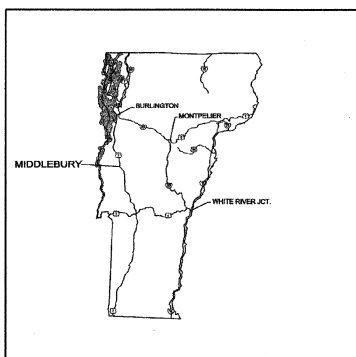
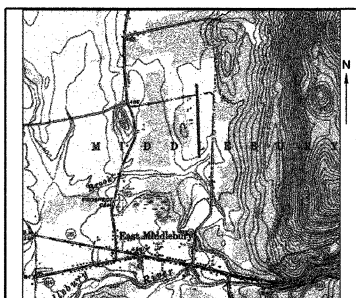




LOCATION MAP



VICINITY MAP

# PLANS FOR IMPROVEMENTS TO MIDDLEBURY STATE AIRPORT

TO INCLUDE:  
RECONSTRUCTION OF RUNWAY 1-19  
RECONSTRUCTION OF TAXIWAY A  
RECONSTRUCTION OF ACCESS ROAD

MIDDLEBURY, VERMONT

VAOT EA 043150

| RECORD PLANS                                                                                                                                                           |                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| CONTRACTOR:                                                                                                                                                            | FW WHITCOMB, CORP                         |
| RESIDENT ENGINEER:                                                                                                                                                     | DALE NORTON                               |
| CONSTRUCTION BEGAN:                                                                                                                                                    | JULY 12, 2000                             |
| CONSTRUCTION COMPLETE:                                                                                                                                                 | OCTOBER 30, 2001                          |
| RECORD PLANS BY:                                                                                                                                                       | K. NORTH & N. GARBICK                     |
| I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.                                                 |                                           |
| BY:                                                                                                                                                                    | <i>Robert P. Norton</i> RESIDENT ENGINEER |
| DATE:                                                                                                                                                                  | <i>24 May 2004</i>                        |
| NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives. |                                           |

|                                           |                        |
|-------------------------------------------|------------------------|
| DUFRESNE-HENRY, INC.                      |                        |
| SUBMITTED BY:                             | <i>Michael J. Chel</i> |
| SENIOR PROJECT MANAGER                    |                        |
| DATE:                                     | <i>5/10/00</i>         |
| VERMONT AGENCY OF TRANSPORTATION          |                        |
| APPROVED BY:                              | <i>David C. Allen</i>  |
| DIRECTOR, MAINTENANCE & AVIATION DIVISION |                        |
| DATE:                                     | <i>May 17, 2000</i>    |

| ITEM   | DESCRIPTION                                         | UNIT | QUANTITIES |
|--------|-----------------------------------------------------|------|------------|
| 203.15 | Common Excavation                                   | CY   | 10         |
| 203.16 | Solid Rock Excavation                               | CY   | 10         |
| 203.31 | Sand Borrow                                         | CY   | 10         |
| 204.30 | Granular Backfill for Structures                    | CY   | 10         |
| 404.65 | Emulsified Asphalt                                  | OWT  | 35         |
| 406.25 | Bituminous Concrete Pavement                        | TON  | 4305       |
| 406.50 | Price Adjustment Asphalt Cement (N.A.B.I.)          | LS   | 1          |
| 524.11 | Joint Sealer Hot Poured (MOD)                       | LF   | 150        |
| 631.17 | Testing Equipment-Bituminous                        | LS   | 1          |
| 635.10 | Mobilization                                        | LS   | 1          |
| 646.50 | Durable Letter of Symbol (MOD)(#1 Single)           | Each | 1          |
| 646.50 | Durable Letter of Symbol (MOD)(#1)                  | Each | 1          |
| 646.50 | Durable Letter of Symbol (MOD)(#9)                  | Each | 1          |
| 864.01 | P-208A Cold Mixed Recycled Base Course              | CY   | 5850       |
| 864.01 | P-208A Cold Mixed Recycled Base Course(MOD)         | CY   | 500        |
| 864.03 | P-620 Runway and Taxiway Painting(Durable White)    | SF   | 1400       |
| 864.03 | P-620 Runway and Taxiway Painting(Durable Yellow)   | SF   | 700        |
| 864.03 | P-620 Runway and Taxiway Painting(Temporary White)  | SF   | 1400       |
| 864.03 | P-620 Runway and Taxiway Painting(Temporary Yellow) | SF   | 700        |

