

**GIDEON MEMORIAL AIRPORT  
CITY OF GIDEON, MISSOURI**

**ADDENDUM NO. 1**

for

**State Project No. AIR-126-073B-MoDOT**

**BASE BID  
BITUMINOUS MILL & OVERLAY OF RUNWAY 15-33**

**ADDITIVE ALTERNATE 1:  
BITUMINOUS OVERLAY OF PARALLEL TAXIWAY AND  
CONNECTING TAXIWAYS (EXISTING FOOTPRINT)**

**ADDITIVE ALTERNATE 2:  
BITUMINOUS OVERLAY OF PARALLEL TAXIWAY AND  
CONNECTING TAXIWAYS (25' WIDTH)**

April 26, 2013

Prepared By:



**ADDENDUM NO. 1**  
**BITUMINOUS MILL & OVERLAY OF RUNWAY 15-33**  
**ADDITIVE ALTERNATE 1: BITUMINOUS OVERLAY OF PARALLEL TAXIWAY AND CONNECTING TAXIWAYS (EXISTING FOOTPRINT)**  
**ADDITIVE ALTERNATE 2: BITUMINOUS OVERLAY OF PARALLEL TAXIWAY AND CONNECTING TAXIWAYS (25' WIDTH)**

This addendum is herewith a part of the Contract Documents of the above issued project, and is issued to amend and supplement the April 5, 2013 construction plan drawings and April 10, 2013 proposal, contract documents, and specifications.

The **CONTRACT DOCUMENTS** are revised as follows:

**TABLE OF CONTENTS**

ADD: The following items:

<b>ITEM MO-209 CRUSHED AGGREGATE BASE COURSE.....</b>	<b>MO-209</b>
<b>ITEM SP-4 FULL DEPTH PATCHING.....</b>	<b>SP-4</b>
<b>ITEM SP-5 SUBGRADE STABILIZATION.....</b>	<b>SP-5</b>

DELETE: The following items:

<b>ITEM SP-1 TRANSVERSE CRACK REPAIR.....</b>	<b>121</b>
<b>ITEM SP-3 SAND MIX CRACK REPAIR.....</b>	<b>126</b>

**SECTION 1 – NOTICE TO BIDDERS**

REVISE the first sentence:

Sealed bids subject to the conditions and provisions presented herein will be received until 2:00 P.M. CST, **May 3, 2013** and then publicly opened and read at the Gideon City Hall, 109 N. Main Street, Gideon, Missouri 63848.

**Contract Work Items, Base Bid**

REVISE: The following items:

MO-601-5.1 Bituminous Pavement Milling – 1”	SY	30,593
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ADD: The following items:

SP-4-5.1 Full Depth Patching	SY	150
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DELETE: The following item:

SP-1-6.1 Transverse Crack Repair Type A	LF	120
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**SECTION 1 – NOTICE TO BIDDERS**

**Contract Work Items, Additive Alternate 1**

DELETE: The following items:

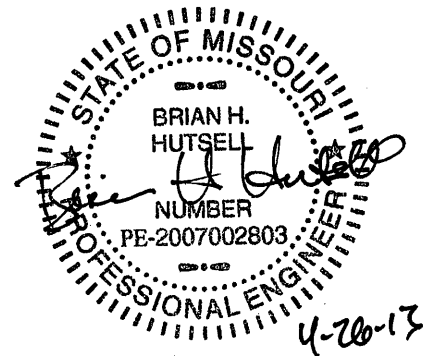
SP-1-6.1 Transverse Crack Repair Type A	LF	100
SP-1-6.2 Transverse Crack Repair Type B	LF	50
SP-3-6.1 Sand Mix Crack Repair	LF	150

**SECTION 1 – NOTICE TO BIDDERS**

**Contract Work Items, Additive Alternate 2**

DELETE: The following items:

SP-1-6.1 Transverse Crack Repair Type A	LF	66
SP-1-6.2 Transverse Crack Repair Type B	LF	33
SP-3-6.1 Sand Mix Crack Repair	LF	100



**SECTION 2 – INSTRUCTIONS TO BIDDERS**

REVISE Item 5:

Bids Due at: 2:00 P.M. CST, **May 3, 2013**

**ITEM MO-601 SURFACE PREPARATION**

REVISE: section 601-1.1:

As it pertains to this project, this item shall consist of the sawcutting and removal of a 1” depth of the existing asphalt surface, sterilization and/or removal of vegetation in all areas to be overlain, and the powerbrooming of areas to be overlain.

REVISE: section 601-3.1 B. Asphaltic Concrete:

Asphaltic concrete pavement to be removed in the area of the 1” milling need not be cut to the full depth of the bituminous material around the perimeter of the area to be removed.

ADD: to section 601-3.2 PREPARATION OF JOINTS AND CRACKS:

Mixture of emulsified asphalt and aggregate may be placed in separate material layers in lieu of a pre-mixed emulsion, provided that asphalt soaking and curing of the full depth repair is attained.

REVISE: section 601-4.1 A. Saw Cut

Any necessary saw cutting to create a vertical edge or to correct edges damaged by the contractor shall be considered incidental to the Bituminous Pavement Milling – 1” pay item.

REVISE: section 601-5.1 PAYMENT

Item MO-601-5.1 Bituminous Pavement Milling – 1” – per square yard

**ITEM MO-209 CRUSHED AGGREGATE BASE COURSE**

ADD: This specification (attached to this Addendum No. 1).

**ITEM SP-4 FULL DEPTH PATCHING**

ADD: This specification (attached to this Addendum No. 1).

**ITEM SP-5 SUBGRADE STABILIZATION**

ADD: This specification (attached to this Addendum No. 1).

**ITEM SP-1 TRANSVERSE CRACK REPAIR**

DELETE: This specification.

**ITEM SP-3 SAND MIX CRACK REPAIR**

DELETE: This specification.

**PROPOSAL FORM**

DELETE: Sheets 129-135

ADD: New revised sheets 129-135 attached to this Addendum

CLARIFICATION: The following item has been revised:

3	MO-601-5.1	Bituminous Pavement Milling – 1”	30,593 SY
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The following items have been added:

9	SP-4-6.1	Full Depth Patching	150 SY
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The following items have been deleted:

9	SP-1-6.1	Transverse Crack Repair Type A	120 LF
15	SP-1-6.1	Transverse Crack Repair Type A	100 LF
16	SP-1-6.2	Transverse Crack Repair Type B	50 LF
18	SP-3.6.1	Sand Mix Crack Repair	150 LF
24	SP-1-6.1	Transverse Crack Repair Type A	66 LF
25	SP-1-6.2	Transverse Crack Repair Type B	33 LF
27	SP-3.6.1	Sand Mix Crack Repair	100 LF

The remaining items were renumbered sequentially.

**When submitting a bid for this work the contractor shall turn in the original As-Bid Project Manual and Complete Addendum #1. The Proposal Form in Addendum #1 shall be completed and executed as the bid.**

The **CONSTRUCTION PLANS** are revised as follows:

**SHEET 1 OF 7**

DELETE: This sheet.

ADD: Attached sheet.

**SHEET 2 OF 7**

DELETE: This sheet.

ADD: Attached sheet.

**SHEET 3 OF 7**

DELETE: This sheet.

ADD: Attached sheet.

**SHEET 4 OF 7**

DELETE: This sheet.

ADD: Attached sheet.

**SHEET 5 OF 7**

DELETE: This sheet.

ADD: Attached sheet.

**ITEM MO-209 CRUSHED AGGREGATE BASE COURSE**

## ITEM MO-209 CRUSHED AGGREGATE BASE COURSE

### DESCRIPTION

**209.1.1** This work shall consist of furnishing and placing one or more courses of crushed aggregate base **to cap** a prepared **crusher run subbase in full depth patching areas** in accordance with these specifications and in conformity with the lines, grades, thicknesses and typical cross sections shown on the plans. Aggregate base shall meet the requirements of the 2004 Missouri Standard Specification for Highway Construction (MSSHC), Section 304 - Aggregate Base Course. **All construction methods, testing, and acceptance criteria shall be in accordance with the standards included within this Item MO-209.**

### MATERIALS

**209-2.1 AGGREGATE.** All materials for aggregate base shall conform to the requirements of the 2004 (MSSHC), Section 304, for **Type 5 Aggregate**.

The ledge stone from which the aggregate base will be produced has to have source approval from the Missouri Department of Transportation (MoDOT). Prior to use of materials, the contractor shall submit the current MoDOT source approval letter to the Engineer for the materials proposed for use during construction. Source approval granted for “all types of highway construction” (Product Code 1005CACP) constitutes approval for all uses. Source approval granted for “all types except PCCP” (Product Code 1005CACM) comprises approval for all uses except Portland cement concrete pavement. Source approval obtained for “all types except PCCP & PCCM” (Product Code 1002CAAC) is considered to be approval for all uses except Portland cement concrete.

The contractor shall submit certified test reports to the Engineer for the gradation of the aggregate base. The certification shall show the appropriate AASHTO test for the material, the test results, and a statement that the material passed or failed. The aggregate shall be sampled and tested for gradation using the following procedures:

1. Sampling Aggregates. Sampling shall be in accordance with AASHTO T 2.
2. Sieve Analysis of Fine and Coarse Aggregate. The aggregate shall be tested in accordance with AASHTO T 27 and shall meet the gradation requirements of the MSSHC, Section 1007.
3. Material Passing No. 200 Sieve. The aggregate shall be tested in accordance with AASHTO T 11 and meet the requirements of the MSSHC, Section 1007.

In lieu of the above gradation testing requirements, the contractor may provide documentation from MoDOT (District Materials Office) indicating that the material meets specification requirements.

The Engineer may request samples for testing, prior to and during production, to verify the quality of the materials and to ensure conformance with the applicable specifications.

### CONSTRUCTION METHODS

**209-3.1 PREPARING UNDERLYING COURSE.** The underlying course shall be checked and accepted by the Engineer before placing and spreading operations are started. Any ruts or soft yielding

places caused by improper drainage conditions, hauling, or any other cause shall be corrected at the Contractor's expense before the base course is placed thereon. Material shall not be placed on frozen subgrade.

**209-3.2 MIXING.** The aggregate shall be uniformly blended during crushing operations or mixed in a plant. The plant shall blend and mix the materials to meet the specifications and to secure the proper moisture content for compaction.

**209-3.3 PLACING.** The crushed aggregate base material shall be placed on the moistened subgrade in layers of uniform thickness with a mechanical spreader. The maximum depth of a compacted layer shall be 6 inches. If the total depth of the compacted material is more than 6 inches, it shall be constructed in two or more layers. In multi-layer construction, the base course shall be placed in approximately equal-depth layers.

The previously constructed layer should be cleaned of loose and foreign material prior to placing the next layer. The surface of the compacted material shall be kept moist until covered with the next layer.

**209-3.4 COMPACTION.** Immediately upon completion of the spreading operations, the crushed aggregate shall be thoroughly compacted. The number, type, and weight of rollers shall be sufficient to compact the material to the required density.

The moisture content of the material during placing operations shall not be below, nor more than 2 percentage points above, the optimum moisture content as determined by ASTM D 698.

