



*"Our mission is to upgrade and maintain
a safe and efficient road system"*

ADDENDUM #2

PAGE #: 1

DATE: March 12th, 2018

TO: All Bidders and Plan/Document Holders

FROM: Joseph H. Slonecki, P.E.
Assistant County Highway Engineer
Grand Traverse County Road Commission

RE: South Airport Rd – US 31 to Veterans Dr Project (#18E004)

Documents issued with this Addendum

Addendum – 1 through 18 pages
Issued Specification – No
Issued Drawings – No
Reissued Specification Sections – Yes
Reissued Plan Sheets – Yes
Bid Forms – Yes

The following are revisions or clarifications to the original construction documents. This form is required to be submitted with the bid form. Note that all bid forms have been revised and resubmitted as part of this addendum. The following is a summary of attached documents:

| | <u>Sheets</u> |
|---------------------------|---------------|
| • Addendum No. 1 write up | 2 |
| • Bid Form | 11 |
| • Special Provisions | 3 |
| • Plan Sheets | 2 |

General Contract:

The bid form has been revised to include the pay item for Subbase, and updated Pav't Removal quantity (see updated plan sheet 19 included in this addendum).

Special Provisions:

The special provision for Roadway Grading has been updated to include estimated quantities of earthwork.

Language has been added to clarify “suitable” material for use as embankment. Also see page 134 of the MDOT 2012 Standard Specifications for Construction.

Plan Sheets:

Sheet 3: The note for Aggregate Material has been removed.

Sheet 19: Pav’t Removal total has been updated to include added area easterly of Sta 119+00.

Confirmation of receipt _____
(Contractor signature)
END OF ADDENDUM #2

BID FORM

PROJECT IDENTIFICATION:

GRAND TRAVERSE COUNTY ROAD COMMISSION
South Airport Road

OWNER PROJECT NUMBER: 18E004

THIS BID IS SUBMITTED TO:

GRAND TRAVERSE COUNTY ROAD
COMMISSION
1881 LAFRANIER ROAD
TRAVERSE CITY, MI 49696-8911

- 1.01 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with the Road Commission 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 Contract Documents.
- 2.01 Bidder accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. The Bid will remain subject to acceptance and the prices guaranteed for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of the Road Commission.
- 3.01 In submitting this Bid, Bidder represents, as set forth in the Agreement, 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 all which is hereby acknowledged.

Addendum No. Addendum Date

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions, including subsurface 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, rules, 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 in or relating to existing surface or subsurface structures at or contiguous to the Site which may have been provided, if any, and (2) reports and drawings of a Hazardous Environmental Condition, if any, which may have been provided.
- E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the materials, means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific materials, means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.
- F. Bidder does not consider that any 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 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 the Road Commission and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- I. 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.
- J. 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.
- K. The Bidder understands that if it is the Successful Bidder, it is being selected by the Road commission to perform the Work because of Bidder's skill and expertise to perform the Work and Bidder specifically represents and agrees that it has the experience, knowledge, and competency necessary to perform the Work or oversee the performance of the Work and assumes the responsibility for

the performance of the Work pursuant to the Contract documents and assumes the risk in performing the Work.

- 4.01 Bidder further represents that 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 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 Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over the Road Commission.
- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

UNIT PRICE BID:

Acceptance or rejection of each bid alternate will be at the sole discretion of the Road Commission and will be determined prior to award.

See Attachment A which includes the following:

Project #18E004 – South Airport Road

Unit Prices have been computed in accordance with the Instructions to Bidders.

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 provided, determined as provided in the Contract Documents.

- 6.01 Bidder agrees that the Work will be substantially completed and completed and ready for final payment in accordance with the General Specifications on or before the dates or within the number of calendar days indicated in the Contract Documents.
- 7.01 Bidder accepts the provisions of the Contract as to liquidated damages in the event of failure to complete the Work within the times specified above, which shall be stated in the Contract.
- 8.01 The required Bid security is attached to and made a condition of this Bid.
- 9.01 The terms used in this Bid with initial capital letters have the meanings indicated in the Bidding Documents.

SUBMITTED on _____, 20____

Note to Bidders - Complete only one of the following three sections as appropriate for your business status: individual, partnership or corporation.

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____
(Individual's signature)

Doing business as: _____

Business Address: _____

Phone: _____ Fax No.: _____

A Partnership

Name (typed or printed): _____

By: _____
(Authorized Individual's signature)

Doing business as: _____

Business Address: _____

Phone: _____ Fax No.: _____

A Corporation/Limited Liability Company/Professional Liability Company

Name (typed or printed): _____

State of Formation _____

Type: _____

By _____
(signature)

Name: _____
(type or printed)

