

Procurement Division, 1000 N. Central Street, Suite 100, Knoxville, TN 37917

Knox County Procurement Division Addendum I to Invitation for Bids 3421 Hardin Valley Road Sidewalk Extension

Addendum Date: May 19, 2023 Buyer: Brian Hubbs

Opening Date: May 31, 2023 at 4:00 PM Total Page(s): Thirteen (13)

This addendum shall become a part of the project plans and specifications and shall be acknowledged on the bid form.

Questions / Answers:

Question 1: There is a bid item for a gravity wall. No details are provided. Can details be provided?

Answer 1: A footnote will be added to the pay item that references TDOT Standard Drawing W-SG-1 for a Modular Block Wall.

Question 2: Page 4 of the plans states that some existing concrete sidewalk is to be removed and replaced per page 12. There is no page 12 of the plans. Please confirm what is needed.

Answer 2: That note was inadvertent. It will be removed from the plans.

Question 3: The RRFB signs are shown to be by other on page 5. Can it be confirmed if the RRFB's are in this contract?

Answer 3: Neither the poles nor the RRFB's are part of this contract. They will be installed by others.

Question 4: The topsoil item 203-KC-04 is shown to be measured in lump sum. Topsoil is normally measured in cubic yards. Is lump sum truly the unit the County wants?

Answer 4: That pay item will be removed from the documents.

Question 5: Is there a top and bottom elevation or height available for the gravity wall?

Answer 5: See elevations on Cross Section Sheet 11 for Station 4+26.20.

Procurement Division, 1000 N. Central Street, Suite 100, Knoxville, TN 37917

NOTE:

BIDDERS ARE TO USE THE ATTACHED REVISED (5/18/23) BID FORM WHEN SUBMITTING YOUR BID.

Plan Sheets 1, 3, 4, 5 and 11 have been revised, see revision block dated 5/18/23 on each sheet. PLAN SHEETS 1, 3, 4, 5 and 11 ARE ATTACHED.

End of Addendum I.

Brian Hubbs

Construction and Contract Specialist Knox County Procurement Division

PROJECT MANUAL FOR HARDIN VALLEY ROAD SIDEWALK EXTENSION **Knox County, Tennessee Bid Number # 3421**

Notice to Bidders, Instructions to Bidders, Bid Form, Bid Bond, Contract Agreement. **Performance Bond and Specifications**

for

Knox County Engineering and Public Works 205 W. Baxter Avenue Knoxville, TN. 37917 Tel. No. (865) 215-5800

Glenn Jacobs, Knox County Mayor Jim Snowden P.E., Director of Engineering & Public Works

Sidewalk Construction, New Striping, Grading, Storm Drainage and Erosion Control

> Bid Date – Wednesday, May 31, 2023 Set No. __2___

ENGINEERS

Urban Engineering, Inc. 10330 Hardin Valley Road, Suite 201 Knoxville, TN 37932

Office: (865) 966-1924



SECTION 00300: BID FORM

Project Identification:	Hardin Valley Road Side Knox County, Tennessee	
	Bid No. 3421	
This Bid is Submitted to:	Knox County Procureme 1000 North Central Stree Suite 100	
	Knoxville, TN 37917	
Bid Opening Date:	Wednesday, May 31, 202 Knox County Procureme	
with the Owner in the fo or indicated in the Contr	rm included in the bidding	is Bid is accepted, to enter into an Agreement g Documents to perform all Work as specified ices and within the time indicated in this Bid ons of these documents.
remain subject to accepta		aned in the Contract Documents. The Bid will (60) days after the Bid opening or for a longer g.
In submitting this Bid, th	e Bidder represents the fol	lowing as set forth in the Agreement:
	the Documents, and the fe	ted the Contract Documents, other related data ollowing Addenda, receipt of which is hereby
Addendur	n No	Addendum Date:
Addendur	m No	Addendum Date
Addendur	m No	Addendum Date
Addendur	m No	Addendum Date
Addendur	m No	Addendum Date
		familiar with and is satisfied as to the general, costs(s), progress and the performance of the

C. Bidder is familiar with and is satisfied as to all Federal, State and local laws and regulations that may affect cost(s), progress and the performance of work;

Work;