**209-3.5 ACCEPTANCE SAMPLING AND TESTING FOR DENSITY.** Aggregate base course shall be accepted for density on a lot basis. A lot will consist of one day's production where it is not expected to exceed 2400 square yards. A lot will consist of one-half day's production where a day's production is expected to consist of between 2400 and 4800 square yards.

Each lot shall be divided into two equal sublots. One test shall be made for each subplot. Sampling locations will be determined by the Engineer on a random basis in accordance with statistical procedures contained in ASTM D 3665.

Each lot will be accepted for density when the field density is at least 100 percent of the maximum density of laboratory specimens prepared from samples of the base course material delivered to the job site. The specimens shall be compacted and tested in accordance with ASTM D 698. The in-place field density shall be determined in accordance with ASTM D 1556, D 2167 or ASTM D 6938. If the specified density is not attained, the entire lot shall be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached.

In lieu of the core method of field density determination, acceptance testing may be accomplished using a nuclear gage in accordance with ASTM D 6938 using the Direct Transmission Method. Calibration and operation of the gage shall be in accordance with the requirements of the manufacturer. The operator of the nuclear gage must show evidence of training and experience in the use of the instrument. The gage shall be standardized daily in accordance with ASTM D 6938.

If a nuclear gage is used for density determination, two random readings shall be made for each subplot.

**209-3.6 FINISHING.** The surface of the aggregate base course shall be finished by blading or with

automated equipment especially designed for this purpose.

In no case will the addition of thin layers of material be added to the top layer of base course to meet grade. If the elevation of the top layer is 1/2 inch or more below grade, the top layer of base shall be scarified to a depth of at least 3 inches, new material added, and the layer shall be blended and recompact to bring it to grade. If the finished surface is above plan grade, it shall be cut back to grade and rerolled.

Type 5 aggregate base is intended to provide some drainage and shall not be segregated. Trimmed Type 5 aggregate base may not be reused until it is verified as meeting the required specifications. Base material contaminated to such an extent that it no longer complies with the specifications shall be removed and replaced with satisfactory material at the expense of the contractor.

**209-3.7 SURFACE TOLERANCES.** The finished surface shall not vary more than 3/8 inch when tested with a 16-foot straightedge applied parallel with or at right angles to the centerline. Any deviation in excess of this amount shall be corrected by the Contractor at the Contractor's expense.

**209-3.8 THICKNESS CONTROL.** The completed thickness of the base course shall be within 1/2 inch of the design thickness. Four determinations of thickness shall be made for each lot of material placed. The lot size shall be consistent with that specified in paragraph 3.5. Each lot shall be divided into four equal sublots. One test shall be made for each subplot. Sampling locations will be determined by the Engineer on a random basis in accordance with procedures contained in ASTM D 3665. Where the thickness is deficient by more than 1/2 inch, the Contractor shall correct such areas at no additional cost by excavating to the required depth and replacing with new material. Additional test holes may be required to identify the limits of deficient areas.

**209-3.9 MAINTENANCE.** The base course shall be maintained in a condition that will meet all specification requirements until the work is accepted. Equipment used in the construction of an adjoining section may be routed over completed portions of the base course, provided no damage results and provided that the equipment is routed over the full width of the base course to avoid rutting or uneven compaction.

If a prime coat is specified in the contract, the contractor will be required to apply the prime coat on any completed portion of the aggregate base as soon as practicable, or as otherwise specified. However, the contractor will not be permitted to apply prime if the moisture in the top 2 inches of the aggregate base exceeds the higher of either (1) the average of the optimum moisture as determined by the standard compaction test and the absorption of the plus No. 4 fraction, or (2) two-thirds of the optimum moisture as determined by the standard compaction test.

At the discretion of the engineer, proof rolling may be required by a loaded tandem axle truck on top of the aggregate base course to determine the level of stability. If the condition of the aggregate base course is not satisfactory, it should be given more time to cure or be reworked to put it into the proper condition for overlay.

## **METHOD OF MEASUREMENT/BASIS OF PAYMENT**

**209-4.1** There will be no direct measurement or payment for the crushed aggregate base course used on the project. The base course used shall be considered incidental to Item SP-4 Full Depth Patching.



**ITEM SP-4 FULL DEPTH PATCHING**

## ITEM SP-4 FULL DEPTH BITUMINOUS PATCHING

### DESCRIPTION

**1.1** This work shall consist of full depth removal of existing deteriorated bituminous pavement, base course and 8" of unsuitable soil and replacement with a geosynthetic fabric, crusher run material, aggregate base course, tack and prime coat, and bituminous concrete at the locations shown on the plans, or as directed by the Engineer during the construction phase of the project. This full depth patching work will occur prior to the placement of any overlay pavements.

### MATERIALS

**2.1 BITUMINOUS TACK COAT AND SURFACE COURSE.** The bituminous tack and prime coat shall be according to Item MO-603, Bituminous Tack Coat and Item MO-602, Bituminous Prime Coat. All quantity of bituminous tack and prime coat applied in the full depth patching process shall not be measured for payment under Items MO-603 and MO-602 but rather should be considered incidental to this Item.

**2.2 AGGREGATE BASE COURSE.** The aggregate base course layer shall be placed in accordance with Item MO-209, Crushed Aggregate Base Course. All quantity of aggregate base course used in the full depth patching process shall not be measured for payment under Item MO-209, but rather should be considered incidental to this Item.

**2.3 CRUSHER RUN AGGREGATE.** The crusher run aggregate layer shall be placed in accordance with Item SP-5, Subgrade Stabilization. All quantity of crusher run aggregate base course used in the full depth patching process shall not be measured for payment under Item SP-5, but rather should be considered incidental to this Item.

**2.4 GEOSYNTHETIC FABRIC.** The geosynthetic fabric shall be according to Item SP-5, Subgrade Stabilization. All quantity of geosynthetic fabric used in the full depth patching process shall not be measured for payment under Item SP-5, but rather should be considered incidental to this Item.

**2.5 BITUMINOUS SURFACE COURSE.** The mixture for the bituminous concrete for partial depth patches shall be a MoDOT approved BP-1 plant mixed Bituminous Surface Course approved for use on highway pavements, per item MO-401S. All quantity of Bituminous Surface Course used in the full depth patching process shall not be measured for payment under Item MO-401S, but rather should be considered incidental to this Item.

**2.4 EXISTING PAVEMENT STRUCTURE.** The existing pavement structure which is shown in the plans has been assembled from available record information. Neither the airport nor the engineer is not responsible for its accuracy. The contractor shall not be allowed extra compensation if the structure is not as shown.

### EQUIPMENT

**3.1** All equipment shall be specified hereinafter or as approved by the Engineer. The equipment shall not cause damage to the pavement to remain in place.

The machine used for removal of existing pavement, aggregate and soil shall be of the size and type that is capable of performing the work without damaging the adjacent pavement that is to remain in place. The machine shall be capable of cutting a vertical edge without chipping or spalling the edges of the

pavement to remain. The area to be replaced shall cover only the failed area. Any excessive area that is removed because the Contractor doesn't have the appropriate machine, or areas that are damaged because of his negligence, shall not be included in the measurement for payment.

Mechanical equipment shall be used to compact the aggregate layers as described in MO-209 and SP-5. Compaction/preparation of exposed soil prior to the geosynthetic fabric application should be completed with light equipment adequate for moderate compaction and smoothing without creating additional disturbance.

Mechanical equipment shall be used to compact the bituminous concrete patch mixture. Compaction of the bituminous mixture in the partial depth patches shall be by mechanical means to achieve the best possible compaction. The patch mix shall be compacted by a self motivated roller, or other equipment approved by the engineer. If the compaction does not satisfy the engineer, the contractor shall change compaction equipment or methods.

Cleaning equipment shall be a mechanical sweeper or air equipment capable of applying compressed air, at a minimum 100 psi, and shall have sufficient flow rate to remove all disturbed pavement debris. Air equipment shall meet the requirements of ASTM D 4285.

## **CONSTRUCTION REQUIREMENTS**

**4.1 GENERAL.** The contractor shall remove the removed material, haul and place it at a location on airport property designated by the engineer.

Waste material shall be removed from the patch area into a hauling vehicle and hauled to the dump location on the airport to be determined by the Engineer. Air equipment and a mechanical sweeper shall remove all remaining disturbed pavement debris and any loose and/or unsound pavement.

The deteriorated material shall be removed to the depth as shown on the plans. After preparation of the exposed soil, a geosynthetic fabric and crusher run layer should be placed in accordance with SP-5, Subgrade Stabilization. The crusher run layer shall be capped with a layer of Item MO-209 Crushed Aggregate Base course as shown on the plans. A coating of MO-602 Bituminous Prime Coat should be applied to all aggregated to be paved upon, and all exposed surfaces of surrounding asphalt pavement should be thoroughly cleaned prior to an application of bituminous tack coat according to Item MO-603 of this specification. The removed area shall be filled with asphaltic concrete meeting the requirements of MoDOT for bituminous surface course highway pavements, MO-401S. The material shall be compacted with equipment approved by the Resident Engineer until the material is dense and no movement or marks can be noted. The material shall not be placed in lifts over 4 inches in depth.

Patches which are high or become rough by rutting, shoving, or heaving shall be corrected by trimming off high areas and/or filling depressions. Filled areas shall be rolled again. Trimming high patches or filling in depressions on rough patches shall be at the Contractor's expense.

Compaction of the bituminous mixture in the partial depth patches shall be by mechanical means to achieve the best possible compaction. The intent is to compact the bituminous patch material with roller of some fashion. Vibrating plates and jumping jack type equipment shall be used to supplement the heavier compaction equipment. If the compaction does not satisfy the engineer, the contractor shall change compaction equipment or methods.

## **METHOD OF MEASUREMENT**

**5.1** Full depth patching will be measured in square yards of the minimum dimension required by the engineer and the minimum thickness specified, in place, complete and accepted by the engineer.

## **BASIS OF PAYMENT**

**6.1** Full depth patching of the existing bituminous pavement will be paid for at the contract unit price per square yard of the horizontal dimensions established by the engineer and to the minimum thickness specified.

**6.2** These prices shall be full compensation for furnishing all materials, equipment, labor, hauling, disposal, and all other incidental items necessary to complete the work to the satisfaction of the Engineer.

Payment will be made under:

SP-4-6.1 – Full Depth Patching – per square yard.

**END ITEM SP-4**

**ITEM SP-5 SUBGRADE STABILIZATION**

## ITEM SP-5 SUBGRADE STABILIZATION

### DESCRIPTION

**1.1** This item shall consist of a base course composed of crushed aggregates constructed on a geosynthetic fabric placed on a prepared underlying subgrade in accordance with these specifications and shall conform to the dimensions and typical cross section shown on the plans and with the lines and grades established by the Engineer. The purpose of this item is to provide a stable platform for the construction of the pavements.

### MATERIALS

**2.1 CRUSHER RUN AGGREGATE.** The aggregate shall consist of crushed stone consisting of hard, durable particles or fragments of stone, free from dirt or other objectionable matter, and shall contain not more than 8% of flat, elongated, soft or disintegrated pieces. The material shall be from the same ledges that are approved for item MO-209 Crushed Aggregate Base Course. The crushed aggregate shall be graded such that the maximum dimension of the largest stone fragments does not exceed 6 inches in any dimension and is well graded. There shall be sufficient grading such that voids are filled with finer material to form a dense compact mass.

