



TRANSPORTATION CABINET

Frankfort, Kentucky 40622
www.transportation.ky.gov/

Steven L. Beshear
Governor

Michael W. Hancock, P.E.
Secretary

November 15, 2011

CALL NO. 307
CONTRACT ID NO. 111053
ADDENDUM # 2

Subject: McCracken County, JL03 073 0062 010-011
Letting November 18, 2011

- (1) Revised - Table of Contents - Page 2 of 87
- (2) Added - Special Notes - Pages 11(a)-11(g) of 87
- (3) Revised - Bid Items - Pages 84-87 of 87

Proposal revisions are available at <http://transportation.ky.gov/contract/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in blue ink that reads "Ryan Griffith".

Ryan Griffith
Director
Division of Construction Procurement

RG:ks
Enclosures



An Equal Opportunity Employer M/F/D

TABLE OF CONTENTS

PART I	SCOPE OF WORK
	<ul style="list-style-type: none">• PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES• CONTRACT NOTES• STATE CONTRACT NOTES• ASPHALT MIXTURE• INCIDENTAL SURFACING• COMPACTION OPTION A• SPECIAL NOTE(S) APPLICABLE TO PROJECT• RIGHT OF WAY NOTES• UTILITY CLEARANCE• KPDES STORM WATER PERMIT, BMP AND NOI• COMMUNICATING ALL PROMISES
PART II	SPECIFICATIONS AND STANDARD DRAWINGS
	<ul style="list-style-type: none">• SPECIFICATIONS REFERENCE• SUPPLEMENTAL SPECIFICATIONS• [SN-1I] PORTABLE CHANGEABLE SIGNS
PART III	EMPLOYMENT, WAGE AND RECORD REQUIREMENTS
	<ul style="list-style-type: none">• LABOR AND WAGE REQUIREMENTS• EXECUTIVE BRANCH CODE OF ETHICS• KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978• PROJECT WAGE RATES
PART IV	INSURANCE
PART V	BID ITEMS

SPECIAL NOTES FOR TRAFFIC SIGNAL LOOP INSTALLATION

I. DESCRIPTION. All loops shall be quadrapole loops. Loop replacement shall be performed in accordance with the Department's Standard Specifications (current edition), applicable Standard Drawings, and applicable Special Provisions except as hereafter specified. Article references are to the Standard Specifications.

The Contractor shall furnish all materials, labor, and equipment for the replacement of traffic signal loop(s), and junction boxes (if the contract specifies quantities for this bid item elsewhere), and maintaining and controlling traffic, and all other work specified as part of this contract. The Contractor shall coordinate the placement of the traffic loops with the on- site Engineer and the Traffic Engineer.

All items required for lane closures related to this item of work shall be considered incidental to bid item "Maintain and Control Traffic".

II.MATERIALS. All wire and cable shall be plainly marked in accordance with the provisions of the national electrical code.

Conduit shall be rigid steel. All rigid steel conduit shall be galvanized inside and out and shall conform to the Underwriters' Laboratories requirements for rigid metallic conduit.

Loop wire shall be #14 AWG IMSA Spec 51.7.

Loop lead-in cable shall be #14 AWG stranded, paired conductors, electrically shielded and conforming to IMSA 19-2-1984.

III.CONSTRUCTION. The electrical contractor shall coordinate with the general contractor and traffic engineer for loop locations.

All wiring shall conform to the provisions of the National Electrical Code unless otherwise shown on the details. Where more than one circuit is installed within the same conduit, permanent circuit identification numbers shall be affixed to all wires. All wires shall be permanently labeled within 6 inches of the input file.

Rigid steel conduit encasement shall be provided for all conductors where conductors are run inside poles or cabinets and induction loop conductors sealed within pavements. All conduit installations shall conform to the provisions of the National Electrical Code except where directed otherwise. Bonded slip joints will be permitted for joining rigid conduit to junction boxes. Where a standard coupling cannot be used, an approved threaded union coupling shall be used.

All conduit ends shall be reamed to remove burrs and sharp edges. Damaged portions of the galvanized surfaces and untreated treads resulting from field cuts shall be painted with a rust inhibitive paint. Conduit bends shall have a radius of not less than 12 times the nominal diameter of the conduit, unless otherwise shown on the plans. See Typical Grounding Detail.