QUANTITIES

| SHEET                    | TITLE                                            |
|--------------------------|--------------------------------------------------|
| 1                        | TITLE SHEET                                      |
| 2                        | CONSTRUCTION PHASING PLAN                        |
| 3                        | CONSTRUCTION NOTES                               |
| 4                        | PLAN & PROFILE STA. 20+00 TO STA. 31+00          |
| 5                        | PLAN & PROFILE STA. 31+00 TO STA. 41+00          |
| 6                        | PLAN & PROFILE STA. 41+00 TO STA. 45+03.77       |
| 7                        | PLAN & PROFILE STA. 100+00 TO STA. 107+08        |
| 8                        | TAXIWAY INTERSECTION GRADING PLANS               |
| 9                        | TYPICAL DETAILS                                  |
| 10                       | RUNWAY 1-19 MARKING PLAN                         |
| VTRANS STANDARD DRAWINGS |                                                  |
| AP-10                    | RUNWAY MARKING DETAILS 6-1-94                    |
| AP-11                    | TAXIWAY AND APRON MARKING DETAILS 6-1-94         |
| E-106                    | TRAFFIC CONTROL AND MISCELLANEOUS DETAILS 8-8-95 |
| T-2                      | TEMPORARY EROSION CONTROL DETAILS 6-1-94         |

INDEX OF SHEETS

MAY 2000

**DH**  
**Dufresne-Henry**

SOUTH BURLINGTON, VERMONT  
Tel. (802) 864-0223 • FAX (802) 864-0165  
www.dufresne-henry.com

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|                |                  | Sarasota        |
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| Manchester     |                  |                 |



## General notes

- This project shall be constructed in accordance with the contract plans and specifications referenced therein. The project is subject to inspection by representatives of the Vermont Agency of Transportation (VADT).
- The project is to be completed in conformance with the Construction Phasing Plans and notes, as contained in the plans, and shall be constructed in a timely manner in accordance with the Contractor's approved project schedule. The schedule shall provide for completion of the phases as shown on the plans and described in the contract specifications.
- The Contractor is expected to meet completion of critical portions of the project and open specified airfield segments to traffic by the stated times and to complete the entire project on time.
- Middlebury State Airport will be in operation during the construction of this project. Coordination of all work with the Airport Manager and the Resident Engineer is mandatory so as to minimize impacts on airport operations.
- Construction and maintenance operations by others may occur concurrently and at times in the vicinity of construction associated with this project. The Contractor shall coordinate his operations and cooperate with maintenance crews and other Contractors working on the airport.
- Access to the site — the Contractor's access points to the site are shown on the Construction Phasing Plan, Sheet 2.
- Haul routes — approximate location of haul routes on the airport site are shown on the phasing plans. It shall be the Contractor's responsibility to coordinate off-site haul routes (State or Town highways) with the appropriate owner who has jurisdiction over the affected route. On-site haul routes shall be maintained by the Contractor and shall be restored at the Contractor's expense to their original condition upon completion of being used as a haul route. The before and after condition of on-site haul routes shall be jointly inspected by the Contractor and the Engineer. Fencing, drainage, grading and other miscellaneous construction required to construct temporary haul routes or access points on the airport will be the Contractor's responsibility and shall be approved by the Engineer prior to commencing the work. Existing access roads to airport facilities shall remain open and maintained at all times.
- Contractor's staging areas — an area will be made available for Contractor's mobilization and storage. This area is shown on the Construction Phasing Plan, Sheet 2. The Contractor's staging area shall be graded, topsoiled, seeded, and mulched upon completion of use, at the Contractor's expense.
- Safety — the Contractor shall conduct his activities in a safe manner as specified in the section titled, "Safety Requirements During Construction" on the sheet.
- Protection of existing airport underground cables as shown on the plans is the responsibility of the Contractor. The location of these utilities must be verified by the Contractor. Repair of cables damaged due to Contractor's operations must be started immediately and continued until completed. All such repairs shall be in accordance with the specifications and shall be at the Contractor's expense. When FAA cables are damaged, repairs shall be done in accordance with FAA requirements and in the presence of an FAA representative. The FAA may elect to have the repair performed by others in which case the Contractor shall be responsible for paying the incurred cost of repairs.
- Existing airport lighting systems — interruption of existing airport lighting systems not included in this project shall not be permitted. All airport lighting circuits affected by this project shall be maintained by the Contractor during operational periods in accordance with the specifications and/or as directed by the Engineer.
- Construction limits — all Contractor vehicles and traffic (unless otherwise authorized) shall remain within the designated construction limits or haul routes construction. Storage and stockpiling limits are further defined in the section titled, "Safety Requirements During Construction" on this sheet.
- Portable floodlighting — the Contractor shall provide portable floodlighting when required for construction operations. The Contractor shall provide sufficient units so that all work areas are illuminated to a level of 5 horizontal foot candles. The lighting levels shall be calculated and measured in accordance with the current standards of the Illumination Engineering Society.
- The Contractor shall obtain all the permits and licenses required for the project work at his own expense.
- Existing topographic field surveys for this project area were performed by Little River Survey Co. in 1998.
- The horizontal control on this project is tied to the NAD 1983 and NAVD 1988.