**2.2 GEOSYNTHETIC FABRIC.** The fabric for Subgrade Stabilization shall consist of woven or nonwoven filaments of polypropylene, polyester, or polyethylene. Nonwoven fabric may be needle punched, heat-bonded, resin-bonded or a combination thereof. The fabric shall be resistant to ultraviolet radiation. The fabric shall comply with the following physical properties:

### PHYSICAL PROPERTIES

Grab tensile strength (lb) - ASTM D 4632.....	300 (min.) <sup>1</sup>
Grab elongation @ break (%) - ASTM D 4632.....	15 (min.) <sup>1</sup>
Mullen Burst strength (psi) - ASTM D 3786.....	500 (min.) <sup>2</sup>
Trapezoidal tear strength (lb) - ASTM D 4533.....	100 (min.)
Weight (oz/sq. yd.) - ASTM D 3776.....	5.0 (min.)

<sup>1</sup> For woven fabric, test results shall be referenced to orientation with warp or weave, whichever the case may be. Both woven and nonwoven fabric shall be tested wet.

<sup>2</sup> Test results may be obtained by manufacturer's certification.

Listed above are minimum requirements for the geosynthetic fabric. The Contractor shall be responsible for providing a material which will meet these requirements and also will perform properly in the application as detailed in this specification.

**2.3 QUALITY TESTS.** The Contractor shall provide soundness, and abrasion tests for all virgin aggregates to be used on the job. When quality tests have been made on the aggregate

sources/ledges within the last two years and the material meets the specification, verification tests consisting of specific gravity and absorption tests shall be made. If new tests are within 10% of the test results for the previous quality tests, the aggregate will be acceptable. Tests results shall be furnished for the original quality tests for the files. Gradation of the material will be accepted by visual inspection by the Engineer.

## **CONSTRUCTION METHODS**

**3.1 OPERATION AT SOURCES OF SUPPLY.** All work involved in clearing and stripping of quarries and pits, including the handling of unsuitable material shall be performed by the Contractor at his own expense. The base material shall be obtained from approved sources. The material shall be handled in a manner that shall secure a uniform and satisfactory product.

**3.2 EQUIPMENT** All equipment necessary for the proper construction of this work shall be on the project, in first-class working condition, and approved by the Engineer before construction is permitted to start.

**3.3 PREPARING UNDERLYING COURSE.** The underlying course shall be prepared by compacting and smoothing using mechanical methods. No fabric or crusher run material shall be placed until the subgrade has been approved by the Engineer.

**3.4 INSTALLATION OF GEOSYNTHETIC FABRIC.** The fabric shall be delivered to the jobsite in such a manner as to facilitate handling and incorporation into the work without damage. Material shall be stored in such a manner as to prevent exposure to direct sunlight and damage by other construction activity.

Fabric may be installed on the application surface either by hand or mechanical methods, provided that the fabric is not torn or the surface rutted.

Fabric of insufficient width or length to fully cover the specified area shall be lapped, or sewn. The following are minimum laps for each:

1. Lap only - 24 inches
2. Sewn - 4 inches

If sewn, the seam strength shall be equal or more than the minimum grab strength of the fabric when tested wet.

At no time shall vehicles be driven directly on the fabric.

**3.5 PLACING AND SPREADING OF CRUSHER RUN MATERIAL.** The crusher run material shall be placed at the width and depth required by the Engineer. The material shall be back-dumped on the fabric in a sequence of operations beginning at the outer edges of the treatment area with subsequent placement towards the middle.

Placement of the material on the fabric shall be accomplished by spreading dumped material off of previously placed material with a bulldozer blade or end-loader, in such a manner as to prevent tearing or shoving of the fabric. Dumping of material directly on the fabric will only be permitted to establish an initial working platform. No vehicles or construction equipment shall be allowed on the fabric prior to placement of the crusher run material.

The crusher run material shall be placed to the full required thickness and compacted to the satisfaction of the Engineer before any loaded trucks are allowed on the blanket.

Fabric which is damaged during installation or subsequent placement of granular material, due to failure of the Contractor to comply with these provisions, shall be repaired or replaced at his expense, including cost of removal and replacement of the granular material.

Torn fabric may be patched in-place by cutting and placing of the same fabric over the tear. The dimension of the patch shall be at least 2 ft. larger than the dimension of the tear, and it shall be weighted or otherwise secured to prevent the granular material from causing lap separation.

**3.6 FINISHING AND COMPACTING.** After spreading, the crushed aggregate shall be thoroughly compacted by rolling. The rolling shall progress gradually from the sides to the center of the lane under construction, or from one side toward previously placed material by lapping uniformly each preceding rear-wheel track by one-half the width of such track. Rolling shall continue until the entire area of the course has been rolled by the rear wheels. The rolling shall continue until the stone is thoroughly set, the interstices of the material reduced to a minimum, and until creeping of the stone ahead of the roller is not longer visible. Density requirement will not apply to the placement of the Crusher Run material. Blading and rolling shall be done alternately, as required or directed, to obtain smooth, even, and uniformly compacted base.

**3.7 SURFACE TEST.** After the course has been completely compacted, the surface shall be within  $-0/+ 0.1$  ft of the required grade. It is understood that there will be large stones which will cause irregularities. These shall be kept to a minimum and shall not protrude more than  $+0.2$  ft above the required grade.

**3.8 CAPPING OF CRUSHER RUN AGGREGATE.** At the top of the crusher run aggregate base a cap of material which meets the material requirements of MO-209 shall be spread and consolidated to insure a uniform surface. The top of the resulting base shall be constructed at an elevation shown in the typical sections for the bottom of the MO-209 Crushed Aggregate Base. All work associated with the construction of the aggregate cap shall be considered incidental to the crusher run aggregate pay item. The contractor shall include all costs for construction of cap in the cost bid for the crusher run aggregate.

**3.9 PROTECTION.** Work on the base course shall not be accomplished during freezing temperatures nor when the subgrade is wet. When the aggregates contain frozen materials or when the underlying course is froze, the construction shall be stopped. Hauling equipment shall not be routed over completed portions of the base course.



**3.10 MAINTENANCE.** Following the completion of the base course, the Contractor shall perform all maintenance work necessary to keep the base course in a satisfactory condition priming. The base course shall be properly drained at all times. If cleaning is necessary any work or restitution necessary shall be performed at the expense of the Contractor.

#### **METHOD OF MEASUREMENT**

**4.1** The quantity of Crusher Run material shall not be measured for payment and shall be considered incidental to Item SP-4 Full Depth Patching.

The quantity of Geosynthetic Fabric shall not be measured for payment and shall be considered incidental to Item SP-4 Full Depth Patching.

**END OF ITEM SP-5**

**PROPOSAL FORM**

**PROPOSAL FORM**  
**CITY OF GIDEON, MISSOURI**  
 Project No. AIR 126-073B-MODOT

TO: City Manager/Clerk/Administrator

The undersigned, in compliance with the request for bids for construction of the following Project:

**BASE BID: BITUMINOUS MILL & OVERLAY OF RUNWAY 15-33**

**ADDITIVE ALTERNATE NO. 1: BITUMINOUS OVERLAY OF PARALLEL AND CONNECTING TAXIWAYS (EXISTING FOOTPRINT)**

**ADDITIVE ALTERNATE NO. 2: BITUMINOUS OVERLAY OF PARALLEL AND CONNECTING TAXIWAYS (25' WIDTH)**

hereby proposes to furnish all labor, permits, material, machinery, tools, supplies and equipment to faithfully perform all work required for construction of the Project in accordance with the project manual, project drawings and issued Addenda within the specified time of performance for the following prices:

<b>BASE BID</b>								
BID ITEM	FAA or MoDOT SPEC.	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		EXTENSION		
				DOLLARS	CTS	DOLLARS	CTS	
1	MO-401-5.1	Mineral Aggregate (BP-1 Mix)	3,509 TON					
2	MO-401-5.2	Asphalt Cement (BP-1 Mix)	184.7 TON					
3	MO-601-5.1	Bituminous Pavement Milling – 2”	30,593 SY					
4	MO-601-5.2	Crack Cleaning and Sealing	5,000 LF					
5	MO-603-5.1	Bituminous Tack Coat	4,820 GAL					
6	MO-620-5.1-1	Airport Runway Pavement Marking (White)	18,896 SF					
7	MO-620-5.1-2	Airport Taxiway Pavement Marking (Yellow)	4,051 SF					
8	MO-620-5.1-3	Airport Pavement Marking (Black)	8,704 SF					
9	SP-4-6.1	Full Depth Patching	150 SY					
<b>TOTAL BID (Base Bid)</b>								

<b>ADDITIVE ALTERNATE 1</b>								
BID ITEM	FAA or MoDOT SPEC.	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		EXTENSION		
				DOLLARS	CTS	DOLLARS	CTS	
10	MO-401-5.1	Mineral Aggregate (BP-1 Mix)	2,960 TON					
11	MO-401-5.2	Asphalt Cement (BP-1 Mix)	155.8 TON					
12	MO-601-5.2	Crack Cleaning and Sealing	10,000 LF					
13	MO-603-5.1	Bituminous Tack Coat	4,183 GAL					
14	MO-622-5.1	Crack and Joint Sealing – Bituminous Pavement	2,000 LF					
15	SP-2-5.1	Butt Joints	750 SY					
<b>TOTAL BID (Additive Alternate 1)</b>								

<b>BASE BID + ADDITIVE ALTERNATE 1</b>					
			DOLLARS	CTS	
<b>TOTAL BID (Base Bid + Additive Alternate 1)</b>					

<b>ADDITIVE ALTERNATE 2</b>								
BID ITEM	FAA or MoDOT SPEC.	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		EXTENSION		
				DOLLARS	CTS	DOLLARS	CTS	
16	MO-401-5.1	Mineral Aggregate (BP-1 Mix)	1,934 TON					
17	MO-401-5.2	Asphalt Cement (BP-1 Mix)	101.8 TON					
18	MO-601-5.2	Crack Cleaning and Sealing	6,600 LF					
19	MO-603-5.1	Bituminous Tack Coat	2,934 GAL					
20	MO-622-5.1	Crack and Joint Sealing – Bituminous Pavement	5,400 LF					
21	SP-2-5.1	Butt Joints	550 SY					
<b>TOTAL BID (Additive Alternate 1)</b>								

<b>BASE BID + ADDITIVE ALTERNATE 2</b>					
			DOLLARS	CTS	
<b>TOTAL BID (Base Bid + Additive Alternate 2)</b>					

**ACKNOWLEDGEMENTS BY BIDDER**

- a. By submittal of a proposal, the BIDDER acknowledges and accepts that the quantities established by the OWNER are an approximate estimate of the quantities required to fully complete the Project and that the estimated quantities are principally intended to serve as a basis for evaluation of bids. The BIDDER further acknowledges and accepts that payment under this contract will be made only for actual quantities and that quantities will vary in accordance with the General Provisions subsection entitled “Alteration of Work and Quantities”.
- b. The BIDDER acknowledges and accepts that the Bid Documents are comprised of the documents identified within the General Provisions. The BIDDER further acknowledges that each the individual documents that comprise the Bid Documents are complementary to one another and together establishes the complete terms, conditions and obligations of the successful BIDDER.
- c. As evidence of good faith in submitting this proposal, the undersigned encloses a bid guaranty in the form of a certified check, cashier’s check or bid bond in the amount of 5% of the bid price. The BIDDER acknowledges and accepts that refusal or failure to accept award and execute a contract within the terms and conditions established herein will result in forfeiture of the bid guaranty to the owner as a liquidated damage.
- d. The BIDDER acknowledges and accepts the OWNER’S right to reject any or all bids.
- e. The BIDDER acknowledges and accepts the OWNER’S right to hold all Proposals for purposes of review and evaluation and not issue a notice-of-award for a period not to exceed {60} calendar days from the stated date for receipt of bids.