Conduit which will not be subjected to regular pressure from traffic shall be laid to a depth of not less than 18 inches. At crossings under roadway surfaces and shoulders, the conduit shall be placed at a depth of not less than 24 inches below grade. The contractor will not be permitted to cut any pavement in carrying out conduit installations. After the conduit has been installed and prior to backfilling, the conduit installation shall be inspected and approved by the Engineer.

Contractor shall install underground utility warning tape above the circuit cables as shown on the detail sheets. The tapes shall conform to the APWA-ULCC national color code with black lettering on a red background. The tape shall continuously read "Caution: Electric Line Buried Below" alternating with a 'No Digging' symbol.

The tape shall be durable and colorfast to withstand years of underground burial and easily direct buried. The tape shall be 6" wide and 7 mils (nominal) thick. The tape shall have a minimum tensile strength of 600 lbs./6" width. It shall be color code impregnated with alkali and acid stable, lead-free, organic pigments for direct burial. It shall be ultraviolet colorfast. The tape shall be nondistorting with no elongation.

When backfilling trenches, the backfill material shall be placed and compacted in lifts of 9 inches or less. Any area disturbed as a result of the contractor's operations shall be restored to the satisfaction of the Engineer.

Loop lead-in wire, exclusive of shielded cable, shall be twisted with three to five turns per foot before placement in saw slot, conduit or junction box. Unshielded loop wiring to field terminal connections in cabinet and unshielded loop wiring in loop amplifier connector harness shall also be twisted three to five turns per foot.

Except for the connection of the loop wires to the loop lead-in wires, loops shall be extended splice-free to the controller. Loop wires shown as extended to poles or junction boxes shall be spliced into loop lead-in cable at the poles or boxes. Loop lead-in cable shall be extended splice-free from pole or junction box to controller. Each loop shall have a separate lead-in cable installed. Multiple loops on the same lead-in cable will not be accepted. Splices shall be placed to minimize possibility of water intrusion. The electrical contractor shall coordinate the installation of traffic loops with the paving contractor and the Engineer prior to milling.

Junction boxes shall conform to ANSI/SCTE 77 "Specifications for Underground Enclosure Integrity" for Tier 15. Covers shall have a minimum coefficient of friction of 0.05 in accordance with ASTM C1028, shall be marked "TRAFFIC" and be attached with 3/8" stainless hex bolts. Junction boxes shall be installed flush with finished grade. See Junction Box Type B detail.

All splices shall be made with butt splices. Butt splices shall be copper and of the correct wire range. Butt splices shall be covered with a 3M Mastic Pad or approved equal and then taped with a 3M brand #33 electrical tape. Mastic pad must cover at least 3 inches past each end of butt splice. Underground splices include splices in junction boxes and

pole bases. Each conductor shall be encased in a separate splice kit. Cost of the splices shall be incidental to the cost of wire or cable. The splicing specification listed here takes precedence over any other splicing specifications listed in the Standard Specifications for Road and Bridge Construction.

Induction loop conductors shall test free of shorts and unauthorized grounds and shall have an insulating resistance of at least 100 megohms when tested with a 500 volt direct current potential in a reasonably dry atmosphere between conductors and ground.

Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a Contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department.

Information provided in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.

It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities.

The Contractor will be responsible for all damage to public and/or private property resulting from his work. Upon completion of the work, restore all disturbed highway features in like kind design and materials. Clean the site and dispose of all waste and debris off the right-of-way at sites obtained by the Contractor at no additional cost to the Department. Sow all disturbed earthen areas with Seed Mixture No. 1.

IV. MEASUREMENT.

Conduit shall include furnishing and installing specified conduit in accordance with specifications. This item includes conduit fittings, expansion joints, clamps, and weatherheads.

Junction box shall include furnishing and installing specified junction box in accordance with the specifications and shown on the Junction Box Type B detail. This item includes #57 aggregate, backfilling, and the restoration of disturbed areas to the satisfaction of the Engineer.

