



**BRANSCOME**

# Chambers Field Runway

Naval Station Norfolk, VA

# Project Information:



- **Total Contract: \$20.2M**
  - Original Contract Value: \$16.9M
  - Change Orders: \$3.3M
  
- **Contract Duration: 120 days**
  
- **Liquidated Damages: \$12,500/Day**
  
- **Runway Dimensions:**
  - 6500 ft. Long
  - 200 ft. Wide
  
- **Asphalt Quantities:**
  - 30,000 Tons P401
  - 3,150 Tons P403
  - 6,300 Tons 9.5A



# Scope of Work: Runway



**UTS Milling and Surface Treatment**



**Asphalt Leveling & Paving**



**Infield Demolition**



**Concrete Repair & Joint Sealing**



**Grooving & Striping**



**Runway Lighting**



# Scope of Work: Instrument Landing System



**Airfield Navigation Signs**



**ILS Platforms**



# Quantities:

- 5,000 LF Low Profile Barriers
- 39,000 Tons of Asphalt
- 200+ CY Concrete Repairs
- 62,000 LF Joint Sealant
- 270,000 SY Variable Depth Milling: 3" – 48"
- 1,950 LF Storm Drain
- 97 Airfield Navigation Signs
- 330 Runway Lights
- 90% of Waste Recycled (>100,000 Tons)



# Runway Closure: March 1<sup>st</sup> to June 30<sup>th</sup>, 2021



MILITARY WATCH | NORFOLK

CHAMBERS FIELD RUNWAY TO BE RESURFACED

3



# US Navy Admiral Visit



- High profile project that was deemed “Mission Essential” for US Navy operations
- Project required all aircraft to be temporarily deployed to three different Navy Bases for the duration of the work
- Navy Admirals inspected site regularly to monitor progress and quality
- US Navy commended the job upon completion



# UTS Milling



- Two milling operations running concurrently on Runway
- Variable Depth Milling 3" – 8" to re-profile existing runway to new grades
- 176,000 SY milled in 10 days

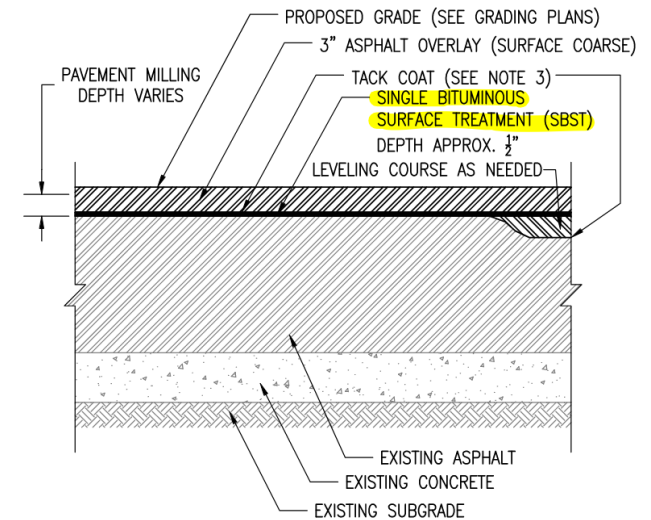




# Surface Treatment



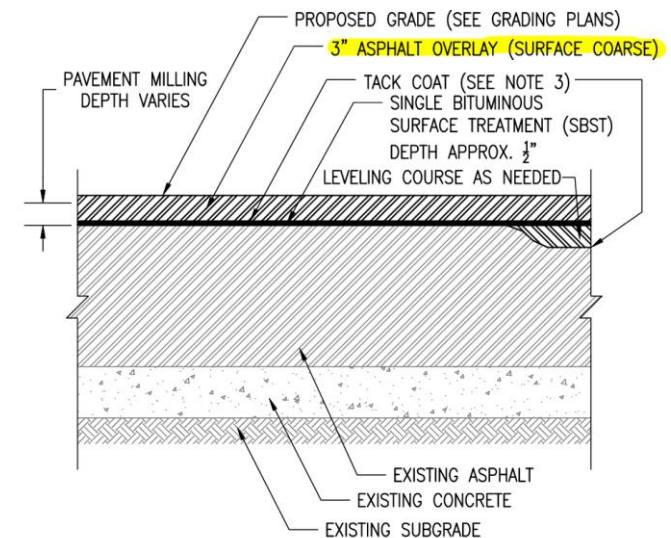
- **1/2" SBST Bituminous Surface Treatment installed over asphalt base to repair existing surface condition**
- **Installation performed by Whitehurst**