Title _____

Business Address:_____

Phone:_____ Fax No.:_____

e-mail:_____

South Airport Road

From West of US-31 to Veterans Drive

BID FORM

March 12, 2018

PAY ITEM

| CODE | ITEM | ESTIMATED | | | |
|---------|---|-----------|------|------------|------------------|
| | | QUANTITY | UNIT | UNIT PRICE | ESTIMATED AMOUNT |
| 1500001 | Mobilization, Max. (\$125,000.00) | 1 | LSUM | | |
| 2040020 | Curb and Gutter, Rem | 4,051 | Ft | | |
| 2040021 | Dr Structure Cover, ADA Compliant | 2 | Ea | | |
| 2040035 | Guardrail, Rem | 415 | Ft | | |
| 2040050 | Pavt, Rem | 10,548 | Syd | | |
| 2040055 | Sidewalk, Rem | 46 | Syd | | |
| 2040080 | Exploratory Investigation, Vertical | 50 | Ft | | |
| 2050016 | Excavation, Earth | 50 | Cyd | | |
| 2050031 | Non Haz Contaminated Material Handling and Disposal, LM | 100 | Cyd | | |
| 2050041 | Subgrade Undercutting, Type II | 2,000 | Cyd | | |
| 2057002 | Roadway Grading, Type 1 | 18.6 | Sta | | |
| 2057002 | Roadway Grading, Type 2 | 55.4 | Sta | | |
| 2080020 | Erosion Control, Inlet Protection, Fabric Drop | 12 | Ea | | |
| 2080026 | Erosion Control, Silt Fence | 375 | Ft | | |
| 3010002 | Subbase, CIP | 2,275 | Cyd | | |
| 3020010 | Aggregate Base, 4 inch | 3,267 | Syd | | |
| 3020016 | Aggregate Base, 6 inch | 41,302 | Syd | | |
| 3060021 | Maintenance Gravel, LM | 150 | Cyd | | |
| 3070008 | Approach, CI I, 6 inch | 2,631 | Syd | | |
| 3070021 | Approach, CI II | 32 | Ton | | |
| 3070108 | Shoulder, CI I, 6 inch | 12,534 | Syd | | |
| 3070121 | Shoulder, CI II | 20 | Ton | | |
| 4010047 | Culv End Sect, Conc, 12 inch | 1 | Ea | | |
| 4020600 | Sewer, CI E, 12 inch, Tr Det B | 272 | Ft | | |
| 4030005 | Dr Structure Cover, Adj, Case 1 | 7 | Ea | | |
| 4030050 | Dr Structure Cover, Type K | 11 | Ea | | |
| 4030200 | Dr Structure, 24 inch dia | 1 | Ea | | |
| 4030210 | Dr Structure, 48 inch dia | 3 | Ea | | |
| 4030290 | Dr Structure, Cleaning | 12 | Ea | | |
| 4040063 | Underdrain, Subbase, 6 inch | 2,373 | Ft | | |
| 4040073 | Underdrain, Subgrade, 6 inch | 300 | Ft | | |
| 4040093 | Underdrain Outlet, 6 inch | 105 | Ft | | |
| 4040113 | Underdrain, Outlet Ending, 6 inch | 7 | Ea | | |
| 5010002 | Cold Milling HMA Surface | 3,085 | Syd | | |
| 5010005 | HMA Surface, Rem | 54,369 | Syd | | |
| 5010025 | Hand Patching | 10 | Ton | | |
| 5010033 | HMA, 13A | 449 | Ton | | |
| 5010045 | HMA, 3E3 | 346 | Ton | | |
| 5010046 | HMA, 3E10 | 6,739 | Ton | | |
| 5010051 | HMA, 4E3 | 897 | Ton | | |
| 5010061 | HMA Approach | 666 | Ton | | |
| 5010510 | HMA, 4E10, High Stress | 11,806 | Ton | | |
| 6030005 | Cement | 2 | Ton | | |
| 8020016 | Curb and Gutter, Conc, Det B2 | 769 | Ft | | |
| 8020038 | Curb and Gutter, Conc, Det F4 | 4,601 | Ft | | |
| 8020050 | Driveway Opening, Conc, Det M | 238 | Ft | | |

South Airport Road

From West of US-31 to Veterans Drive

BID FORM

March 12, 2018

PAY ITEM

| CODE | ITEM | ESTIMATED | | | |
|---------|---|-----------|------|------------|------------------|
| | | QUANTITY | UNIT | UNIT PRICE | ESTIMATED AMOUNT |
| 8020055 | Shoulder Gutter, Conc, Det 1 | 1 | Ea | | |
| 8020075 | Spillway, Conc | 12 | Ft | | |
| 8030010 | Detectable Warning Surface | 75 | Ft | | |
| 8030030 | Curb Ramp Opening, Conc | 84 | Ft | | |
| 8030034 | Sidewalk Ramp, Conc, 4 inch | 355 | Sft | | |
| 8030044 | Sidewalk, Conc, 4 inch | 364 | Sft | | |
| 8070000 | Guardrail, Type B | 538 | Ft | | |
| 8070040 | Guardrail Approach Terminal, Type 1B | 2 | Ea | | |
| 8070042 | Guardrail Approach Terminal, Type 2B | 2 | Ea | | |
| 8070080 | Guardrail Reflector | 24 | Ea | | |
| 8070095 | Post, Mailbox | 10 | Ea | | |
| 8100371 | Post, Steel, 3 lb | 150 | Ft | | |
| 8100399 | Sign, Type IIB | 15 | Sft | | |
| 8100403 | Sign, Type III, Rem | 9 | Ea | | |
| 8100404 | Sign, Type IIIA | 15 | Sft | | |
| 8100405 | Sign, Type IIIB | 35 | Sft | | |
| 8110091 | Pavt Mrkg, Polyurea, 4 inch, White | 18,477 | Ft | | |
| 8110092 | Pavt Mrkg, Polyurea, 4 inch, Yellow | 16,435 | Ft | | |
| 8110108 | Pavt Mrkg, Polyurea, 12 inch Cross Hatching, White | 322 | Ft | | |
| 8110110 | Pavt Mrkg, Polyurea, 12 inch, Crosswalk | 613 | Ft | | |
| 8110114 | Pavt Mrkg, Polyurea, 24 inch, Stop Bar | 440 | Ft | | |
| 8110405 | Pavt Mrkg, Polyurea, Lt Turn Arrow Sym | 18 | Ea | | |
| 8110410 | Pavt Mrkg, Polyurea, Only | 14 | Ea | | |
| 8110412 | Pavt Mrkg, Polyurea, Rt Turn Arrow Sym | 6 | Ea | | |
| 8110450 | Recessing Pavement Markings, Longit | 25,893 | Ft | | |
| 8120012 | Barricade, Type III, High Intensity, Double Sided, Lighted Furn | 10 | Ea | | |
| 8120013 | Barricade, Type III, High Intensity, Double Sided, Lighted Oper | 10 | Ea | | |
| 8120140 | Lighted Arrow, Type C, Furn | 3 | Ea | | |
| 8120141 | Lighted Arrow, Type C, Oper | 3 | Ea | | |
| 8120170 | Minor Traf Devices | 1 | LSUM | | |
| 8120210 | Pavt Mrkg, Longit, 6 inch or less Width, Rem | 15,338 | Ft | | |
| 8120216 | Pavt Mrkg, Type NR, Paint, 24 inch, Stop Bar | 148 | Ft | | |
| 8120217 | Pavt Mrkg, Type NR, Paint, Lt Turn Arrow | 10 | Ea | | |
| 8120218 | Pavt Mrkg, Type NR, Paint, Rt Turn Arrow | 1 | Ea | | |
| 8120230 | Pavt Mrkg, Type NR, Tape, 4 inch, White, Temp | 581 | Ft | | |
| 8120231 | Pavt Mrkg, Type NR, Tape, 4 inch, Yellow, Temp | 764 | Ft | | |
| 8120235 | Pavt Mrkg, Wet Reflective, Type NR, Paint, 4 inch, White, Temp | 22,392 | Ft | | |
| 8120236 | Pavt Mrkg, Wet Reflective, Type NR, Paint, 4 inch, Yellow, Temp | 26,256 | Ft | | |
| 8120245 | Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, White, Temp | 6,118 | Ft | | |
| 8120246 | Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp | 7,329 | Ft | | |
| 8120250 | Plastic Drum, High Intensity, Furn | 358 | Ea | | |
| 8120251 | Plastic Drum, High Intensity, Oper | 358 | Ea | | |
| 8120257 | Pavt Mrkg, Wet Reflective, Type R, Tape, Lt Turn Arrow | 13 | Ea | | |
| 8120258 | Pavt Mrkg, Wet Reflective, Type R, Tape, Rt Turn Arrow | 1 | Ea | | |
| 8120265 | Pavt Mrkg, Wet Reflective, Type R, Tape, 24 inch, Stop Bar | 390 | Ft | | |