Trenching and backfilling shall include excavation, backfilling, and the restoration of disturbed areas to the satisfaction of the Engineer. Incidental to this item shall be

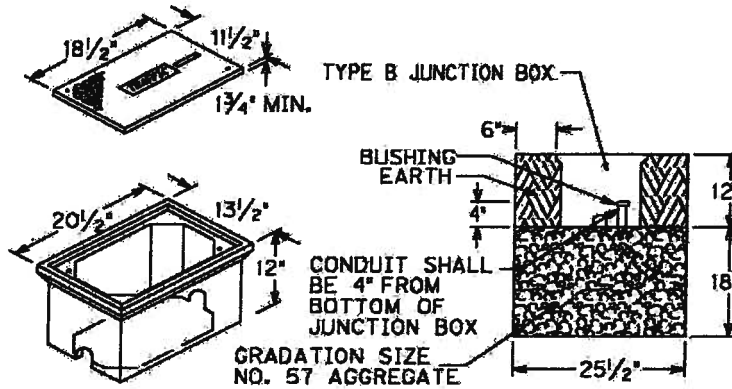
furnishing and installing underground utility warning tape as shown on the Depth of Conduit detail.

Wire or cable shall include furnishing and installing specified wire or cable within conduit, saw, or overhead as required. Incidental to this item shall be furnishing and installing splice boots, cable rings or other hardware required for installing cable. Wire installed in saw slots shall be installed as shown on the Saw Slot detail. The contractor shall install all cable runs splice-free from the controller to each loop wire the cable is feeding. Exceptions to this must be approved by the Engineer. The removal of existing lead-in cable shall be incidental to this item.

Loop saw slot and fill shall include sawing, cleaning saw slot as well as furnishing and installing loop sealant, backer rod and non-shrink grout as shown on the details. The contractor shall saw according to the dimensions shown on the detail sheets and not cut out any sections of pavement by over-sawing any slot. The 3/4" conduit referenced in the Loop Wire Transition details is incidental to this project and not a separate pay item.

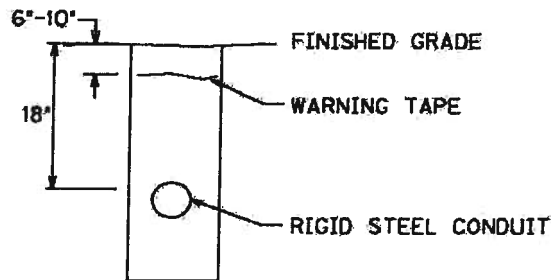
V. PAYMENT. The Department will make payment for completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
4793	Conduit 1 1/4"	Linear Foot
4811	Junction Box Type B	Each
4820	Trenching and Backfilling	Linear Foot
4830	Loop Wire	Linear Foot
4850	Cable-No. 14/1 Pair	Linear Foot
4895	Loop Saw Slot and Fill	Linear Foot

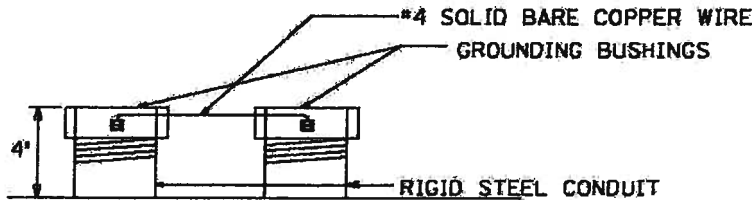


JUNCTION BOXES SHALL CONFORM TO ANSI/SCTE 77 "SPECIFICATIONS FOR UNDERGROUND ENCLOSURE INTEGRITY" FOR TIER 15. COVERS SHALL HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.05 IN ACCORDANCE WITH ASTM C1028, SHALL BE MARKED "TRAFFIC" AND BE ATTACHED WITH 3/8" STAINLESS HEX BOLTS. JUNCTION BOXES SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.