- f. The undersigned agrees that upon written notice of award of contract, he or she will execute the contract within thirty (30) days of the notice-of-award, and furthermore, and provide executed payment and performance bonds within fifteen (15) days from the date of contract execution. The undersigned accepts that failure to execute the contract and provide the required bonds within the stated timeframe shall result in forfeiture of the bid guaranty to the owner as a liquidated damage.
- g. Time of Performance: By submittal of this proposal, the undersigned acknowledges and agrees to commence work within ten (10) calendar days of the date specified in the written "Notice-to-Proceed" as issued by the OWNER. The undersigned further agrees to complete the Project within **nineteen (19) consecutive (twenty nine (29) consecutive Calendar days if an alternate is awarded) Calendar days** from the commencement date specified in the Notice-to-Proceed, **and all work requiring a runway closure within the first nineteen (19) consecutive calendar days from the commencement date specified in the notice to proceed.**
- h. The undersigned acknowledges and accepts that for each and every Calendar day the project remains incomplete beyond the contract time of performance, the Contractor shall pay the non-penal amount of \$750 per Calendar day both for the total project and runway closure as a liquidated damage to the OWNER.
- i. The BIDDER, by submission of a proposal, acknowledges that award of this contract is subject to the provisions of the Missouri Prevailing Wage Law. The BIDDER accepts the requirement to pay prevailing wages for each classification and type of worker as established in the attached wage rate determinations as issued by the Missouri Division of Labor Standards. The BIDDER further acknowledges and accepts their requirement to incorporate the provision to pay the established prevailing wages in every subcontract agreement entered into by the Bidder under this project.
- j. The undersigned acknowledges receipt of the following addenda:

Addendum No. _____, dated _____	Date Received _____
Addendum No. _____, dated _____	Date Received _____
Addendum No. _____, dated _____	Date Received _____
Addendum No. _____, dated _____	Date Received _____
Addendum No. _____, dated _____	Date Received _____

**REPRESENTATIONS BY BIDDER**

By submittal of a proposal (bid), the BIDDER represents the following:

- a. The BIDDER has read and thoroughly examined the bid documents including all authorized addenda.
- b. The BIDDER has a complete understanding of the terms and conditions required for the satisfactory performance of project work.
- c. The BIDDER has fully informed themselves of the project site, the project site conditions and the surrounding area.
- d. The BIDDER has familiarized themselves of the requirements of working on an operating airport and understands the conditions that may in any manner affect cost, progress or performance of the work
- e. The BIDDER has correlated their observations with that of the project documents.
- f. The BIDDER has found no errors, conflicts, ambiguities or omissions in the project documents, except as previously submitted in writing to the owner that would affect cost, progress or performance of the work.
- g. The BIDDER is familiar with all applicable Federal, State and local laws, rules and regulations pertaining to execution of the contract and the project work.
- h. The BIDDER has complied with all requirements of these instructions and the associated project documents.

**CERTIFICATION BY BIDDER**

- a. The undersigned hereby declares and certifies that the only parties interested in this proposal are named herein and that this proposal is made without collusion with any other person, firm or corporation.
  
- b. **Compliance with the Work Authorization Law (as required by Section 285.530, Revised Statutes of Missouri)**

For all contracts which include state or local funds in excess of \$5,000, the Bidder, by submission of an offer and by signing the Worker Eligibility Verification Affidavit for All Contract Agreements in Excess of \$5,000, certifies that it:

- 1. does not knowingly employ any person who is an unauthorized alien in connection with the contracted services;
  
- 2. has enrolled and actively participates in a federal work authorization program;

A general contractor or subcontractor of any tier shall not be liable under sections 285.525 to 285.550 when such general contractor or subcontractor contracts with its direct subcontractor who violates subsection 1 of this section, if the contract binding the contractor and subcontractor affirmatively states that the direct subcontractor is not knowingly in violation of subsection 1 of this section and shall not henceforth be in such violation and the contractor or subcontractor receives a sworn affidavit under the penalty of perjury attesting to the fact that the direct subcontractor's employees are lawfully present in the United States.





**THIS EXECUTED PROPOSAL FORM MUST BE SUBMITTED  
IN THE ORIGINAL BOUND PROJECT MANUAL.**

**SIGNATURE OF BIDDER**

The undersigned states that the correct LEGAL NAME AND ADDRESS of (1) the individual bidder, (2) each partner or joint venturer (whether individuals or corporations, and whether doing business under a fictitious name), or (3) the corporation (with the state in which it is incorporated) are shown below; that (if not signing with the intention to bind themselves to become responsible and sole bidder) they are the agent of, and they are signing and executing this (as indicated in the proper spaces below) as the bid of a

- ( ) sole individual                      ( ) partnership                      ( ) joint venture  
 ( ) corporation, incorporated under the laws of state of \_\_\_\_\_.

Executed by bidder this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

Name of individual,  
all partners  
or joint venturers:

Address of each:


doing business under the name of:

Address of principal place of business in  
Missouri:

(If using a fictitious name, show this name  
above in addition to legal names)

\_\_\_\_\_  
 \_\_\_\_\_

(If a corporation, show its name above)

\_\_\_\_\_  
 \_\_\_\_\_

ATTEST: (SEAL)

\_\_\_\_\_  
 (Signature)                      Secretary

\_\_\_\_\_  
 (Signature)                      (Title)

\_\_\_\_\_  
 Please print name

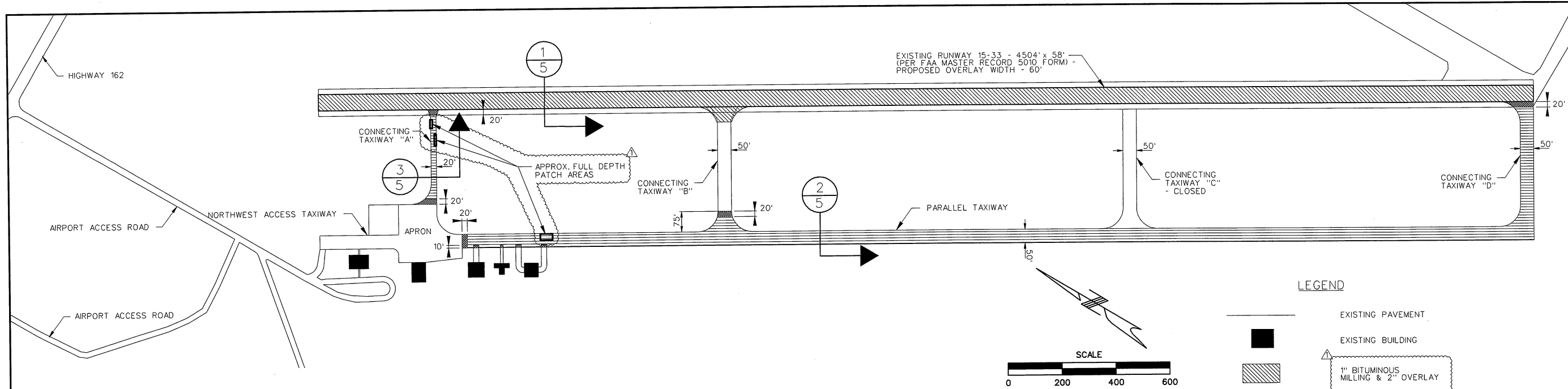
\_\_\_\_\_  
 Please print name

NOTE: If bidder is doing business under a fictitious name, the bid shall be executed in the legal name of the individual partners, joint ventures, or corporation, with the legal address shown, and registration of fictitious name filed with the secretary of state, as required by sections 417.200 to 417.230 RSMo. If the bidder is a corporation not organized under the laws of Missouri, it shall procure a certificate of authority to do business in Missouri, as required by section 351.572 et seq RSMo.

**REVISED PLAN SHEETS**



4/26/2013 12:40:20:00\Gideon\draw\Sheets\02\_Site\_Plan.dgn



EXISTING RUNWAY 15-33 - 4504' x 58' (PER FAA MASTER RECORD 5010 FORM) - PROPOSED OVERLAY WIDTH - 60'

GENERAL

- 1. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL FOLLOW THE REQUIREMENTS OF THE AIRPORT'S APPROVED CONSTRUCTION SAFETY AND PHASING PLAN (CSPP)...

1. COORDINATION

- 1. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL ATTEND A PRECONSTRUCTION CONFERENCE WITH THE AIRPORT, ENGINEER, AND THE MoDOT AVIATION SECTION...

2. PHASING

- 1. PHASING SHALL BE AS SHOWN ON THE CONSTRUCTION ACTIVITY PLAN (CAP) SHEET.

3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

- 1. ALL RUNWAYS, TAXIWAYS AND APRONS SHALL BE KEPT OPEN TO AIRCRAFT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED ON THE CONSTRUCTION ACTIVITY PLAN.

4. PROTECTION OF NAVIGATION AIDS (NAVAIDS)

- 1. THE CONTRACTOR SHALL REMAIN CLEAR OF THE PAPI SYSTEMS, WIND CONE, BEACON AND OTHER NAVAIDS FACILITIES AT ALL TIMES.

5. CONTRACTOR ACCESS

- 1. CONTRACTOR ACCESS SHALL BE AS NOTED BELOW AND AS SHOWN ON THE SITE PLAN AND CONSTRUCTION ACTIVITY PLAN SHEETS.

6. WILDLIFE MANAGEMENT

- 1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR AIRPORT MANAGER IF ANY WILDLIFE IS SEEN ENTERING THE AIRPORT.

7. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

- 1. THE CONTRACTOR SHALL PICK UP ANY FOREIGN OBJECT DEBRIS (FOD) SEEN ON THE AIRFIELD PAVEMENTS.

8. HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

- 1. THE CONTRACTOR SHALL DEVELOP A HAZMAT MANAGEMENT PLAN AND KEEP COPIES ON THE JOBSITE OF MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL MATERIALS HANDLED ON THE JOBSITE.

9. NOTIFICATION OF CONSTRUCTION ACTIVITIES

- 1. THE CONTRACTOR SHALL PROVIDE A 24 HOUR EMERGENCY CONTACT PERSON AND PHONE NUMBER.

Table with contact information for Owner (Joshua Atchley), Engineer (Crawford, Murphy & Tilly, Inc.), Fire Department (Gideon Volunteer Fire Department), and Emergency (911).