South Airport Road

From West of US-31 to Veterans Drive

BID FORM

March 12, 2018

PAY ITEM

| CODE | ITEM | ESTIMATED | | | |
|---------|--|--------------------|------|------------|------------------|
| | | QUANTITY | UNIT | UNIT PRICE | ESTIMATED AMOUNT |
| 8120310 | Sign Cover | 10 | Ea | | |
| 8120330 | Sign, Portable, Changeable Message, Furn | 4 | Ea | | |
| 8120331 | Sign, Portable, Changeable Message, Oper | 4 | Ea | | |
| 8120350 | Sign, Type B, Temp, Prismatic, Furn | 827 | Sft | | |
| 8120351 | Sign, Type B, Temp, Prismatic, Oper | 827 | Sft | | |
| 8120370 | Traf Regular Control | 1 | LSUM | | |
| 8167011 | Slope Restoration | 9,226 | Syd | | |
| 8200065 | Fdn, Rem | 2 | Ea | | |
| 8200101 | Pedestal, Alum, Salv | 1 | Ea | | |
| 8200105 | Pedestal, Fdn | 1 | Ea | | |
| 8200106 | Pedestal Fdn, Rem | 1 | Ea | | |
| 8200126 | Pushbutton and Sign, Salv | 2 | Ea | | |
| 8200145 | Steel Pole, Rem | 2 | Ea | | |
| 8200233 | TS, Two Way Pedestal Mtd, Salv | 1 | Ea | | |
| 8200422 | Wireless Vehicle Detection System | 1 | Ea | | |
| 8200425 | Wireless Vehicle Sensor Node | 8 | Ea | | |
| 8200450 | TS, Bag | 8 | Ea | | |
| 8200451 | TS, Bag, Rem | 8 | Ea | | |
| 8200452 | TS Head, Adj | 16 | Ea | | |
| 8200453 | TS Head, Temp | 4 | Ea | | |
| 8210001 | Monument Box | 1 | Ea | | |
| 8210010 | Monument Preservation | 1 | Ea | | |
| 8210020 | Protect Corners | 2 | Ea | | |
| 8230431 | Gate Box, Adj, Case 1 | 5 | Ea | | |
| | | TOTAL PRICE | | | |

(numerals)

| | |
|--------------------|--|
| TOTAL PRICE | |
|--------------------|--|

(words)

| | |
|---------------|--|
| Submitted By: | |
| Date: | |
| Signature: | |

South Airport Road

From West of US-31 to Veterans Drive

BID FORM: ALTERNATE 1

March 12, 2018

| PAY ITEM | | ESTIMATED | | | |
|----------|---|-----------|------|------------|------------------|
| CODE | ITEM | QUANTITY | UNIT | UNIT PRICE | ESTIMATED AMOUNT |
| 1500001 | Mobilization, Max. (\$125,000.00) | 1 | LSUM | | |
| 2040020 | Curb and Gutter, Rem | 4,051 | Ft | | |
| 2040021 | Dr Structure Cover, ADA Compliant | 2 | Ea | | |
| 2040035 | Guardrail, Rem | 415 | Ft | | |
| 2040050 | Pavt, Rem | 10,548 | Syd | | |
| 2040055 | Sidewalk, Rem | 46 | Syd | | |
| 2040080 | Exploratory Investigation, Vertical | 50 | Ft | | |
| 2050016 | Excavation, Earth | 50 | Cyd | | |
| 2050031 | Non Haz Contaminated Material Handling and Disposal, LM | 100 | Cyd | | |
| 2050041 | Subgrade Undercutting, Type II | 2,000 | Cyd | | |
| 2057002 | Roadway Grading, Type 1 | 18.6 | Sta | | |
| 2057002 | Roadway Grading, Type 2 | 55.4 | Sta | | |
| 2080020 | Erosion Control, Inlet Protection, Fabric Drop | 12 | Ea | | |
| 2080026 | Erosion Control, Silt Fence | 375 | Ft | | |
| 3010002 | Subbase, CIP | 2,275 | Cyd | | |
| 3020010 | Aggregate Base, 4 inch | 3,267 | Syd | | |
| 3020016 | Aggregate Base, 6 inch | 41,302 | Syd | | |
| 3060021 | Maintenance Gravel, LM | 150 | Cyd | | |
| 3070008 | Approach, CI I, 6 inch | 2,631 | Syd | | |
| 3070021 | Approach, CI II | 32 | Ton | | |
| 3070108 | Shoulder, CI I, 6 inch | 12,534 | Syd | | |
| 3070121 | Shoulder, CI II | 20 | Ton | | |
| 4010047 | Culv End Sect, Conc, 12 inch | 1 | Ea | | |
| 4020600 | Sewer, CI E, 12 inch, Tr Det B | 272 | Ft | | |
| 4030005 | Dr Structure Cover, Adj, Case 1 | 7 | Ea | | |
| 4030050 | Dr Structure Cover, Type K | 11 | Ea | | |
| 4030200 | Dr Structure, 24 inch dia | 1 | Ea | | |
| 4030210 | Dr Structure, 48 inch dia | 3 | Ea | | |
| 4030290 | Dr Structure, Cleaning | 12 | Ea | | |
| 4040063 | Underdrain, Subbase, 6 inch | 2,373 | Ft | | |
| 4040073 | Underdrain, Subgrade, 6 inch | 300 | Ft | | |
| 4040093 | Underdrain Outlet, 6 inch | 105 | Ft | | |
| 4040113 | Underdrain, Outlet Ending, 6 inch | 7 | Ea | | |
| 5010002 | Cold Milling HMA Surface | 3,085 | Syd | | |
| 5010005 | HMA Surface, Rem | 54,369 | Syd | | |
| 5010025 | Hand Patching | 10 | Ton | | |
| 5010033 | HMA, 13A | 449 | Ton | | |
| 5010045 | HMA, 3E3 | 346 | Ton | | |
| 5010046 | HMA, 3E10 | 6,739 | Ton | | |
| 5010051 | HMA, 4E3 | 897 | Ton | | |
| 5010061 | HMA Approach | 666 | Ton | | |
| 5010510 | HMA, 4E10, High Stress | 11,806 | Ton | | |
| 6030005 | Cement | 2 | Ton | | |
| 8020016 | Curb and Gutter, Conc, Det B2 | 769 | Ft | | |
| 8020038 | Curb and Gutter, Conc, Det F4 | 4,601 | Ft | | |
| 8020050 | Driveway Opening, Conc, Det M | 238 | Ft | | |

