

Bidder: _____

Request for Proposal – Oldham County Fiscal Court

100 W. Jefferson Street, Suite 4
LaGrange, Kentucky 40031
(502) 222-1476

KY Hwy 329 Overhead Sign Mast Arm Installation Construction Services

Contractor: _____

Address: _____

City, State, Zip: _____

Phone Number: _____

Email Address: _____

Total Not to Exceed Bid: \$ _____

| | | | | |
|-------------|---|-------|---|-------|
| _____ | / | _____ | / | _____ |
| (Signature) | | Title | | Date |

Oldham County Fiscal Court is accepting bids on behalf of the City of Crestwood for construction services associated with the installation of an overhead sign mast arm warning structure at KY Hwy 329 and KY Hwy 22, more specifically, 6600 W KY Hwy 22 in Crestwood, KY. The mast arm and pole will be provided by the Kentucky Transportation Cabinet (KYTC) and shall be transported by the contractor awarded this project. Construction guidance including but not limited to KYTC permit is attached.

Scope-of-Work and Schedule

The bidder shall include the following aspects into their lump sum quote:

- 1) Conduct utility locates at 6600 W Hwy 22. Enclosures depict the approximate location of utilities based on pot-holing completed by Oldham County Fiscal Court, is provided for informational purposes. Also provided are plan sheets from the previous traffic signal installation project.

Bidder: _____

- 2) Approximate location of foundation is indicated in enclosures. Final position will be dependent on utility locations. Foundation construction details are provided in enclosures.
- 3) The contractor awarded his project is responsible for transporting the mast arm and pole from Frankfort, KY where it is currently stored. Hardware is not provided and shall be obtained by the contractor awarded this project.
- 4) 6 warning tube features (see sign hanger assembly detail attached) shall be supplied and installed on the mast arm by the contractor awarded this project. These shall be evenly spaced, 2 feet on-centers.
- 5) The contractor awarded this project shall provide and install a warning sign (approximately 3 feet tall x 5 feet wide) similar to those currently on site indicating the low bottom clearance for tractor trailers (graphic example attached)
- 6) Install mast arm and signage as depicted in enclosures. Coordinate final layout, spacing, and other specifics with Oldham County Engineer prior to installation.
- 7) Implement approved Maintenance of Traffic Plan (attached).
- 8) Utilize appropriate Erosion Protection and Sediment Control (EPSC) Best Management Practices (BMPs) during construction.
- 9) The former gas station property at 6600 W KY Hwy 22 is possessed by the City of Crestwood and as such is available for staging and equipment.
- 10) Schedule of Operations:
 - a. In order to minimize impact on the property owners, mobilization onto the project location and land disturbance by the contractor shall not occur until all material is acquired by the contractor.
 - b. The contractor shall coordinate the start date with the Oldham County Engineer and the City of Crestwood. The Oldham County Engineer or City of Crestwood will provide a Notice-To-Proceed (NTP) for land-disturbance activities to the contractor based on this coordination.
 - c. All work shall be completed by the contractor no greater than **30** days from the date of the NTP. Consideration will be given in the event of weather that prohibits work.

| Item Summary | quantity | unit |
|---|---------------------|------|
| Utility Locates | 1 | LS |
| Maintenance of Traffic | 1 | LS |
| Transport and Install Mast Arm and Pole | 1 | LS |
| Mast Arm and Pole Hardware | 1 | LS |
| Foundation, complete | 1 | LS |
| Panel Sign (including mounting hardware) | 15 SFT (Approx.) | SFT |
| Tube Warning Features (including mounting assembly) | 6 | EA |

Bids shall be a lump sum price, which shall be used to determine the lowest quote.

Bidder: _____

Administrative Procedures

To be considered for this project, the Oldham County Treasurer must receive the complete bid package using this form by **Friday, March 15, 2024, 12:00 pm (EST) noon.**

Proposals must be submitted in a sealed envelope with the company name, street address, bid due date and project name: **“KY Hwy 329 Overhead Mast Arm Sign Project”** clearly marked. Bids must be mailed or delivered to Patrick Meador, Oldham County Treasurer, at the above address. Proposals sent via email will not be accepted.

All bidders and their employees, assigns, subcontractors, etc. must be fully covered by Workers Compensation. A certificate of liability insurance with workers compensation coverage must be included in the bid package.

All bids must be signed.

Successful bidders must be in good standing with the Kentucky Secretary of State, the Kentucky Revenue Cabinet, and must not be debarred or excluded from Federal work. IRS Form W-9 must be included with bid.

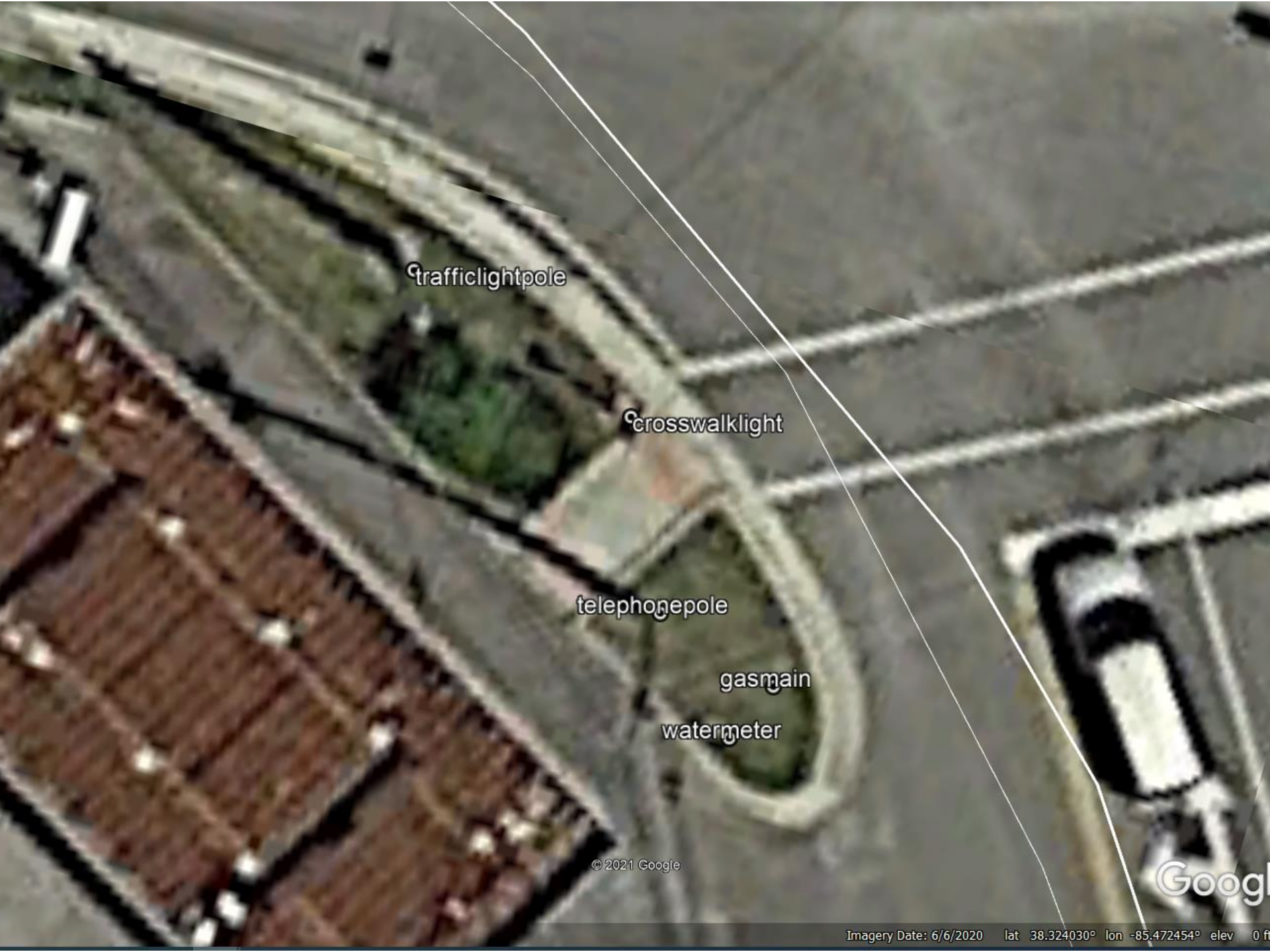
Proposals will be opened on **Tuesday, March 19, 2024** during the scheduled public Fiscal Court Meeting. NTP will be coordinated with the City of Crestwood as noted above. The City of Crestwood and Oldham County Fiscal Court reserves the right to waive any irregularities and/or reject any or all bids.

Oldham County Fiscal Court may issue an addendum, or addenda, changing some aspect of the Bid. All addenda, if any, shall be considered in making the Bid, and such addenda shall be made a part of this Bid. Addenda will be issued at the following: [DemandStar at www.demandstar.com](http://www.demandstar.com). Before submitting a Bid, it is incumbent upon each Bidder to be informed as to whether any addenda have been issued, and the failure to cover in the Bid any such addenda may result in disqualification of that Bid.

All questions and inquiries shall be submitted to Jim Silliman, County Engineer, on or before 12:00 p.m. **Friday, March 08, 2024** at jsilliman@oldhamcountyky.gov. Questions and answers will be posted on DemandStar at www.demandstar.com.

All items/components of the project must be included in the bid.

The contractor awarded the project shall provide a performance surety in the amount of their bid prior issuance of NTP.



trafficlightpole

crosswalklight

telephonepole

gasmain

watermeter

© 2021 Google

Google

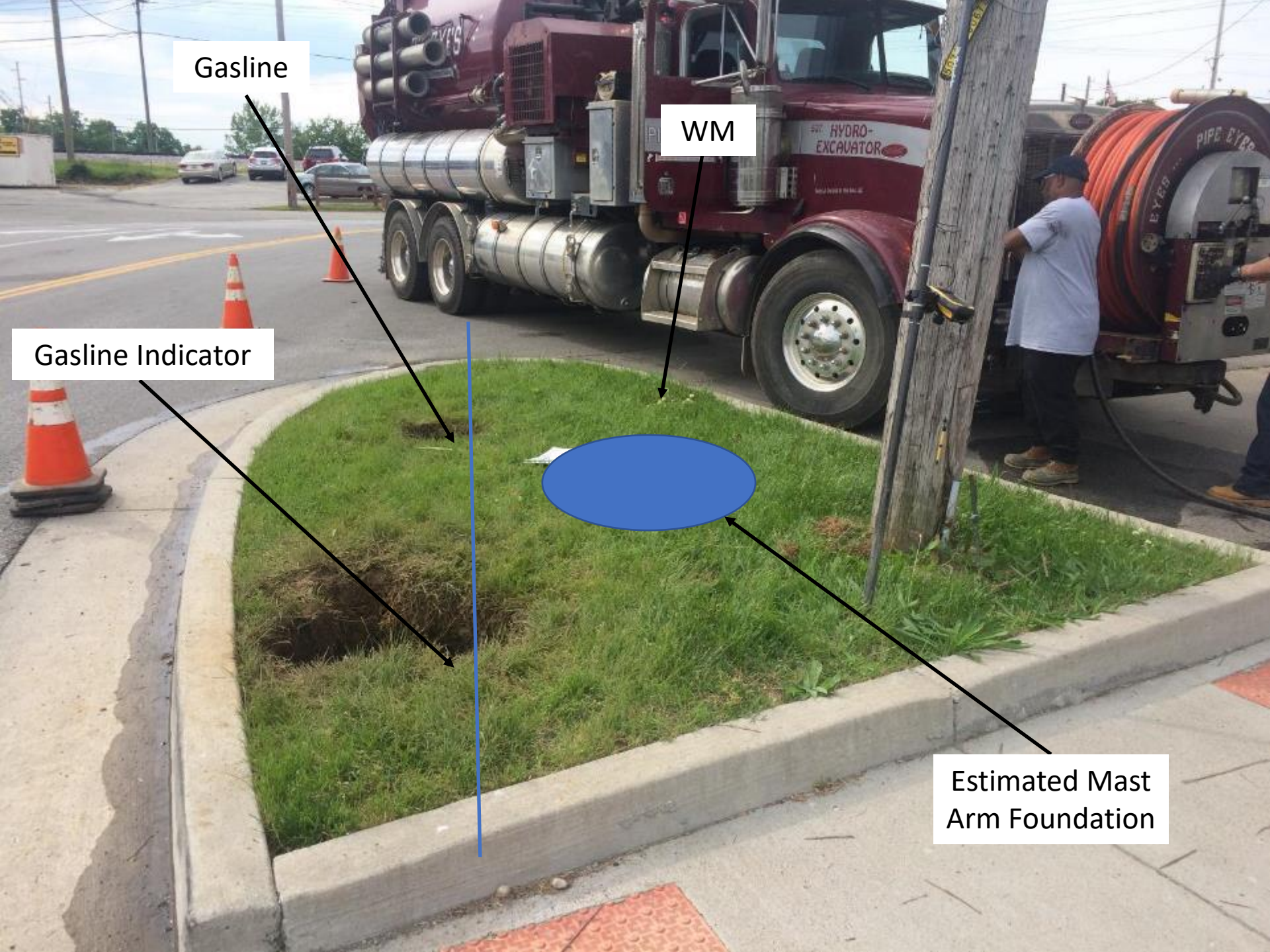
Imagery Date: 6/6/2020 lat 38.324030° lon -85.472454° elev 0 ft

