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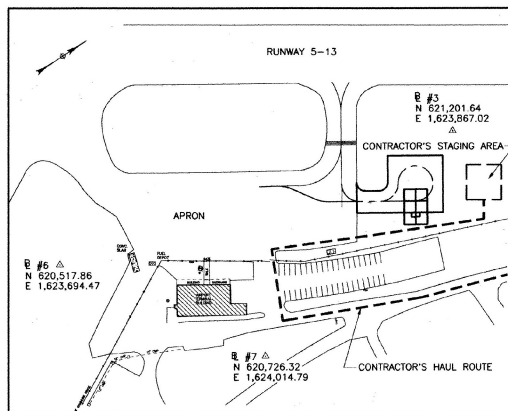
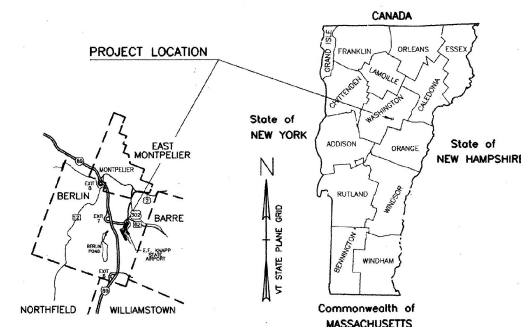
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STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT TOWN OF BERLIN COUNTY OF WASHINGTON E.F. KNAPP STATE AIRPORT JET A AND AVGAS FUELING SYSTEM A.I.R. 04-3087

INSTALLATION OF AN AVIATION FUEL SYSTEM, DISMANTLING THE EXISTING
FUEL SYSTEM, DRAINAGE, PAVING & PAVEMENT MARKINGS.



SITE LOCATION MAP

RECORD PLANS

CONTRACTOR: E.E. PACKARD MONTPELIER, VT.
RESIDENT ENGINEER: RICHARD COMI
CONSTRUCTION BEGAN: April 14, 1997
CONSTRUCTION COMPLETED: Oct. 21, 1997
RECORD PLANS BY: Charles LaBr

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET
OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY: W.H. For P. Cont. RESIDENT ENGINEER
DATE: 3-13-03

NOTE: Any further information concerning final quantities, amounts or other
details relative to this project may be found on microfilm in Central Files.

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING
CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY
ADMINISTRATION OR THE CHIEF ENGINEER.
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE
WITH THESE PLANS AND THE STANDARD SPECIFICATIONS
FOR CONSTRUCTION DATED 1990, AS APPROVED BY THE
FEDERAL HIGHWAY ADMINISTRATION ON MARCH 6, 1990
FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT
REVISIONS AND SUCH REVISED SPECIFICATIONS AND
SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE
PLANS.

DATUM
VERTICAL _____
HORIZONTAL _____



APRIL 1993



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**CLOUGH, HARBOUR
& ASSOCIATES**

ENGINEERS, SURVEYORS & PLANNERS
111 WINNERS CIRCLE ALBANY, NEW YORK 12205

VERMONT AGENCY OF TRANSPORTATION
APPROVED: W.D. Sullivan
DATE: JUNE 6, 1994

C.H.A. Project No. 2872
Date: APRIL 1993



SHEET 1 of 13

P.E. No. 6861

NOTES:

1. BASE MAPPING PREPARED BY LITTLE RIVER SURVEY FROM APRIL 1992 AND JULY 1992 FIELD SURVEYS.
2. NORTH REFERENCE AND GRID SYSTEM ARE BASED ON NAD 83.
3. CONTOURS AND BENCHMARKS ARE BASED ON NVD 29.
4. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE. OTHERS ARE SHOWN FROM RECORD DATA. THEIR LOCATION MAY DIFFER FROM THAT SHOWN AND OTHERS MAY EXIST.
5. BACKFILL EXCAVATION FROM TANK REMOVED WITH MATERIAL MEETING THE REQUIREMENTS OF VAOT 703.04A GRANULAR BORROW BACKFILL SHALL BE PLACED IN LIFTS OF 6" OR LESS AND IT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 203 OF VAOT STANDARD SPECIFICATIONS 1990 EDITION, REGARDLESS TO PROVIDE POSITIVE DRAINAGE. DISTURBED AREA TO BE RESTORED IN KIND. EXISTING SYSTEM SHALL NOT BE REMOVED UNTIL NEW FUEL SYSTEM IS OPERATIONAL AND APPROVED BY THE ENGINEER.
6. THE CONTRACTOR'S ATTENTION IS CALLED TO SECTION 01015 OF THE SPECIFICATIONS AND FAA ADVISORY CIRCULAR AC NO. 150/5370-2C FOR REQUIREMENTS ON SAFETY CONSIDERATIONS WHEN WORKING NEAR THE RUNWAYS, TAXIWAYS, AND APRONS.
7. THE CONTRACTOR WILL BE PROVIDED ACCESS TO THE SITE BY THE AIRPORT MANAGER WITH WHOM THE CONTRACTOR SHALL FULLY COOPERATE.
8. THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE WORK AREA SHOWN ON THE PLANS AND USE ONLY THE HAUL ROUTE SPECIFIED. SPECIAL RESTRICTIONS APPLY IN AREAS WITHIN THE RUNWAY SAFETY AREAS. NO WORK SHALL PROCEED WITHOUT THE APPROVAL OF THE ENGINEER AND NOTIFICATION OF AIRPORT GROUND PERSONNEL.
9. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
10. ALL DEBRIS DEPOSITED ON ANY ACTIVE PORTION OF A RUNWAY, TAXIWAY, OR APRON SHALL BE REMOVED CONTINUOUSLY DURING THE COURSE OF WORK.
11. THE CONTRACTOR AND HIS EMPLOYEES SHALL REMAIN ATTENTIVE TO AIR TRAFFIC WHEN TRAVELING ON ANY ACTIVE PORTION OF A RUNWAY, TAXIWAY, OR APRON. NO PERSON SHALL VENTURE TO ENTER AN ACTIVE AREA WHILE IT IS VISIBLY IN USE BY AIRCRAFT OR SHALL BE IN USE BY AN APPROACHING AIRCRAFT.
12. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISIONS OF O.S.H.A. REGULATIONS AND CONSTRUCTION.
13. DURING NON-WORKING HOURS, THE CONTRACTOR SHALL PARK HIS EQUIPMENT IN THE STAGING AREA DESIGNATED IN THE PLANS. CONTRACTOR'S EMPLOYEES SHALL PARK IN THE DESIGNATED STAGING AREA.
14. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF IDENTIFYING SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES WHICH MAY INTERFERE WITH WORK SCHEDULED UNDER THIS PROJECT. HE SHALL PROCEED WITH GREAT CARE IN EXECUTING ANY WORK AND SHALL IMMEDIATELY REPLACE OR REPAIR ANY DAMAGED ITEMS TO THE SATISFACTION OF THE ENGINEER, AT NO COST TO THE AGENCY.