South Airport Road

From West of US-31 to Veterans Drive

BID FORM: ALTERNATE 1

March 12, 2018

| PAY ITEM | | ESTIMATED | | | |
|-----------------|---|------------------|-------------|-------------------|-------------------------|
| CODE | ITEM | QUANTITY | UNIT | UNIT PRICE | ESTIMATED AMOUNT |
| 8020055 | Shoulder Gutter, Conc, Det 1 | 1 | Ea | | |
| 8020075 | Spillway, Conc | 12 | Ft | | |
| 8030010 | Detectable Warning Surface | 75 | Ft | | |
| 8030030 | Curb Ramp Opening, Conc | 84 | Ft | | |
| 8030034 | Sidewalk Ramp, Conc, 4 inch | 355 | Sft | | |
| 8030044 | Sidewalk, Conc, 4 inch | 364 | Sft | | |
| 8070000 | Guardrail, Type B | 538 | Ft | | |
| 8070040 | Guardrail Approach Terminal, Type 1B | 2 | Ea | | |
| 8070042 | Guardrail Approach Terminal, Type 2B | 2 | Ea | | |
| 8070080 | Guardrail Reflector | 24 | Ea | | |
| 8070095 | Post, Mailbox | 10 | Ea | | |
| 8100371 | Post, Steel, 3 lb | 150 | Ft | | |
| 8100399 | Sign, Type IIB | 15 | Sft | | |
| 8100403 | Sign, Type III, Rem | 9 | Ea | | |
| 8100404 | Sign, Type IIIA | 15 | Sft | | |
| 8100405 | Sign, Type IIIB | 35 | Sft | | |
| 8110091 | Pavt Mrkg, Polyurea, 4 inch, White | 18,477 | Ft | | |
| 8110092 | Pavt Mrkg, Polyurea, 4 inch, Yellow | 16,435 | Ft | | |
| 8110108 | Pavt Mrkg, Polyurea, 12 inch Cross Hatching, White | 322 | Ft | | |
| 8110110 | Pavt Mrkg, Polyurea, 12 inch, Crosswalk | 613 | Ft | | |
| 8110114 | Pavt Mrkg, Polyurea, 24 inch, Stop Bar | 440 | Ft | | |
| 8110405 | Pavt Mrkg, Polyurea, Lt Turn Arrow Sym | 18 | Ea | | |
| 8110410 | Pavt Mrkg, Polyurea, Only | 14 | Ea | | |
| 8110412 | Pavt Mrkg, Polyurea, Rt Turn Arrow Sym | 6 | Ea | | |
| 8110450 | Recessing Pavement Markings, Longit | 25,893 | Ft | | |
| 8120012 | Barricade, Type III, High Intensity, Double Sided, Lighted Furn | 10 | Ea | | |
| 8120013 | Barricade, Type III, High Intensity, Double Sided, Lighted Oper | 10 | Ea | | |
| 8120140 | Lighted Arrow, Type C, Furn | 3 | Ea | | |
| 8120141 | Lighted Arrow, Type C, Oper | 3 | Ea | | |
| 8120170 | Minor Traf Devices | 1 | LSUM | | |
| 8120210 | Pavt Mrkg, Longit, 6 inch or less Width, Rem | 15,338 | Ft | | |
| 8120216 | Pavt Mrkg, Type NR, Paint, 24 inch, Stop Bar | 148 | Ft | | |
| 8120217 | Pavt Mrkg, Type NR, Paint, Lt Turn Arrow | 10 | Ea | | |
| 8120218 | Pavt Mrkg, Type NR, Paint, Rt Turn Arrow | 1 | Ea | | |
| 8120230 | Pavt Mrkg, Type NR, Tape, 4 inch, White, Temp | 581 | Ft | | |
| 8120231 | Pavt Mrkg, Type NR, Tape, 4 inch, Yellow, Temp | 764 | Ft | | |
| 8120235 | Pavt Mrkg, Wet Reflective, Type NR, Paint, 4 inch, White, Temp | 22,392 | Ft | | |
| 8120236 | Pavt Mrkg, Wet Reflective, Type NR, Paint, 4 inch, Yellow, Temp | 26,256 | Ft | | |
| 8120245 | Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, White, Temp | 6,118 | Ft | | |
| 8120246 | Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp | 7,329 | Ft | | |
| 8120250 | Plastic Drum, High Intensity, Furn | 358 | Ea | | |
| 8120251 | Plastic Drum, High Intensity, Oper | 358 | Ea | | |
| 8120257 | Pavt Mrkg, Wet Reflective, Type R, Tape, Lt Turn Arrow | 13 | Ea | | |
| 8120258 | Pavt Mrkg, Wet Reflective, Type R, Tape, Rt Turn Arrow | 1 | Ea | | |
| 8120265 | Pavt Mrkg, Wet Reflective, Type R, Tape, 24 inch, Stop Bar | 390 | Ft | | |