Gasline

WM

Gasline Indicator

Estimated Mast
Arm Foundation



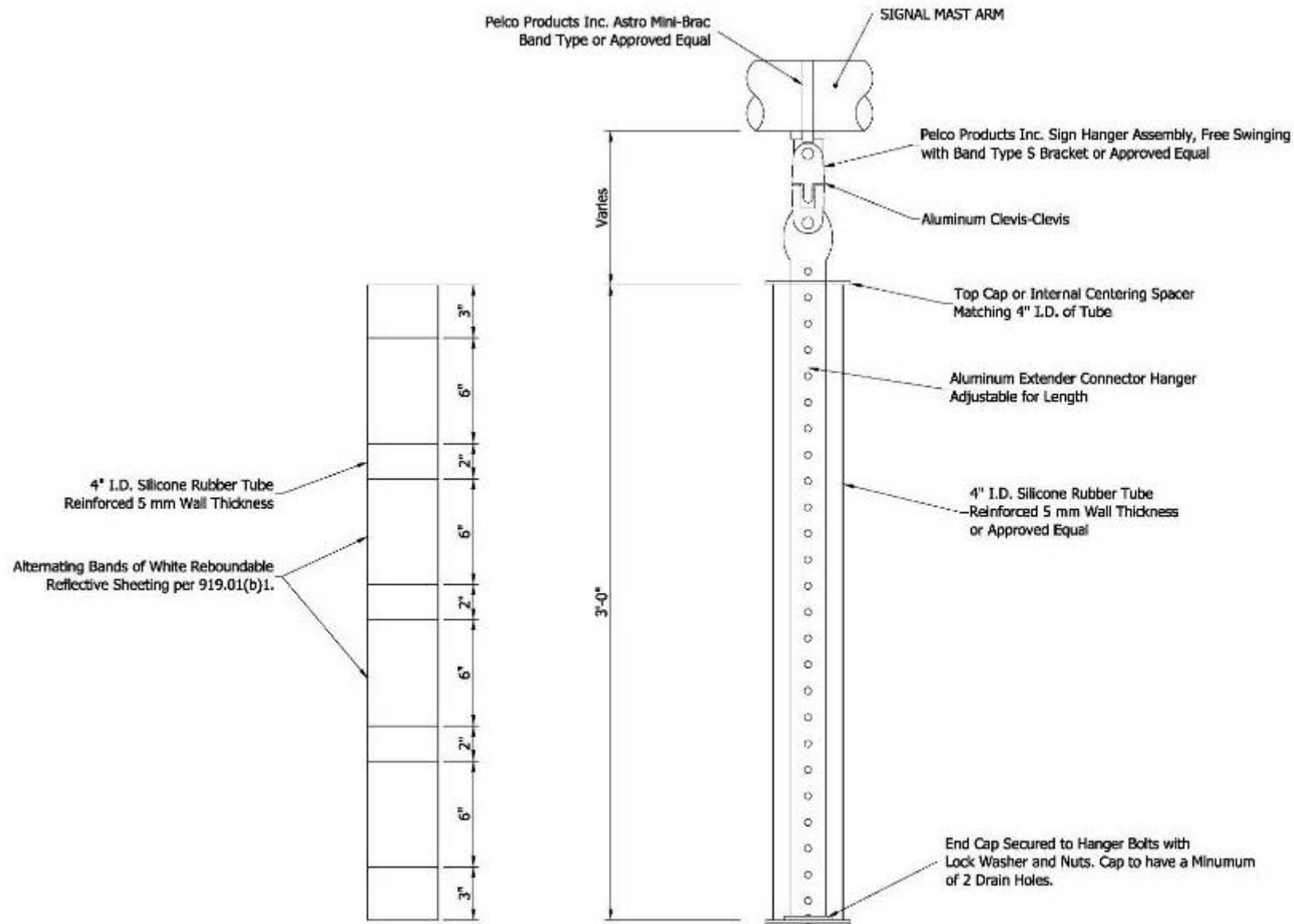








Mast Arm and Pole to be donated by KYTC



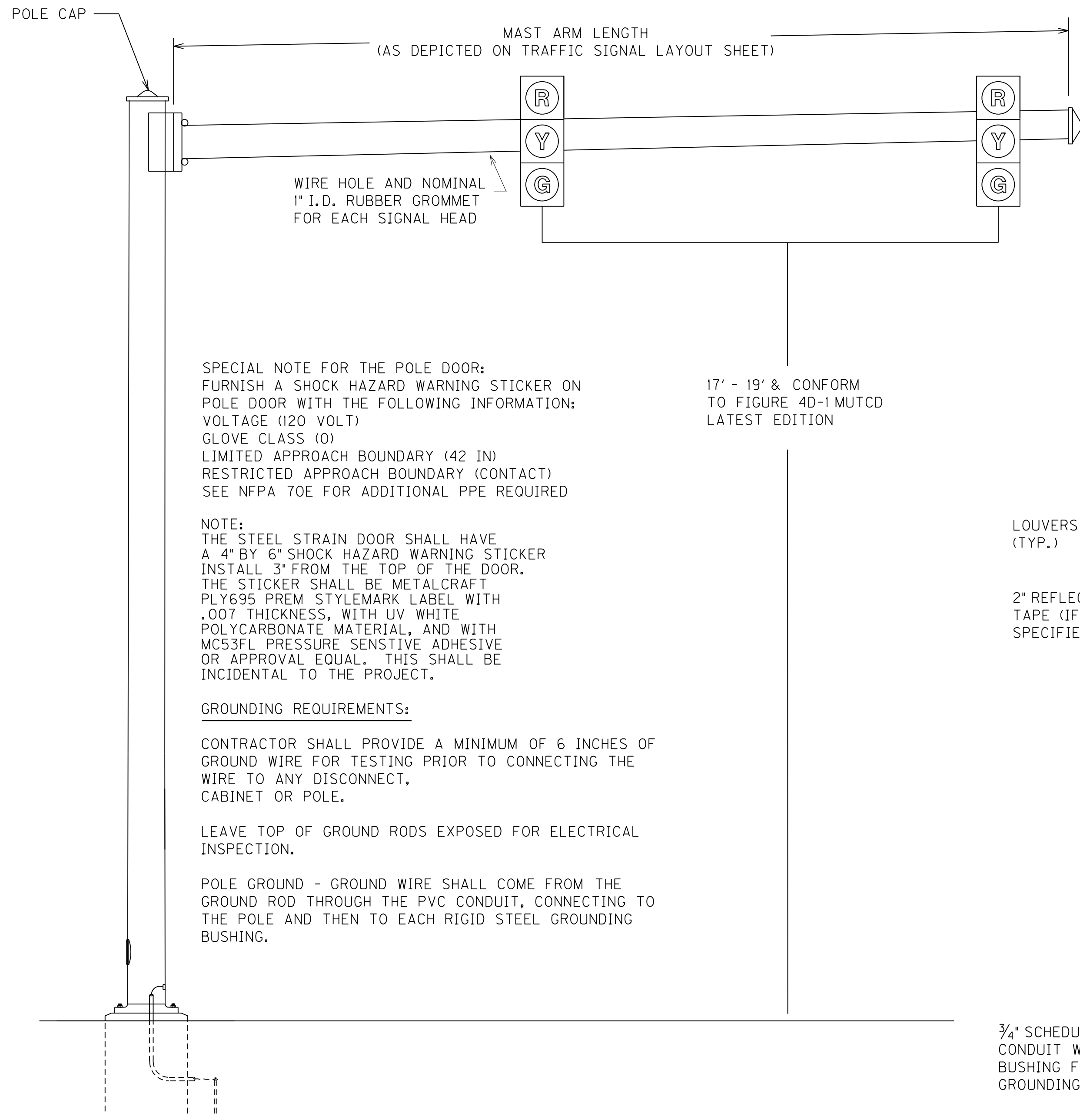
SIGN HANGER ASSEMBLY DETAIL

NOT TO SCALE



Sample warning sign graphic

FILE NAME: G:\PWORK\TED.SWANEGAR\DM528756\08-MAST ARM MONO (MA1).DGN
USER: ted.swaneegar
DATE PLOTTED: June 24, 2020
E-SHEET NAME:
MicroStation v8.11.9.832



SEE MAST ARM POLE BASE
DETAIL FOR MATERIALS AND
INSTALLATION REQUIREMENTS

MONOTUBE MAST ARM POLE DETAIL

NOTES:

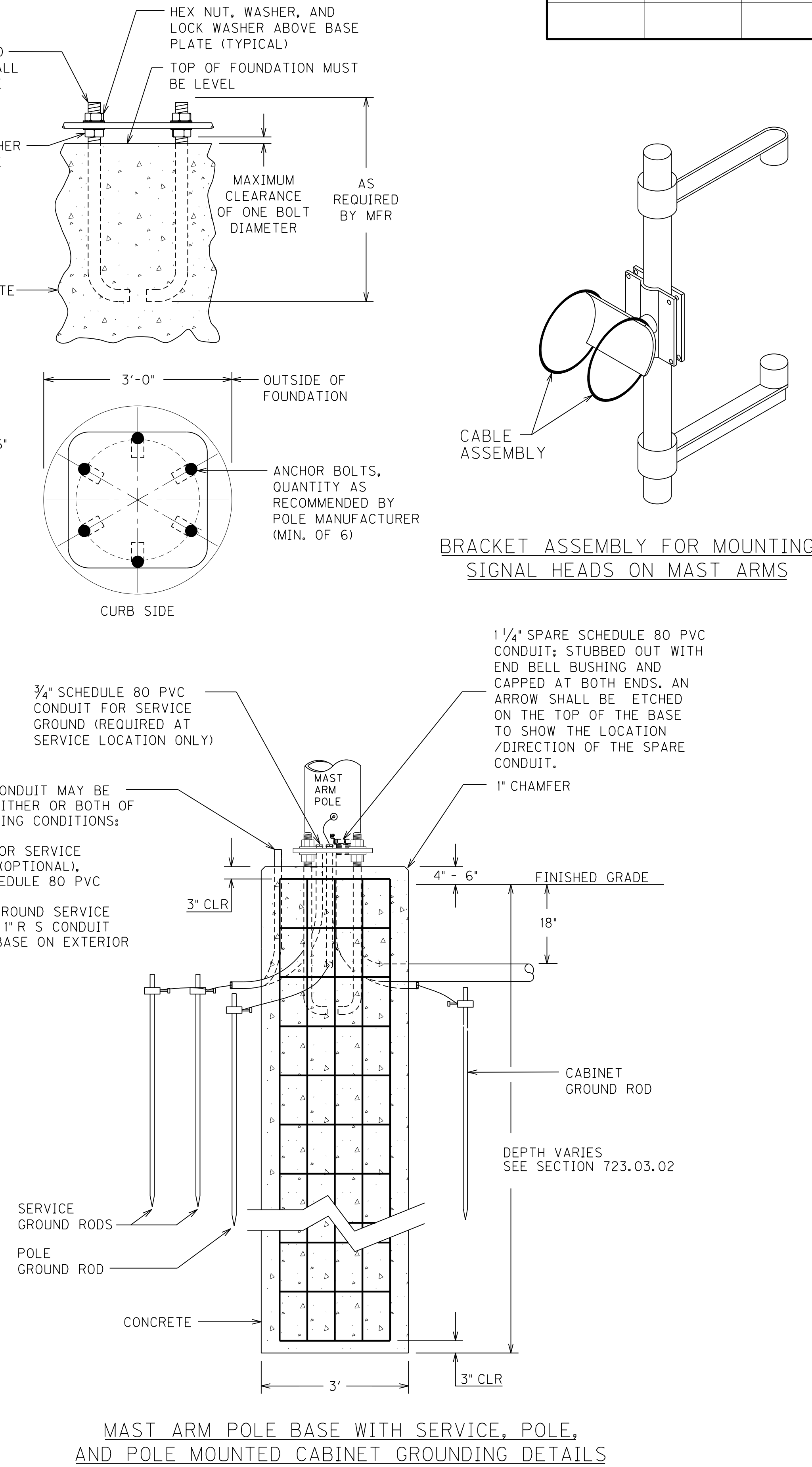
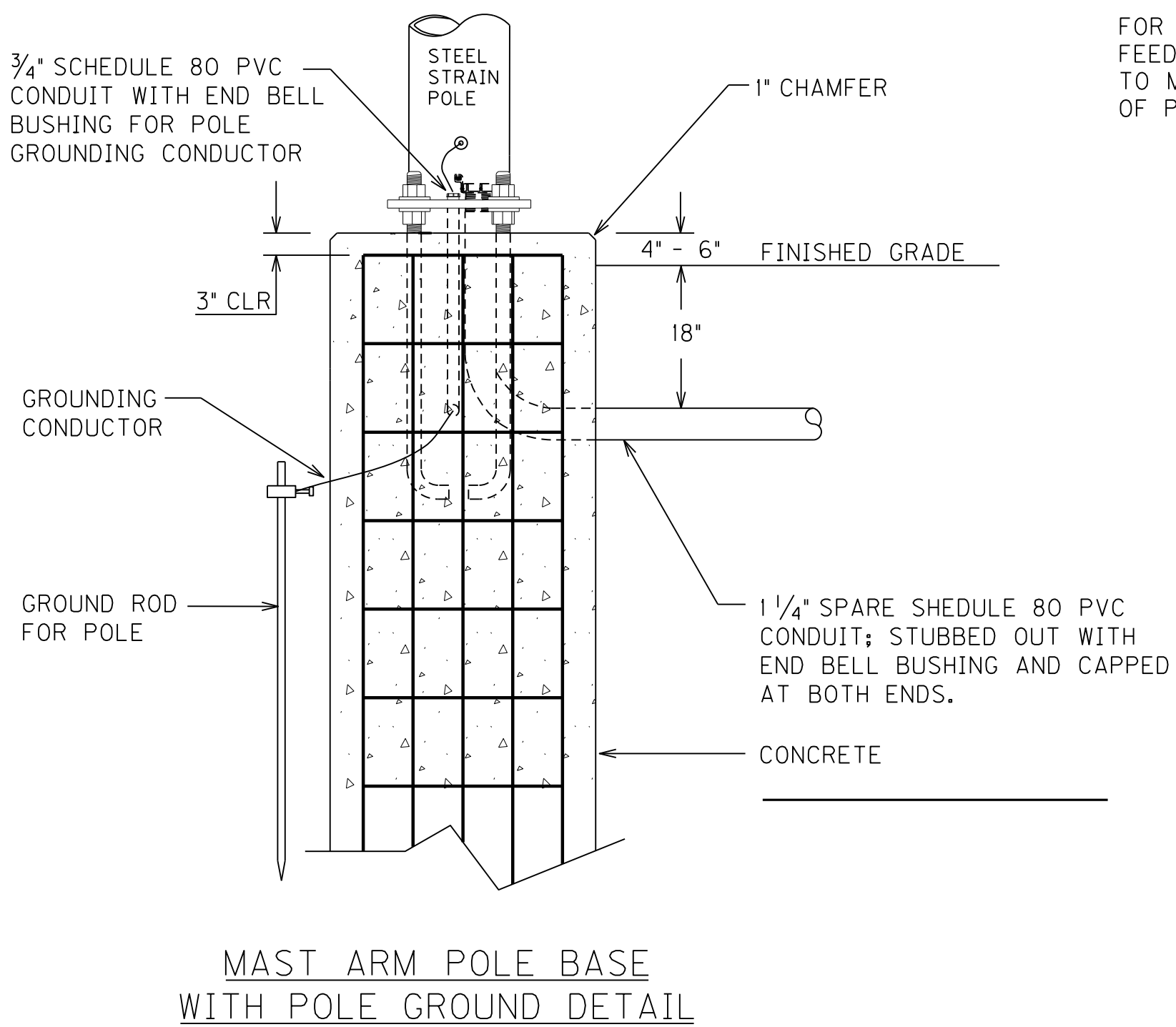
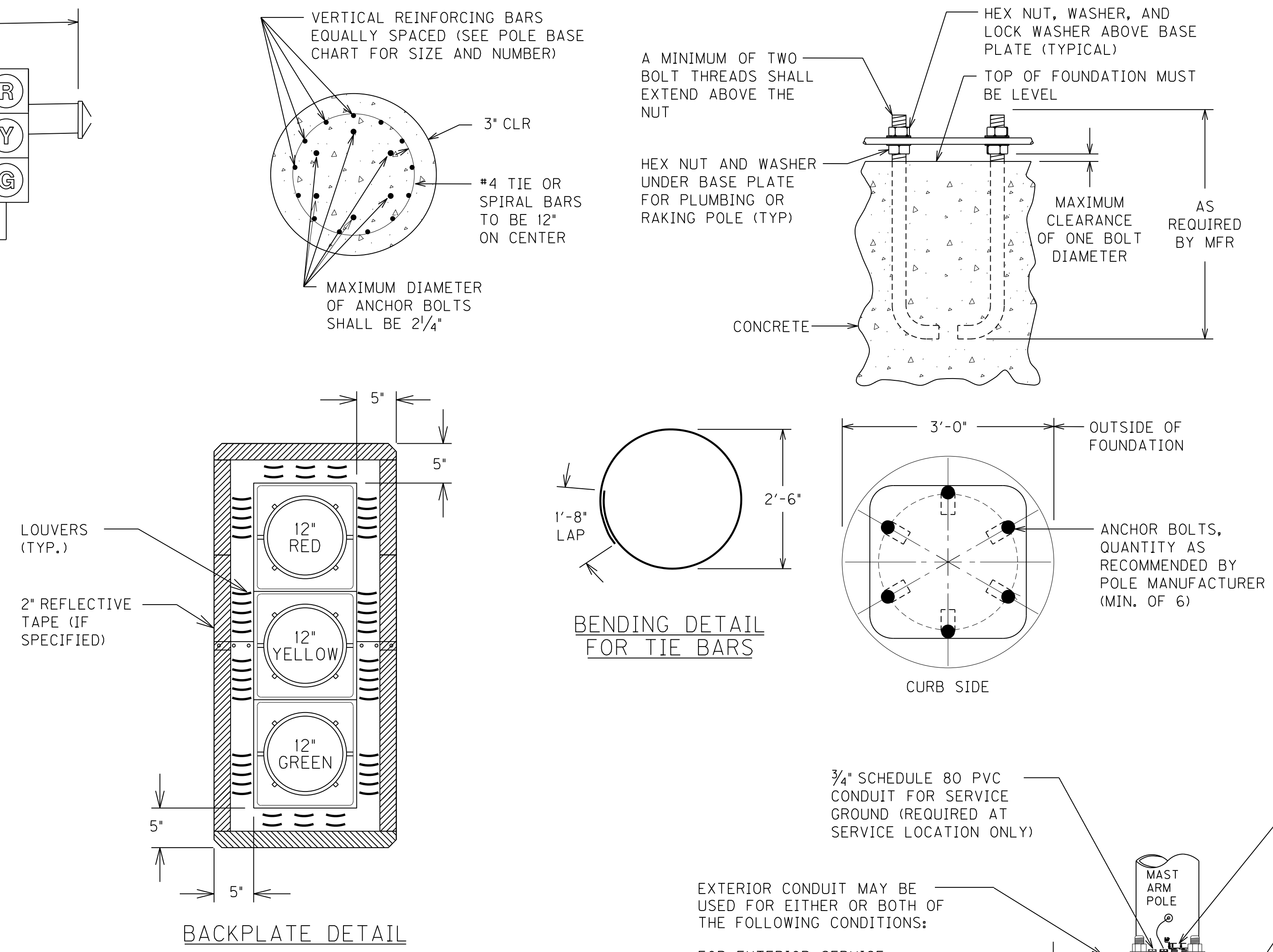
ALL CONDUITS USED FOR THE TELEPHONE, GROUNDING, SPARE, AND SERVICE THAT ARE
INSTALLED IN THE POLE BASE ARE INCIDENTAL TO BID ITEM "2315TEN". THIS INCLUDES
PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE POLE
BASE.

