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# STATE OF VERMONT AGENCY OF TRANSPORTATION

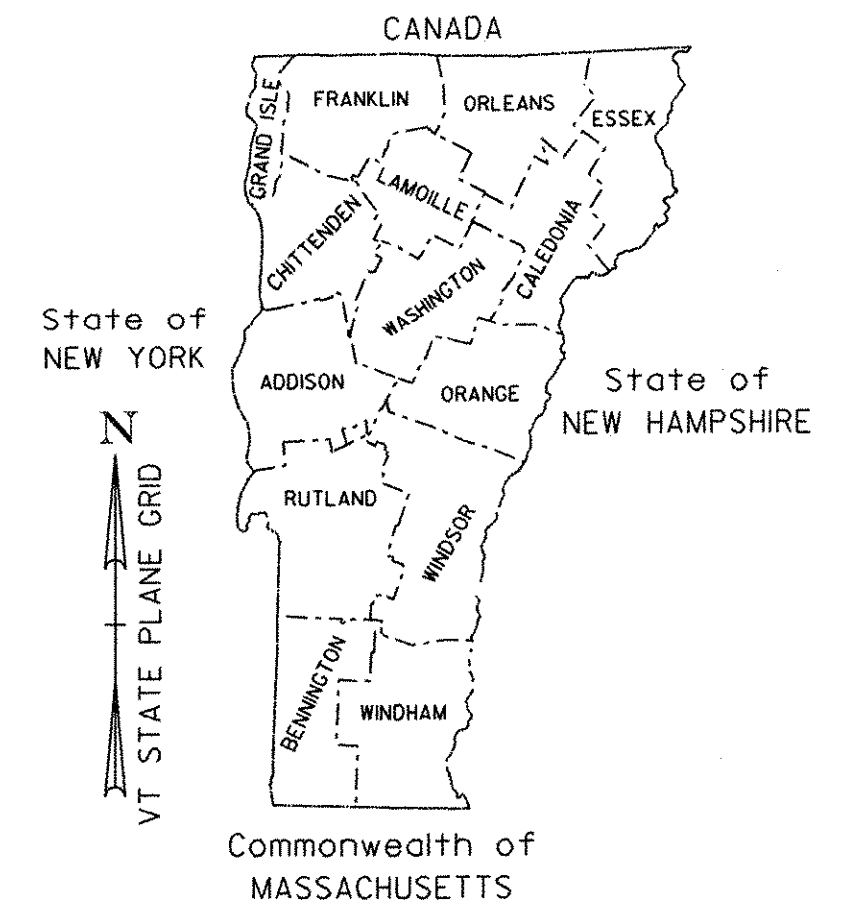


## PROPOSED IMPROVEMENT STATEWIDE AIRPORT CRACK SEALING

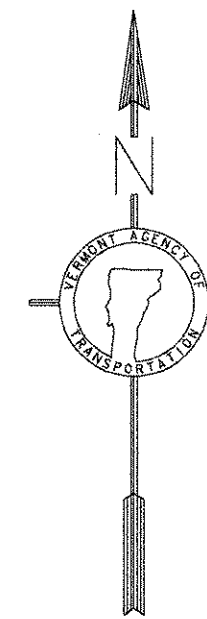
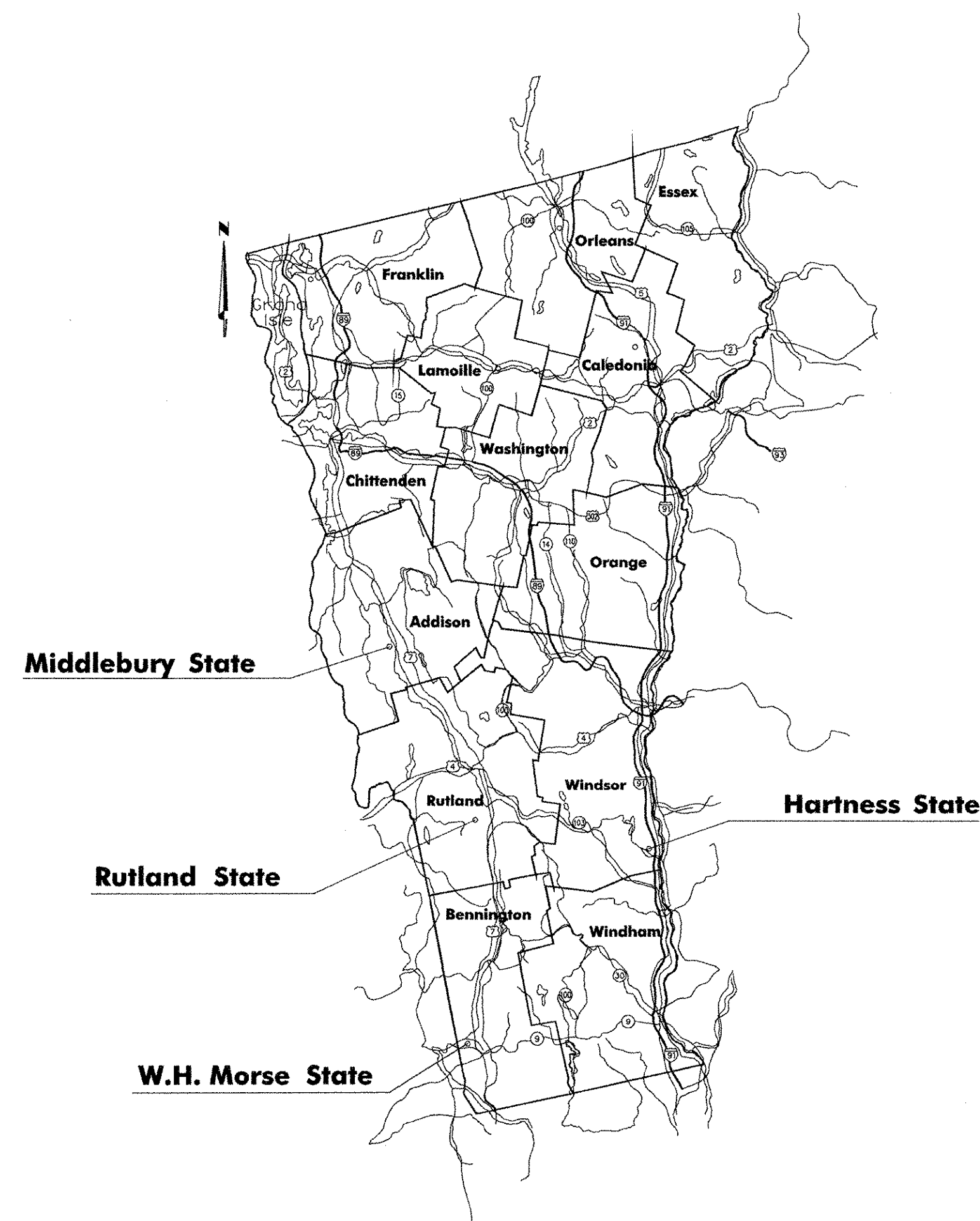
PROJECT NUMBER: AIR 04-3185