## Safety Requirements During Construction

- (A) Federal Aviation Administration (FAA) Advisory Circulars (AC), Orders and Federal Aviation Regulations (FAR).
- The following publications contain definitions/descriptions of critical airport operating areas. The areas defined below pertain to airfield safety requirements and are referenced throughout the contract documents. Copies of these publications are available through the FAA or can be ordered by mail from:
- U.S. Department of Transportation  
Subsequent Distribution Office  
Airmore East Business Center  
3341 Q 75th Avenue  
Landover, Md 20785
- and can be reviewed at the Division of Maintenance and Aviation offices of the Vermont Agency of Transportation.
- AC 150/5370-2, "Operational Safety on Airports During Construction", current edition.
  - FAR Part 77 "Objects Affecting Navigable Airspace", current edition.
  - AC 150/5300-13, "Airport Design", current edition, establishes design, operational, and maintenance standards for airports. Standard terms used in the contract plans and specifications are defined below.
  - Obstacle Free Zone (OFZ) — a volume of space which is free of all fixed objects and clear of vehicles in the proximity of an airplane conducting an approach, missed approach, landing, takeoff, or departure. An OFZ typical section is shown on the general project layout plan.
  - Runway Protection Zone (RPZ): a trapezoidal area centered on the runway beginning at a point 200 feet beyond the end of the runway, useable for takeoff or landing.
  - Object Free Area (OFA): a two dimensional ground area surrounding runways, taxiways, and taxiways which is clear of objects except for objects whose location is fixed by function.

