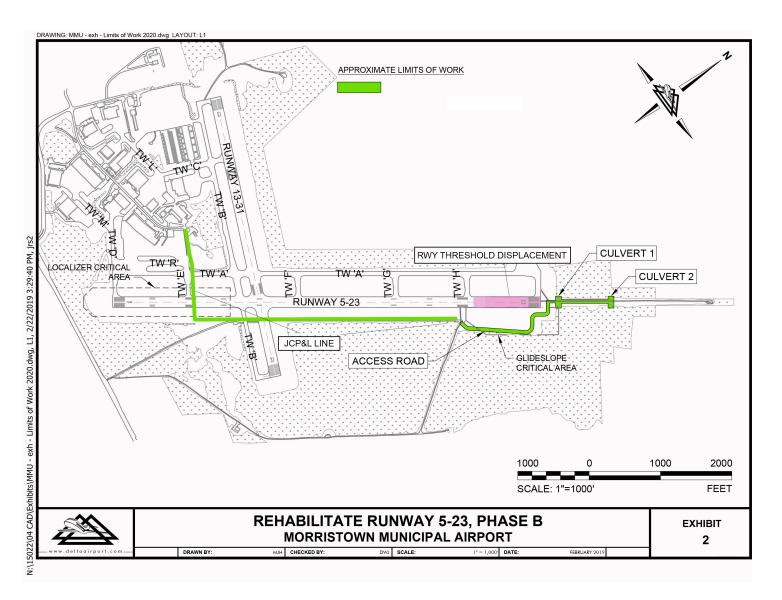
RWY 5-23 Rehabilitation Project

Phase II, Stage B Overview, Timing & Operational Impacts



Phase II, Stage B Overview & Timeline

Overall Project Timeline: July 6, 2021 – Nov. 9, 2021

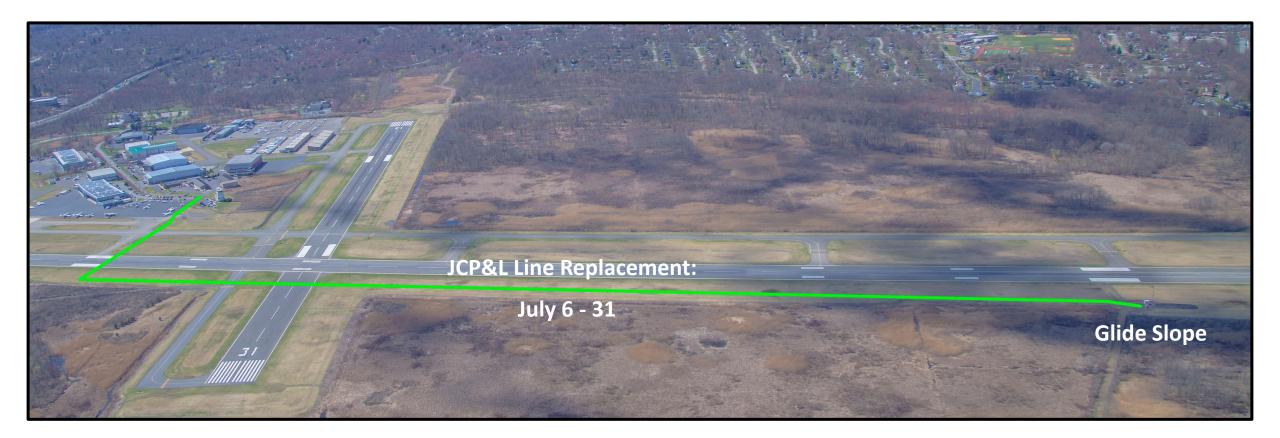
Phase II, Stage B consists of:

- The installation of an access road in the glide slope critical area adjacent to the ILS, connecting to MALSR road for access to culverts
- Installation of stormwater treatment devices between Taxiway Alpha and RWY 5-23
- Installation of conduit to support a new JCP&L line
 to power ILS and new MALSR System (Phase C)
- Replacement two culverts off the approach end of RWY 23

Project Impacts:

- Disabling ILS Approach system for RWY 23
- Relocation of RWY 23 Threshold
 - Requires 3-day closure of RWY 5-23
 - RWY 5-23 shortened to 5,000'
 - Relocation required due to installation of sheet piles/culverts utilizing cranes and ensuring an appropriate safety area for construction personnel