ALL CONDUITS SHALL BE INSTALLED 6 INCHES ABOVE THE CONCRETE POLE BASE.

FOR POLE BASE DEPTH SEE CHART IN SECTION 723 OF THE KENTUCKY STANDARD
SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

OVERHEAD SERVICE WIRES SHALL BE INSTALLED ON THE EXTERIOR OF THE POLE IN A 3/4"
RIGID STEEL CONDUIT WITH WEATHERHEAD, OR ON THE INSIDE THE STEEL STRAIN POLE IN
FLEXIBLE CONDUIT.

UNDERGROUND SERVICE WIRES SHALL BE INSTALLED IN 3/4" RIGID STEEL CONDUIT AS
SHOWN ON THE CONTROLLER CABINET DETAIL SHEET.

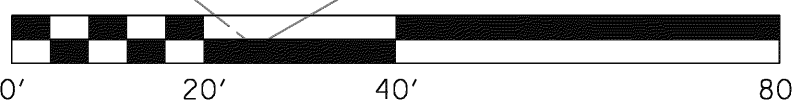




| | | |
|-----------|----------|-----------|
| COUNTY OF | ITEM NO. | SHEET NO. |
| OLDHAM | 5-449.00 | R5 |

BEARING - DISTANCE

- 1 - N 10°24'44" E, 5.67'
- 2 - Arc = 73.98', R = 1030.00'
Chord = N 81°33'38" E, 173.96'
- 3 - Arc = 66.05', R = 1030.00'
Chord = S 86°46'09" E, 66.04'
- 4 - Arc = 61.6', R = 280.00'
Chord = N 85°08'10" E, 61.04'
- 5 - S 60°02'26" E, 178'
- 6 - S 32°58'48" W, 23.20'
- 7 - N 31°55'30" W, 38.38'
- 8 - Arc = 49.93', R = 30.00'
Chord = N 13°45'14" E, 44.02'
- 9 - N 60°57'05" E, 67.98'
- 10 - N 65°31'46" E, 96.08'
- 11 - S 63°37'08" W, 85.53'
- 12 - S 63°37'08" W, 60.65'
- 13 - S 64°09'16" W, 60.01'
- 14 - N 33°26'37" W, 7.70'
- 15 - N 53°21'56" W, 38.41'
- 16 - S 46°22'30" W, 47.36'
- 17 - S 32°02'30" E, 20.29'
- 18 - N 53°21'56" W, 6.31'
- 19 - S 63°11'59" W, 20.00'
- 20 - S 22°30'16" W, 29.68'
- 21 - Arc = 41.45', R = 34.00'
Chord = N 79°34'03" W, 38.93'
- 22 - S 88°36'23" E, 34.30'
- 23 - S 9°22'26" W, 9.29'
- 24 - Arc = 95.00', R = 970.00'
Chord = N 85°33'28" W, 94.96'
- 25 - N 8°05'25" E, 14.74'



KY 22
STA 105+00 to STA 110+00

SCALE: 1"=20'

| KENTUCKY SUBSURFACE UTILITY ENGINEERING | | | | | | | | | | |
|---|--------------------|-----------|-----------|------------|------------|--------------|-------|----------------------|-----------------|--------------------------------|
| POINT | UTILITY & SIZE | STATION | OFFSET | NORTHING | EASTING | GROUND ELEV. | DEPTH | TOP OF UTILITY ELEV. | TYPE OF SURFACE | COMMENTS |
| 11002 | 2" Gas | 108+05.42 | 49.39 RT. | 4005801.57 | 5000892.17 | 783.96 | 1.76 | 782.20 | Asphalt | TH#1 LG&E Transmission |
| 11005 | 1.25" Gas Service | 109+43.30 | 4.31 RT. | 4005902.40 | 5001003.76 | 782.86 | 3.35 | 779.51 | Grass | TH#2 LG&E Service |
| 12002 | 3' Wide Encasement | 105+14.74 | 16.41 RT. | 4005833.59 | 5000587.08 | 779.77 | 2.80 | 776.97 | Asphalt | TH#4 AT&T Fiber Optic |
| 12004 | 3' Wide Encasement | 105+80.91 | 20.14 RT. | 4005817.02 | 5000651.25 | 781.56 | 3.15 | 778.41 | Asphalt | TH#5 AT&T Fiber Optic |
| 12006 | 3' Wide Encasement | 106+37.86 | 4.94 RT. | 4005823.71 | 5000711.12 | 782.14 | 3.00 | 779.14 | Asphalt | TH#6 AT&T Fiber Optic |
| 12008 | 3' Wide Encasement | 107+65.29 | 29.41 LT. | 4005866.51 | 5000831.64 | 781.57 | 0.65 | 780.92 | Grass | TH#7 AT&T Fiber Optic |
| 13008 | 12" Water | 108+56.71 | 11.49 RT. | 4005856.97 | 5000929.31 | 783.10 | 4.36 | 778.74 | | TH#10 Louisville Water Company |
| 13014 | 8" Water | 106+88.75 | 2.17 RT. | 4005825.57 | 5000762.44 | 782.94 | 3.95 | 778.99 | Asphalt | TH#11 Louisville Water Company |
| 13015 | 6" Water | 106+84.26 | 4.17 RT. | 4005823.40 | 5000758.00 | 782.85 | 3.88 | 778.97 | Asphalt | TH#12 Louisville Water Company |
| 13017 | 8" Water | 106+83.65 | 56.07 LT. | 4005883.60 | 5000755.56 | 778.68 | 3.55 | 775.13 | Dirt | TH#13 Louisville Water Company |
| 13020 | 6" Water | 105+59.39 | 1.64 RT. | 4005839.36 | 5000633.75 | 780.69 | 4.00 | 776.69 | Asphalt | TH#14 Louisville Water Company |

DITCH NOTES

| LOCATION | DT. TY. | LINING | W | L | T | D | QUANTITY |
|---------------------|-----------|--------|----|----|---|---|----------|
| RT. 109+60 - 110+00 | SPEC. 'V' | ECB | 12 | 40 | | | 53 SY |
| RT. 109+55 | INLET | TRM1 | 12 | 20 | | | 27 SY |

CONSTRUCT ENTRANCE

| LOCATION | TYP | ENTR. PIPE | S. Y. ASPH. PAVING |
|--------------------|-----|------------|--------------------|
| LT. STA. 105+91 | COM | - | 64" |
| RT. STA. 106+67 | COM | - | 26" |
| RT. STA. 108+94.50 | COM | - | 46" |

- Resurface Entr.
- Full Depth Entr.

REMOVE EXISTING GUARDRAIL

| LOCATION | LENGTH |
|------------------------|--------|
| APPR RT. 106+10 | |
| LT. STA. 50+28 - 50+54 | 25 LF |

ADJUST MANHOLE TO GRADE

| LOCATION | EACH | PROP. TMH ELEV. |
|-----------------------|------|-----------------|
| STA. 107+22 - 13' RT. | 1 | 782.10 |

APPR. RT. STA. 106+10

PI STA= 50+24.33
Δ= 38°52'33" Lt.
T= 17.64'
L= 33.93'
R= 50.00'
E= 3.02'

MAINLINE

PI STA= 107+33.89
Δ= 38°02'51" Lt.
T= 146.54'
L= 282.22'
R= 425.00'
E= 24.55'
e= 4.02'
Runoff= SPCL.*
Runout= SPCL.*

* SEE SUPER ELEVATION
DIAGRAM ON PROFILE

MAINLINE

PI STA= 110+52.77
Δ= 2°17'40" Rt.
T= 80.10'
L= 160.18'
R= 4000.00'
E= 0.80'
e= MATCH EXIST
Runoff= MATCH EXIST
Runout= MATCH EXIST

11 Roger & Lillie Rawlins

12 The Milton C Stoess Trust

FILE NAME: G:\ENGR\HDI58.04\PHASE2\SUBMITTALS\5-449.CONTRACT PLAN SET\ROADWAY\RD0500PL.DGN

USER: pberry
DATE PLOTTED: November 8, 2016

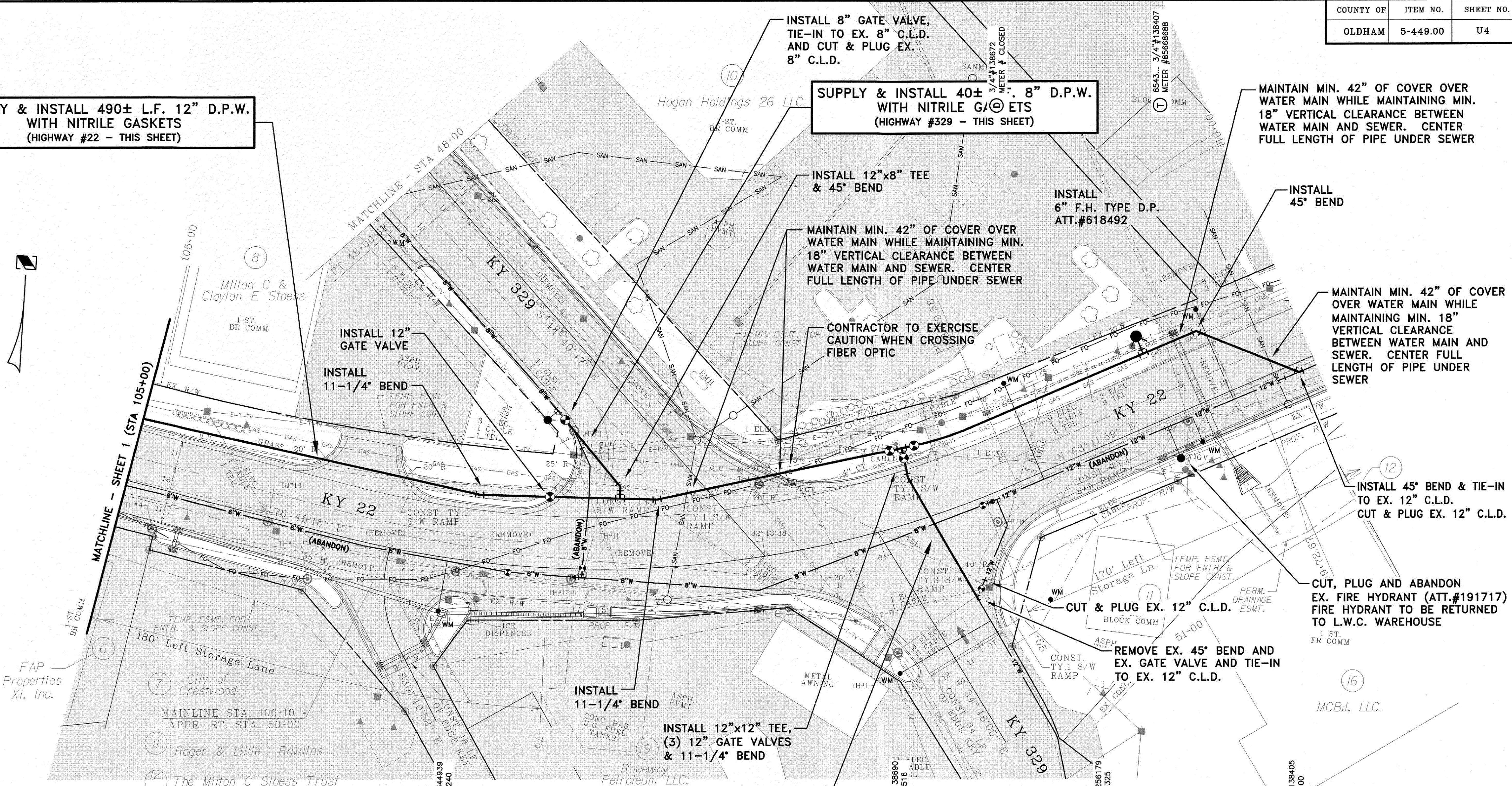
E-SHEET NAME:
MicroStation v8.11.7.180

| COUNTY OF | ITEM NO. | SHEET NO. |
|-----------|----------|-----------|
| OLDHAM | 5-449.00 | U4 |

SUPPLY & INSTALL 490± L.F. 12" D.P.W. WITH NITRILE GASKETS (HIGHWAY #22 - THIS SHEET)