- (d) Safety Area — the surface adjacent to runways, taxiways and taxiways over which aircraft should, in dry weather, be able to cross at normal speeds without incurring significant damage. A safety area is graded, drained and compacted. It is free of any holes, trenches, bumps or other significant surface variations or objects other than those which are required because of their essential aeronautical function. The safety area requires the capability of supporting maintenance vehicles and aircraft rescue and fire fighting vehicles under normal (dry) conditions.
- (B) General Safety Requirements
- The Contractor shall acquaint his supervisors and employees with the airport activity and operations that are inherent to Middlebury State Airport and shall conduct his construction activities to conform to all routine and emergency air traffic requirements and guidelines for safety specified herein. The Contractor shall be responsible for providing all safety devices as required for the protection of his personnel.
  - Protection of all persons shall be provided throughout the progress of the work. The work shall proceed in such a manner as to provide safe conditions for all workers and Agency personnel. The sequence of operation shall be such that maximum protection is afforded to insure that personnel and workers in the work area are not subject to any dangerous conditions.
  - During performance of this contract, the airport runways, taxiways, and aircraft parking aprons shall remain in use by aircraft to the maximum extent possible. All aircraft traffic on these areas shall have priority over Contractor's traffic. The owner reserves the right to order the Contractor at any time to vacate any area necessary to maintain safe aircraft operations. Use of areas near the Contractor's work will be controlled to minimize disturbance to the Contractor's operation. The Contractor shall not allow employees, Subcontractors, suppliers, or any other unauthorized person to enter or remain in any airport area which would be hazardous to persons or to aircraft operations.
  - All work to be performed which is close to an active runway, taxiway or apron shall be performed when the runway, taxiway or apron is not in use. Such work shall be accomplished only with prior permission from the Engineer and Airport Manager. Requested closings shall be directed to the Engineer at least 48 hours in advance.

## Construction and Facilities Maintenance

- (A) the following are considered safety problems and/or hazards:
- Trenches, holes, or excavation on or adjacent to any open runway or in runway or taxiway safety areas.
  - Unmarked/unlighted holes or excavation in any apron, open taxiway, open taxiway, or related safety area.
  - Mounds or piles of earth, construction materials, temporary structures, or other objects in the vicinity of any open runway, taxiway, taxiway, or in any related safety, approach, or departure area.
  - Vehicles or equipment, whether operating or idle, on any open runway, taxiway, taxiway or in any related safety, approach, or departure area.
  - Vehicles, equipment, excavation, stockpiles, or other materials which could interfere with electronic signals from radio or electronic navigational aids (navaids).
  - Pavement drop-offs — lips (either permanent or temporary) which could cause damage to aircraft if crossed at normal operating speeds. The normal maximum drop-off or lip is 1-1/2 inches.
  - Unmarked utility, navaid, weather service, runway lighting, or other power or signal cables that could be damaged during construction.
  - Objects, whether or not marked or flagged, or activities anywhere on or in the vicinity of the airport which could be distracting, confusing, or alarming to pilots during aircraft operations.
  - Unflagged/unlighted low visibility items such as tall cranes, drills, and the like anywhere in the vicinity of active runways, or in any approach or departure area.
  - Misleading or malfunctioning obstruction lights or unlighted/unmarked obstructions in the approach to any active runway.
  - Water, snow, dirt, debris, or other transient accumulation which temporarily obscures pavement markings or pavement edges, or degrades visibility of runway/taxiway markings or lighting.
  - Inadequate or improper methods of marking, barricading, and lighting of temporarily closed portions of the airport operations area.
  - Trash or other materials with foreign object damage (fod) potential: whether on runways, taxiways, or aprons; or in related safety areas.
  - Inadequate barricading or other marking which is placed to separate construction or maintenance areas from open aircraft operating areas.
  - Failure to control unauthorized vehicle and human access to active aircraft operating areas.
  - Failure to maintain radio communication between construction/maintenance vehicles and Middlebury Unicom.
  - Construction/maintenance activities or materials which could hamper the response of Aircraft Rescue and Fire Fighting (ARFF) equipment from reaching all aircraft or any part of the runway/taxiway system, runway approach and departure areas and aircraft parking locations.
  - Bird attractants on airport such as: edibles (food scraps, etc.), miscellaneous trash, or ponded water.
  - The Contractor shall conduct activities so as not to violate any safety standards contained herein. The Contractor shall inspect all construction and storage areas as often as necessary and promptly take all steps necessary to prevent/remedy any unsafe or potentially unsafe conditions or activities discovered.
  - The VADT will be responsible for issuing appropriate Notice to Airmen (NOTAM) concerning construction activity on the airfield.

## Motivated vehicles

This project includes work within the Aircraft Operations Area (AOA). All permitted vehicles shall be equipped with a flashing amber (yellow) dome-type light, mounted on top of the vehicle and of such intensity to conform to local codes for maintenance and emergency vehicles. All vehicles operating within the airfield boundary shall be identified with a sign on each side of the vehicle bearing the Contractor's name in 12-inch minimum letter height.