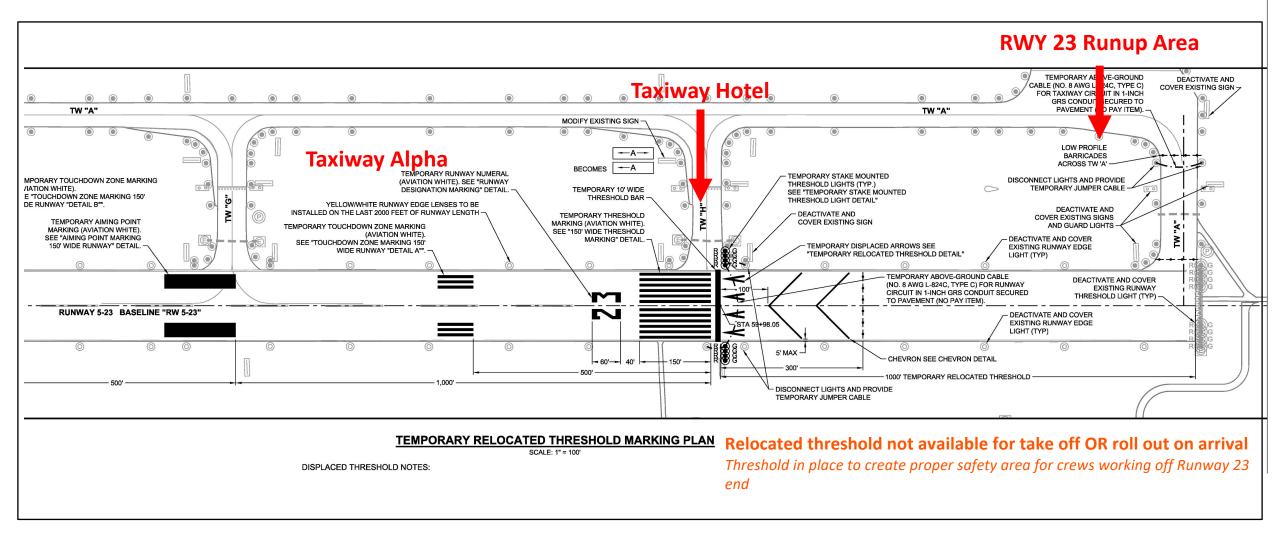
Phase II, Stage B Aerial: JCP&L Line Replacement