LEGEND

- BORING
- UNDERDRAIN AND FLUSHING BASIN
SEE DETAIL [8] AND [9]
- TYPE III BARRICADE
- 6" SOLID YELLOW TAXIWAY STRIPING
- PCC PAVEMENT

REMOVE 10,000 GALLON UNDERGROUND FIBERGLASS STORAGE TANK, PIPING, COVER SLAB, AND RELATED APPURTENANCES SEE NOTE 3, ITEM 529.15 (MOD)

REMOVE EXISTING FUEL DISPENSER, PUMP, CABINET, PIPING, SLAB, FILTERS, AND APPURTENANCES SEE NOTE 3, ITEM 529.15 (MOD)

PROJECT BENCHMARK
N.W. CORNER MON.
EL. 1125.97

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DATE

W.D. 1/93
T.J.B. P.M. 1/93
Checked By: M.L.C. 4/93
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111 WATKINS CIRCLE - ALBANY, NEW YORK - 12205
P.O. BOX 5269 518-453-4500

E.F. KNAPP
STATE AIRPORT

TOWN OF BERLIN

JET A AND AVGAS FUELING SYSTEM
A.I.R. 04-3087

SITE PLAN

SCALE: 1" = 20'

DATE: APRIL 1993

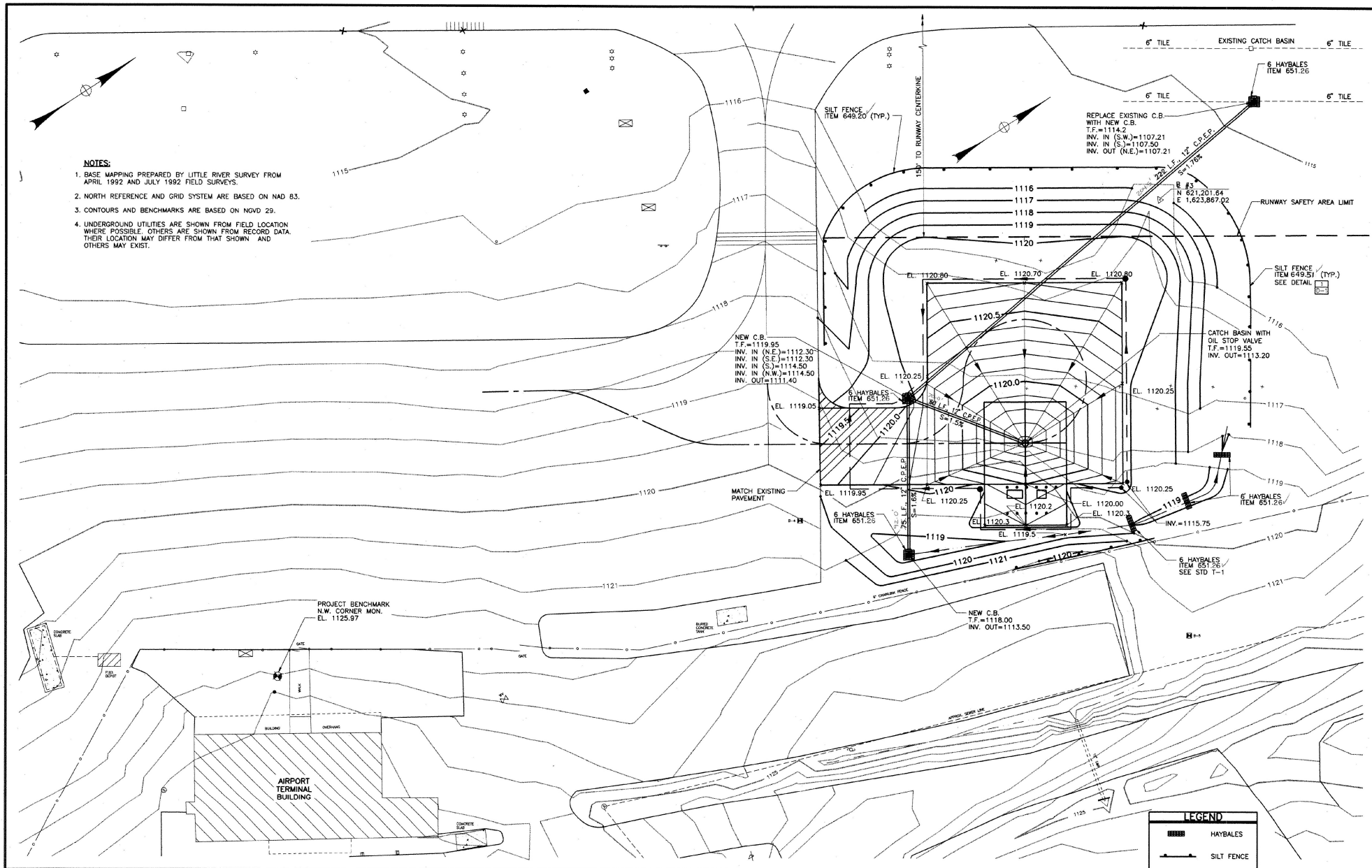
Drawing No.