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES PAVEMENT CRACK SEALING, ASPHALT PATCHING AND PAVEMENT MARKINGS AT THE FOLLOWING AIRPORTS:

- HARTNESS STATE AIRPORT
- MIDDLEBURY STATE AIRPORT
- RUTLAND STATE AIRPORT
- W.H. MORSE STATE AIRPORT



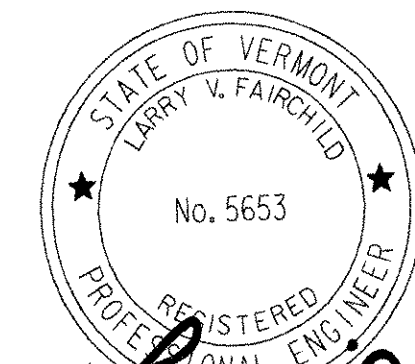
**Vermont Agency of Transportation Airports**



PLANS PREPARED BY



**CLOUGH HARBOUR & ASSOCIATES LLP**  
111 Winners Circle, PO Box 5268, Albany, NY 12205  
Main: (518) 453-4500 • www.coughharbour.com



BY Larry V. Fairchild

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DIRECTOR OF OPERATIONS DIVISION	
APPROVED <u>[Signature]</u>	DATE <u>12/1/05</u>
PROJECT MANAGER : FORTNEY	
PROJECT NAME : STATEWIDE AIRPORT CRACK SEALING	
PROJECT NUMBER : AIR 04-3185	
SHEET 1 OF 4 SHEETS	

