

ADDENDUM No. 2

**DOBBS BRANCH BASIN IMPROVEMENTS PHASE 1
CONTRACT NUMBER W-17-022-201**

CITY OF CHATTANOOGA, TENNESSEE

The following changes shall be made to the Contract Documents, Specifications, and Drawings:

1. Section 00 73 00, Part SC-602.1

Delete the following:

“\$100.00/hour to \$140/hour, depending on the actual Resident Project Representative assigned to the Project”

Replace with the following:

“\$110.00/hour.”

2. Section 00 80 00-12-08 Project Wage Rate Sheet

Delete the Project Wage Rate Sheet and replace with the attached Project Wage Rate Sheet dated 1/03/2020.

3. Section 00 41 00

Delete the Bid Form and replace with the updated Bid Form attached.

4. Section 01 22 00

Delete Section 01 22 00 and replace with the updated 01 22 00 attached.

5. Contract Drawing C-506

Delete C-506 and replace with the attached revised drawing.

6. Contract Drawing C-507

Delete C-507 and replace with the attached revised drawing.

Questions/Responses

Q1: Would it be possible to have DuraSeal products considered for approval for use on these projects?

R1: No, we cannot accept this manufacturer at this time.

Q2: Dye testing includes “all plumbing fixtures”. Does this mean each fixture within each residence including sinks, baths, toilets, showers, washing machines, and floor drains for each home?

R2: The contractor is responsible to verify connectivity of all taps in the mainline sewers rehabilitated by CIPP. The Contractor may need to dye and flow test any and all plumbing fixtures within or surrounding a house or facility in an effort to verify connectivity.

Q3: There are a significant number of vacant homes that accessing for dye testing will not be possible. Can the City provide access for the contractor to properly dye test?

R3: Contractor is responsible for access to properties to dye test. The Engineer will assist the Contractor where possible for this task but ultimately the Contractor is responsible to verify all taps to the mainline sewer rehabilitated by CIPP.

Q4: Our CIPP lateral contractors have asked if the +/- 100 CIPP laterals that are included as bid items will be determined at the time of engineering evaluation so as to minimize the number of mobilizations, and thus saving the City of Chattanooga money ?

R4: Yes, but others may be added as the work progresses.

Q5: Is there a different standard for TDOT roadways versus City streets for the asphalt milling and paving item in the specification?

R5: Yes. See revisions to Drawings C-506, C-507 and Section 01 22 00 via addendum.

Q6: In the event that an excavation is within 10 feet of an intersection requiring the milling and paving to extend into unaffected intersection, will the contractor be required to extend the milling and paving quantity to include the entire intersection? Page C-506 does not include this described situation which will possible in multiple locations on this project.

R6: This is to be determined. The quantity of pavement resurfacing included in the bid will cover the anticipated pavement replacement. Additionally, a pavement replacement allowance is also included to account for unknowns.

Q7: Regarding bid items 2 A, B, C,D, E, and F (CCTV and Cleaning) how will the contractor be reimbursed for this work in the event a line segment contains multiple collapses and the entire segment cannot be evaluated at the time of the initial and an additional setup will be required?

R7: These instances will likely be uncommon, therefore there won't be a special payment situation for this. Contractor will be paid for the linear footage of pipe CCTV'd/Cleaned.

Q8: The actual quantity of point repairs in this area could exceed the bid quantity. Are the quantity of point repairs based on specific knowledge of past inspections?

R8: The quantities are based on metrics determined from past work in this area and supplemented by the City's existing data.

Q9: The cash allowance values are not established. Will the City establish these values before the bid date?

R9: Yes. See the attached revised Section 00 41 00.

Q10: Is there a cost for the traffic permits required from the City as described in item 67 of the general conditions? How long are these permits valid from the date of being issued?

R10: There is no cost for the work zone permits. The permit durations are as requested by the Contractor and approved by the City.

Q11: The smoke testing described in item 74 of the general conditions suggests sanitary sewer lines being connected to storm drains. Please provide detail of these connections which are expected.

R11: These connections are unknown, but smoke testing has suggested they may be present. No SSES has been completed yet, therefore these will need to be investigated. If they are found and need to be addressed this would require the use of an allowance or contract change.

Q12: Inspector overtime (for all construction activities for prime and subcontractors) is suggested in addendum 1 to be anything over regular work hours. It states that regular work hours are 7:00 AM to 6:00 PM (for Monday thru Friday) and 40 hours a week. For clarification, if a contractor works from 7:00 AM to 6:00 PM for five days a week for the entire duration of the contract of 70 weeks, the contractor will be responsible for 15 hours of overtime per week for 70 weeks equating to 1,050 hours of overtime.

R12: Per the Contract Documents regular work hours will total 40 hours per week and can be accomplished between the hours of 7AM to 6 PM, unless otherwise approved by the Engineer. If the Contractor chooses to work more than 40 hours per week or outside of 7AM to 6PM, then this requires prior approval from the Engineer and overtime rates apply above 40 hours total per week.

Q13: Can the hourly overtime rate for inspection be provided prior to bid?

R13: The rate will be \$110/hour.

Q14: In the event that multiple activities are simultaneously occurring and all are in overtime, will the contractor be responsible for paying multiple inspectors for overtime?

R14: At this time, there is only one inspector assigned to this project.

Q15: What specific geography should the Land Disturbance Permit include as much of the work is going to be determined after the evaluation is complete? The contractor, at the time of bid, has no way of determining the exact area to include so an accurate estimate cost can be determined.

R15: Assume less than one acre. The Land Disturbance Permit has already been submitted and preliminarily approved by the City. The Contractor is responsible to pay the permit fee (approximately \$300) and sign on as the permit holder.

Q16: The specification requires the contractor (prime) to perform 50% of the work onsite with its own forces. Can this value be reduced?

R17: No.

Q17: Do liquidated damages apply to the two milestones? If so, at what rate?

R17: Liquidated damages do not apply to the two milestones. The intention of the milestones is to encourage the Contractor to complete the SSES and for the Engineer to complete the review early enough to allow the Contractor to have ample time to complete the work. If there are problem segments due to access, collapsed pipes, etc., then those will be dealt with accordingly, but will not be attached to liquidated damages.

Q18: I read in the specs/documents where the manhole inspections would aid in determining whether a cementitious or polymer based lining product would be utilized if the present of gases or corrosion are established. What criteria or factors will determine whether a Type 1 or Type 2 polymer resin based product as specified would be used?

R18: Manhole lining type will be determined after the manhole inspections.

Q19: Is it correct to assume the bid line item quantities for each type of product are an educated estimate in lieu of the pending inspections to be done, or how is this related?

R19: The quantities are based on existing conditions data available at this time. Final quantities may differ.

Q20: The specification stipulates "The preferred method of installation and cure for CIPP shall be inversion using hydrostatic head (water column) pressure and curing with heated, circulated water. The use of pressurized air inversion/steam cure will be considered on a case-by-case basis only. "The Contractor shall submit a written request for the use of pressurized air/steam in sewer segments where the Contractor feels that the utilization of pressurized air/steam will be beneficial to the Owner." This project is in a high residential area where a faster/more efficient installation will benefit the residents, businesses, and community. Can we assume that a steam installation will be permitted to achieve the technical results of the specification while minimizing disruption as described?

R20: Steam cure will considered for special cases, such as steep grades, based on manufacturers suggested installation practices, otherwise water cure is required.

Q21: In the CIPP lateral specification it is stated, "The Contractor shall install a cleanout meeting the requirements of the detail shown on the Drawing at the edge of the right-of-way or utility easement, should one not exist." Where should this cost be included?

R21: For lateral segments rehabilitated by CIPP, a cleanout must be installed to facilitate the CIPP if one doesn't exist. This type of work will be compensated via allowance item if needed.

Q22: In the CIPP lateral specification it is stated "It is recognized that the deterioration of sewers is an on-going process and in the event that a point repair is deemed necessary by the Engineer, the repair shall be accomplished by the Contractor in a timely manner." There is not a lateral point repair item. Should we include lateral point repair costs in our CIPP lateral item?

R22: A tap connection point repair has been added via addendum, see revisions to 00 41 00 and 01 22 00. This pay item shall be used if needed for a lateral point repair.

Q23: What frequency of CIPP testing is required for mainline and lateral installations?

R23: Samples are required for each CIPP installation. The frequency for which the samples are sent to the laboratory for testing will be determined by the Engineer. Payment for the independent laboratory testing will be covered by an allowance pay item.

Q24: Section 33 01 30.29, 1.02 General Provisions, B Please confirm that the manhole inspection data requirements are NASSCO MACP LEVEL 1?

R24: Each manhole inspection shall be conducted to the standards of NASSCO MACP Level 2. See revision to Section 01 22 00 via addendum.

Q25: Pre bid Out-line & Section 33 01 30.83, 1.02 during the pre-bid meeting it was stated that the contractor must have 5 years' experience with the "exact same product as the one submitted" for CIPP. Will that same "exact same product as submitted" requirement be the same for the 3 years' experience with Manhole lining products?

R25: The manhole lining contractor experience requirements will remain as stated on the Contract Documents.

Q26: 33 01 30.83 - 10, 3.04 Acceptance Testing During manhole lining, if more than one lining crew is on site will there be an inspector assigned to each crew or will one inspector be moving between crews?

R26: One inspector will be assigned to the project to cover all observations. The General Contractor and its subcontractors will schedule acceptance testing observations accordingly.

Q27: Dye Testing is noted on the plans for some line segments, is Dye Testing required for all line segments?

R27: Per the General Note 16 on Drawing G-102 dye testing is required to verify connectivity of each service connection to mainline segments receiving CIPP rehabilitation. General Note 74 on Drawing G-103 specifies requirements for dye testing of each catch basin smoke testing defect found during the study phase of this project. Each of the smoke testing defects, as designated by notes and symbols on the Contract Drawings, require dye testing to investigate storm sewer/sanitary sewer cross connectivity.

Q28: Can a bid item be added to account for the Dye Testing?

R28: The dye testing will remain as incidental to the work. No additional pay item will be added.

Q29: Is Main Street the only TDOT roadway with any scheduled work for this project?

R29: Rehabilitation work for this project is required in several TDOT roadways including Main Street, Bailey Ave., Rossville Blvd., and East 23rd Street.

Q30: Spec Section 33 01 30.83 for Subsurface Manhole Rehabilitation, Paragraph 1.05 Warranty calls for a 10 Year Warranty for coatings/linings. There are very few if any manhole lining products that offer a 10 year warranty, please consider removing this requirement.

R31: The manhole warranty in the Contract Documents will remain.

Q31: Milestones for the SSES work is 60 days for 50% and 90 days for 100%. This is extremely aggressive, will require multiple crews, and leaves absolutely NO MARGIN for error for 127,950LF of small diameter, 12,050' of medium diameter and 480 MH inspections. In addition, it appears the project LDS are attached to these milestones, which leaves no margin for error and could start the project out on a very negative note. Please consider either not attaching LDS to these milestones and/or increasing the time deadlines to more in the range of 120 days and 180 days, respectively.

R31: The two CCTV milestones are not connected to liquidated damages.

Q32: There are currently five allowance items in the bid form with no specified values. Will the Owner please provide values for these allowances by addendum?

R32: Yes, see revised Section 00 41 00.

Q33: Currently, the Units for Bid Items 14a and b are by the foot. Please consider changing these units to per each, as this will remove ambiguity.

R33: These pay items are to be paid by the linear foot. A tap connection point repair pay item has been added via addendum. See revisions to 00 41 00.

Q34: Does the Owner have a cost estimate for the TDOT permits required for excavation?

R34: TDOT permits do not include a permit fee.

Q35: Will the Owner please add an allowance item for any additional access beyond that of the City's ROW? Additional access may be required? However, in the even it is, there is no way to anticipate what the associated costs may be. Therefore, without an allowance item, the Contractor will need to add a substantial amount to their bid to cover EVERY eventuality. As a result, the owner will see increased bid amounts to their bid for additional accessed everywhere, which will not be required.