- D. Bidder has obtained and carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface features at or contiguous to the Site including underground utilities.
- E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, exploration tests, studies and data concerning the conditions (surface and subsurface) at or contiguous to the Site which may affect cost, progress or performance of Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be used by the Bidder, including applying specific means, methods, techniques, sequences and procedures of construction expressly required by the Contract Documents to be used by the Bidder, and safety precautions and programs incident thereto;
- F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies or data are necessarily for the determination of this Bid for the performance of the Work at the price(s) and within the times and in accordance with the other terms and conditions of the Contract Documents:
- G. Bidder is aware of the general nature of the work to be performed by the Owner and others at the Site that relates to the Work as indicated in the Contract Documents;
- H. Bidder has correlated the information known to the Bidder, information and observations obtained from visits to the Site, repolls and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents;
- I. Bidder has given the Engineer written notice of all conflicts, errors, ambiguities or discrepancies that the Bidder has discovered in the Contract Documents, and the written resolution thereof by the Engineer is acceptable to the Bidder;
- J. The Contract 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.

Bidder further represents that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any individual or entity to refrain from bidding; and the Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over the Owner.

The Bidder acknowledges and accepts the Owner's right to waive any and all Bid requirements and formalities.

Bidder will complete the Work in accordance with the Contract Documents for the following compensation:

Unit Prices have been computed in accordance with the General Conditions. Bidder acknowledges that the 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 provided, determined as provided in the Contract Documents.

Bidder agrees that the work will be substantially completed and ready for final payment in accordance with the General Conditions on or before the time frame outlined in the Summary of Work.

Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the time specified above, which shall be stated in the Agreement.

The terms used in this Bid with the initial capital letters have the meanings indicated in the General Conditions and Supplementary Conditions.

Submitted on thisday of _	
State of Tennessee Contractor Lie	cense No.
Classification	; Expiration Date
Corporation Name:State of Incorporation:	
Business Address:	
Phone Number	Fax Numberint Venture Submittal, each joint venture must sign.
Email Address	
Type (Corporation, Partnership, I	Limited Liability Corporation):
By:	
(Signature of Auth	porized Agent - Attach Evidence of Authority)
Name (type or Print)(Corporate Seal, if applicable)	Title
Attest	
(Signature of Corp	porate Secretary, if applicable)

Hardin Valley Road Sidewalk Extension BID NO. 3421 BID FORM

	ESTIMATED SIDEWALK QUANTITIES							
ITEM NO.	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE				
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1					
201-01	CLEARING AND GRUBBING	LS	1					
202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1					
203-01	SIDEWALK AND DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	115					
203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	270					
203-06	WATER	MG	1					
209-05	SEDIMENT REMOVAL	C.Y.	50					
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	550					
303KC01	MINERAL AGGREGATE MAINTENANCE STONE	TON	75					
303KC01.01	MINERAL AGGREGATE, TYPE A BASE, GRADING D (DEPTH=8")	S.Y.	200					
307KC03	BITUMINOUS PLANT MIX BAS (HOT MIX) GRADING BM-2 DEPTH=2.5")	S.Y.	200					
402KC01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	S.Y.	200					
403KC01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	S.Y.	200					
411KC01	ASPHALTIC CONCRETE SURFACING (HOT MIX) GRADING D (DEPTH=1.5 INCHES)	S.Y.	200					
604-07.30	RETAINING WALL (GRAVITY-TYPE)	L.F.	11					
607-03.30	18" FLEXIBLE PIPE CULVERT (HDPE)	L.F.	53					
607KC01	PRECAST ENDWALL 18"	EACH	2					
611-01.01	MANHOLES 0'-4' DEPTH	EACH	3					
701-01.01	CONCRETE SIDEWALK (4")	S.F.	3,950					
701KC02.03	CONCRETE CURB RAMP	EACH	4					
702-01	CONCRETE CURB	C.Y.	6					
702-03	CONCRETE COMBINED CURB AND GUTTER	C.Y.	16					
709-05.06	MACHINED RIP-RAP CLASS A-1	TON	50					
712-01	TRAFFIC CONTROL	LS	1					
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	21					
712-06	SIGNS (CONSTRUCTION)	S.F.	200					
712-08.03	ARROW BOARD (TYPE C)	EACH	1					
713-KC16.20	SIGNS (PERMANENT)	LS	1					