SUPPLY & INSTALL 40± L.F. 8" D.P.W. WITH NITRILE GASKETS (HIGHWAY #329 - THIS SHEET)

SUPPLY & INSTALL 70± L.F. 12" D.P.W. WITH NITRILE GASKETS (HIGHWAY #329 - THIS SHEET)



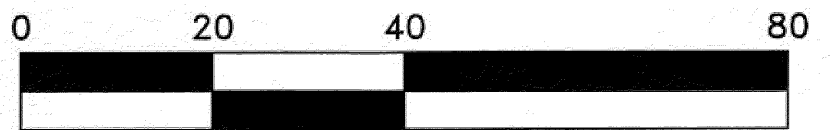
NOTE: WHEN ABANDONING EXISTING GATE VALVES, REMOVE OPERATOR NUT, KEYTUBE, ROUND TOP & LID AND BACKFILL WITH EITHER CONCRETE OR ASPHALT.

NOTE: THIS PROJECT HAS BEEN APPROVED IN ACCORDANCE WITH KDOT AGREED ORDER NO. DOW-WL09001 AND IS VALID FOR 2-YEARS FROM DATE OF THE DESIGNATED PLAN REVIEWER CERTIFICATION, DURING WHICH TIME PROJECT CONSTRUCTION SHALL BEGIN.

NOTE: JEFFERSON COUNTY PROPERTY DATA SHOWN ON THIS MAP WAS DIGITIZED FROM PVA BLOCK MAPS, ADJUSTED TO LOGIC PLANIMETRIC MAP DATA AND HAS BEEN UPDATED FROM PVA RECORDS. THE PROPERTY DATA DOES NOT SUPERSEDE DEED RECORDS AND SHOULD NOT BE USED FOR PURPOSES OTHER THAN GENERAL PROPERTY REFERENCE AND IDENTIFICATION.

NOTE: BASE MAP INFORMATION DERIVED FROM PLANIMETRIC AND TOPOGRAPHIC DATA FROM LOUISVILLE/ JEFFERSON COUNTY INFORMATION CONSORTIUM. (LOJIC)

*** THESE DRAWINGS ARE FOR L.W.Co. WORK ONLY ***
UTILITIES LOCATIONS ARE SHOWN FROM AVAILABLE INFORMATION AND ARE APPROXIMATE. CONTRACTORS ARE URGED TO MAKE THEIR OWN DETERMINATION OF EXACT LOCATIONS



SERVICE LEGEND AND COUNT (THIS SHEET)
(4) R-RENEW
(1) T-TRANSFER
(1) D-DISCONTINUE
(0) RE-RELOCATE
(0) M-METER EXCHANGE
FIRE HYDRANT COUNT (THIS SHEET)
(1) INSTALL
(1) REMOVE

INSPECTION CERTIFICATION
I hereby certify, to the best of my knowledge and belief, that the water main project has been constructed and tested in accordance with the approved plans and specifications.
NAME (PRINT) _____
NAME (SIGNATURE) _____
DATE 9-9-2016

DESIGNATED PLAN REVIEWER CERTIFICATION
I hereby certify that the water main plans have been reviewed and approved in accordance with the requirements of the KDOT Agreed Order Technical Design and Construction Standards.
NAME (PRINT) JAMES G. GRUNOW
NAME (SIGNATURE) _____
DATE 9-9-2016

WATER LINE ONLY
STATE OF KENTUCKY
DANIEL TEGENE
20883
PROFESSIONAL ENGINEER
SIGNATURE: *Dal Tegen*
DATE: 9-9-2016

LOUISVILLE WATER COMPANY
550 S. 3RD STREET • LOUISVILLE, KENTUCKY 40202 • (502) 569-3600
SPENCER W. BRUCE, PE - INTERIM PRESIDENT
JAMES G. GRUNOW, PE - INTERIM VICE PRESIDENT/CHIEF ENGINEER
KY. HIGHWAY #22
AT KY. HIGHWAY #329
INTERSECTION IMPROVEMENTS
DATE 08-26-16 SCALE 1"=20' MAP NO. 1287-302
DRAWN BY E. SCHMIDT CHECKED BY D. TEGENE ENGR. J. LONG
PROJECT NUMBER 14004 SHEET 2 OF 3
TASK NUMBER 04

FILE NAME: Z:\ACAD\WORK\JAMIE LONG\14004 HWY 22-329\14004-02.DWG
USER: eschmidt
E-SHEET NAME: 5-449.00
DATE PLOTTED: March 26, 2012
MicroStation v8.11.7.180

APPLICATION FOR ENCROACHMENT PERMIT

KYTC KEPT #: 05-2023-00769

SECTION 1: APPLICANT CONTACT INFORMATION

| | | | |
|---|--|-------------------------------|---------------------|
| APPLICANT City of Crestwood | ADDRESS P.O. Box 186 | | |
| EMAIL | CITY Crestwood | STATE KY | ZIP 40014 |
| CONTACT NAME 1 Jim Kramer, Mayor | EMAIL jkramer@crestwoodky.gov | PHONE # (502) 241-7088 | |
| | | CELL # | |
| CONTACT NAME 2 (if applicable) Jim Silliman, Oldham County Engineer | EMAIL jsilliman@oldhamcountyky.gov | PHONE # (502) 222-3216 | |
| | | CELL # | |

SECTION 2: PROPOSED WORK LOCATION

| | | | |
|-------------------------|----------------------|---------------------------|----------------------------------|
| ADDRESS | CITY | STATE Kentucky | ZIP |
| COUNTY Oldham | ROUTE # 22 | MILE POINT 3.25 | LONGITUDE (X) 38.32402 |
| | | | LATITUDE (Y) -85.47226 |

ADDITIONAL LOCATION INFORMATION:

southwest quadrant of the intersection of Ky Hwy 329 and W Hwy 22 (a.k.a. Ballardsville Road)

FOR KYTC USE ONLY

PERMIT TYPE: ☐ Air Right ☐ Entrance ☐ Utilities ☐ Vegetation Removal ☒ Other: Truck warning

ACCESS: ☐ Full ☐ Partial ☒ by Permit **LOCATION:** ☐ Left ☐ Right ☒ Crossing

SECTION 3: GENERAL DESCRIPTION OF WORK

Installation of foundation, pole, and mast arm with overhead warning sign and special features (vertical hanging tubes) to deter tractor trailers from using the KY Hwy329 CSX railroad crossing where there is a history of tractor trailers becoming stuck. Refer to attached Request for Quotes for additional details.

THE UNDERSIGNED APPLICANT(s), being duly authorized representative(s) or owner(s), DO AGREE TO ALL ORIGINAL UNEDITED TERMS AND CONDITIONS ON THE TC 99-1A, pages 1-4.

 Mayor
SIGNATURE

7/3/2023
DATE

This is not a permit unless and until the applicant(s) receives an approved TC 99-1B from KYTC. This application shall become void if not approved by the cancellation date. The cancellation date shall be a minimum of one year from the date the applicant submits their application.

APPLICATION FOR ENCROACHMENT PERMIT

TERMS AND CONDITIONS

1. The permit, including this application and all related and accompanying documents and drawings making up the permit, remains in effect and is binding upon the Applicant/Permittee, its successors and assigns, as long as the encroachment(s) exists and also until the permittee is finally relieved by the Department of Highways from all its obligations.
2. Applicant shall meet all requirements of the Clean Water Act if the project will disturb one acre or more, the applicant shall obtain a KPDES KYR10 Permit from the Kentucky Division of Water. All disturbed areas shall meet the requirements of the Department of Highway's Standard Specifications, Sections 212 and 213, as amended.
3. **INDEMNITY:**
 - A. **PERFORMANCE BOND:** The permittee shall provide to the Department a performance bond according to the Permits Manual, Section PE-203 as a guarantee of conformance with the Department's Encroachment Permit requirements.
 - B. **PAYMENT BOND:** At the discretion of the department, a payment bond shall be required of the permittee to ensure payment of liquidated damages assessed to the permittee.
 - C. **LIABILITY INSURANCE:** Liability insurance shall be required of the permittee (in an amount approved by the department) to cover all liabilities associated with the encroachment.
 - D. It shall be the responsibility of the permittee, its successors and assigns, to maintain all indemnities in full force and effect until the permittee is authorized to release the indemnity by the Department.
4. A copy of this application and all related documents making up the approved permit shall be given to the applicant and shall be made readily available for review at the work site at all times.
5. Perpetual maintenance of the encroachment is the responsibility of the permittee, its successors and assigns, with the approval of the Department as required, unless otherwise stated.
6. Permittee, its successors and assigns, shall comply with and agree to be bound by the requirements and terms of (a) this application and all related documents making up the approved permit, (b) by the Department's Permits Manual, and (c) by the Manual on Uniform Traffic Control Devices, both manuals as revised to and in effect on the date of issuance of the permit, all of which documents are made a part thereof by this reference. Compliance by the permittee, its successors and assigns, with subsequent revisions to applicable provisions of either manual or other policy of the Department may be made a condition of allowing the encroachment to persist under the permit.
7. Permittee agrees that this and any encroachment may be ordered removed by the Department at any time, and for any reason, upon thirty days written notice to the last known address of the applicant or to the address at the location of the encroachment. The permittee agrees that the cost of removing and of restoring the associated right-of-way is the responsibility of the permittee, its successors and assigns.
8. Permittee, its successors and assigns, agree that if the Department determines that motor vehicular safety deficiencies develop as a result of the installation or use of the encroachment, the permittee, its successors and assigns, shall provide and bear the expenses to adjust, relocate, or reconstruct the facilities, add signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department within a reasonable time after receipt of a written notice of such deficiency. The period within which such adjustments, relocations, additions, modifications, or other corrective measures must be completed will be specified in the notice.
9. Where traffic signals are required as a condition of granting the requested permit or are thereafter required to correct motor vehicular safety deficiencies, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee, its successors and assigns and the Department in its reasonable discretion and only in accordance with the Department's current policy set forth in the Traffic Operations Manual and Permits Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, its successors and assigns, at no expense to the Department.

APPLICATION FOR ENCROACHMENT PERMIT

10. The requested encroachment shall not infringe on the frontage rights of an abutting owner without their written consent as hereinafter described. Each abutting owner shall express their consent, which shall be binding on their successors and assigns, by the submission of a notarized statement as follows, "I (we), _____, hereby consent to the granting of the permit requested by the applicant along Route _____, which permit does affect frontage rights along my (our) adjacent real property." By signature(s) _____, subscribed and sworn by _____, on this date _____.
11. The permit, if approved, is subject to the agreement that it shall not interfere with any similar rights or permit(s) previously granted to any other party, except as otherwise provided by law.
12. Permittee shall include documentation which describes the facilities to be constructed. Permittee, its successors and assigns, agree as a condition of the granting of the permit to construct and maintain any and all permitted facilities or other encroachments in strict accordance with the submitted and approved permit documentation and the policies and procedures of the Department. Permittee, its successors and assigns, shall not use facilities authorized herein in any manner contrary to that prescribed by the approved permit. Only normal usage as contemplated by the parties and by this application and routine maintenance are authorized by the permit.
13. Permittee, its successors and assigns, at all times from the date permitted work is commenced until such time as all permitted facilities or other encroachments are removed from the right-of-way and the right-of-way restored, **shall defend, protect, indemnify and save harmless** the Department from any and all liability claims and demands arising out of the work, encroachment, maintenance, or other undertaking by the permittee, its successors and assigns, related or undertaken pursuant to the granted permit, due to any claimed act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party nor operate to enlarge any liability of the Department beyond that existing at common law or otherwise if this right to indemnity did not exist.
14. Upon a violation of any provision of the permit, or otherwise in its reasonable discretion, the Department may require additional action by the permittee, its successors and assigns, up to and including the removal of the encroachment and restoration of the right-of-way. In the event additional actions required by the Department under the permit are not undertaken as ordered and within a reasonable time, the Department may in its discretion cause those or other additional corrective actions to be undertaken and the Department shall recover the reasonable costs of those corrective actions from the permittee, its successors and assigns.
15. Permittee, its successors and assigns, shall use the encroachment premises in compliance with all requirements of federal law and regulation, including those imposed pursuant to Title VI of the Civil Right Act of 1964 (42 U.S.C. § 2000d et seq.) and the related regulations of the U.S. Department of Transportation in Title 49 C.F.R. Part 21, all as amended.
16. Permittee, its successors and assigns, agree that if the Department determines it is necessary for the facilities or other encroachment authorized by the permit to be removed, relocated or reconstructed in connection with the reconstruction, relocation or improvement of a highway, the Department may revoke permission for the encroachment to remain under the permit and may order its removal, relocation or reconstruction by the permittee, its successors and assigns, at the expense of the permittee, except where the Department is required by law to pay any or all of those costs.

