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# PAVEMENT REHABILITATION PROJECT

## BILLY MITCHELL AIRPORT (HSE)

WSP PROJECT NO. 188695-05  
NCDOT PROJECT NO. 36244.74.1.1  
SUBMITTED: SEPTEMBER 16, 2024

ISSUED  
FOR BID

PREPARED BY:

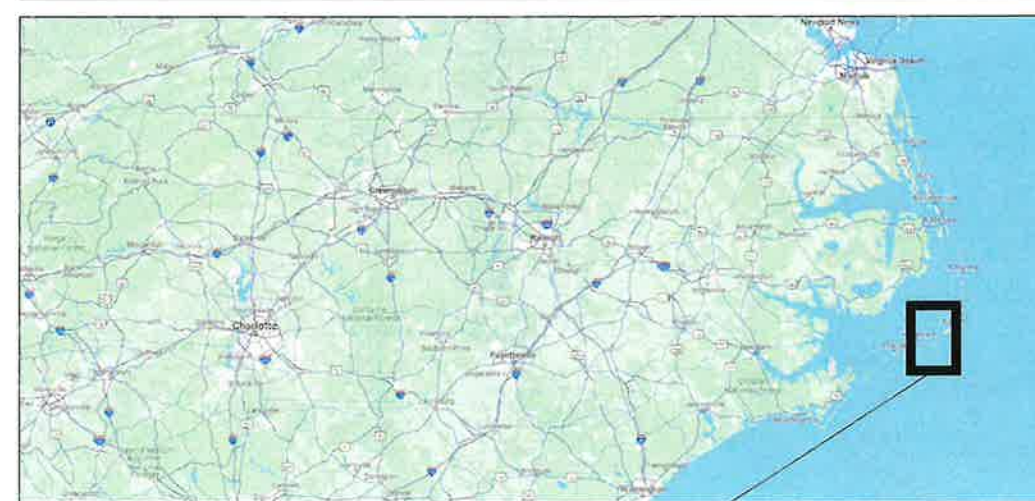


**BILLY MITCHELL AIRPORT**  
AIRPORT INFORMATION:  
FAA IDENTIFIER: HSE  
LATITUDE: 35 13' 58.1" N  
LONGITUDE: 75 37' 04.1" W  
CTAF FREQUENCY: 122.9  
NO TOWER  
MAXIMUM EQUIPMENT HEIGHT: 15' AGL

LOCATION MAP



AREA MAP



PROJECT AREA

**BILLY MITCHELL AIRPORT (HSE)**  
**PAVEMENT REHABILITATION PROJECT**  
NCDOT PROJECT NO. 36244.74.1.1  
53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID



SHEET TITLE

COVER SHEET

DATE: SEPTEMBER 16, 2024  
SCALE: NTS  
DRAWN BY: SSD  
CHECKED BY: RDB  
APPROVED BY: RDB

WSP PROJECT NUMBER: 188695-05

SHEET NUMBER: **G0.00**

SHEET 1 OF 26

### INDEX

PDF PAGE NUMBER	SHEET NUMBER		SHEET TITLE	
1	G0.00		COVER SHEET	
2	G0.01		INDEX, SUMMARY OF QUANTITIES, ABBREVIATIONS AND LEGEND	
3	G1.01		LOCATION MAP AND ALIGNMENT CONTROL	
4	GP0.01		CONSTRUCTION SAFETY AND PHASING PLAN	
5-6	GP0.02	-	GP0.03	CONSTRUCTION SAFETY AND PHASING PLAN NOTES
7-10	CD1.01	-	CD1.04	DEMOLITION PLAN
11	CD5.01		EXISTING TYPICAL SECTIONS	
12-15	C1.01	-	C1.04	PAVING AND GRADING PLAN
16-17	C5.01	-	C5.02	PAVING DETAILS
18	CE1.01		EROSION CONTROL PLAN	
19-20	CE5.01	-	CE5.02	EROSION CONTROL DETAILS
21-24	PM1.01	-	PM1.04	PAVEMENT MARKING PLAN*
25-26	PM5.01	-	PM5.02	PAVEMENT MARKING DETAILS*

\* BY OTHERS

### SUMMARY OF QUANTITIES

ITEMS					*BASE BID ITEMS	** BID FORM - OPTIONAL SUPPLEMENTAL AGREEMENT	* ITEMS W/ FULL DEPTH PAVE. REHAB. OF RUNWAY
LINE #	ITEM #	SPEC #	ITEM DESCRIPTION	UNIT	QUANTITY	QUANTITY	QUANTITY
1	0000100000-N	800	MOBILIZATION	LS	1.0	1.0	1.0
2	0000900000-N	SP-02	GENERIC MISCELLANEOUS ITEM RUNWAY END POINT MONUMENTS	LS	1.0	-	1.0
3	0156000000-E	250	REMOVAL OF EXISTING ASPHALT PAVEMENT	SY	18,860.0	25,050.0	43,910.0
4	0234000000-E	SP-04	GENERIC GRADING ITEM AGGREGATE BASE COURSE	CY	710.0	50.0	760.0
5	0241000000-E	SP-10	GENERIC GRADING ITEM RUBBLIZE EXISTING CTBC	SY	8,630.0	-	8,630.0
6	0241000000-E	SP-07	GENERIC GRADING ITEM SUBGRADE STABILIZATION	SY	4,380.0	-	4,380.0
7	1146000000-E	535	CONDITIONING EXISTING BASE	MSY	8.0	25.0	33.0
8	1297000000-E	607	MILLING ASPHALT PAVEMENT, ****" DEPTH (2")	SY	25,050.0	(25,050.0)	-
9	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	TON	430.0	320.0	750.0
10	1880000000-E	SP-03	GENERIC PAVING ITEM ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C (NCDOT 610)	TON	2,900.0	7,500.0	10,400.0
11	1880000000-E	SP-03	GENERIC PAVING ITEM ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C (NCDOT 610)	TON	4,780.0	(740.0)	4,040.0
12	1892000000-E	710	GENERIC PAVING ITEM 6" CONCRETE PAVEMENT (WITH DOWELS)	SY	153.0	-	153.0
13	6132000000-N	SP-06-5.1	GENERIC EROSION CONTROL ITEM CONSTRUCTION ENTRANCE	EA	1.0	-	1.0
14	6147000000-E	SP-06-5.2	GENERIC EROSION CONTROL ITEM TEMPORARY SILT FENCE	LF	4,562.0	-	4,562.0

\* SEE PLAN SHEET GP0.01

\*\* SEE BID PROPOSAL FOR OPTIONAL SUPPLEMENTAL WORK ITEMS

### LEGEND

EXISTING CONDITION	DESCRIPTION	PROPOSED CONDITION
	FENCE	
	TREE	
	SIGN	
	VEGETATION	
	POST	
	ROFA	
	RSA	
	TOFA	
	TSA	

### ABBREVIATIONS

AOA	AIR OPERATIONS AREA	OC	ON CENTER
APPROX	APPROXIMATE	OFA	OBJECT FREE AREA
ASOS	AUTOMATED SURFACE OBSERVING SYSTEM	OFZ	OBSTACLE FREE ZONE
AVE	AVENUE	OPS	OPERATIONS
BLVD	BOULEVARD	QTY	QUANTITY
CSPP	CONSTRUCTION SAFETY & PHASING PLAN	PACS	PRIMARY AIRPORT CONTROL STATION
CTAF	COMMON TRAFFIC ADVISORY FREQUENCY	PID	PERMANENT IDENTIFIER
DEMO	DEMOLITION OR DEMOLISH	R	RADIUS
DND	DO NOT DISTURB	REQD	REQUIRED
DWG	DRAWING	ROFA	RUNWAY OBJECT FREE AREA
E	EAST/EASTING	RPR	RESIDENT PROJECT REPRESENTATIVE
EA	EACH	RSA	RUNWAY SAFETY AREA
EX/EXIST	EXISTING	RT	RIGHT
FAA	FEDERAL AVIATION ADMINISTRATION	RW	RUNWAY
FOD	FOREIGN OBJECT DEBRIS	S	SOUTH
GP	GENERAL PROVISION	SACS	SECONDARY AIRPORT CONTROL STATION
H	HEIGHT OR HORIZON	SCH	SCHEDULE
HAZMAT	HAZARDOUS MATERIAL	SE	SOUTHEAST
HMA	HOT MIX ASPHALT	SF	SQUARE FEET
HORIZ	HORIZONTAL	SP	SPACES OR SPECIAL PROVISION
HSE	BILLY MITCHELL AIRPORT	SPCD	SAFETY PLAN COMPLIANCE DOCUMENT
L	LENGTH	SQ IN	SQUARE INCH
LF	LINEAR FEET	ST	STREET
LS	LUMP SUM	STD	STANDARD
LT	LEFT	SW	SOUTHWEST
MAX	MAXIMUM	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
MDISK	MONUMENT DISK	TEMP	TEMPORARY
MIN	MINIMUM	TOFA	TAXIWAY OBJECT FREE AREA
MITCHPORT	BILLY MITCHELL AIRPORT	TRV	TRAVERSE
MPH	MILES PER HOUR	TSA	TAXIWAY SAFETY AREA
MSL	MEAN SEA LEVEL	TW	TAXIWAY
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	TYP	TYPICAL
NAVAID	NAVIGATIONAL AID	UG	UNDERGROUND
N	NORTH/NORTHING	UIP	USE IN PLACE
N/A	NOT APPLICABLE	VAR	VARIES
NCDOA	NORTH CAROLINA DIVISION OF AVIATION	VERT	VERTICAL
NGS	NATIONAL GEODETIC SURVEY	W	WEST OR WIDTH
NOTAM	NOTICE TO AIR MISSIONS	W/	WITH
NPS	NATIONAL PARK SERVICE	W/O	WITHOUT
NTP	NOTICE TO PROCEED	@	AT
NTS	NOT TO SCALE	#	NUMBER
OBX	OUTER BANKS AIRPORTS	%	PERCENT
		±	PLUS/MINUS (APPROXIMATE)
		Ø	DIAMETER



1001 MOREHEAD SQUARE DRIVE  
SUITE 610  
CHARLOTTE, NC 28203  
T 704-342-5401 | www.wsp.com

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

**PAVEMENT REHABILITATION PROJECT**  
NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID



SHEET TITLE  
**INDEX, SUMMARY OF QUANTITIES, ABBREVIATIONS AND LEGEND**

DATE **SEPTEMBER 16, 2024**

SCALE **NA**

DRAWN BY **SSD**

CHECKED BY **RDB**

APPROVED BY **RDB**

WSP PROJECT NUMBER **188695-05**

SHEET NUMBER **G0.01**

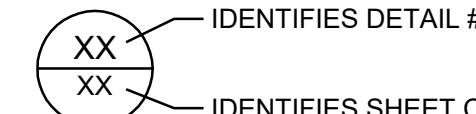
SHEET **2 OF 26**

SCALE (S) AS NOTED ON THIS SHEET ARE BASED ON A FULL SIZE 22 X 34 SHEET



DETAIL TITLE

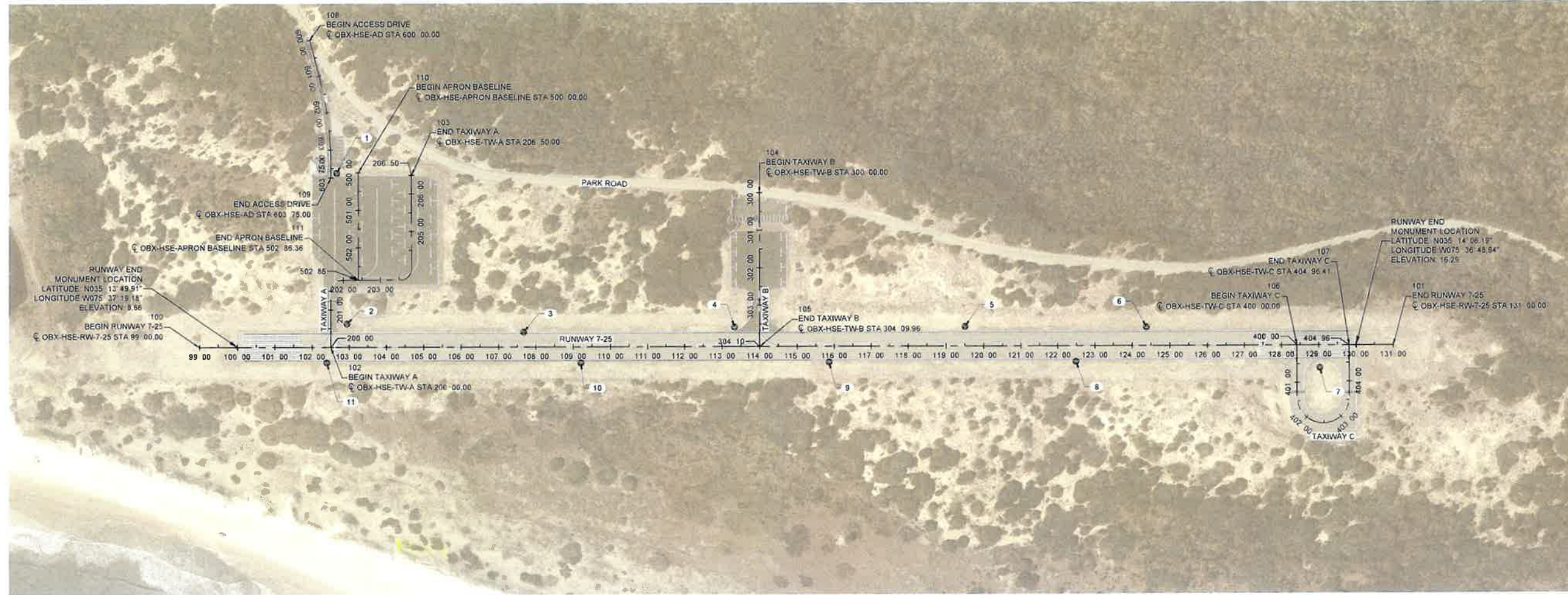
SCALE:



IDENTIFIES DETAIL #

IDENTIFIES SHEET CAN BE FOUND ON

NO.	DESCRIPTION	DATE



**BILLY MITCHELL AIRPORT (HSE)**  
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HSE PRIMARY CONTROL POINTS				
NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION
2	TRV 2 MDISK MITCHPORT	556209.55	3008752.10	9.22
4	TRV 4 MIRS W/ CAP	556800.77	3009606.92	10.87
5	TRV 5 MIRS W/ CAP	557157.08	3010111.09	12.53
7	TRV 7 MDISK MIRCHPORT AX MK	557614.77	3010953.64	14.58

HSE SECONDARY CONTROL POINTS				
NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	TRV 1 NAIL	556522.14	3008498.12	12.09
3	TRV 3 NAIL	556464.28	3009151.68	10.01
6	TRV 6 NAIL	557436.28	3010510.58	14.30
8	TRV 8 NAIL	557251.95	3010409.16	13.72
9	TRV 9 NAIL	556869.83	3009867.34	12.28
10	TRV 10 NAIL	556485.31	3009324.72	10.42
11	TRV 11 NAIL	556093.47	3008767.30	8.86

**ALIGNMENT CONTROL:**

POINT	ALIGNMENT
100	BEGIN RUNWAY 7-25 STA 99 00.00, N: 555931.38, E: 3008466.39
101	END STA 131 00.00, N: 557777.37, E: 3011080.26
102	BEGIN TAXIWAY A (TW A) STA 200 00.00, N: 556133.35, E: 3008752.39
103	PI STA 201 78.89, N: 556279.48, E: 3008649.19
103	END STA 203 83.08, N: 556404.70, E: 3008826.49
104	BEGIN TAXIWAY B (TW B) STA 300 00.00, N: 557131.18, E: 3009454.60
105	END STA 304 09.96, N: 556796.31, E: 3009691.10
106	BEGIN TAXIWAY C (TW C) STA 400 00.00, N: 557628.22, E: 3010869.07
107	PI STA 402 08.00, N: 557458.32, E: 3010989.05
107	END STA 403 18.46, N: 557539.37, E: 3011103.82
108	BEGIN ACCESS DRIVE (AD) STA 600 00.00, N: 556770.46, E: 3008231.99
109	PI STA 602 26.25, N: 556625.13, E: 3008405.41
109	END STA 603 75.00, N: 556502.59, E: 3008491.96
110	BEGIN APRON BASELINE STA 500 00.00, N: 556556.11, E: 3008544.49
111	END STA 502 86.36, N: 556322.21, E: 3008709.69

**GENERAL NOTES:**

- GRID COORDINATE SYSTEM: NAD83, NORTH CAROLINA STATE PLANE, US FOOT. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), US FOOT.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CONTROL POINT INFORMATION PRIOR TO CONSTRUCTION. THE CONTRACTOR MUST DOCUMENT AND REPORT TO THE PROJECT REPRESENTATIVE ANY DISCREPANCIES FOUND DURING SURVEY VERIFICATIONS.
- CONTRACTOR MUST PRESERVE AND PROTECT EXISTING CONTROL POINTS SHOWN ON PLAN.
- AFTER RUNWAY REHABILITATION IS COMPLETE, CONTRACTOR MUST ESTABLISH RUNWAY END POINT MONUMENTS AT THE LOCATIONS SHOWN ABOVE. PLACEMENT MUST BE IN ACCORDANCE WITH SPECIFICATION SECTION SP-02, RUNWAY END POINT MONUMENTS.
- SEE C1 SERIES FOR DETAILED LAYOUT PLANS.
- CONTRACTOR TO FOLLOW NCDOT SECTION 801 SPECIFICATIONS FOR ALL SURVEYING AND CONSTRUCTION LAYOUT. SURVEYING, STAKEDOUT AND CONSTRUCTION LAYOUT IS INCIDENTAL TO THE PROJECT.
- EXISTING CONDITIONS INCORPORATES PROJECT SURVEY AND HISTORICAL DATA PROVIDED BY THE PROJECT REPRESENTATIVE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY WITH SURVEY THE EXISTING CONDITIONS. CONTRACTOR TO SURVEY EXISTING PAVEMENT (INCLUDING ELEVATION) TO THE EXTENT REQUIRED TO RE-ESTABLISH THE EXISTING GRADES DURING PAVING OPERATIONS. THIS SHOULD BE DONE PRIOR TO START OF CONSTRUCTION AND CONTRACTOR MUST NOTIFY THE PROJECT REPRESENTATIVE OF ANY DISCREPANCIES. CONTRACTOR MUST NOT MODIFY THE EXISTING GRADES WITHOUT THE PRIOR WRITTEN CONSENT OF THE PROJECT REPRESENTATIVE.

**ISSUED FOR BID**



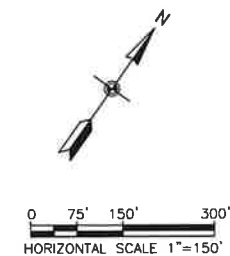
SHEET TITLE  
**LOCATION MAP AND ALIGNMENT CONTROL**

DATE **SEPTEMBER 16, 2024**  
SCALE **1" = 150'**  
DRAWN BY **SSD**  
CHECKED BY **RDB**  
APPROVED BY **RDB**

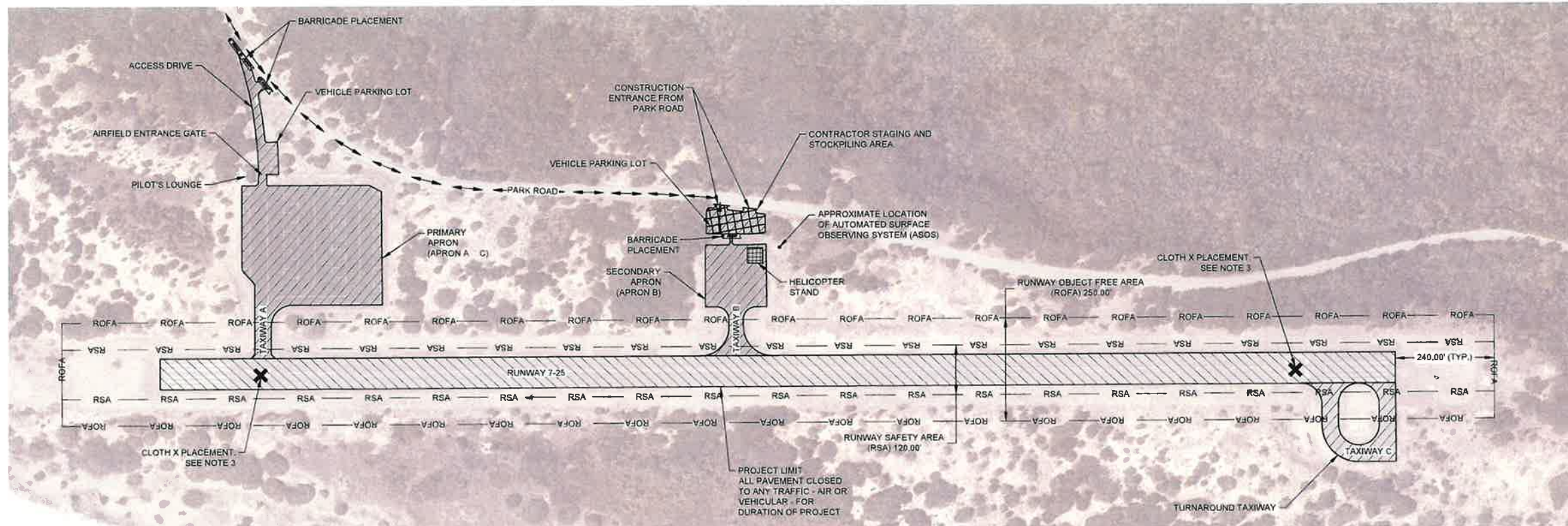
WSP PROJECT NUMBER **188695-05**

SHEET NUMBER **GI1.01**

SHEET **3 OF 26**



NO.	DESCRIPTION	DATE



**LEGEND**

- RUNWAY PAVEMENT REHABILITATION
- PAVEMENT REHABILITATION
- HELICOPTER STAND
- CONTRACTOR STAGING AREA / CONTRACTOR STOCKPILE AREA
- ACCESS/HAUL ROUTE
- CLOTH RUNWAY CLOSURE MARKER
- LOW PROFILE BARRICADE

**PHASING NOTES**

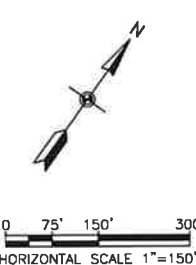
1. THE PROJECT REPRESENTATIVE MUST APPROVE CONTRACTOR'S PROPOSED SCHEDULE PRIOR TO ISSUANCE OF NTP. CONTRACTOR TO NOTIFY THE PROJECT REPRESENTATIVE IN WRITING IF A CHANGE TO SCHEDULE IS PROPOSED PRIOR TO SCHEDULE ELEMENT COMPLETION DATE.
2. FOR BID ALTERNATE WORK, CONTRACTOR MUST MILL ASPHALT, COORDINATE CRACK REPAIR WITH SPAM CONTRACTOR, OVERLAY PAVEMENT, AND REGRADE AS DESCRIBED IN THESE PLANS.
3. PRIOR TO STARTING WORK, CONTRACTOR MUST PLACE AND MAINTAIN A CLOTH X, WHILE RUNWAY 7-25 IS CLOSED, AT BOTH ENDS OF THE RUNWAY ON OR NEAR THE RUNWAY DESIGNATION NUMBERS FACING THE APPROACH, AS SPECIFIED IN ADVISORY CIRCULAR 150/5370-2G, OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION. DURING CONSTRUCTION HOURS, CLOTH 'X' MAY BE MOVED TO THE GRASS AREA DIRECTLY ADJACENT TO EACH END OF RUNWAY, IN LINE WITH RUNWAY CENTERLINE. UPON COMPLETION OF WORK FOR THE DAY, CLOTH 'X' MUST BE PLACED BACK AT THE LOCATION AS SHOWN ON THE DRAWINGS. SEE NOTE 6, DETAIL 2/ GP0.03.
4. BARRICADES MUST BE PLACED AT THE ENTRANCE TO THE AIRFIELD, AFTER THE HELIPAD, PRIOR TO WORK, AS DESCRIBED IN THESE PLANS.
5. THE CONTRACTOR MUST COMPLETE THE WORK IDENTIFIED IN THIS CONTRACT WITHIN 75 CONSECUTIVE CALENDAR DAYS. NO EXTRA TIME WILL BE GIVEN FOR THE BID ALTERNATE 1. RUNWAY 7-25, APRON, AND TAXIWAYS MUST BE CLOSED UNTIL ALL WORK IS COMPLETED IN THESE AREAS. ACCESS DRIVE WORK MAY BE COMPLETED WHILE RUNWAY 7-25, APRON, AND TAXIWAY ARE OPEN. WORK TO BE ALLOWED 7 DAYS A WEEK, FROM SUNRISE TO SUNSET ONLY.
6. NOTAMS MUST BE ISSUED BY THE PROJECT REPRESENTATIVE ADVISING PILOTS OF THE CLOSED RUNWAY, TAXIWAYS, AND APRON.
7. CONTRACTOR MUST NOTIFY THE PROJECT REPRESENTATIVE OF INTENT TO REOPEN AND MUST ALLOW FOR, AT MINIMUM, ONE DAY FOR THE PROJECT REPRESENTATIVE TO PERFORM FIELD INSPECTIONS PRIOR TO OPENING AIRFIELD PAVEMENT TO TRAFFIC.
8. FOR ALL REOPENINGS OF A CLOSED AIRFIELD PAVEMENTS REQUIRED BY THIS PROJECT, ALL OPENING REQUIREMENTS MUST BE FULFILLED BY THE CONTRACTOR AND APPROVED BY THE PROJECT REPRESENTATIVE PRIOR TO THE PLANNED AND AGREED UPON REOPENING TIME.
9. ITEMS OF WORK:
  - 9.1. TO BE COMPLETED BY CONTRACTOR:
    - 9.1.1. BASE BID
      - 9.1.1.1. RUNWAY PAVEMENT REHABILITATION
        - 9.1.1.1.1. PAVEMENT MILLINGS
        - 9.1.1.1.2. CRACK SEAL (BY OTHERS)
        - 9.1.1.1.3. PAVEMENT OVERLAY
      - 9.1.1.2. APRON, TAXIWAY, AND PARKING LOT REHABILITATION
        - 9.1.1.2.1. ASPHALT PAVEMENT REMOVAL
        - 9.1.1.2.2. SALVAGE OF TIEDOWNS
        - 9.1.1.2.3. CEMENT TREATED BASE (CTB) RUBBLIZATION
        - 9.1.1.2.4. BASE COURSE INSTALLATION/PREPARATION
        - 9.1.1.2.5. ASPHALT PAVEMENT INSTALLATION
        - 9.1.1.2.6. HELICOPTER STAND PAVEMENT INSTALLATION
      - 9.1.2. BID OPTION:
        - 9.1.2.1. RUNWAY PAVEMENT REMOVAL
          - 9.1.2.1.1. ASPHALT PAVEMENT REMOVAL
          - 9.1.2.1.2. SALVAGE OF TIEDOWNS
          - 9.1.2.1.3. CEMENT TREATED BASE (CTB) RUBBLIZATION
          - 9.1.2.1.4. BASE COURSE INSTALLATION/PREPARATION
          - 9.1.2.1.5. ASPHALT PAVEMENT INSTALLATION

- 9.2 TO BE COMPLETED BY OTHERS:
  - 9.2.1 CRACK SEAL
  - 9.2.2 PLACEMENT OF TIEDOWNS
  - 9.2.3 PAVEMENT MARKINGS

10. AIRPORT WILL BE CLOSED TO ANY AIRCRAFT OR VEHICULAR TRAFFIC FOR THE DURATION OF THE PROJECT.

**GENERAL NOTES:**

1. THE PROJECT IS FOR THE REHABILITATION OF RUNWAY 7-25 PAVEMENT, ALL TAXIWAYS, APRONS (ALL AIRFIELD PAVEMENT) AND VEHICLE PARKING LOTS.
2. A NOTICE TO PROCEED (NTP) WILL BE ISSUED FOR THIS WORK.
3. CLOTH X'S WILL BE SUPPLIED BY THE OWNER (LOCATED IN THE PILOT'S LOUNGE) AND PLACED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
4. LOW PROFILE BARRICADES WILL BE SUPPLIED AND MAINTAINED BY THE CONTRACTOR. BARRICADES MUST BE RELOCATED AS NECESSARY TO MAINTAIN WORK AREA SAFETY AND TO PREVENT ACCIDENTAL ENTRY BY OTHERS.
5. CONTRACTOR TO ACCESS BILLY MITCHELL AIRPORT VIA PARK ROAD WITH EQUIPMENT AND SUPPLIES.
6. CONTRACTOR TO ACCESS STAGING AREA VIA PARK ROAD.
7. HAUL ROUTES SHOWN MUST BE UTILIZED WITH NO DEVIATION UNLESS INSTRUCTED OTHERWISE BY THE PROJECT REPRESENTATIVE.
8. AREAS DISTURBED OR DAMAGED BY THE CONTRACTOR'S OPERATIONS ARE TO BE COMPLETELY RESTORED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE PROJECT REPRESENTATIVE UPON COMPLETION OF CONSTRUCTION.
9. CONTRACTOR MUST ONLY UTILIZE THE CONTRACTOR STORAGE/STAGING AREA FOR MATERIAL AND EQUIPMENT STORAGE, STOCKPILING, AND TO PARK EMPLOYEE VEHICLES. STOCKPILING OF MATERIALS IS NOT ALLOWED IN WORK AREAS. STOCKPILING IS LIMITED TO THE CONTRACTOR STAGING AREA.
10. CONTRACTOR EQUIPMENT HEIGHT MUST NOT EXCEED 15 FEET UNLESS OTHERWISE APPROVED BY THE PROJECT REPRESENTATIVE.
11. THE CONTRACTOR WILL NOT BE PERMITTED TO OPERATE OR PLACE EQUIPMENT OR MATERIALS OUTSIDE SPECIFIC WORK AREAS OR HAUL ROUTES.
12. THE CONTRACTOR MUST NOT DISTURB ANY GROUND ADJACENT TO THE PARKING LOT STAGING AREA. ALL EQUIPMENT, VEHICLES, AND MATERIALS STORED/STOCKPILED WITHIN THE STAGING AREA MUST BE KEPT TO THE PAVED AREA SHOWN. ANY DAMAGE CAUSED TO PAVED OR UNPAVED AREAS ADJACENT TO THE STAGING AREA MUST BE RESTORED TO EXISTING CONDITIONS. CONTRACTOR WILL BE RESPONSIBLE FOR ANY PERMITTING NECESSARY DUE TO DAMAGE. NO ADDITIONAL MEASUREMENT OR PAYMENT FOR WORK, MATERIALS, LABOR, TOOLS, INCIDENTALS, OR PERMITS WILL BE MADE DUE TO CONTRACTOR DAMAGE.
13. THE CONTRACTOR MUST STRICTLY KEEP TO THE ACCESS ROADS AND THE WORK AREAS SHOWN IN THE PLANS.
14. CONTRACTOR MUST COORDINATE WITH THE PROJECT REPRESENTATIVE FOR PROVIDING CHAIN LOCK OR GAIN ACCESS TO THE PROJECT SITE VIA KEY PAD AT THE EXISTING GATES. THE CONTRACTOR IS RESPONSIBLE FOR PRESERVING THE CONDITION OF THE FENCE AND GATE DURING CONSTRUCTION.
15. NCDOTA PORTABLE RESTROOMS WILL BE AVAILABLE FOR USE. RESTROOMS MUST BE CLEANED AND MAINTAINED FOR DURATION OF CONSTRUCTION AND AT THE COMPLETION OF THE PROJECT BY THE CONTRACTOR.