S-1

SHEET 2 OF 13

NOTES:

1. BASE MAPPING PREPARED BY LITTLE RIVER SURVEY FROM APRIL 1992 AND JULY 1992 FIELD SURVEYS.
2. NORTH REFERENCE AND GRID SYSTEM ARE BASED ON NAD 83.
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LEGEND	
	HAYBALES
	SILT FENCE

Revisions:	Drawn By:	App'd. By:	Date:

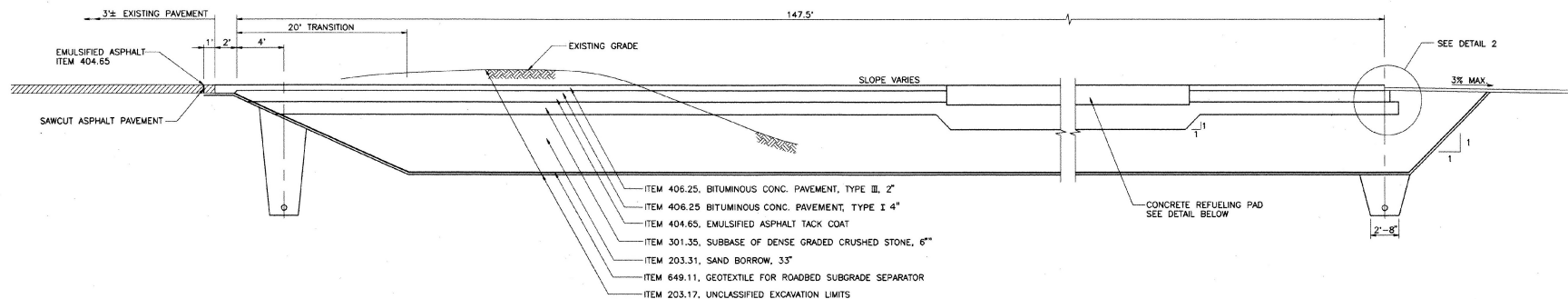
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Drawn By:	1/93
Checked By:	4/93
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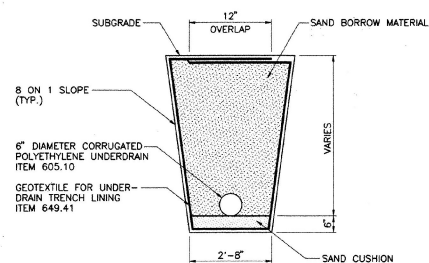
E.F. KNAPP
STATE AIRPORT
TOWN OF BERLIN

JET A AND AVGAS FUELING SYSTEM A.I.R. 04-3087		Drawing No.
GRADING AND DRAINAGE PLAN		S-2
SCALE: 1" = 20'	DATE: APRIL 1993	SHEET 3 OF 13

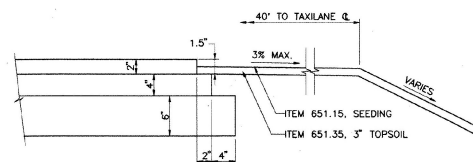


AIRCRAFT REFUELING APRON

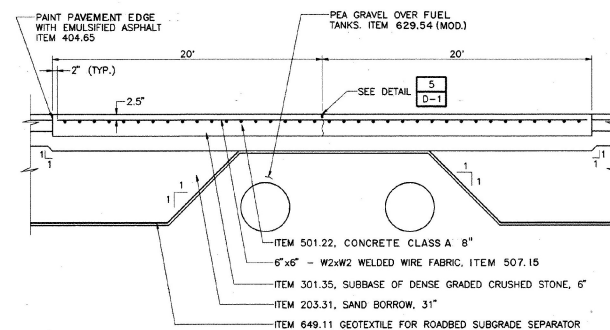
NO SCALE
SECTION A-A



1 UNDERDRAIN CONSTRUCTION DETAIL
NO SCALE



2 PAVEMENT EDGE DETAIL
NO SCALE



3 CONCRETE REFUELING PAD DETAIL
NO SCALE

Revisions	Drawn By	App'd By	Date

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Drawn By	Date
P.M.	1/93
Checked By	Date
M.L.C.	1/93

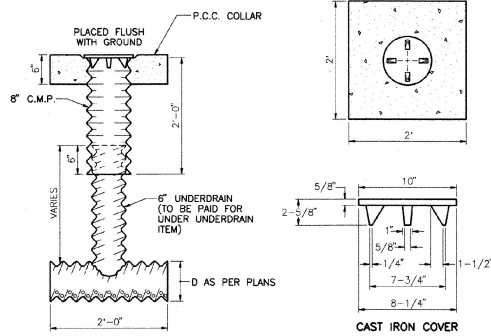


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CHA Project No. 2972

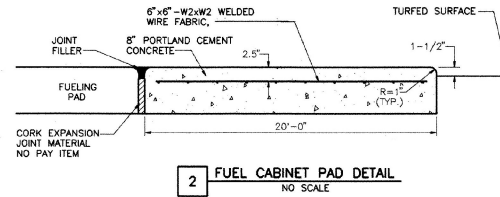
EDWARD F. KNAPP
STATE AIRPORT
TOWN OF BERLIN

JET A AND AVGAS FUELING SYSTEM
A.I.R. 04-3087
TYPICAL SECTIONS

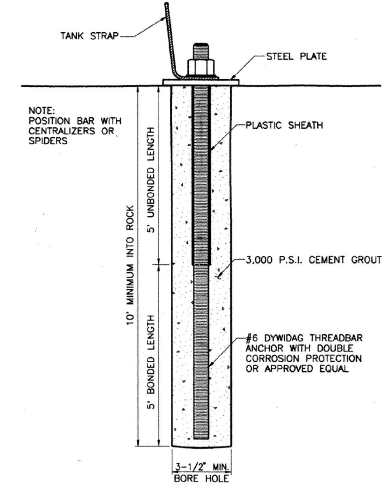
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TS-1
SCALE: AS SHOWN
DATE: APRIL 1994
SHEET 4 OF 13