APPLICATION FOR ENCROACHMENT PERMIT

17. Permittee agrees that the authorized permit is personal to the permittee and shall remain in effect until such time as (a) the permittee's rights to the adjoining real property to have benefitted from the requested encroachment have been relinquished, (b) until all permit obligations have been assumed by appropriate successors and assigns, and (c) unless and until a written release from permit obligations has been granted by the Department. The permit and its requirements shall also bind the real property to have benefitted from the requested encroachment to the extent permitted by law. The permit and the related encroachment become the responsibility of the successors and assigns of the permittee and the successors and assigns of each property owner benefitting from the encroachment, or the encroachment may not otherwise permissibly continue to be maintained on the right-of-way. (Does not apply to utility encroachments serving the general public.)
18. If work authorized by the permit is within a highway construction project in the construction phase, it shall be the responsibility of the permittee to make personal contact with the Department's Engineer on the project in order to coordinate all permitted work with the Department's prime contractor on the project.
19. This permit is not intended to, nor shall it, affect, alter or alleviate any requirement imposed upon the permittee, its successors and assigns, by any other agency.
20. Permittee, its successors and assigns, agree to contain and maintain all dirt, mud, and other debris emanating from the encroachment away from the surrounding right-of-way and the travel way of the highway hereafter and at all times that its obligations under the permit remain in effect.
21. Before You Dig: The contractor is instructed to call 1-800-752-6007 to reach KY 811, the One-Call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that the owners of underground facilities are not required to be members of the KY 811 One-Call Before U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Clerk to determine what utility companies have facilities in the area.
22. The undersigned Utility acknowledges ownership and control of the facilities proposed to be installed, modified, or extended by the Applicant/Permittee and agrees to be bound by the requirements and terms of this application and all related documents making up the approved permit, by the Department's Permits Guidance Manual, and by all applicable regulations and statutes in effect on the date of issuance of the permit. This information and application is certified correct to the best knowledge and belief of the undersigned Utility.

UTILITY

NAME (Utility Representative)

TITLE (Utility Representative)

SIGNATURE (Utility Representative)

DATE



Know what's below. Call before you dig.

To Submit a Locate Request
24 Hours a Day, Seven Days a Week:
Call 811 or 800-752-6007



Kentucky Transportation Cabinet
Department of Highways
Permits Branch

TC 99-1 (B)
1/2012
Page 1 of 1

ENCROACHMENT PERMIT

KEPTS No.: 05-2023-00769

Permittee: City of Crestwood

Latitude: 38.32402

Longitude: -85.47226

Completion Date: 01-23-2025

Coordinates provided on the TC 99-1(B) are the approved location for this permit.

| Indemnities | | |
|---------------------|-----------------|-----------------|
| Type | Amount Required | Tracking Number |
| Performance Bond | \$0 | |
| Payment Bond | | |
| Liability Insurance | | |

This permit has been:

APPROVED ☒ **DENIED** ☐

Tara Young, P.E. Transportation Engineer II
NAME **TITLE**

SIGNATURE **DATE**

The TC 99-1(B), including the application TC-99 1(A) and all related and accompanying documents and drawings make up the permit. It is not a permit unless both the TC 99-1(A) and TC 99-1(B) are both present.

ENCROACHMENT PERMIT GENERAL NOTES & SPECIFICATIONS

I. SAFETY

A. General Provisions

- All signs and control of traffic shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, latest edition, Part 6, and safety requirements shall comply with the KYTC Permits Manual. Federal law requires that traffic control shall be implemented in accordance with MUTCD standards, KYTC's Standard Specifications for Road and Bridge Construction (KYTC SSRBC), current edition and under the supervision of a certified Work Zone Traffic Control Supervisor.
- All work necessary in shoulder or ditch line areas of a state highway shall be scheduled to be promptly completed so that hazards adjacent to the traveled way are kept to an absolute minimum.
- No more than one (1) traveled-lane shall be blocked or obstructed during normal working hours. All signs, flaggers and other devices during lane closures shall conform to the MUTCD. The traveled-way and shoulders shall be kept clear of mud and other construction debris at all times during construction of the permitted facility. No non-construction equipment or vehicles or office trailers shall be allowed on the right of way during working hours. The right of way shall be left free and clear of equipment, material, and vehicles during non-working hours.
- When necessary to block one (1) traveled-lane of a state highway, the normal working hours shall be as directed by the Department. No lanes shall be blocked or obstructed during adverse weather conditions (rain, snow, fog, etc.) without specific permission from the Department.
- Normal working hours for lane closures shall be between **9:00 A.M.—3:00 P.M., weekdays**. All exceptions regarding lane closures and working hours must be submitted and approved in advance by the Department.
- All materials and methods of construction shall be in accordance with the latest edition of the KYTC SSRBC.
- Date and time restrictions pertaining to this permit are as follows:

| |
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B. Explosives

- No explosive devices or explosive material shall be used within state right of way without proper license and approval of the Kentucky Department of Mines and Minerals, Explosive Division.

C. OSHA

- Kentucky Occupational Safety and Health Standards for the construction industry, which has the effect of law, states in part: (Page 52, 1926.651, Specific Excavation Requirements) "Prior to opening an excavation, effort shall be made to determine whether underground installations, (sewer, telephone, water, fuel, electric lines, etc.) will be encountered, and if so, where such underground installations are located. When the excavation approaches the estimated location of such an installation, the exact location shall be determined, and when it is uncovered, proper supports shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation."

D. Archaeological

- Whenever materials of an archaeological nature are discovered during the course of construction work or maintenance operations, contact shall be made immediately with the Division of Environmental Analysis, which maintains an archaeologist on staff, or with the Office of the State Archaeologist located at the University of Kentucky. Following this consultation, further action shall be decided on a case-by-case basis by the State Highway Engineer or the Transportation Planning Engineer or their designated representative.

E. Environmental

- If the activity to which this permit related disturbs one acre or more of land, you must obtain a KPDES KYR10 permit. Information can be found at <http://water.ky.gov/permitting/Pages/GeneralPermits.aspx>

II. UTILITIES

- The permittee shall be responsible for any damage to existing utilities. Any utility modifications or relocations within state right of way necessary, as determined by the Department or by the owner of the utility, shall be at the expense of the permittee and subject to the approval of the Department.
- All existing manholes and valve boxes shall be adjusted to be flush with finished grade.
- Encasement pipe shall conform to current standards for highway crossings in accordance with the KYTC Permits Manual. Pipe encasing shall not be required if the pipe interior diameter is 2" or less.
- Parallel utilities shall be constructed between back slope of ditch line and right-of-way line and shall have a minimum of 30" cover above top of pipe or conduit.
- All pavement cuts shall be restored per KYTC SSRBC and the District 5 Pavement Restoration drawing.
- Aerial crossing of utility lines shall have a minimum clearance of 18' from the high point of the roadway to the low point of the line.
- The clear zone requirement shall be met to the extent possible in accordance with the AASHTO Roadside Design Guide.
- The minimum depth for underground utilities is 42" under roadways, ramps, and ditch lines, and a minimum depth of 30" in all other areas within state right of way except for natural gas and petroleum fraction lines.
- Natural gas and petroleum fraction lines require a minimum depth of 60" under roadways, ramps, and ditch lines and a minimum depth of 42" cover when located outside of ditch lines.
- Any excavation within 3' of edge of pavement will require flowable fill as backfill. Flowable fill shall be in accordance with the KYTC SSRBC.

Utility notes specific to fully-controlled access highways ONLY:

- All work necessary within the right-of-way shall be performed behind a temporary woven wire fence erected prior to the start of work. The temporary fence shall be removed immediately upon completion of work on the right-of-way, and the control of access immediately restored to original condition, in accordance with the KYTC SSRBC. All vents, valves, manholes, etc., shall be located outside of the right-of-way. Encasement pipe shall extend from right-of-way line to right-of-way line and shall be one continuous run of pipe. The encasement pipe shall be welded at all joints. The boring pit and tail ditch shall extend past the existing toe of slope or bottom of ditch line and shall be a minimum of 42" deep. Work in interstate right-of-way requires approval from Federal Highway Administration (FHWA).

III. DRAINAGE

- Any negative impact to existing drainage will be the applicant's responsibility to repair in accordance with the KYTC SSRBC.
- All pipe shall be laid in a straight alignment, to proper grades, and with all materials and methods of installation including bedding and joint seating.
- Ensure no standing water on or along any new construction, regardless of existing conditions. This includes, but is not limited to: curb & gutter, header curb, entrances, sidewalk ramps, etc. If pooling water or evidence of such is found during the final inspection, the Permittee will be required to remedy prior to release of the permit.
- All drainage structures and appurtenances (manholes, catch basins, curbing, inlet basins, etc.) shall conform to the KYTC SSRBC and shall be constructed in accordance with the KYTC Standard Drawings.

IV. PAVING

- No bituminous pavement shall be installed within the right of way between November 15 and April 1, nor when the temperature is below 40 degrees Fahrenheit, without the express written consent of the Department. No bituminous pavement shall be installed when the underlying course is wet.
- Paving within the right of way shall be as follows:
 - Base (Type):_____, (Thickness)_____
 - Base (Type):_____, (Thickness)_____
 - Base (Type):_____, (Thickness)_____
 - Finished Surface (Type)_____, (Thickness)_____

- ***Paving requirements specific to this permit:***

- Any permittee performing road cuts must restore the pavement to pre-existing conditions. Pictures/videos are recommended to ensure proper placement of signs and pavement markings that are temporarily removed for paving operations. In some cases, a pre-work inventory may be requested from the Department. Per Section 713 of the KYTC SSRBC, prepare and keep a written record of the locations of existing pavement markings, and furnish a copy to the Department before removing or obliterating the markings. Notify the Department a minimum of 14 calendar days prior to re-installing the final markings to verify if any modifications are needed.
- Existing pavement and shoulder material shall be removed to accommodate the above paving specifications. Existing pavement shall be removed until full depth mainline pavement is encountered to prevent any deficient sections. If field conditions do not match the plan and additional removal is required to ensure full depth pavement, contact the Department for approval of removal limits.
- The finished surface of all new pavement within the right-of-way shall be true to the required slope and grade, uniform in density and texture, free of irregularities, and equivalent in riding qualities to the adjacent highway pavement or as determined by KYTC or the KYTC SSRBC.
- All materials and methods of construction, including base and subgrade preparation, shall be in accordance with KYTC's Standard Specifications. Notify the Department a minimum of 48 hours prior to beginning paving operations.

Phone: 502-210-5400; Permits Section

- Existing edge of pavement shall be saw-cut to provide a straight and uniform joint for new pavement. An approved joint sealer, in accordance with the KYTC SSRBC (latest edition), shall be applied between new and existing pavements. Ensure the remaining pavement section is sufficient and matches the planned section. If the existing pavement section is thinner, contact the Department prior to continuing construction to determine if additional pavement needs to be removed.

V. ENTRANCES

- KYTC does not take responsibility for any plans associated with an approved permit. All plans shall be reviewed and stamped by a Professional Engineer and shall conform to all KYTC and any other applicable standards. Even after approval of the permit, if the Department finds any of the construction requires modification to meet standards or if a design or construction flaw is discovered, direction will be given to the Permittee and the change performed at no cost to the Department.
- Encroachment permits issued by KYTC in no way supersede local planning/zoning requirements or subdivision regulations. KYTC has no authority with zoning changes.
- Commercial entrances must be paved to the right-of-way line. Any deviations must be approved by KYTC before installation.
- KYTC can dictate drainage improvement installation during construction or after the entrance is at final grade. The permit release does not release the permit applicant from drainage maintenance.
- Signs (ground-mounted and span-mounted), stop bars, crosswalk, and proper lane markings must be in-place before the entrance is open for traffic. Lane width modifications must be approved by the Department.

VI. TRAFFIC

- Any contractor performing work within the vicinity of KYTC roadway lighting / school zone flashers or any Intersection with a traffic signal must specifically request traffic signal locates at least **two (2)** weeks prior to starting work in the right of way. For work near roadway lighting, request locates from the KYTC District 5 Traffic section at 502-338-5273. For work near traffic signals or school flashers in Jefferson County, contact Tammy Baum at 502-574-3261. For work near traffic signals or school flashers outside Jefferson County, request locates from the KYTC District 5 Traffic section at 502-550-0803.
- The applicant must document the condition of all KYTC Roadway signage that is within the work area, prior to beginning work. The applicant must ensure that any signs impacted by the permitted work remain in place, whenever possible and remain undamaged. In the event that any signs have to be removed, it is the applicant's responsibility to document the sign's location before removal and to install the original or new sign per KYTC Standards for sign installation at the same or approximate location. If any questions arise about sign placement, the applicant must contact the District 5 Traffic section for comments.
- Any thermoplastic or striping damaged during the encroachment must be restored in a timely manner per KYTC SSRBC. Stop bars, arrows, words and crosswalks shall be thermoplastic material and all markings must be replaced / refreshed in their entirety. This work must be performed by a KYTC pre-qualified contractor.
- Any work within 10' of a pole, pole base or traffic facility must receive prior approval from the District 5 Traffic Engineer. Excavating near a signal, lighting pole or anchoring facility must be done so that it does not impact the structural integrity of the pole or base. The applicant must show calculations and plans for the excavation before receiving approval.
- If the scope of the permit involves a signal build or rebuild, it is the applicant's responsibility to apply for any required electrical service & pay for any associated fees, as well as request a field inspection and activation from the KYTC District 5 Traffic section. If the signal modifications require timing or phasing changes, this must be requested at least **two (2)** weeks in advance of the desired change. Applicant will be required to provide variable message boards for all approaches to notify motorists of the signal's activation, at least **two (2)** weeks prior to the turn on date. KYTC will not take ownership of permitted signals until the electrical inspection is formally accepted and approved.
- Work which impacts traffic loops requires 48-hour notice to the KYTC District 5 Traffic signal section at 502-550-0803. Accidental damage of a traffic loop must be reported immediately to the KYTC District 5 Traffic signal section at 502-550-0803 (Evenings / Weekends - 502-564-2080). Traffic loops out of operation for more than five working days will subject the applicant to the possible cancellation of the permit and a claim against the bond for the cost of the repairs. Loop repair must be performed by a KYTC pre-qualified contractor and must be coordinated with the KYTC District 5 Traffic section.