Vehicles making only occasional visits to the job site are exempt from the identification requirements contained herein above provided that they are escorted into, through, and out of the airport area by a properly identified vehicle.

## Radio communications

Radio communications are required between the Contractor's representative and Middlebury Unicom. Radio contact is required at all times while the Contractor has personnel and equipment on the project site and while they are in an Active Air Operations Area (AOA) of the airport. Radios shall be furnished by the Contractor and shall be capable of transmitting and receiving at a frequency of 122.8 MHz. This frequency is to be utilized when crossing active facilities. Sufficient radios shall be on site and operating at all times so that instructions or communications may be dispatched to all crews and/or equipment working in an active AOA.

## Debris

Debris, waste, and loose material (including dust and dirt) capable of causing damage to aircraft landing gear or propellers, or being ingested in jet engines, shall not be allowed on active aircraft movement areas or adjacent grassed areas. Materials observed to be within these areas shall be removed immediately by the Contractor. The Contractor shall be required to have a sweeping machine and operator on site and ready at all times during construction activity. Where travel on or across runways, ramp areas, taxiways, or aircraft aprons is required, the Contractor shall provide adequate personnel and equipment to keep such surfaces clear of debris.

## Flagmen

In accordance with the specifications, the Contractor shall at his own expense, furnish flagmen as necessary to control his traffic (unless otherwise directed by the Engineer). All Contractor vehicles that are required to cross active runways, runway safety areas, taxiways and aprons shall do so under the direct control of a competent flagman who is in direct radio with the Middlebury Unicom/GTAF on the frequency of 122.8 MHz. All aircraft traffic on runways, taxiways, and aprons shall have priority over Contractor's traffic. At no time shall the Contractor's vehicles or personnel be allowed to enter or cross active runways or clear zones without proper authorization.

## Miscellaneous

- (A) Open flame, welding or torch cutting operations are prohibited unless adequate fire and safety precautions have been taken and the procedure previously approved by the Engineer.
- (B) Equipment and stockpiled material shall be constrained in a manner to prevent movement resulting from aircraft jet blast or wind conditions in excess of 10 knots.
- (C) The Contractor shall provide bucket type construction barricades with flashing yellow lights as shown on the drawings to delineate the work areas when closed to airport traffic. Open trenches, excavations and stockpiled material located in the AOA shall be prominently marked with orange flags and lighted by approved light units during hours of limited visibility and darkness.
- (D) All materials and equipment when not in use shall be placed in approved areas where they will not constitute a hazard to aircraft operations and not penetrate clearance surfaces. Equipment shall be parked at the staging area when not in use.
- (E) Maximum equipment height shall not exceed 15 feet unless prior approval is obtained from the Engineer.
- (F) Upon completion of any stage/phase of work, the Engineer will arrange a physical inspection of the area with airport operations personnel prior to opening any portion of a runway, ramp area or airport roadway that has been closed for work or used for a crossing point or haul route by the Contractor.
- (G) The Contractor shall provide the Engineer with a current list of all employees working on the airport. The list shall be maintained current by the Contractor and applies to all Subcontractors.
- (H) Except for emergencies, all contact with airport personnel shall be made through the Resident Engineer. For emergencies involving safety (injuries, fires, security breaches, etc.) the Contractor shall make direct contact with airport operations followed by notification to the Resident Engineer as soon as possible.
- (I) The Contractor shall provide the phone numbers of three personnel, including the project superintendent who may be contacted in an emergency. Personnel shall be on call 24 hours per day for maintaining airport hazard lighting and barricades.
- (J) In accordance with the specifications, federal wage rates shall be posted outside the site field office in a weatherproof enclosure.