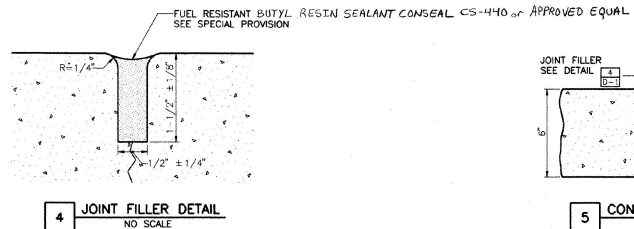
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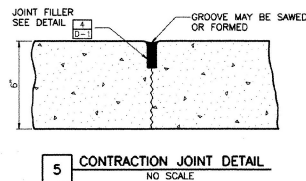
2 FUEL CABINET PAD DETAIL
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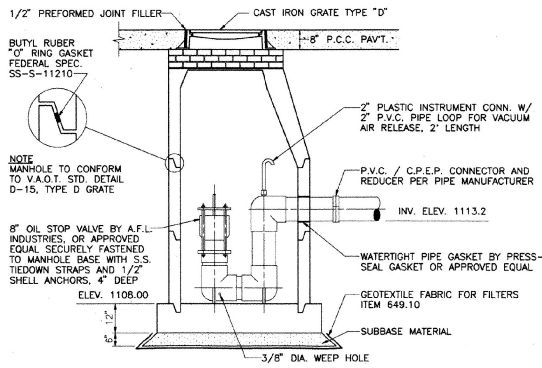
3 ROCK ANCHOR
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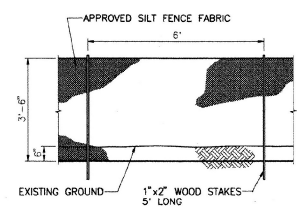
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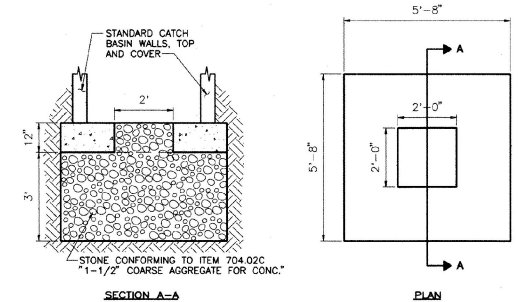
5 CONTRACTION JOINT DETAIL
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6 CATCH BASIN WITH OIL STOP VALVE
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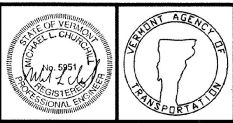
7 SILT FENCE DETAIL
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8 OPEN CONCRETE BASE DETAIL
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Revisions	Drawn By	App'd By	Date

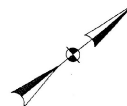
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CHA Project No. 2972

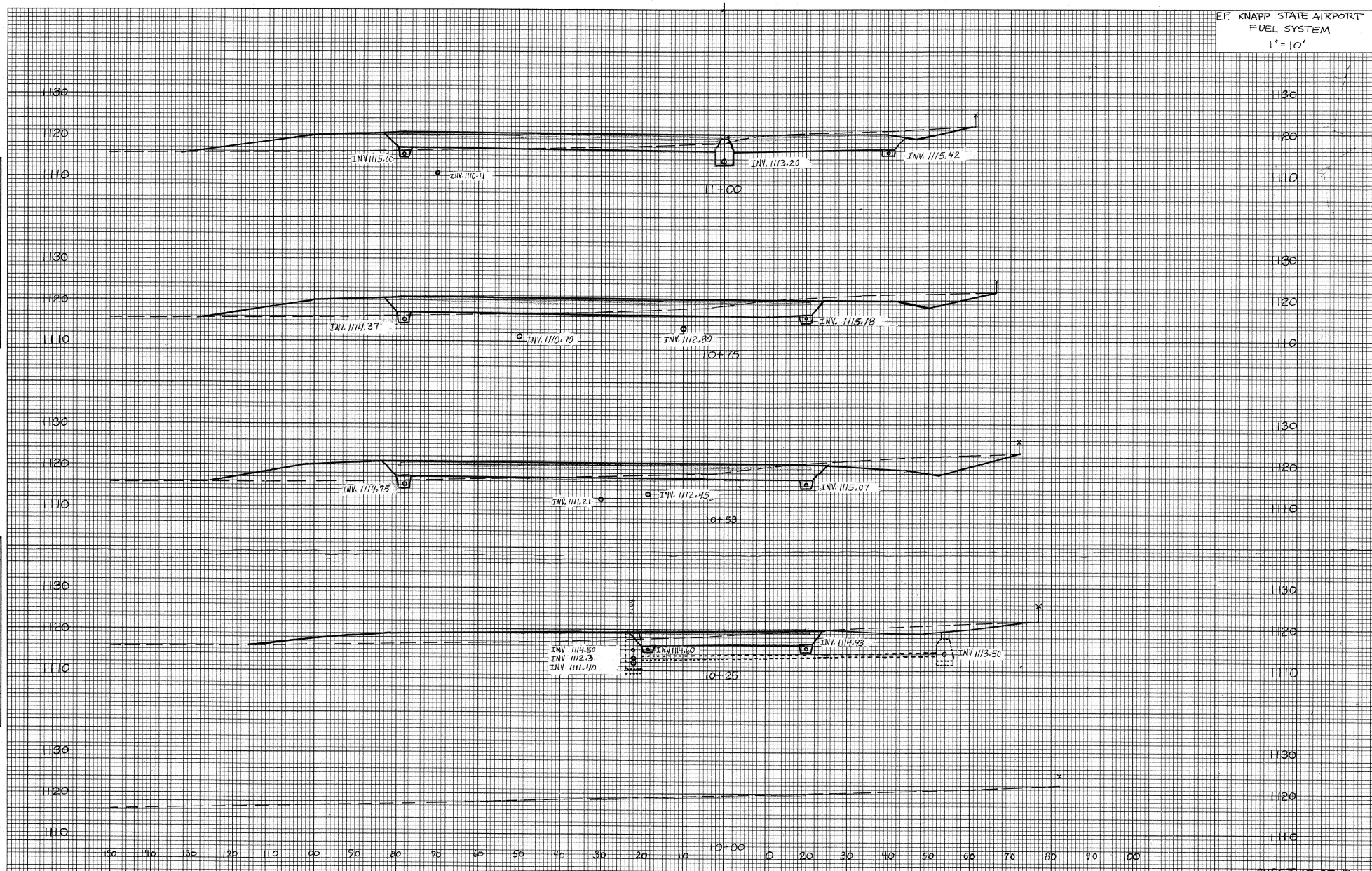
E.F. KNAPP
STATE AIRPORT
TOWN OF BERLIN

JET A AND AVGAS FUELING SYSTEM
A.I.R. 04-3087
DETAILS
Drawing No. **D-1**
SCALE: AS SHOWN DATE: APRIL 1993 SHEET 5 OF 13



TANK SECTION A-A
NTS

SHEET 7 OF 13



EF KNAPP STATE AIRPORT
FUEL SYSTEM
1" = 10'