VII. SIDEWALK SPECIFICATIONS

A. New Sidewalks

- Sidewalks shall be constructed of Class A concrete (3,500 psi.), shall be a minimum of 5' in width, 8" in thickness across the bituminous entrance, and 4" in thickness across the remaining sections. The width of the sidewalk must meet current ADA (Americans with Disabilities Act) guidelines.
- Sidewalks shall have tooled joints not less than 1" in depth at five (5') foot intervals, and pre-molded expansion joints extending entirely through the sidewalk at intervals not to exceed 50'. See more in Section 505 of the KYTC SSRBC for information relating to this requirement.
- All new sidewalk construction shall demonstrate a cross-slope less than or equal to 2.0% in accordance with ADA standards. Constructing sidewalk with a cross-slope of 1.5% is recommended.
- All new sidewalk construction will be inspected utilizing a 24" long digital inclinometer, with data measured to the **tenth of a percent-grade accuracy**.

B. Existing Sidewalks

- Use of the sidewalk shall not be blocked or obstructed and a usable walkway shall be maintained across the construction area at all times per ADA requirements and MUTCD specifications. Sidewalk closures must be approved by the Department before implementation.
- The location and design of ADA ramps (truncated domes/tactile warnings/etc.) will need to be field verified by the Department before installation. Any retrofitting will require the adherence to current ADA guidelines. If field conditions do not match the plans, contact the Department for approval of any modifications.
- Any section of sidewalk that becomes damaged shall be entirely replaced to match existing sections.

VIII. RIGHT OF WAY RESTORATION

- All disturbed portions of the right of way shall be restored to grass as per KYTC SSRBC (latest edition). A satisfactory turf, as determined by the Department, shall be established by the permittee prior to release of indemnity. Sodding or seeding shall be as follows:

Lawn or High Maintenance Situation: 70% Lawn Fescue (e.g., variety - Falcon) and 30% Bluegrass or 70% Lawn Rye (e.g., variety - Derby) and 30% Bluegrass

Right of Way Lawn Maintenance Situation: 70% KY 31 Fescue and 30% Perennial Rye Grass or 100% KY Fescue

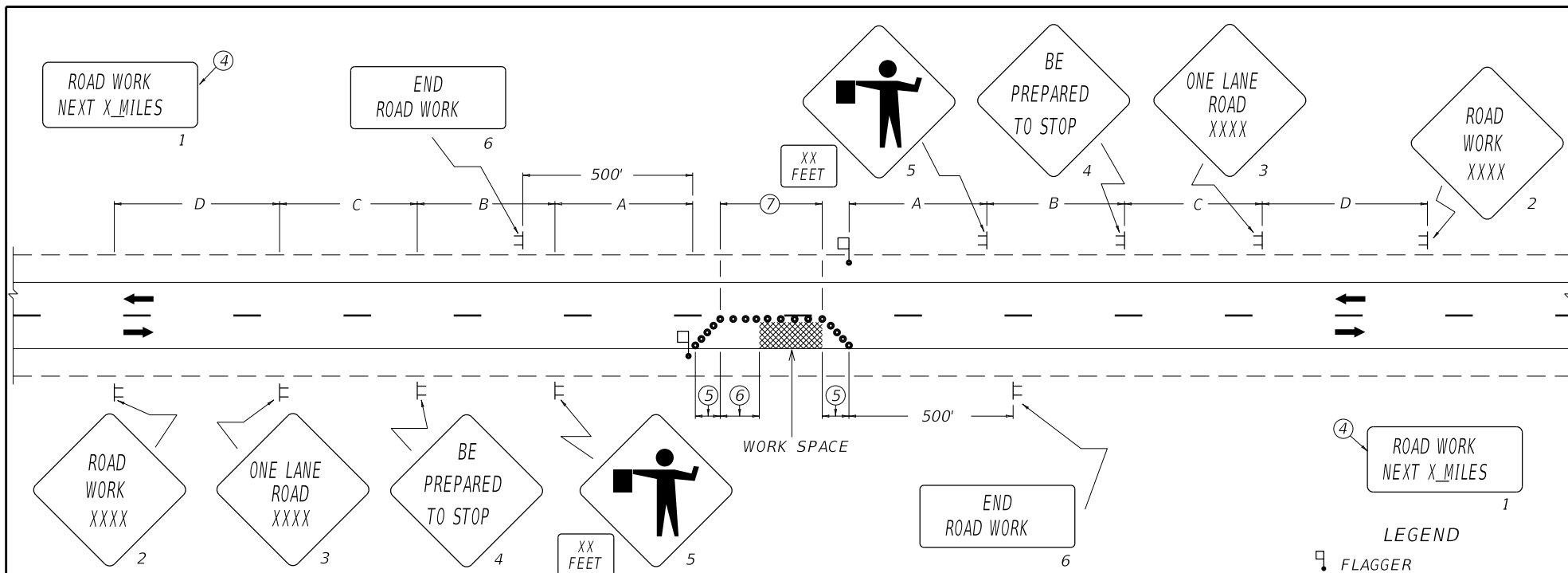
- Two tons of clean straw mulch per acre of seeding.
- Prior to seeding, the ground shall be prepared in accordance with the KYTC SSRBC (latest edition).
- Substitutes for sod such as artificial turf, rocked mulch, or paved areas may be acceptable if they are aesthetically pleasing and receive prior approval from KYTC.
- All ditch-flow lines and all ditch-side slopes shall be sodded.
- Existing concrete right of way markers shall not be disturbed. If damaged in any way, they shall be entirely replaced by the permittee with new concrete markers to match the original markers, in accordance with Kentucky Department of Highways Standard Drawing for Right-Of-Way Monuments (current version). Markers that are entirely removed shall be re-established in the proper locations by the permittee and to the satisfaction of the Department. All right of way monuments must be installed by a licensed Land Surveyor.

IX. RIGHT OF WAY FENCE RESTORATION

- The replacement fence shall be a height of at least 48" and shall be of sufficient density to contain all animals (if applicable).
- The replacement fence shall be a minimum of 1' and a maximum of 2' outside the right-of-way line.
- The fence materials and design shall meet accepted industry standards and be treated as paintable. Durable finish materials such as vinyl are also acceptable.
- The permittee shall be required to maintain the fence in a high state of service. Access from the roadway for the purpose of maintenance will not be allowed. All work on the fence must be accessed from private property.
- The existing fence shall be removed by permittee and stored at the Department's maintenance storage yard for future reuse by the Department. If not, the Department must be reimbursed for the cost of the fence removed from the site.

NOTICE TO PERMITTEE

THE PERMITTEE AGREES THAT ALL WORK WITHIN THE EXISTING RIGHT OF WAY SHALL BE DONE IN ACORDANCE WITH THE PLANS AS APPROVED AND PERMITTED BY AN ENCROACHMENT PERMIT. ANY CHANGES OR VARIANCES MADE AT THE TIME OF CONSTRUCTION WITHOUT WRITTEN APPROVAL FROM THE DEPARTMENT OF HIGHWAYS SHALL BE REMOVED BY THE PERMITTEE AT NO EXPENSE TO THE DEPARTMENT OF HIGHWAYS AND SHALL BE REDONE BY THE PERMITTEE TO CONFORM WITH THE APPROVED PLANS.



~ NOTES ~

1. THE SIZE OF SIGNS 2 THRU 5 SHALL BE 48" X 48" WITH 30" X 24" SUPPLEMENTAL PLAQUES FOR EXPRESSWAYS/FREEWAYS. THE MINIMUM SIZE OF SIGNS 2 THRU 5 SHALL BE 36" X 36" WITH 24" X 18" SUPPLEMENTAL PLAQUES FOR OTHER ROADWAYS. SIGN NOS. 1 AND 6 SHALL BE 48" X 24" FOR EXPRESSWAYS/FREEWAYS AND 36" X 18" FOR OTHER ROADWAYS. A FREEWAY IS DEFINED AS A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS. AN EXPRESSWAY IS DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
2. THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. FLAGGER STATIONS SHALL BE LOCATED FAR ENOUGH IN ADVANCE OF THE ACTIVITY AREA SO THAT APPROACHING ROAD USERS WILL HAVE SUFFICIENT DISTANCE TO STOP BEFORE ENTERING THE WORK SPACE. ILLUMINATION SHALL BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT.
3. DRUMS SHALL BE USED IN LIEU OF CONES IF CLOSURE EXTENDS INTO NIGHTTIME HOURS. GRABBER CONES MAY BE USED IN LIEU OF DRUMS IF THE USE OF DRUMS WOULD RESULT IN LANES THAT ARE TOO NARROW OR AN UNACCEPTABLE SITUATION BASED ON ENGINEERING JUDGMENT.
- ④ SIGN NO. 1 SHOULD BE INSTALLED AT THE LIMITS OF THE PROJECT WHEN THE CONSTRUCTION ZONE IS LONGER THAN TWO MILES IN LENGTH. THE DISTANCE SHOWN SHALL BE STATED TO THE NEAREST WHOLE MILE.
- ⑤ TAPERS SHALL BE 50' (MIN) TO 100' (MAX) IN LENGTH. SPACING OF CHANNELIZING DEVICES SHOULD BE 20' THRU THE TAPER AREAS.
- ⑥ BUFFER SPACE (OPTIONAL). IF USED, THE BUFFER SPACE SHOULD BE EXTENDED SO THAT THE TWO-WAY TRAFFIC TAPER IS PLACED BEFORE A HORIZONTAL OR CREST VERTICAL CURVE TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE FLAGGER AND A QUEUE OF STOPPED VEHICLES. REFER TO TABLE 6C-2 OF THE MUTCD FOR GUIDANCE ON BUFFER SPACE LENGTH.
- ⑦ SPACING OF CHANNELIZING DEVICES THRU THE ACTIVITY AREA SHOULD BE 80'. ON ROADWAYS WITH WIDTHS LESS THAN 20 FEET, CHANNELIZING DEVICES MAY BE OMITTED THRU THE ACTIVITY AREA BASED ON ENGINEERING JUDGMENT.

BID ITEMS AND UNIT TO BID
LANE CLOSURE EACH
REFER TO SECTION 112 OF STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

| SIGNING AND SPACING TABLE | | | | |
|---------------------------|-------|------|-------|-------|
| ROAD TYPE | A | B | C | D |
| EXPRESSWAY/ FREEWAY | 1000' | 500' | 1100' | 2600' |
| SP. LT. \geq 45 MPH* | 500' | 500' | 500' | 1100' |
| SP. LT. \leq 40 MPH* | 250' | 250' | 250' | 250' |

*NOTE: USE NORMAL POSTED SPEED LIMIT

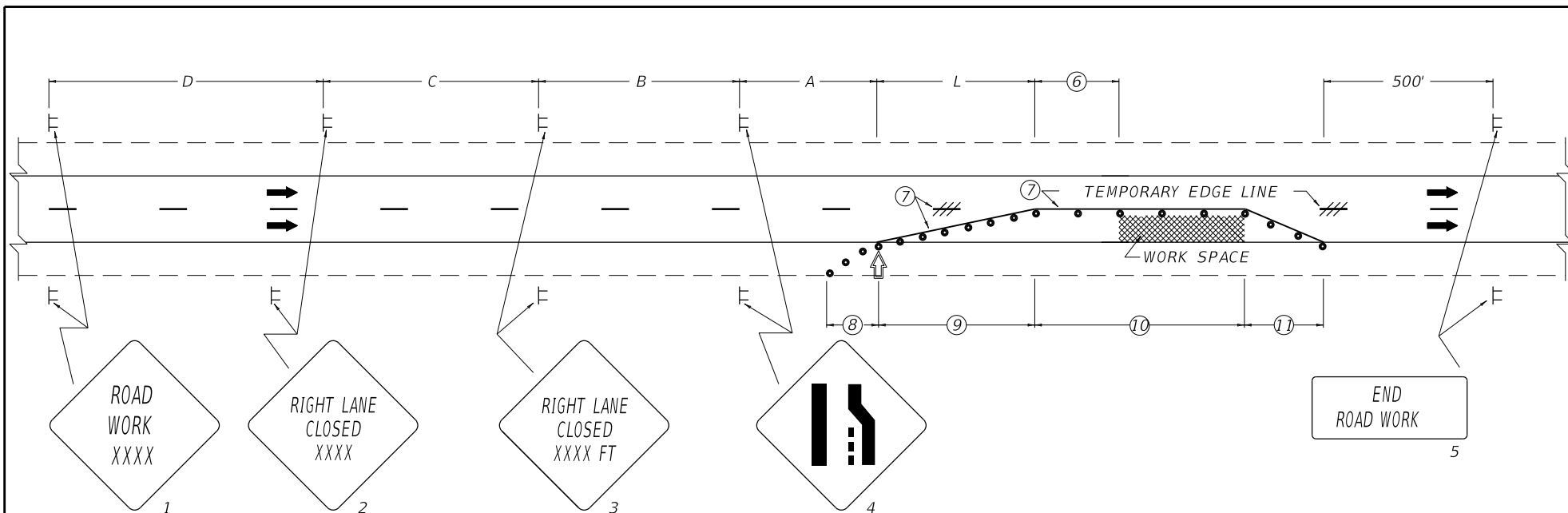
DRAWING NOT TO SCALE

KENTUCKY
DEPARTMENT OF HIGHWAYS

LANE CLOSURE
TWO-LANE HIGHWAY

STANDARD DRAWING NO. TTC-100-05

SUBMITTED *B. Allen Wolf* 02-26-20
DIRECTOR OF TRANSPORTATION OPERATIONS DATE
APPROVED *[Signature]* 02-26-20
STATE HIGHWAY ENGINEER DATE