**CONVENTIONAL SYMBOLS**

COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	

# QUANTITY SHEET

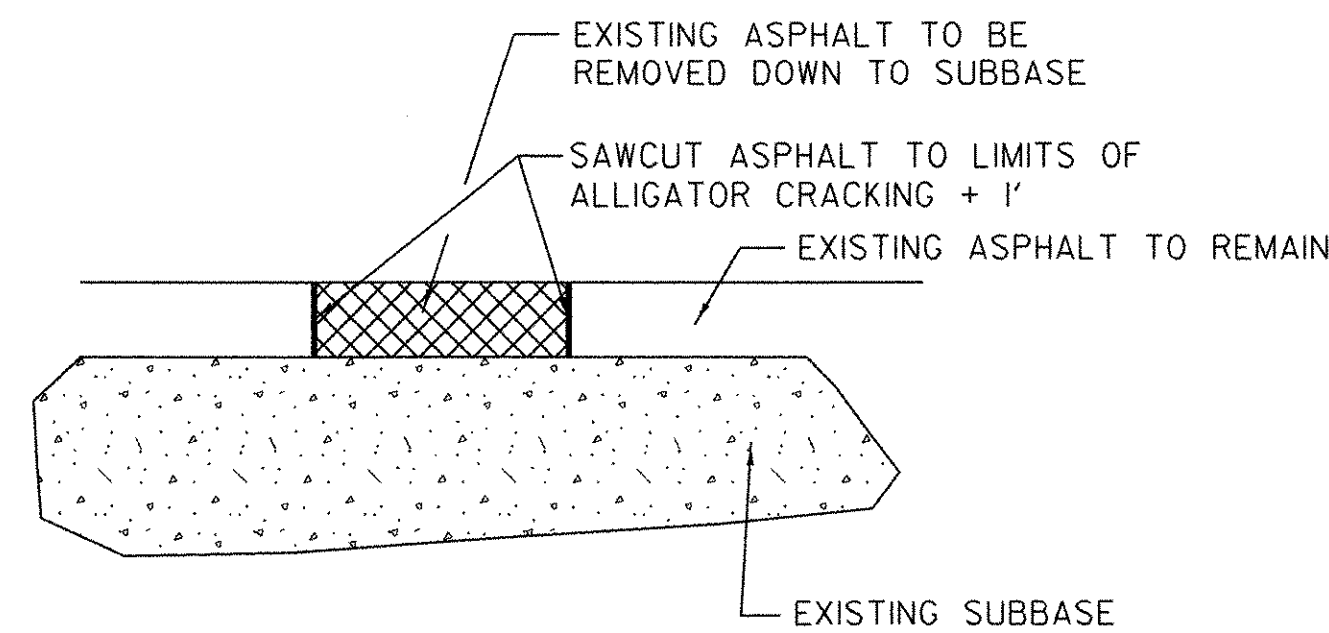
## SUMMARY OF ESTIMATED QUANTITIES

## RECORD SUMMARY OF QUANTITIES

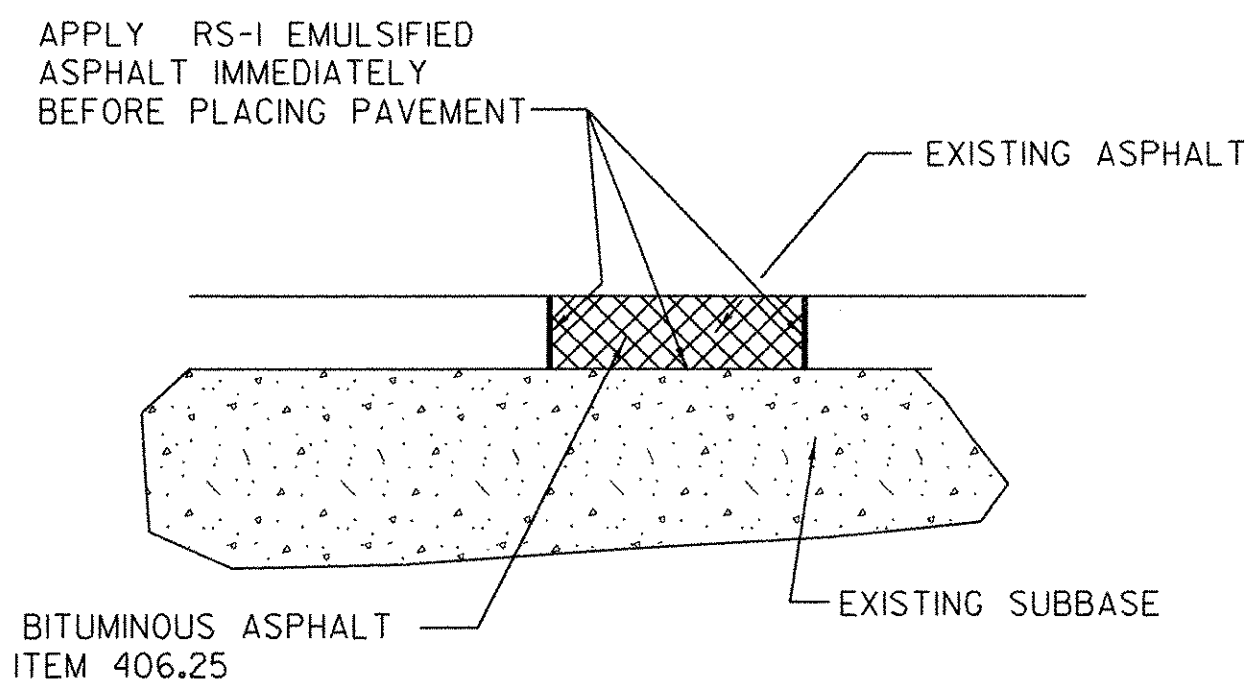
SUMMARY OF ESTIMATED QUANTITIES										RECORD SUMMARY OF QUANTITIES					
		QUANTITIES				TOTALS	UNIT	ITEMS	ITEM NUMBER	RND	QUANTITIES	UNIT	ITEMS		
		HARTNESS	MIDDLEBURY	RUTLAND	W.H. MORSE										
		0	200	44.95	0	80	221.15	280	TON	BITUMINOUS CONC. PAV'T.(PG 58-28)(MOD.)	406.25	-	266.1	TON	BIT. CONC. PVMT. (PG 58-280 (MOD.))
		36,457			23,559			60,000	LF	JOINT SEALER, HOT Poured (MOD)	524.11	-		LF	JOINT SEALER, HOT Poured (MOD.)
		20,300	700		35,000										
		.25	.25		.25			1	LS	MOBILIZATION / DEMOBILIZATION	635.8	-			
								3,200	SF	REMOVAL OF EXIST. PAVEMENT MARKINGS	646.85	-	1295	SF	REMOVAL OF EXISTING PAVEMENT MARKINGS
								30	EA	LUMINAIRE (MOD.)	679.50	-	30	EA	LUMINAIRE
		22,910	2,920		28,760			9,955							
		20,000	2,000		25,000			6,800	SF	P-620 RUNWAY AND TAXIWAY PAINTING (WHITE)	864.03	-	64,545	SF	P-620 RUNWAY AND TAXIWAY PAINTING (WHITE)
		2,985	4,650		10,375			1,570							
		3,100	5,000		19,200			2,200	SF	P-620 RUNWAY AND TAXIWAY PAINTING (YELLOW)	864.03	-	19,580	SF	P-620 RUNWAY AND TAXIWAY PAINTING (YELLOW)
		1,500			8,285			330	SF	RUNWAY AND TAXIWAY PAINTING (BLACK)		-	10,115	SF	P-620 RUNWAY AND TAXIWAY PAINTING (BLACK)