DATE	BY	SCALE
FINAL SURVEY	DESIGNED BY	
	DRAWN BY	
	CHECKED BY	
	APPROVED BY	

DATE	BY	SCALE
ORIGINAL SURVEY	DESIGNED BY	
	DRAWN BY	
	CHECKED BY	
	APPROVED BY	

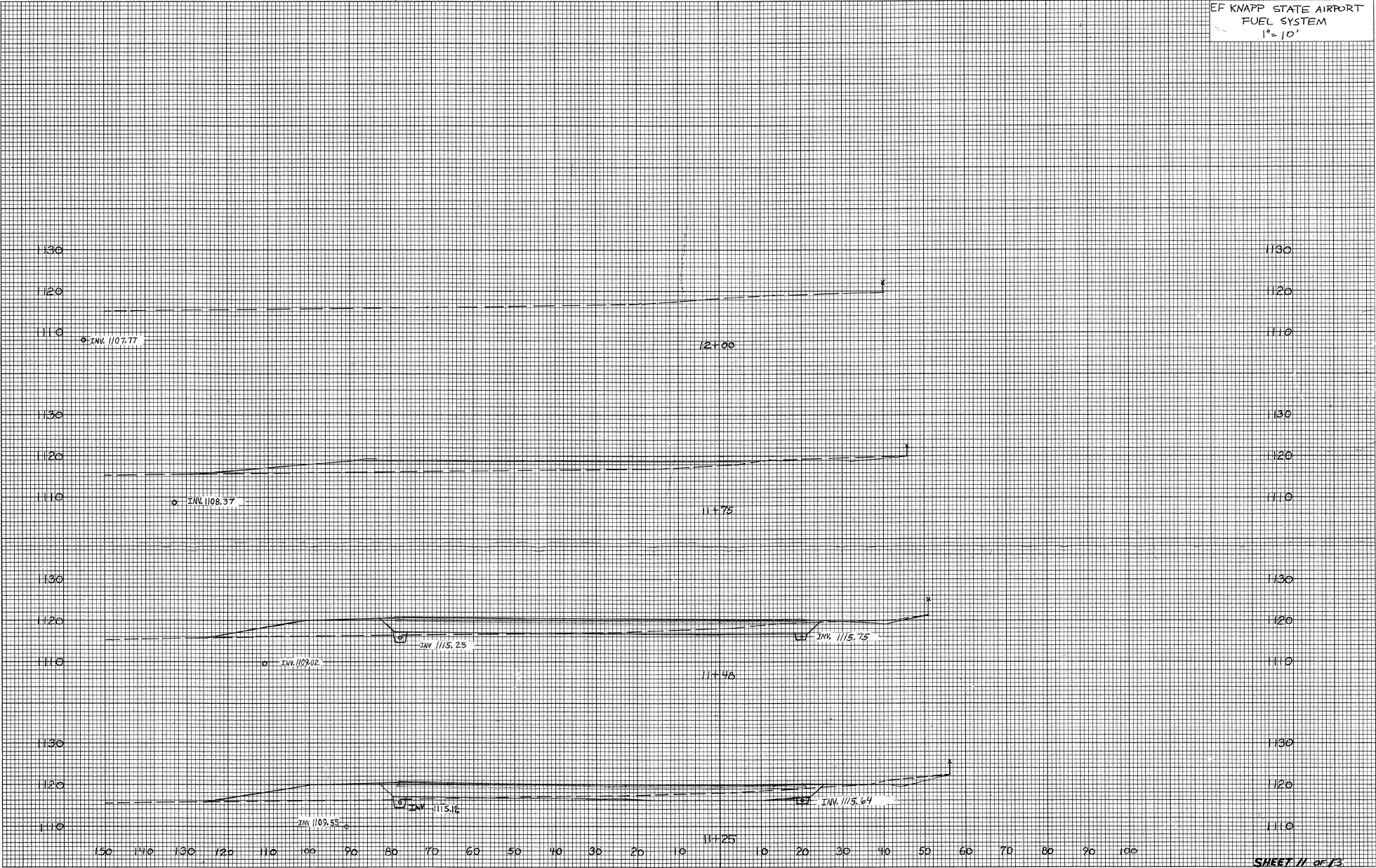


PLATE 9-FULL CROSS SECTION-FULL LINE
1" = 10'