R35: No additional payment will be made for access outside City ROW.

Q36: Bid Item 2 appears to include the clean and CCTV of CIPP quantities that are listed in the subsequent bid items to be CIPP rehabbed. Please confirm. In addition, there are cleaning quantities that match the quantities of the CIPP rehabbed in the subsequent CIPP bid items below for each diameter. Should the Contractor assume they will clean all the CIPP footage again prior to lining? Please confirm.

R36: Bid item 2 is for the SSES inspection of all sewer segments and manholes in the project area. This data will allow the Owner/Engineer to determine where point repairs are needed to confirm the CIPP scope. The bid items associated with the pre and post CCTV are designated to compensate the Contractor for standard pre & post videos for the segments designated for CIPP rehabilitation. So the answer to your question is, yes.

Q37: Is the SSES scope identified? No clean and CCTV only segments are shown on the plans. Please clarify.

R37: All of the sanitary sewer gravity main segments shown on the drawings within the Dobbs Branch Sub-basins 3 and 4 are included in the SSES scope. These boundaries are identified on drawings G-110 and G-111. These segments are shown in detail on drawings C-101 through C-137.

Q38: The inspector overtime rate is listed in the spec as range of \$100 to \$140/hr. Please confirm the actual per hour cost as we must build our project estimates accordingly.

R39: Inspector overtime rate is \$110.00/hour. See revised spec via addendum.

Q39: Bid Item 9: New Precast Concrete Manhole - There is a quantity of 60EA for the 4-foot diameter base including frame and cover. This is a 4-foot diameter but does not specify the vertical footage that is included in the bid item. Bases can range anywhere from 26" and up....Please clarify the vertical footage to be included with the base.

R39: The manhole base shall be a standard 4-foot tall base. See revisions to Section 01 22 00 via addendum.

Q40: Measurement and Payment Section 01 22 00-10 - P. Point Repairs - if service is encountered in the defective mainline repair, will we receive a separate payment for a service lateral installation, or is this included in the point repair pricing associated with bid items 11a-j?

R40: If a service lateral is found in the excavation of mainline sewer point repair the cost of a saddle or tee, 6-feet of 4-inch or 6-inch PVC sewer, and reconnecting the service lateral will be included in the mainline point repair item. If approved first by the Engineer, the "Open Cut Service Lateral Replacement/Installation" pay item will compensate for the sideline lateral length above 6-feet. See revisions to 01 22 00.

Q41: Measurement and Payment Section 01 22 00-10 - R. Open Cut Tap Repair - 1. If a service lateral is excavated for repair the unit price for the corresponding main line sewer diameter shall be used for payment. Does this mean that if we install a new sewer service on an 8" main line, starting at the main either using a saddle tee or a straight tee, then we will be

paid an 8" point repair pricing to include 12 feet of service pipe? If this is the case, how will we be paid for the 4" or 6" tap repairs?

R41: Section 01 22 00 is revised via addendum to address this issue. The changes include adding a "Tap Connection Point Repair" pay item.

Q42: Bid item 14: Open Cut Service Lateral Replacement/Installation - There is a quantity of 250 LF and 100 LF respectively. Measurement and Payment states that payment for this item will be made from the center of the main sewer to end of the authorized segment replacement. No separate payment will be made for cleanouts. As a "LF" bid item, how is the connection made to the main and how many feet is included for this connection? Will it be made with a saddle tee or a sewer tee? Should this bid item be "EA" instead of "LF"?

R42: See response to item above. Item will remain as per LF. If the tap repair is within a mainline point repair the tap connection is incidental to the work. If a point repair is required to repair only a tap connection then the "Tap Connection Point Repair" pay item will be used. See revisions to 00 41 00 and 01 22 00.

Q43: Bid item 14: Open Cut Service Lateral Replacement/Installation - Measurement and Payment Section S.2 states that "Payment shall also include locating existing service lines and determining requirements for the connection." Who makes the determination of the work required for repairing a service lateral i.e. footage of pipe replacement and whether or not a cleanout is installed or replaced?

R43: The Engineer shall make the final determination and provide approval prior to service lateral repairs or cleanout replacement. Cleanouts shall be required at horizontal or vertical alignment changes to allow for future maintenance. See revisions to 01 22 00.

Q44: Bid item 14: Open Cut Service Lateral Replacement/Installation - Measurement and Payment Section S.3 states that "No additional payment will be made for temporary bypass pumping, excavation, backfill, bedding, bends, fittings, locating existing taps and verifying connectivity to existing structures." Please clarify whether flowable fill is considered backfill for this items and should also be included in the pricing.

R44: Excavations associated with the work described above that are located within the roadway require flowable fill as detailed in the Contract Documents. Flowable fill is not considered "backfill" in the context above. Flowable fill is paid per the unit price bid.

Q45: Measurement and Payment Section 2.12 Part A states "Only these areas of pavement replacement associated with Same Trench Sewer Replacement, Open Cut Service Lateral Replacement, Point Repairs and New Manholes will be eligible for payment." Please clarify which streets are eligible for payment of flowable fill.

R45: All City streets and TDOT roads require flowable fill.

Q46: Can the owner please let us know who is the contact person to reach out to obtain the TDOT, Land Disturbance and Street Cut Permits?

R46: TDOT, see permit in Specification Appendix. Land Disturbance and Street Cut Permits contact City of Chattanooga, Land Development Office.

Q46: The quantities for various thicknesses for the CIPP in the bid form are not matching with the ones in the drawings. Can the owner please clarify?

R46: Provide pricing based on the bid form.

Q47: Does the owner have existing videos of the sewer lines to be CIPP lined?

R47: No videos will be provided.

Q48: Can the CIPP warranty period be changed to the Standard 1-year?

R48: The CIPP warranty will remain as described in the Contract Documents.

Q49: Will the owner accept Hydrotite as an approved equal for the LMK End Seals? Please see attached submittal for the hydrotite

R49: No.

Q50: For the CIPP, will the owner accept air inversion and steam cure?

R50: Steam cure will be considered for special cases, such as steep grades. Otherwise, water cure is required.

Q51: Section 33 01 30.29 May manhole inspections be conducted on Saturdays?

R51: Yes, but see response to Question 12. See General Conditions regarding work hours and inspector overtime.

Q52: May preparation for manhole lining be done on weekends?

R52: Yes, but see response to Question 12. See General Conditions regarding work hours and inspector overtime.

Q53: May multi Layer Polyurea/Polyurethane liner type 2 in bid item 16c also be used for item 16b?

R53: Technically yes, that would be acceptable but a bid needs to be provided for both types.

January 13, 2020

/s/ Justin C. Holland, Administrator
City of Chattanooga
Department of Public Works

00 80 00-12-08 Project Wage Rate Sheet

"General Decision Number: TN20200145 01/03/2020

Superseded General Decision Number: TN20190145

State: Tennessee

Construction Type: Heavy
Including Water and Sewer Line Construction

Counties: Hamilton and Sequatchie Counties in Tennessee.

HEAVY CONSTRUCTION PROJECTS (including sewer/water construction).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020

* ELEC0175-012 06/01/2019

Hamilton County

	Rates	Fringes
ELECTRICIAN.....	\$ 32.17	14.5%+7.60

ELEC0429-008 06/01/2019

Sequatchie County

	Rates	Fringes
Electrician.....	\$ 27.24	13.21

 ENGI0917-022 05/01/2017

	Rates	Fringes
Operating Engineers:		
Bulldozer and Crane.....	\$ 28.26	10.10
Forklift.....	\$ 25.97	10.10

 LAB00846-001 05/01/2018

	Rates	Fringes
LABORER: Common or General.....	\$ 15.36	5.97

 SUTN2009-144 12/02/2009

	Rates	Fringes
LABORER: Flagger.....	\$ 8.73	0.00
LABORER: Pipelayer.....	\$ 11.68	0.00
OPERATOR:		
Backhoe/Excavator/Trackhoe.....	\$ 16.82	0.00
OPERATOR: Loader.....	\$ 13.50	0.00
TRUCK DRIVER: Dump Truck.....	\$ 10.76	0.00

 WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

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**DOBBS BRANCH BASIN IMPROVEMENTS PHASE 1
CONTRACT NUMBER W-17-022-201**

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

City of Chattanooga, Tennessee
Purchasing Department
101 E. 11th Street, Suite G13
Chattanooga, Tennessee 37402

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for period of time after the Bid opening as stated in the Advertisement for Bids, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating

- to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in SC-4.02 as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-4.06 as containing reliable "technical data."
- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.
 - F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
 - G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
 - H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
 - I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
 - J. Where this Bid Form contains the provision for a bid based on a lump sum price, the Bidder shall be responsible for having prepared its own estimate of the quantities necessary for the satisfactory completion of the Work specified in these Contract Documents and for having based the lump sum price bid on its estimate of quantities.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
1. “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
 2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

Item No.	Description	Estimated Quantity	Unit	Unit Cost	Total Cost
1	Mobilization/Demobilization				
a	Mobilization/Demobilization	1	LS		
2	Sewer Cleaning, CCTV Inspection and Results Provided to Owner				
a	Sewer Cleaning, CCTV Inspection of 8-inch Diameter Sewers	96,200	LF		
b	Sewer Cleaning, CCTV Inspection of 10-inch Diameter Sewers	22,350	LF		
c	Sewer Cleaning, CCTV Inspection of 12-inch Diameter Sewers	9,400	LF		
d	Sewer Cleaning, CCTV Inspection of 15-inch Diameter Sewers	2,300	LF		
e	Sewer Cleaning, CCTV Inspection of 18-inch Diameter Sewers	1,850	LF		
f	Sewer Cleaning, CCTV Inspection of 24-inch Diameter Sewers	7,900	LF		
3	MH Inspection and Results Provided to Owner				
a	Manhole Inspection per NASSCO MACP Standards	480	EA		
4	8-Inch Sewer Cured-In-Place Rehabilitation				
a	Pre-Installation Cleaning - Normal	60,000	LF		
b	Pre-Installation Cleaning - Heavy	5,000	LF		
c	6.0 mm CIPP Complete and In-Place to Include Bypass Pumping	55,000	LF		
d	7.5 mm CIPP Complete and In-Place to Include Bypass Pumping	5,000	LF		
e	Pre-Installation CCTV - 8-Inch Sewer	5,5000	LF		
f	Post-Installation CCTV - 8-Inch Sewer	55,000	LF		
g	Remove Protruding Service Lateral in 8-inch Sewers	65	EA		
h	Service Lateral Reinstatement Coring and Brushing for 8-inch Sewers	650	EA		
5	10-Inch Sewer Cured-In-Place Rehabilitation				
a	Pre-Installation Cleaning - Normal	11,700	LF		
b	Pre-Installation Cleaning - Heavy	1,000	LF		
c	6.0 mm CIPP Complete and In-Place to Include Bypass Pumping	8,500	LF		
d	7.5 mm CIPP Complete and In-Place to Include Bypass Pumping	3,200	LF		

e	Pre-Installation CCTV - 10-Inch Sewer	11,700	LF		
f	Post-Installation CCTV - 10-Inch Sewer	11,700	LF		
g	Remove Protruding Service Lateral in 10-inch Sewers	10	EA		
h	Service Lateral Reinstatement Coring and Brushing for 10-inch Sewers	60	EA		
6	12-Inch Sewer Cured-In-Place Rehabilitation				
a	Pre-Installation Cleaning - Normal	4,000	LF		
b	Pre-Installation Cleaning - Heavy	500	LF		
c	7.5 mm CIPP Complete and In-Place to Include Bypass Pumping	3,000	LF		
d	9.0 mm CIPP Complete and In-Place to Include Bypass Pumping	1,000	LF		
e	Pre-Installation CCTV - 12-Inch Sewer	4,000	LF		
f	Post-Installation CCTV - 12-Inch Sewer	4,000	LF		
g	Remove Protruding Service Lateral in 10-inch Sewers	5	EA		
h	Service Lateral Reinstatement Coring and Brushing for 12-inch Sewers	20	EA		
7	15-Inch Sewer Cured-In-Place Rehabilitation				
a	Pre-Installation Cleaning - Normal	900	LF		
b	Pre-Installation Cleaning - Heavy	200	LF		
c	9.0 mm CIPP Complete and In-Place to Include Bypass Pumping	800	LF		
d	10.5 mm CIPP Complete and In-Place to Include Bypass Pumping	100	LF		
e	Pre-Installation CCTV - 15-Inch Sewer	900	LF		
f	Post-Installation CCTV - 15-Inch Sewer	900	LF		
g	Remove Protruding Service Lateral in 10-inch Sewers	5	EA		
h	Service Lateral Reinstatement Coring and Brushing for 15-inch Sewers	10	EA		
8	18-Inch Sewer Cured-In-Place Rehabilitation				
a	Pre-Installation Cleaning - Normal	850	LF		
b	Pre-Installation Cleaning - Heavy	100	LF		
c	10.5 mm CIPP Complete and In-Place to Include Bypass Pumping	550			
d	12.0 mm CIPP Complete and In-Place to Include Bypass Pumping	300	LF		
e	Pre-Installation CCTV - 18-Inch Sewer	850	LF		
f	Post-Installation CCTV - 18-Inch Sewer	850	LF		
g	Remove Protruding Service Lateral in 10-inch Sewers	5	EA		
h	Service Lateral Reinstatement Coring and Brushing for 18-inch Sewers	5	EA		