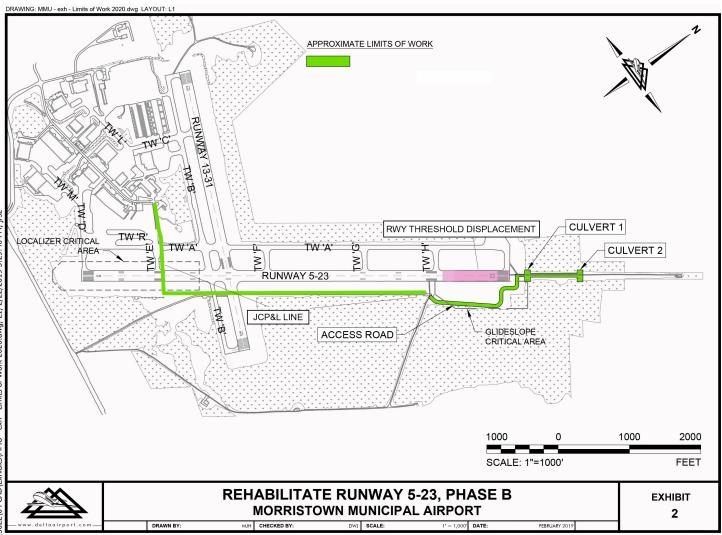


Phase II, Stage B Aerial: Access Road and Culverts



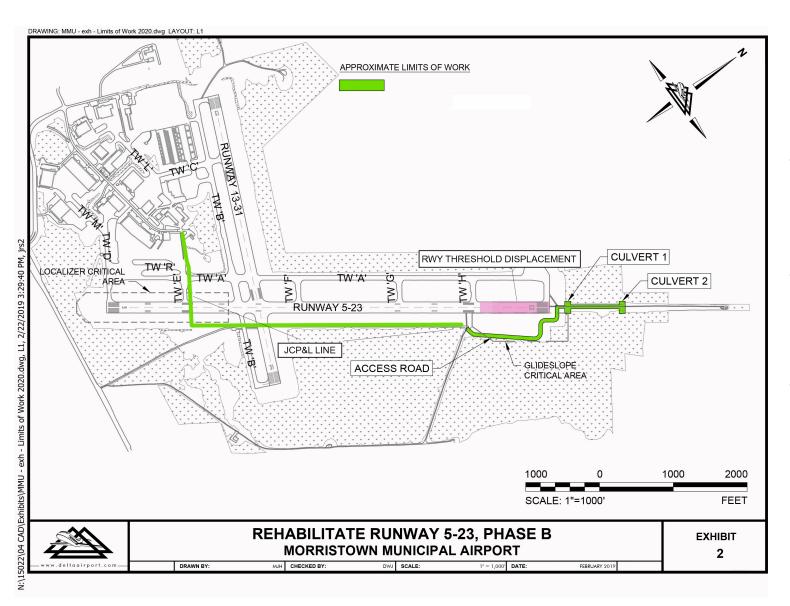
RWY 23 Threshold Relocation: 5,097 feet remaining





Expanded Project Timeline: July 6, 2021 – Nov. 9, 2021 Phase II, Stage B1: July 6 – 31 ٠ Nightly RWY 23 closures 2200 - 0600• Phase II, Stage B2: Aug. 6 – Sep. 30 RWY 23 threshold relocation: Aug. 6 – 9 56-hr. full closure Aug. 6 @ 2200 – Aug. 9 @ 0600 Nightly RWY 23 Closures • 2200 - 0600Phase II, Stage B3: Oct. 1 – Nov. 1 ٠ RWY 23 relocation returned: Oct. 30 – Nov. 1 • 32-hr. full closure Oct. 30 @2200 - Nov. 1 @ 0600 **Nightly RWY 23 Closures** 2200 - 0600• Nov. 1 – Nov. 9 Closeout: ٠

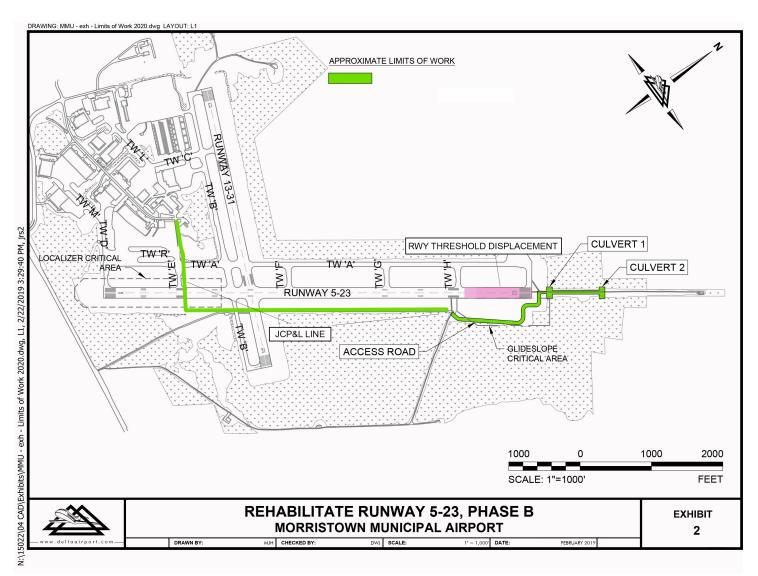
Threshold relocation remains in place through entirety of Stages B2 & B3



Runway 5/23 Full Closures Continued

Full Closures: RWY 5-23 Unavailable

- Aug. 6 at 2200 through Aug. 9 at 0600
 - RWY 23 displaced; 5,097 feet remaining
- Oct. 30 at 2200 through Nov. 1 at 0600
 - RWY 23 threshold relocation removed; full length restored
- RWY 13-31 available except for a 3-hour window during both closures in the overnight hours for threshold marking painting/removal