713-15.35	METAL BARRICADE (TYPE III)	EACH	1	
716KC02.01	PLASTIC PAVEMENT MARKING (4")	L.F.	70	
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	21	
716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	3	
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSSWALK)	L.F.	75	
716KC04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	L.F.	50	
717-01	MOBILIZATION	LS	1	
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	5	
801-06.11	STRAW WATTLES (STANDARD)	L.F.	710	
803-01	SODDING (NEW SOD)	S.Y.	2,400	

Grand Total of Unit Prices \$_	
(Grand Total Bid in words) _	

DESIGN PLANS

HARDIN VALLEY ROAD SIDEWALK EXTENSION

DISTRICT NO. W6 KNOX COUNTY, TENNESSEE



ENGINEER:

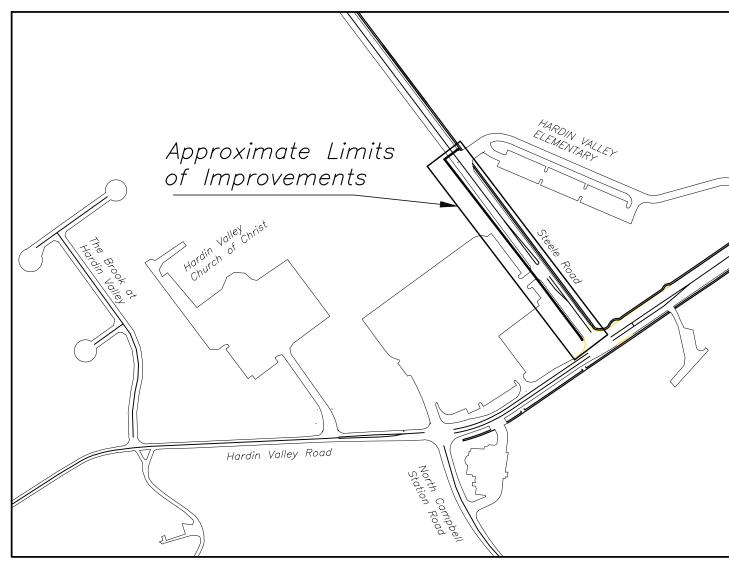
URBAN ENGINEERING, INC.

10330 HARDIN VALLEY RD., SUITE #201 KNOXVILLE, TN 37932 (865) 966-1924

DEVELOPER:

KNOX COUNTY ENGINEERING & PUBLIC WORKS

205 W. BAXTER AVENUE
KNOXVILLE, TN 37917
CONTACT: AARON FRITTS, P.E.
PHONE: (865) 215-5830
FAX: (865) 215-5810



LOCATION MAP N.T.S.

SHEET INDEX

<u>TITLE</u>	<u>SHEE</u>
TITLE SHEET	1
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PRESENT LAYOUT	4
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<u>COMMISSIONERS</u>

DISTRICT/SEAT <u>NAME</u> CHAIRWOMAN (2ND DISTRICT) COURTNEY DURRETT VICE CHAIRWOMAN (6TH DISTRICT) TERRY HILL 1ST DISTRICT DASHA LUNDY 3RD DISTRICT GINA OSTER 4TH DISTRICT KYLE WARD 5TH DISTRICT JOHN SCHOONMAKER 7TH DISTRICT RHONDA LEE 8TH DISTRICT RICHIE BEELER 9TH DISTRICT CARSON DAILEY AT LARGE (SEAT 10) LARSEN JAY AT LARGE (SEAT 11) KIM FRAZIER

APPROVED BY:

GLENN JACOBS, KNOX COUNTY MAYOR

APPROVED BY:

AARON FRITTS, P.E. KNOX COUNTY ENGINEERING AND PUBLIC WORKS

GRADING

ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY THE SAME. ALL MATERIAL SHALL BE DISPOSED OF IN THE UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

SEEDING AND SODDING

SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

<u>DRAINAGE</u>

OF OTHER ITEMS.

THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST

EXCAVATION FOR CATCH BASINS, ENDWALLS, MANHOLES AND CULVERTS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE.

WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE DUE TO SUCH CHANGE

DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COSTS ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

<u>UTILITIES</u>

THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES

THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL IMPACT THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE KNOX COUNTY ENGINEER AT ANY LOCATIONS WHERE CLEARING IS CALLED FOR IF THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND

SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC. AT 1-800-351-1111.

UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES AND GRADES ARE A CONTRACT ITEM, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT—OF—WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK, AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE KNOX COUNTY ENGINEER.

<u>MISCELLANEOUS</u>

THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.

NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

SIDEWALKS HEREON ARE DESIGNED IN GENERAL CONFORMANCE WITH FHWA GUIDELINES.

RIGHT-OF-WAY

ON NON—STATE ROUTES, ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS SHALL REQUIRE A PERMIT ONLY IF THE LOCAL AGENCY SPECIFIES THE NEED FOR THAT PERMIT.

PAVEMENT MARKINGS

IF THERMOPLASTIC IS USED ON THE FINAL SURFACE, THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKING AFTER THE PAVING OPERATION IS COMPLETED. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR PERMANENT MARKINGS. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716KCO2.01 PLASTIC PAVEMENT MARKING (4" LINE) LINEAR FOOT.

SIGNING NOTES

THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUT—OUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND. THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL EXTRUDED PANEL SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE, AS OUTLINED IN THE STANDARD SPECIFICATIONS. ALL SHIELDS ON GUIDE SIGNS SHALL BE DEMOUNTABLE

AND ATTACHED TO THE SIGN FACE AS OUTLINED IN THE STANDARD SPECIFICATIONS.

THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.

AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE KNOX COUNTY ENGINEER.

THE CONTRACTOR SHALL BE REQUIRED TO FURNISH LAYOUT DRAWINGS (3 SETS) OF ALL EXTRUDED PANEL SIGNS WITH SPACING OF ALL LETTERS, NUMERALS, SHIELDS AND ARROWS. THE LAYOUT DRAWINGS SHALL BE SENT TO THE KNOX COUNTY ENGINEER.

THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.

OWNER:

KNOX COUNTY ENGINEERING & PUBLIC WORKS

205 W. BAXTER AVENUE
KNOXVILLE, TN 37917
CONTACT: AARON FRITTS, P.E.
PHONE: (865) 215–5830
FAX: (865) 215–5810

ENGINEER:
URBAN ENGINEERING, INC.

10330 HARDIN VALLEY RD., SUITE #201
KNOXVILLE, TN 37932
(865) 966-1924

CONSTRUCTION WORK ZONE AND TRAFFIC CONTROL NOTES

ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY—EIGHT (48)
HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE
WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COST OF REMOVAL, COVERING AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE KNOX COUNTY ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT—OF—WAY TO PROVIDE FOR THIS THIRTY (30) FEET SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE KNOX COUNTY ENGINEER'S APPROVAL TO USE THEM.

THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC. UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO BE PARKED WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE. WHERE THERE IS INSUFFICIENT RIGHT—OF—WAY TO PROVIDE FOR THIS THIRTY (30) FEET SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE KNOX COUNTY ENGINEER'S APPROVAL TO USE THEM.

ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EROSION CONTROL NOTES

CLEARING AND GRUBBING SHALL NOT BE INITIATED MORE THAN 20 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS TEMPORARILY SEEDED AND MULCHED.

CLEARING, GRUBBING AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED CONCURRENT WITH CLEARING OPERATIONS, AND SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS.

CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED SOIL AREAS AND SHALL BE PHASED FOR PROJECTS THAT HAVE OVER 50 ACRES OF SOIL DISTURBANCE. HOWEVER, PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EROSION CONTROL MEASURES OVER TEMPORARY EROSION CONTROL MEASURES ON ALL PROJECTS.

INSPECTION AND MAINTENANCE OF STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS AND SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EROSION CONTROL STRUCTURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.

SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL PER CUBIC

THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF—SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC.

SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EROSION AND SEDIMENTATION CONTROL MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. HAY BALES AND/OR SILT FENCE MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

INSTREAM SEDIMENTATION CONTROL DEVICES ARE NOT APPROVED AS PRIMARY TREATMENT DEVICES. THEY MAY BE USED ONLY AS BACKUP OR FAIL—SAFE PROTECTION. SEPARATE EROSION AND SEDIMENTATION CONTROLS AND SEDIMENT TREATMENT DEVICES MUST BE UTILIZED.

SLURRY WATER PUMPED FROM WORK AREAS AND EXCAVATIONS MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED SLURRY WATER MUST BE DISCHARGED THROUGH A PIPE OR A WELL—VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION AND SEDIMENTATION.

CHECK DAMS SHALL BE UTILIZED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, SANDBAG, OR STRAW BALE CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO DETAIN RUNOFF AND TRAP SEDIMENT. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, THAT CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS.