9	New Precast Concrete Manhole				
a	4-Foot Diameter Base, including Frame and Cover	60	EA		
b	4-Foot Diameter Risers	480	VF		
c	Penetrations to New Precast Manhole for 8-inch thru 18-inch Pipe Sewer	50	EA		
10	Pavement Removal and Replacement				
a	Removal and/or Milling of Existing Pavement and Placement of New Asphalt Pavement	81,000	SF		
b	Removal and Placement of Concrete Pavement	250	CY		
c	Placement of Flowable Fill	1,800	CY		
*** ADDITIONAL WORK IF DIRECTED BY THE ENGINEER ***					
11	Point Repairs				
a	8 Inch Sewer Point Repair Up to 12-feet in Length, Less than 8' Cut	63	EA		
b	8 Inch Sewer Point Repair Up to 12-feet in Length, Greater than 8' Cut	22	EA		
c	10 Inch Sewer Point Repair Up to 12-feet in Length, Less than 8' Cut	7	EA		
d	10 Inch Sewer Point Repair Up to 12-feet in Length, Greater than 8' Cut	15	EA		
e	12 Inch Sewer Point Repair Up to 12-feet in Length, Less than 8' Cut	4	EA		
f	12 Inch Sewer Point Repair Up to 12-feet in Length, Greater than 8' Cut	4	EA		
g	15 Inch Sewer Point Repair Up to 12-feet in Length, Less than 8' Cut	2	EA		
h	15 Inch Sewer Point Repair Up to 12-feet in Length, Greater than 8' Cut	2	EA		
i	18 Inch Sewer Point Repair Up to 12-feet in Length, Less than 8' Cut	2	EA		
j	18 Inch Sewer Point Repair Up to 12-feet in Length, Greater than 8' Cut	2	EA		
k	4-inch or 6-inch Tap Connection Point Repair on 8 Inch through 18 Inch Diameter Sewer	16	EA		
12	Same Trench Sewer Replacement				
a	Remove existing 4, 6, or 8-inch Diameter Sewer and Replace with 8-inch diameter PVC Pipe Sewer	500	LF		
b	Remove existing 10-inch Diameter Sewer and Replace with 10-inch diameter PVC Pipe Sewer	100	LF		
c	Remove existing 12-inch Diameter Sewer and Replace with 12-inch diameter PVC Pipe Sewer	100	LF		
d	Remove existing 15-inch Diameter Sewer and Replace with 15-inch diameter PVC Pipe Sewer	50	LF		

e	Remove existing 18-inch Diameter Sewer and Replace with 18-inch diameter PVC Pipe Sewer	50	LF		
f	Connect to Existing MH with 8-Inch thru 18-inch Sewer	45	EA		
13	Service Lateral Seals				
a	4 or 6-inch Service Lateral Seal, 12-inch length for 8-inch Diameter Sewers	90	EA		
b	4 or 6-inch Service Lateral Seal, 12-inch length for 10-inch Diameter Sewers	10	EA		
c	4 or 6-inch Service Lateral Seal, 12-inch length for 12-inch Diameter Sewers	4	EA		
d	4 or 6-inch Service Lateral Seal, 12-inch length for 15-inch Diameter Sewers	2	EA		
e	4 or 6-inch Service Lateral Seal, 12-inch length for 18-inch Diameter Sewers	2	EA		
14	Service Lateral Replacement / Installation				
a	Open Cut Service Lateral Replacement / Installation / Including cleanouts / 4-inch or 6-inch PVC (Less than 8-Foot Cut)	250	LF		
b	Open Cut Service Lateral Replacement / Installation / Including Cleanouts / 4-inch or 6-inch PVC (Greater Than 8-Foot Cut)	100	LF		
15	Manholes - Surface Rehabilitation				
a	Replace existing Frame and Cover with New Standard Frame and Cover	50	EA		
b	Replace existing Frame and Cover with New Watertight Frame and Cover	10	EA		
c	Locate Existing Manhole and Uncover	20	EA		
d	Raise 4-Foot Diameter Manhole to Grade (exclude height of Frame and Cover)	40	VF		
e	Inflow Dish	100	EA		
f	Rebuild Brick Chimney	25	EA		
16	Manholes - Subsurface Rehabilitation				
a	Cementitious Liner in 4-Foot Diameter Manhole, Per Spec 33 01 30.83	1,450	VF		
b	Single-Layer Polymer Resin Based Liner in 4-Foot Diameter Manhole, Type 1, Per Spec 33 01 30.83	450	VF		
c	Multi-Layer Polyurea/Polyurethane Liner in 4-Foot Diameter Manhole, Type 2, Per Spec 33 01 30.83	1,000	VF		
d	Plug 8, 10, 12, 15, 18-Inch Diameter Sewer and Make Watertight	20	EA		
e	Install or Demo & Rebuild Cast-in-Place Concrete Bench and Invert in Existing Manhole	10	EA		
17	Trench Stabilization				

a	Removal of unstable soil and placement of Crushed Stone	50	CY		
b	Filter Fabric Placement for Trench Stabilization	50	SY		
18	Cash Allowances				
a	Cash Allowance - Soil, Concrete and Other Material Testing	1	LS	\$10,000	\$10,000
b	Cash Allowance - Construction Verification Surveying	1	LS	\$20,000	\$20,000
c	Cash Allowance - Cured-In-Place Pipe Testing, Laboratory Services	1	LS	\$25,000	\$25,000
d	Cash Allowance - Point Repairs, Pipe Bursting, Pipe Replacement, Lateral Cured-In-Place Pipe and Manhole Work.	1	LS	\$150,000	\$150,000
e	Cash Allowance - Pavement Restoration	1	LS	\$150,000	\$150,000

BID TOTAL, ITEMS 1 THROUGH 18, INCLUSIVE, IN THE AMOUNT OF _____

_____ DOLLARS (\$_____).

Unit Prices have been computed in accordance with Paragraph 11.03.B of the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are submitted with and made a condition of this Bid:

- A. Statement of Bidders Qualifications
- B. Affidavit of No Collusion by Prime Bidder
- C. Drug-Free Workplace Affidavit
- D. Attestation Regarding Personnel Used in Contract Performance

E. Certification By Proposed Prime or Subcontractor Regarding Equal Employment Opportunity

F. Certification Regarding Debarment, Suspension and Other Responsibility Matters

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

9.01 This Bid submitted by:

An Individual

Name (typed or printed): _____

By: _____

(SEAL)

(Individual's signature)

Doing business as: _____

Attest: _____

(Notary)

Name (typed or printed): _____

A Partnership

Partnership

Name: _____

(SEAL)

By: _____

(Signature of general partner – attach evidence of authority to sign)

Name (typed or printed): _____

Attest: _____

(Signature of another Partner)

Name (typed or printed): _____

A Corporation

Corporation

Name: _____

(SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By: _____

(Signature)

Name (typed or printed): _____

Title: _____

(CORPORATE SEAL)

Attest: _____

(Signature of Corporate Secretary)

Name (typed or printed): _____

Date of Qualification to do business in Tennessee is _____

A Joint Venture

Name of Joint Venturer: _____

First Joint Venturer Name:

(SEAL)

By: _____
(Signature of first joint venture partner)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name:

(SEAL)

By: _____
(Signature of second joint venture partner)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

All Bidders shall complete the following:

Bidder's Business address: _____

Phone: _____ Facsimile: _____

Primary Contact: _____

E-mail: _____

Submitted on _____, 201__.

State Contractor License No. _____.

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Part 1 Base Bid Pay Items

1.01 Mobilization

- A. Mobilization will be measured by the unit for the completion of the work as described in the specifications, and payment will be made on a lump sum basis.
- B. Partial payment for Mobilization will be determined as indicated below. Upon completion of all work on the project, payment will be made of any amount bid for Mobilization in excess of the total limit for partial payment.

Partial Payment Schedule:

Estimate of Total Contract Progress, Exclusive of Mobilization (Not Less Than)	Percent of Mobilization Payment Allowed
2%	30%*
5%	50%*
10%	80%*
25%	100%*
*% of lump sum bid price for mobilization or of the total \ limit for partial payment whichever is less.	

- C. Payment for Mobilization will be made in accordance with the provisions set out above, which price shall be full compensation for organizing and moving all forces, supplies, equipment, and incidentals to the project site, regardless of the number of times such moves are made and also for all preconstruction costs incurred after award of the contract.

1.02 Closed Circuit Television (CCTV) Inspection of Sewers and Service Laterals

- A. Payment will be made at the unit price bid for each pipe diameter. Quantities shall be determined from field measurements verified in writing by the Engineer.
- B. Measurement for payment for sewers shall be from centerline of manhole to centerline of manhole. Measurement for payment for laterals shall be for lengths authorized by the Engineer.
- C. Payment will be based on the actual footage of pipe cleaned and inspected and shall include all items necessary to perform the specified work and provide the specified work product in accordance with Specification 33 01 30.16. Payment is for cleaning and inspection together, they are not paid separately.
- D. Contractor shall submit a CCTV Inspection Plan to the Engineer for review no later than 10 days after the Notice to Proceed. This plan shall include a written description

and map layout describing the process in which the Contractor will perform the CCTV Inspection and provide results to the Engineer. The report shall include an example of CCTV report and run graph as described in Specification 33 01 30.16. The report will summarize how the results will be periodically provided to the Engineer for their review. Payment for this report and subsequent submittal of CCTV results shall be included in the price bid for CCTV Inspection.

1.03 Manhole Inspections and Results Provided to Owner

- A. Payment will be made at the unit price bid for each manhole inspection. Quantities shall be determined from field observations verified in writing by the Engineer.
- B. Payment will be based on the actual quantity of manholes inspected, regardless of depth or diameter, and shall include all items necessary to perform the specified work and provide the specified work product in accordance with Specification 33 01 30.29.
- C. All Manhole inspections shall be provided in accordance with NASSCO MACP Level 2.
- D. Contractor shall submit a Manhole Inspection Plan to the Engineer for review no later than 10 days after the Notice to Proceed. This plan shall include a written description and map layout describing the process in which the Contractor will perform the Manhole Inspections and provide results to the Engineer. The report shall include an example of Manhole Inspection report as described in Specification 33 01 30.29. The report will summarize how the results will be periodically provided to the Engineer for their review. Payment for this report and subsequent submittal of results shall be included in the price bid for Manhole Inspection.