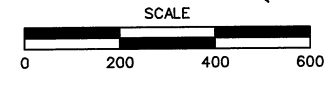
10. INSPECTION REQUIREMENTS

- 1. THE CONTRACTOR SHALL INSPECT THE JOBSITE DAILY TO ENSURE COMPLIANCE WITH THE CSPP. THE CHECKLIST FOUND IN APPENDIX 3 OF FAA AC 150/5370-2F MAY BE USED TO AID IN THE INSPECTIONS.

11. UNDERGROUND UTILITIES

- 1. IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES AT CRITICAL POINTS.

LEGEND: Symbols for existing pavement, existing building, 1" bituminous milling & 2" overlay, 2" bituminous taxiway overlay, and bituminous butt joint.



REVISIONS table with columns for NUMBER, BY, and DATE. Includes a graphic scale bar and text: THIS BAR IS EQUAL TO 2" AT FULL SCALE (34x22). PLOT 1

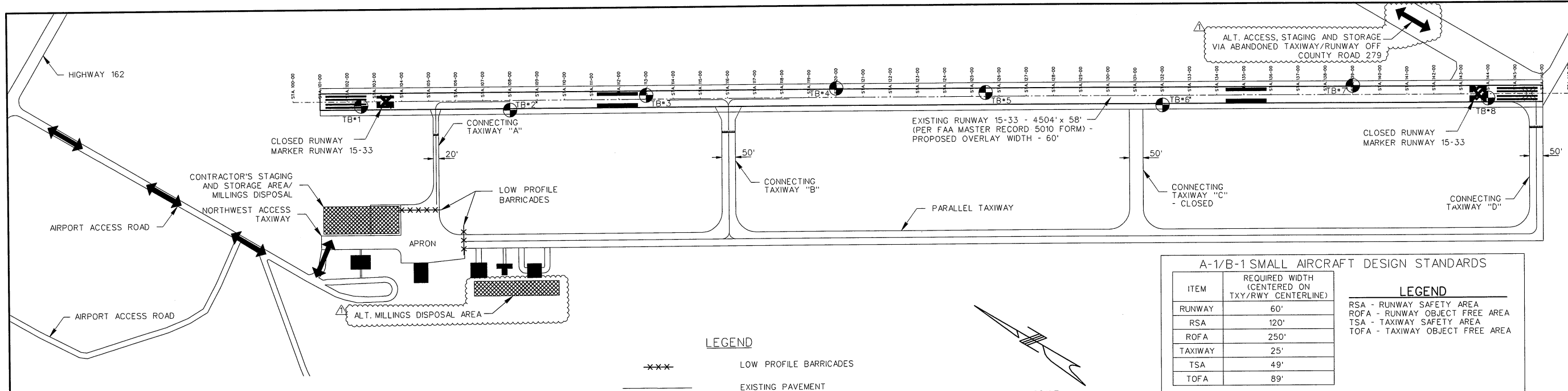
GIDEON MEMORIAL AIRPORT GIDEON, MISSOURI BITUMINOUS OVERLAY OF RUNWAY 15-33 AND TAXIWAY PAVEMENT REHABILITATION

Professional Engineer seal for Brian H. Hutsell, No. PE-2007002803, State of Missouri.

CMT CONSULTING ENGINEERS logo and address: ONE MEMORIAL DRIVE, SUITE 500, ST. LOUIS, MO 63102.

Project information table including FILE: 02\_Site\_Plan.dgn, DESIGN BY: TGH, DRAWN BY: TGH, CHECKED BY: BHH, APPROVED BY: BHH, DATE: APRIL 5, 2013, JOB No: 12409-02-00, and SHEET 2 OF 7 SHEETS.

4/26/2013  
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**CONSTRUCTION ACTIVITY NOTES**

1. THE CONTRACTOR SHALL COORDINATE HIS/HER OPERATIONS WITH THE AIRPORT AND THE ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE AIRPORT 72 HOURS PRIOR TO ALL RUNWAY CLOSURES SO THAT PROPER NOTAMS MAY BE ISSUED. WHEN CLOSING THE RUNWAY, THE CONTRACTOR SHALL USE RUNWAY CLOSURE MARKERS. SEE DETAIL ON THIS SHEET.
3. THE CONTRACTOR SHALL HAVE A TOTAL OF 19 CONSECUTIVE CALENDAR DAYS TO COMPLETE THE BASE BID PORTION (RUNWAY) OF THIS WORK WHICH SHALL INCLUDE THE SECOND APPLICATION OF PAVEMENT MARKINGS. IF AN ALTERNATE TO THE BASE BID IS AWARDED, AN ADDITIONAL 10 CONSECUTIVE CALENDAR DAYS WILL BE ADDED TO THE TOTAL ALLOWED PROJECT TIME. CALENDAR DAYS FOR THE PROJECT WILL BE SUSPENDED ONE TIME IN THE DURATION OF THIS WORK TO ACCOMMODATE THE SPECIFIED WAITING PERIOD FOR THE SECOND APPLICATION OF THE PAVEMENT MARKINGS. THE CONTRACTOR SHALL BE ALLOWED TO CLOSE THE RUNWAY FOR A TOTAL OF 19 CONSECUTIVE CALENDAR DAYS WITHIN THE OVERALL PROJECT TIME REQUIREMENTS AND ONE ADDITIONAL TIME FOR APPLICATION OF THE FINAL PAVEMENT MARKINGS. THE CONTRACTOR SHALL BE SUBJECT TO LIQUIDATED DAMAGES AS OUTLINED IN THE CONTRACT DOCUMENTS FOR ANY WORK EXTENDING BEYOND 19 OR 29 (PENDING ALTERNATE AWARD) CONSECUTIVE CALENDAR DAYS OR ANY RUNWAY CLOSURES BEYOND THOSE PROVIDED FOR HEREIN.

CLOSURE OF THE RUNWAY BY THE CONTRACTOR REQUIRES THE FOLLOWING:  
 -APPROVAL FROM THE AIRPORT OR ENGINEER  
 -PLACEMENT OF RUNWAY CLOSURE MARKERS OVER THE RUNWAY NUMERALS  
 -PLACEMENT OF THE LOW PROFILE BARRICADES ACROSS THE CONNECTING TAXIWAYS AS SHOWN

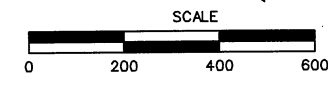
4. OPENING OF THE RUNWAY BY THE CONTRACTOR REQUIRES THE FOLLOWING:  
 -COMPLETION OF THE BITUMINOUS OVERLAY AND PAVEMENT MARKINGS.  
 -CLEANING OF ANY DEBRIS ON THE RUNWAY PAVEMENT  
 -REMOVAL OF RUNWAY CLOSURE MARKERS  
 -APPROVAL FROM THE AIRPORT OR ENGINEER
5. CONTRACTOR ACCESS, STAGING, AND STORAGE SHALL BE AS SHOWN ON THIS SHEET.
6. DURING ADVERSE WEATHER, THE CONTRACTOR SHALL MAKE PROVISIONS FOR ACCESS TO THE WORK SITE AT NO ADDITIONAL COST TO THE CONTRACT. NO EXTENSION OF CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK SITE.
7. THROUGHOUT THE DURATION OF THE CONTRACT, ANY DAMAGE TO THE EXISTING AIRFIELD PAVEMENTS, ACCESS ROAD, ACCESS GATE, APRON OR FENCING ADJACENT TO THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
8. ANY DAMAGE TO THE EXISTING ELECTRICAL CIRCUITS AND EQUIPMENT CAUSED BY THE CONTRACTOR'S OPERATIONS, SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
9. THE CONTRACTOR SHALL PLACE BARRICADES AT THE LOCATIONS SHOWN WHILE THE RUNWAY IS CLOSED AND REMOVE THE BARRICADES WHEN THE RUNWAY IS OPEN.

**SEQUENCE OF CONSTRUCTION GENERAL NOTES**

1. THE CONTRACTOR SHALL PROVIDE THE AIRPORT AND THE ENGINEER WITH A DETAILED SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) (IN ACCORDANCE WITH FAA AC 150/5370-2F) AND CONSTRUCTION SCHEDULE A MINIMUM OF 7 DAYS PRIOR TO THE PRECONSTRUCTION MEETING. THIS SPCD AND CONSTRUCTION SCHEDULE SHALL BE UPDATED WEEKLY FOLLOWING THE NOTICE TO PROCEED OR AS REQUESTED BY THE ENGINEER.
2. NO WORK SHALL BEGIN UNTIL AFTER THE CONTRACTOR'S SPCD IS APPROVED.
3. ALL CONTRACTOR PERSONNEL INCLUDING SUBCONTRACTORS SHALL FOLLOW THE CONTRACTOR'S SPCD AND ALL AIRPORT SAFETY AND SECURITY REQUIREMENTS.
4. THE CONTRACTOR SHALL KEEP A RECORD OF THE NAMES OF ALL EMPLOYEES ENTERING THE JOB SITE ON A DAILY BASIS. A RECORD OF EACH SUBCONTRACTOR ENTERING THE JOB SITE SHALL ALSO BE KEPT BY THE GENERAL CONTRACTOR.
5. ACCESS TO THE JOB SITE SHALL BE AS SPECIFIED ON THIS SHEET AND THE SITE PLAN SHEET.
6. THE CONTRACTOR SHALL PROVIDE A 24 HOUR EMERGENCY CONTACT PERSON AND PHONE NUMBER.
7. BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THIS SHEET OR AS DIRECTED BY THE CITY OR THE ENGINEER.
8. WORK INSIDE 60' OF AN ACTIVE RUNWAY CENTERLINE SHALL REQUIRE CLOSURE OF THE RUNWAY.
9. WORK INSIDE 44.5' OF THE EXISTING TAXIWAY CENTERLINE SHALL REQUIRE CLOSURE OF THE TAXIWAY IN ACCORDANCE WITH FAA AC 150/5370-2F, SECTION 3-3.

**LEGEND**

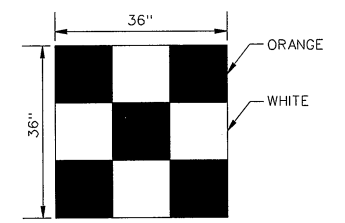
- \*\*\* LOW PROFILE BARRICADES
- X RUNWAY CLOSURE MARKER
- [Hatched Box] CONTRACTOR'S STORAGE/STAGING AREA
- [Double Arrow] CONTRACTOR'S ACCESS
- [Square] EXISTING BUILDING
- TB\*x BORING LOCATION



**A-1/B-1 SMALL AIRCRAFT DESIGN STANDARDS**

ITEM	REQUIRED WIDTH (CENTERED ON TXY/RWY CENTERLINE)
RUNWAY	60'
RSA	120'
ROFA	250'
TAXIWAY	25'
TSA	49'
TOFA	89'

**LEGEND**  
 RSA - RUNWAY SAFETY AREA  
 ROFA - RUNWAY OBJECT FREE AREA  
 TSA - TAXIWAY SAFETY AREA  
 TOFA - TAXIWAY OBJECT FREE AREA

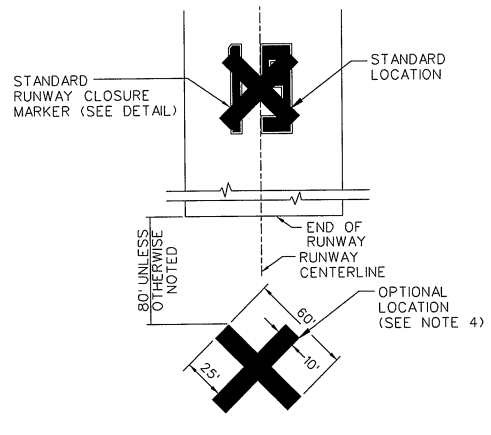


CONSTRUCTION EQUIPMENT AND TRUCK SIGNAL FLAG  
N.T.S.