QUANTITY SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

APPROXIMATE SUMMARY OF QUANTITIES

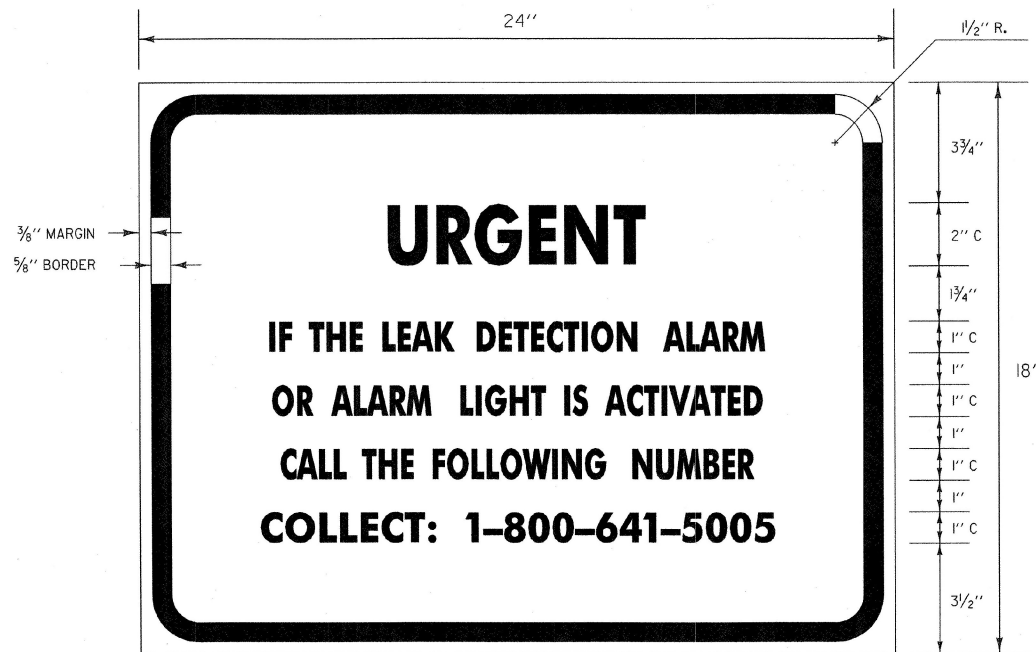
QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROLLING
50	CY	SOLID ROCK EXCAVATION	203.16	-
* 1020	CY	COMMON EXCAVATION	203.15	-
110	CY	EARTH BORROW	203.30	-
1400	CY	SAND BORROW	203.31	-
500	CY	TRENCH EXCAVATION OF EARTH	204.20	-
25	CY	TRENCH EXCAVATION OF ROCK	204.21	-
50	CY	EXCAV. CL. I CONTAMINATED SOILS	215.20	EST.
50	CY	EXCAV. CL. II CONTAMINATED SOILS	215.21	EST.
220	CY	SUBBASE DENSE GRADED CRUSHED STONE	301.35	-
20	CWT	EMULSIFIED ASPHALT	404.65	-
380	TON	BITUMINOUS CONCRETE PAVEMENT	406.25	-
60	CY	CONCRETE, CLASS A	501.22	-
250	LB	REINFORCING STEEL	507.15	-
5	GAL	JOINT SEALER, HOT POURED (MOD.)	524.10	-
1	EA	REMOVAL OF STRUCTURE (MODIFIED)	529.15	-
357	LF	12" CORRUGATED POLYETHYLENE PIPE	601.0905	-
3	EA	PRECAST REINFORCED CONC. CATCH BASIN W/CAST IRON GRATE	604.20	-
1	EA	PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER	604.21	-
1	EA	PRECAST REINFORCED CONC. MANHOLE W/CAST IRON COVER (MODIFIED)	604.21	-
1	EA	CAST IRON GRATE W/FRAME TYPE D	604.51	-
500	LF	6" UNDERDRAIN	605.10	EST.
4	EA	UNDERDRAIN FLUSHING BASIN	605.95	EST.
60	MGL	DUST CONTROL W/WATER	609.10	EST.
8	EA	GUIDE POSTS (MODIFIED)	621.85	-
140	TON	CRUSHED STONE BEDDING (MODIFIED)	629.54	-
1	LS	MOBILIZATION	635.10	EST.
300	LF	4" YELLOW LINE (MODIFIED)	646.21	EST.
300	LF	TEMP. 4" YELLOW LINE (MOD.)	646.61	EST.
1670	SY	GEOTEXTILE FOR ROADBED SUBGRADE	649.11	EST.
* 200	SY	SEPARATOR GEOTEXTILE FABRIC FOR SILT FENCE	649.51	EST.
265	SY	GEOTEXTILE FOR UNDERDRAIN TRENCH LINING	649.41	EST.
55	LB	SEED	651.15	-
320	LB	FERTILIZER	651.18	-
2	TON	AGRICULTURAL LIMESTONE	651.20	-
2	TON	HAY MULCH	651.25	-
35	EA	HAY BALES FOR EROSION CONTROL	651.26	-
220	CY	TOPSOIL	651.35	-
2200	LF	ELECTRICAL CONDUIT	678.21	EST.
3	EA	JUNCTION BOX	678.26	-
2	EA	LIGHT POLE BASE	679.21	-
2	EA	LIGHT POLE	679.45	-
2	EA	LUMINAIRE	679.50	-
1	LS	AIRPORT FUEL SYSTEM	830.15	-
* 1	LS	TESTING EQUIPMENT- CONCRETE	631.16	-
* 1	LS	TESTING EQUIPMENT- BITUMINOUS	631.17	-
* 250	SF	BLACK PAVEMENT MARKING MASKING TAPE	646.80	EST.

DETAILED SUMMARY OF QUANTITIES

[illegible]