PERMANENT EROSION CONTROL MEASURES SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING.

THE CONTRACTOR SHALL INSTALL A RAIN GAUGE ON—SITE AND MAINTAIN IT IN GOOD WORKING CONDITION. THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION ON THE PROJECT AND PROVIDE THIS INFORMATION TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGE IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS.

ANTICIPATED STORM EVENTS (OR SERIES OF STORM EVENTS SUCH AS INTERMITTENT SHOWERS OVER ONE OR MORE DAYS) AND WITHIN 24 HOURS AFTER THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER, AND AT LEAST ONCE PER WEEK.

INSPECTIONS OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DONE BEFORE

OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF—SITE ROADWAY SEDIMENT TRACKING.

UPON CONCLUSION OF THE INSPECTIONS, EROSION AND SEDIMENT CONTROL MEASURES

FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER THE CONDITION IS IDENTIFIED.

THE CONTRACTOR SHALL MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION

PLAN ON-SITE (OR AT NEARBY OFFICE) AND SHALL PLACE COPIES OF ANY

PROJECT—RELATED PERMITS ON THE PROJECT BULLETIN BOARD.

THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS FROM ENTERING WATERS OF THE STATE/U.S.

THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STAE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS, RULES, REGULATIONS AND ORDINANCES; INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE UTILIZED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

BORROW AND WASTE DISPOSAL AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100 YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS IN THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT OBTAINED SOLELY BY THE CONTRACTOR.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS FROM STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT—DEDICATED ASPHALT AND/OR CONCRETE PLANTS.

ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED AND THE PERMIT OR PERMITS ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

SPECIAL NOTES

ALL DRAINAGE PIPES INSTALLED UNDERNEATH THE ROADWAY PAVEMENT, INCLUDING CURB & GUTTER, WILL BE REQUIRED TO BE BACKFILLED ENTIRELY WITH STONE. THE QUANTITY OF STONE USED FOR BACKFILL AND PIPE BEDDING WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE UNIT PRICE FOR THE PIPE INSTALLATION. ADDITIONALLY, ALL ROAD CUTS MADE FOR PIPE INSTALLATION WILL BE CAPPED TEMPORARILY WITH BINDER AND WILL NOT BE ALLOWED TO LEAVE AN EXPOSED STONE TRENCH FOR TRAFFIC. THE PAVEMENT FOR THE TEMPORARY BINDER WILL BE INCLUDED IN THE UNIT PRICE OF THE PIPE INSTALLATION AS WELL.

CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRIC SAFETY CODE. SPECIAL ATTENTION IS CALLED TO THE REQUIRED SPACING BETWEEN OVERHEAD SERVICE LINES.

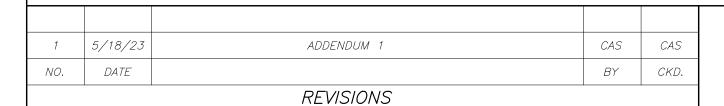
FOOTNOTES:

- 1 INCLUDES STAKING REQUIRED FOR UTILITY RELOCATIONS PER KNOX COUNTY ENGINEERING AND PUBLIC WORKS REQUEST.
- (2) SEE SUBSECTION 205-04 OF THE STANDARD SPECIFICATIONS.
- THIS ITEM INCLUDES, BUT IS NOT LIMITED TO THE REMOVAL, DISPOSAL, RELOCATION AND OR REPLACEMENT OF TREES, LANDSCAPING, SIDE DRAINS, MAILBOXES, FENCES, STORM DRAINS, DRAINAGE STRUCTURES, LAMPS AND OTHER ITEMS THAT MAY BE ENCOUNTERED BUT ARE NOT READILY VISIBLE ON THE GROUND SURFACE. INCLUDES MATERIALS, LABOR AND DISPOSAL FEES, IF APPLICABLE. THIS ITEM ALSO INCLUDES REMOVAL AND DISPOSAL OF ASPHALT THAT IS NOTED AS TO BE REMOVED (INCLUDING SAWCUTTING).
- 4) THIS ITEM INCLUDES HAULING AND DISPOSING OF EXCESS MATERIAL (TOPSOIL, UNDERCUT AND CLAY) FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL FEES, IF APPLICABLE. THE EXCAVATION QUANTITY EXCLUDES EXCAVATION FROM PIPE TRENCHES, STRUCTURES, ETC.
- (5) MODULAR TYPE WALL PER TDOT STD. DWG W-SG-1.
- 6 MAY BE INCREASED OR DECREASED AS DIRECTED BY THE ENGINEER OR KNOX COUNTY.
- 7 SEE SUBSECTION 209-07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE AND REPLACEMENT.
- 8 ALL CATCH BASINS AND MANHOLES ARE TO BE PRECAST CONCRETE. NO POURED—IN—PLACE WILL BE ALLOWED UNLESS OTHERWISE NOTED ON THE DRAWINGS
- (9) ALL SIGNS ARE TO BE FLUORESCENT SHEETING AND NEW.
- (10) PERMANENT SIGNS (SHEET 5).
- 11 TRUNCATED DOMES ARE NOT TO BE PAID FOR SEPARATELY. THE COST FOR TRUNCATED DOMES IS TO BE INCLUDED IN UNIT PRICE FOR CONCRETE CURB RAMPS.
- (12) INCLUDES 4" ROAD BASE