1.04 Cleaning of Sewers

- A. Pre-Installation Cleaning of Pipelines
 - 1. Payment will be made at the unit price bid for each pipe diameter. Quantities shall be determined from field measurements verified in writing by the Engineer.
 - 2. Measurement for payment shall be from centerline of manhole to centerline of manhole.
 - 3. Payment will be based on the actual footage of pipe cleaned. Additional passes required to clean lines to the level specified in Section 33 01 30.14 will not be counted for payment purposes. Unit prices shall include jetting in sewers both upstream and downstream.
 - 4. The sewers to be cleaned convey sanitary sewage and/or or combined sewage. In many instances such sewers are subject to high flows, either continuously or in a periodically varying cycle, due to rainfall, infiltration, and/or pumping operations. The Contractor shall include in the unit price bid all costs for dealing with such variations, and where necessary, schedule the work to accommodate such variation in flows.

5. The cost of trapping, removing, hauling and disposing of the residual wastes captured during cleaning operations shall be included in the unit price bid.
 6. Debris captured from sewer cleaning must be hauled to the Moccasin Bend Wastewater Treatment Plant in accordance with a schedule and plan approved in writing by the Engineer.
- B. Heavy Cleaning of Pipelines
1. The Contractor shall be paid for heavy cleaning on the basis of the distance loosened debris is moved to the nearest point of extrication from the sewer. Payment shall be calculated on a lineal foot basis and be paid in addition to the normal cleaning rate on the bid form.
 2. Heavy cleaning must be pre-approved in writing by the Engineer.

1.05 Pre-Installation and Post-Installation Closed Circuit Television (CCTV) Inspection of Sewers and Service Laterals

- A. Payment will be made at the unit price bid for each pipe diameter and service lateral. Quantities shall be determined from field measurements verified in writing by the Engineer.
- B. Measurement for payment for sewers shall be from centerline of manhole to centerline of manhole. Measurement for payment for laterals shall be for lengths authorized by the Engineer.
- C. Payment will be based on the actual footage of pipe inspected and shall include all items necessary to perform the specified work and provide the specified work product.

1.06 Sewer Cured-In-Place Rehabilitation

- A. Payment will be made at the unit price bid per linear foot of each diameter and CIPP thickness constructed. Quantities shall be determined from field measurements verified in writing by the Engineer. Post inspection videos conforming to Section 33 01 30.73 of these Specifications shall be submitted to and reviewed and approved by the Engineer prior to application for payment of the completed CIPP.
- B. Measurement shall be from centerline of manhole to centerline of manhole.
- C. No separate payment will be made for surface grouting or injectable grout required to stop leaks or other purposes.
- D. No additional payment will be made for additional work items required, including temporary bypass pumping, to rehabilitate and test the work to the level specified in Section 33 01 30.73.

1.07 Sewer Service Lateral Reinstatement – Coring and Brushing

- A. Payment for coring and brushing the sewer service laterals shall be paid for at the appropriate unit price under Service Lateral Reinstatement Coring and Brushing in the bid per main sewer pipe diameter. Measurement for payment shall be made on a unit quantity basis. Post inspection videos conforming to Section 33 01 30.16 of these Specifications shall be submitted to and reviewed and approved by the Engineer prior to application for payment of the completed Sewer Service Reinstatement.

1.08 Removing Protruding Service Laterals

- A. Payment will be made for each protruding service lateral removed, per each pipe size, to facilitate installation of cured-in-place pipe rehabilitation.

1.09 4-Foot Diameter Precast Concrete Manhole Base Including Frame and Cover

- A. Measurement for payment at the unit price for 4-Foot Diameter Base, including Frame and Cover, shall be made on a unit quantity basis.
- B. The precast concrete base shall be a minimum vertical height of 48-inches.
- C. Payment for precast concrete manhole replacement shall include two penetrations for influent and effluent pipelines regardless of diameter. Payment for additional penetrations shall be made from the unit price for penetrations to precast concrete manholes.
- D. No separate or additional payment will be made for excavation, removal of existing manholes, preparation of subbase, dewatering, testing, bedding, granular backfill, connecting pipes to manholes, constructing invert, plugging abandoned pipes not otherwise shown on the plans, risers or frame and cover.

1.10 4-Foot Diameter Precast Concrete Risers

- A. Measurement for payment at the unit price for 4-Foot Diameter Precast Concrete Manhole Risers shall be made on a unit quantity basis per vertical foot installed.
- B. Payment for removing and replacing pavement associated with new manhole installation will be paid in accordance with the pavement restoration pay item.
- C. No separate or additional payment will be made for removal of existing manholes, preparation of subbase, bedding material, bedding installation, dewatering, testing, connecting pipes to manholes, constructing invert, plugging abandoned pipes not otherwise shown on the plans, risers or frame and cover.
- D. Vertical depth measurement shall be to the actual dimension of the work from the concrete manhole top to the bottom of the riser section(s).

1.11 Penetrations to New Precast Manhole for 8-inch thru 18-inch Pipe Sewer

- A. Measurement for payment at the unit price for penetrations to new precast manholes shall be made on a unit quantity basis.
- B. Payment for penetrations shall be for new manholes where more than two penetrations are required. This pay item only applies to penetrations that are greater than two per manhole.
- C. No separate or additional payment will be made for excavation, removal of existing manholes, preparation of subbase, dewatering, testing, bedding, granular backfill, connecting pipes to manholes, constructing invert, plugging abandoned pipes not otherwise shown on the plans, risers or frame and cover.

1.12 Removing and Replacing Pavement

- A. Payment for removing and replacing pavement will be made as a separate item based on the measured quantity replaced at the unit price in the Bid. The unit price bid shall include all costs associated with removing and replacing asphalt or concrete pavement, including providing select backfill if necessary, traffic control and temporary measures for maintaining traffic. Only those areas of pavement replacement associated with Same Trench Sewer Replacement, Open Cut Service Lateral Replacement, Point Repairs, Manhole Surface Rehabilitation and New Precast Concrete Manholes will be eligible for payment.
- B. Payment for removing and replacing pavement will be made at the square foot unit price bid for the areas of restoration required for City of Chattanooga roadways and Tennessee Department of Transportation roadways.
- C. No additional payment will be made for removing and replacing damaged adjacent pavement.
- D. Costs for removal and replacement of sidewalks and curb and gutter shall be included in the unit price bid for the item to which it pertains.
- E. Measurement for payment of flowable fill will be made for each cubic yard installed.

Part 2 Additional Work If Ordered By the Engineer

2.01 Point Repairs, Same Trench Sewer Replacement, New Sewer Installation, and Open Cut Lateral Replacement

- A. Existing Utilities and Obstructions
 - 1. Horizontal Conflict: Payments for conflicts with existing utilities shall be made only where additional manholes and/or additional lengths of pipe are approved by the Engineer. Said payment shall be made at the unit prices in the Bid. No other payment will be made for any delay or extra cost encountered by the Contractor

- due to protection, avoidance or relocation of existing utilities, mains or services or changing the horizontal alignment of the sewer.
2. Vertical Conflict: Where authorized by the Engineer, payment for additional depth of cut required to avoid vertical conflicts shall be made on the basis of the amount authorized. No payment will be made for relocation of existing utilities.
- B. Location and Grade: No separate payment shall be made for survey work performed by or for the Contractor in the establishment of reference points, bench marks, limits of right-of-way or easement, including their restoration, as well as centerline or baseline points.
- C. Trench Excavation: No separate payment will be made for trench excavation. All costs shall be included in the unit price bid for the item to which it pertains.
- D. Sheeting, Bracing and Shoring: No separate payment will be made for providing any sheeting, bracing and shoring.
- E. Rock Excavation: No separate payment will be made for rock excavation. The cost of such work and all associated costs shall be included in the unit price for the item to which it pertains.
- F. Dewatering Excavations: All costs of equipment, labor and materials required for dewatering, including disposal of groundwater where applicable, shall be included in the price bid for the item to which it pertains.
- G. Trench Stabilization
1. No payment for trench stabilization shall be authorized until after the trench has been dewatered. If the pipe is installed in an inadequately prepared trench bottom, the Engineer shall notify the Contractor in writing of the deficiency and will not authorize payment for that portion of that length of pipe which was improperly installed.
 2. Payment for trench stabilization shall be made on the basis of the amount authorized and the unit price bid for Trench Stabilization. Payment shall include all costs for the removal and disposal of the unsuitable material and replacement with crushed stone. No additional payment will be made for material required for specified bedding.
 3. Payment for filter fabric shall be at the unit price bid for Filter Fabric under trench stabilization. Payment shall include all costs for the placement of filter fabric.
- H. Bedding and Haunching
1. The unit price bid for pipe for gravity sewer shall include excavation of the trench to the depth below the pipe necessary to provide specified bedding and to lay the sewer to grade.
 2. No additional payment will be made for additional trench depth.

3. No separate payment will be made for material used to provide specified bedding. The cost of all bedding materials shall be included in the unit price bid for the item to which it relates, except for trench stabilization.
 4. No additional payment will be made for improved bedding required to compensate for over excavation of the trench.
- I. Initial Backfill
1. No separate payment shall be made for initial backfill.
 2. No separate payment shall be made for drying out the initial backfill material in order to meet the compaction requirements.
 3. No separate payment shall be made for the adding of moisture to the initial backfill materials in order to meet the compaction requirements.
 4. No separate payment shall be made for providing select material if the insitu material cannot meet the compaction requirements.
- J. Final Backfilling
1. No additional payment will be made for additional material when excavated materials are used.
 2. No separate payment shall be made for drying out the final backfill material in order to meet the compaction requirements.
 3. No separate payment shall be made for the adding of moisture to the final backfill materials in order to meet the compaction requirements.
 4. No additional payment will be made for providing select material if the insitu material cannot meet the compaction requirements.
- K. Additional Material: No separate payment will be made for additional earth or fill materials imported to the Project site.
- L. No separate payment shall be made for detection tape or tracing wire.
- M. No payment will be made for cutting and beveling pipe.
- N. No separate payment shall be made for Concrete Encasement.
- O. All costs associated with point repairs shall include locating the damaged segment, excavating, removing and replacing the segment with PVC pipe, labor and materials for connecting the new sewer with the existing sewer, backfilling, compacting, discarding the removed pipe and all necessary bypass pumping.
- P. Point Repairs:

Measurement and Payment

1. The unit price bid for Point Repairs shall include all costs for replacing up to twelve linear feet of existing sewer with PVC pipe.
 2. If additional length of 8, 10, 12, 15 or 18-inch sewer must be replaced, then the unit prices bid for Same Trench Sewer Replacement will apply for all lengths greater than the first twelve feet.
 3. Payment for point repairs at various depths shall be associated with the depth described in the various pay items. The depth shall be the average depth of the invert at the upstream and downstream ends of the repair or sewer segment if the entire segment is replaced. Pipe and its installation shall conform to the requirements set forth for Same Trench Sewer Replacement.
 4. No separate payment will be made for replacement of service lateral tap connection(s) found in the same excavation as a mainline point repair. This shall include the saddle or tee, and up to 6-feet, measured from the centerline of the main sewer to the reconnection, of 4-inch or 6-inch lateral sewer to reconnect the lateral. If additional length of service lateral must be replaced as approved by the Engineer, then the unit prices bid for Open Cut Service Lateral Replacement/Installation for 4 or 6-inch Diameter Sewer will apply for all lengths greater than the first 6 linear feet.
- Q. Connect to Existing Manhole:
1. The unit price for Connect to Existing Manhole with 8, 10, 12 15 and 18-inch Sewer shall include all labor, materials and equipment to make the connection.
- R. Open Cut Tap Repair:
1. If a service lateral tap connection is excavated for repair (separately from a mainline sewer point repair) the unit price for the "4-inch or 6-inch Tap Connection Point Repair" pay item shall be used and includes up to 12 linear feet of 4-inch or 6-inch PVC sewer.
 2. "4-inch or 6-inch Tap Connection Point Repair" pay item applies to each tap connection repair, regardless of mainline sewer diameter or depth.
 3. If additional length of service lateral must be replaced as approved by the Engineer, then the unit prices bid for the Open Cut Service Lateral Replacement/Installation for 4 or 6-inch Diameter Sewer will apply for all lengths greater than the first 12 feet.
- S. Open Cut Service Lateral Replacement / Installation:
1. Measurement for payment at the unit price for new 4-inch and 6-inch PVC sewer service lateral shall be for the authorized segment replacement.
 2. Payment shall also include locating existing service lines.