**QUANTITY SHEET**

PROJECT NAME: STATEWIDE CRACK SEALING  
 PROJECT NUMBER: AIR 04-3185  
 FILE NAME: 13666-0-LDGN  
 PROJECT LEADER: M.A.R.  
 DESIGNED BY: M.A.R.  
 PLOT DATE: 1/3/2006  
 DRAWN BY: PM  
 CHECKED BY:  
 SHEET 2 OF 4



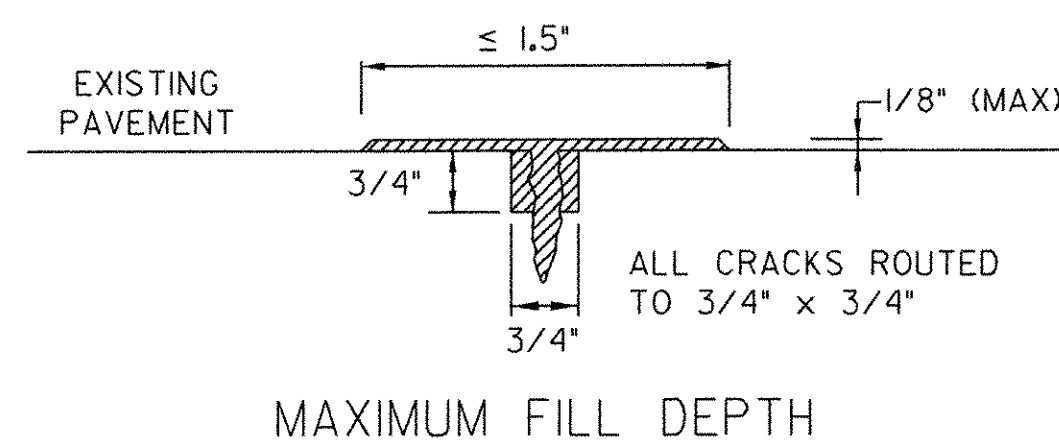
STEP 1 - ASPHALT REMOVAL



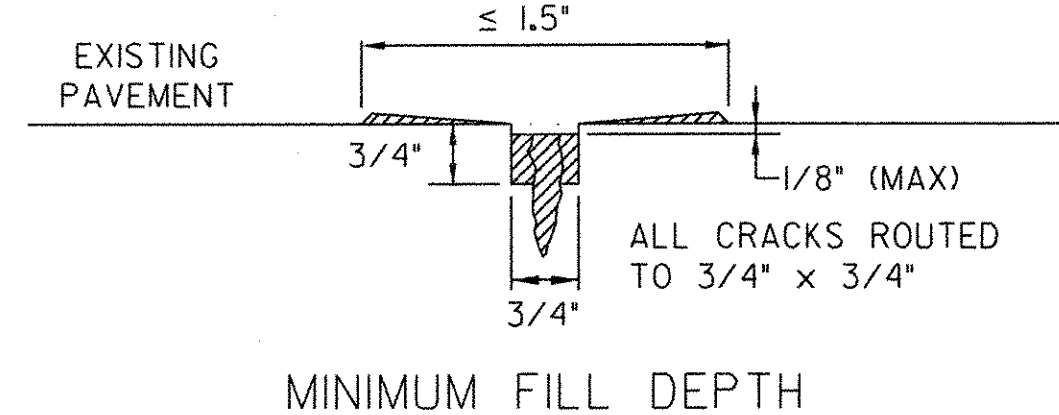
STEP 2 - REPLACE ASPHALT

1 ASPHALT PATCH DETAIL  
SCALE: NONE

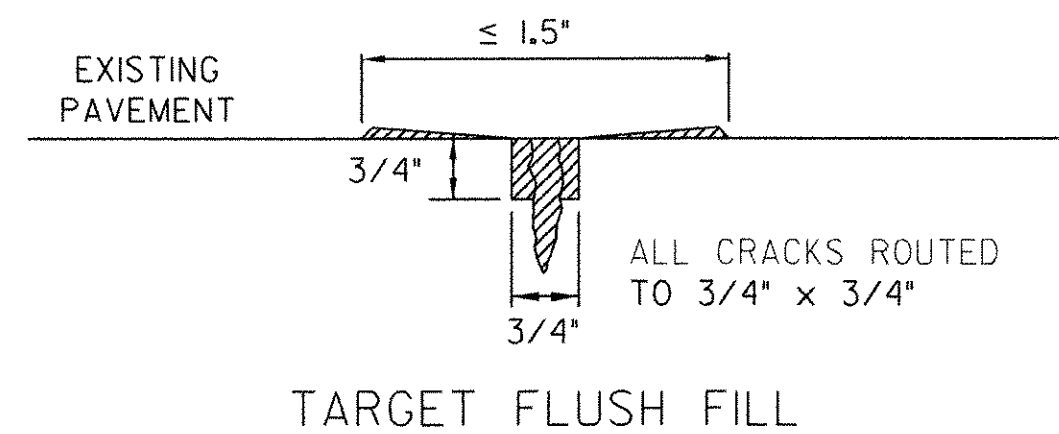
- NOTES:
1. ASPHALT PATCHING TO BE PAID UNDER ITEM 406.25.
  2. SAWCUT INCIDENTAL TO 406.25.
  3. ALL AREAS TO BE SAWCUT SHALL BE PAVED THE SAME DAY. NO UNPAVED AREAS WILL BE ALLOWED TO REMAIN OVERNIGHT.