# UTS Paving



- 39,000 Tons paved in 15 Days
- UTS Machine Control to control variable depths (3" – 6")
- Tandem Paving operation reduced longitudinal joints which were required to be saw cut
- Paving sequence eliminated transverse joints



# Asphalt Grooving

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- Two 8 ft. Cardinal Safe-T-Groover Machines worked 24/7 to complete 144,400 SY in 7 days
- Asphalt cured 30 days prior to Grooving
- Grooves  $\frac{1}{4}$ " Wide and  $\frac{1}{4}$ " Deep (+/-  $\frac{1}{16}$ " ) and skipped over the CL Lights



# Airfield Striping

- Hi-Lite performed Airfield Striping with Sightline, Inc. Present to perform specialized QC Services
- Ground surface was water blasted prior to application with Pull Test and Surface Moisture Tests conducted daily to verify cleanliness
- Material Coverage and Reflectivity exceeded FAA specifications
- 128,000 SF of markings completed using 19,000 lb of beads and 1,235 Gal of Paint

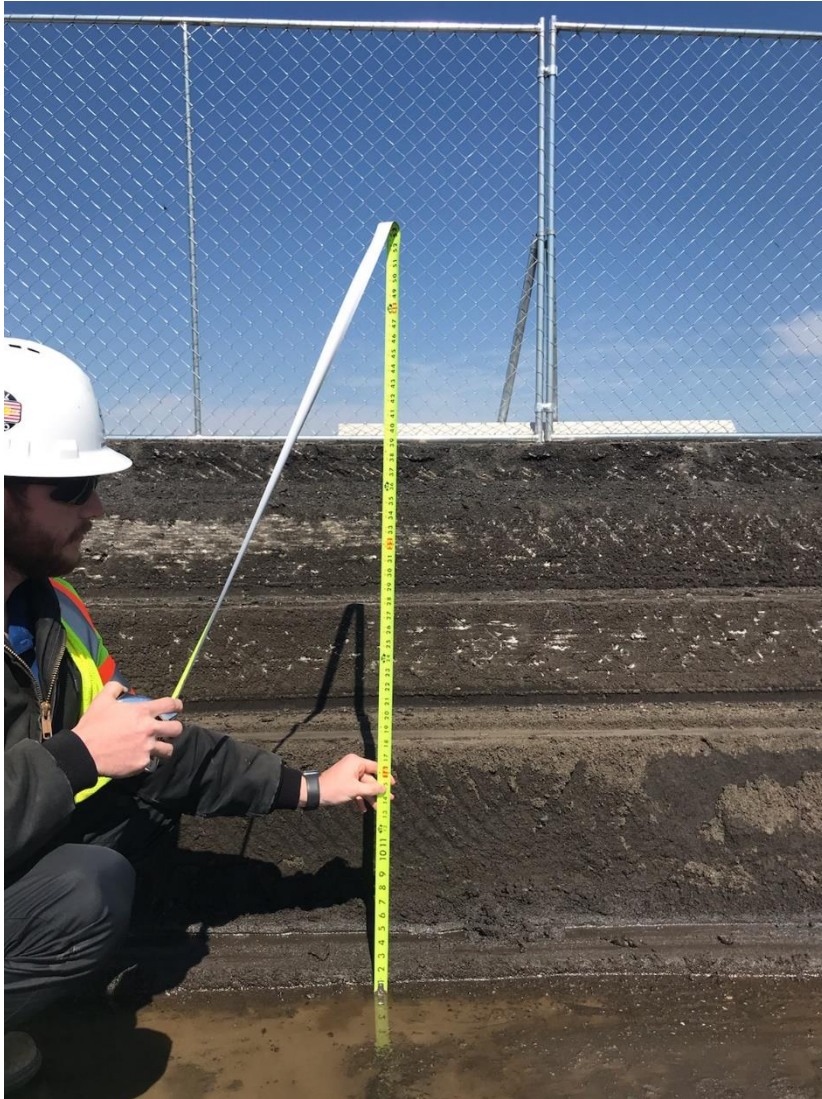


# Airfield Striping Layout

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# Demo Milling



- 94,000 SY variable depth asphalt milling ranging 6" – 48" + 6" concrete to return impervious pavement to green areas for site drainage