3. No additional payment will be made for temporary bypass pumping, excavation, backfill, bedding, bends, fittings, locating existing taps and verifying connectivity to existing structures.
4. No separate payment will be made for installation or replacement of 4-inch or 6-inch diameter service lateral cleanouts. Cleanouts are required at horizontal or vertical alignment changes.
5. The "4-inch or 6-inch Tap Connection Point Repair" pay item shall be used for lateral point repairs and will include up to 12 linear feet of 4-inch or 6-inch PVC sewer. If additional length of service lateral must be replaced as approved by the Engineer, then the unit prices bid for Open Cut Service Lateral Replacement/Installation for 4 or 6-inch Diameter Sewer will apply for all lengths greater than the first 12 linear feet.

T. Flow and Dye Testing of Smoke Testing Defect

1. No separate payment will be made for flow and dye testing of smoke testing defects.

2.02 Service Lateral Rehabilitation

A. Service Lateral Seal, 12-inch Length

1. Measurement and payment will be made at the unit price bid for each service lateral seal for each diameter sewer on the project.
2. No separate payment will be made for traffic control, CIPP plate testing, locating the correct tap, or managing odors in accordance with Contract Documents.
3. Service lateral seals shall be T-Liner by LMK Enterprises, Inc., Top Hat/Top Hat Plus by BLD Services, LLC or approved equivalent.
4. Service lateral seals shall extend a minimum of 12-inches into the lateral from the tap at the mainline sewer.

2.03 Surface Manhole Rehabilitation

- A. Payment will be made at the unit price bid for each manhole rehabilitation bid item. Quantities shall be determined from the number of each item installed or constructed and approved by the Engineer.
- A. Payment will be based on the actual type and quantity of manhole rehabilitation item installed or constructed. Additional setups required to rehabilitate manholes to the level specified in Section 33 01 30.84 will not be counted for payment purposes.
- B. Replace Existing Frame and Cover with New Frame and Cover

Measurement and Payment

1. Measurement for payment for existing frame and cover replaced with a new standard frame cover or watertight frame and cover will be made on a unit quantity basis for each.
 2. Payment for each existing frame and cover replaced with a new standard frame cover or watertight frame and cover will be made on the unit price bid for each. The cost of such work and all costs incidental thereto shall be included in the unit price bid for each item.
 3. No separate or additional payment will be made for excavation, backfill, adjusting rings, traffic control or removal and replacement of asphalt pavement, concrete pavement, sidewalks or curb and gutters. The costs for these items shall be included in the various bid items.
 4. Standard Frame and Cover and Watertight Frame and Cover shall be in accordance with the City of Chattanooga Standard Construction Detail SD-301.03
- C. Locate Existing Manhole and Uncover
1. Measurement for payment for each manhole located and uncovered will be made on a unit quantity basis for each.
 2. Payment for locate existing manhole and uncover will be made on the unit price bid for each. The cost of such work and all costs incidental thereto shall be included in the unit price bid for this item.
 3. No separate or additional payment will be made for excavation, backfill, traffic control or removal and replacement of asphalt pavement, concrete pavement, sidewalks or curb and gutters. The costs for these items shall be included in the various bid items.
- D. Raise 4-Foot Diameter Manhole to Grade
1. Measurement for payment for each manhole raised to grade will be made on a unit quantity basis for each.
 2. Payment for manhole raised to grade will be made on the unit price bid for each. The cost of such work and all costs incidental thereto shall be included in the unit price bid for this item.
 3. No separate or additional payment will be made for excavation, backfill, adjusting rings, traffic control or removal and replacement of asphalt pavement, concrete pavement, sidewalks or curb and gutters. The costs for these items shall be included in the various bid items.
- E. Inflow Dish
1. Measurement and Payment for inflow dish shall be made on a unit quantity basis for each installed.

2. Inflow dishes are to be installed as directed by the Engineer and in accordance with Specification 33 01 30.84.
- F. Rebuild Brick Chimney
1. As indicated on the Drawings each manhole designated to have the brick chimney rebuilt shall include the following:
 - i. Remove damaged existing chimney
 - ii. Replace chimney and frame seal with new masonry
 2. Measurement for payment for each rebuilt brick chimney will be made on a unit quantity basis for each.
 3. Payment for each rebuilt brick chimney will be made on the unit price bid for each. The cost of such work and all costs incidental thereto shall be included in the unit price bid for this item.
 4. No separate or additional payment will be made for excavation, backfill, adjusting rings, traffic control or removal and replacement of asphalt pavement, concrete pavement, sidewalks or curb and gutters. The costs for these items shall be included in the various bid items.

2.04 Subsurface Manhole Rehabilitation

- A. Payment will be made at the unit price bid per vertical foot for each manhole diameter and respective rehabilitation type. Quantities shall be determined from field measurements verified in writing by the Engineer.
- B. Vertical depth measurement shall be to the actual dimension of the work from the manhole invert to the top of the liner.
- C. Payment will be based on the actual vertical footage of manhole rehabilitated. Additional setups required to rehabilitate manholes to the level specified in Section 33 01 30.83 will not be counted for payment purposes.
- D. Payment shall not be made for the installed lining until after:
 1. The manhole passes the vacuum test (cementitious only).
 2. The manhole passes the spark test (Polymer Based lining systems Type 1 and 2)
 3. The final post-rehabilitation CCTV showing installed CIPP connecting to the manhole as specified elsewhere in the Specification.
- E. No separate payment will be made for surface grouting or injectable grout required to stop leaks or other purposes.

Measurement and Payment

- F. No separate payment will be made for removal of manhole steps, repairing or patching the bench and channel, patching manhole chimneys and/or walls or grouting pipe connections.
- G. Additional work items required, including temporary bypass pumping, to perform rehabilitation and testing in accordance with Section 33 01 30.83 will not be counted for payment purposes.
- H. Plug 8, 10, 12, 15 or 18-inch Sewer
 - 1. Measurement for payment at the unit price for each plug shall be made on a unit quantity basis for each.
 - 2. Payment for Plug 8, 10, 12, 15 or 18-inch Sewer will be made at the unit price bid. The cost of such work and all costs incidental thereto shall be included in the unit price bid for this item.
- I. Install or demolish and Rebuild Cast-in-Place Concrete Bench and Invert in Existing Manhole
 - 1. As indicated on the Drawings each manhole designated to have the bench and invert rebuilt shall include the following:
 - i. Remove damaged portion of the existing bench and invert
 - ii. Where applicable remodel the bench and invert to accommodate the new flow path.
 - iii. Install new cast-in-place concrete bench and invert prior to manhole rehabilitation
 - 2. Measurement for payment at the unit price for each bench and invert rebuilt shall be made on a unit quantity basis for each.
 - 3. Payment for rebuild bench and invert in existing manhole, regardless of diameter, will be made at the unit price bid for each. The cost of such work and all costs incidental thereto shall be included in the unit price bid for this item.
 - 4. Additional work items required, including temporary bypass pumping, to rebuild the bench and invert will not be counted for payment purposes

2.05 Cash Allowances

A. General

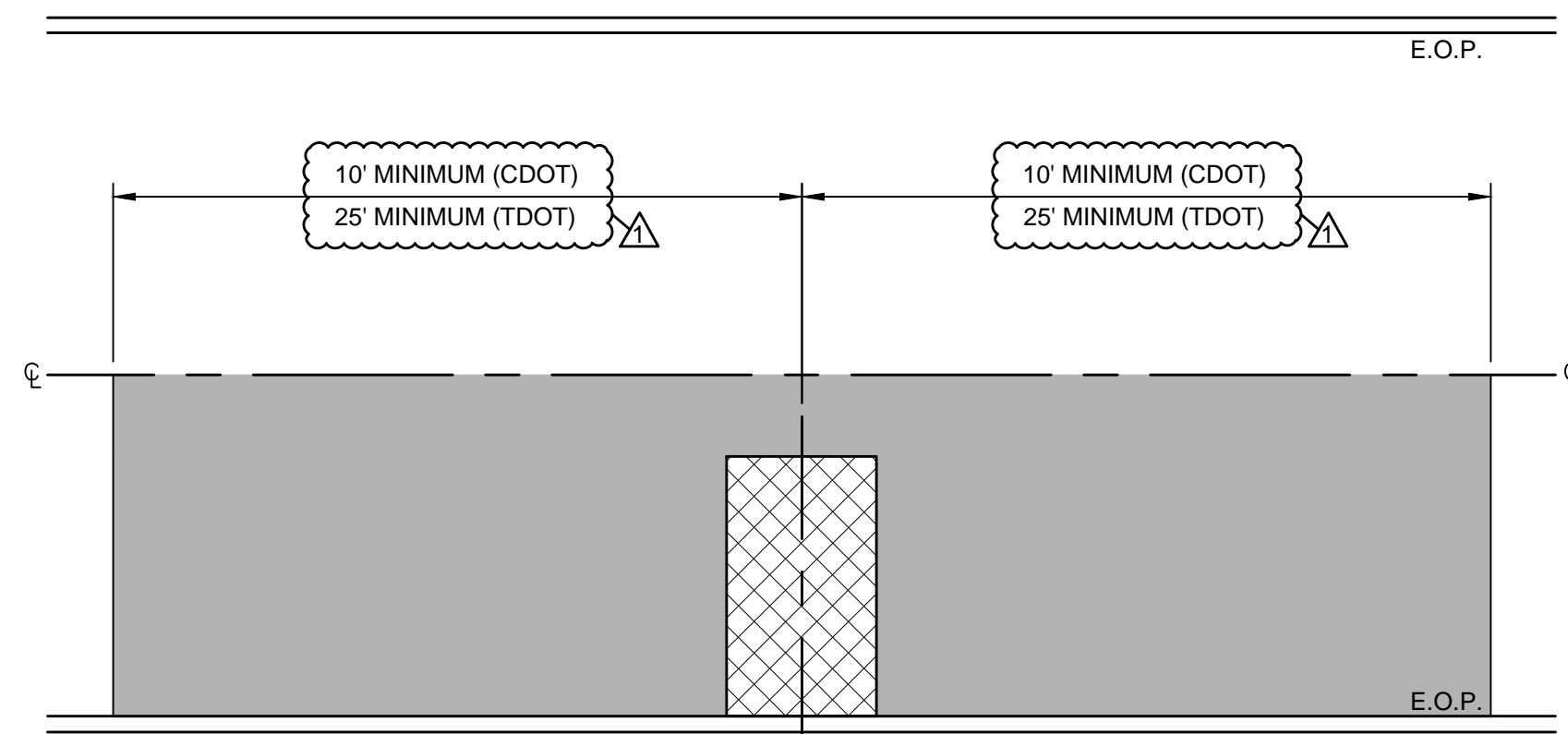
- 1. The Contractor shall include in the Bid Total all allowances stated in the Contract Documents. These allowances shall cover the net cost of the services provided by a firm selected by the Owner. The Contractor's handling costs, labor, overhead, profit and other expenses contemplated for the original allowance shall be included in the items to which they pertain and not in allowances.