**ASPHALT/BASE COURSE BORING DATA**

BORING LOCATION	AVG. THICKNESS OF ASPHALT PAVEMENT (IN.)	THICKNESS OF BASE ROCK (IN.)
TB*1	3.4	5.1
TB*2*	1.6	6.4
TB*3	3.8	8.3
TB*4	3.2	7.8
TB*5	4.2	3.8
TB*6*	1.7	6.3
TB*7*	1.0	21.0
TB*8	3.3	7.7

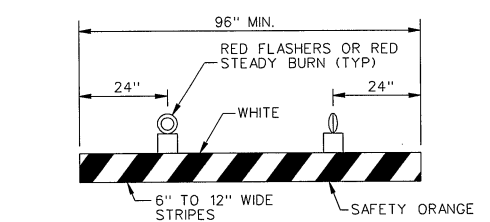
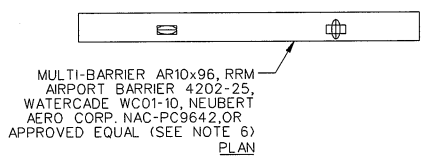
\*THESE BORINGS FALL OUTSIDE OF THE 60' PROPOSED USABLE WIDTH OF THE RUNWAY TO BE OVERLAIN. CARE SHOULD BE TAKEN WHEN OPERATING ON THESE THIN PAVEMENTS.



NOTES

- 1) WHEN A RUNWAY CLOSURE IS REQUIRED THE CONTRACTOR SHALL PLACE STANDARD YELLOW CLOSURE X MARKERS OF SPECIFIED DIMENSIONS OVER THE RUNWAY NUMERALS AT EACH END OF THE RUNWAY.
- 2) CONTRACTOR SHALL MAINTAIN YELLOW CLOSURE MARKERS AS LONG AS THEY ARE IN PLACE
- 3) COST OF FURNISHING, INSTALLING, MAINTAINING, RELOCATING AND REMOVING YELLOW MARKERS SHALL BE INCIDENTAL TO THE CONTRACT
- 4) YELLOW MARKERS SHALL BE PLACED OVER EXISTING RUNWAY NUMERALS ON BOTH ENDS; HOWEVER, WHEN WORK IS NECESSARY FOR THAT AREA, THE MARKERS SHALL BE RELOCATED OFF THE PAVEMENT AS SHOWN ON THE DETAIL. THIS RELOCATION IS TEMPORARY. THE CONTRACTOR SHALL RETURN THE MARKERS TO THE PREFERRED LOCATION AS SOON AS POSSIBLE FOLLOWING COMPLETION OF WORK IN THAT AREA.

CLOSED RUNWAY MARKER DETAIL  
N.T.S.



**BARRICADE NOTES:**

1. FLASHER OR STEADY BURN LIGHTS SHALL BE BATTERY OR SOLAR POWER OPERATED. LENS SHALL BE RED AND BE ABLE TO ROTATE 90°.
2. FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR PAINT.
3. BARRICADES TO BE PLACED WITH A MAXIMUM OF 20' SPACING CENTER TO CENTER ALONG OPERATIONAL PAVEMENT ADJACENT TO CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER. ALTERNATE FLASHER OR STEADY BURN LENSES SO THAT EVERY OTHER LENS IS ROTATED 90°.
4. FLASHER OR STEADY BURN LIGHTS SHALL BE SECURED TO THE BARRICADES, AS APPROVED BY THE RESIDENT ENGINEER.
5. BARRICADES SHALL BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF IT COMPONENTS, AND WEIGHTED TO AVOID BEING BLOWN OVER.
6. BARRICADES SHALL BE OF A COMMERCIAL DESIGN AND SHALL MEET CURRENT FAA REQUIREMENTS.

LOW PROFILE LIGHTED BARRICADE  
N.T.S.

**REVISIONS**

NUMBER	BY	DATE
1	BHH	4/26/13

0 1 2  
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). PLOT 1

**GIDEON**  
**MEMORIAL AIRPORT**  
**GIDEON, MISSOURI**

**BITUMINOUS OVERLAY OF RUNWAY 15-33 AND TAXIWAY PAVEMENT REHABILITATION**

STATE OF MISSOURI  
 BRIAN H. HUTSELL  
 PROFESSIONAL ENGINEER  
 NUMBER PE-2007062883  
 DATE: 4-26-13  
 BRIAN H. HUTSELL, P.E.  
 CIVIL ENGINEER

ONE MEMORIAL DRIVE, SUITE 500  
 ST. LOUIS, MO 63102  
 (314) 436-5500

**CMT**  
 CRAWFORD, MURPHY & TILLY, INC.  
 CONSULTING ENGINEERS  
 PROFESSIONAL ENGINEERING - 000631

FILE: 03\_CAP.dgn

DESIGN BY: TGH

DRAWN BY: TGH

CHECKED BY: BHH

APPROVED BY: BHH

DATE: APRIL 5, 2013

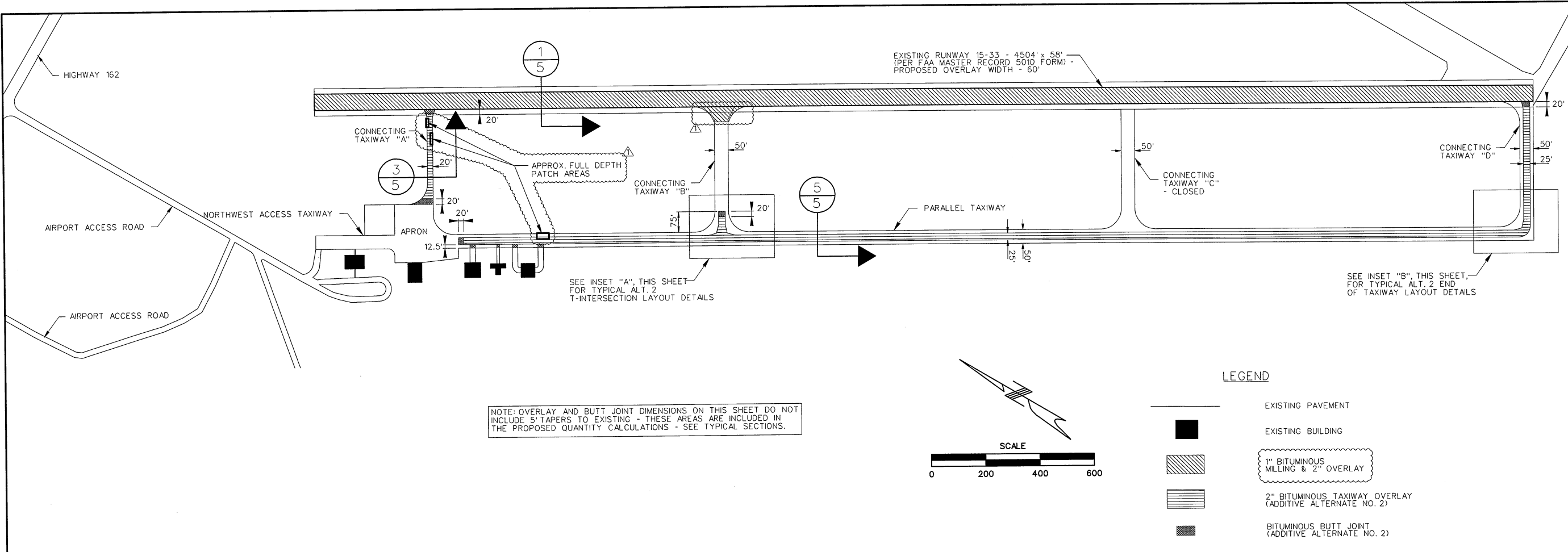
JOB No: 12409-02-00

**CONSTRUCTION ACTIVITY PLAN**

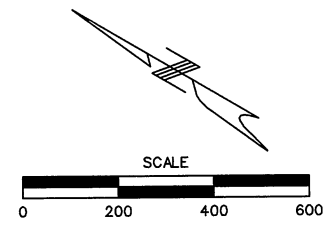
SHEET 3 OF 7 SHEETS

STATE PROJECT NO. AIR 126-073B-ModOT

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NOTE: OVERLAY AND BUTT JOINT DIMENSIONS ON THIS SHEET DO NOT INCLUDE 5' TAPERS TO EXISTING - THESE AREAS ARE INCLUDED IN THE PROPOSED QUANTITY CALCULATIONS - SEE TYPICAL SECTIONS.



**LEGEND**

	EXISTING PAVEMENT
	EXISTING BUILDING
	1" BITUMINOUS MILLING & 2" OVERLAY
	2" BITUMINOUS TAXIWAY OVERLAY (ADDITIVE ALTERNATE NO. 2)
	BITUMINOUS BUTT JOINT (ADDITIVE ALTERNATE NO. 2)