- FOD Control critical in these areas due to adjacent Helo-Pads
- Several unmarked, private utilities present in the area that had to be worked around that supported Navy Precision Approach Radars (PAR)



# Active Helicopter Pads (Video)

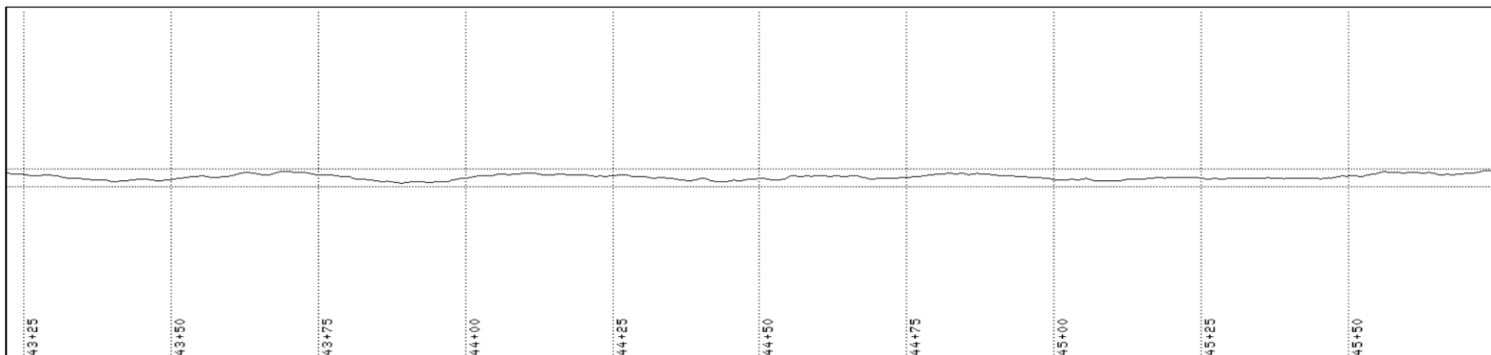
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# Quality Control



- 18 lots tested, all 100% Pay Factor based on Laboratory Air Voids & In-Place Density
- Mat cores 94-96% TMD, Joint Cores >92.5% TMD
- Profilograph completed with AMES 6300 Lightweight Profile Method exceeded required smoothness.
  - Average of 0.75 in/mi over runway, no entry greater than 1.8 in/mi
  - Specification standard allowed up to 7 in/mi





# Challenges:

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- **Fast Paced Schedule**
- **Security Requirements**
- **Trucking Availability**
- **QC Tolerances**
- **Unmarked Utilities**
- **Owner Changed Conditions**



# Challenges: Runway Light Elevations



- Existing Light Cans Exceeded FAA tolerance of +/-1/16"
- Runway Grades Re-designed After Milling Complete
- Add 5,000 Tons P401 Asphalt
- UTS Paving
- Change Order: +6 Calendar Days



# Opening Day: July 19<sup>th</sup>, 2021