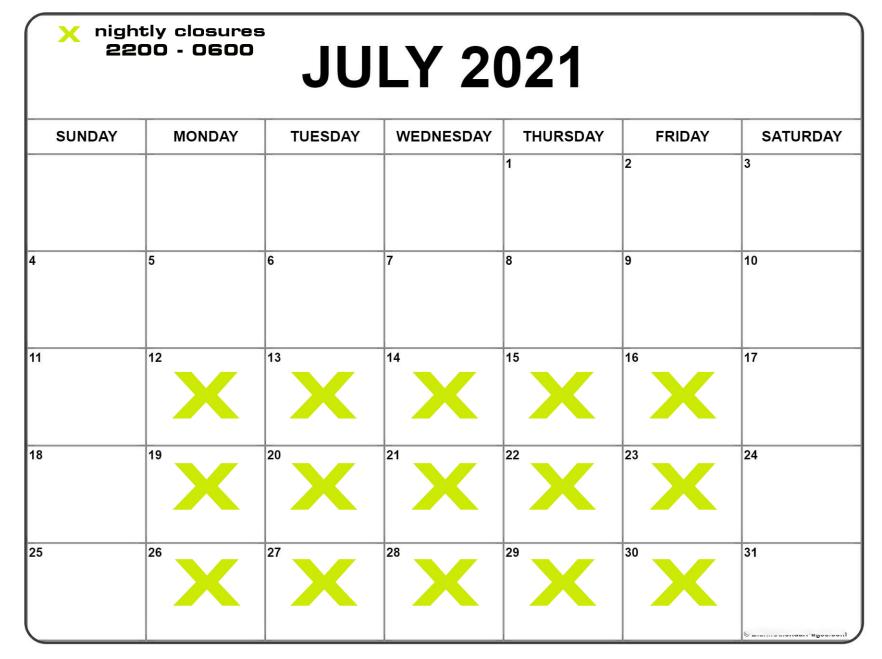


RWY 5-23 Navigational Aid Impacts

- July 6 November 1:
- *RWY 23 Glideslope Out Of Service for 112 calendar days
- RWY 23 Localizer and MALSR intermittent weeknight closures (2200-0600)
- August 6 November 1
- RWY 23 Localizer and MALSR out of service
- *Glide slope and MALSR must be OOS for culvert work off approach end of RWY 23

Available Approaches During <u>Phase II, Stage B</u> RNAV (RNP) Y RWY 23 RNAV (GPS) RWY 05

RNAV (GPS) Z RWY 23



Nightly Runway Closures Begin for Access Road Construction

All closure dates subject to change based upon construction progress & weather

 ^{2200 – 0600}

x nightly closures 2200 - 0600 August 9 = RWY 5-23 SHORTENED TO 5,097 FEET										
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY				
1	2	3	4	5	6	7 56-Hour				
8 Closure	9	10	11	12	13	14				
15	16	17	18	19	20	21				
22	23	24	25	26	27	28				
29	30	31								
						© BlankCalendarPages.com				

56-Hour FULL RWY Closure:2200 on August 6 through 0600 onAugust 9

Starting August at 0600, RWY 23 will be shortened to 5,097 Feet

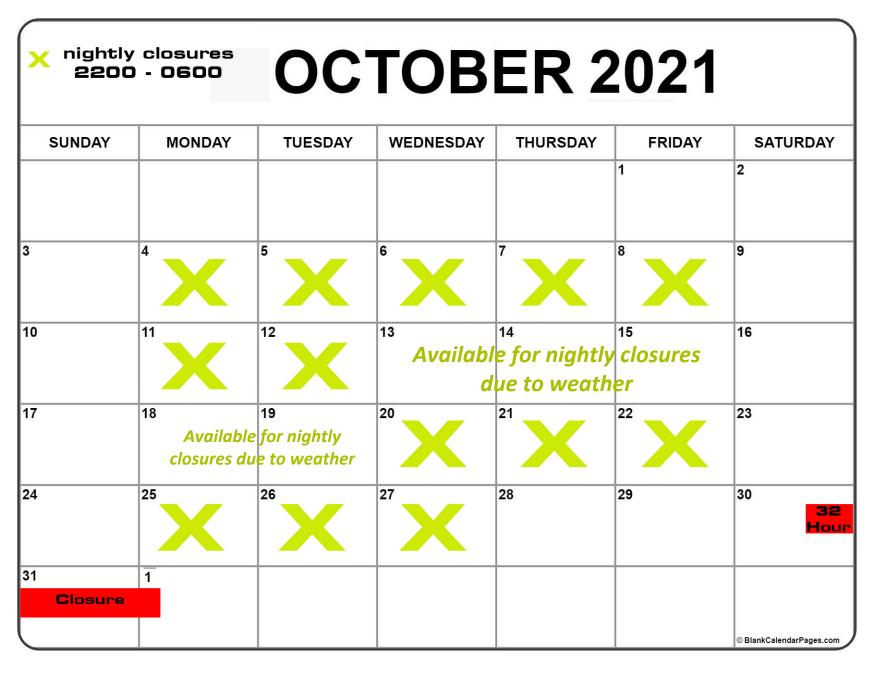
All closure dates subject to change based upon construction progress & weather