JUNCTION BOX TYPE B

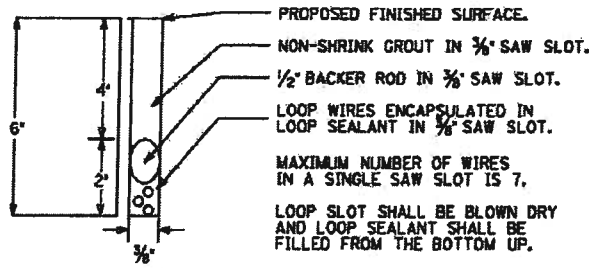


DEPTH OF CONDUIT

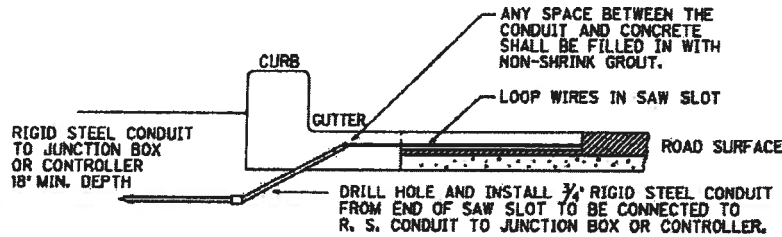


TYPICAL GROUNDING DETAIL

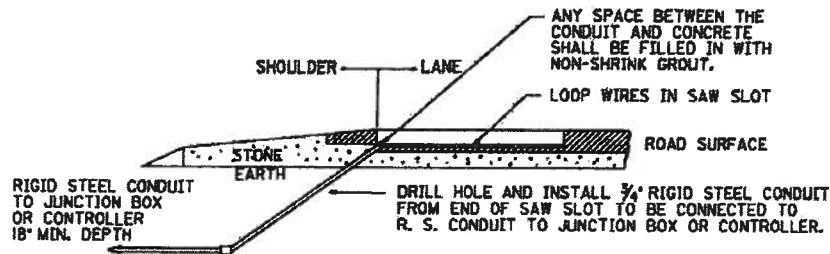
LOOP WIRES SHALL BE ENCAPSULATED WITH LOOP SEALANT PER MANUFACTURER'S INSTRUCTIONS. ALL LOOP SEALANT SHALL BE COVERED WITH A CONTINUOUS LAYER OF BACKER ROD. BACKER ROD SHALL BE INSTALLED SUCH THAT NO VOIDS ARE PRESENT BETWEEN LOOP SEALANT AND BACKER ROD. FILL REMAINING SAW SLOT WITH NON-SHRINK GROUT PER MANUFACTURER'S INSTRUCTIONS.



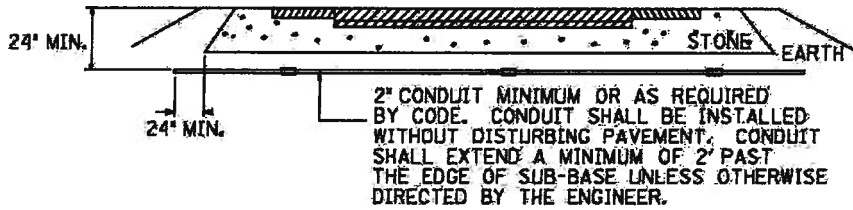
SAW SLOT DETAIL



LOOP WIRE TRANSITION - CONCRETE CURB



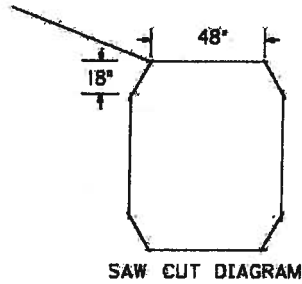
LOOP WIRE TRANSITION - FLAT SHOULDER



CONDUIT UNDER EXISTING PAVEMENT DETAIL

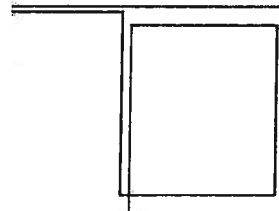
LOOP LEAD-IN WIRES SHALL BE TWISTED WITH THREE TO FIVE TURNS PER FOOT UNTIL TERMINATED AT FIELD CONNECTIONS IN THE CABINET OR CONNECTED TO SHIELDED CABLE.