South Airport Road

From West of US-31 to Veterans Drive

BID FORM: ALTERNATE 1

March 12, 2018

PAY ITEM

| CODE | ITEM | ESTIMATED | | | |
|---------|--|--------------------|------|------------|------------------|
| | | QUANTITY | UNIT | UNIT PRICE | ESTIMATED AMOUNT |
| 8120310 | Sign Cover | 10 | Ea | | |
| 8120330 | Sign, Portable, Changeable Message, Furn | 4 | Ea | | |
| 8120331 | Sign, Portable, Changeable Message, Oper | 4 | Ea | | |
| 8120350 | Sign, Type B, Temp, Prismatic, Furn | 827 | Sft | | |
| 8120351 | Sign, Type B, Temp, Prismatic, Oper | 827 | Sft | | |
| 8120370 | Traf Regular Control | 1 | LSUM | | |
| 8167011 | Slope Restoration | 9,226 | Syd | | |
| 8200065 | Fdn, Rem | 2 | Ea | | |
| 8200101 | Pedestal, Alum, Salv | 1 | Ea | | |
| 8200105 | Pedestal, Fdn | 1 | Ea | | |
| 8200106 | Pedestal Fdn, Rem | 1 | Ea | | |
| 8200126 | Pushbutton and Sign, Salv | 2 | Ea | | |
| 8200145 | Steel Pole, Rem | 2 | Ea | | |
| 8200233 | TS, Two Way Pedestal Mtd, Salv | 1 | Ea | | |
| 8200422 | Wireless Vehicle Detection System | 1 | Ea | | |
| 8200425 | Wireless Vehicle Sensor Node | 8 | Ea | | |
| 8200450 | TS, Bag | 8 | Ea | | |
| 8200451 | TS, Bag, Rem | 8 | Ea | | |
| 8200452 | TS Head, Adj | 16 | Ea | | |
| 8200453 | TS Head, Temp | 4 | Ea | | |
| 8210001 | Monument Box | 1 | Ea | | |
| 8210010 | Monument Preservation | 1 | Ea | | |
| 8210020 | Protect Corners | 2 | Ea | | |
| 8230431 | Gate Box, Adj, Case 1 | 5 | Ea | | |
| | | TOTAL PRICE | | | |

(numerals)

| | |
|--------------------|--|
| TOTAL PRICE | |
|--------------------|--|

(words)

| | |
|---------------|--|
| Submitted By: | |
| Date: | |
| Signature: | |

GRAND TRAVERSE COUNTY ROAD COMMISSION

SPECIAL PROVISION
FOR
ROADWAY GRADING, TYPE 1
ROADWAY GRADING, TYPE 2

KPM:GLK

1 of 3

03-12-18
S. Airport Rd

a. Description. **Roadway Grading, Type 1 or 2** consists of the miscellaneous earthwork and grading operations required to construct the proposed cross sections within the limits shown on the plans or stated in this special provision. All lines and grades shall be as shown on the plans and as directed by the Engineer. **Roadway Grading, Type 1** shall apply to the earthwork and grading operations required for the widening of South Airport Road (West of US-31) from Station 87+70 to 106+27 Lt. **Roadway Grading, Type 2** shall apply to the earthwork and grading operations required for the reconstruction of South Airport Road (East of US-31) from Station 111+00 to 166+35. **Roadway Grading, Type 1 or 2** shall be completed in accordance with Section 205 of the 2012 Standard Specifications for Construction and this special provision.

b. Materials. Additional material required to achieve the typical cross sections shall meet the requirements of the 2012 Standard Specifications for Construction for the specific application. If excavated material is suitable (i.e. granular or gravel material), it shall be used as embankment material within the limits of roadway grading or elsewhere on the project as directed by the Engineer.

c. Construction Methods. All work shall be in accordance with applicable sections of the 2012 Standard Specifications for Construction.

As required to achieve proposed cross sections, **Roadway Grading, Type 1** includes, but is not limited to, the following work:

Earthwork and grading operations to widen the roadbed from Station 87+70 to 106+27 Lt.

- Stripping and stockpiling topsoil for use in turf establishment.
- All earth excavation and embankment required to construct the typical cross section along the proposed alignment.
- All earth excavation and embankment required to reconstruct drives and approaches within the limits of the proposed alignment.
- All earth excavation required for ditching within the limits of the proposed alignment.

As required to achieve proposed cross sections, **Roadway Grading, Type 2** includes, but is not limited to, the following work:

Earthwork and grading operations for the reconstruction of South Airport Road from Station 111+00 to 166+35.

- Stripping and stockpiling topsoil for use in turf establishment.
- All earth excavation and embankment required to remove the existing buried HMA and concrete pavement as shown in the typical cross sections.
- All earth excavation and embankment required to construct the typical cross section along the proposed alignment.
- All earth excavation and embankment required to reconstruct drives and approaches within the limits of the proposed alignment.
- All earth excavation required for ditching within the limits of the proposed alignment.

d. Measurement and Payment. The completed work as measured will be paid for at the contract unit price for the following contract item (pay item).

| Contract Item (Pay Item) | Pay Unit |
|------------------------------|----------|
| Roadway Grading, Type 1..... | Station |
| Roadway Grading, Type 2..... | Station |

Roadway Grading, Type 1 or 2 shall only apply where called for in the plans or where stated in this special provision. If the limits of the related work items are extended by the Engineer, the pay limits of **Roadway Grading, Type 1 or 2** will be adjusted accordingly.

Roadway Grading, Type 1 will be measured along the outside edge of pavement of South Airport Road in those areas where work is performed. In areas where work is performed on both sides of the road, each side of the road will be measured separately.