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53252 BILLY MITCHELL ROAD  
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SHEET TITLE

**CONSTRUCTION SAFETY AND PHASING PLAN**

DATE **SEPTEMBER 16, 2024**  
SCALE **1" = 150'**  
DRAWN BY **SSD**  
CHECKED BY **RDB**  
APPROVED BY **RDB**

WSP PROJECT NUMBER **188695-05**

SHEET NUMBER **GP0.01**

SHEET **4 OF 26**

IT IS ANTICIPATED THAT THE AIRPORT WILL BE CLOSED FOR THE DURATION OF THE PROJECT, THEREFORE NOT ALL OF THE RESTRICTIONS BELOW ARE APPLICABLE. CONTRACTOR TO COORDINATE RESTRICTIONS WITH THE PROJECT REPRESENTATIVE PRIOR TO START OF CONSTRUCTION. SHOULD THE CONDITIONS CHANGE AND A PORTION OF THE AIRPORT IS OPEN DURING CONSTRUCTION, ADDITIONAL RESTRICTIONS BELOW WILL BECOME APPLICABLE.

**COORDINATION:**

- 1. THE CONSTRUCTION OPERATIONAL SAFETY AND PHASING PLAN (CSPP) ESTABLISHES THE AIRPORT AND PROJECT SPECIFIC REQUIREMENTS THAT ARE TO BE INCLUDED IN THE CONTRACTOR'S BID FOR MAINTAINING OPERATIONAL SAFETY AND SECURITY DURING CONSTRUCTION.
2. THE CSPP, CONTAINED HEREIN WITHIN THE SPECIFICATIONS AND PLANS, HAS BEEN APPROVED BY THE PROJECT REPRESENTATIVE. THE CSPP MUST BE FOLLOWED BY THE CONTRACTOR THROUGHOUT THE PROJECT DURATION AND CONSISTS OF SHEETS GP0.01, GP0.02, AND GP0.03 AND THE CONTRACTOR'S SPCD (SEE NOTE 3 BELOW). IF THE CONTRACTOR WANTS TO MAKE A CHANGE TO THE CSPP, THE CHANGE MUST BE APPROVED BY THE PROJECT REPRESENTATIVE PRIOR TO IMPLEMENTATION.
3. THE CONTRACTOR MUST SUBMIT A WRITTEN SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) TO THE PROJECT REPRESENTATIVE FOR REVIEW AND APPROVAL FOURTEEN (14) CALENDAR DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE SPCD WILL BE SUBMITTED PRIOR TO THE PRE-CONSTRUCTION MEETING SO THAT IT CAN BE DISCUSSED DURING THE MEETING AS AN AGENDA ITEM. CONSTRUCTION CANNOT PROCEED UNTIL THIS PLAN HAS BEEN ACCEPTED BY THE PROJECT REPRESENTATIVE. THE SPCD WILL DEMONSTRATE HOW THE CONTRACTOR WILL MEET THE SAFETY REQUIREMENTS OF THE CONTRACT AND CSPP, INCLUDING DETAILS ON TOOL BOX SAFETY MEETINGS, TYPES, LOCATIONS, AND MAINTENANCE OF BARRICADES, WORK ACCESS ROUTES, AND PROPOSED PROCEDURES USED BY THE CONTRACTOR TO MONITOR AIRCRAFT ACTIVITY. PROCEDURES UTILIZED BY THE CONTRACTOR TO ELIMINATE CONFLICTS BETWEEN CONSTRUCTION OPERATIONS AND AIRCRAFT TRAFFIC MUST BE INCLUDED IN THE SPCD. THE SPCD WILL BE UPDATED AND RESUBMITTED FOR REVIEW AND APPROVAL BY THE PROJECT REPRESENTATIVE FOR EACH CHANGE IN CONDITION RELATED TO THE PROJECT.
4. THE CONTRACTOR MUST PROVIDE THE PROJECT REPRESENTATIVE WITH THE NAME OF THE SAFETY OFFICER AND THE FIELD FOREMAN WHO WILL BE IN CHARGE DURING WORKING HOURS. ADDITIONALLY, THE CONTRACTOR MUST IDENTIFY THE 24-HOUR EMERGENCY RESPONSE TELEPHONE NUMBERS FOR THE SUPERVISOR(S) IN CHARGE.
5. THE CONTRACTOR MUST BE FULLY AWARE AND CONTINUOUSLY MONITOR ALL REQUIREMENTS AND ACTIVITIES FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS AND ADVISORY CIRCULAR 150/5370-2G "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION" AS ATTACHED AS AN APPENDIX TO THE SPECIFICATIONS. THE CONTRACTOR'S SPCD MUST ADDRESS ALL SAFETY CONSIDERATIONS IN ACCORDANCE WITH THE ADVISORY CIRCULAR.
6. THE CONTRACTOR MUST OBEY THE INSTRUCTIONS OF THE FAA AND THE PROJECT REPRESENTATIVE AT ALL TIMES.
7. THE CONTRACTOR MUST PROVIDE THE PROJECT REPRESENTATIVE A FOURTEEN (14) DAY ADVANCE NOTICE OF INTENDED WORK PLANS PRIOR TO IMPLEMENTATION OF WORK.
8. THE CONTRACTOR MUST PROVIDE FAA ATO TECHNICIANS UNENCUMBERED ACCESS TO FAA FACILITIES (ASOS) AND UNDERGROUND CABLES WITHIN OR ADJACENT TO THE PROJECT LOCATION AT ALL TIMES.
9. WEEKLY PROGRESS MEETINGS WITH STAKEHOLDERS MUST BE HELD THROUGHOUT PROJECT DURATION.

**AREAS AND OPERATIONS AFFECTED BY CONSTRUCTION:**

- 1. THE PROJECT IS WITHIN THE MOVEMENT AREA OF THE AIRCRAFT OPERATIONS AREA (AOA). COORDINATION WITH THE PROJECT REPRESENTATIVE IS REQUIRED.
2. THE CONTRACTOR'S STORAGE/STAGING AREAS AND PARKING FOR TRAILERS, EQUIPMENT AND EMPLOYEE PARKING ARE LOCATED AS SHOWN ON PLANS. THE CONTRACTOR MUST PARK ALL CONSTRUCTION EQUIPMENT AT THESE LOCATIONS AT THE COMPLETION OF EACH WORK DAY. NO INDIVIDUAL EMPLOYEE VEHICLE WILL HAVE ACCESS TO ANY SECURE AREAS, INCLUDING THE AIRPORT RUNWAYS/TAXIWAYS/APRONS. ALL VEHICLES MUST BE PARKED AT THE DESIGNATED CONTRACTOR PARKING AREAS.
3. OPEN VEHICLE ACCESS ROUTES MUST BE MADE AVAILABLE FOR EMERGENCY PERSONNEL. THE CONTRACTOR MUST YIELD AT ALL TIMES TO AIRCRAFT, AIRPORT VEHICLES, FUEL TRUCKS, AND EMERGENCY VEHICLES.

**PROTECTION OF NAVAIDS:**

- 1. ONLY KNOWN NAVAID IS THE ASOS, THE CONTRACTOR MUST NOT DAMAGE IN ANY WAY THE PHYSICAL CONDITION OF AIRPORT NAVIGATIONAL AIDS (NAVAIDS) OR ALTER OR AFFECT IN ANY WAY THEIR FUNCTION DURING THIS PROJECT OTHER THAN AS DESCRIBED IN THE SCOPE OF WORK.

**CONTRACTOR ACCESS:**

- 1. THE CONTRACTOR MUST ACCESS THE WORK AREA AS SHOWN ON SHEET GP0.01.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE SAFETY OF WORKMEN THROUGHOUT THE CONSTRUCTION SITE AND FOR THE ENTIRE DURATION OF THE PROJECT. IN PARTICULAR, THE CONTRACTOR MUST BE AWARE OF AIRCRAFT ACTIVITY ON THE AIRPORT AND FULLY ACQUAINT HIM OR HERSELF WITH THE DANGERS OF JET BLAST AND ITS AFFECT ON WORK IN ADJACENT AREAS, ESPECIALLY IN NON-MOVEMENT AREAS. MATERIAL CAPABLE OF BEING DISPLACED MUST NOT BE STOCKPILED OR STORED WITHOUT BEING SECURED IN WORK AREAS ADJACENT TO ACTIVE AIRCRAFT OPERATIONAL AREAS.
3. THE CONTRACTOR'S VEHICLES FOR PERSONNEL, MATERIALS AND/OR EQUIPMENT DELIVERY MUST USE LOAD COVERS AND MAY BE INSPECTED TO CONFIRM LOAD AND EQUIPMENT ARE SECURE TO THE VEHICLE. ANY MATERIAL, PARTS OF EQUIPMENT, TOOLS, TRASH OR OTHER DEBRIS THAT FALL FROM THE VEHICLE ONTO THE ACCESS ROAD ARE CONSIDERED POTENTIAL FOREIGN OBJECT DEBRIS (FOD). ANY FOD DROPPED FROM THE CONTRACTOR VEHICLES ON THE ACCESS ROAD MUST BE RETRIEVED AND CLEANED UP IMMEDIATELY AS FOD IS A SERIOUS DANGER TO AIRCRAFT AND CAN CAUSE SEVERE DAMAGE TO AIRCRAFT.
4. CONTRACTOR TO PLACE "CONSTRUCTION ENTRANCE, CONSTRUCTION TRAFFIC ONLY" SIGN AT HAUL/ACCESS ROAD AND PUBLIC ROAD PER MUTCD STANDARDS. SIGN TO BE INCIDENTAL TO PROJECT. COORDINATE WITH ENGINEER FOR LOCATION OF SIGN. REMOVE SIGN AT THE END OF CONSTRUCTION.

**LOCATION OF STOCKPILED CONSTRUCTION MATERIALS:**

- 1. ONLY STOCKPILED MATERIALS WILL BE ALLOWED IN THE CONTRACTOR'S STAGING AREA.
2. STOCKPILES, INCLUDING BARRICADES, MUST NOT PENETRATE THE FAR PART 77 IMAGINARY SURFACES OR CREATE FOD. THE CONTRACTOR IS RESPONSIBLE FOR THE SECURITY OF THEIR MATERIALS. STAGING LOCATIONS ARE SHOWN ON THE CONSTRUCTION SAFETY PHASING PLAN, SEE GP0.01. ANY APPROVED STORAGE OF EQUIPMENT MUST NOT PRESENT A LINE OF SIGHT PROBLEM WITH VEHICLE TRAFFIC OR AIRCRAFT.
3. MAXIMUM HEIGHT OF EQUIPMENT, VEHICLES AND MATERIALS STOCKPILED IN THE CONTRACTOR'S STAGING AREA MUST NOT BE GREATER THAN 15-FT IN HEIGHT.
4. CONTRACTOR TO WATER STOCKPILES IN ORDER TO CONTROL WIND BLOWN DUST OR PARTICULATES. WATERING WILL BE INCIDENTAL TO PROJECT.

**VEHICLE AND PEDESTRIAN OPERATIONS:**

- 1. THE CONTRACTOR'S EQUIPMENT, VEHICLES AND MATERIALS ARE STRICTLY RESTRICTED TO THE STORAGE/STAGING AREA DURING NON-WORKING HOURS UNLESS OTHERWISE APPROVED BY THE PROJECT REPRESENTATIVE.
2. WHILE WORKING WITHIN THE AOA, CONTRACTOR VEHICLES MUST HAVE A 3-FOOT SQUARE FLAG CONSISTING OF INTERNATIONAL ORANGE AND WHITE SQUARES IN FULL VIEW ABOVE THE VEHICLE AND/OR A FLASHING YELLOW BEACON. EACH VEHICLE MUST HAVE THE CONTRACTOR'S NAME CLEARLY IDENTIFIED ON BOTH SIDES OF THE VEHICLE. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE FLAG, BEACON, AND NAME DECALS.
3. THE CONTRACTOR'S USE OF HAUL ROUTES MUST NOT HINDER THE SAFE AND UNOBSTRUCTED FLOW OF AIRPORT TRAFFIC. AIRCRAFT TRAFFIC WILL HAVE THE RIGHT OF WAY AT ALL TIMES.
4. SPEED LIMIT ON HAUL ROUTES AND ACTIVE APRONS IS 10 MPH UNLESS OTHERWISE POSTED.

**AIRPORT SECURITY:**

- 1. VEHICLES AND EQUIPMENT MAY ONLY ENTER THE AIRPORT OPERATIONS AREA (AOA) THROUGH THE IDENTIFIED ACCESS GATES.
2. THE CONTRACTOR MUST MAINTAIN AIRFIELD SECURITY AND GATE SECURITY AT ALL TIMES.

**TWO-WAY RADIO COMMUNICATIONS:**

- 1. THE CONTRACTOR MUST OBTAIN AND IS REQUIRED TO HAVE AT ALL TIMES A SUFFICIENT NUMBER OF OPERABLE RADIOS, TUNED TO THE CTAF FREQUENCY 122.9. SUPERINTENDENT TO MONITOR RADIO AT ALL TIMES DURING WORKING HOURS. ALL CONTRACTOR VEHICLES IN THE AOA MUST MONITOR THE CTAF FREQUENCY AT ALL TIMES. THE COST OF PROVIDING RADIOS MUST BE INCLUDED IN THE COST OF THE PROJECT.

**WILDLIFE MANAGEMENT:**

- 1. THE CONTRACTOR MUST OBSERVE STRICT ADHERENCE TO SITE CLEANLINESS. THE CONTRACTOR MUST MAINTAIN A CLEAN WORKSITE, CLEAR OF EXCESS DEBRIS AND TRASH, FOOD GARBAGE OR OTHER NUISANCE ATTRACTANTS. TRASH IS CONSIDERED A HAZARD IN THAT IT MAY BECOME WINDBLOWN AND BECOME FOREIGN OBJECT DEBRIS (FOD) OR IT MAY ATTRACT UNWANTED WILDLIFE WHICH MAY PRESENT SERIOUS HAZARDS TO AIRCRAFT IN THE AOA.
2. DURING CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT THERE IS NO STANDING WATER WITHIN THE WORK SITE AND WITHIN THE STAGING AREAS.
3. ANY AREA THAT HAS BECOME DISTURBED BY THE CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL VEGETATION HAS BEEN ESTABLISHED AND ACCEPTED. CONTRACTOR MUST MAINTAIN GRASS TO NO GREATER THAN 6 INCHES IN HEIGHT WITHIN 20 FEET OF EDGE OF PAVEMENT.
4. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN IN GOOD WORKING ORDER ANY GATE HE OR SHE USES FOR SITE ACCESS. ADDITIONALLY, THE CONTRACTOR WILL BE REQUIRED TO STRICTLY FOLLOW AIRPORT SECURITY PROTOCOLS FOR KEEPING THE AIRFIELD SECURE AT ALL TIMES AS WELL AS FOR ENTERING/EXITING THE AOA.
5. NO KNOWN HABITAT DISRUPTION SHOULD OCCUR AND NO KNOWN ISSUES ARE ANTICIPATED. EASTERN BLACK RAIL (WETLAND BIRD) IS ANTICIPATED TO BE PRESENT IN THE WETLANDS ADJACENT TO THE PROJECT AREA. BREEDING SEASON BEGINS APRIL 1 TO AUGUST 31. TREE AND SHRUB CLEARING OF ANY KIND CANNOT OCCUR IN THAT PERIOD WITHOUT PRIOR COORDINATION AND APPROVAL FROM THE PROJECT REPRESENTATIVE.

**FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT:**

- 1. ANY FOREIGN OBJECT DEBRIS (FOD) ON THE ACTIVE AOA SURFACES OR PUBLIC ROADWAYS MUST BE IMMEDIATELY CLEANED BY THE CONTRACTOR TO THE SATISFACTION OF THE PROJECT REPRESENTATIVE. THE CONTRACTOR MUST UTILIZE WHATEVER EQUIPMENT IS NECESSARY TO KEEP THESE ROUTES FREE AND CLEAR OF DUST, DEBRIS, MUD, ETC. ALL EQUIPMENT AND LABOR NECESSARY TO MAINTAIN A CLEAN ROUTE WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT. FAILURE TO KEEP THE ACTIVE AOA SURFACES FREE OF DEBRIS COULD RESULT IN THE STOPPAGE OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO AIRPORT PROPERTY OR AIRCRAFT AS A RESULT OF FOREIGN OBJECT DEBRIS (FOD) IN THE CONSTRUCTION AREAS.
2. THE CONTRACTOR MUST KEEP THE PROJECT SITE AND VEHICLES CLEAN, USING A CLEAN AS YOU GO APPROACH THROUGHOUT THE DURATION OF THE PROJECT. THIS WILL INCLUDE TAKING AN INVENTORY OF TOOLS BEFORE ENTERING THE AOA AND AFTER LEAVING THE AOA TO ENSURE NO TOOLS ARE UNACCOUNTED FOR OR INADVERTENTLY LEFT WITHIN THE AOA.

**HAZARDOUS MATERIAL MANAGEMENT:**

- 1. THE CONTRACTOR MUST BE REQUIRED TO SUBMIT A SAFETY AND HEALTH PLAN, WHICH DETAILS HOW THEIR COMPANY MANAGES AND HANDLES HAZARDOUS MATERIALS, FOR CIRCUMSTANCES WHICH MAY OCCUR ON THIS PROJECT. ALL LUBRICATING LIQUIDS AND SOLIDS (OILS AND GREASES) MUST BE SECURED AND CONTAINED IN DRY AREAS UNTIL USED BY TRAINED PERSONNEL OR MECHANICS. ALL WASTE MATERIAL MUST BE PROPERLY DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE ENVIRONMENTAL LAWS AND ACCORDING TO MANUFACTURER'S DIRECTIONS. CONSTRUCTION FUEL MUST NOT BE STORED AT THE SITE. EXCESS MATERIAL FROM THE EXISTING SYSTEM MUST BE LEGALLY DISPOSED OF OFF AIRPORT PROPERTY.
2. IF HAZARDOUS MATERIALS ARE ENCOUNTERED ON THE SITE WHICH ARE IMPACTED BY THE WORK, THE CONTRACTOR MUST NOTIFY THE PROJECT REPRESENTATIVE IMMEDIATELY OF THEIR PRESENCE.

**NOTIFICATION OF CONSTRUCTION ACTIVITIES:**

- 1. THE NOTICE TO PROCEED WILL NOT BE ISSUED UNTIL THE CONTRACTOR HAS SUBMITTED TO THE PROJECT REPRESENTATIVE FOR APPROVAL, AND WHICH HAS BEEN APPROVED IN WRITING, THE FOLLOWING ITEMS: A SPCD, A SCHEDULE WITH CRITICAL PATH IDENTIFIED AND EMERGENCY CONTACT INFORMATION (SUPERVISOR, FOREMAN, PROJECT MANAGER), AND SCHEDULE OF VALUES FOR LUMP SUM WORK ITEMS. THE LIST OF EMERGENCY CONTACT INFORMATION MUST BE UPDATED WEEKLY, AS NECESSARY, AT THE WEEKLY PROGRESS STATUS MEETINGS.
2. THE PROJECT REPRESENTATIVE MUST GENERATE AND MAINTAIN NOTICE TO AIR MISSIONS (NOTAMS) PRIOR TO CLOSURES AS REQUIRED. THE CONTRACTOR MUST PROVIDE THE PROJECT REPRESENTATIVE A MINIMUM OF FOURTEEN (14) DAYS ADVANCE NOTICE ON PLANNED CLOSURES.
3. IN THE EVENT OF AN EMERGENCY, THE CONTRACTOR MUST CALL THE APPROPRIATE AIRPORT REPRESENTATIVES (SEE THIS SHEET).
4. THE CONTRACTOR MUST IDENTIFY A QUALIFIED, DEDICATED SAFETY AND SECURITY POINT OF CONTACT THAT IS APPROVED BY THE PROJECT REPRESENTATIVE.
5. THE CONTRACTOR MUST PRODUCE AN EMERGENCY CONTACT LIST WITHIN SEVEN (7) DAYS FOLLOWING THE PRE-CONSTRUCTION MEETING.
6. THE AIRPORT DOES NOT HAVE AN ONSITE AIR RESCUE FIRE FIGHTING EMERGENCY RESPONSE TEAM. THE LOCAL FIRE PROTECTION DISTRICT EMERGENCY PHONE NUMBERS SHOULD BE LISTED ON THE EMERGENCY CONTACT LIST, PROVIDED BY THE CONTRACTOR, FOR ANY COORDINATION THAT MAY BE NECESSARY BETWEEN THE CONTRACTOR AND FIRE DISTRICT. THE CONTRACTOR MUST HAVE REFERENCE TO THIS EMERGENCY CONTACT LIST AT ALL TIMES.
7. AN INCURSION WITH AN AIRCRAFT IS A SERIOUS SAFETY INFRINGEMENT AND IS A FEDERAL VIOLATION THAT WILL SUBJECT THE CONTRACTOR TO THE MAXIMUM FINE ALLOWED BY FEDERAL AVIATION ADMINISTRATION.
8. MAXIMUM HEIGHT OF CONTRACTOR'S VEHICLES AND EQUIPMENT WITHIN THE AOA MUST BE 15-FT ABOVE THE GROUND SURFACE. IF THE CONTRACTOR CHOOSES TO USE EQUIPMENT IN EXCESS OF THIS HEIGHT, HE/SHE WILL BE RESPONSIBLE FOR SUBMITTING FOR A REVISED AIRSPACE ANALYSIS (FAA FORM 7460-1). THE CONTRACTOR IS ADVISED THAT THE FAA REVIEW MAY TAKE UP TO 90 DAYS FROM TIME OF SUBMITTAL. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS AND TIME DELAYS ASSOCIATED WITH THE FAA 7460-1 APPLICATION.

**INSPECTION REQUIREMENTS:**

- 1. CONTRACTOR MUST PROVIDE UNENCUMBERED ACCESS TO THE FAA AND THE PROJECT REPRESENTATIVE OF THE WORK AREAS AT ALL TIMES.
2. CONTRACTOR MUST IDENTIFY, IN WRITING TO THE PROJECT REPRESENTATIVE THE INDIVIDUALS RESPONSIBLE FOR CONDUCTING INSPECTIONS PRIOR TO THE INSPECTION TAKING PLACE.
3. CONTRACTOR MUST COMPLETE A DAILY INSPECTION OF THE WORK SITE FOR SAFETY BY COMPLETING THE FAA CHECKLIST IN AC 150/5370-2G. THE CONTRACTOR MUST INCLUDE SUFFICIENT TIME WITHIN THE ALLOWABLE CLOSURE REQUIREMENTS TO ACCOMMODATE INSPECTIONS AND ACCEPTANCE OF WORK BY THE PROJECT REPRESENTATIVE.
4. REOPENING OF RUNWAY OR TAXIWAY PAVEMENTS AFTER A CONSTRUCTION OR OTHER CLOSURE MUST ONLY BE APPROVED BY THE PROJECT REPRESENTATIVE AND WILL ONLY BE APPROVED ON THE BASIS THAT THE CONTRACTOR HAS MET THE REQUIREMENT FOR OPENING AIRFIELD PAVEMENTS AS OUTLINED IN THE PROJECT DOCUMENTATION PROVIDED. THE CONTRACTOR MUST INCLUDE SUFFICIENT TIME WITHIN THE ALLOWABLE SCHEDULED CLOSURE REQUIREMENTS TO ACCOMMODATE INSPECTION OF PAVEMENT TO BE OPENED BY THE PROJECT REPRESENTATIVE.
5. THERE MUST BE NO SLOPES GREATER THAN 5 AND NO DROP-OFFS GREATER THAN 3 INCHES WITHIN THE RUNWAY OR TAXIWAY SAFETY AREA, AND NO PRESENCE OF FOD ON THE AIRFIELD PAVEMENT, IN ORDER TO OPEN THE RUNWAY OR TAXIWAY. IF NECESSARY, TEMPORARY EDGE TREATMENT WILL BE PLACED ALONG THE RUNWAY EDGE IN ORDER TO MEET THIS REQUIREMENT PRIOR TO REOPENING THE RUNWAY.
6. FINAL INSPECTIONS: ANY DAMAGE ALONG THE HAUL ROUTES, DUE TO THE CONTRACTOR'S VEHICLES OR EQUIPMENT, MUST BE REPAIRED BY THE CONTRACTOR PRIOR TO THE COMPLETION OF THE PHASE THE ROUTE IS USED.

WSP USA INC. NORTH CAROLINA LICENSE NO. P-0165
1001 MOREHEAD SQUARE DRIVE SUITE 610 CHARLOTTE, NC 28203
NO. DESCRIPTION DATE

BILLY MITCHELL AIRPORT (HSE)
PAVEMENT REHABILITATION PROJECT
NCDOT PROJECT NO. 36244.74.1.1
53252 BILLY MITCHELL ROAD FRISCO, NC 27936

ISSUED FOR BID



SHEET TITLE
CONSTRUCTION SAFETY AND PHASING PLAN NOTES SHEET 1 OF 2

DATE SEPTEMBER 16, 2024
SCALE NA
DRAWN BY SSD
CHECKED BY RDB
APPROVED BY RDB

WSP PROJECT NUMBER 188695-05

SHEET NUMBER GP0.02

SHEET 5 OF 26

FILE NAME: C:\BX\HSE\GP0.02-GP0.03.DWG
PLOT DATE: 9/13/2024 12:36 PM

IT IS ANTICIPATED THAT THE AIRPORT WILL BE CLOSED FOR THE DURATION OF THE PROJECT, THEREFORE NOT ALL OF THE RESTRICTIONS BELOW ARE APPLICABLE. CONTRACTOR TO COORDINATE RESTRICTIONS WITH THE PROJECT REPRESENTATIVE PRIOR TO START OF CONSTRUCTION. SHOULD THE CONDITIONS CHANGE AND A PORTION OF THE AIRPORT IS OPEN DURING CONSTRUCTION, ADDITIONAL RESTRICTIONS BELOW WILL BECOME APPLICABLE.

**UNDERGROUND UTILITIES AND EXISTING PAVEMENTS:**

- 1. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING PAVEMENTS, TURFED AREAS, UNDERGROUND PIPES AND UTILITIES, AND ALL OTHER EXISTING FEATURES UNLESS OTHERWISE NOTED ON THESE PLANS. THE CONTRACTOR WILL REPAIR TO ORIGINAL CONDITIONS ALL FEATURES INCLUDING EXISTING PAVEMENTS AND TURFED AREAS DISTURBED BY HIS OR HER ACTIVITIES TO THE SATISFACTION OF THE PROJECT REPRESENTATIVE. THIS REPAIR WILL BE CONSIDERED INCIDENTAL TO THE WORK AND NO ADDITIONAL COMPENSATION WILL BE APPROVED.