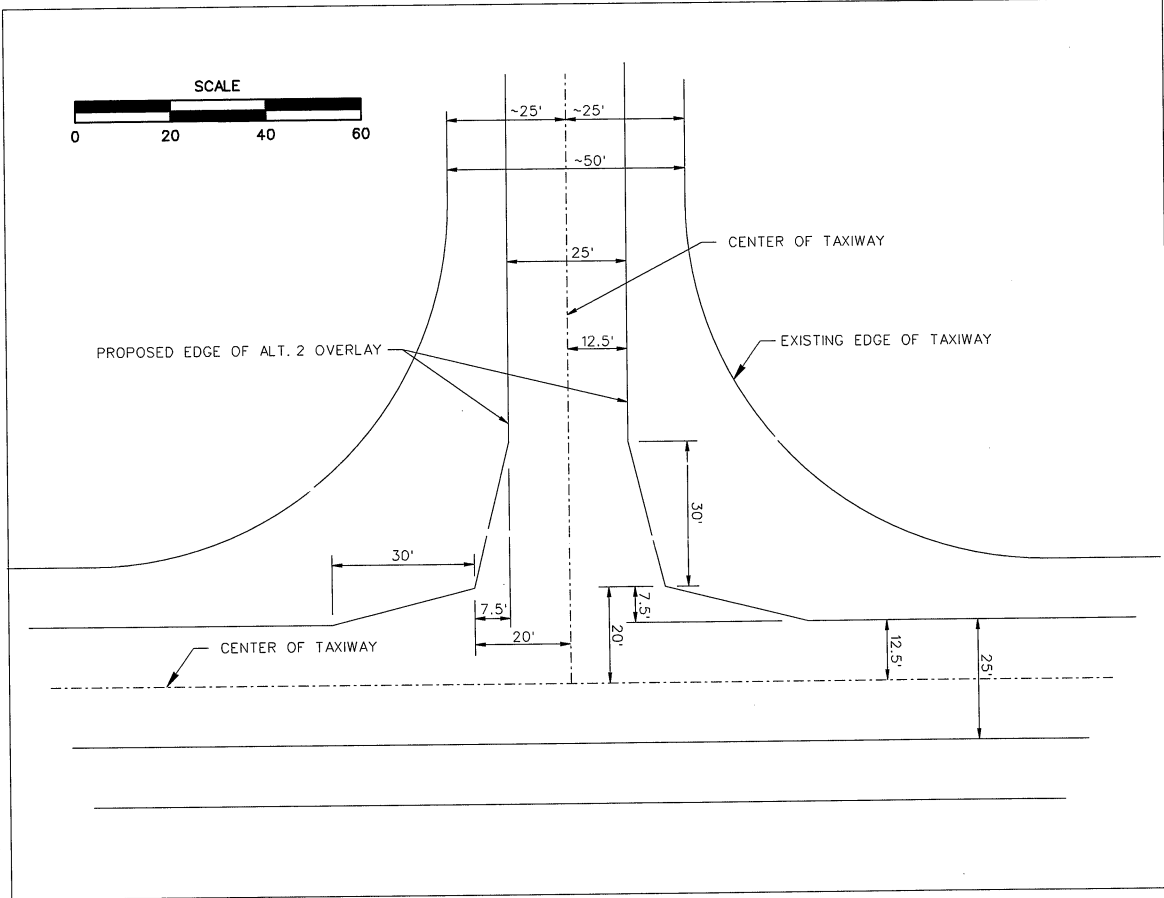
**REVISIONS**

NUMBER	BY	DATE
1	BHH	4/26/13

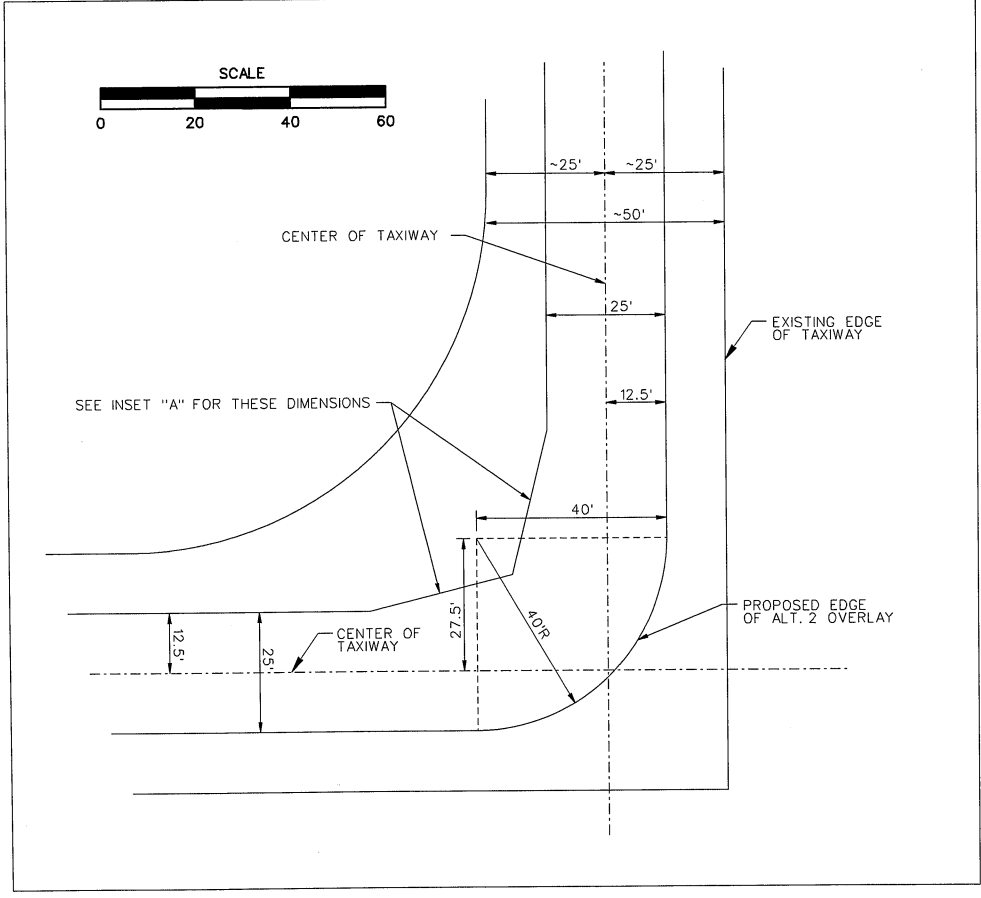
0 1 2  
THIS BAR IS EQUAL TO 2' AT FULL SCALE (34x22). PLOT 1

**GIDEON MEMORIAL AIRPORT**  
GIDEON, MISSOURI

**BITUMINOUS OVERLAY OF RUNWAY 15-33 AND TAXIWAY PAVEMENT REHABILITATION**



INSET "A" - TYPICAL ALT. 2 T-INTERSECTION LAYOUT



INSET "B" - TYPICAL ALT. 2 END OF TAXIWAY LAYOUT

STATE OF MISSOURI  
BRIAN H. HUTSELL  
NUMBER PE-2007002803  
PROFESSIONAL ENGINEER

DATE: 4-26-13  
BRIAN H. HUTSELL, P.E.  
CIVIL ENGINEER

ONE MEMORIAL DRIVE, SUITE 500  
ST. LOUIS, MO 63102  
(314) 436-5500

**CMT**  
CRAWFORD, MURPHY & TILLY, INC.  
CONSULTING ENGINEERS

PROFESSIONAL ENGINEERING - 000631

THE PROFESSIONAL ENGINEER'S SIGNATURE AND PERSONAL SEAL APPEAR HEREON. SEALS ARE THE PROPERTY OF THE ENGINEER AND ARE NOT TO BE REPRODUCED OR COPIED. THE ENGINEER ASSUMES RESPONSIBILITY FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT TO WHICH THIS SEAL APPLIES. THIS SEAL AND SIGNATURE ARE NOT VALID UNLESS THE ENGINEER IS CURRENTLY LICENSED IN THE STATE OF MISSOURI AND IS CURRENTLY LICENSED IN THE STATE OF MISSOURI. THIS SEAL AND SIGNATURE ARE NOT VALID UNLESS THE ENGINEER IS CURRENTLY LICENSED IN THE STATE OF MISSOURI AND IS CURRENTLY LICENSED IN THE STATE OF MISSOURI.