MAXIMUM FILL DEPTH



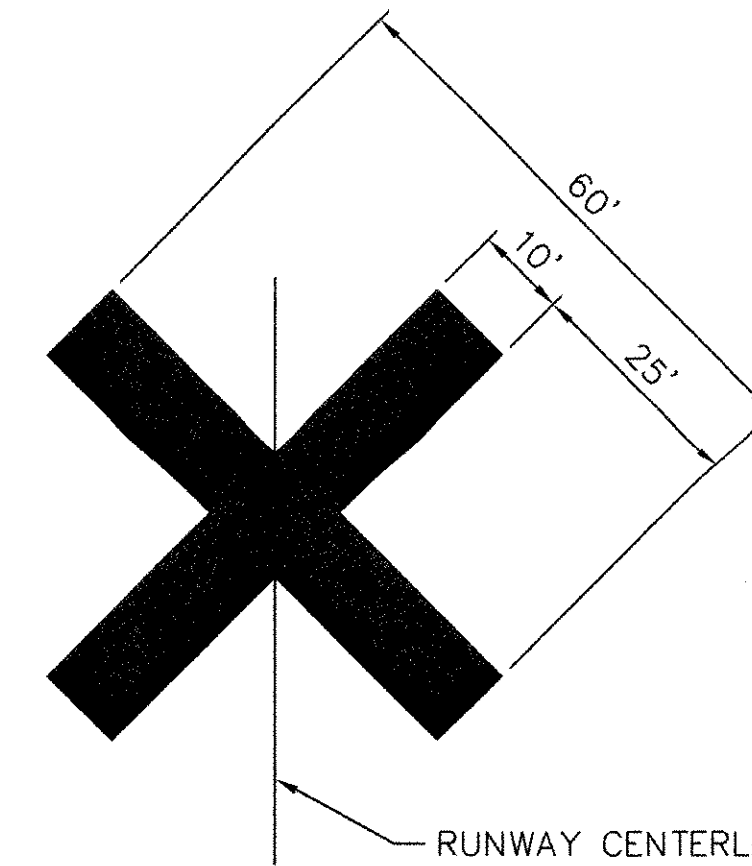
MINIMUM FILL DEPTH



TARGET FLUSH FILL

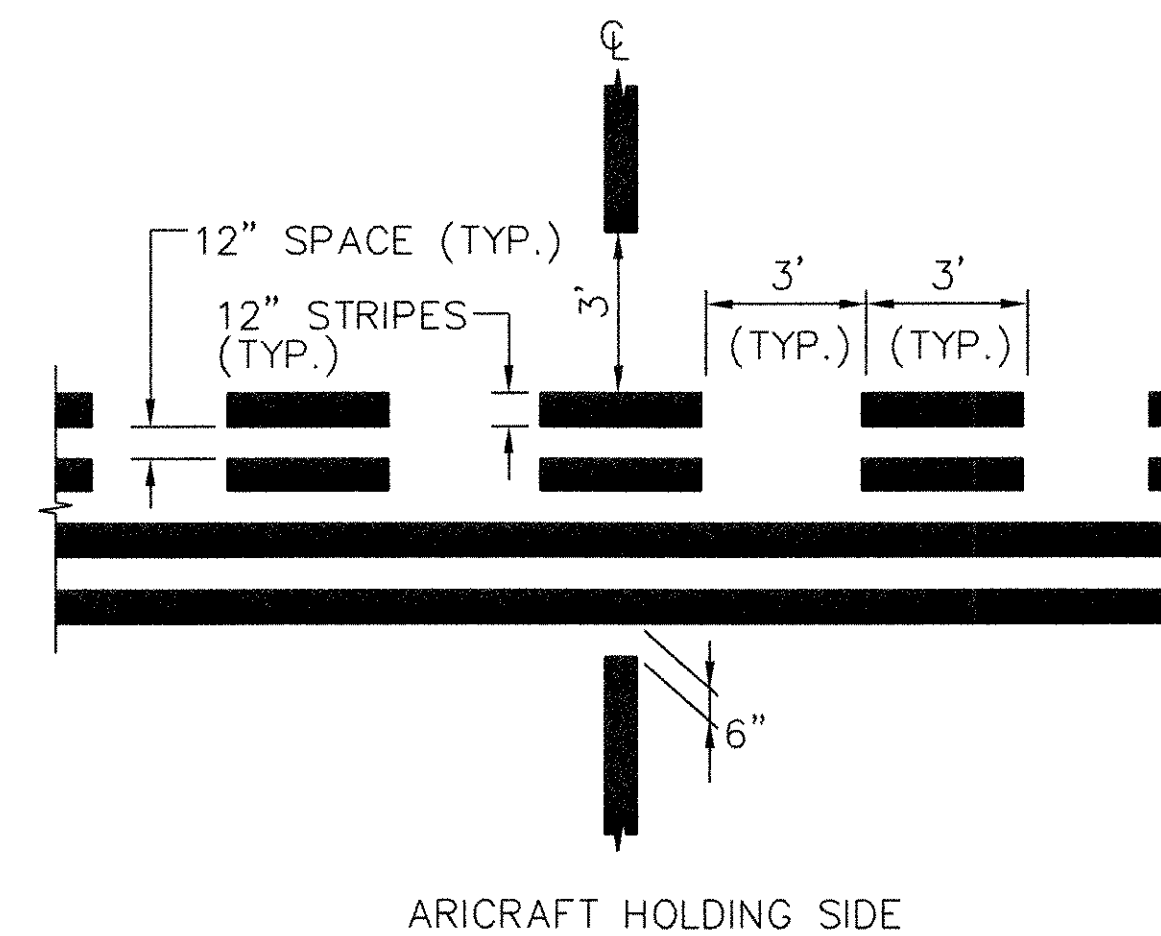
2 CRACK REPAIR DETAIL  
SCALE: NONE

- NOTE:
- CRACK REPAIR TO BE PAID UNDER ITEM 524.II



NOTE: CLOSED RUNWAY SYMBOL TO BE SNOW FENCE OR OTHER MATERIAL APPROVED BY ENGINEER. SYMBOL SHALL BE YELLOW AND IT SHALL BE SECURELY ANCHORED OFF THE RUNWAY END. TO BE PAID UNDER 635.11

3 CLOSED RUNWAY SYMBOL  
SCALE: NONE



4 HOLD MARKING DETAIL  
SCALE: NONE

**CRACK REPAIR NOTES:**

1. A STRIKE OFF FLUSH FILL TECHNIQUE WILL BE USED FOR MATERIAL APPLICATION. STRIKE OFF MAY BE ACCOMPLISHED WITH A SHOE.
2. ALL CRACKS WILL BE ROUTED TO 3/4" BY 3/4" PRIOR TO SEALING. ROUTED CRACKS SHALL BE SEALED WITHIN THE SAME WORKDAY.
3. CRACKS THAT ARE TO BE ROUTED AND SEALED SHOULD HAVE WIDTHS NO LESS THAN 1/8" AND NO GREATER THAN 3/4" UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
4. AMBIENT TEMPERATURE RANGE: 5 TO 40 DEGREES CENTIGRADE. (40 TO 105 DEGREES F)
5. PAVEMENT TEMPERATURE RANGE: 10 TO 60 DEGREES CENTIGRADE. (50 TO 140 DEGREES F)
6. RELATIVE HUMIDITY SHOULD BE LESS THAN 80 PERCENT.