**PENALTIES:**

- 1. IN THE EVENT AN EMPLOYEE OF THE CONTRACTOR VIOLATES A SAFETY PROVISION, THEY WILL BE PROHIBITED FROM RETURNING TO WORK ON THE AOA WITHOUT REMEDIAL SAFETY TRAINING AND THE APPROVAL OF THE AIRPORT. VIOLATIONS MAY BE DEEMED AS JUST AND SUFFICIENT CAUSE TO REQUIRE THE EMPLOYEE BE PERMANENTLY REMOVED FROM THE JOB SITE.
- 2. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS AND DELAYS CAUSED BY SAFETY VIOLATIONS. CONSTRUCTION PERSONNEL DRIVING ERRATICALLY ON THE AIRPORT, EXCEEDING THE 10 MPH SPEED LIMIT, OR VIOLATING ANY OTHER AIRPORT DRIVING RULE OR SAFETY REGULATION, AT A MINIMUM, MUST BE REMOVED FROM THE PROJECT PERMANENTLY. AIRPORT OPERATIONS CAN REMOVE ANY CONTRACTOR PERSONNEL, AT ANY TIME, FOR ANY DURATION, DUE TO A SAFETY VIOLATION.
- 3. NON-COMPLIANCE BY THE CONTRACTOR WITH AIRPORT RULES AND REGULATIONS OR FAILURE TO COMPLY WITH THE APPROVED CSPP AND SPCD, AIRPORT SECURITY REGULATIONS, VEHICLE SPEED RESTRICTIONS AND ANY OTHER APPLICABLE AIRPORT REGULATION MAY RESULT IN FINES AS ALLOWED BY LAW AS WELL AS THE REMOVAL OF THE CONTRACTOR PERSONNEL FROM THE WORK SITE.

**LIQUIDATED DAMAGES:**

- 1. SHOULD THE CONTRACTOR EXCEED THE ALLOWABLE NUMBER OF CALENDARS DAYS TO COMPLETE THE WORK, A LIQUIDATED DAMAGE OF 1,000 PER DAY MAY BE APPLIED TO THE CONTRACT IN DAMAGES.

**SPECIAL CONDITIONS:**

- 1. EMERGENCY SITUATIONS: SHOULD A LIFE THREATENING INJURY OCCUR ON SITE, WHETHER IT BE TO THE CONTRACTOR'S WORKFORCE OR THE PROJECT REPRESENTATIVE'S INSPECTION CREW OR OTHERS, THE PROJECT REPRESENTATIVE MUST BE IMMEDIATELY NOTIFIED. THE CONTRACTOR MUST FOLLOW ALL INSTRUCTIONS BY THE FAA, AND THE PROJECT REPRESENTATIVE OFFICIALS OR THEIR DESIGNEES.
- 2. THE CONTRACTOR MUST YIELD TO ALL SAFETY PERSONNEL, IN THE EVENT OF A WORK STOPPAGE DUE TO AIRCRAFT EMERGENCY, THE CONTRACTOR MUST, IF POSSIBLE, MAKE SAFE THE CONSTRUCTION SITE AND VACATE THE AREA.

**RUNWAY AND TAXIWAY VISUAL AIDS:**

- 1. CLOSURES WILL BE NOTED WITH THE USE OF LOW PROFILE BARRICADES AT RUNWAY AND TAXIWAY CROSSINGS. BARRICADES MUST BE SECURED TO PREVENT MOVEMENT FROM JET BLAST. THE PROJECT REPRESENTATIVE WILL PROVIDE NOTAMS FOR CLOSURES. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE, PLACE AND MAINTAIN TEMPORARY BARRICADES AT CLEARLY VISIBLE LOCATIONS TO KEEP PILOTS FROM ERRANTLY TAXIING DOWN A CLOSED TAXIWAY OR CLOSED RUNWAY.

**MARKINGS AND SIGNS FOR ACCESS ROADS:**

- 1. THE CONTRACTOR MUST CLEARLY MARK ALL ACCESS AND HAUL ROUTES AND INSTALL SIGNAGE IN ACCORDANCE WITH MUTCD.

**HAZARD MARKING AND LIGHTING:**

- 1. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING IN-KIND ANY MARKINGS DESTROYED, OBLITERATED, OR OTHERWISE RENDERED UNUSABLE BY CONSTRUCTION ACTIVITIES, UNLESS OTHERWISE NOTED IN THE PLANS.
- 2. ALL CONSTRUCTION VEHICLES AND EQUIPMENT MUST HAVE A FLASHING YELLOW BEACON AND/OR 3 FEET BY 3 FEET CHECKERED ORANGE AND WHITE FLAG ATTACHED TO VEHICLES/EQUIPMENT (SUCH AS CRANES) AS SPECIFIED IN AC 150/5210-5D "PAINTING, MARKING, AND LIGHTING OF VEHICLES USED ON AN AIRPORT".
- 3. LOW-PROFILE BARRICADES MUST HAVE BATTERY-OPERATED FLASHING RED LIGHTS. SEE DETAIL 1 THIS SHEET.

**WORK ZONE LIGHTING FOR NIGHTTIME CONSTRUCTION:**

- 1. CONSTRUCTION IS PROHIBITED FROM SUNDOWN TO SUNRISE. NO NIGHTTIME WORK IS ALLOWED.

**PROTECTION OF RUNWAY, TAXIWAY SAFETY AREAS AND OBJECT FREE AREAS:**

**RUNWAY SAFETY AREA (RSA)**

- 1. THERE WILL BE NO WORK WITHIN ANY ACTIVE RSA. THE CONTRACTOR IS NOT PERMITTED TO WORK WITHIN THE RSA OF AN ACTIVE RUNWAY.
- 2. NO OPEN TRENCHES OR EXCAVATIONS ARE PERMITTED WITHIN THE RSA WHILE THE RUNWAY IS OPEN. BACKFILL TRENCHES BEFORE THE RUNWAY IS OPENED. IF BACKFILLING EXCAVATIONS BEFORE THE RUNWAY MUST BE OPENED IS IMPRACTICABLE, COVER THE EXCAVATIONS APPROPRIATELY. COVERING FOR OPEN TRENCHES MUST BE DESIGNED TO ALLOW THE SAFE OPERATION OF THE HEAVIEST AIRCRAFT OPERATING ON THE RUNWAY ACROSS THE TRENCH WITHOUT DAMAGE TO THE AIRCRAFT.
- 3. CONSTRUCTION CONTRACTORS MUST PROMINENTLY MARK OPEN TRENCHES AND EXCAVATIONS AT THE CONSTRUCTION SITE WITH RED OR ORANGE FLAGS, AS APPROVED BY THE FAA, STATE, OWNER, AND ENGINEER, AND ILLUMINATE AREAS WITH RED LIGHTS DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS.
- 4. SOIL EROSION MUST BE CONTROLLED TO MAINTAIN RSA STANDARDS, THAT IS, THE RSA MUST BE CLEARED AND GRADED AND HAVE NO POTENTIALLY HAZARDOUS RUTS, HUMPS, DEPRESSIONS OR OTHER SURFACE VARIATIONS, AND CAPABLE, UNDER DRY CONDITIONS, OF SUPPORTING SNOW REMOVAL EQUIPMENT, FIREFIGHTING EQUIPMENT, AND THE OCCASIONAL PASSAGE OF AIRCRAFT WITHOUT CAUSING STRUCTURAL DAMAGE TO THE AIRCRAFT.

**RUNWAY OBJECT FREE AREA (ROFA)**

- 1. THERE WILL BE NO WORK WITHIN ANY ACTIVE RUNWAY OBJECT FREE AREA (ROFA). ALL CONTRACTOR EQUIPMENT MUST BE REMOVED FROM THE ROFA WHEN NOT IN USE, AND MATERIAL MUST NOT BE STOCKPILED IN THE ROFA.

**TAXIWAY SAFETY AREA (TSA)**

- 1. THERE WILL BE NO WORK WITHIN ANY ACTIVE TAXIWAY SAFETY AREA (TSA).
- 2. NO OPEN TRENCHES OR EXCAVATIONS ARE PERMITTED WITHIN THE TSA WHILE THE TAXIWAY IS OPEN. BACKFILL TRENCHES BEFORE THE TAXIWAY IS OPENED. IF BACKFILLING EXCAVATIONS BEFORE THE TAXIWAY MUST BE OPENED IS IMPRACTICABLE, COVER THE EXCAVATIONS APPROPRIATELY. COVERING FOR OPEN TRENCHES MUST BE DESIGNED TO ALLOW THE SAFE OPERATION OF THE HEAVIEST AIRCRAFT OPERATING ON THE TAXIWAY ACROSS THE TRENCH WITHOUT DAMAGE TO THE AIRCRAFT.

**TAXIWAY OBJECT FREE AREA (TOFA)**

- 1. THERE WILL BE NO WORK WITHIN ANY ACTIVE TAXIWAY OBJECT FREE AREA.

**OBSTACLE FREE ZONES (OFZ)**

- 1. THERE WILL BE NO WORK WITHIN ANY ACTIVE OBSTACLE FREE ZONES (OFZ).

**RUNWAY APPROACH/DEPARTURE SURFACES**

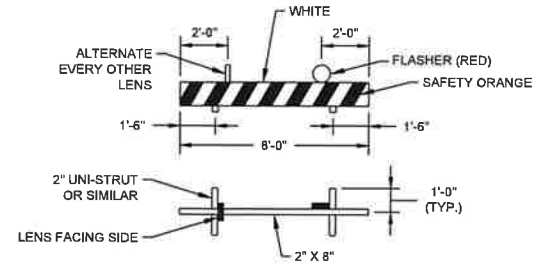
- 1. THERE WILL BE NO WORK WITHIN ANY ACTIVE RUNWAY APPROACH/DEPARTURE AREAS OR CLEARWAYS.

**OTHER LIMITATIONS ON CONSTRUCTION:**

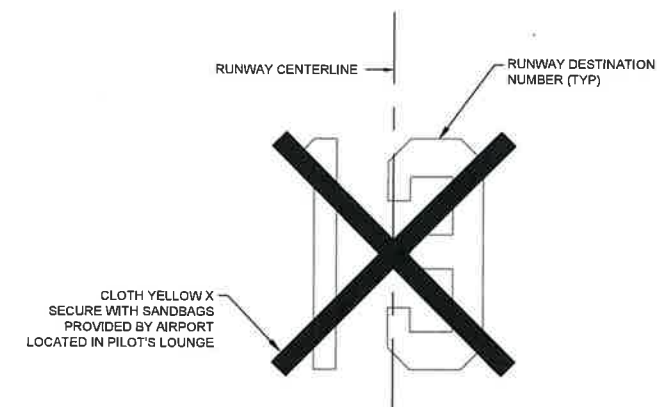
- THE FOLLOWING RESTRICTIONS WILL BE IN PLACE DURING THE CONSTRUCTION OF THIS PROJECT UNLESS OTHERWISE ACCEPTED BY WRITTEN AUTHORIZATION:
- NO USE OF TALL EQUIPMENT (CRANES, CONCRETE PUMPS, AND SO ON) UNLESS A 7460-1 DETERMINATION LETTER IS USED FOR SUCH EQUIPMENT.
  - NO USE OF OPEN FLAMES WELDING OR TORCHES UNLESS ADEQUATE FIRE SAFETY PRECAUTIONS ARE PROVIDED AND APPROVED IN WRITING BY THE AIRPORT.
  - NO USE OF FLARE POTS WITHIN THE PROPERTY AT ANY TIME.
  - NO USE OF ELECTRICAL BLASTING CAPS ON OR WITHIN 1,000 FEET OF AIRPORT PROPERTY.
  - NO SMOKING ON THE PROPERTY.
  - NO DISRUPTION OF UTILITIES SERVING THE FACILITIES OCCUPIED BY THE AIRPORT OR THEIR TENANTS, UNLESS PERMITTED IN WRITING (WITH PROVISIONS FOR TEMPORARY UTILITIES IN THEIR PLACE). NOTIFY THE PROJECT REPRESENTATIVE A MINIMUM OF 48 HOURS IN ADVANCE OF PROPOSED UTILITY DISRUPTIONS AND DO NOT PROCEED WITH UTILITY INTERRUPTION WITHOUT WRITTEN PERMISSION.
  - THE CONTRACTOR SHOULD BE AWARE OF JET BLAST AT ALL TIMES, ESPECIALLY WHILE AROUND ACTIVE RUNWAYS, TAXIWAYS AND APRONS. BARRICADES SHOULD BE FIXED TO THE GROUND OR PAVEMENT TO PREVENT MOVEMENT DUE TO JET BLAST. STOCKPILES AND CONSTRUCTION EQUIPMENT SHOULD BE KEPT AWAY FROM PLACES WHERE JET BLAST IS LIKELY TO OCCUR (RUN-UP APRONS, TAXIWAY CORNERS, ETC.)
  - CONTRACTOR'S WORKING DAYS OR TIMES MAY BE LIMITED AT THE PROJECT REPRESENTATIVE'S DISCRETION FOR SPECIAL OPERATIONS OR SPECIAL EVENTS.

**BARRICADE NOTES**

- 1. FLASHERS TO BE BATTERY OPERATED AND FULLY OPERATIONAL AT ALL TIMES. FLASHERS TO MEET THE LUMINARY REQUIREMENTS OF THE NORTH CAROLINA'S DEPARTMENT OF TRANSPORTATION. LENS TO BE RED AND BE ABLE TO ROTATE 90 DEGREES.
- 2. SUPPORT BRACES TO BE SECURELY ATTACHED TO 2" 8" SAND BAGS TO BE PLACED ON EACH SUPPORT BRACE.
- 3. FACING OF 2" 8" TO BE COVERED WITH REFLECTIVE TAPE OR PAINT. (ALTERNATE WHITE/ORANGE)
- 4. PLACE AT MAXIMUM 12' CENTER TO CENTER INTERVALS (MAXIMUM 4' GAP).
- 5. THE BARRICADE IS INTENDED FOR VISUAL DIRECTIONAL GUIDANCE AND HAZARD WARNING FOR TRAFFIC ADJACENT TO THE WORK AREA. IT IS NOT INTENDED FOR USE AS A PHYSICAL BARRICADE OF TRAFFIC.
- 6. ALL BARRICADES, AS REQUIRED BY THE PROJECT REPRESENTATIVE, WILL BE INCLUDED IN THE COST OF THE PROJECT.



1 LOW PROFILE FLASHER BARRICADE DETAIL SCALE: NTS



FULLY CLOSED RUNWAY MARKER COLOR - YELLOW NOT TO SCALE (FOR DAYTIME AND NIGHT USE)

**NOTES**

- 1. MARKER MUST BE PLACED AT EACH END OF THE RUNWAY DIRECTLY ON THE RUNWAY DESIGNATION NUMBERS.
- 2. RUNWAY CLOSURE MARKERS WILL BE PROVIDED BY THE AIRPORT. MARKERS ARE LOCATED IN THE PILOT'S LOUNGE.
- 3. RUNWAY CLOSURE EQUIPMENT MUST BE IN CONTINUOUS OPERATION 24 HOURS A DAY, 7 DAYS A WEEK FOR THE DURATION OF THE PROJECT.
- 4. CONTRACTOR WILL BE RESPONSIBLE FOR PLACEMENT, MAINTENANCE, AND REMOVAL OF RUNWAY CLOSURE MARKER COMPONENTS.
- 5. RUNWAY CLOSURE MARKERS MUST BE SECURED WITH SANDBAGS.
- 6. WHEN NUMERALS ARE NOT PRESENT DUE TO CONSTRUCTION ACTIVITY (MILLING, ETC) PLACE YELLOW "X" ON RUNWAY SURFACE AND LOCATE THE CENTER 238 FT FROM THE RUNWAY END OR PAVEMENT REMAINING.
- 7. THE CONTRACTOR MUST RETURN THE CLOTH "X'S BACK TO THE AIRPORT AT THE END OF THE PROJECT IN THE CONDITION RECEIVED. ANY DAMAGE MUST BE REPAIRED OR THE CLOTH "X'S WILL BE REPLACED AT THE CONTRACTORS EXPENSE.

2 CLOTH RUNWAY CLOSURE "X" DETAIL SCALE: NTS

WSP USA INC. NORTH CAROLINA LICENSE NO. F-0168 1001 MOREHEAD SQUARE DRIVE SUITE 610 CHARLOTTE, NC 28203 T 704-342-5401 I www.wsp.com

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**  
PAVEMENT REHABILITATION PROJECT  
NCDOT PROJECT NO. 36244.74.1.1  
53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID

Professional Engineer Seal for Richard D. Boley, State of North Carolina, License No. 971672024.

SHEET TITLE  
**CONSTRUCTION SAFETY AND PHASING PLAN NOTES SHEET 2 OF 2**

DATE	SEPTEMBER 16, 2024
SCALE	NTS
DRAWN BY	SSD
CHECKED BY	RDB
APPROVED BY	RDB

WSP PROJECT NUMBER 188695-05

SHEET NUMBER **GP0.03**  
SHEET 6 OF 26

FILE NAME: CBA-HSE-GP0.02-GP0.03.DWG  
PLOT DATE: 9/13/2024 12:37PM

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

PAVEMENT REHABILITATION PROJECT  
NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID



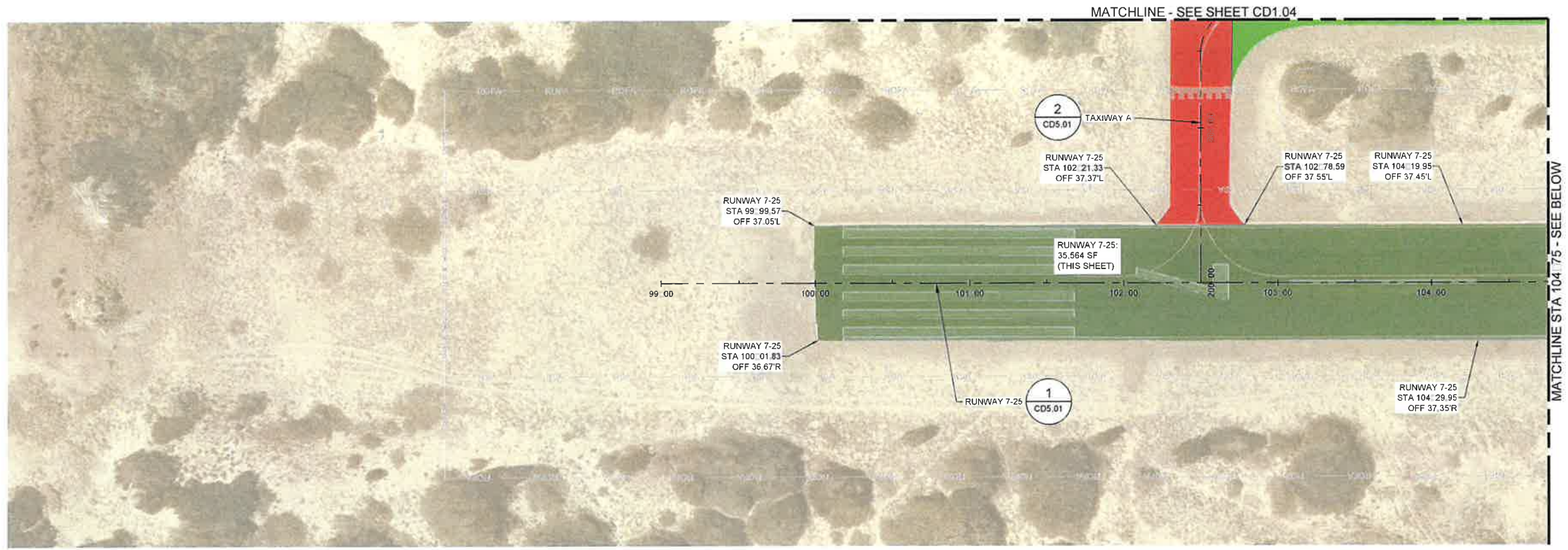
SHEET TITLE  
**DEMOLITION PLAN  
SHEET 1 OF 4**

DATE **SEPTEMBER 16, 2024**  
SCALE **1" = 40'**  
DRAWN BY **KR**  
CHECKED BY **RDB**  
APPROVED BY **RDB**

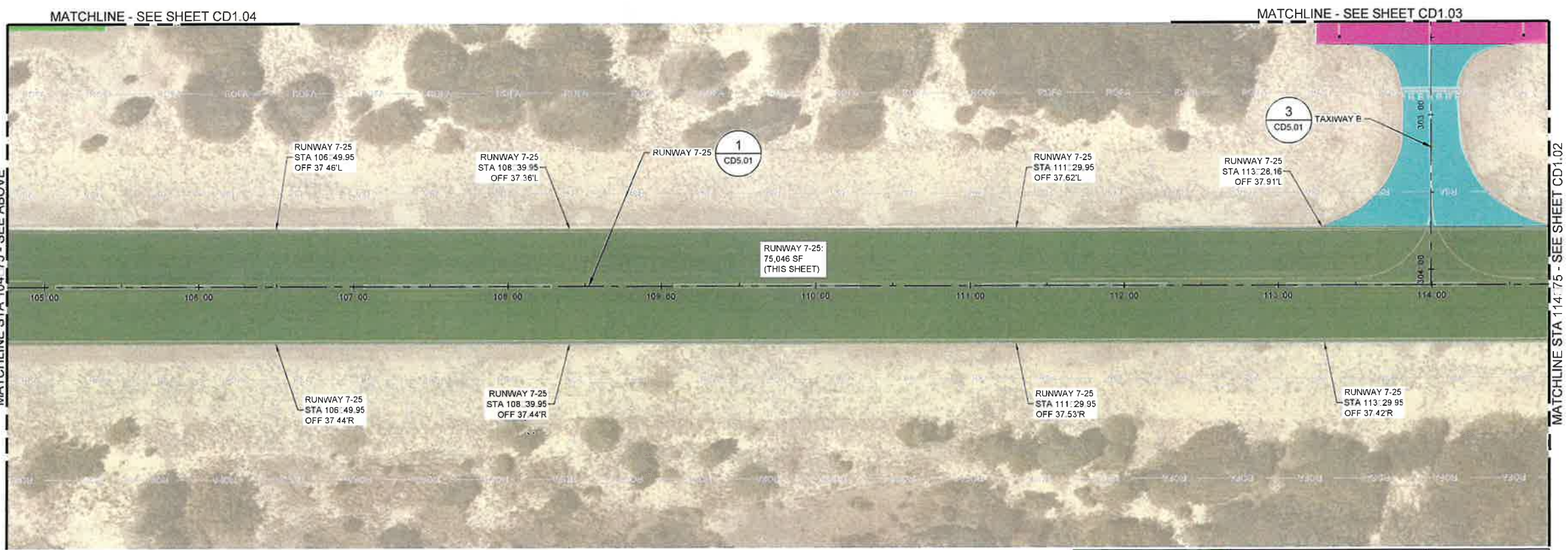
WSP PROJECT NUMBER **188695-05**

SHEET NUMBER **CD1.01**

SHEET **7 OF 26**



**RUNWAY 7-25 PLAN (STA. 99+00.00 TO STA. 104+75.00)**



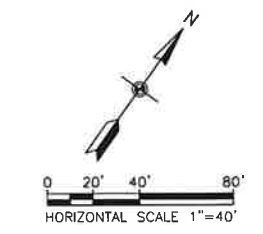
**RUNWAY 7-25 PLAN (STA. 104+75.00 TO STA. 114+75.00)**

**NOTES**

- SALVAGING OF TIEDOWN ANCHORS WILL BE INCIDENTAL TO MILLING OPERATIONS. CONTRACTOR TO STORE TIEDOWNS IN LOCATION IDENTIFIED BY THE PROJECT REPRESENTATIVE. CONTRACTOR TO FILL REMAINING ANCHOR VOID WITH AGGREGATE BASE PRIOR TO COMPACTION OF EXISTING BASE (TYP).
- SEE SHEET CD5.01 FOR EXISTING PAVEMENT AND DEMOLITION TYPICAL SECTIONS.
- SEE SHEET GI1.01 FOR EXISTING CONDITIONS AND ALIGNMENT DETAILS.
- SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
- CONTRACTOR TO PROOF ROLL BASE AND RE-COMPACT BASE AS REQUIRED BY THE PROJECT REPRESENTATIVE. IF PROJECT REPRESENTATIVE DETERMINES THERE IS UNSUITABLE IN-SITU MATERIAL, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE SUBGRADE STABILIZATION IN ACCORDANCE WITH SP-07.
- STATION AND OFFSET IS PROVIDED FOR REFERENCE. CONTRACTOR TO USE EXISTING PAVEMENT LIMITS AS THE LIMITS OF WORK.

AREA	REHABILITATION	DETAIL
RUNWAY 7-25	RUNWAY REHABILITATION	SEE DETAIL (1/CD5.01)
TAXIWAY A	REMOVE PAVEMENT, PROOF ROLL BASE (SEE NOTE 5)	SEE DETAIL (2/CD5.01)
TAXIWAY B	REMOVE PAVEMENT AND EXCAVATE FOR PAVEMENT SECTION, COMPACT SUBGRADE	SEE DETAIL (3/CD5.01)
APRON A	REMOVE PAVEMENT AND EXCAVATE FOR PAVEMENT SECTION, COMPACT SUBGRADE	SEE DETAIL (5/CD5.01)
APRON B	REMOVE PAVEMENT, PROOF ROLL BASE (SEE NOTE 5)	SEE DETAIL (6/CD5.01)
APRON C	REMOVE PAVEMENT AND RUBBLIZE SUBGRADE	SEE DETAIL (7/CD5.01)

PRINT IN COLOR



**KEY PLAN**



FILE NAME: OBX-HSE-CD1.DWG  
 PLOT DATE: S P 13 2024 4:08PM

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

**PAVEMENT REHABILITATION PROJECT**  
 NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
 FRISCO, NC 27936

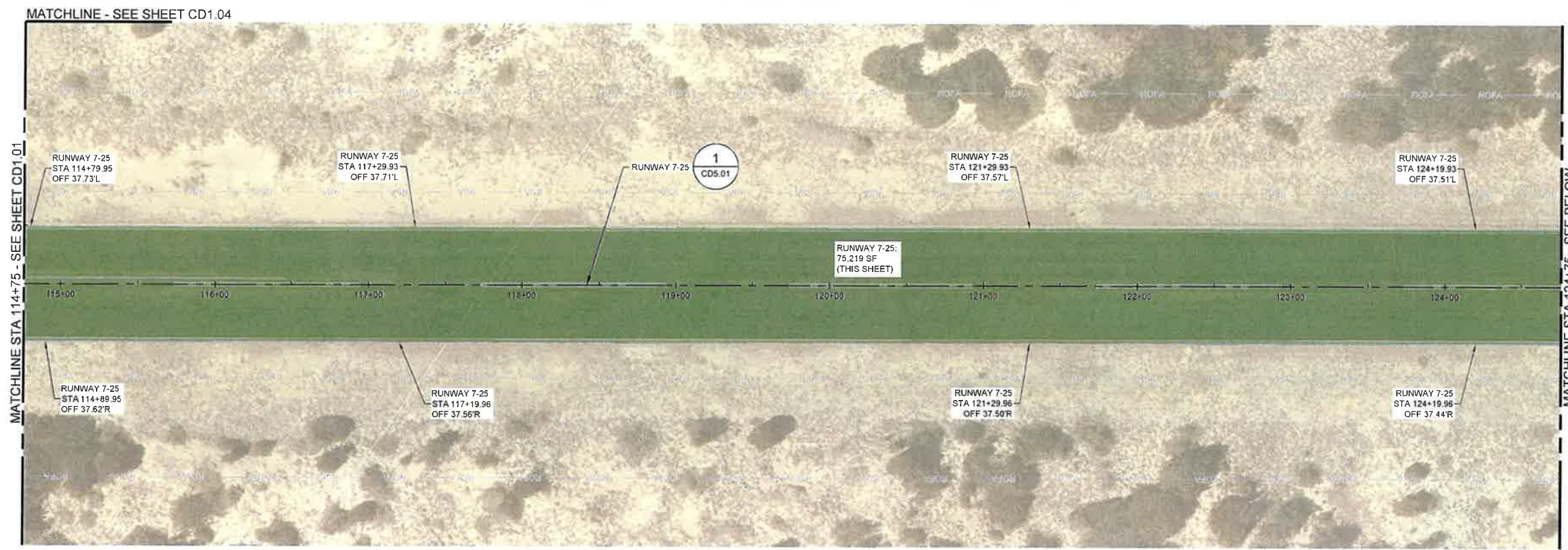
**ISSUED FOR BID**



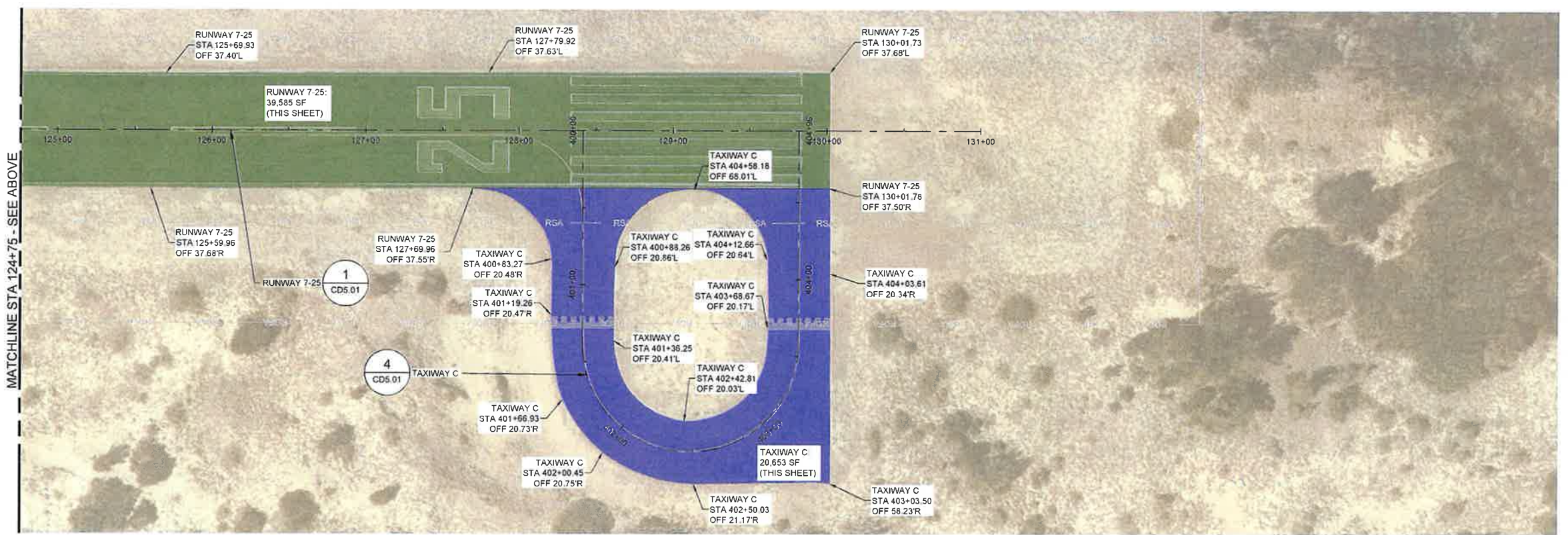
SHEET TITLE  
**DEMOLITION PLAN**  
 SHEET 2 OF 4

DATE: SEPTEMBER 16, 2024  
 SCALE: 1" = 40'  
 DRAWN BY: KR  
 CHECKED BY: RDB  
 APPROVED BY: RDB

WSP PROJECT NUMBER: 188695-05  
 SHEET NUMBER: **CD1.02**  
 SHEET 8 OF 26



**RUNWAY 7-25 PLAN (STA. 114+75.00 TO STA. 124+75.00)**



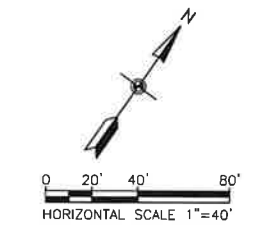
**RUNWAY 7-25 PLAN (STA. 124+75.00 TO STA. 131+00.00)**

**NOTES**

- SALVAGING OF TIEDOWN ANCHORS WILL BE INCIDENTAL TO MILLING OPERATIONS. CONTRACTOR TO STORE TIEDOWNS IN LOCATION IDENTIFIED BY THE PROJECT REPRESENTATIVE. CONTRACTOR TO FILL REMAINING ANCHOR VOID WITH AGGREGATE BASE PRIOR TO COMPACTION OF EXISTING BASE (TYP).
- SEE SHEET CD5.01 FOR EXISTING PAVEMENT AND DEMOLITION TYPICAL SECTIONS.
- SEE SHEET G11.01 FOR EXISTING CONDITIONS AND ALIGNMENT DETAILS.
- SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
- CONTRACTOR TO PROOF ROLL BASE AND RE-COMPACT BASE AS REQUIRED BY THE PROJECT REPRESENTATIVE. IF PROJECT REPRESENTATIVE DETERMINES THERE IS UNSUITABLE IN-SITU MATERIAL, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE SUBGRADE STABILIZATION IN ACCORDANCE WITH SP-07.
- STATION AND OFFSET IS PROVIDED FOR REFERENCE. CONTRACTOR TO USE EXISTING PAVEMENT LIMITS AS THE LIMITS OF WORK.