2. No payment will be made for nonproductive time on the part of testing personnel due to the Contractor's failure to properly coordinate testing activities with the work schedule or the Contractor's problems with maintaining equipment in good working condition. The Contractor shall make all necessary excavations and shall supply any samples of materials necessary for conducting compaction, density tests, concrete tests, cured-in-place pipe samples and any other samples required for testing.
 3. No payment shall be provided for services that fail to verify required results.
- B. If the net cost is more or less than the specified amount of the allowance, the Contract will be adjusted accordingly by change order. The amount of change order will not recognize any changes in handling costs at the site, labor, overhead, profit and other expenses caused by the adjustment to the allowance.
- C. Documentation
1. Submit copies of the invoices with each periodic payment request from the firm providing the services.
 2. Submit results of services provided which verify required results.
- D. Schedule of Cash Allowances
1. Bid Item 18a - Soil, Concrete and Other Materials Testing: Allow the amount provided in the Bid for the services of a geotechnical engineering firm and testing laboratory to verify soils conditions including trench excavation and backfill, and similar issues and for the testing of concrete cylinders for poured in place concrete and testing physical properties of manhole lining materials, as required by the Engineer.
 2. Bid Item 18b - Construction Verification Surveying
 - a. Allow the amount provided in the Bid for construction surveying by an independent surveying firm, selected by the Owner, to perform horizontal and vertical alignment checks at the discretion of the Engineer.
 - b. This allowance is solely for the use of the Engineer for verification of the Contractor's reference points, centerlines and work performed. The presence of this cash allowance in no way relieves the Contractor of the responsibility of installing reference points, centerlines, temporary benchmarks or verifying that the work has been performed accurately.
 3. Bid Item 18c - Cured-In-Place Pipe Testing Laboratory Services: Allow the amount provided in the Bid for the services of a laboratory testing firm and testing laboratory, when ordered by the Engineer to verify physical properties of the cured in place pipe materials.
 4. Bid Item 18d – Various Additional Point Repairs, Pipe Bursting, Pipe Replacement, and Manhole Work: Allow the amount provided in the Bid for point repairs of the

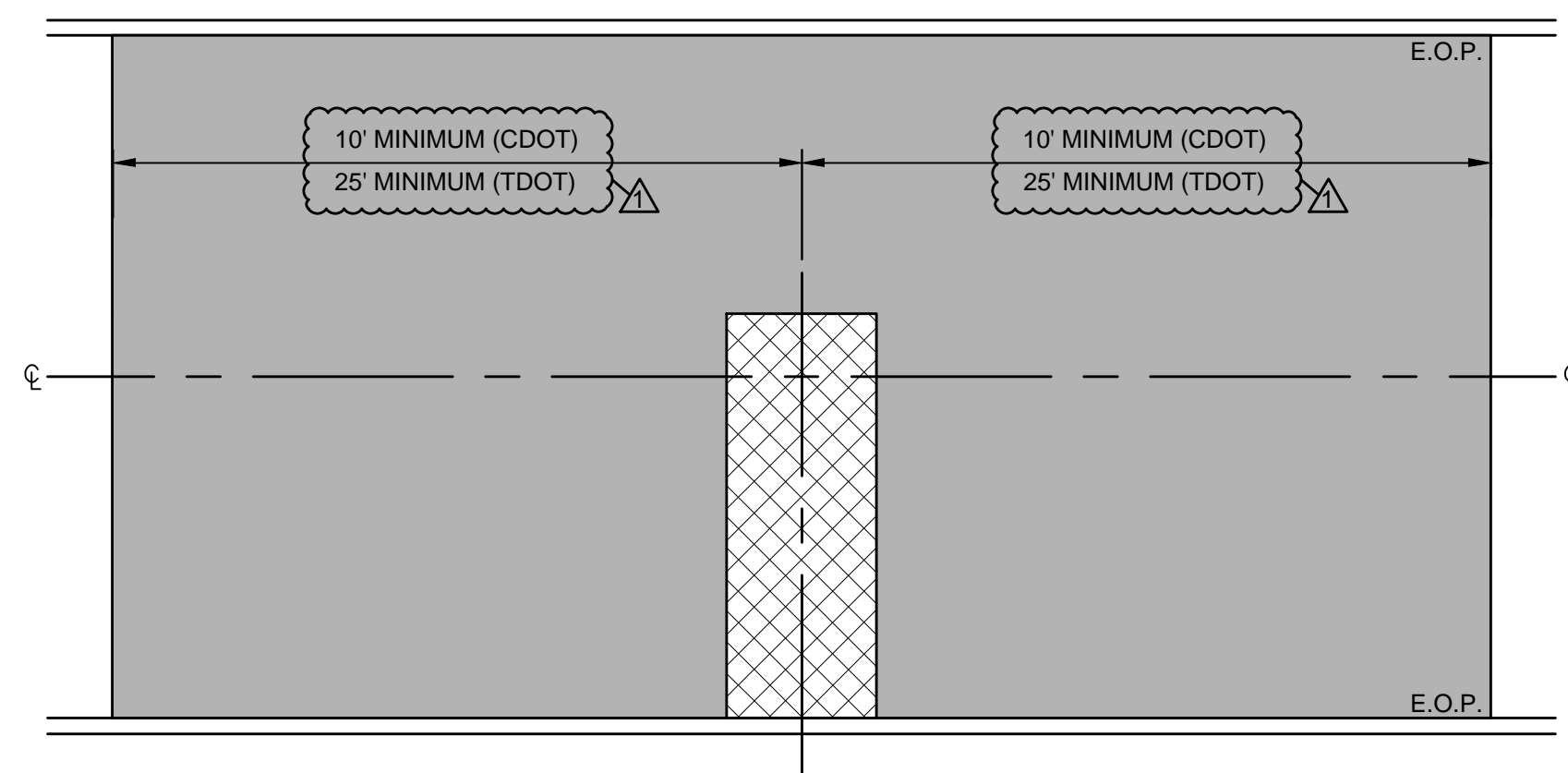
existing sewers that prove to be (at the discretion of the Engineer) unable to be lined through, pipe bursting if needed for surface conditions, pipe replacement and/or manhole work as directed by the Engineer.

- a. All costs associated with point repairs shall include locating the damaged segment, excavating, removing and replacing the segment with PVC pipe, labor and materials for connecting the new sewer with the existing sewer, backfilling, compacting, discarding the removed pipe and all necessary bypass pumping.
 - b. All costs associated with other work shall include locating the manholes and pipelines, excavation, traffic control, excavation, shoring, bedding, backfill, surface restoration, testing and disposal as required by the Engineer.
5. Bid Item 18e – Various Additional Pavement Restoration – Allow the amount provided in the bid for additional pavement restoration at the discretion of the Engineer.

END OF SECTION



PLAN VIEW- CUT IN ONE LANE

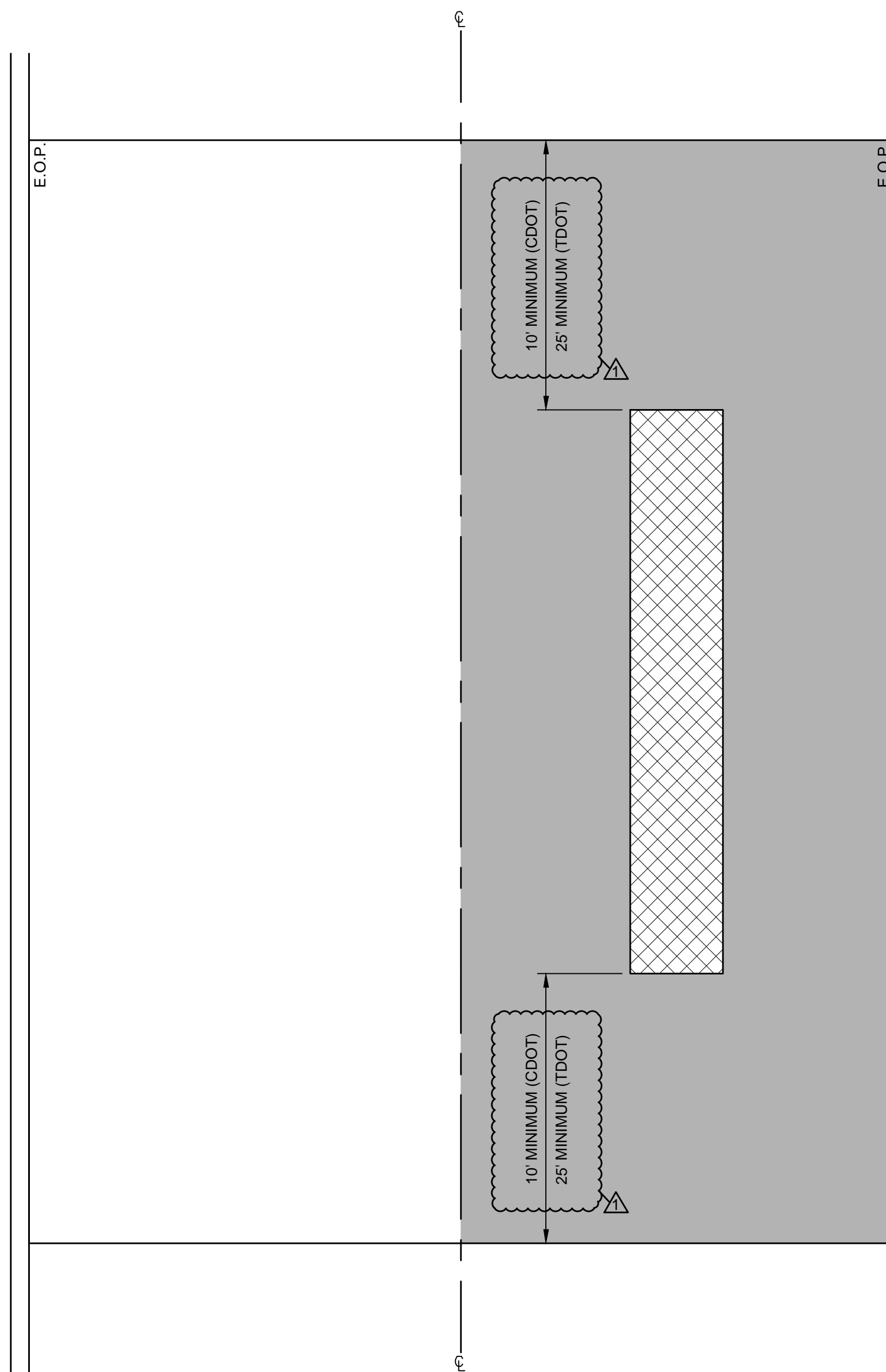


PLAN VIEW- CUT CROSSSES CENTERLINE

NOTES:

PER CITY OF CHATTANOOGA CODE 32-67:

1. ANY PERPENDICULAR CUT IN A ROADWAY MUST BE REPAVED NO LESS THAN THE FULL WIDTH OF THE TRAVEL LANE(S) THAT IT CUTS, AND A MINIMUM OF 10' ON EACH SIDE OF THE CENTERLINE OF EXCAVATION.