TO PULL BOX AND/OR CONTROL BOX



SAW CUT DIAGRAM

TO PULL BOX AND/OR CONTROL BOX



LOOP WIRE PLAN

NUMBER OF TURNS SPECIFIED ON LAYOUT DETAIL SHEET

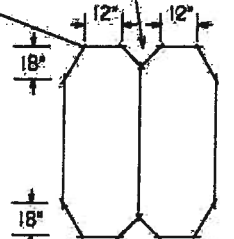
STANDARD LOOP

•ALL 6'x6' LOOPS SHALL BE STANDARD

LOOP LEAD-IN WIRES SHALL BE TWISTED WITH THREE TO FIVE TURNS PER FOOT UNTIL TERMINATED AT FIELD CONNECTIONS IN THE CABINET OR CONNECTED TO SHIELDED CABLE.

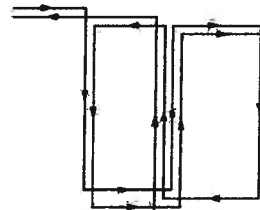
DO NOT SAW CUT MIDDLE SECTION (TYP.)

TO PULL BOX AND/OR CONTROL BOX



SAW CUT DIAGRAM

TO PULL BOX AND/OR CONTROL BOX



LOOP WIRE PLAN

NUMBER OF TURNS SPECIFIED ON LAYOUT DETAIL SHEET

QUADRAPOLE LOOP

•ALL 6'x30' LOOPS SHALL BE QUADRAPOLE

CONTRACT ID: 111053
 COUNTY: MCCRACKEN
 PROPOSAL: JL03 073 0062 010-011

PAGE: 1
 LETTING: 11/18/11
 CALL NO: 307

LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
SECTION 0001 ROADWAY						
0010	00003	CRUSHED STONE BASE	1,513.000	TON		
0020	00078	CRUSHED AGGREGATE SIZE NO 2	3.000	TON		
0030	00190	LEVELING & WEDGING PG64-22	204.000	TON		
0040	00214	CL3 ASPH BASE 1.00D PG64-22	1,755.000	TON		
0050	00358	ASPHALT CURING SEAL	4.000	TON		
0060	00388	CL3 ASPH SURF 0.38B PG64-22	398.000	TON		
0070	00521	STORM SEWER PIPE-15 IN	28.000	LF		
0080	00521	STORM SEWER PIPE-15 IN NO ALT. EXTEND IN KIND	14.000	LF		
0090	00522	STORM SEWER PIPE-18 IN	473.000	LF		
0100	00528	STORM SEWER PIPE-36 IN	32.000	LF		
0110	00552	STORM SEWER PIPE-18 IN EQUIV	167.000	LF		
0120	01000	PERFORATED PIPE-4 IN	1,571.000	LF		
0130	01010	NON-PERFORATED PIPE-4 IN	145.000	LF		
0140	01015	INSPECT & CERTIFY EDGE DRAIN SYSTEM	(1.00)	LS		
0150	01024	PERF PIPE HEADWALL TY 2-4 IN	1.000	EACH		
0160	01028	PERF PIPE HEADWALL TY 3-4 IN	2.000	EACH		
0170	01440	SLOPED BOX INLET-OUTLET TYPE 1	1.000	EACH		
0180	01456	CURB BOX INLET TYPE A	10.000	EACH		
0190	01496	DROP BOX INLET TYPE 3	1.000	EACH		
0200	01740	CORED HOLE DRAINAGE BOX CON-4 IN	14.000	EACH		