<b>RUNWAY 7-25</b>	RUNWAY REHABILITATION	SEE DETAIL (1/CD5.01)
<b>TAXIWAY C</b>	REMOVE PAVEMENT AND RUBBLIZE SUBGRADE	SEE DETAIL (4/CD5.01)

PRINT IN COLOR



**KEY PLAN**



FILE NAME: OBX-HSE-CD1.DWG  
 PLOT DATE: Sep 13, 2024 - 3:51 PM

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**  
**PAVEMENT REHABILITATION PROJECT**  
NCDOT PROJECT NO. 36244.74.1.1  
53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID



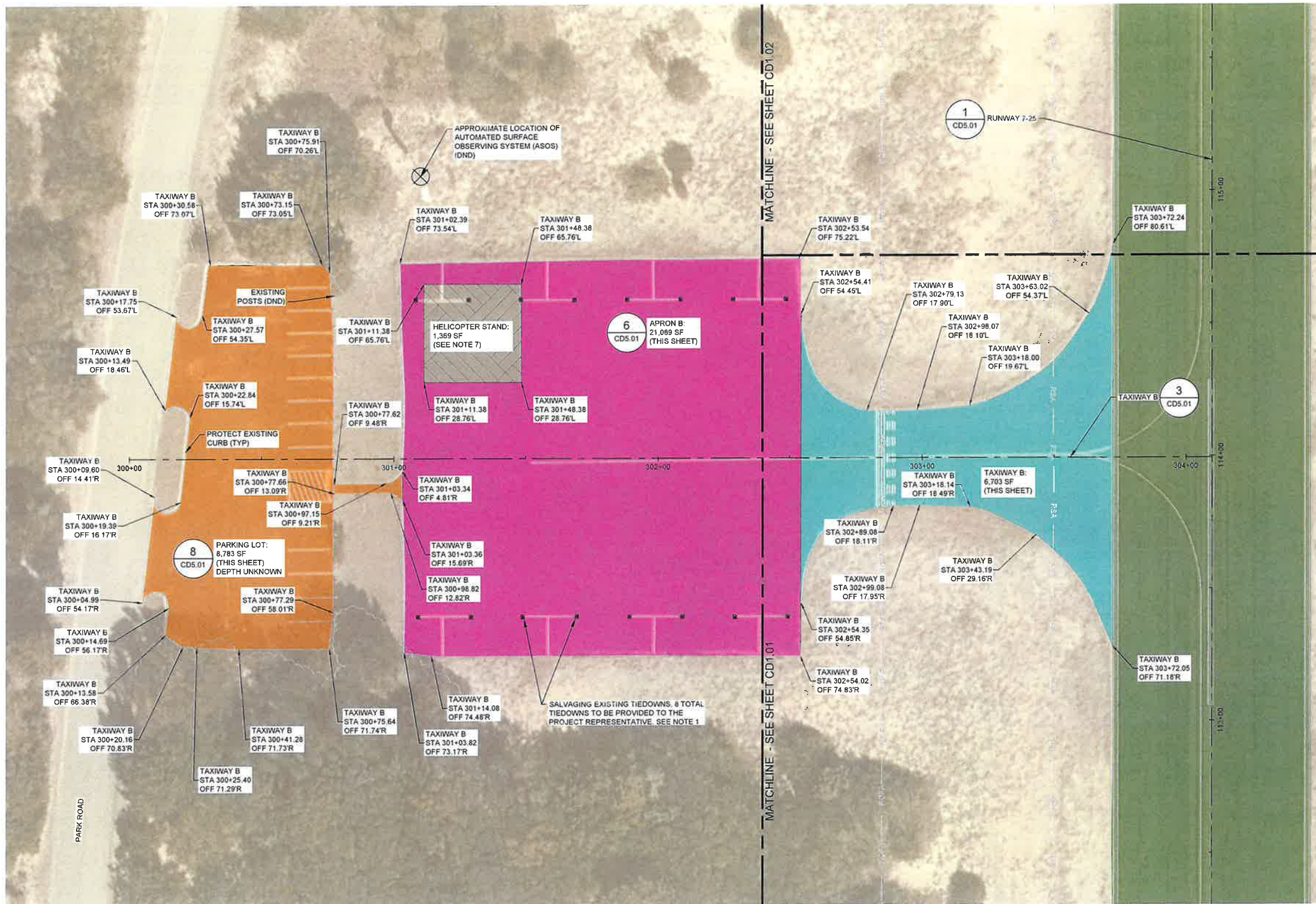
SHEET TITLE  
**DEMOLITION PLAN**  
SHEET 3 OF 4

DATE **SEPTEMBER 16, 2024**  
SCALE **1" = 20'**  
DRAWN BY **KR**  
CHECKED BY **RDB**  
APPROVED BY **RDB**

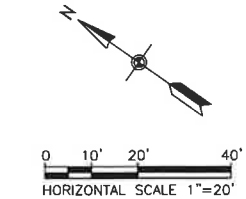
WSP PROJECT NUMBER **188695-05**

SHEET NUMBER **CD1.03**

SHEET **9 OF 26**



PRINT IN COLOR



KEY PLAN



ITEM	DESCRIPTION	REFERENCE
RUNWAY 7-25	RUNWAY REHABILITATION	SEE DETAIL (1/CD5.01)
TAXIWAY B	REMOVE PAVEMENT AND EXCAVATE FOR PAVEMENT SECTION, COMPACT SUBGRADE	SEE DETAIL (3/CD5.01)
APRON B	REMOVE PAVEMENT, PROOF ROLL BASE (SEE NOTE 5)	SEE DETAIL (6/CD5.01)
PARKING LOT AND ACCESS DRIVE	FULL DEPTH PAVEMENT REMOVAL	SEE DETAIL (8/CD5.01)
HELICOPTER STAND	FUTURE HELICOPTER STAND	SEE DETAIL (1/CD5.02)

**NOTES**

- SALVAGING OF TIEDOWN ANCHORS WILL BE INCIDENTAL TO MILLING OPERATIONS. CONTRACTOR TO STORE TIEDOWNS IN LOCATION IDENTIFIED BY THE PROJECT REPRESENTATIVE. CONTRACTOR TO FILL REMAINING ANCHOR VOID WITH AGGREGATE BASE PRIOR TO COMPACTION OF EXISTING BASE (TYP).
- SEE SHEET CD5.01 FOR EXISTING PAVEMENT AND DEMOLITION TYPICAL SECTIONS.
- SEE SHEET G11.01 FOR EXISTING CONDITIONS AND ALIGNMENT DETAILS.
- SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
- CONTRACTOR TO PROOF ROLL BASE AND RE-COMPACT BASE AS REQUIRED BY THE PROJECT REPRESENTATIVE. IF PROJECT REPRESENTATIVE DETERMINES THERE IS UNSUITABLE IN-SITU MATERIAL, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE SUBGRADE STABILIZATION IN ACCORDANCE WITH SP-07.
- STATION AND OFFSET IS PROVIDED FOR REFERENCE. CONTRACTOR TO USE EXISTING PAVEMENT LIMITS AS THE LIMITS OF WORK.
- SEE DETAIL (1/CD5.02) FOR DEPTH OF HELICOPTER EXCAVATION.

FILE NAME: OBX-HSE-CD1.DWG  
PLOT DATE: Sep 13, 2024 - 3:57PM

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

**PAVEMENT REHABILITATION PROJECT**  
 NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
 FRISCO, NC 27936

**ISSUED FOR BID**

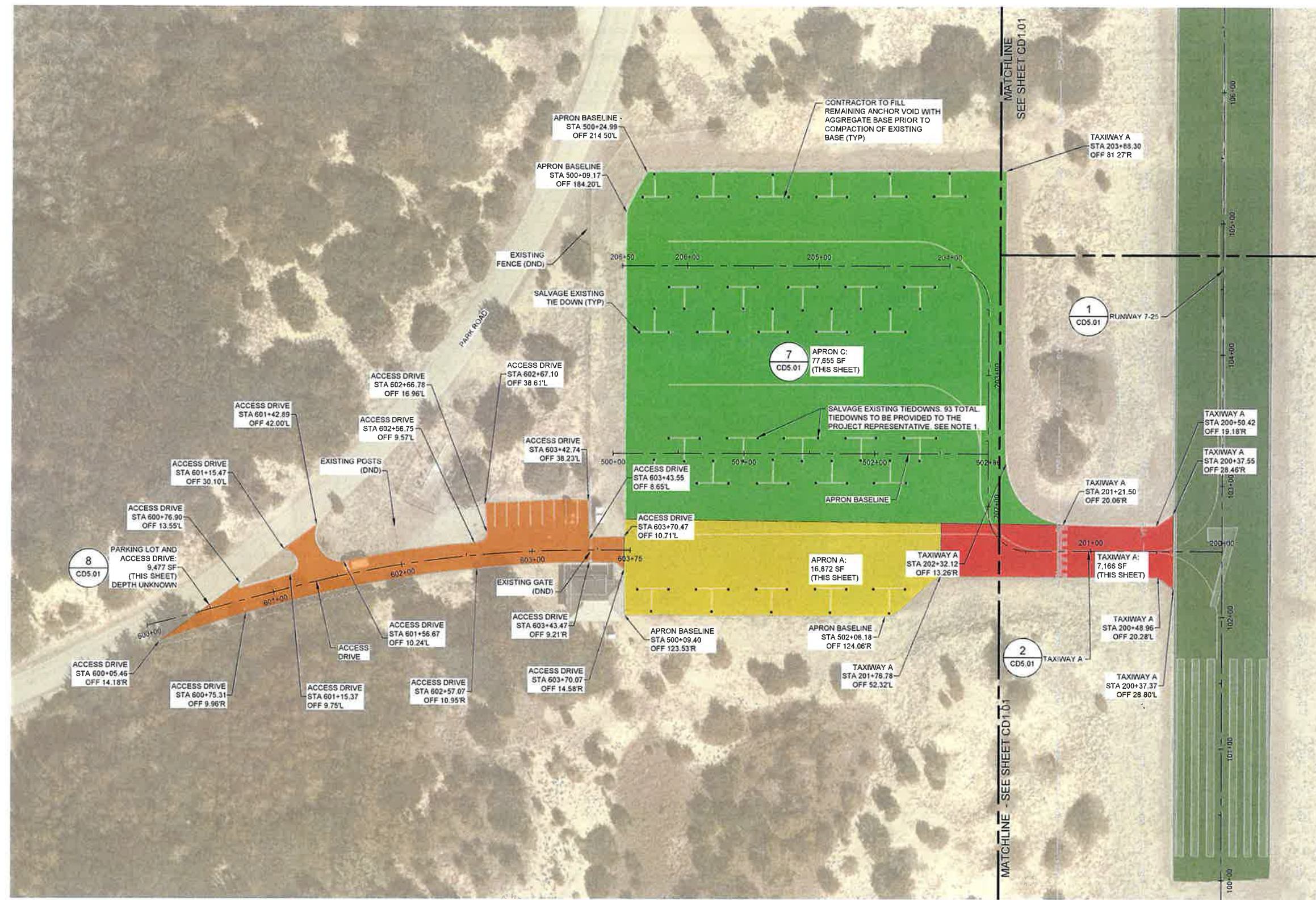


SHEET TITLE  
**DEMOLITION PLAN  
 SHEET 4 OF 4**

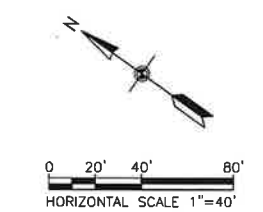
DATE **SEPTEMBER 16, 2024**  
 SCALE **1" = 40'**  
 DRAWN BY **KR**  
 CHECKED BY **RDB**  
 APPROVED BY **RDB**

WSP PROJECT NUMBER **188695-05**

SHEET NUMBER **CD1.04**  
 SHEET 10 OF 26



PRINT IN COLOR



**KEY PLAN**



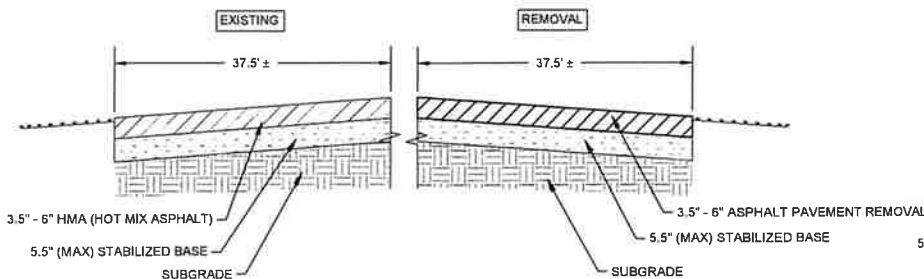
**NOTES**

- SALVAGING OF TIEDOWN ANCHORS WILL BE INCIDENTAL TO MILLING OPERATIONS. CONTRACTOR TO STORE TIEDOWNS IN LOCATION IDENTIFIED BY THE PROJECT REPRESENTATIVE. CONTRACTOR TO FILL REMAINING ANCHOR VOID WITH AGGREGATE BASE PRIOR TO COMPACTION OF EXISTING BASE (TYP).
- SEE SHEET CD5.01 FOR EXISTING PAVEMENT AND DEMOLITION TYPICAL SECTIONS.
- SEE SHEET G11.01 FOR EXISTING CONDITIONS AND ALIGNMENT DETAILS.
- SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
- CONTRACTOR TO PROOF ROLL BASE AND RE-COMPACT BASE AS REQUIRED BY THE PROJECT REPRESENTATIVE. IF PROJECT REPRESENTATIVE DETERMINES THERE IS UNSUITABLE IN-SITU MATERIAL, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE SUBGRADE STABILIZATION IN ACCORDANCE WITH SP-07.
- STATION AND OFFSET IS PROVIDED FOR REFERENCE. CONTRACTOR TO USE EXISTING PAVEMENT LIMITS AS THE LIMITS OF WORK.

AREA	REHABILITATION	DETAIL
RUNWAY 7-25	RUNWAY REHABILITATION	SEE DETAIL (1/CD5.01)
TAXIWAY A	REMOVE PAVEMENT, PROOF ROLL BASE (SEE NOTE 5)	SEE DETAIL (2/CD5.01)
APRON A	REMOVE PAVEMENT AND EXCAVATE FOR PAVEMENT SECTION, COMPACT SUBGRADE	SEE DETAIL (5/CD5.01)
APRON C	REMOVE PAVEMENT AND RUBBLIZE SUBGRADE	SEE DETAIL (7/CD5.01)
PARKING LOT AND ACCESS DRIVE	FULL DEPTH PAVEMENT REMOVAL	SEE DETAIL (8/CD5.01)

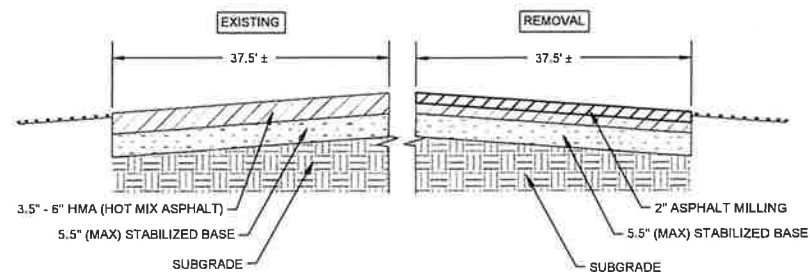
FILE NAME: CD1.PSE-CD1.DWG  
 PLOT DATE: Sep 13, 2024 - 3:58PM

NO.	DESCRIPTION	DATE



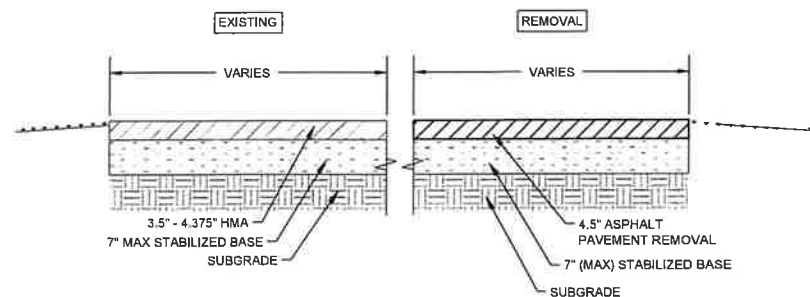
- NOTES:
- THE EXISTING PAVEMENT SECTION WAS DEVELOPED USING HISTORICAL RECORDS AND FIELD INVESTIGATION. THE CONTRACTOR MUST PERFORM HIS OWN FIELD INVESTIGATION TO ENSURE THE ACCURACY OF THE INFORMATION.
  - THE CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THE CONTRACT DOCUMENTS.

OPTION - FULL DEPTH PAVEMENT REPLACEMENT



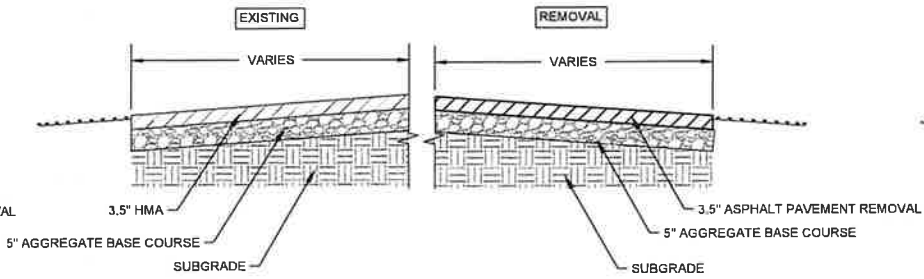
BASE BID - MILL AND OVERLAY (2')

1 EXISTING RUNWAY 7-25 PAVEMENT SECTION  
CD5.01 SCALE: NTS



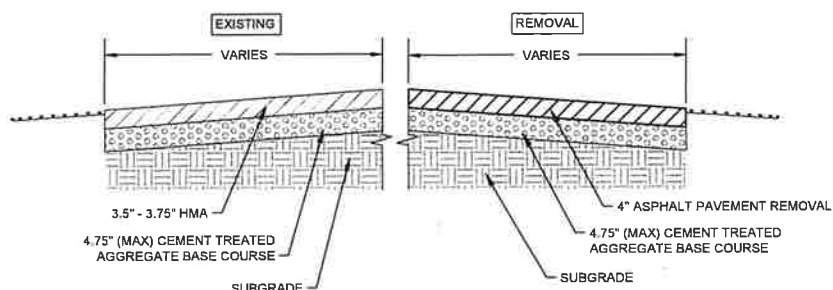
- NOTES:
- THE EXISTING PAVEMENT SECTION WAS DEVELOPED USING HISTORICAL RECORDS AND FIELD INVESTIGATION. THE CONTRACTOR MUST PERFORM HIS OWN FIELD INVESTIGATION TO ENSURE THE ACCURACY OF THE INFORMATION.
  - THE CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THE CONTRACT DOCUMENTS.

6 EXISTING APRON B PAVEMENT SECTION  
CD5.01 SCALE: NTS



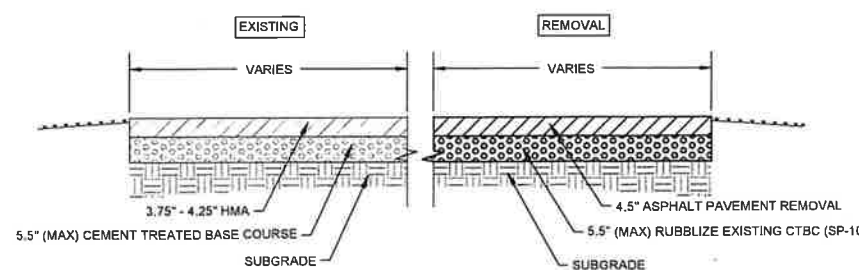
- NOTES:
- THE EXISTING PAVEMENT SECTION WAS DEVELOPED USING HISTORICAL RECORDS AND FIELD INVESTIGATION. THE CONTRACTOR MUST PERFORM HIS OWN FIELD INVESTIGATION TO ENSURE THE ACCURACY OF THE INFORMATION.
  - THE CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THE CONTRACT DOCUMENTS.

2 EXISTING TAXIWAY A PAVEMENT SECTION  
CD5.01 SCALE: NTS



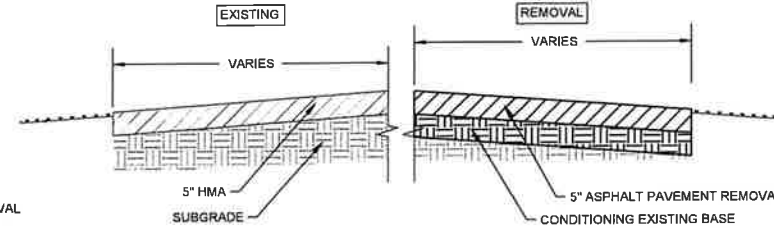
- NOTES:
- THE EXISTING PAVEMENT SECTION WAS DEVELOPED USING HISTORICAL RECORDS AND FIELD INVESTIGATION. THE CONTRACTOR MUST PERFORM HIS OWN FIELD INVESTIGATION TO ENSURE THE ACCURACY OF THE INFORMATION.
  - THE CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THE CONTRACT DOCUMENTS.

4 EXISTING TAXIWAY C PAVEMENT SECTION  
CD5.01 SCALE: NTS



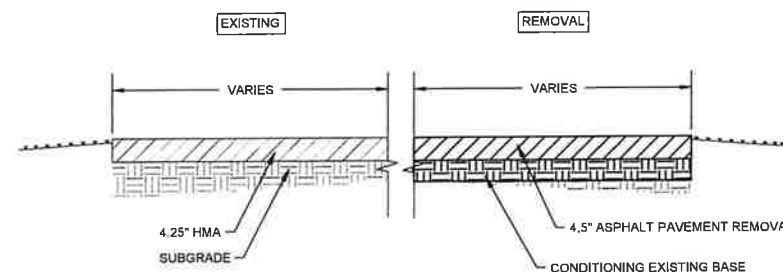
- NOTES:
- THE EXISTING PAVEMENT SECTION WAS DEVELOPED USING HISTORICAL RECORDS AND FIELD INVESTIGATION. THE CONTRACTOR MUST PERFORM HIS OWN FIELD INVESTIGATION TO ENSURE THE ACCURACY OF THE INFORMATION.
  - THE CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THE CONTRACT DOCUMENTS.

7 EXISTING APRON C PAVEMENT SECTION  
CD5.01 SCALE: NTS



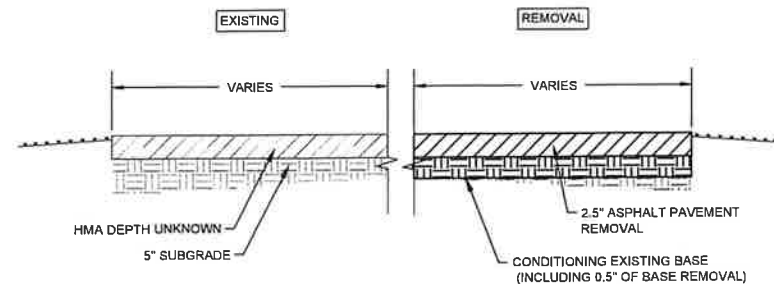
- NOTES:
- THE EXISTING PAVEMENT SECTION WAS DEVELOPED USING HISTORICAL RECORDS AND FIELD INVESTIGATION. THE CONTRACTOR MUST PERFORM HIS OWN FIELD INVESTIGATION TO ENSURE THE ACCURACY OF THE INFORMATION.
  - THE CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THE CONTRACT DOCUMENTS.

3 EXISTING TAXIWAY B PAVEMENT SECTION  
CD5.01 SCALE: NTS



- NOTES:
- THE EXISTING PAVEMENT SECTION WAS DEVELOPED USING HISTORICAL RECORDS AND FIELD INVESTIGATION. THE CONTRACTOR MUST PERFORM HIS OWN FIELD INVESTIGATION TO ENSURE THE ACCURACY OF THE INFORMATION.
  - THE CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THE CONTRACT DOCUMENTS.

5 EXISTING APRON A PAVEMENT SECTION  
CD5.01 SCALE: NTS



- NOTES:
- THE EXISTING PAVEMENT DEPTH IN THE PARKING LOT IS UNKNOWN. THE REMOVAL PAVEMENT SECTION WAS ESTIMATED AT 2.5". THE CONTRACTOR MUST PERFORM HIS OWN FIELD INVESTIGATION TO CONFIRM THE EXISTING DEPTH PRIOR TO START OF CONSTRUCTION.
  - THE CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THE CONTRACT DOCUMENTS.

8 EXISTING PARKING LOT AND ACCESS ROAD PAVEMENT  
CD5.01 SCALE: NTS

NOTE: DUE TO VARIABLE NATURE OF THE EXISTING PAVEMENT SECTIONS AND UNKNOWN RELATED TO THE DEPTH, MATERIAL TYPE, MATERIAL QUALITY, THE CONTRACTOR IS REQUIRED TO COORDINATE WITH THE PROJECT REPRESENTATIVE TO ASSESS IN-SITU CONDITIONS OF MATERIALS TO REMAIN IN-PLACE. THE PROJECT REPRESENTATIVE SHALL HAVE SOLE AUTHORITY TO DETERMINE ADDITIONAL NECESSARY ACTIONS FOR IN-SITU MATERIALS TO REMAIN IN PLACE INCLUDING, BUT NOT LIMITED TO, CONDITION COMPACTING, GRADING, OR REPLACEMENT OF IN-SITU MATERIALS. IF UNSUITABLE IN-SITU MATERIALS ARE DISCOVERED AFTER UNCOVERING PAVEMENT MATERIALS INTENDED TO REMAIN IN PLACE OR DURING PROOF ROLLING, THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT SUBGRADE STABILIZATION MEASURES IN ACCORDANCE WITH SPECIAL PROVISION SP-07.