× nightly closures 2200 - 0600 SEPTEMBER 2021									
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY 3	SATURDAY			
5	6		8	9		11			
12	13	14	15	16	17	18			
19	20 Available fo closures due		22	23	24	25			
26	27	28	29	30					
						© BlankCalendarPages.com			

Nightly Closures for Culvert Work

• 2200 - 0600

All closure dates subject to change based upon construction progress & weather



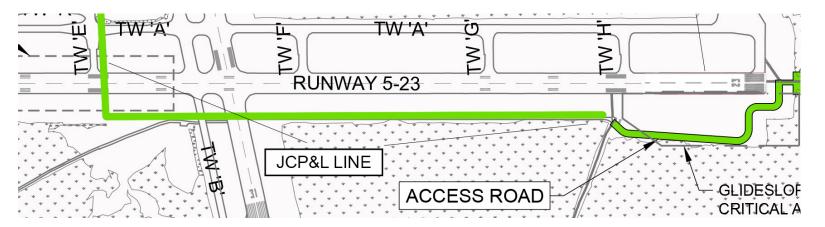
Nightly Closures for Culvert Work

• **2200** – **0600**

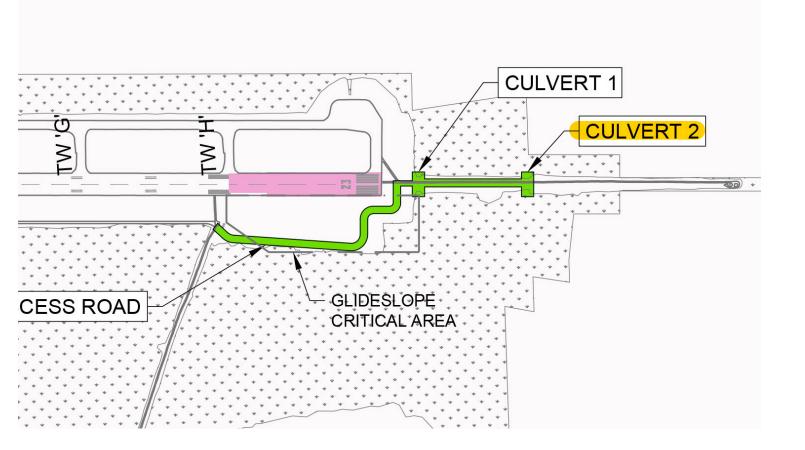
32-Hour FULL RWY Closure:2200 on October 30 through 0600 onNovember 1