TYPE	YEAR	PROJECT NO	SHEET NO
CONSTRUCTION	2023	HARDIN VALLEY SIDEWALK	3

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
<u>1</u>)–	105-01			
<i>-</i> /-	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
2)-	201-01	CLEARING AND GRUBBING	LS	1
3)–	202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
4)-	203-01	SIDEWALK AND DRAINAGE EXCAVATION (UNCLASSIFIED)	CY	115
	203-03	BORROW EXCAVATION (UNCLASSIFIED)	CY	270
	203-06	WATER	MG	1
	209-05	SEDIMENT REMOVAL	CY	50
7)-	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	LF	550
6)-	303KC01 303KC01.01	MINERAL AGGREGATE MAINTENANCE STONE MINERAL AGGREGATE, TYPE A BASE, GRADING D (DEPTH = 8" INCHES)	TON SY	75 200
	307KC03	BITUMINOUS PLANT MIX BASE ((HOT MIX) GRADING BM-2 DEPTH = 2.50 INCHES)	SY	200
	402KC01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	SY	200
	403KC01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	SY	200
	411KC01	ASPHALTIC CONCRETE SURFACING (HOT MIX) GRADING D (DEPTH=1.50 INCHES)	SY	200
5)–	604-07.30	RETAINING WALL (GRAVITY—TYPE)	LF	11
	607-03.30	18" FLEXIBLE PIPE CULVERT (HDPE)	LF	53
	607KC01	PRECAST ENDWALL 18"	EA	2
8)–	611-01.01	MANHOLES O'-4' DEPTH	EACH	3
12)-	701-01.01	CONCRETE SIDEWALK (4")	SF	3950
	701KC02.03	CONCRETE CURB RAMP	EACH	4
	702-01	CONCRETE CURB	CY	6
	702-03	CONCRETE COMBINED CURB AND GUTTER	CY	16
	709-05.06	MACHINED RIP-RAP CLASS A-1	TON	50
	712-01	TRAFFIC CONTROL	LS	1
_	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	21
9)–	712-06 712-08.03	SIGNS (CONSTRUCTION) ARROW BOARD (TYPE C)	SF EACH	200 1
	712-08.03	ANNOW BOARD (THE C)		
10)-	713–KC16.20	SIGNS (PERMANENT)	LS	1
	713-15.35	METAL BARRICADE (TYPE III)	EACH	1
12)-	716KC02.01	PLASTIC PAVEMENT MARKING (4")	LF	70
	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	LF	21
	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	3
	716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	LF	<i>7</i> 5
	716KC04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	LF	50
	717-01	MOBILIZATION	LS	1
	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	5
	801-06.11	STRAW WATTLES (STANDARD)	LF	710
6)–		· ·		





URBAN ENGINEERING, INC.

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KNOX COUNTY ENGINEERING & PUBLIC WORKS
PROPOSED SIDEWALK IMPROVEMENTS
HARDIN VALLEY ROAD AT STEELE ROAD

GENERAL	NOTES	AND	ESTIMATED	QUANTITIES
HARDIN	VALLEY	ROAD	SIDEWALK	EXTENSION

DESIGNED BY:	CHECKED BY:	SCALE:	SHEE
CAS	CAS	AS NOTED	
DRAWN BY:	DATE:	FILE NO.:	
DP	4/20/23	2203005	OF 1