Roadway Grading, Type 2 will be measured along the centerline of South Airport Road and shall include work along both sides of the road. The item will only be paid for once along the project length, even though the work may take place during multiple stages.

Where a driveway or approach requires grading to meet proposed grades, this work is included in the measurement and payment for the item **Roadway Grading, Type 1 or 2** measured along South Airport Road in that area.

Payment for **Roadway Grading, Type 1 or 2** shall include all labor, equipment, and materials required to complete the work as described. Turf establishment, subgrade undercutting, pavement removal, subbase, removal of culverts and other items included in the contract as pay items will be paid for separately.

Estimated Earthwork Quantities

The following estimated earthwork quantities are for informational purposes only.

Roadway Grading, Type 1

Earthwork and grading operations required for the widening of South Airport Road (West of US-31) from Station 87+70 to 106+27 Lt.

| | |
|--------------------|-----------|
| * Earth Excavation | 1694 Cyds |
| Embankment (CIP) | 119 Cyds |

* Includes 129 Cyd of Topsoil Stripping

Roadway Grading, Type 2

Earthwork and grading operations required for the reconstruction of South Airport Road (East of US-31) from Station 111+00 to 166+35.

| | |
|--------------------|-------------|
| * Earth Excavation | 18,731 Cyds |
| **Embankment (CIP) | 11,269 Cyds |

* Includes 669 Cyd of Topsoil Stripping & 8603 Cyd of excavation above the existing buried pavement but below bottom of proposed aggregate.

** Includes 145 Cyd of fill outside proposed shoulder hinge points.

GENERAL PLAN NOTES

UNDERGROUND UTILITIES / MISS DIG

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL DIAL 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

DETECTABLE WARNING SURFACES

DETECTABLE WARNING SURFACES COLOR SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

ADJUSTING MONUMENT BOXES

ALL GOVERNMENT CORNERS ON THIS PROJECT SHALL BE PRESERVED, WHETHER SHOWN OR NOT. IT MAY BE NECESSARY TO PLACE OR ADJUST MONUMENT BOXES, AS REQUIRED.

SIDEWALK AND SIDEWALK RAMP GRADES

ALL SIDEWALK AND SIDEWALK RAMP GRADES SHALL BE STAKED ACCORDING TO STANDARD PLAN R-28 SERIES AND AS SHOWN ON THE PLANS. PRIOR TO CONSTRUCTING THE SIDEWALK AND SIDEWALK RAMPS, THE ENGINEER WILL VERIFY THE GRADES AND AUTHORIZE THE CONSTRUCTION OF THE SIDEWALK AND SIDEWALK RAMPS.

SOIL BORINGS AND/OR PAVEMENT CORES

THE SOIL BORING LOGS AND/OR PAVEMENT CORES REPRESENT POINT INFORMATION. NO INFERENCE SHOULD BE MADE THAT SUBSURFACE OR PAVEMENT CONDITIONS ARE THE SAME AT OTHER LOCATIONS.

PROPERTY OWNERS

PROPERTY INFORMATION, WHERE SHOWN, IS FOR INFORMATION ONLY, AND RELATED ACCURACY IS NOT GUARANTEED.

LAWN SPRINKLER SYSTEMS AND LANDSCAPING

OWNERS OF EXISTING LAWN SPRINKLER SYSTEMS AND/OR LANDSCAPING SHALL BE NOTIFIED (IN WRITING) BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF ANY WORK TO BE DONE THAT WILL AFFECT THOSE SYSTEMS AND/OR LANDSCAPING. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LAWN SPRINKLER SYSTEM PRIOR TO THE CONTRACTOR BEGINNING WORK, AND IF THE CONTRACTOR CUTS THE SYSTEM DURING THE CONSTRUCTION, THE CONTRACTOR SHALL CAP THE SYSTEM PIPE AND WITNESS THE LOCATION OF THE CAP WITH A WOODEN STAKE FOR THE PROPERTY OWNERS USE. THE CONTRACTOR SHALL PLACE THE SALVAGED SPRINKLER HEADS ON THE PROPERTY OWNERS PROPERTY. THIS WORK IS INCLUDED IN OTHER ITEMS OF THE PROJECT.

AGGREGATE BASE Addendum 03-12-2018

AGGREGATE BASE USED ON THIS PROJECT SHALL BE AGGREGATE 22A.

SAWCUTTING

SAWCUT AT ALL LIMITS OF CONSTRUCTION INCLUDING DRIVEWAYS. PAYMENT FOR SAWCUTTING REQUIRED THROUGHOUT THE PROJECT SHALL BE INCLUDED IN OTHER ITEMS.

SOIL EROSION MEASURES

APPROPRIATE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTH-DISTURBING ACTIVITIES. PLACE TURF ESTABLISHMENT ITEMS AS SOON AS POSSIBLE ON POTENTIAL ERODIBLE SLOPES AS DIRECTED BY THE ENGINEER. CRITICAL DITCH GRADES SHALL BE PROTECTED WITH EITHER SOD OR SEED/MULCH OR MULCH BLANKET AS DIRECTED BY THE ENGINEER.

SLOPE RESTORATION

SLOPE RESTORATION QUANTITIES FOR SEGMENT 1 ARE TO THE SLOPE STAKE LINE.

SLOPE RESTORATION QUANTITIES FOR SEGMENT 2 & 3 ARE ESTIMATED AT 6' WIDE (I.E. PAST THE SLOPE STAKE LINE) EXCEPT FROM STA 111+00 TO STA 118+00 LT WHERE THEY ARE ESTIMATED TO THE SLOPE STAKE LINE.

ANY ADDITIONAL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

PROPERTY CORNERS

IN ACCORDANCE WITH SECTION 821 OF THE 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXISTING PROPERTY CORNERS WITHIN THE GRADING LIMITS SHALL BE LOCATED, WITNESSED, ADJUSTED VERTICALLY, AND DOCUMENTED. THIS WORK IS INCLUDED IN PAYMENT FOR PROTECT CORNERS AND SHALL BE PERFORMED WHERE DIRECTED BY THE ENGINEER.