7. PAVEMENT SURFACE AND CRACKS MUST BE CLEAN AND DRY PRIOR TO APPLICATION.
8. TEMPERATURE OF SEALANT +/- 3 DEGREES CENTIGRADE (+/- 5 DEGREES F) FROM MANUFACTURERS SPECIFIED TEMPERATURE APPLICATION.
9. BACKFLUSHING OF HOSE AND APPLICATOR WAND IS NECESSARY ANYTIME THE APPLICATION OF SEALANT HAS BEEN DELAYED FOR A PERIOD GREATER THAN FIFTEEN MINUTES.
10. THE DISTANCE BETWEEN APPLICATOR AND SQUEEGEE SHOULD BE LESS THAN 1 METER (3'), BUT IN NO CASE SHOULD IT BE GREATER THAN 2 METERS (6').
11. THE TIME DELAY BETWEEN THE HOT AIR LANCE TREATMENT AND THE APPLICATION OF THE SEALANT SHOULD BE NO LESS THAN TWO MINUTES. BUT IN NO CASE GREATER THAN FIVE MINUTES.
12. THE ACCEPTABLE SEALANT THICKNESS SHALL BE IN THE RANGE OF + 1/8" ABOVE SURFACE TO - 1/8" AND RECESSES GREATER THAN 1/8" BELOW THE SURFACE SHALL BE REMOVED, REPAIRED AND REPLACED.
13. THE MANUFACTURER'S RECOMMENDATIONS ON CURING OF MATERIAL WILL BE SUPPLIED IN ADVANCE OF ACTIVITIES. THE CURE TIMES MAY BE SHORTENED OR EXTENDED TO MEET CONDITION IN THE FIELD AS DIRECTED BY THE ENGINEER.
14. ANY MATERIAL HEATED ABOVE THE MANUFACTURER'S RECOMMENDED MAXIMUM WILL NOT BE USED ON PROJECT.