**BILLY MITCHELL AIRPORT (HSE)**  
**PAVEMENT REHABILITATION PROJECT**  
NCDOT PROJECT NO. 36244.74.1.1  
53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID



SHEET TITLE  
**EXISTING TYPICAL SECTIONS**

DATE: SEPTEMBER 16, 2024  
SCALE: NTS  
DRAWN BY: SSD  
CHECKED BY: RDB  
APPROVED BY: RDB

WSP PROJECT NUMBER: 188895-05

SHEET NUMBER: **CD5.01**

SHEET 11 OF 26

SCALE (S) AS NOTED ON THIS SHEET ARE BASED ON A FULL SIZE 22 X 34 SHEET.

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

PAVEMENT REHABILITATION PROJECT  
NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID



SHEET TITLE  
**PAVING AND GRADING PLAN  
SHEET 1 OF 4**

DATE **SEPTEMBER 16, 2024**  
SCALE **1" = 40'**  
DRAWN BY **SSD**  
CHECKED BY **RDB**  
APPROVED BY **RDB**

WSP PROJECT NUMBER **188695-05**

SHEET NUMBER **C1.01**

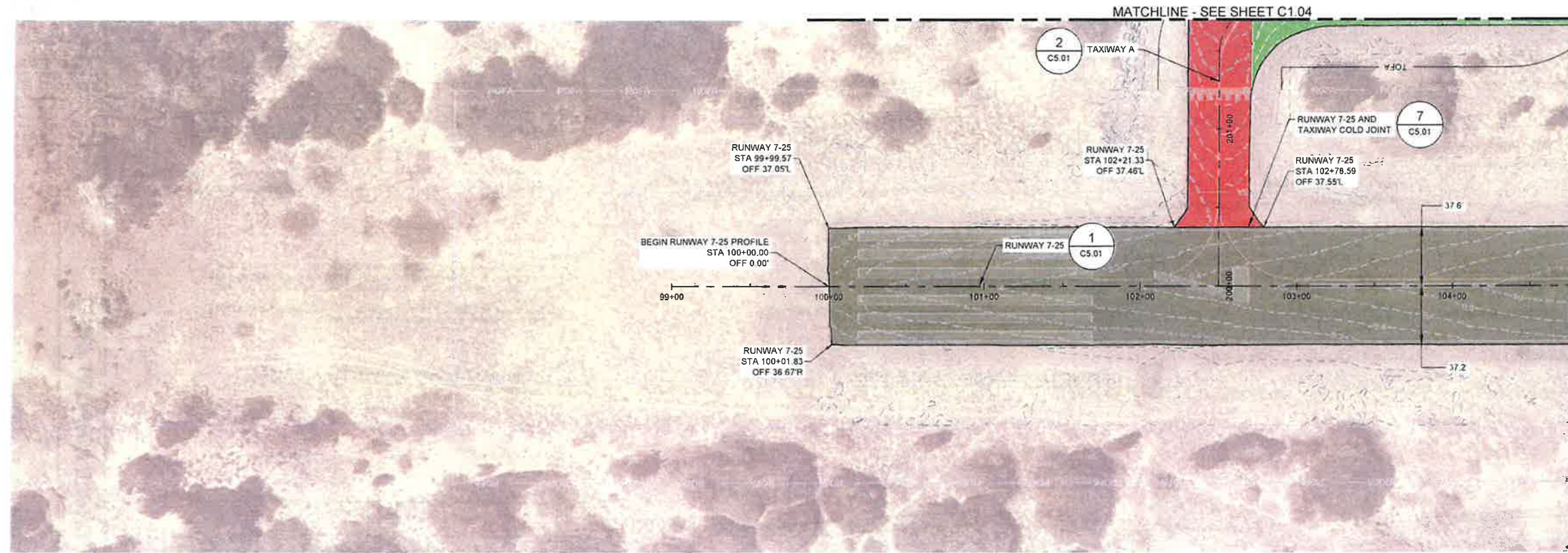
SHEET 12 OF 26

PRINT IN COLOR

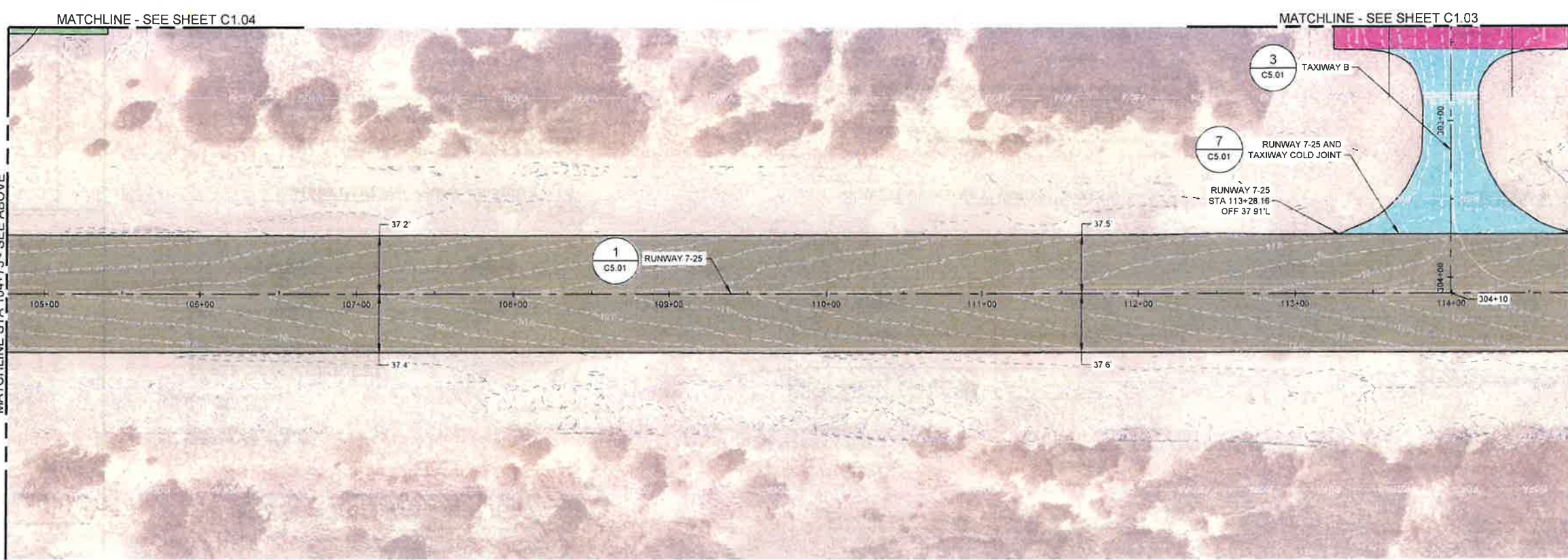
**LEGEND**

- RUNWAY
- TAXIWAY A
- TAXIWAY B
- TAXIWAY C
- APRON A
- APRON B
- APRON C
- PARKING LOT AND ACCESS DRIVE

- 1  
C5.01
- 2  
C5.01
- 3  
C5.01
- 4  
C5.01
- 5  
C5.01
- 6  
C5.01
- 7  
C5.01
- 8  
C5.01
- 9  
C5.01



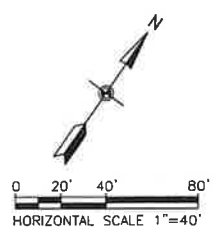
RUNWAY 7-25 PLAN (STA. 99+00.00 TO STA. 104+75.00)



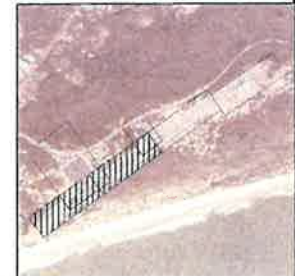
RUNWAY 7-25 PLAN (STA. 104+75.00 TO STA. 114+75.00)

**NOTES**

- FOR APRON, TAXIWAY A AND ACCESS DRIVE PAVING AND GRADING, SEE SHEET C1.04.
- FOR TAXIWAY B AND APRON PAVING AND GRADING, SEE SHEET C1.03.
- FOR RUNWAY 7-25 TYPICAL SECTION, SEE SHEET CD5.01.
- SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
- CONTRACTOR TO INSTALL RUNWAY END POINT MONUMENTS PER SPECIFICATION SP-02.
- STATION AND OFFSET IS PROVIDED FOR REFERENCE. CONTRACTOR TO USE EXISTING PAVEMENT LIMITS AS THE LIMITS OF WORK.
- PAVEMENT REHABILITATION TO MAINTAIN EXISTING GRADES AND GEOMETRY. CONTRACTOR TO SURVEY EXISTING PAVEMENT (INCLUDING ELEVATION) TO THE EXTENT REQUIRED TO RE-ESTABLISH THE EXISTING GRADES AND GEOMETRY DURING PAVING OPERATIONS. CONTRACTOR MUST NOT MODIFY THE EXISTING GRADES AND GEOMETRY WITHOUT THE PRIOR WRITTEN CONSENT OF THE PROJECT REPRESENTATIVE.

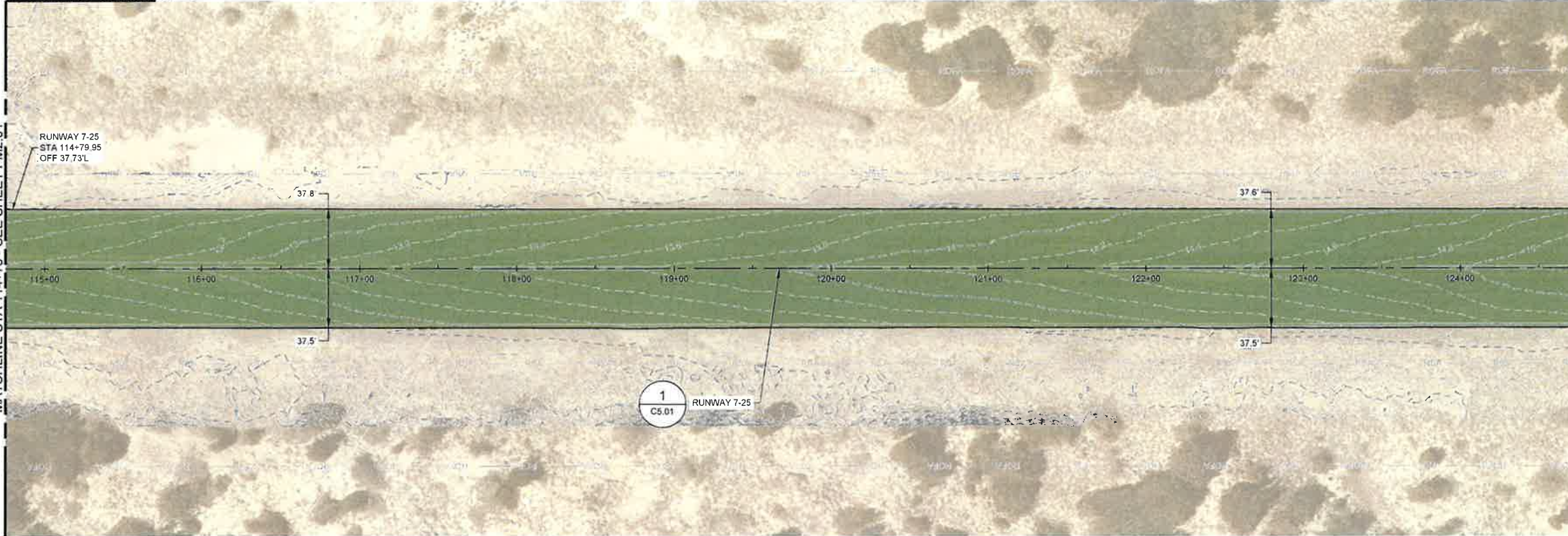


**KEY PLAN**



FILE NAME: C:\A\HSE-C1.DWG  
PLOT DATE: Sep 13, 2024 - 4:34PM

MATCHLINE - SEE SHEET C1.04



RUNWAY 7-25 PLAN (STA. 114+75.00 TO STA. 124+75.00)

PRINT IN COLOR

LEGEND

- RUNWAY
- TAXIWAY A
- TAXIWAY B
- TAXIWAY C
- APRON A
- APRON B
- APRON C
- PARKING LOT AND ACCESS DRIVE

- 1  
C5.01
- 2  
C5.01
- 3  
C5.01
- 4  
C5.01
- 5  
C5.01
- 6  
C5.01
- 8  
C5.01
- 9  
C5.01

**WSP** WSP USA INC.  
 NORTH CAROLINA  
 LICENSE NO. F-0155

1001 MOREHEAD SQUARE DRIVE  
 SUITE 610  
 CHARLOTTE, NC 28203  
 T 704-342-5401 | www.wsp.com

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

**PAVEMENT REHABILITATION PROJECT**  
 NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
 FRISCO, NC 27936

ISSUED FOR BID

NORTH CAROLINA  
 PROFESSIONAL  
 SEAL  
 05.3220  
 ENGINEER  
 Richard D. Bouer  
 9/16/2024

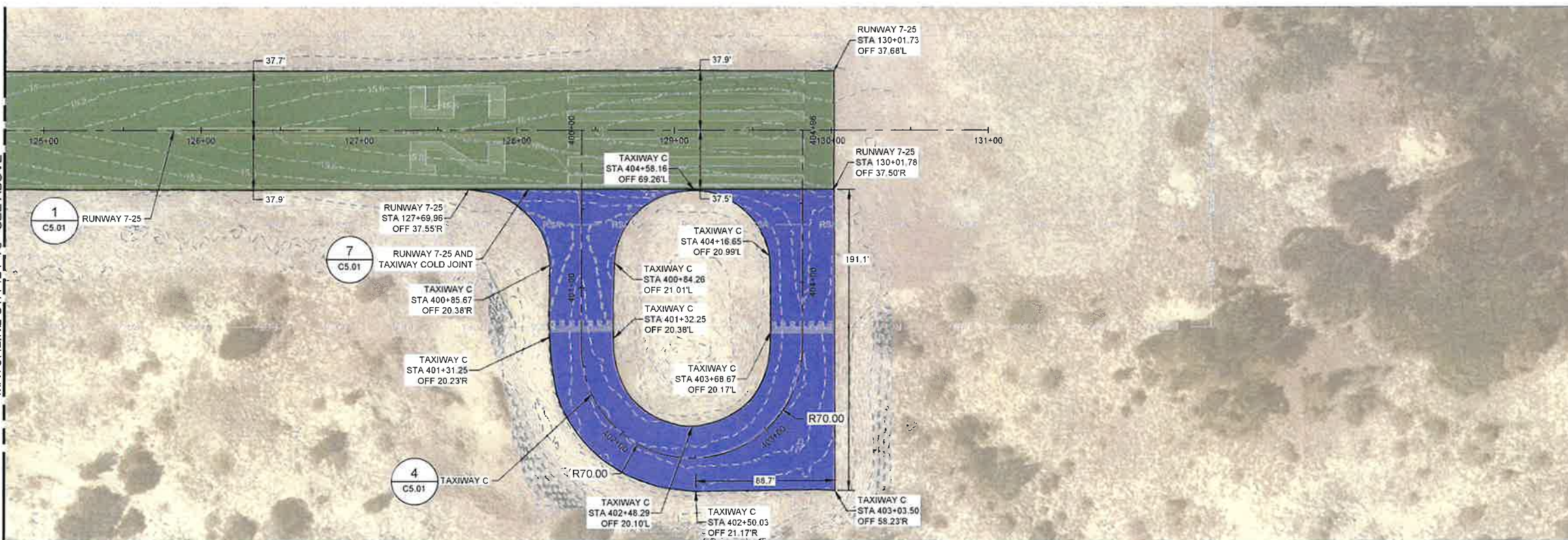
SHEET TITLE  
**PAVING AND GRADING PLAN  
 SHEET 2 OF 4**

DATE **SEPTEMBER 16, 2024**  
 SCALE **1" = 40'**  
 DRAWN BY **SSD**  
 CHECKED BY **RDB**  
 APPROVED BY **RDB**

WSP PROJECT NUMBER **188695-05**

SHEET NUMBER **C1.02**

SHEET 13 OF 26



RUNWAY 7-25 PLAN (STA. 124+75.00 TO STA. 131+00.00)

NOTES

- FOR APRON, TAXIWAY A AND ACCESS DRIVE PAVING AND GRADING, SEE SHEET C1.04.
- FOR TAXIWAY B AND APRON PAVING AND GRADING, SEE SHEET C1.03.
- FOR RUNWAY 7-25 TYPICAL SECTION, SEE SHEET C5.01.
- SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
- CONTRACTOR TO INSTALL RUNWAY END POINT MONUMENTS PER SPECIFICATION SP-02
- STATION AND OFFSET IS PROVIDED FOR REFERENCE. CONTRACTOR TO USE EXISTING PAVEMENT LIMITS AS THE LIMITS OF WORK.
- PAVEMENT REHABILITATION TO MAINTAIN EXISTING GRADES AND GEOMETRY. CONTRACTOR TO SURVEY EXISTING PAVEMENT (INCLUDING ELEVATION) TO THE EXTENT REQUIRED TO RE-ESTABLISH THE EXISTING GRADES AND GEOMETRY DURING PAVING OPERATIONS. CONTRACTOR MUST NOT MODIFY THE EXISTING GRADES AND GEOMETRY WITHOUT THE PRIOR WRITTEN CONSENT OF THE PROJECT REPRESENTATIVE.



SCALE (S) AS NOTED ON THIS SHEET ARE BASED ON A FULL SIZE 22 X 34 SHEET.

FILE NAME: DBX-HSE-C1.DWG  
 PLOT DATE: Sep 13, 2024 - 4:32PM

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

**PAVEMENT REHABILITATION PROJECT**  
NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID

SHEET TITLE  
**PAVING AND GRADING PLAN**  
SHEET 3 OF 4

DATE: SEPTEMBER 16, 2024  
SCALE: 1" = 20'  
DRAWN BY: SSD  
CHECKED BY: RDB  
APPROVED BY: RDB

WSP PROJECT NUMBER: 188695-05

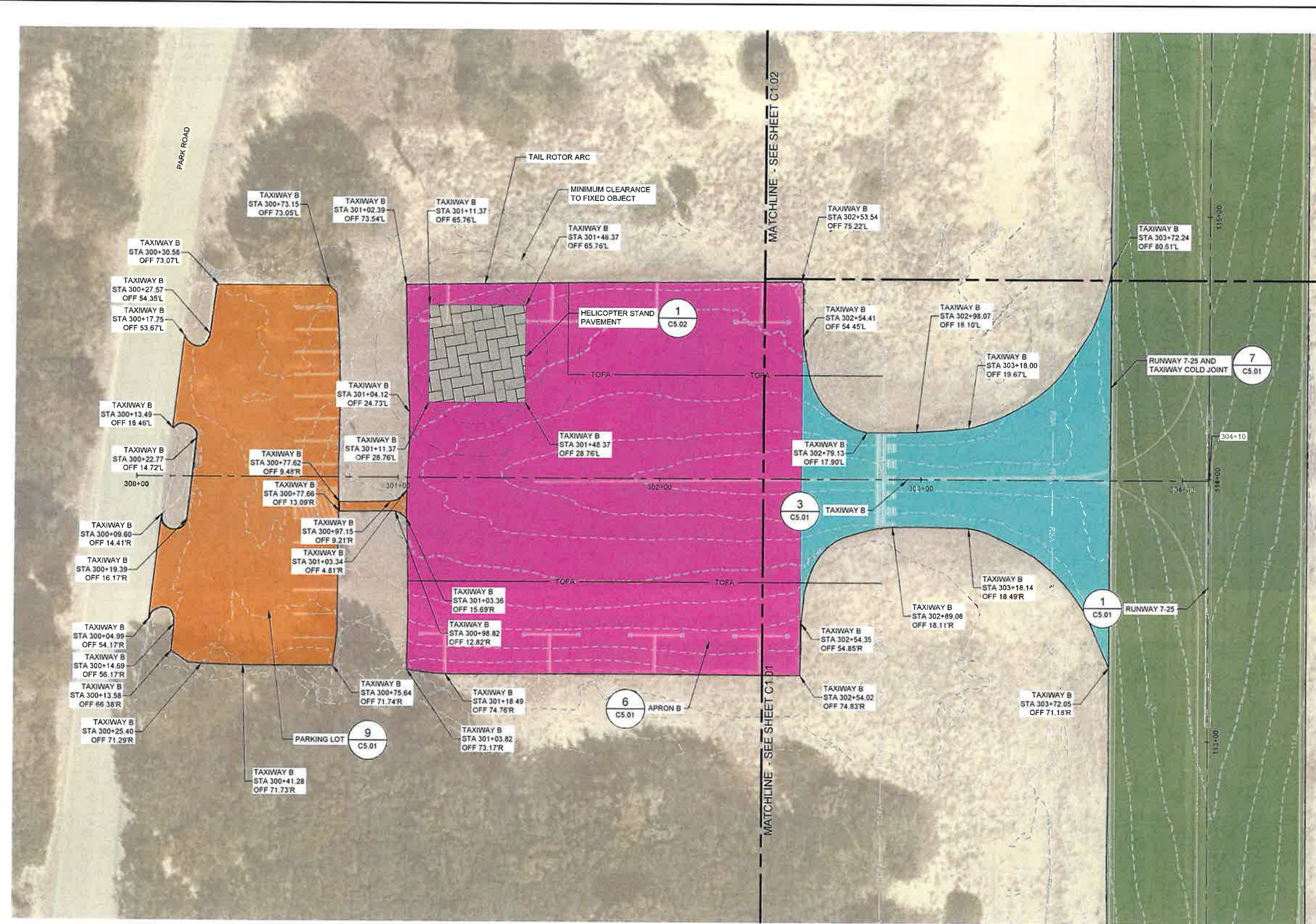
SHEET NUMBER: **C1.03**

SHEET 14 OF 26

PRINT IN COLOR

**LEGEND**

- RUNWAY (1) C5.01
- HELICOPTER STAND CONCRETE PAVEMENT (1) C5.02
- TAXIWAY A (2) C5.01
- TAXIWAY B (3) C5.01
- TAXIWAY C (4) C5.01
- APRON A (5) C5.01
- APRON B (6) C5.01
- APRON C (8) C5.01
- PARKING LOT AND ACCESS DRIVE (9) C5.01



0 10' 20' 40'  
HORIZONTAL SCALE 1"=20'

KEY PLAN



**NOTES**

1. FOR TAXIWAY B AND APRON PAVING AND GRADING, SEE SHEET C1.03.
2. FOR RUNWAY AND TAXIWAY A EXISTING TYPICAL SECTIONS, SEE SHEET CD5.01.
3. SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
4. STATION AND OFFSET IS PROVIDED FOR REFERENCE. CONTRACTOR TO USE EXISTING PAVEMENT LIMITS AS THE LIMITS OF WORK.
5. PAVEMENT REHABILITATION TO MAINTAIN EXISTING GRADES AND GEOMETRY. CONTRACTOR TO SURVEY EXISTING PAVEMENT (INCLUDING ELEVATION) TO THE EXTENT REQUIRED TO RE-ESTABLISH THE EXISTING GRADES AND GEOMETRY DURING PAVING OPERATIONS. CONTRACTOR MUST NOT MODIFY THE EXISTING GRADES AND GEOMETRY WITHOUT THE PRIOR WRITTEN CONSENT OF THE PROJECT REPRESENTATIVE.

FILE NAME: OBX-HSE-C1.DWG  
PLOT DATE: Sep 13, 2024 - 4:30PM

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**  
**PAVING REHABILITATION PROJECT**  
 NCDOT PROJECT NO. 36244.74.1.1  
 53252 BILLY MITCHELL ROAD  
 FRISCO, NC 27936

**ISSUED FOR BID**

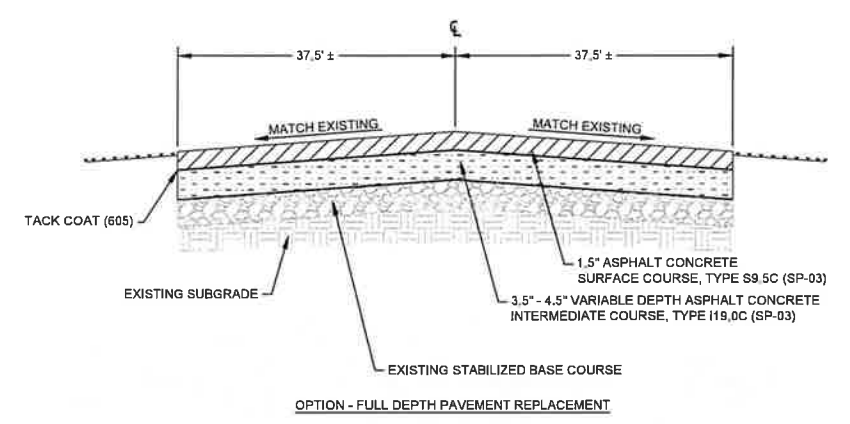


SHEET TITLE  
**PAVING DETAILS**  
 SHEET 1 OF 2

DATE: SEPTEMBER 16, 2024  
 SCALE: NTS  
 DRAWN BY: SSD  
 CHECKED BY: RDB  
 APPROVED BY: RDB

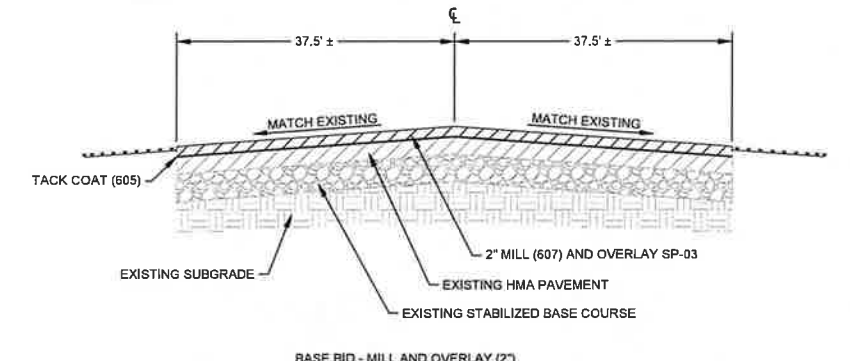
WSP PROJECT NUMBER: 188695-05

SHEET NUMBER: **C5.01**  
 SHEET 16 OF 26



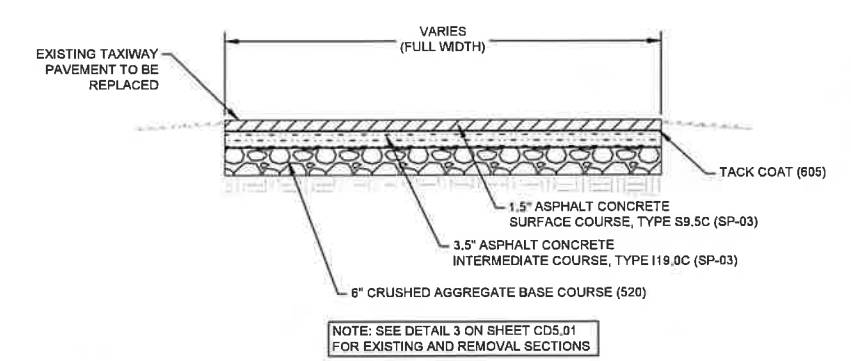
**1 RUNWAY 7-25 DETAIL SECTION**  
 SCALE: NTS

NOTE: SEE DETAIL 1 ON SHEET CD5.01 FOR EXISTING AND REMOVAL SECTIONS



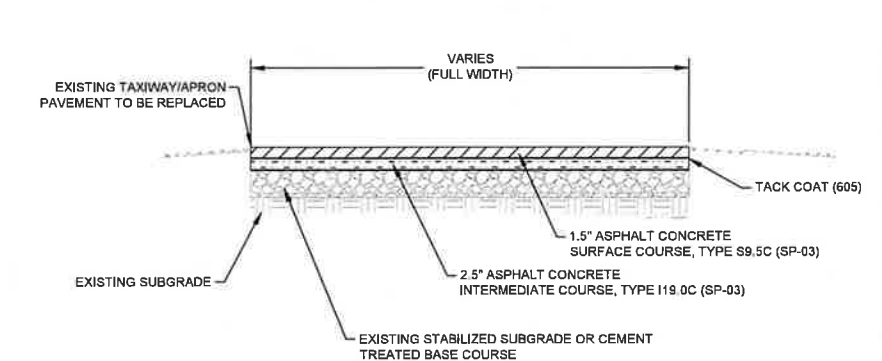
**2 TAXIWAY A DETAIL SECTION**  
 SCALE: NTS