SIGN REMOVAL

ALL REMOVED SIGNS SHALL BECOME THE PROPERTY OF GRAND TRAVERSE COUNTY ROAD COMMISSION AND SHALL BE STOCKPILED IN A LOCATION AS DESIGNATED BY THE ENGINEER.

PERMANENT SIGNING

ALL SIGNS SHALL BE INSTALLED, REMOVED, AND/OR SALVAGED ACCORDING TO THE CURRENT EDITION OF "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE CURRENT EDITION OF MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) "STANDARD SPECIFICATIONS FOR CONSTRUCTION." SIGN LAYOUTS SHALL BE ACCORDING TO THE CURRENT EDITION OF "STANDARD HIGHWAY SIGNS" MANUAL OR AS DETAILED IN THE PLANS. LEGEND LENGTH SHALL BE DETERMINED USING THE "SIGNCAD" SOFTWARE. HANDLING AND INSTALLATION OF ALL SIGNS SHALL CONFORM WITH THE SHEETING MANUFACTURER'S SPECIFICATIONS AND GUIDELINES.

WHEN ATTACHING SIGNS TO SUPPORTS, TIGHTEN THE NUT, NOT THE BOLT HEAD. SIGNS THAT HAVE WRINKLED OR TWISTED SHEETING MAY BE REJECTED.

NYLON WASHERS SHALL BE PLACED BETWEEN THE STEEL WASHER AND THE SIGN FACE SHEETING. THE NYLON WASHERS ARE TO BE CONSIDERED TO BE PART OF THE ATTACHING DEVICES AND HARDWARE. NYLON WASHERS SHALL HAVE A 3/8 INCH INNER DIMENSION, A 7/8 INCH OUTER DIAMETER AND A 1/16 INCH THICKNESS.

SLOPES

CLASS A SLOPES WILL BE REQUIRED THROUGHOUT THIS PROJECT.

UTILITIES

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO BE SATISFIED AS TO ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES.

UTILITY NAME

DTE ENERGY
1250 MICH CON LANE, SW
PO BOX 279
KALKASKA, MI 49646
CONTACT: LARRY BOURKE
231-592-3244

UTILITY

TYPE

GAS

AT&T
142 E STATE ST, FLOOR 2 WEST
TRAVERSE CITY, MI 49686
CONTACT: KATHY DOHM-BEISER
231-941-2707

TELEPHONE/FIBER OPTIC

CHARTER COMMUNICATIONS
1392 TRADE CENTER DR
TRAVERSE CITY, MI 49696
CONTACT: JAMES LUCAS
(231) 941-3727

CABLE

GRAND TRAVERSE DPW
2650 LAFRANIER ROAD
TRAVERSE CITY, MI 49686-8972
CONTACT: SAM TYSON
(231) 995-6039

WATER/SEWER

CONSUMERS ENERGY
821 HASTINGS STREET
TRAVERSE CITY, MI 49686
CONTACT: CURTIS HANSEN
(231) 929-6265

ELECTRIC

MISCELLANEOUS ESTIMATES

THE FOLLOWING ITEMS OF WORK SHALL BE DONE AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN AND PROFILE SHEETS:

MISCELLANEOUS ITEMS

| | | |
|-----|-----|---|
| 1 | LS | Mobilization, Max. |
| 10 | Ea | Post, Mailbox |
| 150 | Cyd | Maintenance Gravel, LM |
| 100 | Ft | Erosion Control, Silt Fence |
| 12 | Ea | Erosion Control, Inlet Protection, Fabric Drop |
| 12 | Ea | Dr Structure, Cleaning |
| 100 | Cyd | Non Haz Contaminated Material Handling and Disposal, LM |
| 2 | Ton | Cement |

THE FOLLOWING ITEMS OF WORK ARE ESTIMATED FOR THE ENTIRE PROJECT FOR MAINTAINING TRAFFIC WHERE DESIGNATED BY THE ENGINEER.

MISCELLANEOUS ITEMS

| | | |
|--------|------|---|
| 10 | Ea | Barricade, Type III, High Intensity, Double Sided, Lighted Furn |
| 10 | Ea | Barricade, Type III, High Intensity, Double Sided, Lighted Oper |
| 3 | Ea | Lighted Arrow, Type C, Furn |
| 3 | Ea | Lighted Arrow, Type C, Oper |
| 1 | LSUM | Minor Traf Devices |
| 358 | Ea | Plastic Drum, High Intensity, Furn |
| 358 | Ea | Plastic Drum, High Intensity, Oper |
| 827 | Sft | Sign, Type B, Temp, Prismatic, Furn |
| 827 | Sft | Sign, Type B, Temp, Prismatic, Oper |
| 15,338 | Ft | Pav Mrkg, Longit, 6 inch or less Width, Rem |
| 581 | Ft | Pav Mrkg, Type NR, Tape, 4 inch, White, Temp |
| 764 | Ft | Pav Mrkg, Type NR, Tape, 4 inch, Yellow, Temp |
| 22,392 | Ft | Pav Mrkg, Wet Reflective, Type NR, Paint, 4 inch, White, Temp |
| 26,256 | Ft | Pav Mrkg, Wet Reflective, Type NR, Paint, 4 inch, Yellow, Temp |
| 6118 | Ft | Pav Mrkg, Wet Reflective, Type R, Tape, 4 inch, White, Temp |
| 7329 | Ft | Pav Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp |
| 148 | Ft | Pav Mrkg, Type NR, Paint, 24 inch, Stop Bar |
| 10 | Ea | Pav Mrkg, Type NR, Paint, Lt Turn Arrow |
| 1 | Ea | Pav Mrkg, Type NR, Paint, Rt Turn Arrow |
| 390 | Ft | Pav Mrkg, Wet Reflective, Type R, Tape, 24 inch, Stop Bar |
| 13 | Ea | Pav Mrkg, Wet Reflective, Type R, Tape, Lt Turn Arrow |
| 1 | Ea | Pav Mrkg, Wet Reflective, Type R, Tape, Rt Turn Arrow |
| 4 | Ea | Sign, Portable, Changeable Message, Furn |
| 4 | Ea | Sign, Portable, Changeable Message, Oper |
| 10 | Ea | Sign Cover |
| 1 | LSUM | Traffic Regulator Control |
| 10 | Ton | Hand Patching (FOR HMA SHLDR REPAIR) |

THE FOLLOWING ITEMS OF WORK ARE ESTIMATED FOR THE ENTIRE PROJECT FOR SLOPE RESTORATION WHERE DESIGNATED BY THE ENGINEER.