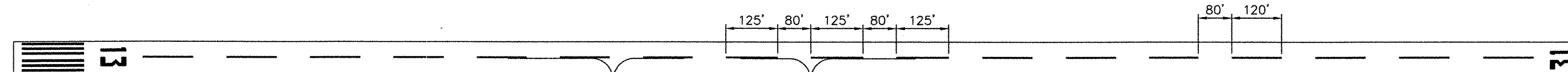
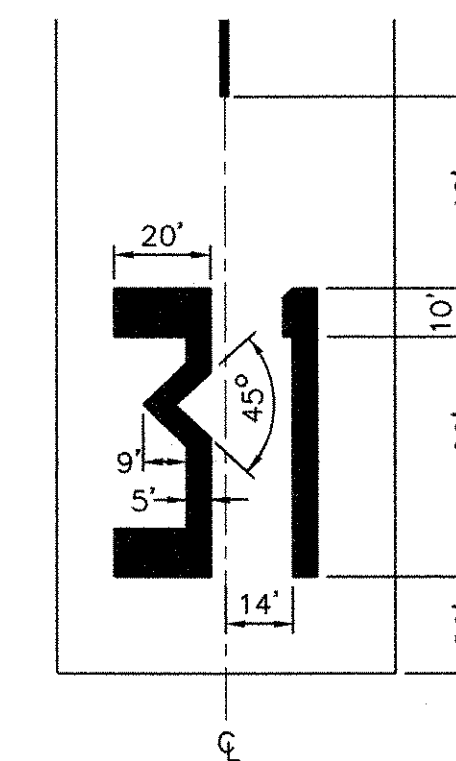
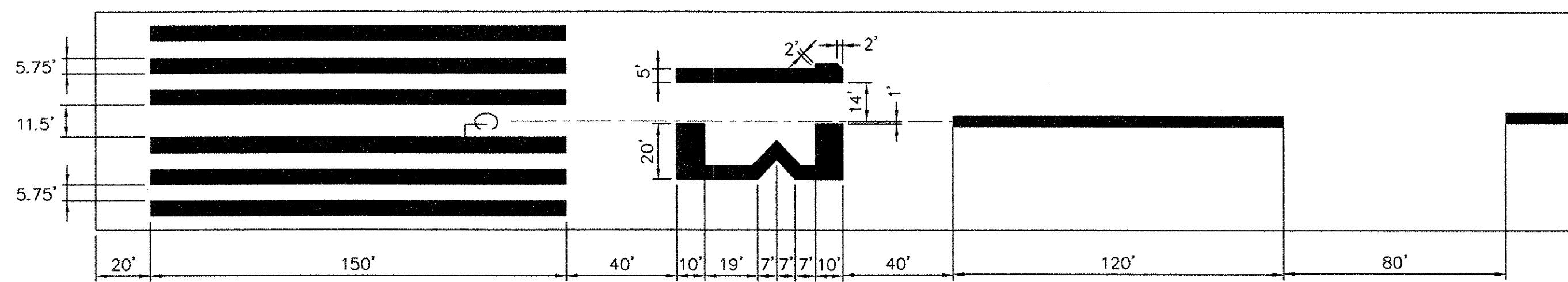
**PAVEMENT REPAIR DETAILS**

PROJECT NAME: STATEWIDE CRACK SEALING  
PROJECT NUMBER: AIR 04-3185

FILE NAME: 13666-D-LDGN  
PROJECT LEADER: M.A.R.  
DESIGNED BY: M.A.R.