NOTE: SEE DETAIL 2 ON SHEET CD5.01 FOR EXISTING AND REMOVAL SECTIONS



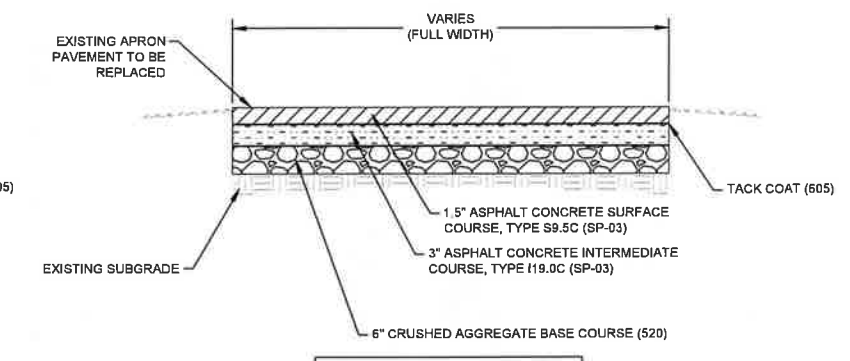
**3 TAXIWAY B DETAIL SECTION**  
 SCALE: NTS

NOTE: SEE DETAIL 3 ON SHEET CD5.01 FOR EXISTING AND REMOVAL SECTIONS



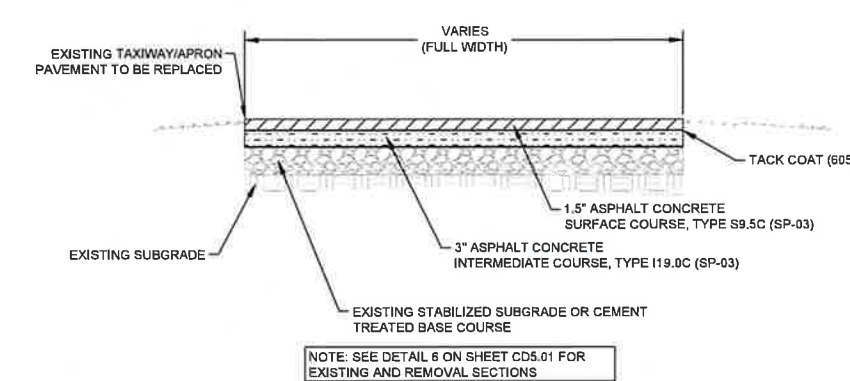
**4 TAXIWAY C DETAIL SECTION**  
 SCALE: NTS

NOTE: SEE DETAIL 4 ON SHEET CD5.01 FOR EXISTING AND REMOVAL SECTIONS



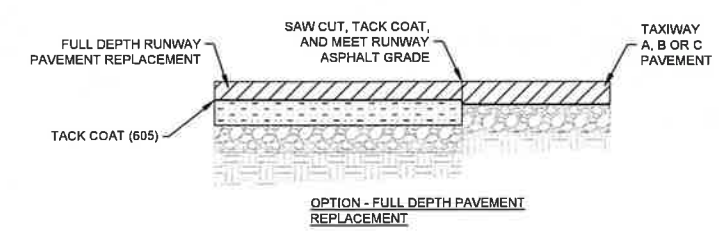
**5 APRON A DETAIL SECTION**  
 SCALE: NTS

NOTE: SEE DETAIL 5 ON SHEET CD5.01 FOR EXISTING AND REMOVAL SECTIONS



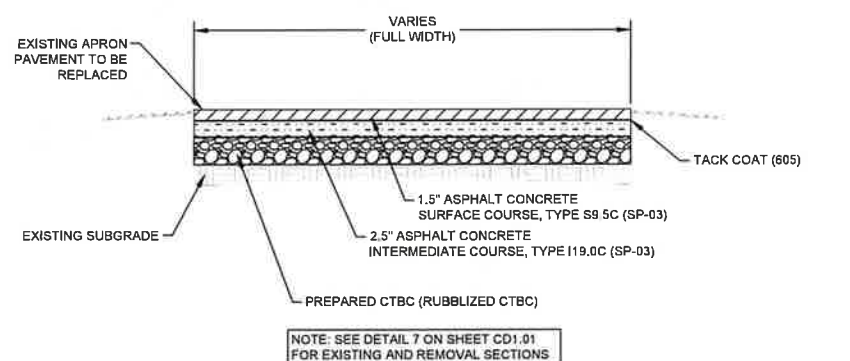
**6 APRON B DETAIL SECTION**  
 SCALE: NTS

NOTE: SEE DETAIL 6 ON SHEET CD5.01 FOR EXISTING AND REMOVAL SECTIONS



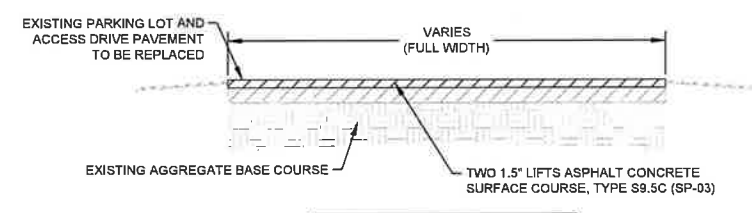
**7 RUNWAY 7-25 AND TAXIWAY COLD JOINT DETAIL**  
 SCALE: NTS

NOTES:  
 1. TACK COAT (605) IS INCIDENTAL TO SP-03.



**8 APRON C DETAIL SECTION**  
 SCALE: NTS

NOTE: SEE DETAIL 7 ON SHEET CD1.01 FOR EXISTING AND REMOVAL SECTIONS



**9 PARKING LOT AND ACCESS ROAD PAVEMENT**  
 SCALE: NTS

NOTE: SEE DETAIL 8 ON SHEET CD5.01 FOR EXISTING AND REMOVAL SECTIONS

FILE NAME: OBX-HSE-C5.01.DWG  
 PLOT DATE: May 19, 2026 - 1:22PM

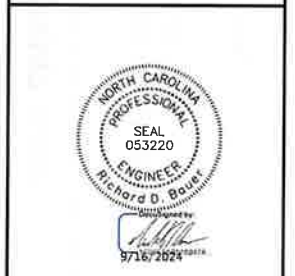
NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

**PAVEMENT REHABILITATION PROJECT**  
 NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
 FRISCO, NC 27936

**ISSUED FOR BID**



SHEET TITLE  
**PAVING AND GRADING PLAN  
 SHEET 4 OF 4**

DATE	SEPTEMBER 16, 2024
SCALE	1" = 40'
DRAWN BY	SSD
CHECKED BY	RDB
APPROVED BY	RDB

WSP PROJECT NUMBER	180695-05
SHEET NUMBER	<b>C1.04</b>
SHEET 15 OF 26	

PRINT IN COLOR

**LEGEND**

- RUNWAY
- TAXIWAY A
- TAXIWAY B
- TAXIWAY C
- APRON A
- APRON B
- APRON C
- PARKING LOT AND ACCESS DRIVE

1  
C5.01

2  
C5.01

3  
C5.01

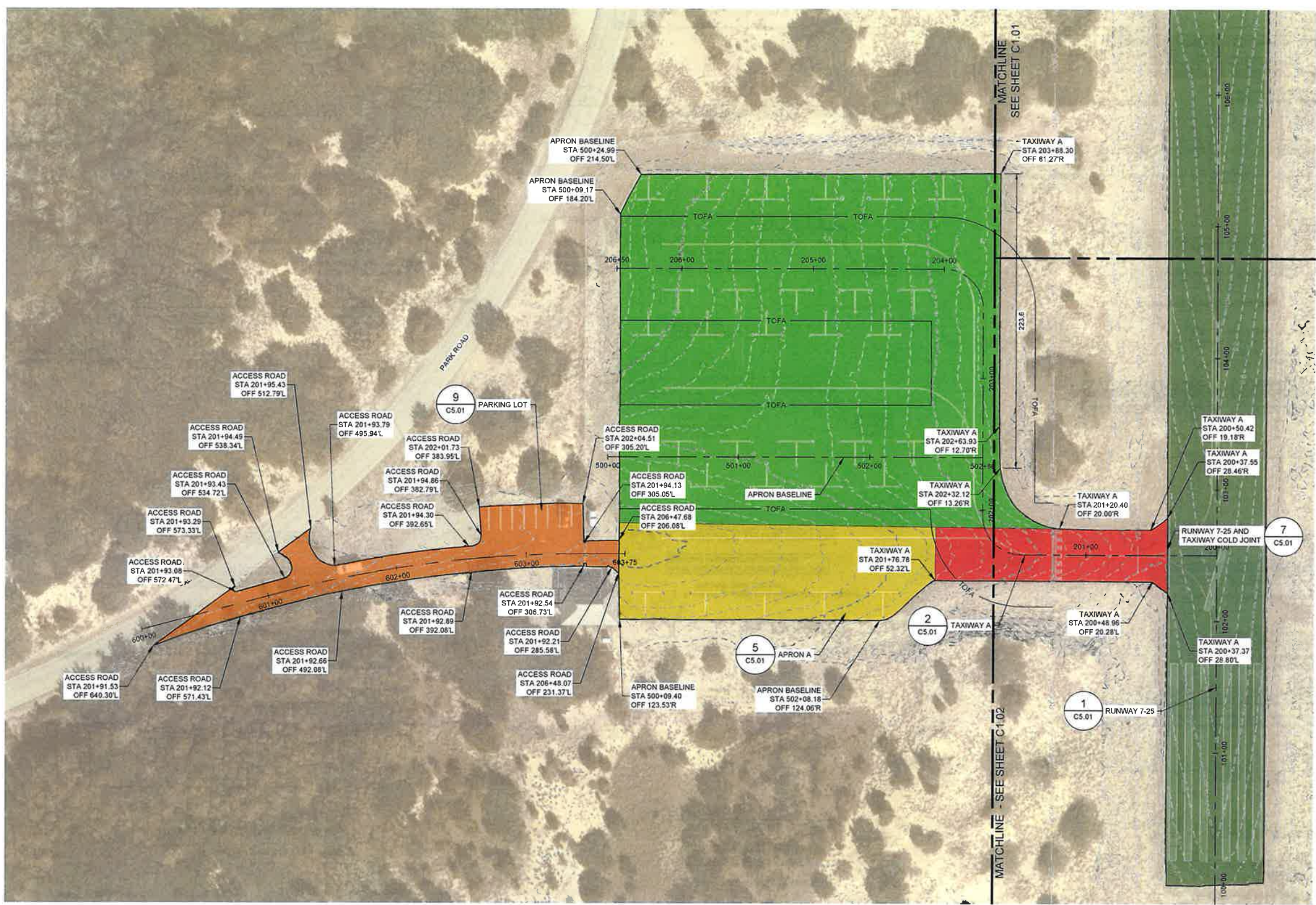
4  
C5.01

5  
C5.01

6  
C5.01

8  
C5.01

9  
C5.01



0 20' 40' 80'  
 HORIZONTAL SCALE 1" = 40'

**KEY PLAN**

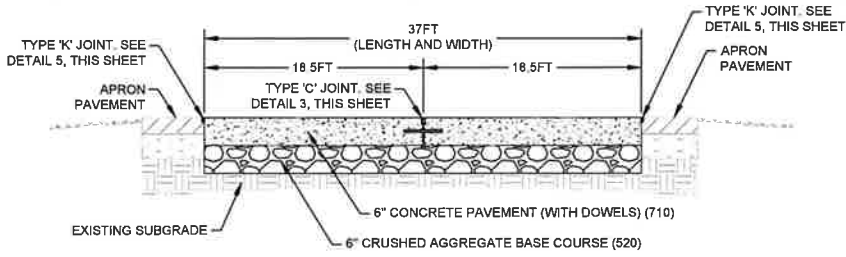


**NOTES**

- FOR TAXIWAY B AND APRON PAVING AND GRADING, SEE SHEET C1.03.
- FOR RUNWAY AND TAXIWAY A EXISTING TYPICAL SECTIONS, SEE SHEET CD5.01.
- SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
- STATION AND OFFSET IS PROVIDED FOR REFERENCE. CONTRACTOR TO USE EXISTING PAVEMENT LIMITS AS THE LIMITS OF WORK.
- PAVEMENT REHABILITATION TO MAINTAIN EXISTING GRADES AND GEOMETRY. CONTRACTOR TO SURVEY EXISTING PAVEMENT (INCLUDING ELEVATION) TO THE EXTENT REQUIRED TO RE-ESTABLISH THE EXISTING GRADES AND GEOMETRY DURING PAVING OPERATIONS. CONTRACTOR MUST NOT MODIFY THE EXISTING GRADES AND GEOMETRY WITHOUT THE PRIOR WRITTEN CONSENT OF THE PROJECT REPRESENTATIVE.

FILE NAME: CBX-HSE-C1.DWG  
 PLOT DATE: 2024 - 4:24PM  
 Sep 13, 2024

NO.	DESCRIPTION	DATE



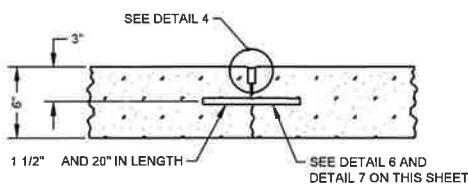
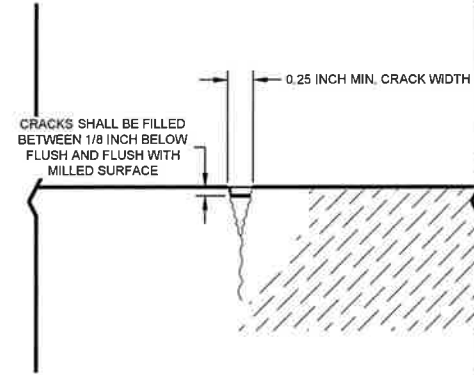
**1 HELICOPTER STAND PAVEMENT SECTION**  
C5.02 SCALE: NTS

**NOTES:**

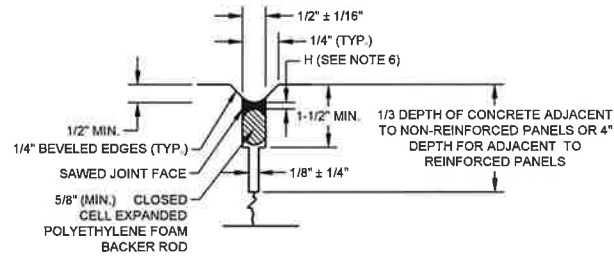
- AFTER MILLING, PRIOR TO OVERLAY, CLEAN EXISTING CRACKS OF ALL LOOSE MATERIAL AND VEGETATION. ROUT AS REQUIRED. REMOVE ALL EXISTING CRACK SEALANT. TREAT REMAINING EXISTING VEGETATION WITHIN THE MILLED PAVEMENT PER HERBICIDE POLICY IN NOTE 4 BELOW. TREATMENT SHALL BE INCIDENTAL TO CRACK REPAIR.
- LOCATIONS FOR CRACK REPAIR MUST BE COORDINATED WITH THE ENGINEER.
- CRACK REPAIR MUST BE PERFORMED IN ACCORDANCE WITH NCDOT SPECIFICATION SECTION 657, SEAL EXISTING PAVEMENT CRACKS AND JOINTS.
- HERBICIDE POLICY: A PESTICIDE/HERBICIDE WORK PLAN MUST BE SUBMITTED THAT WILL ADDRESS:
  - \* LOCATION
  - \* TERRAIN
  - \* NEARBY WATERS/WETLANDS/INTERMITTENT STREAMS
  - \* TIME OF YEAR
  - \* TIME OF DAY FOR APPLICATION
  - \* PROXIMITY TO VISITOR USE AREAS
  - \* NUMBER OF PERSONNEL FOR THE PROJECT
  - \* ACCESS TO THE WORK SITE
  - \* NUMBER OF DAYS ANTICIPATED
  - \* APPLICATION TECHNIQUES
  - \* EQUIPMENT TO BE USED.

PLAN MUST ALSO INCLUDE A SAFETY PLAN THAT WILL OUTLINE THE PROJECT'S PERSONAL PROTECTIVE EQUIPMENT TO BE USED.

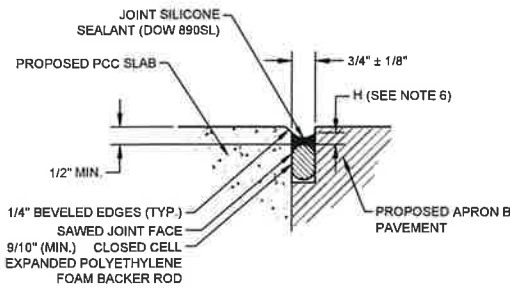
ONLY NPS APPROVED HERBICIDES MUST BE USED. SEE [HTTP://NPS.GOV/PUPS/](http://nps.gov/pups/) FOR THE MOST UP TO DATE LIST OF APPROVED HERBICIDES/PESTICIDES. APPLICATION OF THIS HERBICIDE MUST BE BY LICENSED APPLICATORS. ALL PROPOSED WORK MUST BE REVIEWED BY THE INTEGRATED PEST MANAGEMENT COORDINATOR IN THE PARK. CONTRACTOR MUST SUBMIT A PROPOSAL FOR HERBICIDE USE WITH THE PROPOSED AMOUNT AND ACREAGE TREATED TO NCDOT. CONTRACTOR MUST TRACK AND LOG ALL HERBICIDE USE ON THE OBG PESTICIDE USE LOG AND SUBMIT SEVEN (7) DAYS PRIOR TO THE END OF THE CALENDAR YEAR TO NCDOT. PESTICIDE USE LOG IS INCLUDED AS APPENDIX B OF THE TECHNICAL SPECIFICATIONS.



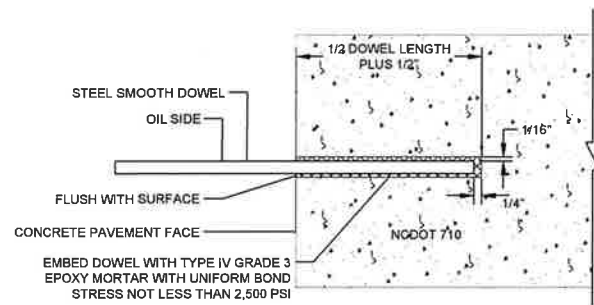
**3 TYPE 'C' DOWELED CONTRACTION JOINT**  
C5.02 SCALE: NTS



**4 CONTRACTION JOINT**  
C5.02 SCALE: NTS

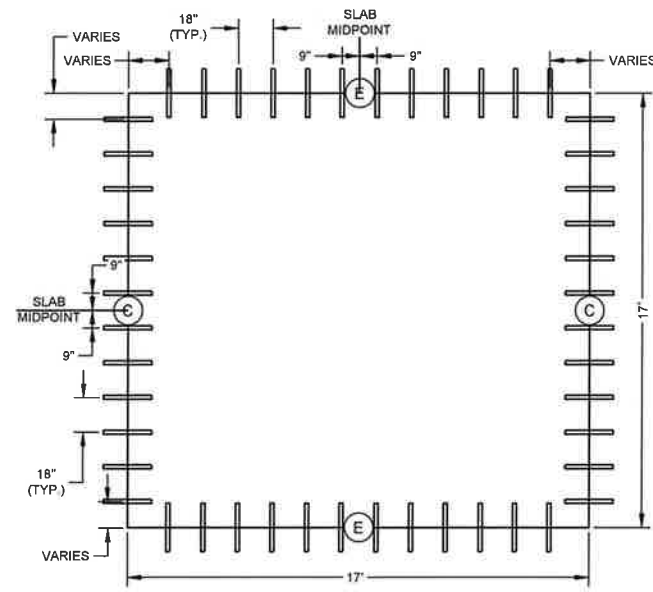


**5 TYPE 'K' CONCRETE TO ASPHALT INTERFACE JOINT**  
C5.02 SCALE: NTS



**6 EPOXY GROUT DOWEL / TIE BAR INSTALLATION**  
C5.02 SCALE: NTS

**2 ASPHALT PAVEMENT CRACK REPAIR DETAILS BY OTHERS**  
C5.02 SCALE: NTS

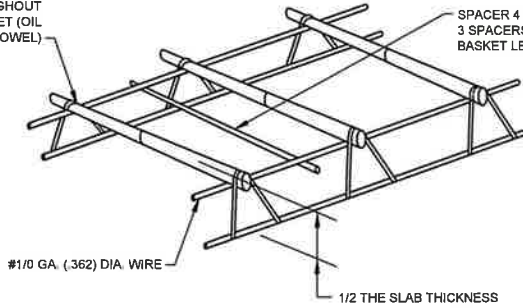


**7 DOWEL SPACING DETAIL**  
C5.02 SCALE: NTS

NOTE:  
REFER TO JOINT DETAILS NOTES SHOWN ON THIS SHEET.

SLAB THICKNESS (T)	DIAMETER	LENGTH	SPACING
18"	1 1/2"	20"	18"

WELD DOWELS TO BASKET AND ALTERNATE SIDES FOR EACH DOWEL WELD THROUGHOUT LENGTH OF BASKET (OIL NON-WELDED HALF OF DOWEL)



**8 CONTRACTION JOINT DOWEL BASKET**  
C5.02 SCALE: NTS

- NOTES:**
- DOWELS MUST BE EPOXY COATED PER ASTM A1078 AND HELD FIRMLY TO THE BASKET ASSEMBLY.
  - DOWEL CUT ENDS CAN BE PAINTED TO PREVENT RUSTING.
  - DOWEL BASKETS MUST BE FIRMLY ANCHORED TO GRADE.
  - DOWELS AND PLACEMENT ARE INCIDENTAL TO NCDOT 710.

**BILLY MITCHELL AIRPORT (HSE)**  
**PAVEMENT REHABILITATION PROJECT**  
NCDOT PROJECT NO. 36244.74.1.1  
53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID



SHEET TITLE  
**PAVING DETAILS SHEET 2 OF 2**

DATE: **SEPTEMBER 16, 2024**  
SCALE: **NTS**  
DRAWN BY: **SSD**  
CHECKED BY: **RDB**  
APPROVED BY: **RDB**

WSP PROJECT NUMBER: **108695-05**

SHEET NUMBER: **C5.02**

SHEET 17 OF 26

FILE NAME: OBX-HSE-C5.01.DWG  
PLOT DATE: Sep 16, 2024 - 5:31 PM

**JOINT DETAIL NOTES:**

- JOINTS MUST NOT INTERSECT THE EDGE OF THE PAVEMENT NOR ANY OTHER JOINT AT AN ANGLE OF LESS THAN 90°.
- DOWEL BASKETS MUST BE FIRMLY ATTACHED TO THE EXISTING UNDERLYING COURSE PRIOR TO PLACING P.C.C.
- PAVEMENT AREAS WHERE THICKENED EDGE JOINTS OCCUR MUST BE CONSTRUCTED SO THAT DOWEL BARS ARE PLACED PARALLEL TO THE FINAL SURFACE AND MAINTAIN A MINIMUM DEPTH OF 1.25T/2 (11.25" FOR 18" PCC) FROM THE FINAL SURFACE.
- ANY PAVEMENT SHOWN WITH THICKENED EDGE JOINTS WILL BE PAID FOR AS NOMINAL THICKNESS (T) PAVEMENT.
- DOWEL DRILLING METHOD MUST BE CAPABLE OF MAINTAINING DRILL HOLES PARALLEL TO THE CONCRETE SURFACE AND NORMAL TO THE JOINT LINE WITHIN 1/4"± AT THE END OF THE DOWEL. DRILL HOLES MUST BE ACCURATELY LAID OUT SO THAT THE MAXIMUM DEVIATION DOES NOT EXCEED 1" IN THE HORIZONTAL DIRECTION AND 1/2" IN THE VERTICAL DIRECTION. DRILL HOLE DIAMETER TO BE APPROXIMATELY 1-7/8" FOR 1-1/2" DOWELS. BAR POSITIONING MUST BE WITHIN A 1/4" TOLERANCE IN HORIZONTAL AND VERTICAL PLANES.

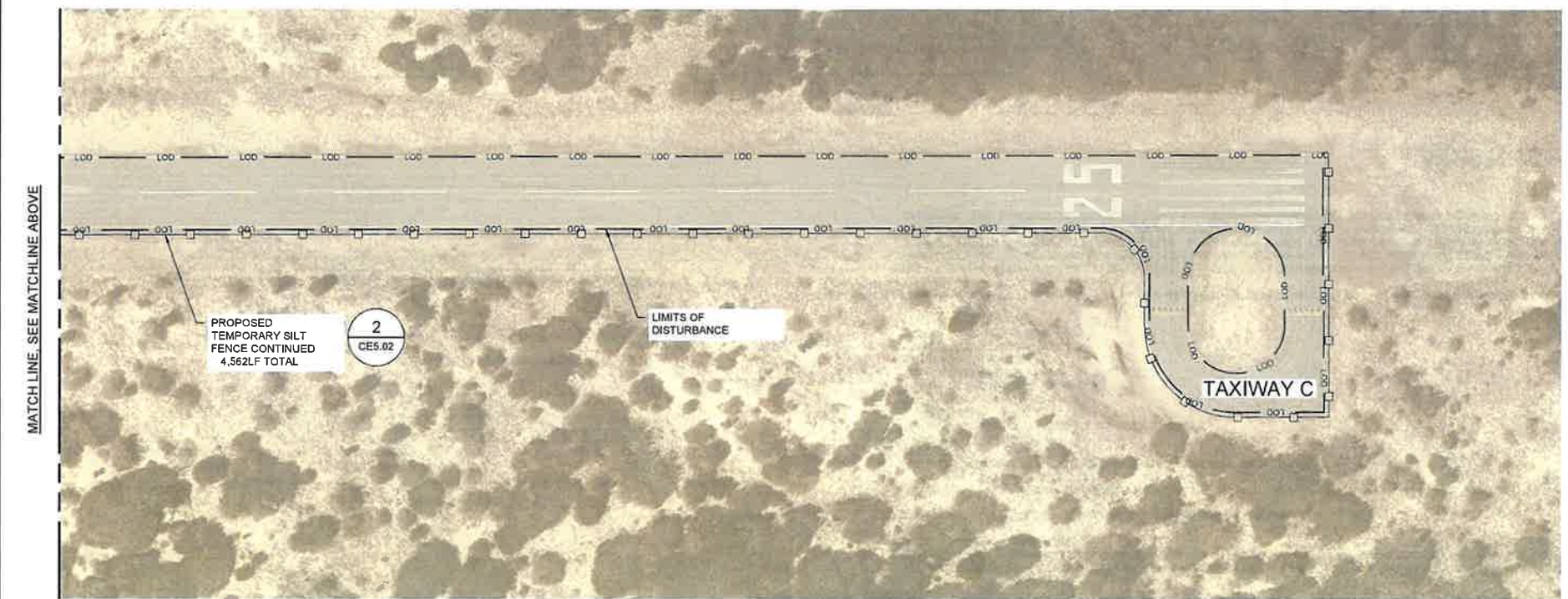
- SEALANT DIMENSION H IS BASED ON MANUFACTURER RECOMMENDATIONS.
- THE DOWEL BAR OR TIE BAR SPACING MUST BE STARTED FROM THE INSIDE OF THE JOINT AT 12 INCH TO 18 INCH (12 INCH MIN.) SPACING FROM THE JOINT EDGE. IF THE SPACING DOES NOT ALLOW FOR AN 18 INCH SPACING AT THE CENTER OF THE SLAB AND THE REMAINING OPENING IS GREATER THAN 18 INCHES THEN A BAR MUST BE PLACED IN THE CENTER OF THE REMAINING SPACE. IF THE REMAINING SPACE IS LESS THAN 18 INCHES, NO ADDITIONAL BAR WILL BE REQUIRED.
- REFER TO TABLE 1: DIMENSIONS AND SPACING OF STEEL DOWELS ON THIS SHEET.

NO.	DESCRIPTION	DATE



PLAN VIEW - 1

MATCH LINE, SEE MATCHLINE BELOW



PLAN VIEW - 2

**LEGEND**

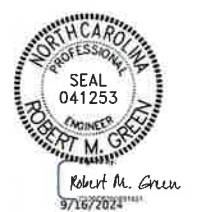
- TEMPORARY SILT FENCE
- LIMITS OF DISTURBANCE
- HELICOPTER STAND
- CONTRACTOR STAGING AREA / CONTRACTOR STOCKPILE AREA
- ACCESS/HAUL ROUTE
- GRAVEL CONSTRUCTION ENTRANCE

**NOTES**

1. FOR THE PURPOSE OF VISUAL CLARITY, THE LIMITS OF DISTURBANCE WAS OFFSET 15FT FROM PAVEMENT AREAS. CONTRACTOR SHALL INSTALL SILT FENCE AGAINST PAVEMENT EDGE AND LIMIT DISTURBANCE TO PAVEMENT RESTORATION AREAS TO THE EXTENT POSSIBLE.

**BILLY MITCHELL AIRPORT (HSE)**  
 PAVEMENT REHABILITATION PROJECT  
 NCDOT PROJECT NO. 36244.74.1.1  
 53252 BILLY MITCHELL ROAD  
 FRISCO, NC 27936

**ISSUED FOR BID**



SHEET TITLE	
EROSION CONTROL PLAN	
DATE	SEPTEMBER 16, 2024
SCALE	1" = 80'
DRAWN BY	TAW
CHECKED BY	RMG
APPROVED BY	RMG
WSP PROJECT NUMBER	188695-05
SHEET NUMBER	<b>CE1.01</b>
SHEET 16 OF 26	

FILE NAME: OBX-HSE-CE1.DWG  
 PLOT DATE: 2024 - 10:07AM

Table with 3 columns: NO., DESCRIPTION, DATE

BILLY MITCHELL AIRPORT (HSE) PAVEMENT REHABILITATION PROJECT NCDOT PROJECT NO. 36244-74-1-1 53252 BILLY MITCHELL ROAD FRISCO, NC 27936

ISSUED FOR BID



SHEET TITLE EROSION CONTROL DETAILS SHEET 1 OF 2

DATE SEPTEMBER 16, 2024 SCALE NTS DRAWN BY TAW CHECKED BY RMG APPROVED BY RMG WSP PROJECT NUMBER 188695-05

SHEET NUMBER CE5.01 SHEET 19 OF 26

SCALE (S) AS NOTED ON THIS SHEET ARE BASED ON A FULL SIZE 22 X 34 SHEET.