MISCELLANEOUS ITEMS

| | | |
|------|-----|-------------------|
| 9226 | Syd | Slope Restoration |
|------|-----|-------------------|

THE FOLLOWING ITEMS OF WORK ARE ESTIMATED FOR THE ENTIRE PROJECT TO CORRECT POSSIBLE UNSTABLE SUBGRADE CONDITIONS WHERE DESIGNATED BY THE ENGINEER.

MISCELLANEOUS ITEMS

| | | |
|------|-----|-----------------------------------|
| 2000 | Cyd | Subgrade Undercutting, Type II |
| 300 | Ft | Underdrain, Subgrade, 6 inch |
| 30 | Ft | Underdrain Outlet, 6 inch |
| 2 | Ea | Underdrain, Outlet Ending, 6 inch |

THE FOLLOWING ITEMS OF WORK ARE ESTIMATED FOR THE ENTIRE PROJECT WHERE DESIGNATED BY THE ENGINEER.

MISCELLANEOUS ITEMS

| | | |
|----|----|-------------------------------------|
| 50 | Ft | Exploratory Investigation, Vertical |
|----|----|-------------------------------------|

THE FOLLOWING ITEMS OF WORK ARE ESTIMATED FOR TEMPORARY SIGNAL WORK AS DESIGNATED BY THE ENGINEER.

MISCELLANEOUS ITEMS

| | | |
|----|----|---------------|
| 8 | Ea | TS, Bag |
| 8 | Ea | TS, Bag, Rem |
| 16 | Ea | TS Head, Adj |
| 4 | Ea | TS Head, Temp |



3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
800-482-7171
OR 811

GRAND TRAVERSE
County Road Commission

KPM ENGINEERING
CIVIL ENGINEERING CONSULTANTS

| NOTE SHEET | | | |
|-------------------|----------------------|--|----------------|
| DATE 2/27/2018 | TOWNSHIP GARFIELD | SOUTH AIRPORT RD WEST OF US-31 TO VETERANS DR | SHEET NO. 6 |

CONTROL POINT
STA 119+19, 43' LT
N = 515.274.42
E = 19,353,427.89

SECTION 21
T27N R11W
GARFIELD TWP

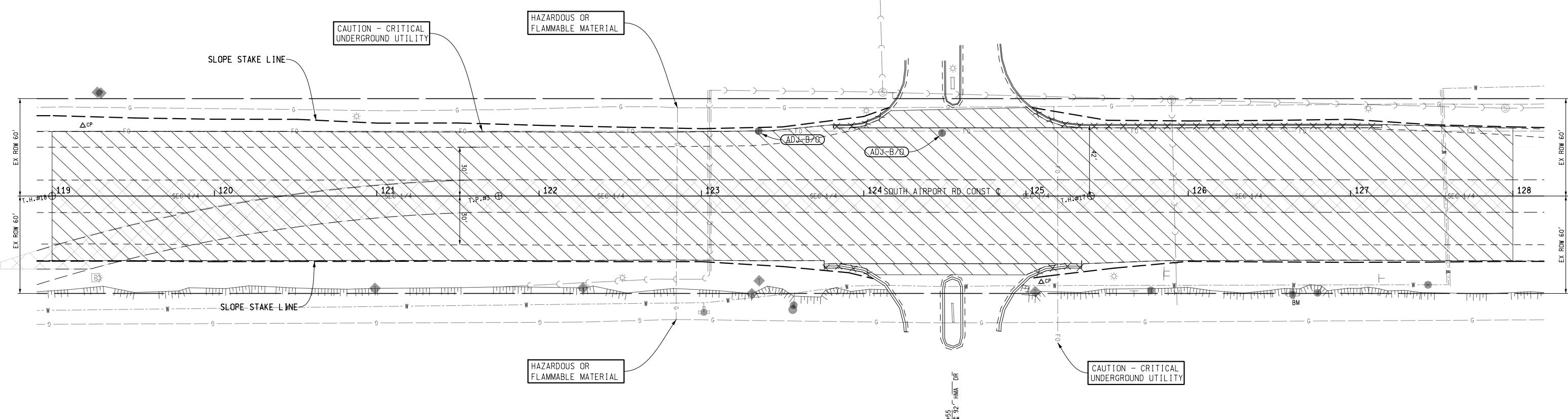
CONTROL POINT
STA 125+10, 53' RT
N = 515.162.21
E = 19,354,015.61

BENCH MARK
STA 126+64, 61' RT
TOP OF HYDRANT
ELEV = 742.60

EX 185' RT TURN LANE
EX 130' RT TURN LANE TAPER
+34
+19

GRAND TRAVERSE MALL

05-021-015-00
GRND TRAVERSE MALL/BROOKFIELD PP L
3200 W SOUTH AIRPORT RD
TRAVERSE CITY, MI 49684-8117



05-126-900-00
GRAND TRAVERSE COMMERCE CENTRE
CONDOMINIUM ASSOCIATION
TRAVERSE CITY, MI 49684

COMMERCE CENTER

SECTION 21
T27N R11W
GARFIELD TWP

REMOVAL QUANTITIES THIS SHEET
8105 Syd HMA Surface, Rem
9.0 Sta Roadway Grading, Type 2
2044 Syd Pav. Rem ADDENDUM 3-12-18
2371 Syd Pav. Rem ADDENDUM 3-12-18

REMOVAL SHEET



3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
800-482-7171
OR 811

GRAND TRAVERSE
County Road Commission

KPM ENGINEERING
CIVIL ENGINEERING CONSULTANTS

SOUTH AIRPORT ROAD, STA 119+00 TO STA 128+00
DATE \$DATE\$ TOWNSHIP GARFIELD SHEET NO. 19
WEST OF US-31 TO VETERANS DR

\$IMES