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DESIGN BY: TGH

DRAWN BY: TGH

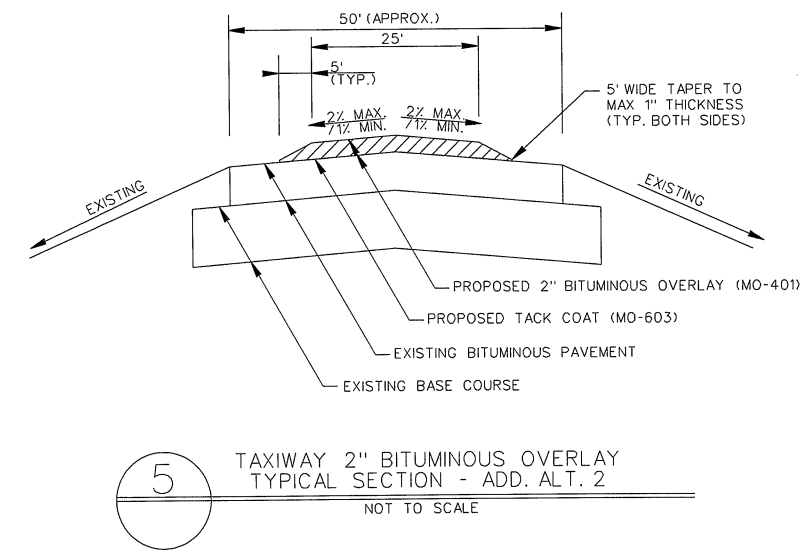
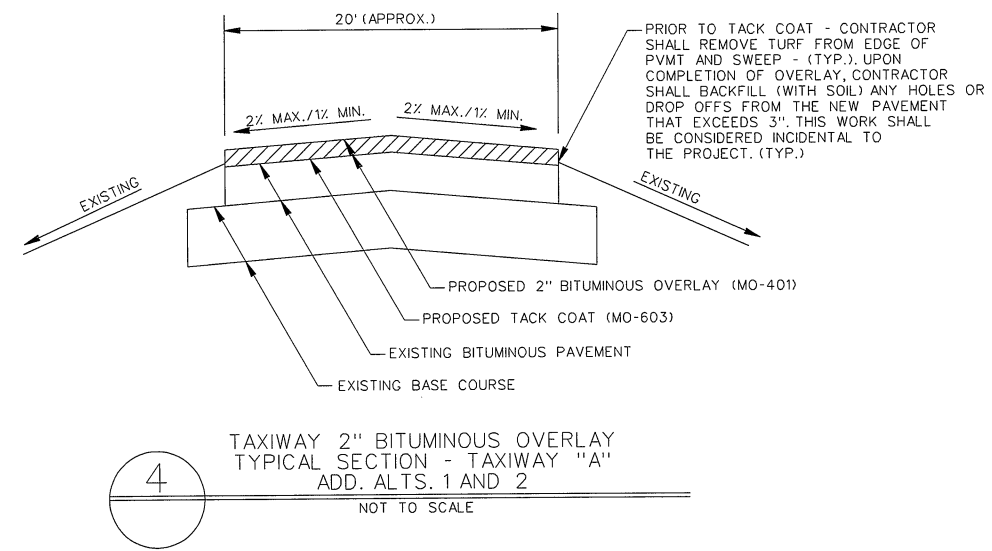
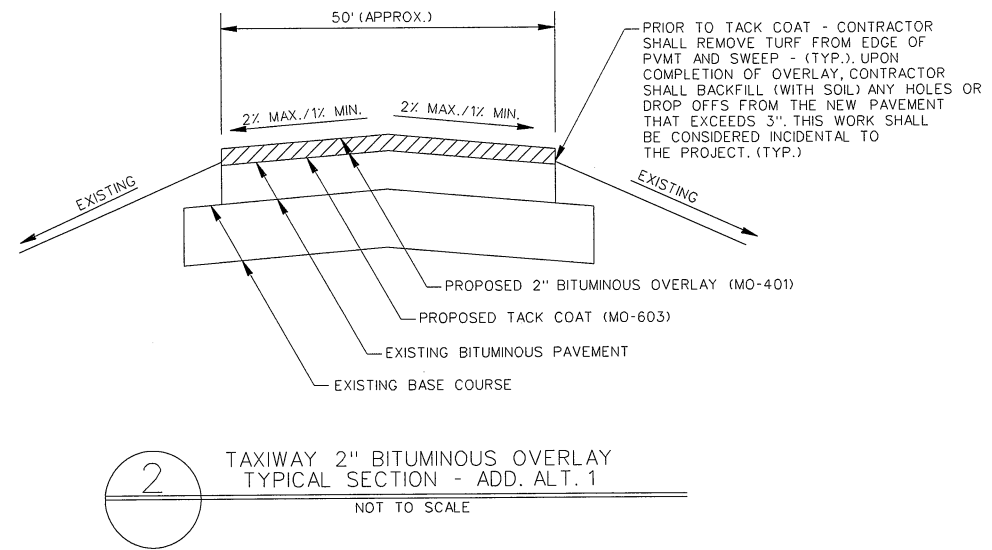
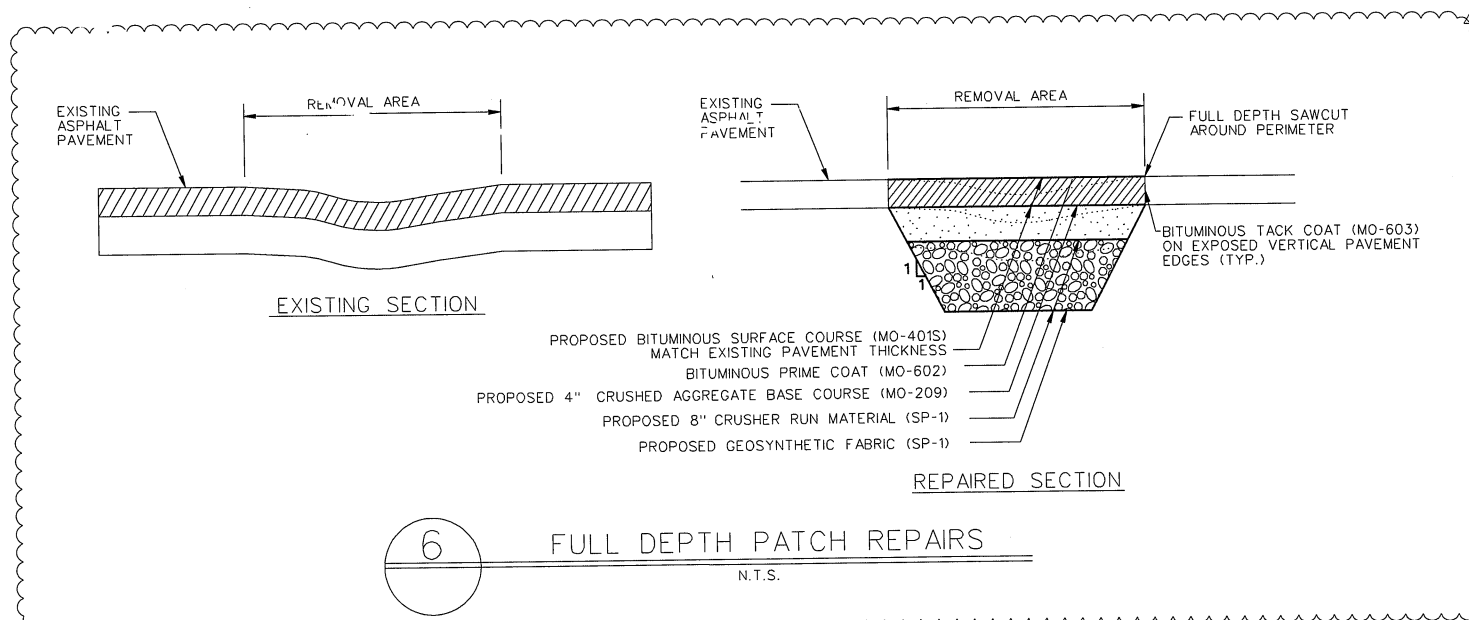
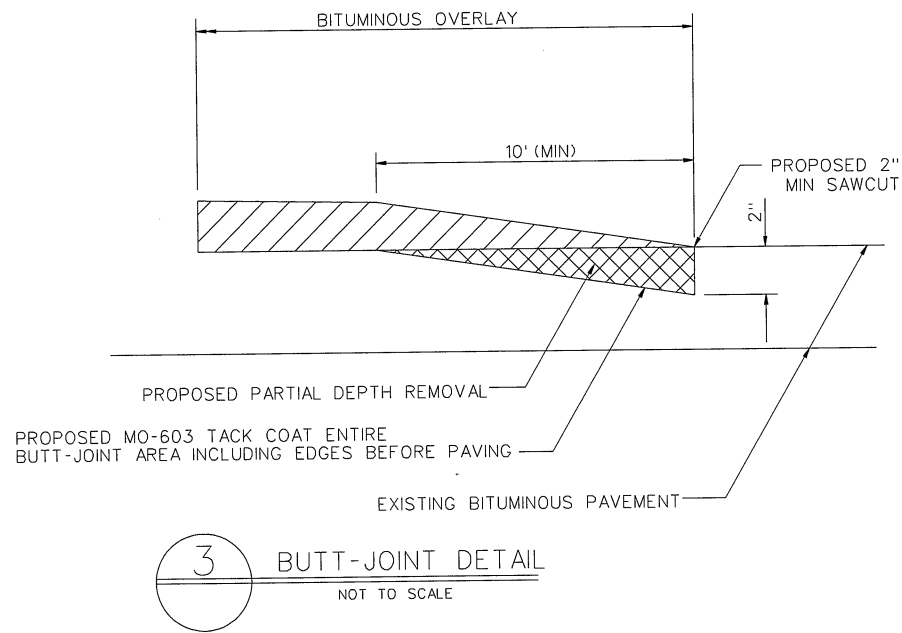
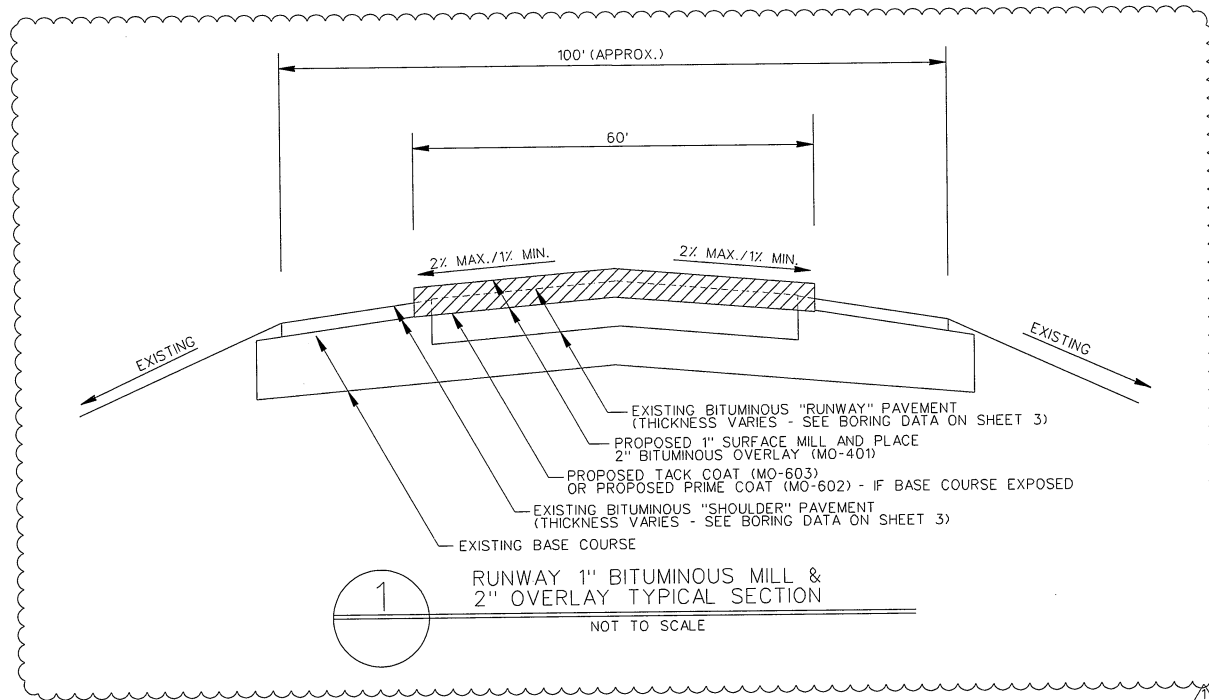
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APPROVED BY: BHH

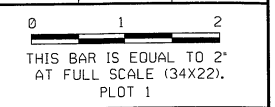
DATE: APRIL 5, 2013

JOB No: 12409-02-00

4/26/2013 K:\MoDOT Aviction\124090200\Gideon\Draw\Sheets\05\_TYPICAL\_SECTIONS.dgn



REVISIONS		
NUMBER	BY	DATE



GIDEON  
MEMORIAL AIRPORT  
GIDEON, MISSOURI

BITUMINOUS OVERLAY OF RUNWAY 15-33  
AND TAXIWAY PAVEMENT REHABILITATION

BRIAN H. HUTSELL  
PE-2007002800  
4-26-13  
DATE: BRIAN H. HUTSELL, P.E.  
CIVIL ENGINEER

ONE MEMORIAL DRIVE, SUITE 500  
ST. LOUIS, MISSOURI 63103-4350

**CMT**  
CRAWFORD, MURPHY & TILLY, INC.  
CONSULTING ENGINEERS  
PROFESSIONAL ENGINEERING - 000631

STATE PROJECT NO. AIR 126-073B-MoDOT

FILE: 05\_TYPICAL\_SECTIONS.dgn

DESIGN BY: TGH
DRAWN BY: TGH
CHECKED BY: BHH
APPROVED BY: BHH
DATE: APRIL 5, 2013
JOB No: 12409-02-00
TYPICAL SECTIONS
SHEET 5 OF 7 SHEETS

## **ACKNOWLEDGEMENT**

Each bidder shall acknowledge receipt of this **Addendum No. 1** of **BITUMINOUS MILL & OVERLAY OF RUNWAY 15-33; ADDITIVE ALTERNATE NO. 1 – BITUMINOUS OVERLAY OF PARALLEL TAXIWAY AND CONNECTING TAXIWAYS (EXISTING FOOTPRINT); ADDITIVE ALTERNATE NO. 2 – BITUMINOUS OVERLAY OF PARALLEL TAXIWAY AND CONNECTING TAXIWAYS (25' WIDTH)**, by his/her signature affixed hereto, and shall attach this Addendum to the original bid.

CERTIFICATION BY BIDDER

SIGNATURE \_\_\_\_\_

TITLE \_\_\_\_\_

COMPANY \_\_\_\_\_

DATE \_\_\_\_\_



# FAX TRANSMITTAL

To: Crawford, Murphy & Tilly, Inc

**Attention:** Brian Hutsell

Re: Addendum #1

Fax 314.436.0723

From:

(name)

---

(company)

---

Date:

---

To verify that all contractors are in receipt of this addendum, Contractors are asked to sign and date this acknowledgement sheet. The Contractor should fax or mail to Crawford, Murphy, & Tilly, Inc. at the number listed below by **April 29, 2013**.

Crawford, Murphy, & Tilly, Inc.  
One Memorial Drive, Suite 500  
Saint Louis, Missouri 63102

Fax: (314) 436-0723

Phone: (314) 436-5500

BY: CRAWFORD, MURPHY, & TILLY, INC.