NCG-01 GROUND COVER & MATERIALS HANDLING. Includes sections for Ground Stabilization, Equipment and Vehicle Maintenance, Onsite Concrete Washout, Litter, Building Material and Land Clearing Waste, Paint and Other Liquid Waste, Portable Toilets, Earthen Stockpile Management, Hazardous and Toxic Waste, and Herbicides, Pesticides and Rodenticides.

NCG-01 GROUND COVER & MATERIALS HANDLING

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT. Includes text regarding sediment basins and traps that receive runoff from drainage areas.

NCG-01 SELF INSPECTION. Includes sections for Self-Inspection, Recordkeeping and Reporting, and Reporting. Contains detailed inspection requirements and recordkeeping procedures.

NCG-01 SELF INSPECTION

DISTURBANCE OUTSIDE OF THE EXISTING PAVED AREA IS TO BE AVOIDED WHERE POSSIBLE. GROUND STABILIZATION AND SEEDING TO BE AT THE DIRECTION OF THE PROJECT REPRESENTATIVE. SHOULD THE PROJECT REPRESENTATIVE DETERMINE THAT STABILIZATION AND SEEDING IS REQUIRED, THE SEED MIX SELECTED SHALL BE AT THE DIRECTION OF THE PROJECT REPRESENTATIVE.

Table with 3 columns: Site Area Description, Stabilize within this many calendar days after ceasing land disturbance, Timeframe variations. Includes rows for Perimeter dikes, High Quality Water (HQW) Zones, Slopes steeper than 3:1, Slopes 3:1 to 4:1, and Areas with slopes flatter than 4:1.



Table with 2 columns: Item to Document, Document Requirements. Lists items like EASC measures, grading phases, ground cover, and corrective actions.

Table with 3 columns: Inspect (during normal business hours), Frequency, Inspection records must include. Lists inspection items like rain gauge, EASC measures, stormwater discharge, perimeter of site, and streams/wetlands.



Table with 2 columns: Item to Document, Document Requirements. Lists items like EASC measures, grading phases, ground cover, and corrective actions.



Table with 2 columns: Item to Document, Document Requirements. Lists items like EASC measures, grading phases, ground cover, and corrective actions.

Table with 3 columns: Inspect (during normal business hours), Frequency, Inspection records must include. Lists inspection items like rain gauge, EASC measures, stormwater discharge, perimeter of site, and streams/wetlands.



ON-SITE CONCRETE WASHOUT STRUCTURE WITH LINER. Includes diagrams for SECTION A-A and SECTION B-B, and detailed notes on construction and maintenance.



Table with 2 columns: Item to Document, Document Requirements. Lists items like EASC measures, grading phases, ground cover, and corrective actions.

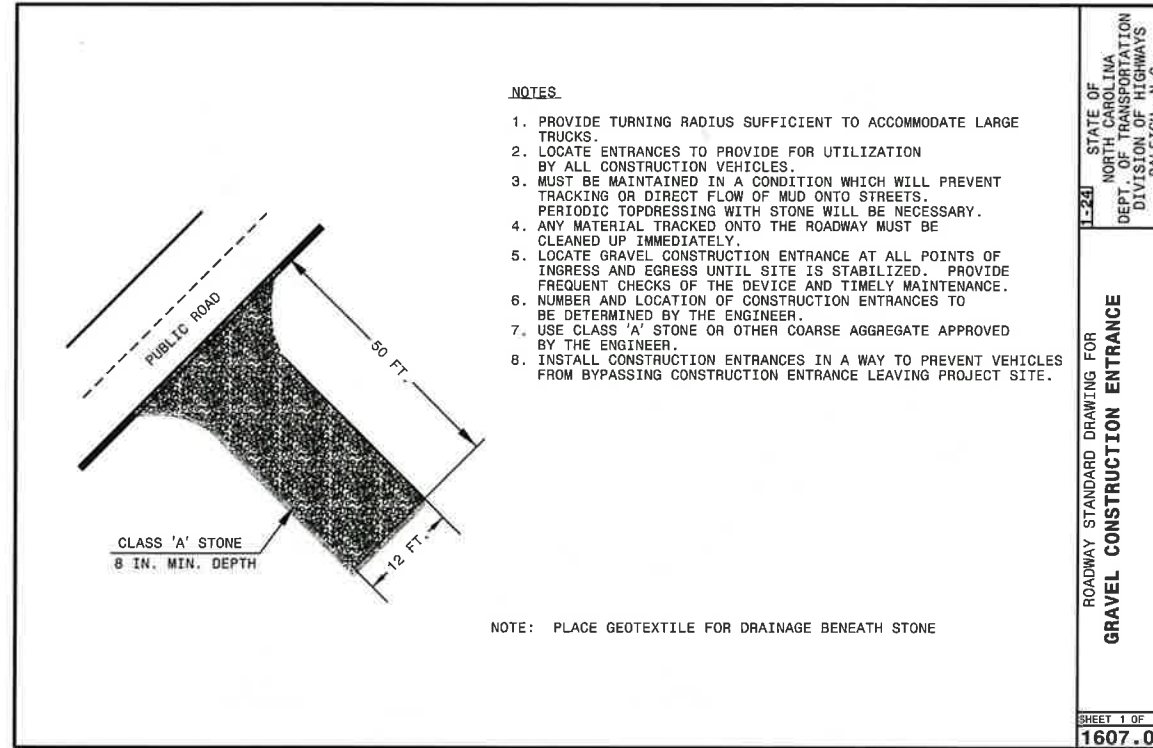
Table with 3 columns: Inspect (during normal business hours), Frequency, Inspection records must include. Lists inspection items like rain gauge, EASC measures, stormwater discharge, perimeter of site, and streams/wetlands.



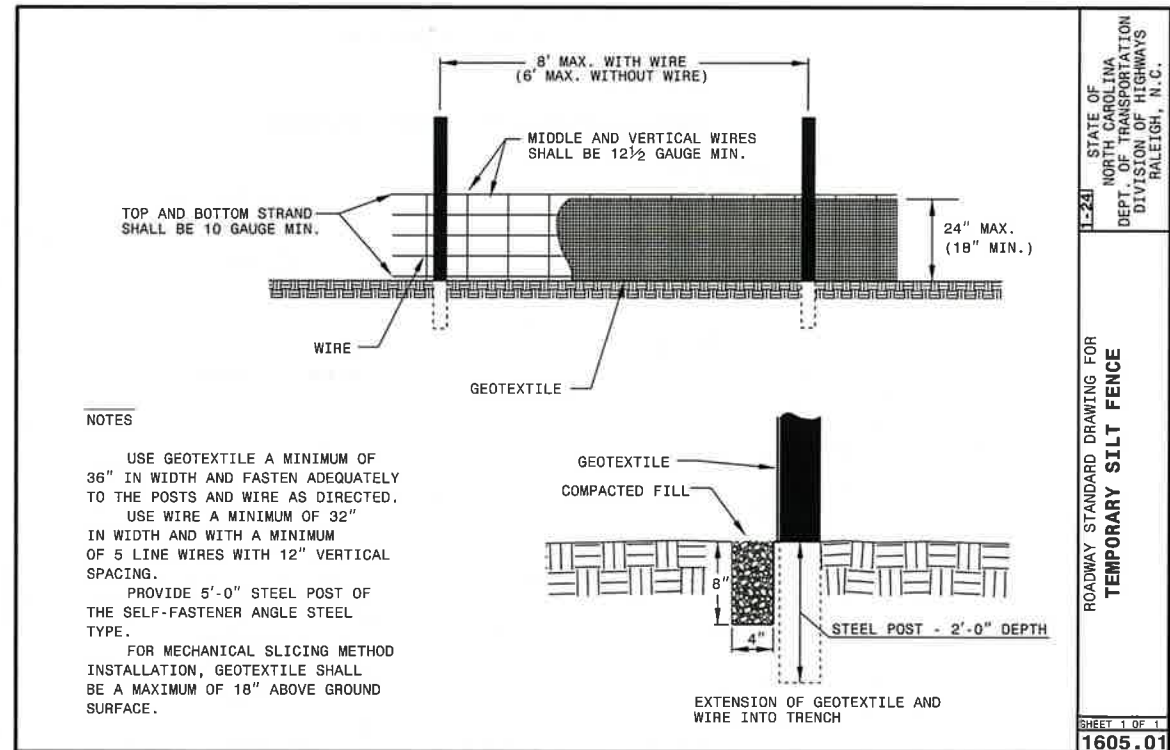
FILE NAME: OBX-HSE-CE5.01-CES.02.DWG PLOT DATE: 9/16/2024 - 10:07AM

**EROSION CONTROL NOTES:**

- SEE SHEET CE1.01 FOR EROSION CONTROL PLAN. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE NOTES AND DETAILS PROVIDED ON SHEETS CE5.01 AND CE5.02 AS WELL AS STANDARD NCDEQ GUIDELINES.
- MINIMUM EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- ALL CONSTRUCTION ACTIVITIES MUST TAKE PLACE WITHIN THE LIMITS OF THE DISTURBANCE AS SHOWN HEREIN. ACTIVITIES OUTSIDE OF THESE SPECIFIC AREAS ARE STRICTLY PROHIBITED.
- INSTALL ESC MEASURES PRIOR TO CONDUCTING ANY DEMOLITION. ESC MEASURES SUCH AS CONSTRUCTION ENTRANCES AND CONCRETE WASHOUTS SHALL BE INSTALLED AND RELOCATED APPROPRIATELY DURING VARIOUS STAGES OF CONSTRUCTION. ANY AREAS THAT ARE WITHIN THE PAVEMENT AREA WHICH ARE USED FOR ACCESS, PARKING OR STORAGE OF EQUIPMENT SHALL BE STABILIZED WITH PERMANENT GROUND COVER SIMILAR TO A CONSTRUCTION ENTRANCE (SEE SHEETS CE1.01)
- CONCRETE WASHOUTS ARE NOT SHOWN IN PLANS. LOCATION SHALL BE DETERMINED BASED ON AVAILABLE SPACE AND PROXIMITY TO ACTIVE WORK AREA.
- ALL WASTE MATERIAL AND CONSTRUCTION DEBRIS SHALL BE DISPOSED OF BY THE CONTRACTOR AT A CONSTRUCTION AND DEMOLITION LANDFILL OR OTHER FACILITY IN POSSESSION OF AN EROSION AND SEDIMENT CONTROL PERMIT AS WELL AS ANY/ALL OTHER APPLICABLE PERMITS.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION SITE IN A SAFE AND ORDERLY CONDITION AND ADHERING TO THE EROSION CONTROL PLAN AS SET FORTH HEREIN. SEE SHEETS CE1.01, CE5.01, AND CE5.02. DEVIATION FROM THE EROSION CONTROL PLAN IS NOT ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE DESIGNER.
- CONTRACTOR IS RESPONSIBLE FOR REGULAR INSPECTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES. ALL MEASURES SHALL BE INSPECTED IMMEDIATELY FOLLOWING ANY MEASURABLE STORM EVENT, ANY REQUIRED MAINTENANCE OR REPAIRS SHALL OCCUR AS SOON AS FEASIBLE.
- CONTRACTOR IS RESPONSIBLE FOR MONITORING WEATHER CONDITIONS, AND FOR TAKING ACTION AS NECESSARY TO STABILIZE THE CONSTRUCTION SITE PRIOR TO FORECASTED/FORESEEABLE STORM EVENTS.
- CONTRACTOR TO MINIMIZE TRACKING EQUIPMENT AND ASSOCIATED SEDIMENT/DEBRIS FROM THE CONSTRUCTION SITE ONTO ADJACENT ROADS.
- IF IT IS DETERMINED DURING CONSTRUCTION THAT SIGNIFICANT SEDIMENT IS LEAVING THE SITE, DESPITE PROPER IMPLEMENTATION AND MAINTENANCE OF THE EROSION CONTROL MEASURES, THE CONTRACTOR IS OBLIGATED TO TAKE ADDITIONAL CORRECTIVE ACTION. THE CONTRACTOR SHALL CONTACT THE ENGINEER TO DISCUSS ADDITIONAL MEASURES.
- DISTURBANCE OUTSIDE OF THE EXISTING PAVED AREA IS TO BE AVOIDED WHERE POSSIBLE. GROUND STABILIZATION AND SEEDING TO BE AT THE DIRECTION OF THE PROJECT REPRESENTATIVE. SHOULD THE PROJECT REPRESENTATIVE DETERMINE THAT STABILIZATION AND SEEDING IS REQUIRED, THE SEED MIX SELECTED SHALL BE AT THE DIRECTION OF THE PROJECT REPRESENTATIVE.
- INSTALL TEMPORARY MEASURES AS SHOWN ON THE APPROVED PLAN. INITIAL SITE PREPARATION SHALL OCCUR ONLY AS NECESSARY TO INSTALL THESE DEVICES. THE REMAINDER OF DEMOLITION AND SITE PREP SHALL OCCUR AFTER CONTROL MEASURES HAVE BEEN INSTALLED.
- REMOVE TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES ONCE SITE IS FULLY STABLE. CONTACT THE ENGINEER TO ASSIST ORGANIZING A SITE WALK-THROUGH PRIOR TO REMOVING TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES.
- THE ENGINEER SHALL BE CONTACTED WITH ANY ISSUES OR CONCERNS REGARDING CONSTRUCTION OR MAINTENANCE OF EROSION CONTROL PRACTICES.
- THE LANDOWNER, THE FINANCIALLY RESPONSIBLE PARTY, OR THE AGENTS THEREOF SHALL PERFORM AN INSPECTION OF THE AREA COVERED BY THE PLAN AFTER EACH PHASE HAS BEEN COMPLETED AND AFTER ESTABLISHMENT OF GROUND COVER.
- NO STAGING OF MATERIALS WITHIN 50 FEET OF OPEN DRAINAGE STRUCTURE.
- PLACE A LAYER OF SAND, SCREENINGS, OR FINES ON PAVED SURFACES BEFORE DEPOSITING ANY EXCAVATION MATERIALS.
- CONTACT THE OWNER'S REPRESENTATIVE WITH ANY CONCERNS DURING CONSTRUCTION OR ANY SPECIFIC MAINTENANCE ISSUES.
- TOTAL DISTURBED AREA (ENCOMPASSED BY LOD): 9.44 ACRES.



**1 GRAVEL CONSTRUCTION ENTRANCE DETAIL**  
DT2.02 SCALE: NTS



**2 TEMPORARY SILT FENCE DETAIL**  
DT2.02 SCALE: NTS

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**  
**PAVEMENT REHABILITATION PROJECT**  
NCDOT PROJECT NO. 36244.74.1.1  
53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

**ISSUED FOR BID**



SHEET TITLE

**EROSION CONTROL DETAILS**  
**SHEET 2 OF 2**

DATE SEPTEMBER 16, 2024

SCALE NTS

DRAWN BY TAW

CHECKED BY RMG

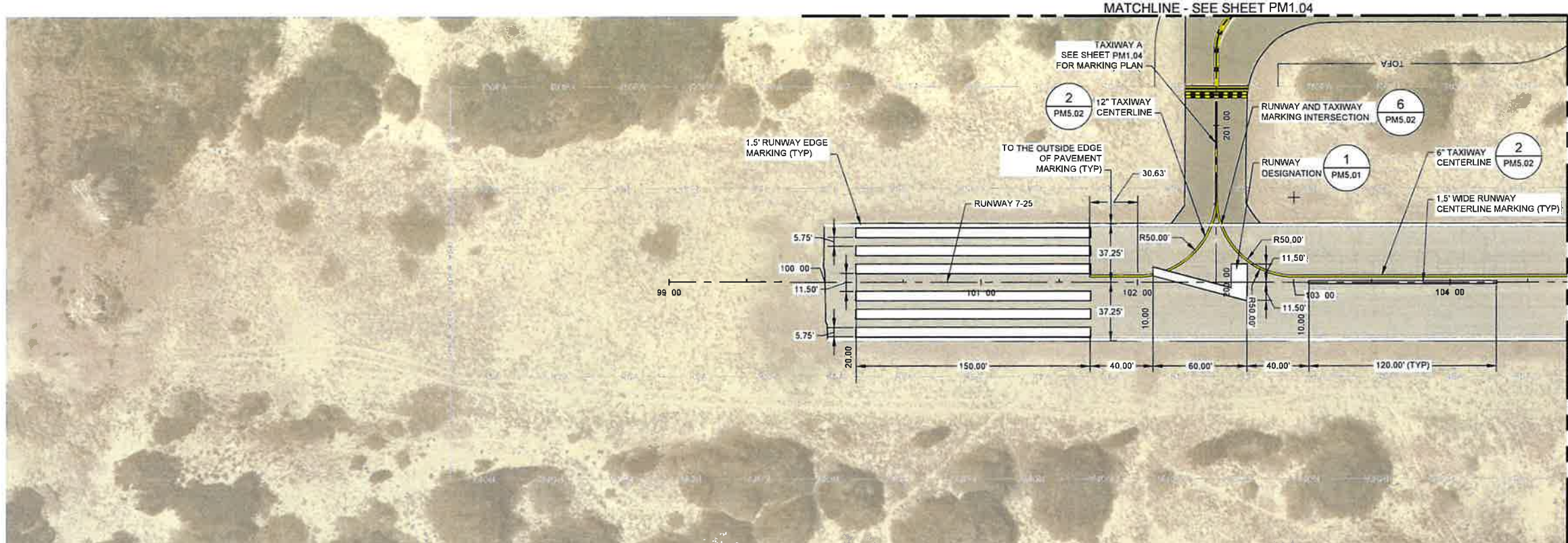
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WSP PROJECT NUMBER 188695-05

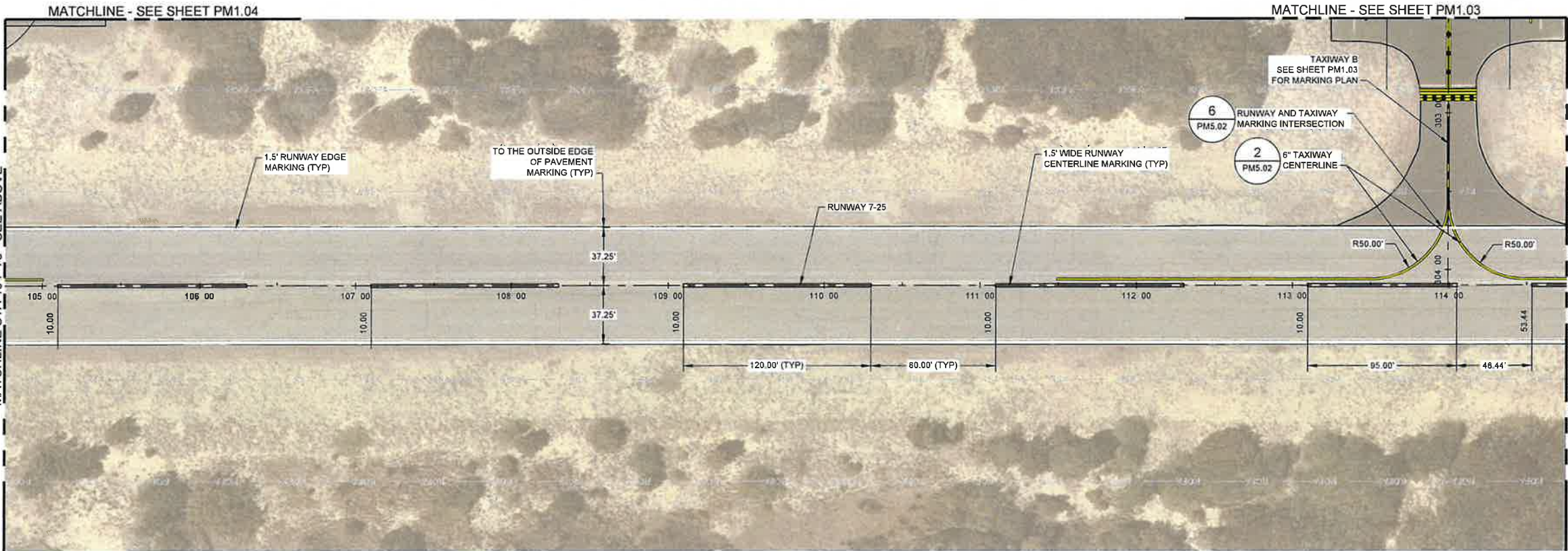
SHEET NUMBER **CE5.02**

SHEET 20 OF 25

NO.	DESCRIPTION	DATE



RUNWAY 7-25 PLAN (STA. 99 00.00 TO STA. 104 75.00)



RUNWAY 7-25 PLAN (STA. 104 75.00 TO STA. 114 75.00)

**BILLY MITCHELL AIRPORT (HSE)**

PAVEMENT REHABILITATION PROJECT  
NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID



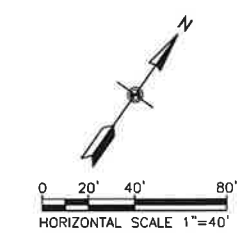
SHEET TITLE  
**PAVEMENT MARKING PLAN  
SHEET 1 OF 4**

DATE: SEPTEMBER 16, 2024  
SCALE: 1" = 40'  
DRAWN BY: KR  
CHECKED BY: RDB  
APPROVED BY: RDB

WSP PROJECT NUMBER: 188695-05

SHEET NUMBER: **PM1.01**

SHEET 21 OF 26



KEY PLAN



**NOTES**

1. FOR DEMOLITION PLANS, SEE SHEETS CD1.01 THROUGH CD1.04.
2. FOR PAVING AND GRADING PLANS, SEE SHEETS C1.01 THROUGH C1.04.
3. SEE SHEET CD5.01 FOR EXISTING PAVING SECTIONS.
4. SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
5. SEE SHEETS PM5.01 THROUGH PM5.02 FOR PAVEMENT MARKING DETAILS.

**BY OTHERS - NOT IN CONTRACT**

FILE NAME: OBAK-HSE-PM1.DWG  
PLOT DATE: S P 13 - 2024 - 1:59PM

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**  
 PAVEMENT REHABILITATION PROJECT  
 NCDOT PROJECT NO. 36244.74.1.1  
 53252 BILLY MITCHELL ROAD  
 FRISCO, NC 27936

ISSUED FOR BID



SHEET TITLE  
**PAVEMENT MARKING PLAN  
 SHEET 2 OF 4**

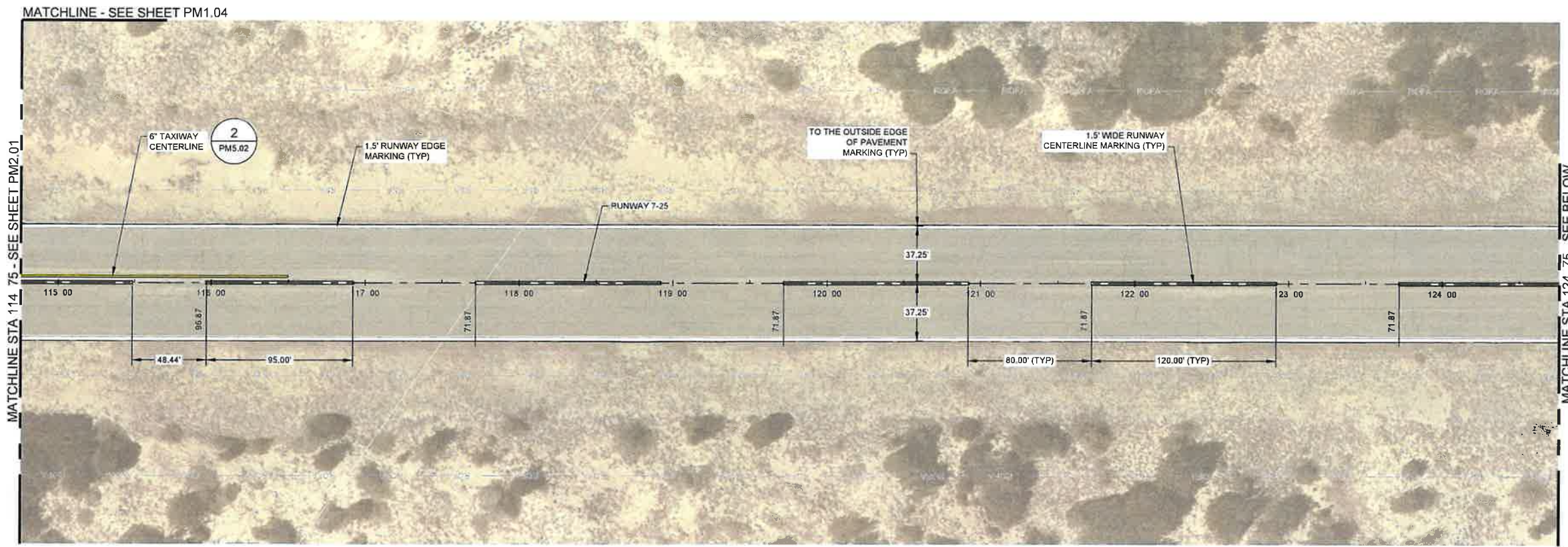
DATE: SEPTEMBER 16, 2024  
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 DRAWN BY: KR  
 CHECKED BY: RDB  
 APPROVED BY: RDB

WSP PROJECT NUMBER: 188695-05

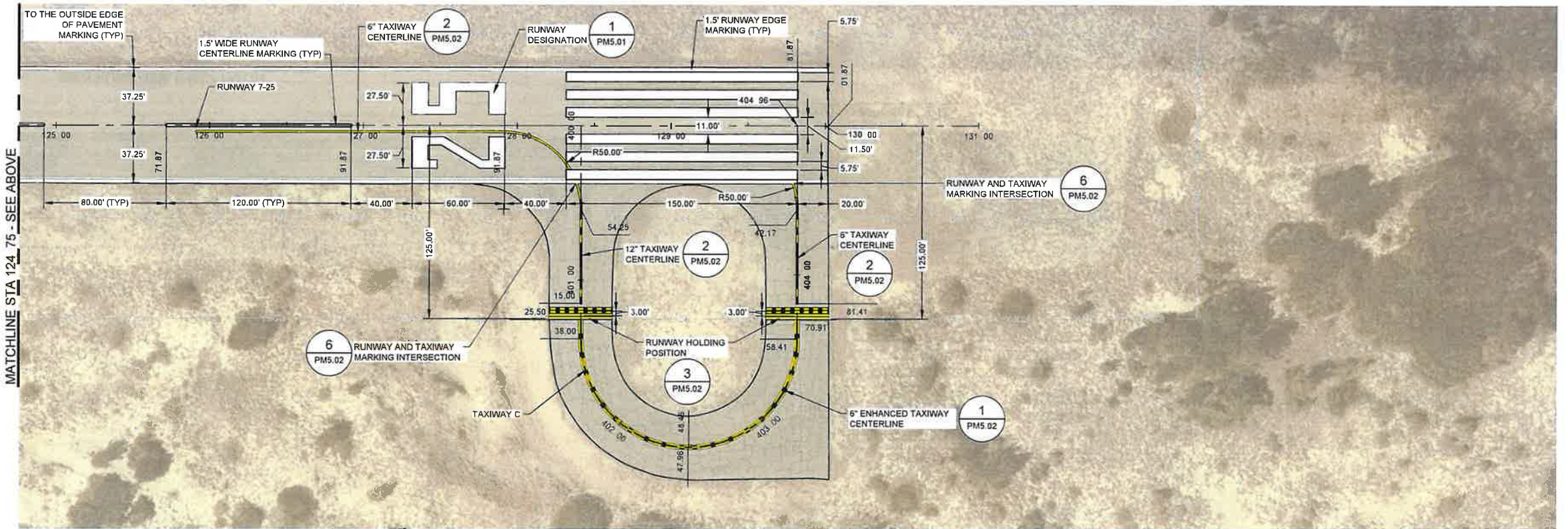
SHEET NUMBER: **PM1.02**

SHEET 22 OF 26

SCALE (S) AS NOTED ON THIS SHEET ARE BASED ON A FULL SIZE 22 X 34 SHEET.



RUNWAY 7-25 PLAN (STA. 114 75.00 TO STA. 124 75.00)

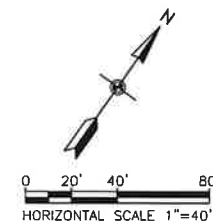


RUNWAY 7-25 PLAN (STA. 124 75.00 TO STA. 131 00.00)

**NOTES**

- FOR DEMOLITION PLANS, SEE SHEETS CD1.01 THROUGH CD1.04.
- FOR PAVING AND GRADING PLANS, SEE SHEETS C1.01 THROUGH C1.04.
- SEE SHEETS CD5.01 AND C5.02 FOR EXISTING PAVING SECTIONS.
- SEE SHEET C5.01 FOR PAVING DETAILS.
- SEE SHEETS PM5.01 THROUGH PM5.02 FOR PAVEMENT MARKING DETAILS.