DETAILED SUMMARY OF QUANTITIES

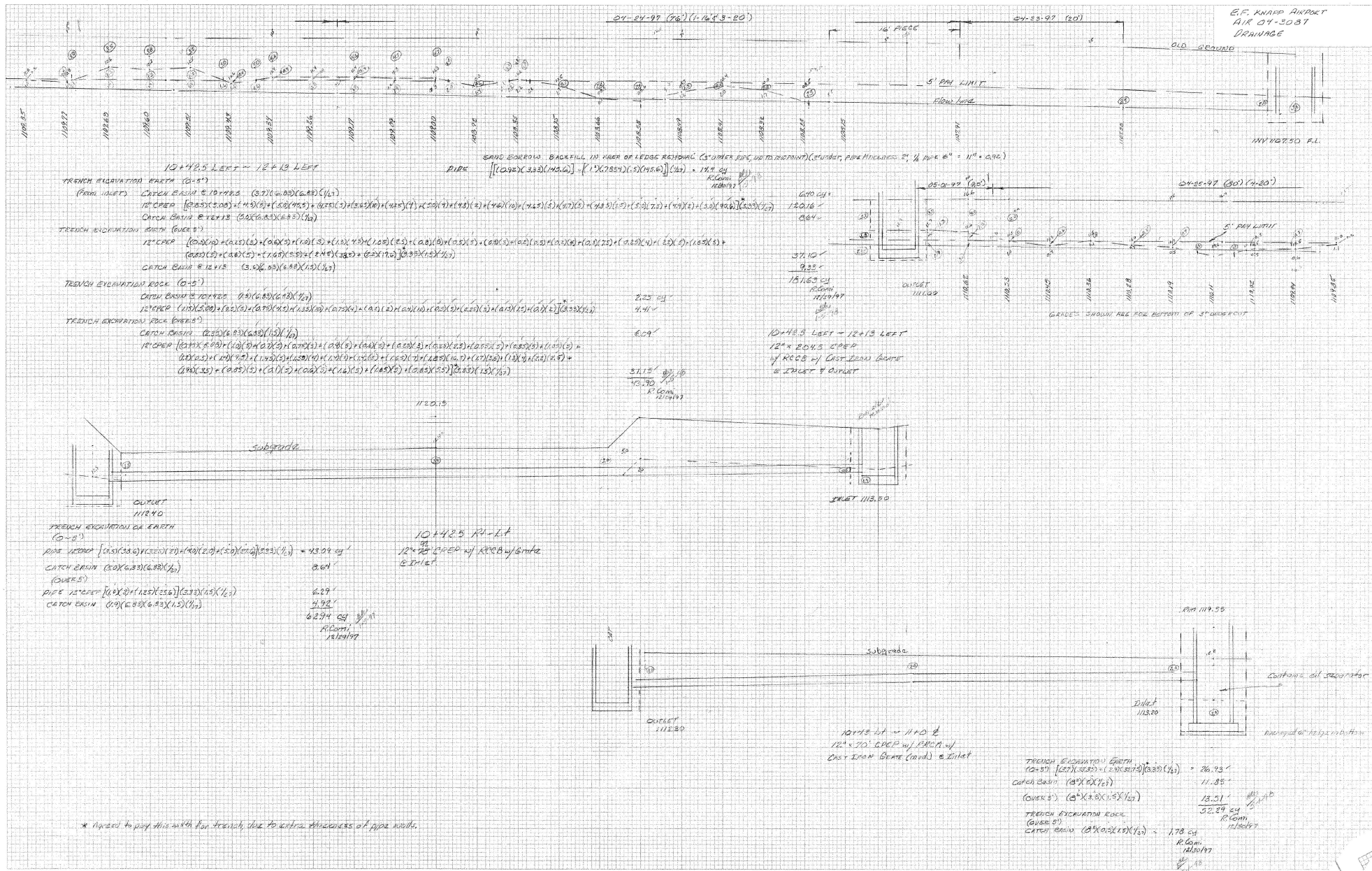
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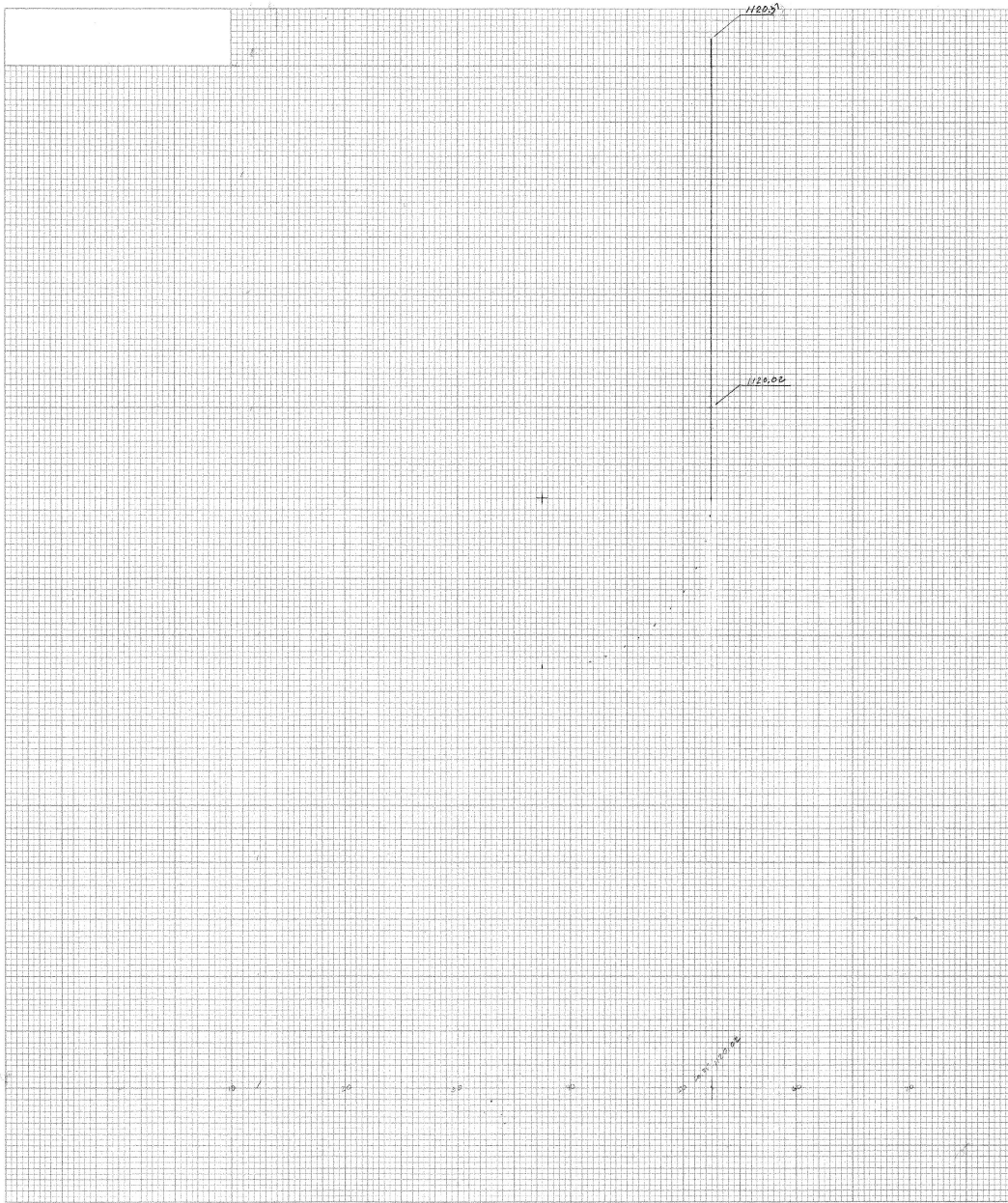


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 BACKGROUND - REFLECTORIZED WHITE

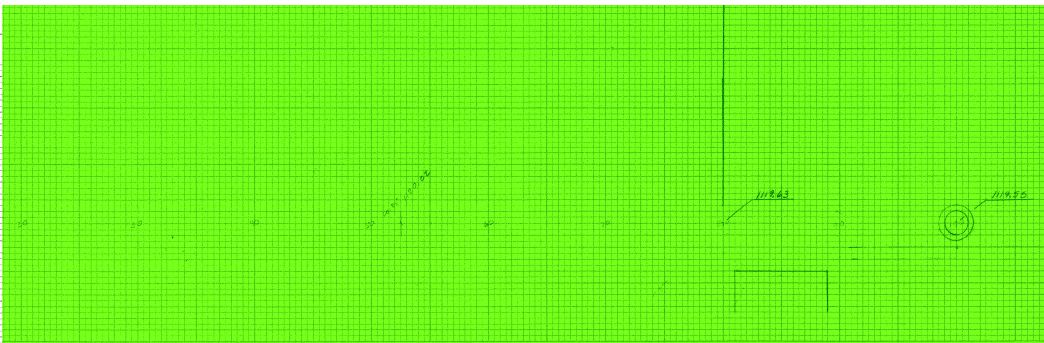
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 SEE STANDARD E-140