## Utilities

- (A) Underground utilities: the locations of the underground utilities shown on the plans are considered to be only estimated locations. All utility locations shall be field verified by the Contractor prior to commencing construction. In the event any utility is damaged the Contractor shall be responsible for paying for incurred costs of repairs.
- (B) Utilities notification: at least two working days prior to commencing construction operations in an area which may involve underground utility facilities. The Contractor shall notify the resident Engineer, and the owner of each underground utility facility affected.
- (C) The following is a list of companies with possible utilities within the construction limits.

Digsafe 1-800-225-4977  
CVPS 1-800-649-2877

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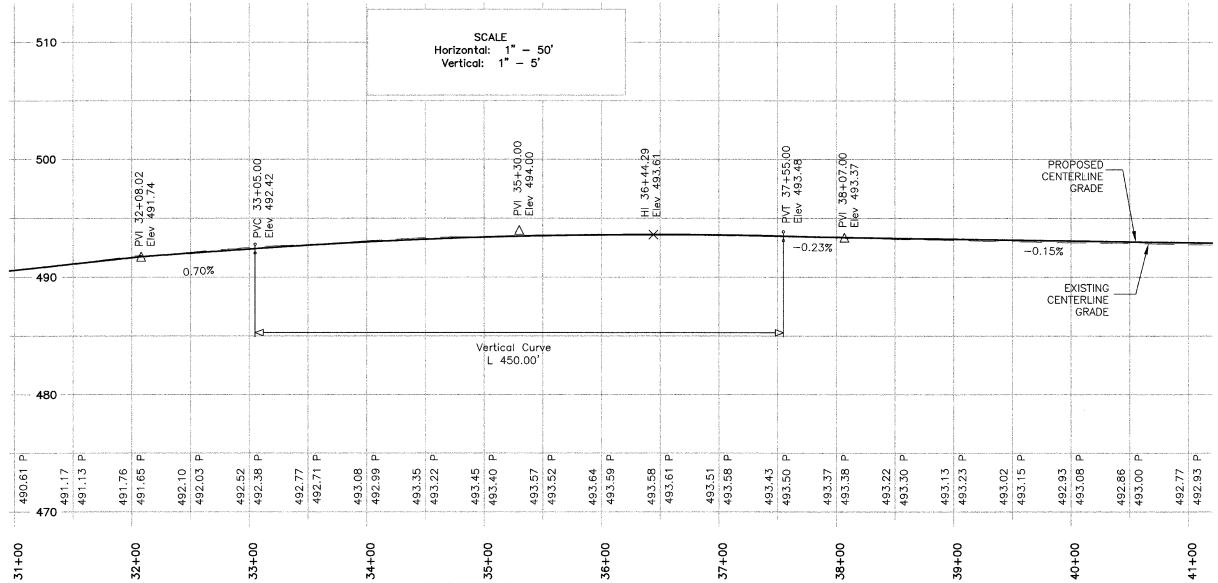
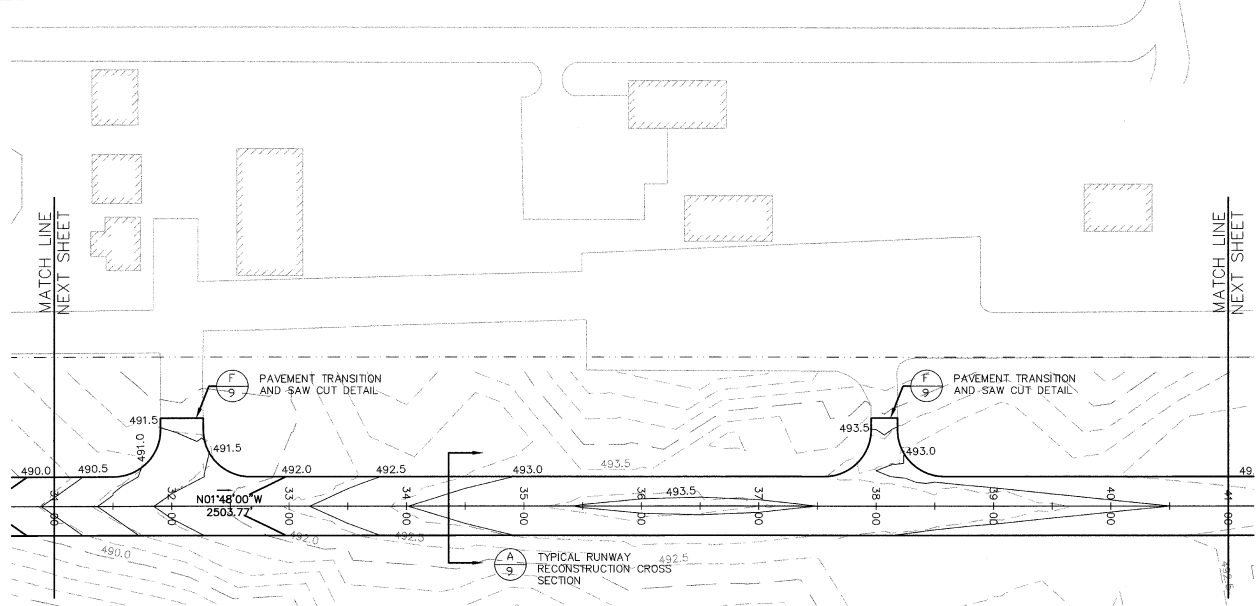
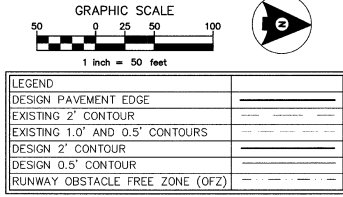
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MIDDLEBURY STATE AIRPORT  
1000000000  
CONSTRUCTION NOTES  
MIDDLEBURY



| Project No. | Rev. | Date     | By | Description |
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| 1000000000  | 1    | 04/01/99 |    |             |





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MIDDLEBURY STATE AIRPORT  
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PLAN & PROFILE  
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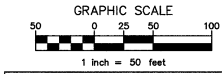
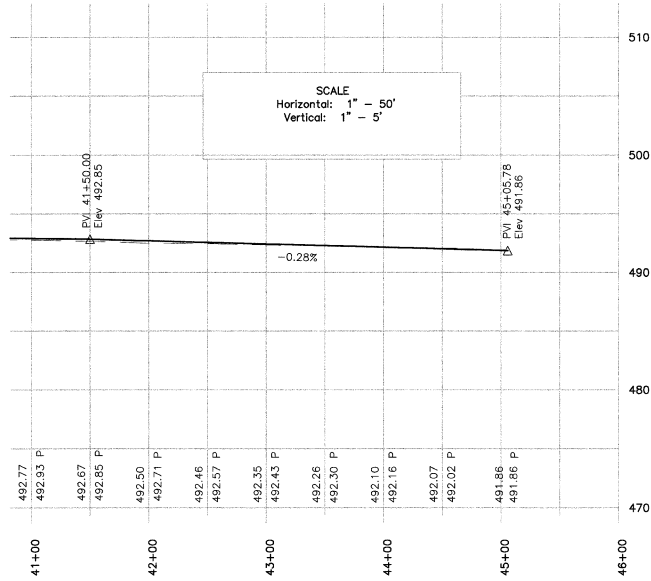
VERMONT  
 MIDDLEBURY



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| Project No.    | 81004051 |
| Proj. Manager  | M.C.     |
| Proj. Designer | G.R.     |
| Drawn By       | G.R.     |
| Checked By     | G.R.     |
| Scale          | 1"=50'   |
| Approved       | D.C.D.   |
| Date           | MAY 2009 |