RWY 23 returned to full length at 0600 on November 1

All closure dates subject to change based upon construction progress & weather

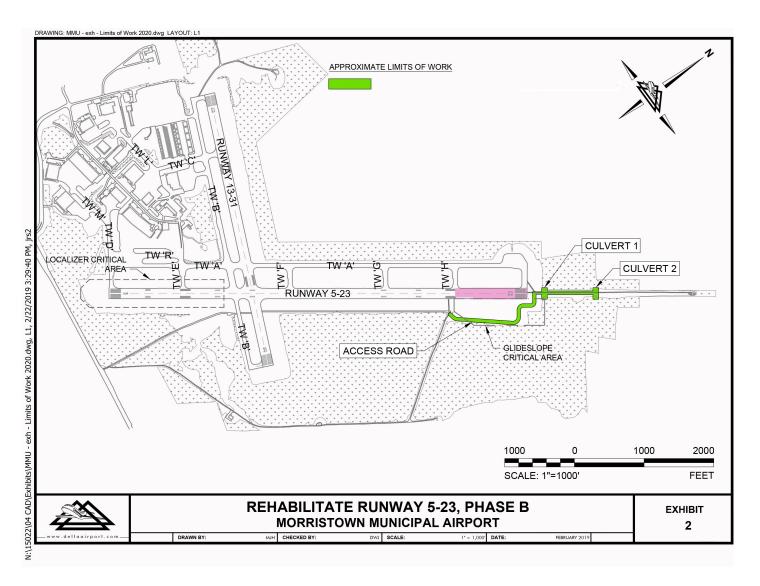


- July 6 July 31
 - Crews mobilize to site
 - Install soil erosion control measures
 - Completion of access road and required grading on East side of RWY 5-23 from glide slope shack to MALSR road
 - JCP&L power conduit install
 - Nightly closures of Runway 5/23 from 2200 – 0600
 - Slide 9 has date details



- August 6 September 30
 - RWY 5-23 threshold relocation
 - Details on next slide
 - Replacement of Culvert 2
 - Sheet piling installed off the approach end of RWY 23
 - Runway 5/23 nightly closures from 2200 – 0600
 - Slides 10 & 11 have date details

 ★ RWY 5-23 threshold relocated throughout Stage B2; RWY length shortened to 5,000'



Runway 5/23 Full Closure 1; <u>Threshold Relocation</u>

August 6 at 2200 through August 9 at 0600

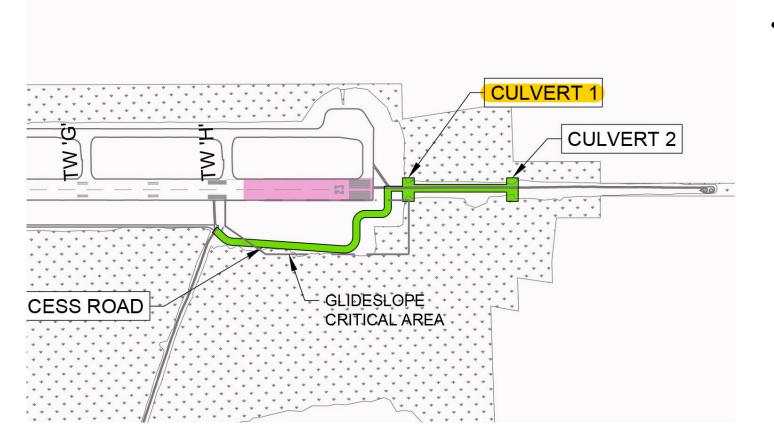
Runway 5/23 will be closed starting at 10pm on August 6 and will remain closed until August 9th at 6:00am.

On August 9th, Runway 5/23 will be re-opened with an approximate 1,000ft displacement.

Runway 13-31 will be open <u>WITH THE</u> <u>EXCEPTION</u> of a 3-hour closure during the overnight hours to remove touchdown markings in the intersection.

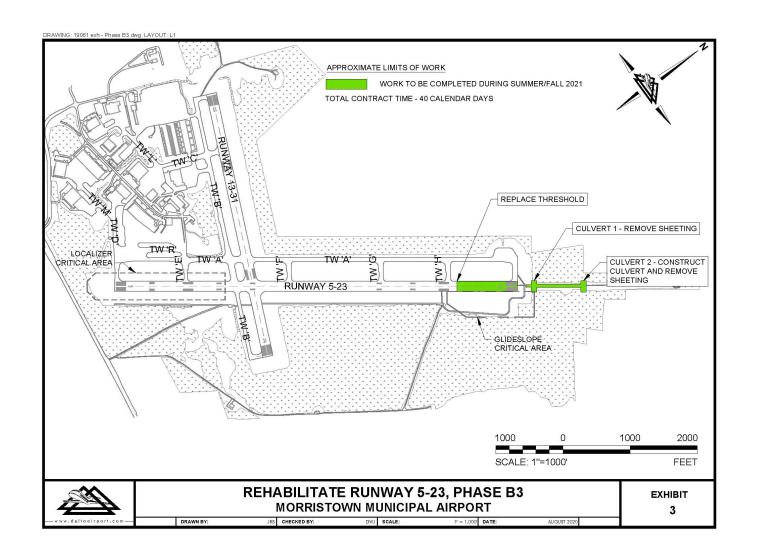
Runway 5/23 will have an available remaining length of 5,097 ft