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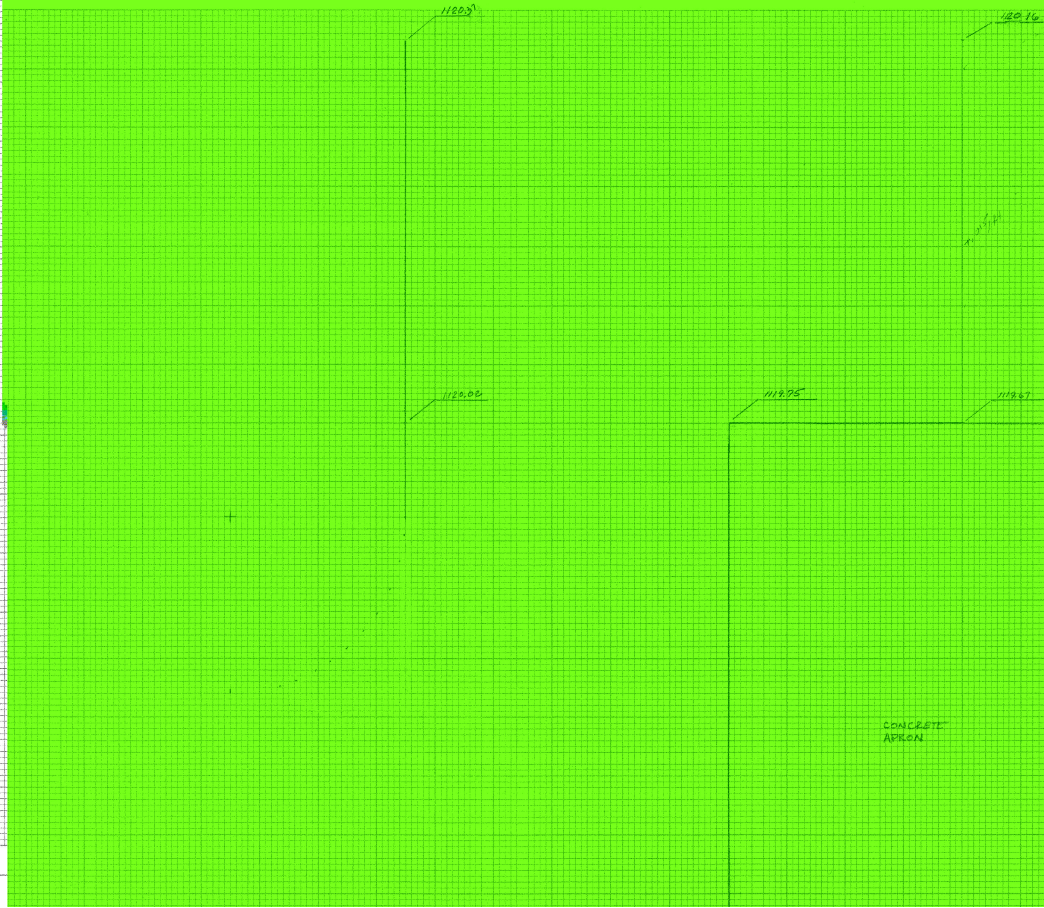




* A 50' minimum 50' 0" 10' 0" 20' 0" 30' 0" 40' 0" 50' 0" 60' 0" 70' 0" 80' 0" 90' 0" 100' 0" 110' 0" 120' 0" 130' 0" 140' 0" 150' 0" 160' 0" 170' 0" 180' 0" 190' 0" 200' 0" 210' 0" 220' 0" 230' 0" 240' 0" 250' 0" 260' 0" 270' 0" 280' 0" 290' 0" 300' 0" 310' 0" 320' 0" 330' 0" 340' 0" 350' 0" 360' 0" 370' 0" 380' 0" 390' 0" 400' 0" 410' 0" 420' 0" 430' 0" 440' 0" 450' 0" 460' 0" 470' 0" 480' 0" 490' 0" 500' 0" 510' 0" 520' 0" 530' 0" 540' 0" 550' 0" 560' 0" 570' 0" 580' 0" 590' 0" 600' 0" 610' 0" 620' 0" 630' 0" 640' 0" 650' 0" 660' 0" 670' 0" 680' 0" 690' 0" 700' 0" 710' 0" 720' 0" 730' 0" 740' 0" 750' 0" 760' 0" 770' 0" 780' 0" 790' 0" 800' 0" 810' 0" 820' 0" 830' 0" 840' 0" 850' 0" 860' 0" 870' 0" 880' 0" 890' 0" 900' 0" 910' 0" 920' 0" 930' 0" 940' 0" 950' 0" 960' 0" 970' 0" 980' 0" 990' 0" 1000' 0"



* A 50' minimum 50' 0" 10' 0" 20' 0" 30' 0" 40' 0" 50' 0" 60' 0" 70' 0" 80' 0" 90' 0" 100' 0" 110' 0" 120' 0" 130' 0" 140' 0" 150' 0" 160' 0" 170' 0" 180' 0" 190' 0" 200' 0" 210' 0" 220' 0" 230' 0" 240' 0" 250' 0" 260' 0" 270' 0" 280' 0" 290' 0" 300' 0" 310' 0" 320' 0" 330' 0" 340' 0" 350' 0" 360' 0" 370' 0" 380' 0" 390' 0" 400' 0" 410' 0" 420' 0" 430' 0" 440' 0" 450' 0" 460' 0" 470' 0" 480' 0" 490' 0" 500' 0" 510' 0" 520' 0" 530' 0" 540' 0" 550' 0" 560' 0" 570' 0" 580' 0" 590' 0" 600' 0" 610' 0" 620' 0" 630' 0" 640' 0" 650' 0" 660' 0" 670' 0" 680' 0" 690' 0" 700' 0" 710' 0" 720' 0" 730' 0" 740' 0" 750' 0" 760' 0" 770' 0" 780' 0" 790' 0" 800' 0" 810' 0" 820' 0" 830' 0" 840' 0" 850' 0" 860' 0" 870' 0" 880' 0" 890' 0" 900' 0" 910' 0" 920' 0" 930' 0" 940' 0" 950' 0" 960' 0" 970' 0" 980' 0" 990' 0" 1000' 0"



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