CONTRACT ID: 111053
 COUNTY: MCCRACKEN
 PROPOSAL: JL03 073 0062 010-011

PAGE: 2
 LETTING: 11/18/11
 CALL NO: 307

LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
0210	01767	MANHOLE TYPE C	2.000	EACH		
0220	01810	STANDARD CURB AND GUTTER	1,616.000	LF		
0230	01812	REMOVE CURB AND GUTTER	298.000	LF		
0240	02101	CEM CONC ENT PAVEMENT-8 IN	461.000	SQYD		
0250	02159	TEMP DITCH	643.000	LF		
0260	02160	CLEAN TEMP DITCH	643.000	LF		
0270	02230	EMBANKMENT IN PLACE	1,777.000	CUYD		
0280	02242	WATER	243.000	MGAL		
0290	02429	RIGHT-OF-WAY MONUMENT TYPE 1	9.000	EACH		
0300	02432	WITNESS POST	9.000	EACH		
0310	02545	CLEARING AND GRUBBING 2.1 ACRES	(1.00)	LS		
0320	02562	SIGNS	296.000	SQFT		
0330	02585	EDGE KEY	382.000	LF		
0340	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	1,688.000	SQYD	2.00	3,376.00
0350	02650	MAINTAIN & CONTROL TRAFFIC	(1.00)	LS		
0360	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.000	EACH		
0370	02676	MOBILIZATION FOR MILL & TEXT	(1.00)	LS		
0380	02677	ASPHALT PAVE MILLING & TEXTURING	34.000	TON		
0390	02701	TEMP SILT FENCE	643.000	LF		
0400	02702	SAND FOR BLOTTER	9.000	TON		
0410	02703	SILT TRAP TYPE A	3.000	EACH		

CONTRACT ID: 111053
 COUNTY: MCCRACKEN
 PROPOSAL: JL03 073 0062 010-011

PAGE: 3
 LETTING: 11/18/11
 CALL NO: 307

LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
0420	02704	SILT TRAP TYPE B	3.000	EACH		
0430	02705	SILT TRAP TYPE C	3.000	EACH		
0440	02706	CLEAN SILT TRAP TYPE A	9.000	EACH		
0450	02707	CLEAN SILT TRAP TYPE B	9.000	EACH		
0460	02708	CLEAN SILT TRAP TYPE C	9.000	EACH		
0470	02709	CLEAN TEMP SILT FENCE	643.000	LF		
0480	02720	SIDEWALK-4 IN CONCRETE	165.000	SQYD		
0490	02726	STAKING	(1.00)	LS		
0500	02775	ARROW PANEL	2.000	EACH		
0510	05950	EROSION CONTROL BLANKET	366.000	SQYD		
0520	05952	TEMP MULCH	7,136.000	SQYD		
0530	05953	TEMP SEEDING AND PROTECTION	714.000	SQYD		
0540	05966	TOPDRESSING FERTILIZER	1.000	TON		
0550	05985	SEEDING AND PROTECTION	7,136.000	SQYD		
0560	05990	SODDING	48.000	SQYD		
0570	06510	PAVE STRIPING-TEMP PAINT-4 IN	9,776.000	LF		
0580	06514	PAVE STRIPING-PERM PAINT-4 IN	4,141.000	LF		
0590	06570	PAVE MARKING-PAINT CROSS-HATCH	4,879.000	SQFT		
0600	08100	CONCRETE-CLASS A	2.130	CUYD		
0610	08150	STEEL REINFORCEMENT	20.000	LB		
0620	20391NS835	JUNCTION BOX TYPE A	3.000	EACH		

CONTRACT ID: 111053
 COUNTY: MCCRACKEN
 PROPOSAL: JL03 073 0062 010-011

PAGE: 4
 LETTING: 11/18/11
 CALL NO: 307

LINE NO	ITEM	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	AMOUNT
0630	20430ED	SAW CUT	1,627.000	LF		
0640	21289ED	LONGITUDINAL EDGE KEY	1,627.000	LF		
0650	23131ER701	PIPELINE VIDEO INSPECTION	357.000	LF		
0660	23158ES505	DETECTABLE WARNINGS	138.000	SQFT		
SECTION 0002 TRAFFIC LOOPS						
0670	04793	CONDUIT-1 1/4 IN (ADDED: 11-15-11)	150.000	LF		
0680	04811	JUNCTION BOX TYPE B (ADDED: 11-15-11)	2.000	EACH		
0690	04820	TRENCHING AND BACKFILLING (ADDED: 11-15-11)	150.000	LF		
0700	04830	LOOP WIRE (ADDED: 11-15-11)	470.000	LF		
0710	04850	CABLE-NO. 14/1 PAIR (ADDED: 11-15-11)	500.000	LF		
0720	04895	LOOP SAW SLOT AND FILL (ADDED: 11-15-11)	400.000	LF		
SECTION 0003 DEMOBILIZATION						
0730	02569	DEMOBILIZATION (AT LEAST 1.5%)		LUMP		
TOTAL BID						