~ NOTES ~

- IF MEDIAN IS NOT WIDE ENOUGH TO MAINTAIN LATERAL CLEARANCES SHOWN IN MUTCD, SIGNS 1 THRU 5 SHALL NOT BE DUAL MOUNTED.
- THE SIZE OF SIGNS 1 THRU 4 SHALL BE 48" X 48" FOR EXPRESSWAYS/FREEWAYS. THE MINIMUM SIZE OF SIGNS 1 THRU 4 SHALL BE 36" X 36" FOR OTHER ROADWAYS. SIGN NO. 5 SHALL BE 48" X 24" FOR EXPRESSWAYS/FREEWAYS AND 36" X 18" FOR OTHER ROADWAYS. A FREEWAY IS DEFINED AS A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS. AN EXPRESSWAY IS DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
- AN ARROW PANEL SHALL BE LOCATED ON THE SHOULDER AT THE BEGINNING OF THE MERGING TAPER OR LOCATED IN THE CLOSED LANE WHEN THE SHOULDER IS NARROW.
- ALL VEHICLES, EQUIPMENT, WORKERS, AND THEIR ACTIVITIES SHALL BE RESTRICTED TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- DRUMS SHALL BE USED IN LIEU OF CONES IF CLOSURE EXTENDS INTO NIGHTTIME HOURS. GRABBER CONES MAY BE USED IN LIEU OF DRUMS IF THE USE OF DRUMS WOULD RESULT IN LANES THAT ARE TOO NARROW OR AN UNACCEPTABLE SITUATION BASED ON ENGINEERING JUDGMENT.
- BUFFER SPACE (OPTIONAL). REFER TO TABLE 6C-2 OF THE MUTCD FOR GUIDANCE ON BUFFER SPACE LENGTH.
- IF DURATION OF LANE CLOSURE EXCEEDS THREE DAYS, TEMPORARY EDGE LINE SHALL BE REQUIRED AND SKIP LINES SHALL BE OBLITERATED BY APPROVED METHOD THRU LENGTH OF TAPER. ANY OTHER CONFLICTING PAVEMENT MARKINGS SHALL BE OBLITERATED.
- IF AN ARROW PANEL IS INSTALLED ON THE SHOULDER OR WITHIN THE CLEAR ZONE, A SHOULDER TAPER SHALL BE REQUIRED. WHEN PAVED SHOULDERS HAVING A WIDTH OF 8' OR MORE ARE CLOSED, A SHOULDER TAPER SHALL BE REQUIRED. TAPER LENGTH SHALL BE 0.33 L. SPACING OF CHANNELIZING DEVICES THRU THE SHOULDER TAPER SHOULD BE 40'.
- SPACING OF CHANNELIZING DEVICES THRU THE MERGING TAPER SHOULD BE 40'.
- SPACING OF CHANNELIZING DEVICES THRU THE ACTIVITY AREA SHOULD BE 80'.
- DOWNSTEAM TAPER SHALL HAVE A MINIMUM LENGTH OF 50' AND A MAXIMUM LENGTH OF 100'. SPACING OF CHANNELIZING DEVICES THRU THE DOWNSTEAM TAPER SHOULD BE 20'.

BID ITEM AND UNIT TO BID
 LANE CLOSURE EACH
 ARROW PANEL EACH
 REFER TO SECTION 112 OF STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

LEGEND

- ARROW PANEL
- SIGN
- CHANNELIZING DEVICES
CONES
DRUMS

DRAWING NOT TO SCALE

USE WITH CUR. STD. DWG.
 TTC-160

| SIGNING AND SPACING TABLE | | | | | |
|---------------------------|-------|------|-------|-------|------|
| ROAD TYPE | A | B | C | D | L |
| EXPRESSWAY/ FREEWAY | 1000' | 500' | 1100' | 2600' | 840' |
| SP. LT. \geq 45 MPH* | 500' | 500' | 500' | 1100' | 680' |
| SP. LT. \leq 40 MPH* | 250' | 250' | 500' | 500' | 320' |

*NOTE: USE NORMAL POSTED SPEED LIMIT

| | |
|---|----------|
| KENTUCKY DEPARTMENT OF HIGHWAYS | |
| LANE CLOSURE MULTI-LANE HIGHWAY CASE I | |
| STANDARD DRAWING NO. TTC-115-04 | DATE |
| SUBMITTED BY <i>B. Allen</i> DIRECTOR OF TRANSPORTATION OPERATIONS | 02-26-20 |
| APPROVED BY <i>[Signature]</i> STATE HIGHWAY ENGINEER | 02-26-20 |

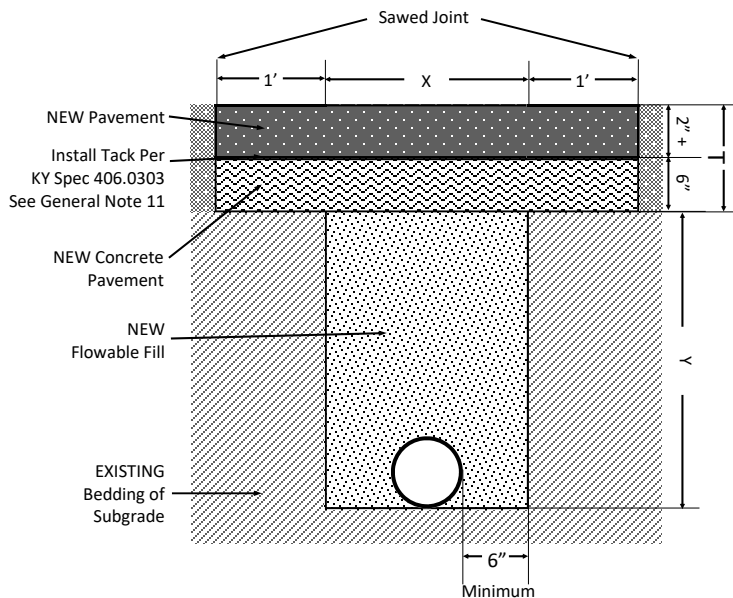
Pavement Restoration



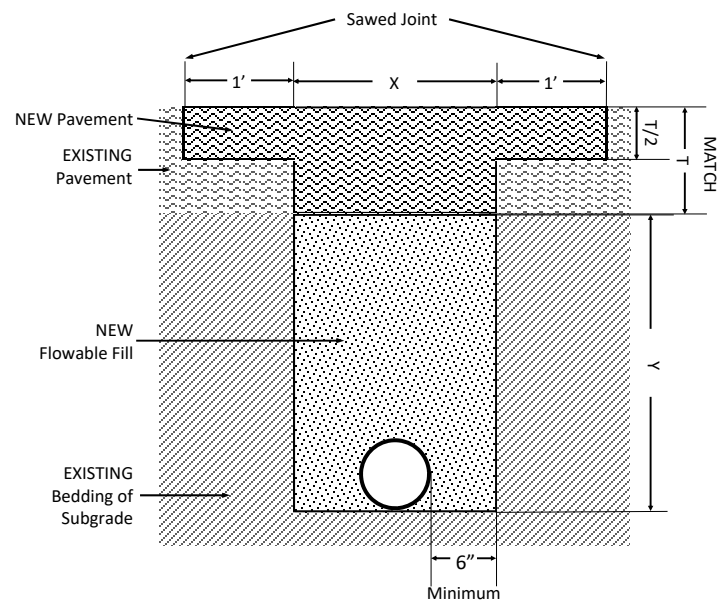
General Notes:

1. All pipes must be encased in a pipe of a larger diameter.
2. Fill extends to bottom of pavement structure.
3. Replace pavement and materials with existing type.
4. Fill material must be agitated during transportation and waiting.
5. For Concrete Paving, if the sawed joints are less than 6' from an existing joint or break in pavement, remove entire slab to break or joint.
6. Dimensions X and Y are the excavation width and depth, respectively.
7. Dimension T is the thickness of the material.
8. The thickness of new pavement shall match the existing thickness over the excavation area.
9. Seal any joints with approved material.
10. Any disturbed traffic control markings (arrows, bike lane symbols, striping, etc.) shall be replaced to match existing conditions as per KYTC specifications.
11. For Bituminous Paving, install roughened surface on the top of the concrete section to apply the tack between asphalt and concrete layers.

Bituminous Paving



Concrete Paving



Flowable Fill Specifications:

Flowable Fill ingredients must meet the requirements of the Kentucky Department of Highways as set forth in the manual of standard specifications.

Flowable Fill shall be proportioned as follows per cubic yard batch:

| | |
|-------------------------|---------------------|
| <i>Cement</i> | <i>30 Pounds</i> |
| <i>Fly Ash, Class F</i> | <i>300 Pounds</i> |
| <i>Sand (SSD)</i> | <i>3,000 Pounds</i> |
| <i>Water (max)</i> | <i>550 Pounds</i> |

NOTES:

1. The proposed mixture shall be proportioned to obtain a minimum flow of 8 inches when tested with a 3 inch by 6 inch open ended cylinder modified flow test and meets acceptable strength requirements.
2. The mixture shall bleed freely within 10 minutes.
3. The mixture shall support a 150 pound person within 3 hours.
4. Flowable fill shall be in place for 2 hours prior to addition and compaction of cover material.

Additional Pavement Restoration Notes

Asphalt Resurfacing Limits

The following notes regarding asphalt resurfacing limits for pavement cuts shall supplement the KYTC District 5 Permits Pavement Restoration Drawing:


- For all asphalt restoration, the pavement mix design shall be a KYTC certified Class 3 Asphalt Surface 0.38B PG 64-22 mix unless otherwise directed by the KYTC Inspector or Engineer.
- For longitudinal cuts within the roadway of a KYTC route, the asphalt surface shall be restored to the full width of the disturbed lane for the entire length of the cut.
- For lateral cuts crossing a KYTC route, the limits of asphalt surface restoration shall be as follows:
 - 25' on each side of the lateral cut for the entire width of the disturbance, OR
 - To the edge of existing crosswalk markings if there is a crosswalk present within 25' of the lateral cut

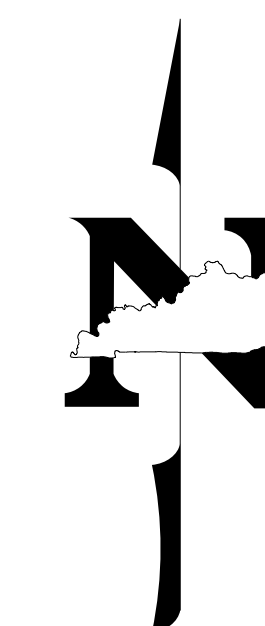
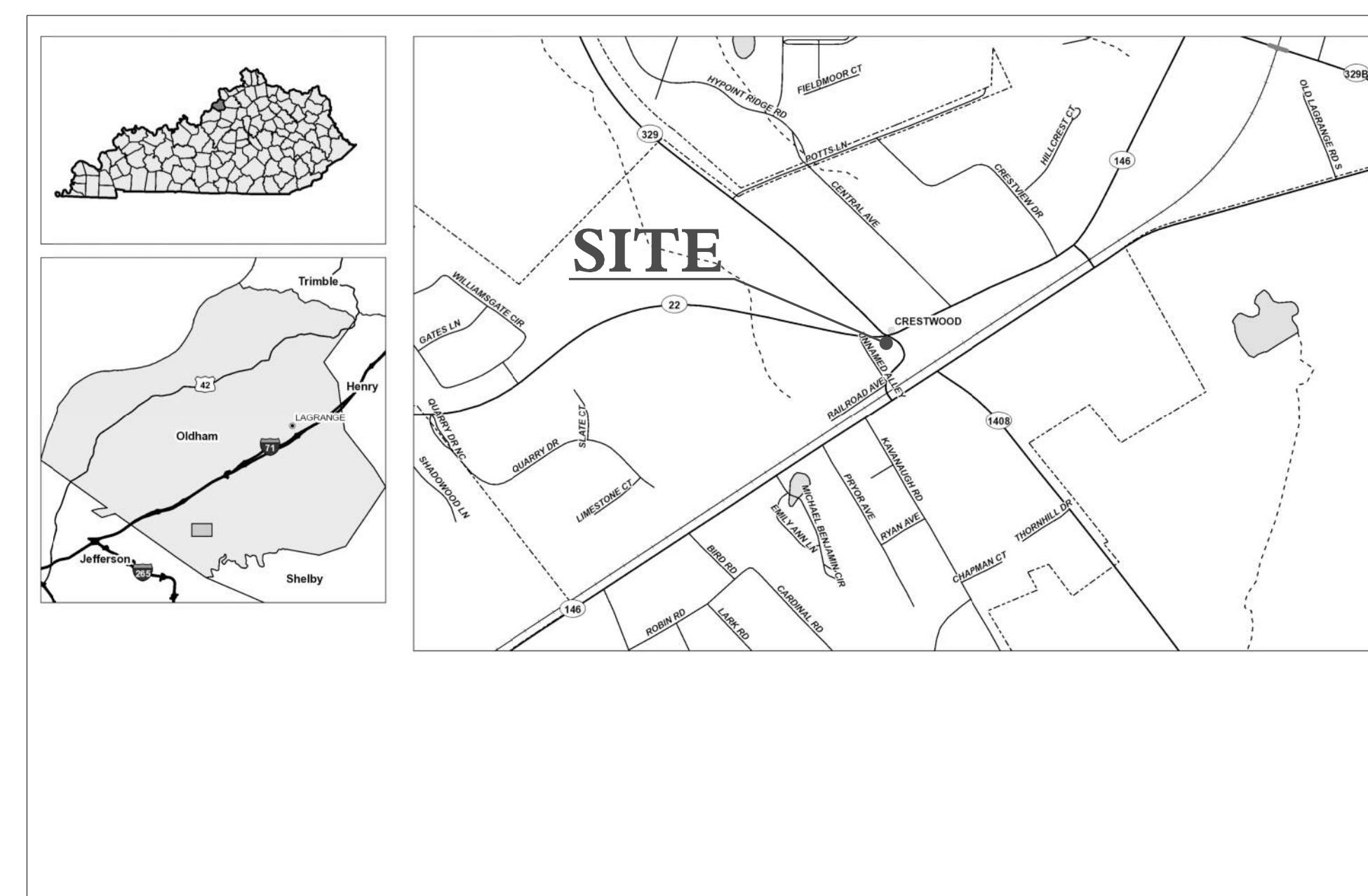
Pothole Restoration

The following requirements shall apply to any pothole cuts made on KYTC routes for the purpose of locating existing utilities for a bored crossing:

- All potholes in the roadway shall be backfilled with cementitious material – concrete, flowable fill, or grout – and capped with 2" of asphalt
- The limits of the 2" asphalt cap shall extend 1 foot square beyond the dimensions of the pothole
- Joints between new and existing asphalt shall be sealed with an approved joint sealer
- If more than ONE pothole is required within the limits of a single lane, the full lane width shall be resurfaced for a minimum length of 10'
- If more than THREE potholes are required for a single crossing, the full roadway width shall be resurfaced in accordance with KYTC's open-cut restoration limits



TEAM 
KENTUCKY
TRANSPORTATION
CABINET



LAYOUT MAP

MAST ARM & POLE INSTALLATION PLANS

DESIGN CRITERIA (N/A)

CLASS OF HIGHWAY -
TYPE OF TERRAIN -
DESIGN SPEED -
REQUIRED NPSD -
REQUIRED PSD -
LEVEL OF SERVICE -
ADT PRESENT (-) -
ADT FUTURE (-) -
DHV -
D % -
T % -

GEOGRAPHIC COORDINATES

LATITUDE 47 DEGREES 49 MINUTES 35 SECONDS NORTH
LONGITUDE 85 DEGREES 28 MINUTES 45 SECONDS WEST

DESIGNED

% RESTRICTED SD -
LEVEL OF SERVICE -
MAX. DISTANCE W/O PASSING -

INDEX OF SHEETS

R1 LAYOUT
R2 PLAN
R3 MAINTENANCE OF TRAFFIC
R4 ARM MAST DETAIL

-

STANDARD DRAWINGS

TTC-100-05
TTD-130

MAST ARM & POLE INSTALLATION PLANS

LENGTH - LIN. FT. MILES
ADDED ☐ FOR EQUALITIES LIN. FT.
DEDUCTED ☐ NOT INCLUDED

RAILROAD CROSSINGS NO. LIN. FT.
BRIDGES LIN. FT.