**BY OTHERS - NOT IN CONTRACT**



**KEY PLAN**



FILE NAME  
 CBX-HSE-PM1.DWG

PLOT DATE  
 9/13/2024 - 1:58PM

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

**PAVEMENT REHABILITATION PROJECT**  
NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936

ISSUED FOR BID



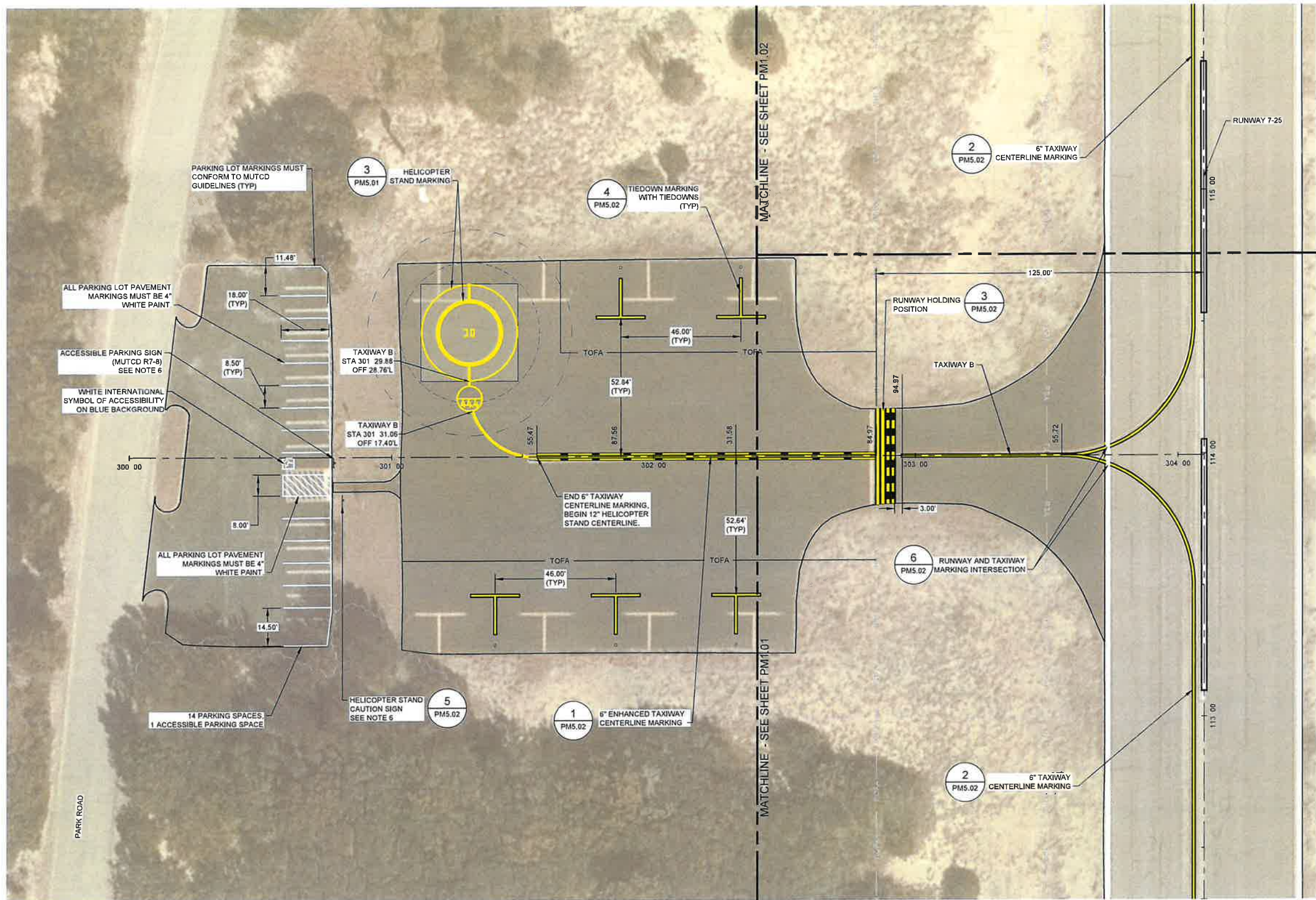
SHEET TITLE  
**PAVEMENT MARKING PLAN**  
SHEET 3 OF 4

DATE: SEPTEMBER 16, 2024  
SCALE: 1" = 20'  
DRAWN BY: KR  
CHECKED BY: RDB  
APPROVED BY: RDB

WSP PROJECT NUMBER: 188695-05

SHEET NUMBER: **PM1.03**

SHEET 23 OF 26



PARKING LOT MARKINGS MUST CONFORM TO MUTCD GUIDELINES (TYP)

ALL PARKING LOT PAVEMENT MARKINGS MUST BE 4" WHITE PAINT

ACCESSIBLE PARKING SIGN (MUTCD R7-8) SEE NOTE 6

WHITE INTERNATIONAL SYMBOL OF ACCESSIBILITY ON BLUE BACKGROUND

ALL PARKING LOT PAVEMENT MARKINGS MUST BE 4" WHITE PAINT

14 PARKING SPACES, 1 ACCESSIBLE PARKING SPACE

TAXIWAY B  
STA 301 29.88  
OFF 28.76'L

TAXIWAY B  
STA 301 31.06  
OFF 17.40'L

HELICOPTER STAND  
CAUTION SIGN  
SEE NOTE 6

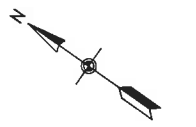
END 6" TAXIWAY CENTERLINE MARKING, BEGIN 12" HELICOPTER STAND CENTERLINE.

RUNWAY AND TAXIWAY MARKING INTERSECTION

RUNWAY HOLDING POSITION

6" TAXIWAY CENTERLINE MARKING

RUNWAY 7-25



0 10' 20' 40'  
HORIZONTAL SCALE 1" = 20'

KEY PLAN



**NOTES**

1. PARKING LOT PAVEMENT MARKING TO FOLLOW MUTCD STANDARDS.
2. FOR DEMOLITION PLANS, SEE SHEETS CD1.01 THROUGH CD1.04.
3. FOR PAVING AND GRADING PLANS, SEE SHEETS C1.01 THROUGH C1.04.
4. SEE SHEET CD5.01 FOR EXISTING PAVING SECTIONS.
5. SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
6. SEE SHEETS PM5.01 THROUGH PM5.02 FOR PAVEMENT MARKING DETAILS.
7. CONTRACTOR TO SUBMIT PROPOSED SIGN POST AND FOUNDATION.

**BY OTHERS - NOT IN CONTRACT**

FILE NAME: OBX-HSE-PM1.DWG  
DATE: 9/13/2024 1:57PM

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

PAVEMENT REHABILITATION PROJECT  
 NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
 FRISCO, NC 27936

ISSUED FOR BID



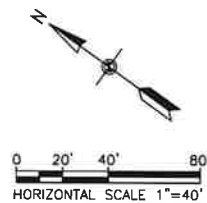
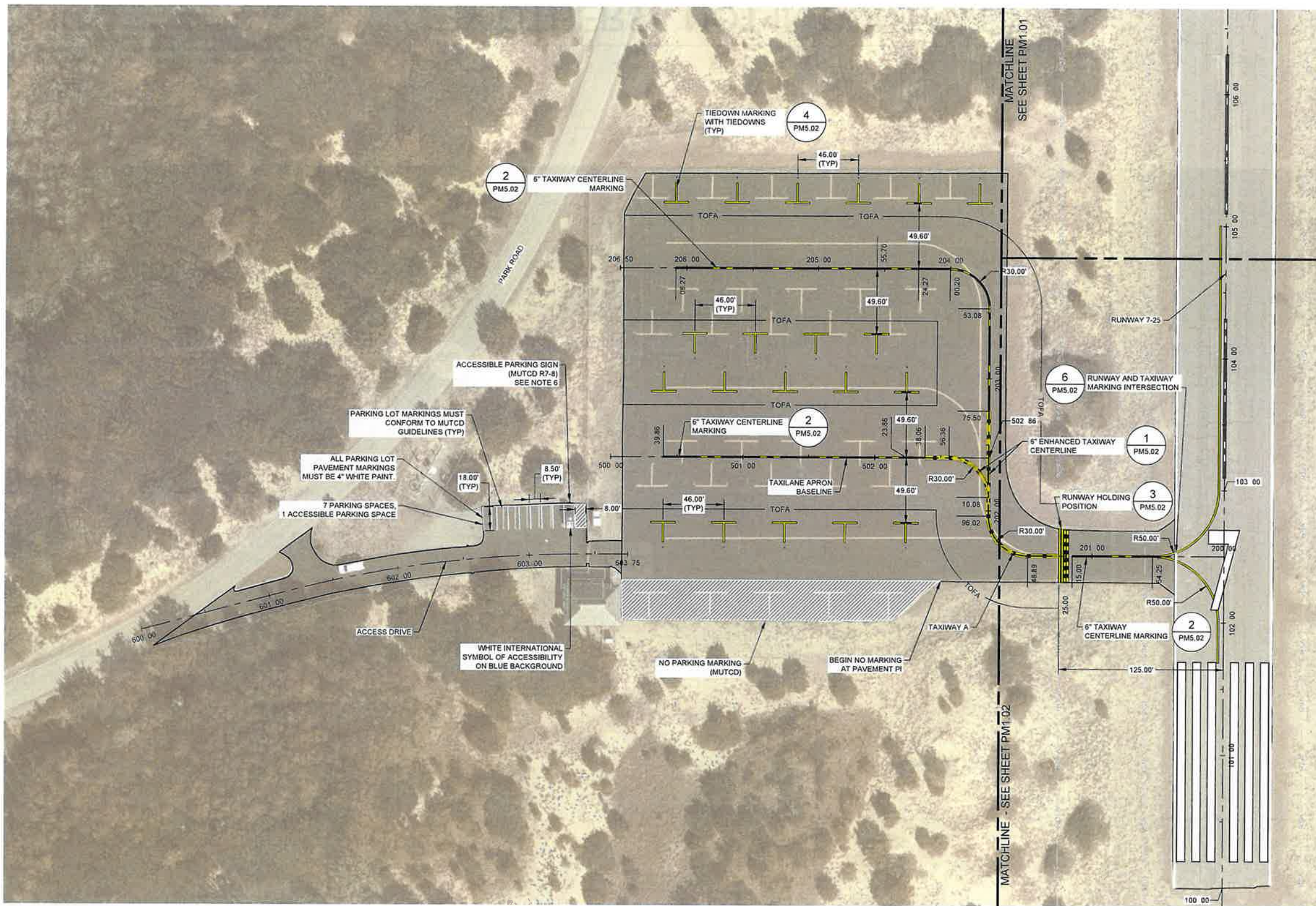
SHEET TITLE  
**PAVEMENT MARKING PLAN  
 SHEET 4 OF 4**

DATE **SEPTEMBER 16, 2024**  
 SCALE **1" = 40'**  
 DRAWN BY **KR**  
 CHECKED BY **RDB**  
 APPROVED BY **RDB**

WSP PROJECT NUMBER **188695-05**

SHEET NUMBER **PM1.04**

SHEET 24 OF 26



**KEY PLAN**



**NOTES**

1. PARKING LOT PAVEMENT MARKING TO FOLLOW MUTCD STANDARDS.
2. FOR DEMOLITION PLANS, SEE SHEETS CD1.01 THROUGH CD1.04.
3. FOR PAVING AND GRADING PLANS, SEE SHEETS C1.01 THROUGH C1.04.
4. SEE SHEET CD5.01 FOR EXISTING PAVING SECTIONS.
5. SEE SHEETS C5.01 AND C5.02 FOR PAVING DETAILS.
6. SEE SHEETS PM5.01 THROUGH PM5.02 FOR PAVEMENT MARKING DETAILS.
7. CONTRACTOR TO SUBMIT PROPOSED SIGN POST AND FOUNDATION.

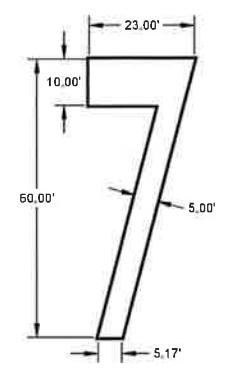
**BY OTHERS - NOT IN CONTRACT**

NO.	DESCRIPTION	DATE

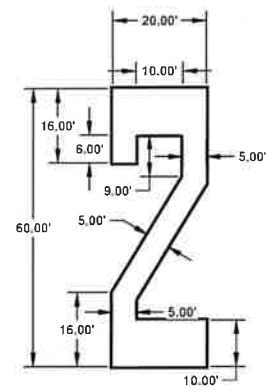
**BILLY MITCHELL AIRPORT (HSE)**

PAVEMENT REHABILITATION PROJECT  
NCDOT PROJECT NO. 36244.74.1.1

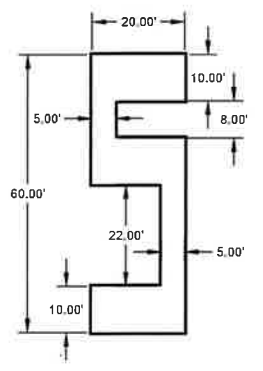
53252 BILLY MITCHELL ROAD  
FRISCO, NC 27936



NUMERAL "7"



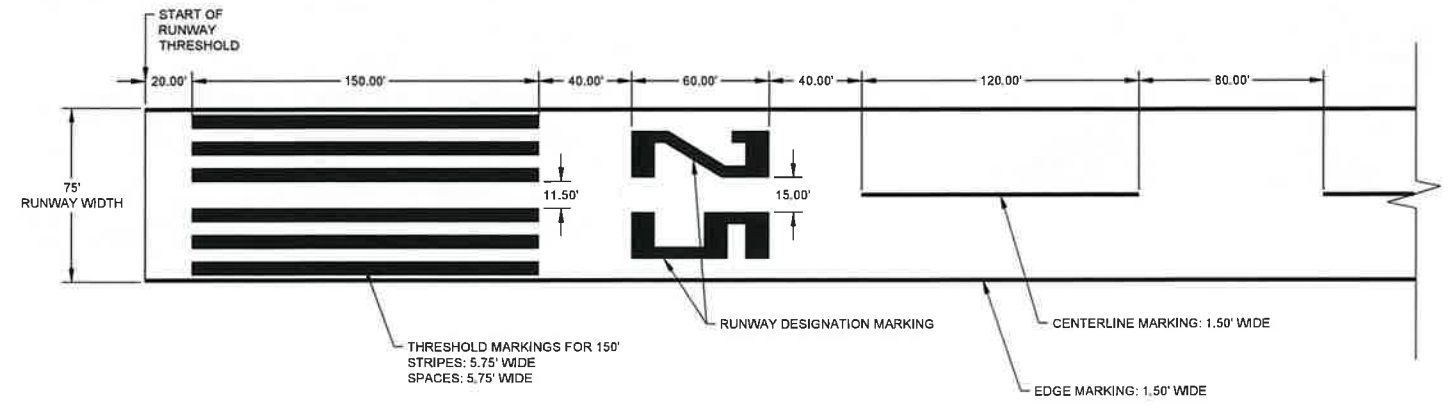
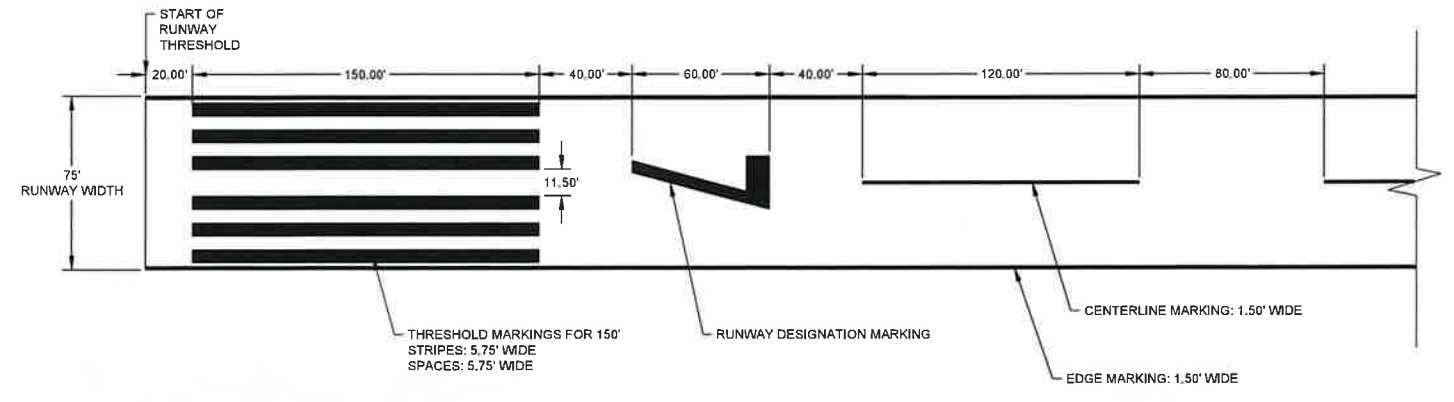
NUMERAL "2"



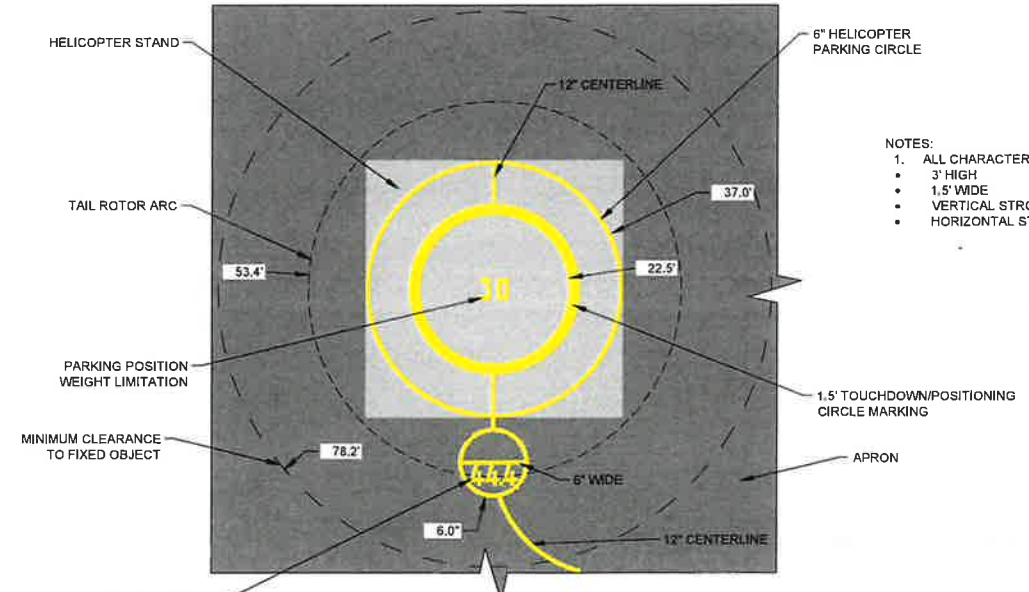
NUMERAL "5"

**1 BILLY MITCHELL AIRPORT RUNWAY DESIGNATION MARKINGS**  
SCALE: NTS

- NOTES FOR RUNWAY MARKINGS:
- DIMENSIONS ARE EXPRESSED IN FEET.
  - ALL CHARACTERS HAVE THESE CHARACTERISTICS (UNLESS OTHERWISE SPECIFIED):
    - 60' HIGH
    - 20' WIDE
    - VERTICAL STROKE OF 5'
    - HORIZONTAL STROKE OF 10'
    - DIAGONAL STROKE OF 5'
  - ALL NUMERALS EXCEPT THE NUMBER ELEVEN AS SHOWN ARE HORIZONTALLY SPACED 15' APART.
  - SINGLE DIGITS MUST NOT BE PRECEDED BY A ZERO.
  - SINGLE DESIGNATIONS ARE CENTERED ON THE RUNWAY PAVEMENT CENTERLINE. FOR DOUBLE DESIGNATIONS, THE CENTER OF THE OUTER EDGES OF THE TWO NUMERALS IS CENTERED ON THE RUNWAY PAVEMENT CENTERLINE.
  - NUMERALS TO BE BORDERED WITH 6" OF BLACK HIGHLIGHT.



**2 RUNWAY MARKING LAYOUT**  
SCALE: NTS



**3 HELICOPTER STAND MARKING LAYOUT**  
SCALE: NTS

- NOTES:
- ALL CHARACTERS HAVE THESE CHARACTERISTICS:
    - 3' HIGH
    - 1.5' WIDE
    - VERTICAL STROKE OF 5'
    - HORIZONTAL STROKE OF 6'

ISSUED FOR BID



SHEET TITLE  
**PAVEMENT MARKING DETAILS  
SHEET 1 OF 2**

DATE: SEPTEMBER 16, 2024  
SCALE: NTS  
DRAWN BY: SSD  
CHECKED BY: RDB  
APPROVED BY: RDB

WSP PROJECT NUMBER: 188695-05

SHEET NUMBER: **PM5.01**

SHEET 25 OF 26

**BY OTHERS - NOT IN CONTRACT**

FILE NAME: OBX-HSE-PM5.01-PM5.02.DWG  
PLOT DATE:

NO.	DESCRIPTION	DATE

**BILLY MITCHELL AIRPORT (HSE)**

**PAVEMENT REHABILITATION PROJECT**  
 NCDOT PROJECT NO. 36244.74.1.1

53252 BILLY MITCHELL ROAD  
 FRISCO, NC 27936

**ISSUED FOR BID**



SHEET TITLE  
**PAVEMENT MARKING DETAILS**  
 SHEET 2 OF 2

DATE: **SEPTEMBER 16, 2024**  
 SCALE: **NTS**  
 DRAWN BY: **SSD**  
 CHECKED BY: **RDB**  
 APPROVED BY: **RDB**

WSP PROJECT NUMBER: **188695-05**

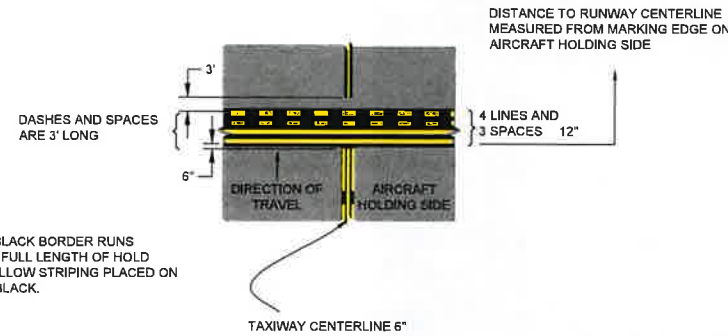
SHEET NUMBER: **PM5.02**

SHEET 26 OF 26

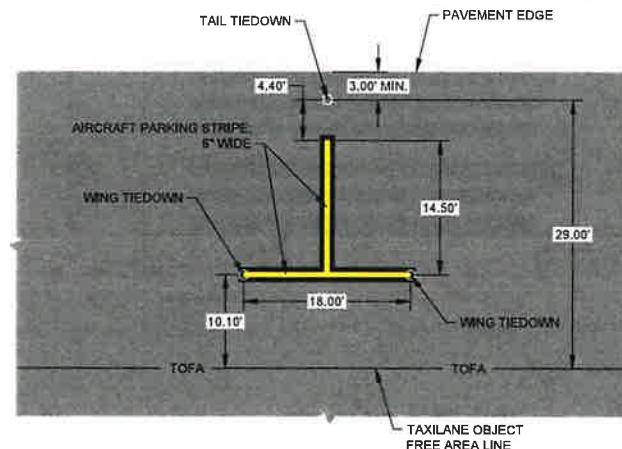


**5 HELICOPTER STAND CAUTION SIGN**  
 SCALE: NTS

- NOTES:
- FOR MORE INFORMATION SEE FAA AC 150/5380-2D "HELIPORT DESIGN".

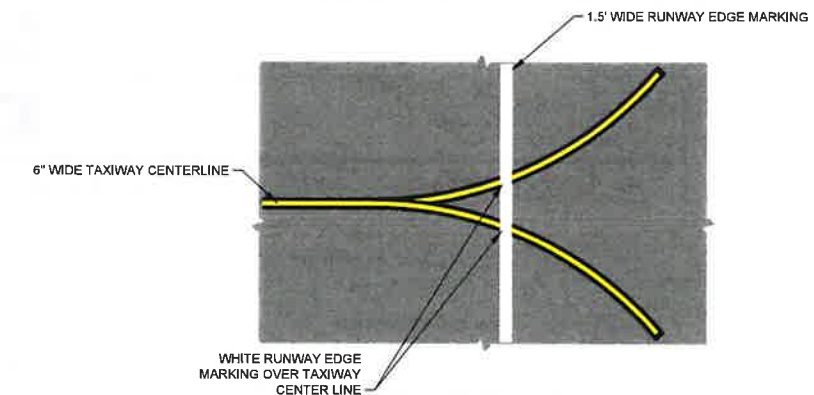


**3 PATTERN A - RUNWAY HOLDING POSITION MARKING**  
 SCALE: NTS

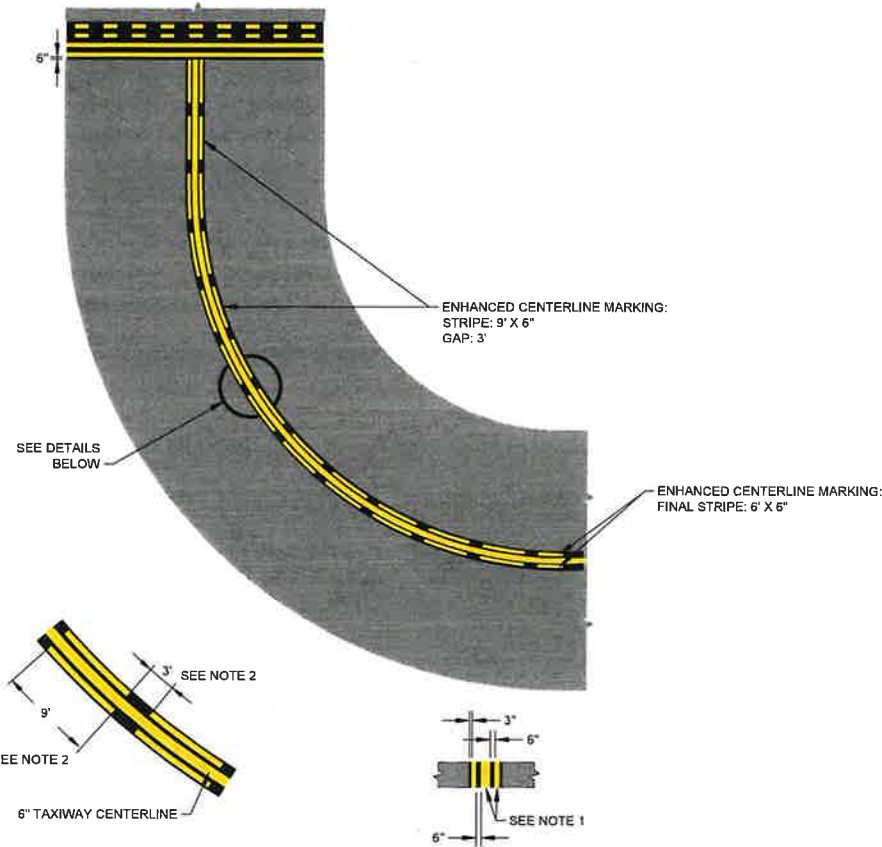


**4 APRON TIEDOWN LAYOUT**  
 SCALE: NTS

- NOTE:
- YELLOW MARKINGS MUST HAVE A 6-INCH BLACK BORDER.



**6 RUNWAY AND TAXIWAY MARKING INTERSECTION**  
 SCALE: NTS



**1 ENHANCED TAXIWAY CENTERLINE MARKINGS**  
 SCALE: NTS

- NOTES:
- DASHED LINES FOR THE ENHANCED TAXIWAY CENTERLINE MARKINGS ARE 6 INCHES IN WIDTH AND SEPARATED 6 INCHES FROM THE TAXIWAY CENTERLINE.
  - THE DASHED LINES DIMENSIONS ARE TAKEN ALONG THE CENTER OF THE TAXIWAY CENTERLINE.
  - SEE PLANS FOR START AND STOP STATIONS.

**2 TAXIWAY CENTERLINE MARKINGS**  
 SCALE: NTS

- NOTES:
- ALL MARKINGS MUST CONFORM TO FAA ADVISORY CIRCULAR 150/5340-1M, "STANDARDS FOR AIRPORT MARKINGS".
  - ALL RUNWAY MARKINGS MUST BE WHITE, ALL TAXIWAY MARKINGS MUST BE YELLOW.
  - TAXIWAY CENTERLINE MARKING IS 3' OFFSET FROM EDGE OF RUNWAY MARKING TO EDGE OF TAXIWAY MARKING.
  - WHERE TAXIWAY CENTERLINE MARKINGS INTERSECT RUNWAY MARKINGS, INTERRUPT TAXIWAY CENTERLINE MARKING SUCH THAT A 6-INCH GAP IS LEFT BETWEEN THE YELLOW TAXIWAY CENTERLINE MARKING AND THE WHITE RUNWAY MARKING.

**BY OTHERS - NOT IN CONTRACT**

FILE NAME: OBX-HSE-PM5.01-PM5.02.DWG  
 PLOT DATE: