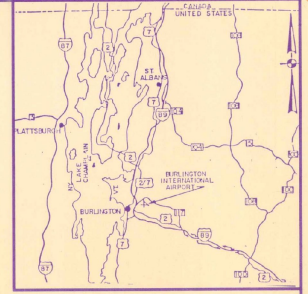


**VICINITY MAP**  
 FT. 2000 0 2000 4000 FT.  
 SCALE: 1"=2000'



**LOCATION MAP**  
 MILE 11 0 11 22 MILES  
 SCALE: 1"=11 MILES

# CITY OF BURLINGTON VERMONT

## BURLINGTON INTERNATIONAL AIRPORT CONSTRUCT OIL-WATER SEPARATOR AND DRAINAGE IMPROVEMENTS (APPROX. 3,700 L.F.) AIP PROJECT NO. 3-50-0005-14

APRIL, 1989

**MAJOR ITEM QUANTITIES**

ITEM NO.	DESCRIPTION	QUANTITY
5-1	36" Storm Drainage Line	3,700 LF
6-1	Oil-Water Separator System	Lump Sum
7-1	Reinforced Concrete Structure	150 CY



**INDEX TO DRAWINGS**

DRAWING NO.	DESCRIPTION	SHEET NO.
1	Title Sheet	1 of 13
2	General Plan	2 of 13
3	Plan & Profile	3 of 13
4	STA 11+00 to STA 32+00 Plan & Profile	4 of 13
5	STA 23+00 to STA 35+00 Plan & Profile	5 of 13
6	STA 35+00 to STA 47+00 Drainage Details	6 of 13
7	Oil-Water Separator Site Plan	7 of 13
8	Mechanical Details	8 of 13
9	Mechanical Details	9 of 13
10	Structural Details	10 of 13
11	Electrical Details	11 of 13
12	Boring Logs	12 of 13
13	Boring Logs	13 of 13

CITY OF BURLINGTON, VERMONT APPROVED _____ DIRECTOR OF AVIATION DATE _____	VERMONT AGENCY OF TRANSPORTATION APPROVED _____ SECRETARY OF TRANSPORTATION DATE _____ APPROVED _____ DIRECTOR OF ENGINEERING AND CONSTRUCTION DATE _____	DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION NEW ENGLAND REGION APPROVED _____ CHIEF OF AIRPORT ENGINEERING & SAFETY BRANCH DATE _____ APPROVAL SUBJECT TO COMMENTS AND RECOMMENDATIONS IN LETTERS DATE _____	DESIGNERS STATEMENT REGARDING COMPLIANCE These plans and specifications have been prepared to the best of my knowledge and belief, in accordance with current FAA Advisory Circulars as listed in AC 00-27, change 1, Advisory Circular checklist, dated 10/15/87. Known deviations from FAA standards were approved by FAA letters dated _____ and are discussed in the project engineering report and/or other official project documents. HOYLE, TANNER & ASSOCIATES, INC. BY: _____ DATE: _____ Registration No. _____	CITY OF BURLINGTON, VERMONT BURLINGTON INTERNATIONAL AIRPORT <h3 style="text-align:center">TITLE SHEET</h3> <table border="1" style="width:100%"> <tr> <td>REV.</td> <td>DESCRIPTION</td> <td>DR.</td> <td>CHKD.</td> <td>APPROV.</td> <td>DATE</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> HOyle, Tanner & Associates, Inc. Consulting Engineers Five Commerce Park North - Bedford, NH SCALES: AS SHOWN DATE: FEB., 1989 DES. BY: J.E.M., C.B.B., J.E.M. PROJECT NO. 37715 SHEET OF 13 <h1 style="text-align:center">1</h1>	REV.	DESCRIPTION	DR.	CHKD.	APPROV.	DATE						
REV.	DESCRIPTION	DR.	CHKD.	APPROV.	DATE											



ENGINEER/ARCHITECT

REV	DESCRIPTION	DATE

PROJECT NO  
37715

Hoyle, Tanner & Associates, Inc.  
Professional Engineer  
1001 State Street  
Burlington, Vermont 05401  
Tel: (802) 898-5355

DES. BY J.E.M. L.C.W.  
CHK. BY J.B.D.

SCALE 1" = 400'

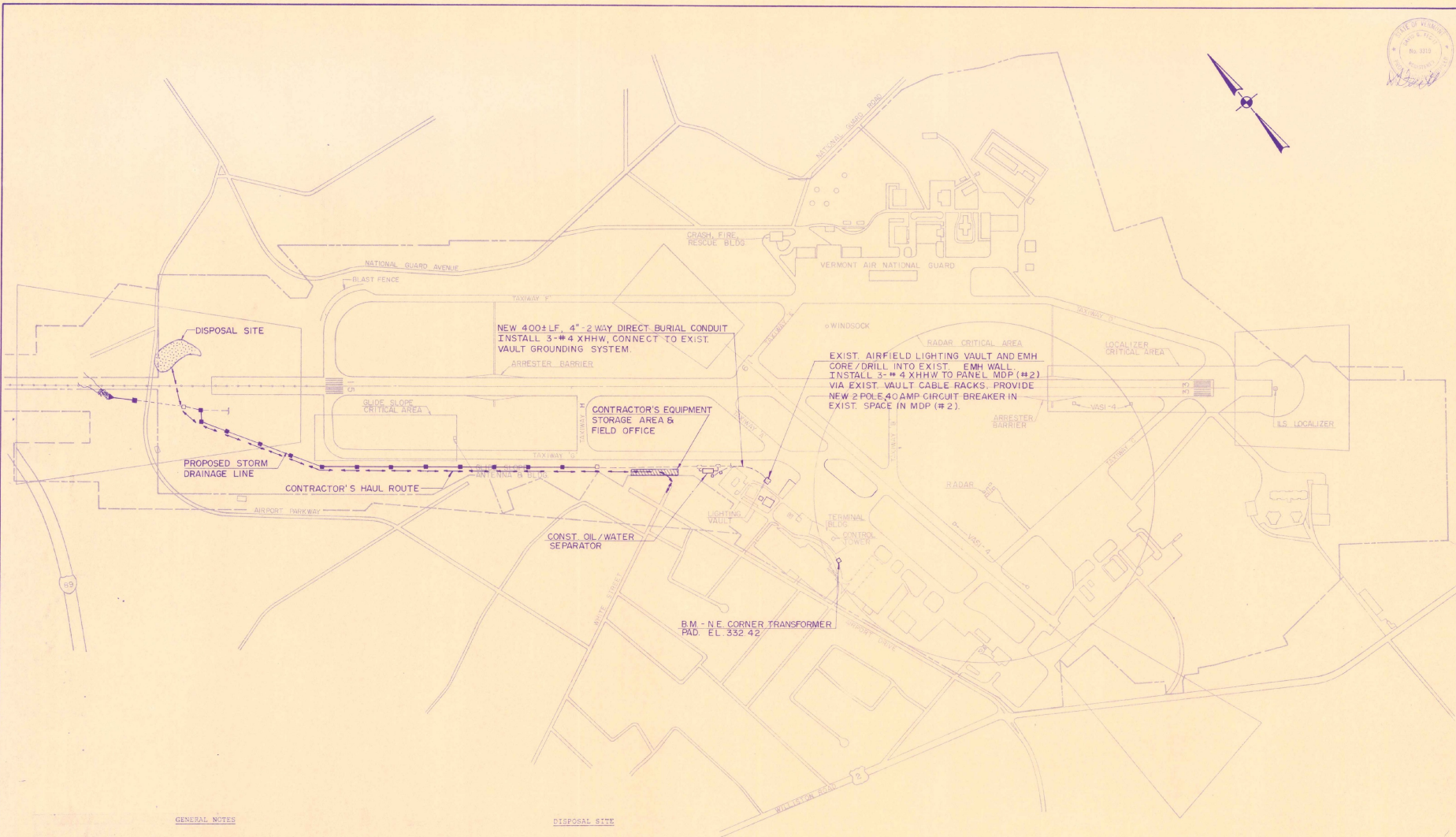
DATE FEB. 1989

BURLINGTON INTERNATIONAL AIRPORT  
SOUTH BURLINGTON, VERMONT  
DRAINAGE IMPROVEMENTS

GENERAL PLAN

DRAWING NO  
2

SHEET 2 OF 13

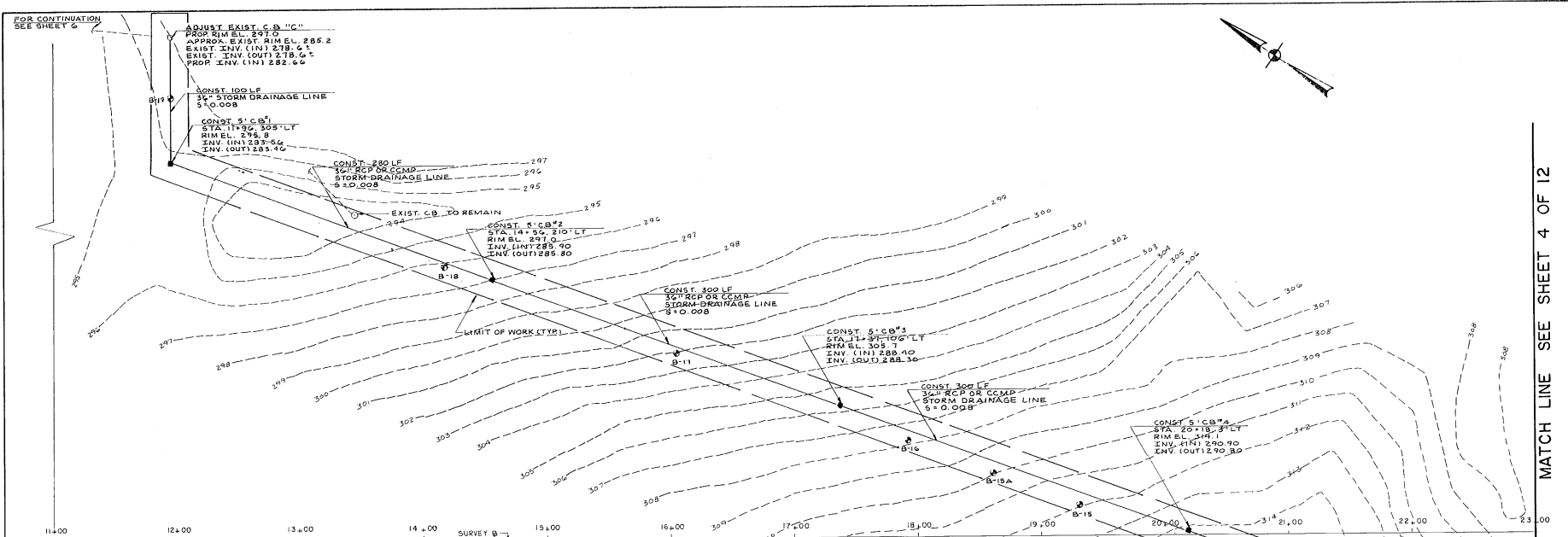


GENERAL NOTES

- The Contractor's attention is called to Section 1 of the Technical Specifications - "Summary of Work and Special Work Requirements".
- Areas for parking and staging are severely limited at Burlington International Airport. No employee parking will be allowed on the airport. The Contractor shall provide an adequate and safe parking area for his employees and provide transportation to and from the parking area to the work area.
- The limits of fill in the disposal sites shall be determined in the field by the Engineer.
- The near edge of pavement of the haul route inside the airport property line shall be located (20ft. from T/W "C" centerline. The haul route shall be 24 ft. wide.
- The Contractor shall be responsible for placing 3 foot grade stakes along the haul route inside the airport property line. The stakes shall be painted orange and spaced approximately 200' apart. The area between the stakes shall be permanently marked on the ground with a readily recognizable marking such as a football field chalk or similar material.

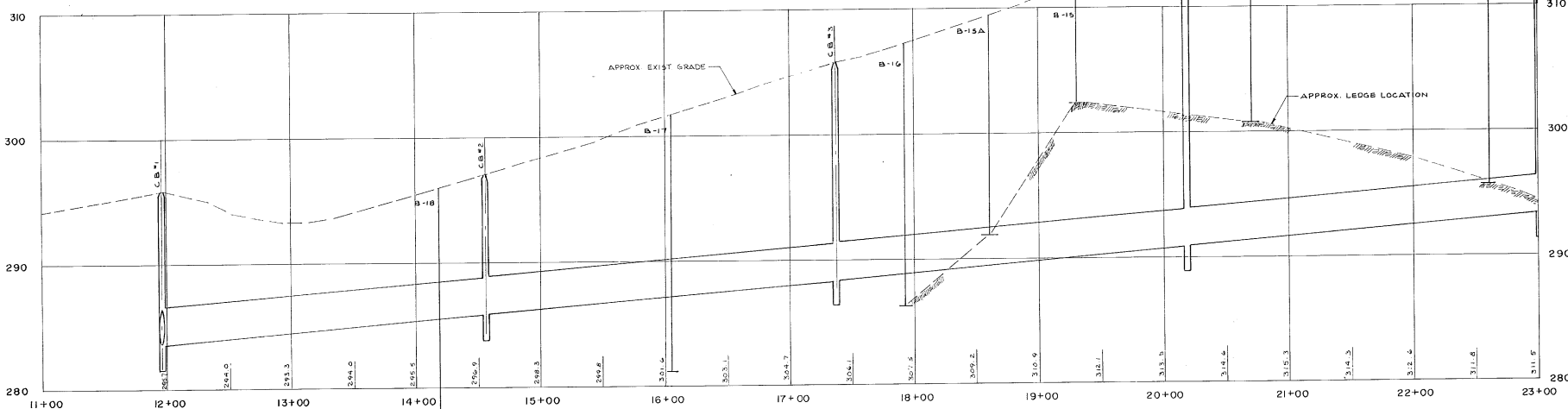
DISPOSAL SITE

- The Contractor shall strip the topsoil from the disposal site and stockpile it for use in restoration of the site.
- The Contractor shall place and compact surplus excavation material in accordance with Section 3 of the Technical Specifications.
- Upon completion of the disposal operations, the Contractor shall respread the topsoil and seed and mulch the disposal site in accordance with Section 4 of the Technical Specifications.
- No separate measurement or payment will be made for preparation or restoration of the disposal sites or for the disposal or surplus excavation materials, but rather, all stripping, stockpiling, hauling, placing, grading, compacting, respreading topsoil and seeding shall be considered incidental to the items that generate the material to be disposed of.



- LEGEND**
- EXISTING CONTOUR
  - - - PROPOSED CONTOUR
  - ⊕ B-20 BORING LOCATION
  - / ■ EXISTING/PROPOSED CATCH BASIN
  - / ● EXISTING/PROPOSED MANHOLE
  - EXISTING TAXIWAY EDGE LIGHT
  - ⊥ BORING DEPTH
  - ⊥ APPROX EXIST LEDGE LOCATION
  - ⊥ APPROX EXIST WATER LOCATION

**PLAN**  
SCALE 1"=40'



**STORM DRAINAGE LINE PROFILE**  
SCALE: HORIZ 1"=40'  
VERT 1"=4'

MATCH LINE SEE SHEET 4 OF 12

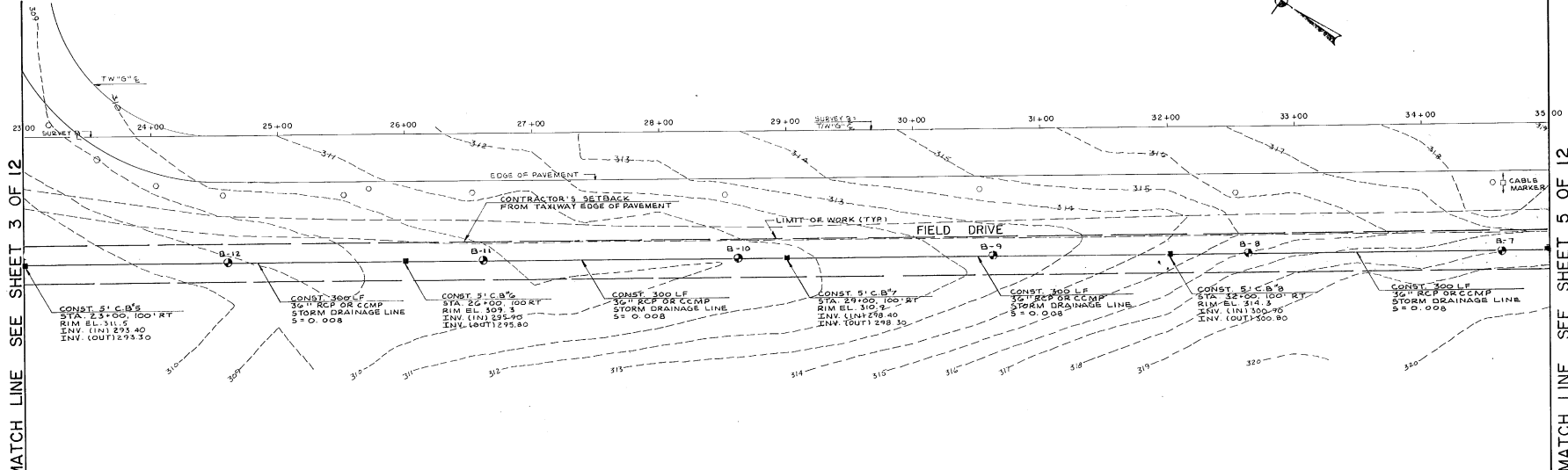
ENGINEER/ARCHITECT	
PROJECT NO. 37715	DATE FEB 1989
DESIGNED BY J.E.M.	CHECKED BY L.C.W.
DRAWN BY J.B.D.	SCALE AS SHOWN
<p><b>BURLINGTON INTERNATIONAL AIRPORT</b> SOUTH BURLINGTON, VERMONT</p> <p><b>PLAN &amp; PROFILE</b></p> <p>STA. 11+00 TO STA. 23+00</p>	
DRAWING NO. <b>3</b>	
SHEET 3 OF 13	

HOYLE, TAMMER & ASSOCIATES, INC. HTA  
555 COMMERCE PARK NORTH BURLINGTON, VERMONT 05405  
TEL: (802) 868-5555

DO NOT SCALE DRAWING

MATCH LINE SEE SHEET 3 OF 12

MATCH LINE SEE SHEET 5 OF 12



PLAN  
SCALE: 1" = 40'

- LEGEND**
- EXISTING CONTOUR
  - - - PROPOSED CONTOUR
  - B-20 BORING LOCATION
  - / ■ EXISTING/PROPOSED CATCH BASIN
  - / ● EXISTING/PROPOSED MANHOLE
  - EXISTING TAXIWAY EDGE LIGHT
  - ⊥ BORING DEPTH
  - ⊥ APPROX EXIST LEDGE LOCATION
  - ⊥ APPROX EXIST WATER LOCATION



STORM DRAINAGE LINE PROFILE  
SCALE: HORIZ. 1" = 40'  
VERT. 1" = 4'

ENGINEER/ARCHITECT

REV	DATE	BY	CHKD BY	DESCRIPTION

PROJECT NO  
37715

DESIGNED BY  
J.E.M.

DRAWN BY  
L.C.W.

CHECKED BY  
J.D.B.

DATE  
FEB. 1989

SCALE  
AS SHOWN

DO NOT SCALE DRAWING

BURLINGTON INTERNATIONAL AIRPORT  
SOUTH BURLINGTON, VERMONT

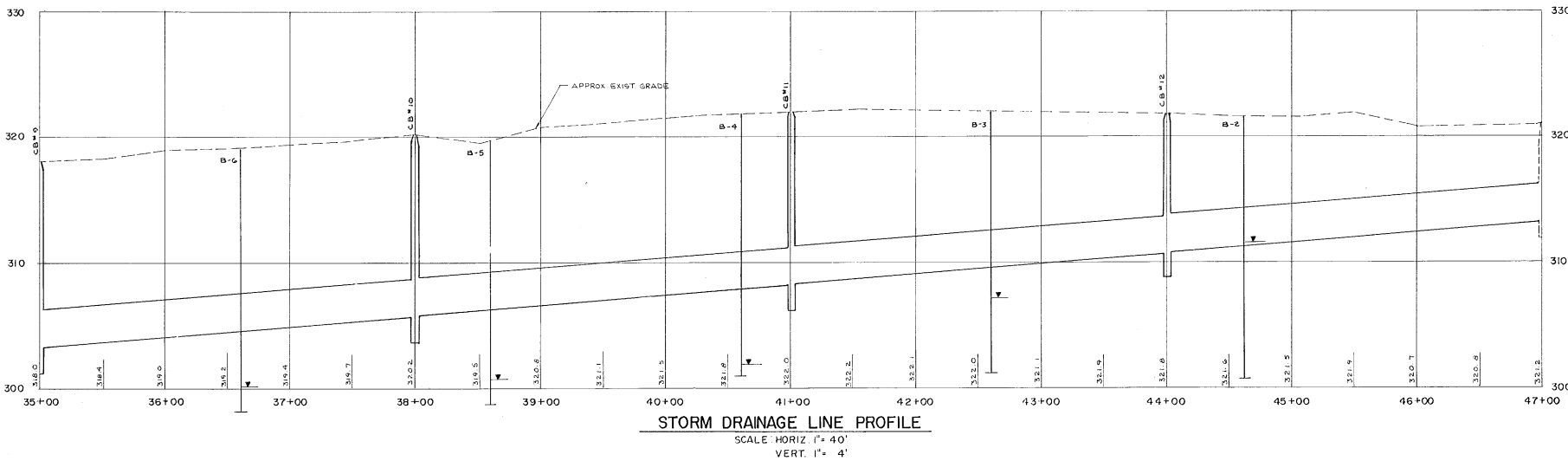
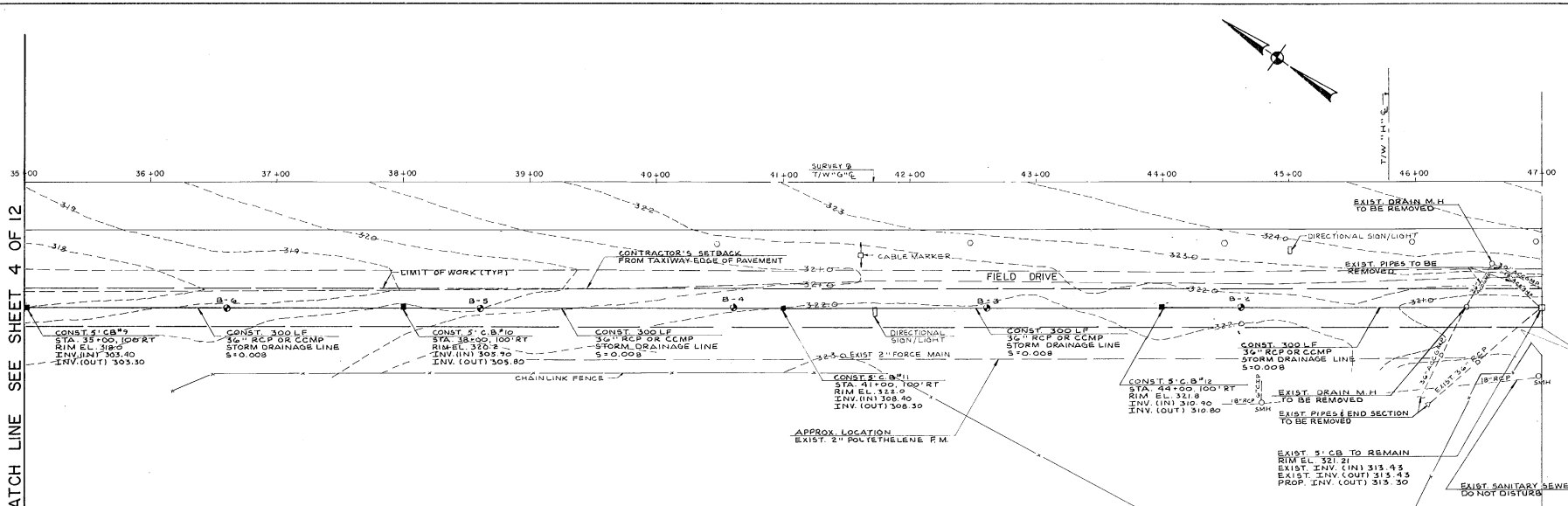
PRELIMINARY IMPROVEMENTS

PLAN 6. PROFILE

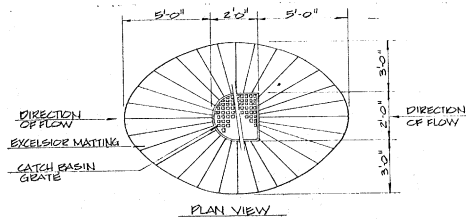
STA. 23+00 TO STA. 35+00

DRAWING NO.  
**4**

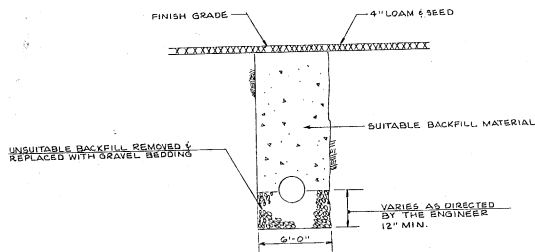
MATCH LINE SEE SHEET 4 OF 12



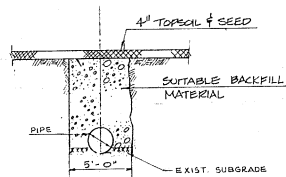
ENGINEER/ARCHITECT	
PROJECT NO.	37715
DES. BY	J.E.M.
DATE	FEB 1989
SCALE AS SHOWN	SCALE AS SHOWN
DR. BY	C.M.D. BY
L.C.W.	J.B.D.
<p>Hoyle, Tanner &amp; Associates, Inc.  <small>INCORPORATED</small>          100 State Street          Burlington, Vermont 05401          Phone: (802) 253-1100          Fax: (802) 253-1101</p>	
<p>BURLINGTON INTERNATIONAL AIRPORT          SOUTH BURLINGTON, VERMONT          DRAINAGE IMPROVEMENTS</p>	
<p>PLAN &amp; PROFILE          STA. 35+00 TO STA. 47+00</p>	
DRAWING NO.	5
SHEET 5 OF 13	



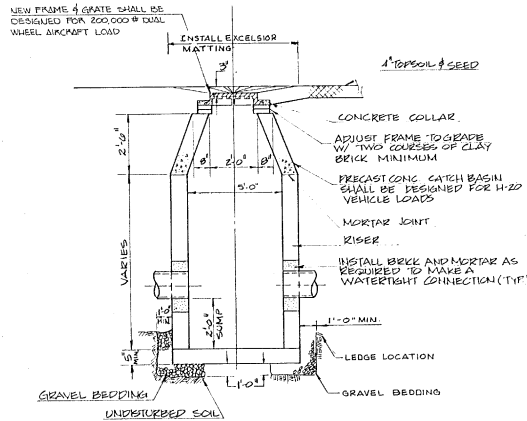
**CATCH BASIN GRADING DETAIL**  
NOT TO SCALE



**TYPICAL TRENCH IN UNSUITABLE MATERIAL DETAIL**  
NOT TO SCALE

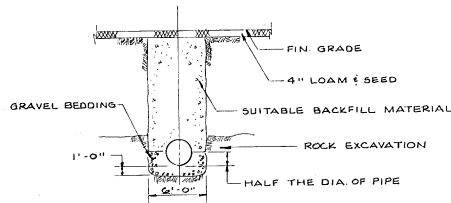


**TYPICAL TRENCH DETAIL**  
NOT TO SCALE

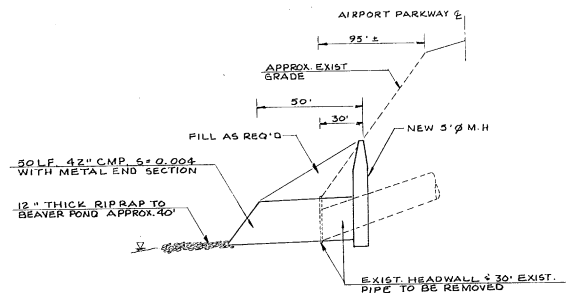


THE CONTRACTOR SHALL SUBMIT MANUFACTURER'S SHOP DRAWINGS INCLUDING REINFORCING DETAILS & CERTIFICATION OF LOADING CAPACITY, TO ENGINEER FOR REVIEW

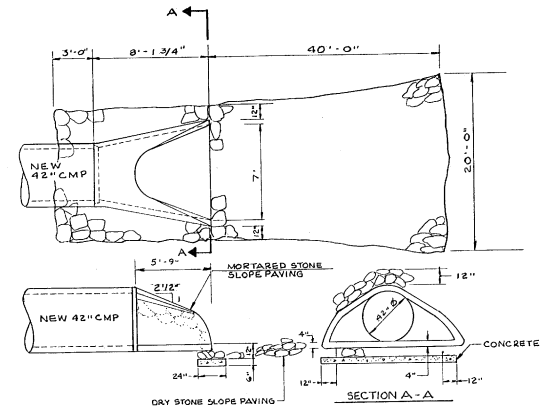
**TYPICAL CATCH BASIN DETAIL**  
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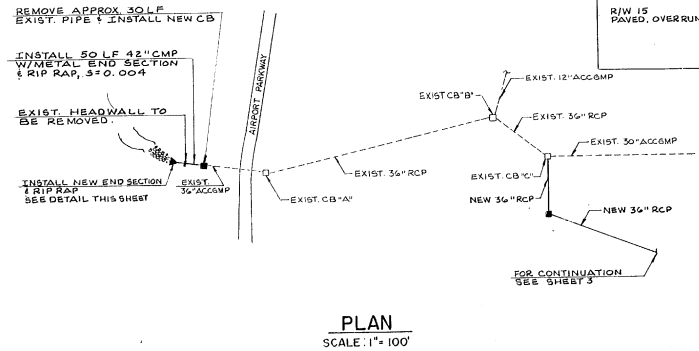
**TYPICAL ROCK TRENCH DETAIL**  
NOT TO SCALE



**SECTION AT EXISTING OUTLET**  
NOT TO SCALE



**METAL END SECTION**  
NOT TO SCALE



**PLAN**  
SCALE: 1"=100'



DR.	CHKD.	DATE
BY	BY	BY
REV.	DESCRIPTION	

PROJECT NO.  
37715

DES. BY  
J.E.M.

DR. BY  
L.C.W.

DATE  
FEB 1989

SCALE AS SHOWN

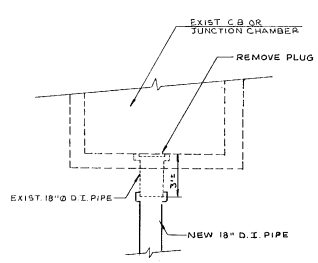
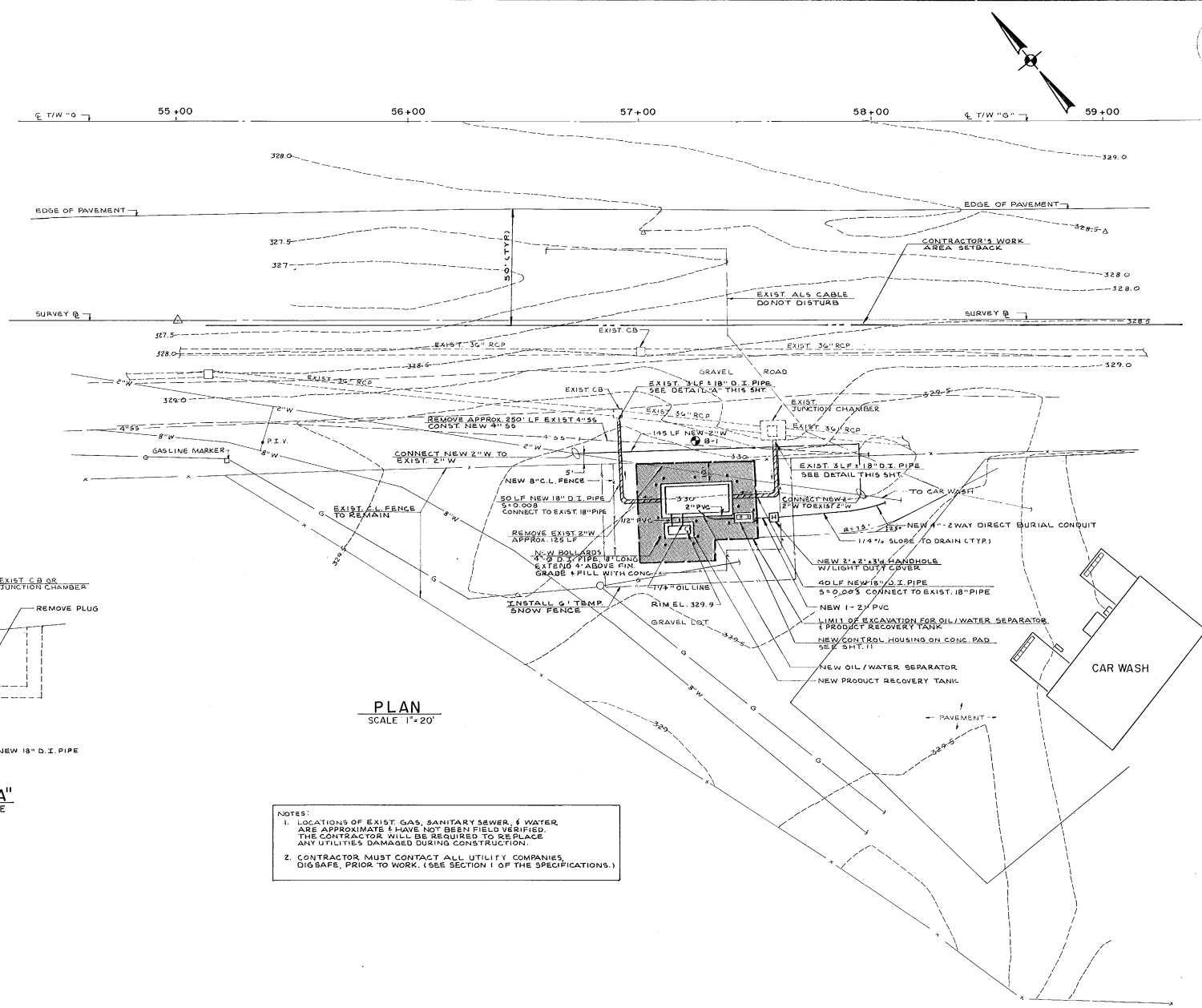
DO NOT SCALE DRAWING

**Hoyle Tanner & Associates, Inc.**  
Five Commerce Park North, Burlington, Vermont  
Tel: (802) 249-1333  
Fax: (802) 249-1334

**BURLINGTON INTERNATIONAL AIRPORT**  
SOUTH BURLINGTON, VERMONT

SOIL-WATER SEPARATOR & DRAINAGE IMPROVEMENTS

DRAWING NO.  
**6**  
SHEET 6 OF 13



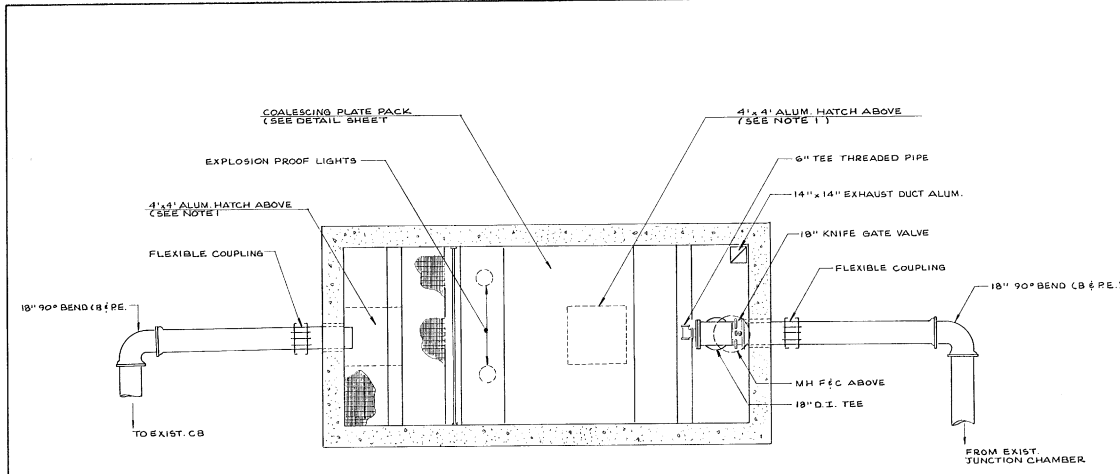
**DETAIL "A"**  
NOT TO SCALE

**PLAN**  
SCALE 1" = 20'

**NOTES:**

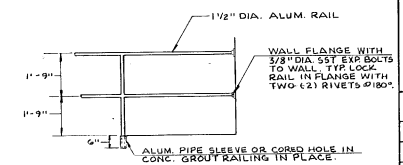
1. LOCATIONS OF EXIST. GAS, SANITARY SEWER, & WATER ARE APPROXIMATE & HAVE NOT BEEN FIELD VERIFIED. THE CONTRACTOR WILL BE REQUIRED TO REPLACE ANY UTILITIES DAMAGED DURING CONSTRUCTION.
2. CONTRACTOR MUST CONTACT ALL UTILITY COMPANIES DIGSAFE, PRIOR TO WORK. (SEE SECTION I OF THE SPECIFICATIONS.)

ENGINEER/ARCHITECT	
PROJECT NO. 37715	
DATE FEB. 1989	DES. BY K.J.F.
SCALE 1" = 20'	DR. BY L.C.W.
HOYLE, TANNER & ASSOCIATES, INC. <small>INCORPORATED IN VERMONT</small> 100 COMMENCEMENT BLVD. NORTH BURLINGTON, VERMONT 05401 TEL. (802) 249-1100 FAX. (802) 249-1101	
BURLINGTON INTERNATIONAL AIRPORT SOUTH BURLINGTON, VERMONT -COLLEEN E. BERGERO-	
DRAWING NO. <b>7</b> SHEET 7 OF 13	
SITE PLAN DO NOT SCALE DRAWING	

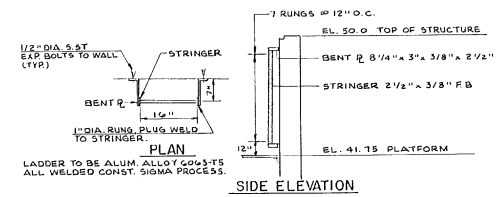


**PLAN**  
SCALE: 1/4" = 1'-0"

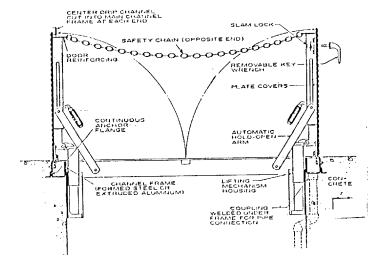
**NOTE:**  
1. PROVIDE AN INTRINSICALLY SAFE ELECTRICAL SWITCH RATED FOR 120 VOLTS & 10 AMPS. ONE (1) SWITCH SHALL BE MOUNTED ON EACH LEAF OF EACH ALUM. HATCH COVER. THE SWITCHES SHALL BE WIRED IN PARALLEL TO THE AUTO SIDE OF THE EXHAUST FAN. INSTALL HOA CONTROL SWITCH IN THE NEW CONTROL HOUSING SUCH THAT THE EXHAUST FAN WILL START AUTOMATICALLY WHEN ANY LEAF IS OPENED.



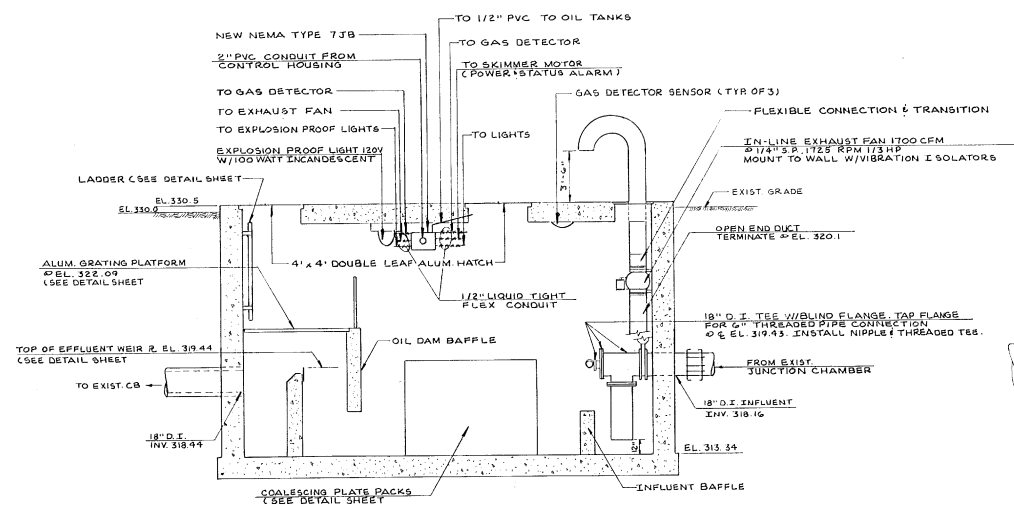
**RAILING DETAIL**  
NOT TO SCALE



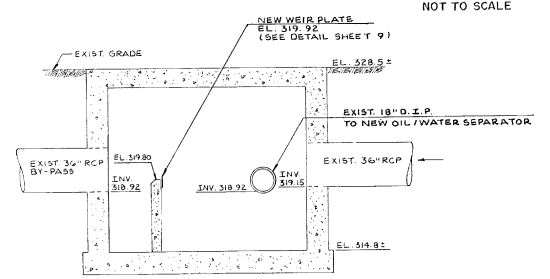
**LADDER DETAIL**  
NOT TO SCALE



**HATCH SECTION**  
NOT TO SCALE



**NEW OIL/WATER SEPARATOR**  
SCALE: 1/4" = 1'-0"



**EXIST. JUNCTION CHAMBER**  
SCALE: 1/4" = 1'-0"

ENGINEER/ARCHITECT

NO.	DATE	BY	REV.	DESCRIPTION

PROJECT NO. 37715

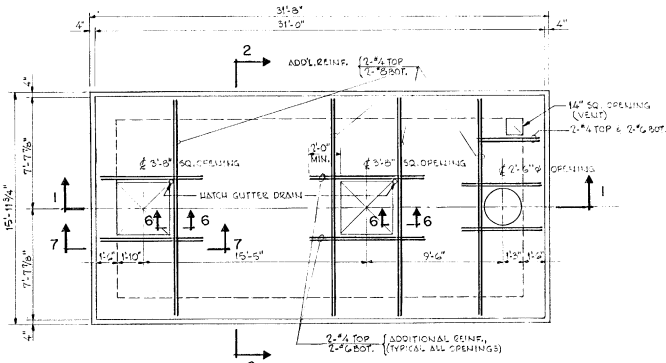
DESIGNED BY: J.B.D.  
CHECKED BY: L.C.W.  
DATE: FEB. 1989

Hoyle, Tanner & Associates, Inc. HIA  
INCORPORATED  
Professional Engineers  
Five Commerce Park North Bedford, NH 03112 • (603) 860-5555

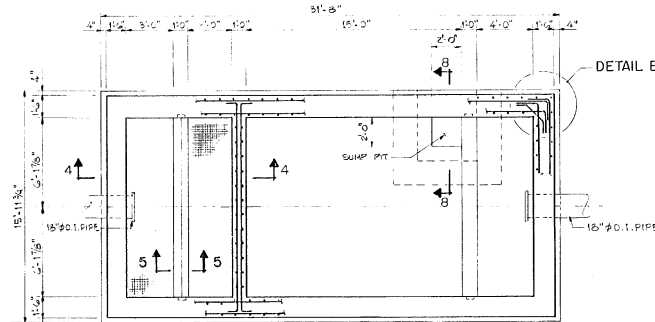
BURLINGTON INTERNATIONAL AIRPORT  
SOUTH BURLINGTON, VERMONT  
OIL/WATER SEPARATOR  
**MECHANICAL DETAILS**

DRAWING NO. 8  
SHEET 8 OF 13

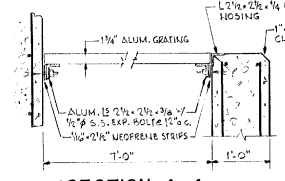




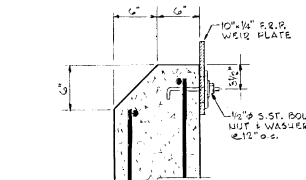
**PLAN**  
SCALE: 1/4" = 1'-0"



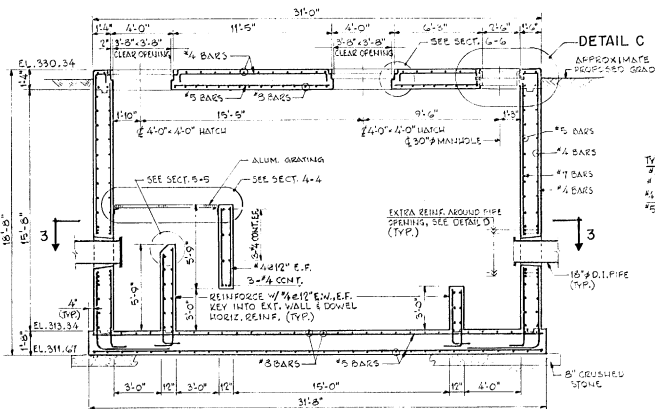
**SECTION 3-3**  
SCALE: 1/4" = 1'-0"



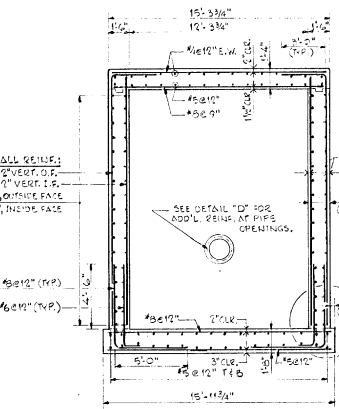
**SECTION 4-4**  
SCALE: 1" = 1'-0"



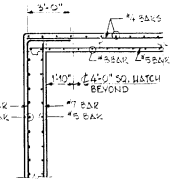
**SECTION 5-5**  
SCALE: 1/2" = 1'-0"



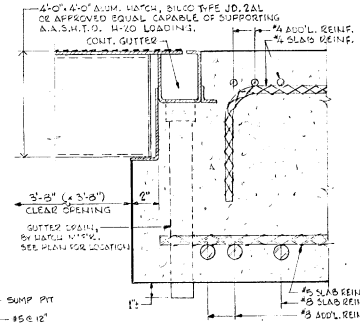
**SECTION 1-1**  
SCALE: 1/4" = 1'-0"



**SECTION 2-2**  
SCALE: 1/4" = 1'-0"

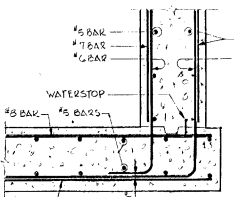


**SECTION 7-7**  
SCALE: 1/4" = 1'-0"

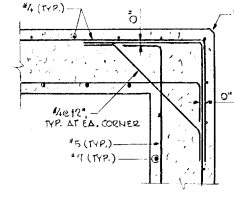


**SECTION 6-6**  
SCALE: 3/4" = 1'-0"

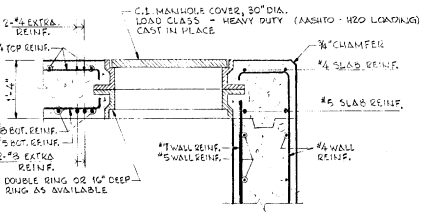
DESIGN MAX. WATER EL. 318.00



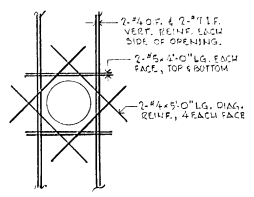
**DETAIL A**  
NOT TO SCALE



**DETAIL B**  
NOT TO SCALE



**DETAIL C**  
SCALE: 3/4" = 1'-0"



**DETAIL D**  
NOT TO SCALE

- GENERAL NOTES**
- ALL WORK SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE TECHNICAL SPECIFICATIONS FOR THIS PROJECT.
  - DESIGN LIVE LOAD FOR OIL / WATER SEPARATOR ROOF SLAB: AASHTO H20-44
  - THE DESIGN GROUNDWATER LEVEL IS AT EL. 318.00, WHICH IS INDICATED IN BORINGS TAKEN IN SEPTEMBER, 1988. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN THE GROUNDWATER LEVEL LOWERED A MINIMUM OF 2 FEET BELOW THE BOTTOM OF THE EXCAVATION UNTIL COMPLETION OF BACKFILL OPERATIONS.
  - ALL CONCRETE SHALL BE PLACED IN THE DRY. ALL CONCRETE SLABS SHALL BE PLACED ON UNFROZEN GROUND.
  - ALL CONCRETE SHALL DEVELOP A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 P.S.I.
  - ALL REINFORCING STEEL SHALL BE HEW DEFORMED BARS CONFORMING TO THE REQUIREMENTS OF ASTM A615, GRADE 60.

**LEGEND**

O.P. = OUTSIDE FACE  
I.F. = INSIDE FACE  
E.P. = EACH FACE  
E.W. = EACH WAY



PROJECT NO.	DATE	DESCRIPTION
37715		

PROJECT NO.	DATE	DESCRIPTION
37715		

**Hoyle, Tanner & Associates, Inc.**  
Professional Engineer  
First Commerce Park North, Bedford NH 03112 (603) 448-1535

**BURLINGTON INTERNATIONAL AIRPORT**  
SOUTH BURLINGTON, VERMONT  
DRAINAGE / SEWERAGE

DRAWING NO.  
**10**  
SHEET 10 OF 13







Transportation  
Phase III  
#090303-01



INITIALS

Hanger 4975 <sup>DONE</sup>

0005-14  
OIL-WATER SEPERATOR  
1989

**LYLE, TANNER & ASSOCIATES, INC.**