LENGTH - LIN. FT. MILES
ADDED ☐ FOR EQUALITIES LIN. FT.
DEDUCTED ☐ NOT INCLUDED

RAILROAD CROSSINGS NO. LIN. FT.
BRIDGES LIN. FT.

LENGTH - LIN. FT. MILES
ADDED ☐ FOR EQUALITIES LIN. FT.
DEDUCTED ☐ NOT INCLUDED

RAILROAD CROSSINGS NO. LIN. FT.
BRIDGES LIN. FT.

LENGTH - LIN. FT. MILES
ADDED ☐ FOR EQUALITIES LIN. FT.
DEDUCTED ☐ NOT INCLUDED

RAILROAD CROSSINGS NO. LIN. FT.
BRIDGES LIN. FT.

PROJECT DESCRIPTION: OVERHEAD SIGN MAST ARM - LAYOUT

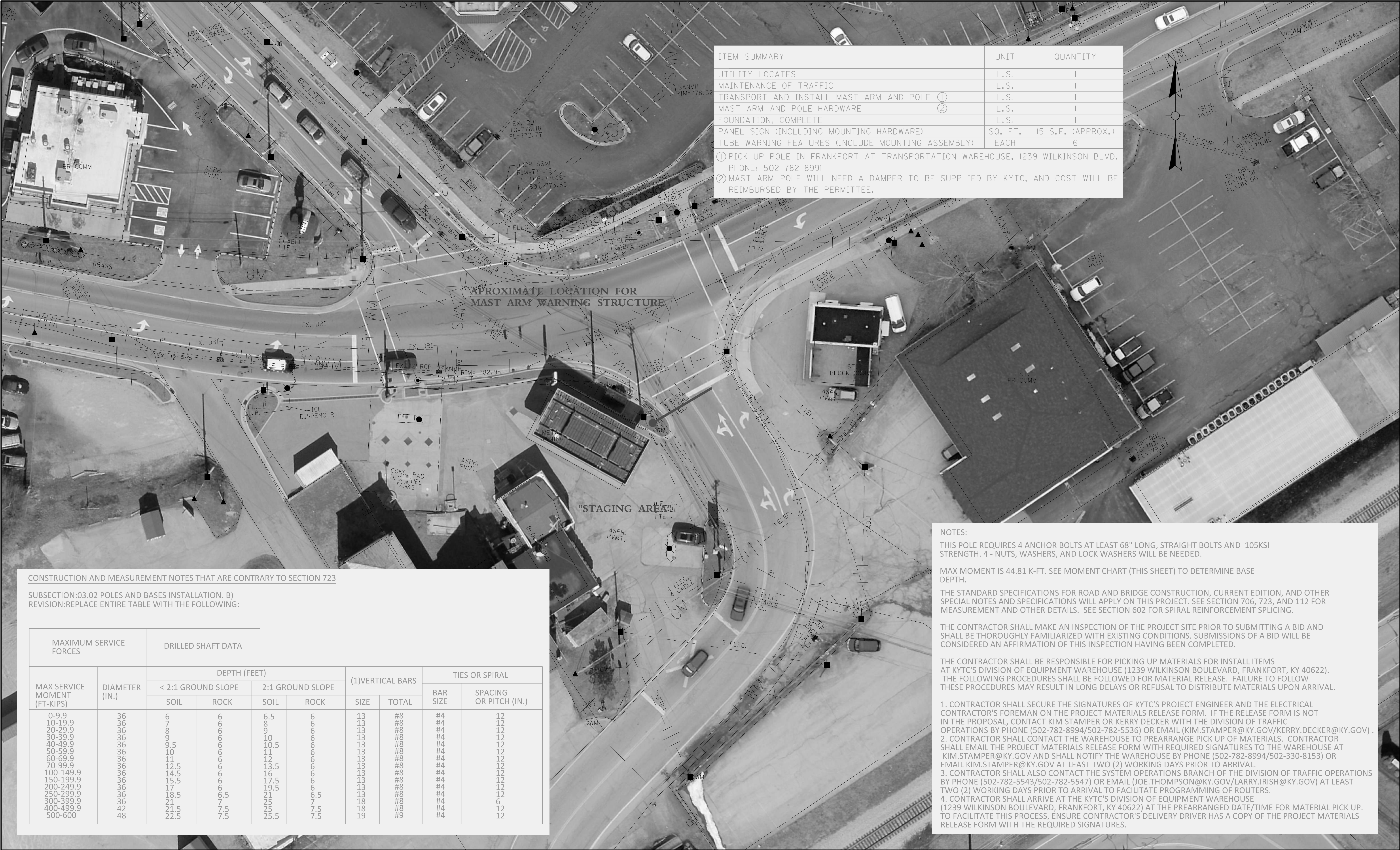
RECOMMENDED BY: JIM SILLIMAN X
OLDHAM CO. PLANNING & DEVELOPMENT DATE: _____

STATE OF KENTUCKY
WILLIAMSON COUNTY
REGISTERED PROFESSIONAL ENGINEER
No. 16720
J. Silliman
09/26/23

LETTING DATE: TBD

ITEM NO. - COUNTY OF OLDHAM

SHEET NO. R1



| ITEM SUMMARY | UNIT | QUANTITY |
|--|---------|-------------------|
| UTILITY LOCATES | L.S. | 1 |
| MAINTENANCE OF TRAFFIC | L.S. | 1 |
| TRANSPORT AND INSTALL MAST ARM AND POLE ① | L.S. | 1 |
| MAST ARM AND POLE HARDWARE ② | L.S. | 1 |
| FOUNDATION, COMPLETE | L.S. | 1 |
| PANEL SIGN (INCLUDING MOUNTING HARDWARE) | SO. FT. | 15 S.F. (APPROX.) |
| TUBE WARNING FEATURES (INCLUDE MOUNTING ASSEMBLY) | EACH | 6 |
| ① PICK UP POLE IN FRANKFORT AT TRANSPORTATION WAREHOUSE, 1239 WILKINSON BLVD. PHONE: 502-782-8991 | | |
| ② MAST ARM POLE WILL NEED A DAMPER TO BE SUPPLIED BY KYTC, AND COST WILL BE REIMBURSED BY THE PERMITTEE. | | |

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723

SUBSECTION:03.02 POLES AND BASES INSTALLATION. B)
REVISION:REPLACE ENTIRE TABLE WITH THE FOLLOWING:

| MAXIMUM SERVICE FORCES | | DRILLED SHAFT DATA | | | | | | | |
|------------------------------|----------------|--------------------|------|------------------|------|------------------|-------|----------------|------------------------|
| MAX SERVICE MOMENT (FT-KIPS) | DIAMETER (IN.) | DEPTH (FEET) | | | | (1)VERTICAL BARS | | TIES OR SPIRAL | |
| | | < 2:1 GROUND SLOPE | | 2:1 GROUND SLOPE | | | | | |
| | | SOIL | ROCK | SOIL | ROCK | SIZE | TOTAL | BAR SIZE | SPACING OR PITCH (IN.) |
| 0-9.9 | 36 | 6 | 6 | 6.5 | 6 | 13 | #8 | #4 | 12 |
| 10-19.9 | 36 | 7 | 6 | 8 | 6 | 13 | #8 | #4 | 12 |
| 20-29.9 | 36 | 8 | 6 | 9 | 6 | 13 | #8 | #4 | 12 |
| 30-39.9 | 36 | 9 | 6 | 10 | 6 | 13 | #8 | #4 | 12 |
| 40-49.9 | 36 | 9.5 | 6 | 10.5 | 6 | 13 | #8 | #4 | 12 |
| 50-59.9 | 36 | 10 | 6 | 11 | 6 | 13 | #8 | #4 | 12 |
| 60-69.9 | 36 | 11 | 6 | 12 | 6 | 13 | #8 | #4 | 12 |
| 70-99.9 | 36 | 12.5 | 6 | 13.5 | 6 | 13 | #8 | #4 | 12 |
| 100-149.9 | 36 | 14.5 | 6 | 16 | 6 | 13 | #8 | #4 | 12 |
| 150-199.9 | 36 | 15.5 | 6 | 17.5 | 6 | 13 | #8 | #4 | 12 |
| 200-249.9 | 36 | 17 | 6 | 19.5 | 6 | 13 | #8 | #4 | 12 |
| 250-299.9 | 36 | 18.5 | 6.5 | 21 | 6.5 | 13 | #8 | #4 | 12 |
| 300-399.9 | 36 | 21 | 7 | 25 | 7 | 18 | #8 | #4 | 6 |
| 400-499.9 | 42 | 21.5 | 7.5 | 25 | 7.5 | 18 | #8 | #4 | 12 |
| 500-600 | 48 | 22.5 | 7.5 | 25.5 | 7.5 | 19 | #9 | #4 | 12 |

- NOTES:
- THIS POLE REQUIRES 4 ANCHOR BOLTS AT LEAST 68" LONG, STRAIGHT BOLTS AND 105KSI STRENGTH. 4 - NUTS, WASHERS, AND LOCK WASHERS WILL BE NEEDED.
- MAX MOMENT IS 44.81 K-FT. SEE MOMENT CHART (THIS SHEET) TO DETERMINE BASE DEPTH.
- THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 723, AND 112 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING.
- THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622). THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELEASE. FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN LONG DELAYS OR REFUSAL TO DISTRIBUTE MATERIALS UPON ARRIVAL.
1. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROJECT ENGINEER AND THE ELECTRICAL CONTRACTOR'S FOREMAN ON THE PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS NOT IN THE PROPOSAL, CONTACT KIM STAMPER OR KERRY DECKER WITH THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-8994/502-782-5536) OR EMAIL (KIM.STAMPER@KY.GOV/KERRY.DECKER@KY.GOV).
 2. CONTRACTOR SHALL CONTACT THE WAREHOUSE TO PREARRANGE PICK UP OF MATERIALS. CONTRACTOR SHALL EMAIL THE PROJECT MATERIALS RELEASE FORM WITH REQUIRED SIGNATURES TO THE WAREHOUSE AT KIM.STAMPER@KY.GOV AND SHALL NOTIFY THE WAREHOUSE BY PHONE (502-782-8994/502-330-8153) OR EMAIL KIM.STAMPER@KY.GOV AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL.
 3. CONTRACTOR SHALL ALSO CONTACT THE SYSTEM OPERATIONS BRANCH OF THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-5543/502-782-5547) OR EMAIL (JOE.THOMPSON@KY.GOV/LARRY.IRISH@KY.GOV) AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL TO FACILITATE PROGRAMMING OF ROUTERS.
 4. CONTRACTOR SHALL ARRIVE AT THE KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622) AT THE PREARRANGED DATE/TIME FOR MATERIAL PICK UP. TO FACILITATE THIS PROCESS, ENSURE CONTRACTOR'S DELIVERY DRIVER HAS A COPY OF THE PROJECT MATERIALS RELEASE FORM WITH THE REQUIRED SIGNATURES.



MOT NOTES:

ALL WORK AND SIGNS ARE INCIDENTAL TO "MAINTAIN AND CONTROL TRAFFIC".

WHEN LANE CLOSURES ARE USED, SEPARATE OPPOSING TRAFFIC WITH BARRELS AND MAINTAIN 11' LANES.

WHEN NO LANE CLOSURE IS NEEDED, BUT WORK IS BEING PERFORMED BEHIND THE CURB, SUPPLEMENT THE SHOWN SIGNAGE WITH AN ADDITIONAL "SHOULDER WORK" SIGN AS SHOWN IN MUTCD TA-3.

WHEN SHOULDER WORK IS BEING PERFORMED, PLACE BARRELS BETWEEN THE WORK ZONE AND THE ROADWAY BEHIND THE CURB.

IF LANE CLOSURES ARE NEEDED, LANE CLOSURES SHALL BE SHORT TERM ONLY AND NOT TO BE LEFT IN PLACE OVER NIGHT.

FOLLOW MUTCD FIGURE TA-24 FOR LANE CLOSURES.

BARRELS ARE TO BE USED TO DELINEATE WORK ZONE FROM TRAFFIC LANE.

SPEED TO BE REDUCED IN WORK ZONE AREA BY 10 MPH.

APROXIMATE LOCATION FOR
MAST ARM WARNING STRUCTURE

TYPE III
BARRICADE

END
ROAD WORK

ROAD
WORK
AHEAD

END
ROAD WORK

ROAD
WORK
AHEAD

END
ROAD WORK

WORK ZONE

BARRELS

TYPE III
BARRICADE

"STAGING AREA"

END
ROAD WORK

ROAD
WORK
AHEAD

ROAD
WORK
AHEAD

TYPE III BARRICADE

ROAD
WORK
AHEAD

W20-1
36"x36"

END
ROAD WORK

G20-2
36"x18"

FOR MAINTENANCE OF
TRAFFIC ONLY

STATE OF KENTUCKY
WILLIAM NOLAN
26720
PROFESSIONAL ENGINEER
6/23

RECOMMENDED BY: JIM SILLIMAN X
OLDHAM CO, PLANNING & DEVELOPMENT
DATE:

PLAN APPROVED BY: WILL NOLAN CERT. NO. S19090084
CERTIFIED WORK ZONE TRAFFIC CONTROL SUPERVISOR
DATE:

ITEM NO. COUNTY OF
OLDHAM

SHEET NO.
R3