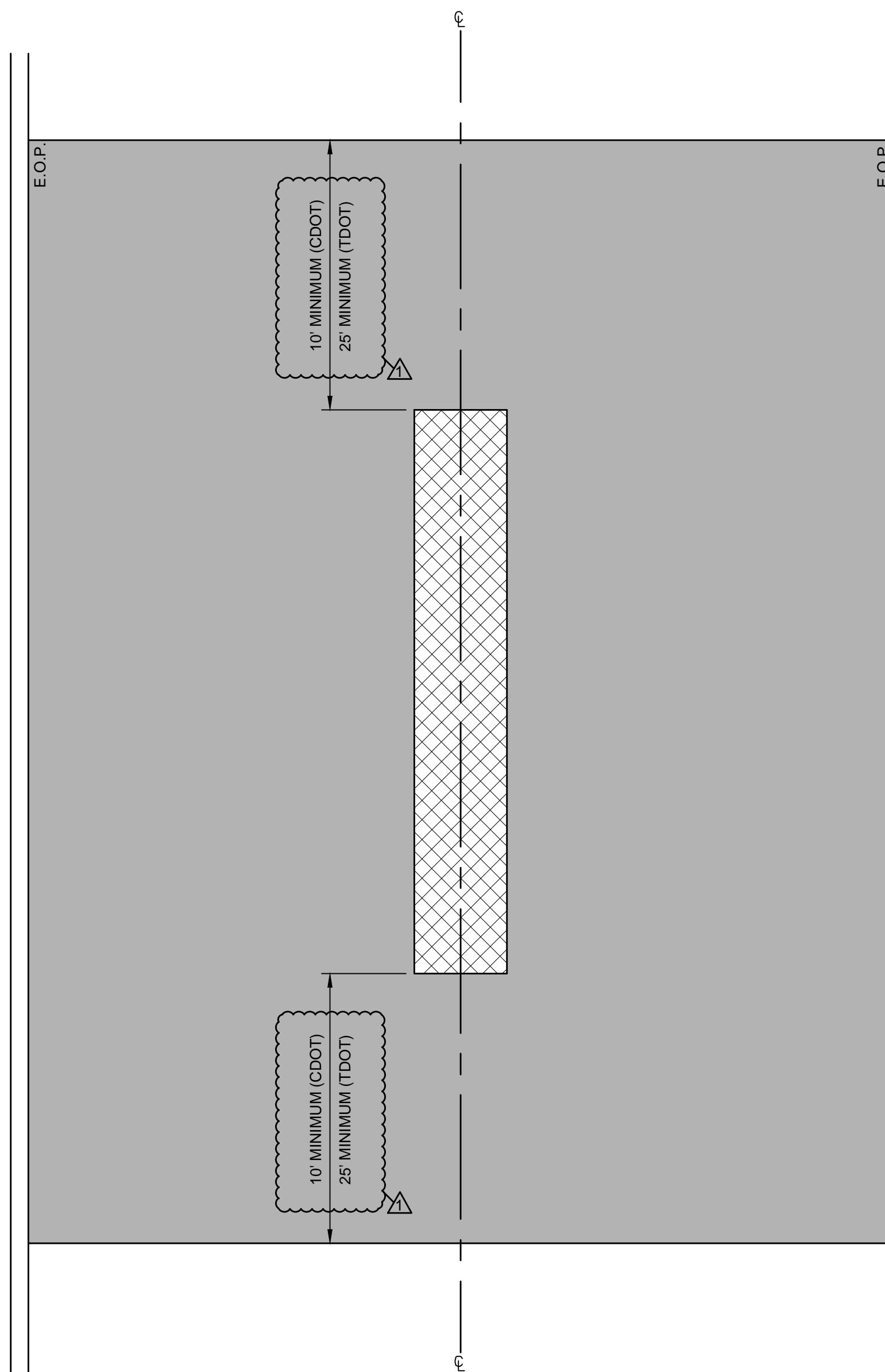


PLAN VIEW- CUT IN ONE LANE

NOTES:

PER CITY OF CHATTANOOGA CODE 32-67:

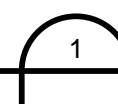
1. ANY LONGITUDINAL CUT MUST BE REPAVED NO LESS THAN THE FULL WIDTH OF THE TRAVEL LANE(S) THAT IT CUTS EXTENDED NO LESS THAN 10' BEYOND THE BEGINNING AND END OF THE CUTS BEING MADE.



PLAN VIEW- CUT CROSSSES CENTERLINE

ASPHALT REPLACEMENT DETAIL

NOT TO SCALE



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IMPROVEMENTS PHASE I
CITY OF CHATTANOOGA, TN
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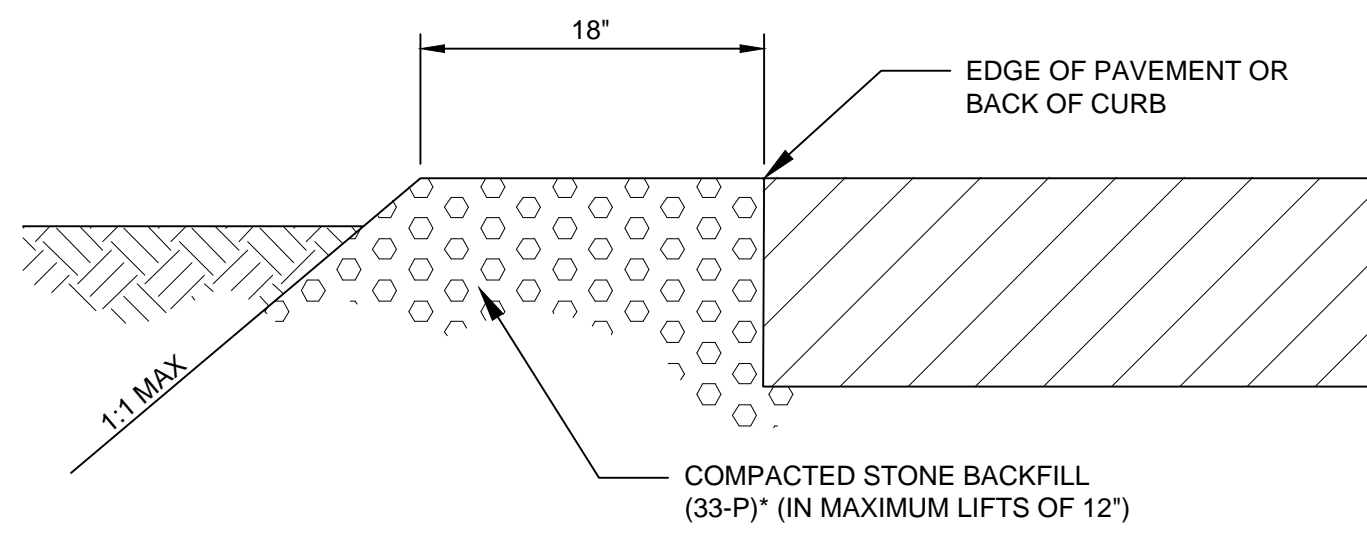
REV	DATE	REVISION DESCRIPTION
1	1/13/20	ISSUED FOR ADDENDUM 2
0	7/19/19	ISSUED FOR BID

DATA SOURCES: Esri, City of Chattanooga GIS
LIMITATION OF LIABILITY: HDR, Inc. acknowledges the inherent limitations of GIS products. HDR, Inc. and the providers of the source data make NO WARRANTY OR REPRESENTATIONS OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, NOR ARE ANY SUCH WARRANTIES TO BE IMPLIED, WITH RESPECT TO THE PRODUCTS, FURNISHED HEREIN.

DATE: OCTOBER 2019

CONSTRUCTION
DETAILS

C - 506

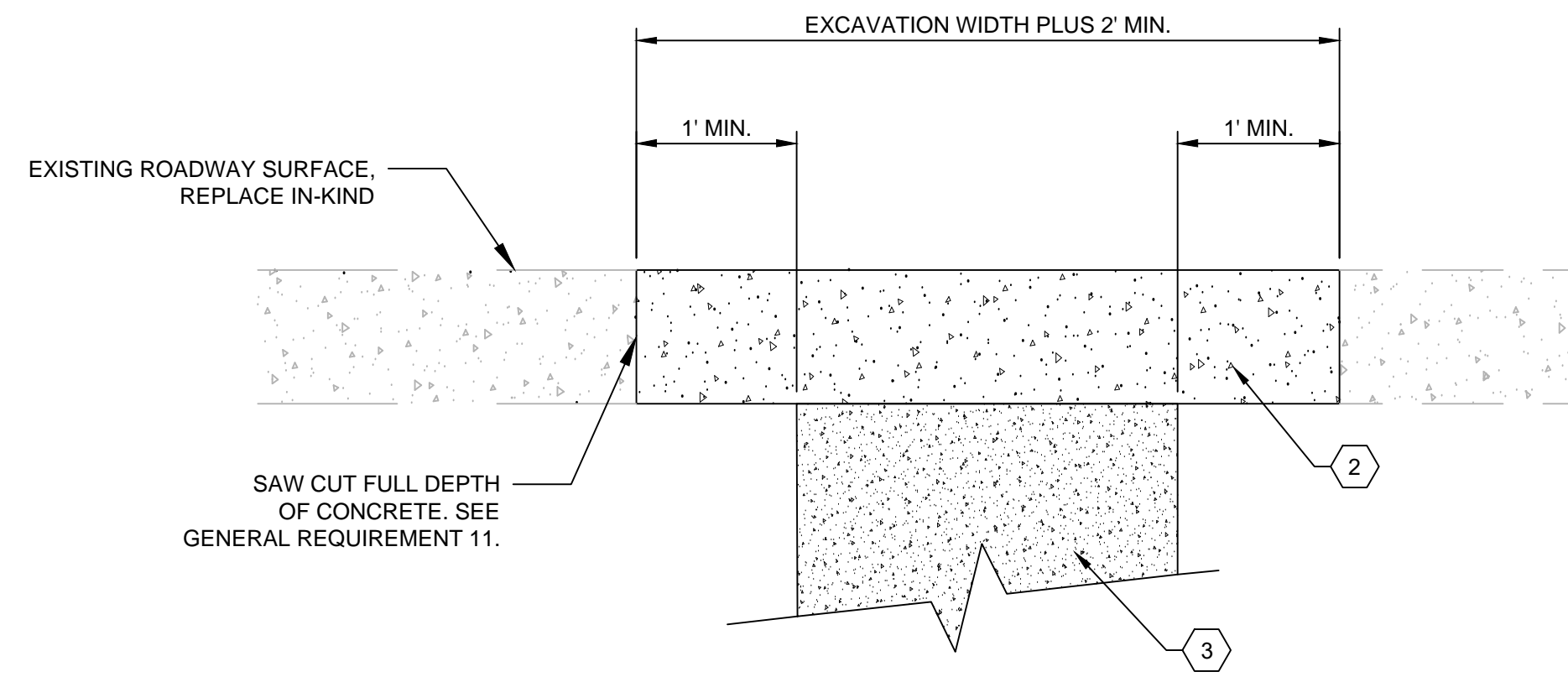


* "33-P (PUG)" - 303.01, TYPE A, GRADING D ("33-P"), TENNESSEE DOT SPECIFICATIONS.