PLOT DATE: 12/15/2005  
DRAWN BY: P.M.  
CHECKED BY: L.V.F.  
SHEET 3 OF 4

RUNWAY 13-31 PAINT QUANTITIES			
LOCATION	SQUARE FEET	COLOR	
		WHITE	YELLOW
THRESHOLD MARKINGS	3,460	★	
CENTERLINE STRIPE	2,050	★	
NUMERALS	1,290	★	



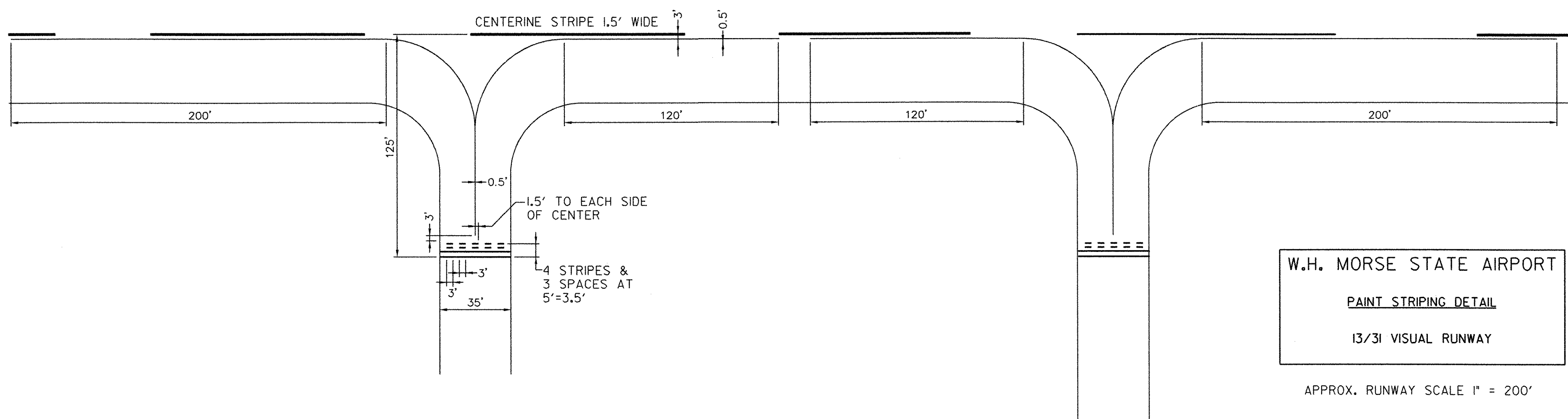
HOLD LINE DETAIL  
SEE DETAIL, THIS SHEET

**GENERAL PAVEMENT MARKING NOTES:**

1. THE CONTRACTOR SHALL REPAINT EXISTING RUNWAY, TAXIWAY AND APRON MARKINGS AT HARTNESS, MIDDLEBURY, AND RUTLAND AIRPORTS. NO LAYOUT OF PAVEMENT MARKINGS WILL BE REQUIRED AT THESE AIRPORTS. AIRFIELD MARKINGS SHALL BE PAID UNDER ITEM 864.03.
2. "ADJUSTMENTS TO THE LENGTHS OF THE STRIPES AND GAPS, (OF THE CENTERLINE) WHERE NECESSARY TO ACCOMMODATE THE RUNWAY LENGTH, ARE MADE NEAR THE RUNWAY MIDPOINT." AC 150/5340.
3. THE NUMBERS SHOULD BE NO CLOSER THAN TWO FEET FROM THE EDGE LINE OF THE RUNWAY.
4. ALL RUNWAY MARKINGS ARE TO BE STRIATED WITH ALL STRIPES AND SPACES EQUAL IN WIDTH (4" TO 6").
5. AREA CALCULATIONS ARE BASED ON STRIATED MARKINGS.
6. CENTERLINE MARKINGS AND SPACING ARE TYPICAL. CENTERLINE IS 120' LONG & SPACING IS 80' LONG UNLESS OTHERWISE SPECIFIED.

**W.H. MORSE AIRPORT MARKING NOTES:**

1. THE EXISTING RUNWAY CENTERLINE STRIPES AND NUMBER 13 ARE TO BE REMOVED. PAID UNDER ITEM 646.85
2. THE CONTRACTOR SHALL LAY OUT AND PAINT NEW RWY 13 THRESHOLD MARKINGS, RWY 13 DESIGNATION MARKINGS, AND CENTERLINE MARKINGS. THE REMAINING AIRFIELD MARKINGS SHALL BE REPAINTED (WITHOUT LAYOUT), ON TOP OF THE EXISTING MARKINGS.
3. THE CONTRACTOR IS TO PROCURE 30 L-861 SPLIT YELLOW/CLEAR MRL GLOBES, WITH FLAT RUBBER GASKETS, AS SPECIFIED IN SPEC. SECTION 679. LIGHT GLOBES AND GASKETS SHALL BE TURNED OVER TO VAOT FOR FUTURE INSTALLATION.
4. CBA CONTACT INFO: CBA LIGHTING CONTROLS, INC. 1-800-253-5133



W.H. MORSE STATE AIRPORT  
PAINT STRIPING DETAIL  
13/31 VISUAL RUNWAY

APPROX. RUNWAY SCALE 1" = 200'

CLOSEUPS NOT TO SCALE

AIRPORT MARKING PLAN	
PROJECT NAME: STATEWIDE CRACK SEALING	PROJECT NUMBER: AIR 04-3185
FILE NAME:	PLOT DATE: 1/3/2006
PROJECT LEADER: M.A.R.	DRAWN BY:
DESIGNED BY: M.A.R.	CHECKED BY:
	SHEET 4 OF 4