RWY threshold relocation remains in place through entirety of Stages B2 & B3



- October 1 November 1
 - Replacement of Culvert 1
 - Sheet piling installed off the approach end of RWY 23
 - Runway 5/23 nightly closures from 2200 - 0600
 - Slide 12 has date details
 - RWY threshold relocation removed
 - Details on next slide

RWY 5-23 threshold relocation remains throughout Stage B2; RWY length shortened to 5,0'



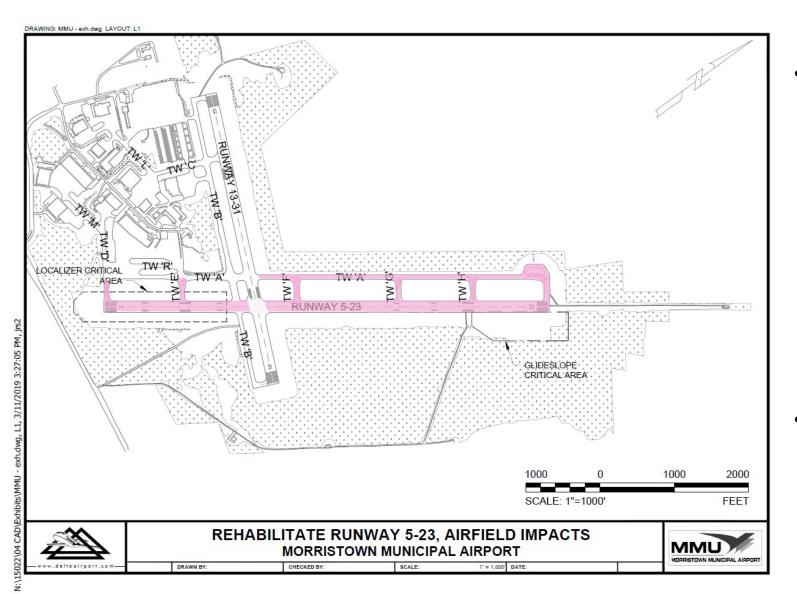
Runway 5/23 Full Closure 2; RWY Threshold Relocation Returned

October 31 at 2200 through November 1 at 0600

Runway 5/23 will be closed starting at 10pm on October 31 and will remain closed until November 1 at 6:00am.

Runway 13-31 will be open **WITH THE EXCEPTION** of a 3-hour closure during the overnight hours to restore touchdown markings in the intersection.

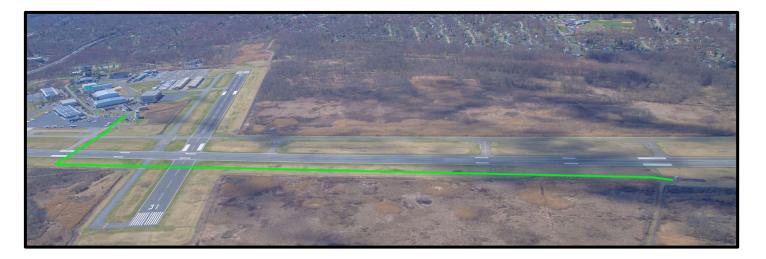
On November 1, Runway 5/23 will be reopened with its full length; 5,998ft



RWY 5-23 Operational Impacts

- During the Runway 5/23 nightly closures, the following impacts will occur:
 - Taxiway Delta: Closed from RWY Alpha to RWY 5
 - Taxiway Alpha: Closed from RWY 13-31 to RWY 23
 - Taxiways Echo, Foxtrot, Golf & Hotel: Closed from Taxiway Alpha to RWY 5-23
- RWY 13-31 will remain open during nightclosures of RWY 5-23 except for the 3-hour closures during the two weekend full closures of Runway 5/23 for threshold relocation work

Questions & Comments



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