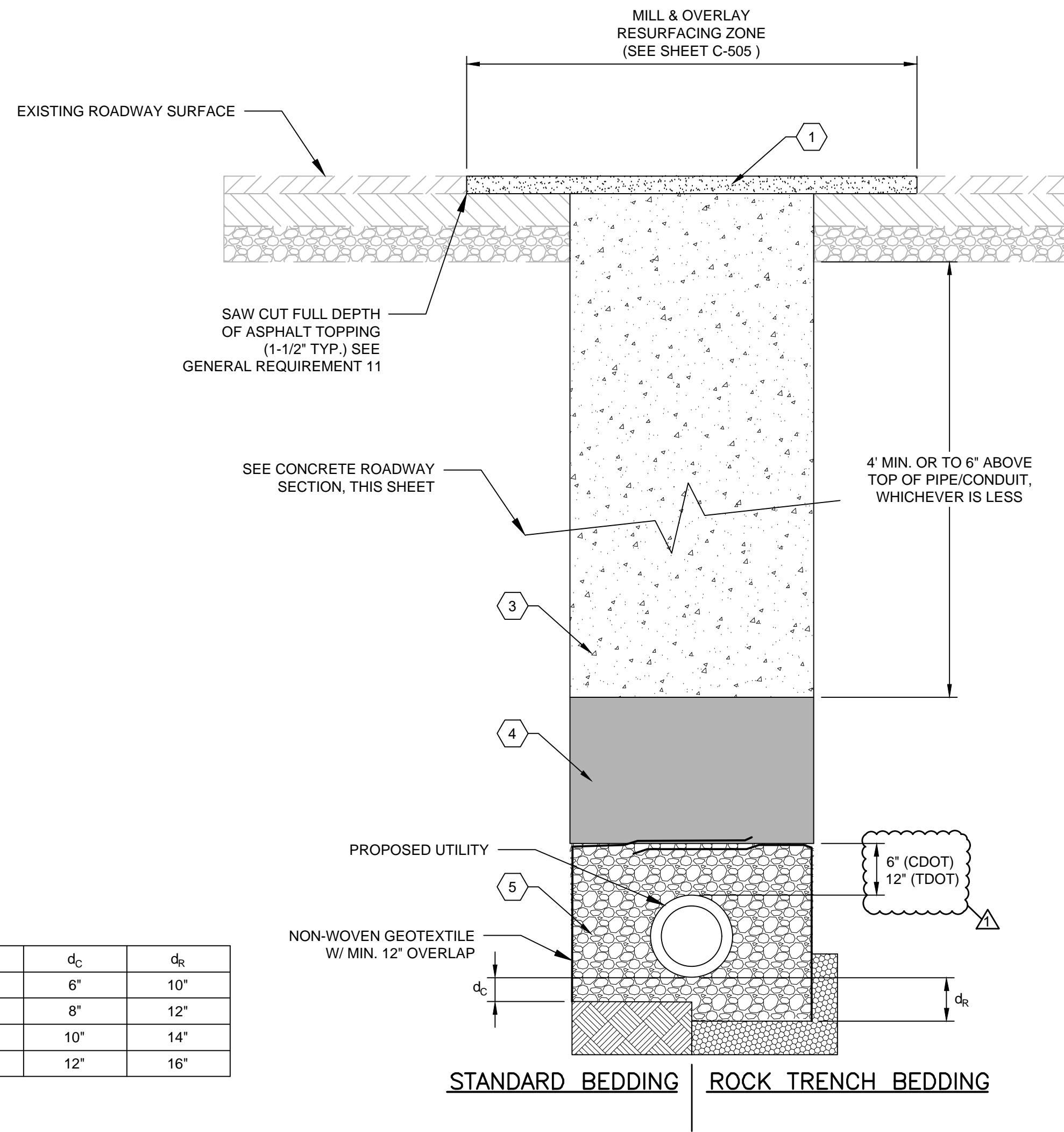
SHOULDER REPAIR

NOTE:

ALL EXCAVATED, GRASS-COVERED SHOULDERS MUST BE LEVELED, AND THEN HAVE TOP SOIL AND SEED ADDED. ALL AREAS ON SHOULDERS USED FOR PARKING MUST BE BACKFILLED TO THE TOP WITH CRUSHED STONE (33-P). *



CONCRETE ROADWAY



UTILITY DIAMETER	d_c	d_r
8" AND LESS	6"	10"
10" TO 18"	8"	12"
20" TO 30"	10"	14"
32" AND LARGER	12"	16"

ASPHALT ROADWAY

TRENCH BEDDING, BACKFILL AND PAVEMENT DETAIL

NOT TO SCALE

KEY NOTES:

1. GRADE "E" ASPHALTIC CONCRETE TOPPING, APPLY TACK COAT PRIOR TO PLACEMENT.
 - 1.1. CDOT ROADWAYS: 1-1/2"
 - 1.2. TDOT ROADWAYS: 2" MINIMUM
 2. FOR CONCRETE ROADWAY: 8" MIN. (MATCH EXISTING) CLASS "A" CONCRETE (4,000 PSI MIN.), COURSE BROOM FINISH. CONCRETE SHALL BE COLORED, STAMPED AND TEXTURED TO MATCH ADJACENT SURFACE.
 3. FLOWABLE FILL (COMPRESSIVE STRENGTH 200-250 PSI IN 48 HOURS), 4 FOOT MINIMUM OR TO WITHIN 6 INCHES ABOVE TOP OF PIPE, 12 INCHES FOR TDOT ROADWAY
 - 3.1. CONCRETE ROADWAYS: FILL TO THE BOTTOM OF THE EXISTING CONCRETE ROADBED
 - 3.2. ASPHALT ROADWAYS: FILL TO WITHIN 1-1/2" OF FINISHED GRADE
 4. CRUSHED LIMESTONE DUST NO LARGER THAN 1/16". OMIT FOR TDOT ROADWAYS.
 5. BEDDING MATERIAL:
 - 5.1. CLASS B BEDDING MATERIAL (SECTION 204.04, TENNESSEE DOT SPECIFICATIONS) - MATERIAL FOR CLASS B BEDDING FOR PIPE CULVERTS SHALL CONSIST OF SAND OR A NATURAL SANDY SOIL, ALL OF WHICH PASSES A 3/8" SIEVE AND NOT MORE THAN TEN PERCENT PASSES A NO. 200 SIEVE; OR STONE, GRAVEL, CHERT, OR SLAG MEETING THE GRADING REQUIREMENTS FOR EITHER GRADING C, D, OR E OF SUBSECTION 903.05.
 - 5.2. IN ROCK CUTS OR OTHER AREAS DESIGNATED BY THE ENGINEER WHERE A FREE DRAINAGE BEDDING OR BACKFILL MATERIAL IS REQUIRED, THE MATERIAL SHALL BE CRUSHED STONE, CRUSHED SLAG, OR WASHED GRAVEL MEETING THE REQUIREMENTS OF SUBSECTION 903.17.
 - 5.3. PVC PIPE BEDDING MATERIAL - NO. 7 WASHED STONE (SECTION 903.22, TENNESSEE DOT SPECIFICATIONS)
 - 5.4. ROCK TRENCH BEDDING - MATERIAL SHALL BE SAME AS FOR CLASS B BEDDING AND SHALL BE PLACED AS SHOWN BY THE STANDARD DETAILS FOR THE TYPE OF PIPE USED. QUANTITIES FOR THE ROCK TRENCH BEDDING ARE THE AMOUNTS IN EXCESS OF THOSE REQUIRED FOR CLASS C BEDDING.
- GENERAL REQUIREMENTS:**
1. ALL STREET CUTS MUST BE BACKFILLED WITH FLOWABLE FILL WITH A COMPRESSIVE STRENGTH OF 200-250 PSI IN 48 HOURS.
 2. FLOWABLE FILL SHALL BE IN PLACE FOR A MINIMUM OF 48 HOURS PRIOR TO PLACING ASPHALT OR CONCRETE TOPPING.
 3. WHERE IT IS IMPRACTICAL TO USE FLOWABLE FILL DUE TO TERRAIN, SLOPE, WIDTH OF TRENCH, OR OTHER SITUATIONS, THE MATERIAL FOR THE BACKFILL IN THE ROADWAY AREAS MAY BE CEMENT TREATED (5% BY UNIT WEIGHT) AGGREGATE BASE AT THE SOLE DISCRETION OF THE CITY TRANSPORTATION ENGINEER/STREETCUT INSPECTOR. BACKFILL SHALL BE PLACED IN 8" LIFTS AND SHALL BE THOROUGHLY COMPACTED BY MEANS OF MECHANICAL TAMP.
 4. WHERE LONGITUDINAL CUTS ARE MADE, THE CITY/COUNTY RESERVES THE RIGHT TO REQUIRE ADDITIONAL RESURFACING BEYOND THE LIMITS OF THE REPAIR TO ENSURE THE PROPER RIDING CHARACTERISTICS AND THE STABILITY OF THE PAVEMENT.
 5. BACKFILL OF TRENCHES WITHIN THE SIDEWALK AREAS SHALL BE COMPACTED GRADED AGGREGATE BASE (NOT LOOSE WASHED STONE). BACKFILL SHALL BE PLACED IN 8" LIFTS AND SHALL BE THOROUGHLY COMPACTED BY MEANS OF MECHANICAL TAMP.
 6. IF A PERPENDICULAR CURB TRENCH REACHES THE CENTERLINE OF THE ROADWAY, THE ASPHALT MUST BE REPLACED FROM CURB TO CURB AND BE A MINIMUM OF TEN (10) FEET ON EACH SIDE OF THE CENTERLINE OF EXCAVATION. (SEE PLAN VIEW DETAIL, THIS SHEET)
 7. ALL REFERENCES TO MATERIALS ARE DESCRIBED IN DETAIL IN THE CITY OF CHATTANOOGA'S STANDARD SPECIFICATIONS. THESE SPECIFICATIONS MUST BE USED AS A REFERENCE WHEN ORDERING MATERIALS.
 8. ANY SUBSTITUTIONS TO THE MATERIALS REFERENCED HEREON MUST BE APPROVED BY THE CITY TRANSPORTATION ENGINEER OR STREETCUT INSPECTOR PRIOR TO INSTALLATION.
 9. EXISTING CONCRETE STREETS THAT HAVE BEEN OVERLAID WITH ASPHALT SHALL BE REPAIRED WITH CONCRETE HAVING A DEPTH EQUAL TO THE EXISTING CONCRETE PLUS THE ADJACENT EXISTING ASPHALT OVERLAY.
 10. WHERE EXISTING CONSTRUCTION AND EXPANSION JOINTS ARE ENCOUNTERED IN CONCRETE PAVEMENT CUTS, THE ENGINEER/INSPECTOR SHALL DESIGNATE LOCATION, SIZE, AND MATERIALS TO CONSTRUCT JOINTS IN THE NEW CONCRETE SURFACE.
 11. ALL STREET CUTS SHALL BE SAWCUT THE FULL DEPTH OF CONCRETE OR DEPTH OF ASPHALT TOPPING PRIOR TO ANY OTHER DEMOLITION METHODS BEING USED.
 12. ALL EXCESS WATER, MUD & UNSUITABLE MATERIAL MUST BE REMOVED FROM THE TRENCH PRIOR TO BACKFILLING.
 13. ALL APPLICABLE ITEMS SHALL BE PER STATE & FEDERAL REGULATIONS.
 14. THE CONTRACTOR THAT CUTS THE STREET SHALL BE RESPONSIBLE FOR REPLACING ANY SIGNAL LOOPS, PAVEMENT MARKINGS, SPEED HUMPS, OR OTHER DEVICES THAT ARE DAMAGED.
 15. TWO WORKING DAYS PRIOR TO WORK WITHIN 100 LF OF A SIGNALIZED INTERSECTION, CALL TRAFFIC ENGINEERING AT (423)-643-5950.
 16. ANY ROADWAY THAT IS NOT GRAVEL, ASPHALT OR CONCRETE SHALL BE COORDINATED WITH WATER QUALITY AND CHATTANOOGA DEPARTMENT OF TRANSPORTATION.
 17. ALL EXCESS WATER, MUD AND UNSUITABLE MATERIAL MUST BE REMOVED FROM THE TRENCH PRIOR TO BACKFILLING. ANY BACKFILL PLACED DURING A RAINY PERIOD OR AT OTHER TIMES WHERE EXCESS WATER CANNOT BE PREVENTED FROM ENTERING THE TRENCH SHALL BE CONSIDERED TEMPORARY AND MUST BE REMOVED AS SOON AS WEATHER PERMITS. ALL BACKFILLS SHALL BE COMPACTED AND SURFACED WITH A MINIMUM OF ONE (1) INCH COLD MIX OR HOT MIX ASPHALT TO IMPROVE TRAFFIC SURFACE UNTIL PERMANENT REPAIR CAN BE ACCOMPLISHED.

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CITY OF CHATTANOOGA, TN
CONSENT DECREE PROGRAM



REV	DATE	ISSUED FOR BID	ISSUED FOR ADDENDUM 2	REVISION DESCRIPTION
1	1/13/20			
0	7/19/19			

DATA SOURCES: Esri, City of Chattanooga GIS
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DATE: OCTOBER 2019

CONSTRUCTION DETAILS