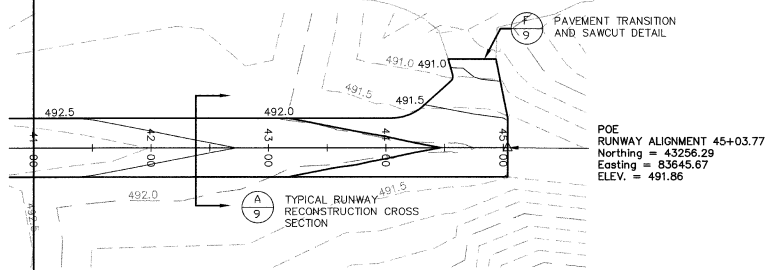
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Sheet 5 of 10  
 SHEETS



| LEGEND                          |           |
|---------------------------------|-----------|
| DESIGN PAVEMENT EDGE            | —————     |
| EXISTING 2' CONTOUR             | -----     |
| EXISTING 1.0' AND 0.5' CONTOURS | -----     |
| DESIGN 2' CONTOUR               | -----     |
| DESIGN 0.5' CONTOUR             | -----     |
| RUNWAY OBSTACLE FREE ZONE (OFZ) | - - - - - |

MATCH LINE  
NEXT SHEET



|                |           |
|----------------|-----------|
| Project No.    | 618046-21 |
| Proj. Manager  | M.C.      |
| Proj. Designer | CHP       |
| Drawn By       | CHP       |
| Checked By     | M.C.      |
| Approved       | DCP       |
| Date           | MAY 2000  |



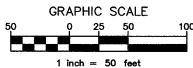
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PLAN & PROFILE  
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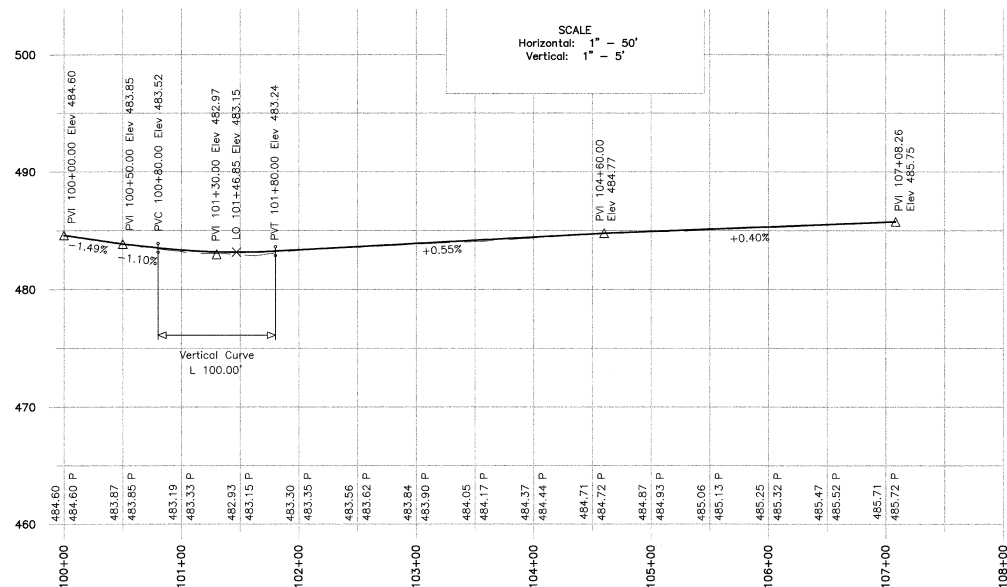
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| LEGEND                          |       |
| DESIGN PAVEMENT EDGE            | ————— |
| EXISTING 2' CONTOUR             | ————— |
| EXISTING 1.0' AND 0.5' CONTOURS | ————— |
| DESIGN 2' CONTOUR               | ————— |
| DESIGN 0.5' CONTOUR             | ————— |
| RUNWAY OBSTACLE FREE ZONE (OFZ) | ————— |

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MIDDLEBURY STATE AIRPORT  
VAOT EA 043150

PLAN & PROFILE

STATION 100+00 TO STATION 107+10.82

MIDDLEBURY VERMONT



|                |            |
|----------------|------------|
| Project No.    | 8160049.01 |
| Proj. Manager  | MLC        |
| Proj. Designer | GPR        |
| Drawn By       | GPR        |
| Checked By     | MLC        |
| Scale          | 1"=50'     |
| Approved       | DCD        |
| Date           | MAY 2000   |

