



# Schedule 2A: T-Hangar

Lumberton, NC  
28358

100% Construction Documents  
January 17, 2025



Schedule 2A:  
T-Hangar

Lumberton, NC 28358



**THE WILSON GROUP**  
- ARCHITECTS -

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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**SCHEDULE 2A  
COVER SHEET**

SHEET NUMBER  
**G-100a**

# SHEET INDEX

## SCHEDULE 2A: T-HANGAR

### GENERAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	G-100a	SCHEDULE 2A COVER SHEET
		01/17/2025	G-101a	SCHEDULE 2A SHEET INDEX

### ARCHITECTURAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	A-102a	T-HANGAR TOILET - SCHEDULE 2A

### PLUMBING

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	P-101A	T-HANGAR PLUMBING PLANS (SCHEDULE 2A)

### CIVIL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	GB-001	CONSTRUCTION SAFETY PLAN (SCHEDULE 2A)
		01/17/2025	GB-101	CONSTRUCTION PHASING PLAN (SCHEDULE 2A)
		01/17/2025	VB-101	SURVEY CONTROL PLAN (SCHEDULE 2A)
		01/17/2025	CB-101	EXISTING CONDITIONS AND REMOVAL PLAN (SCHEDULE 2A)
		01/17/2025	CB-111	SITE LAYOUT PAVING AND MARKING PLAN (SCHEDULE 2A)
		01/17/2025	CB-121	GRADING AND DRAINAGE PLAN (SCHEDULE 2A)
		01/17/2025	CB-122	DRAINAGE PLAN (SCHEDULE 2A)
		01/17/2025	CB-141	SEDIMENTATION & EROSION CONTROL PLAN (SCHEDULE 2A)
		01/17/2025	CB-161	UTILITY PLAN (SCHEDULE 2A)
		01/17/2025	CB-171	10- UNIT T-HANGAR LAYOUT AND FOUNDATION PLAN (SCHEDULE 2A)
		01/17/2025	CB-172	T-HANGAR DETAILS (SHEET 1 OF 2) (SCHEDULE 2A)
		01/17/2025	CB-173	T-HANGAR DETAILS (SHEET 2 OF 2) (SCHEDULE 2A)
		01/17/2025	CB-401	TYPICAL PAVEMENT SECTIONS (SCHEDULE 2A)
		01/17/2025	CB-510	PAVING DETAILS (SCHEDULE 2A)
		01/17/2025	CB-520	DRAINAGE DETAILS (SCHEDULE 2A)
		01/17/2025	CB-540	SEDIMENTATION & EROSION CONTROL DETAILS - 1 (SCHEDULE 2A)
		01/17/2025	CB-541	SEDIMENTATION & EROSION CONTROL DETAILS - 2 (SCHEDULE 2A)
		01/17/2025	CB-542	SEDIMENTATION & EROSION CONTROL DETAILS - 3 (SCHEDULE 2A)
		01/17/2025	CB-543	SEDIMENTATION & EROSION CONTROL DETAILS - 4 (SCHEDULE 2A)

### MECHANICAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	M-102A	MECHANICAL T-HANGAR TOILET - SCHEDULE 2A

### ELECTRICAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	E-001A	ELECTRICAL NOTES, LEGENDS AND SCHEDULES
		01/17/2025	E-101A	ELECTRICAL PLANS
		01/17/2025	E-501A	ELECTRICAL DETAILS
		01/17/2025	E-502A	ELECTRICAL DETAILS
		01/17/2025	E-601A	ELECTRICAL SCHEDULE AND RISER



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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

**SCHEDULE 2A**  
**SHEET INDEX**

SHEET NUMBER

**G-101a**



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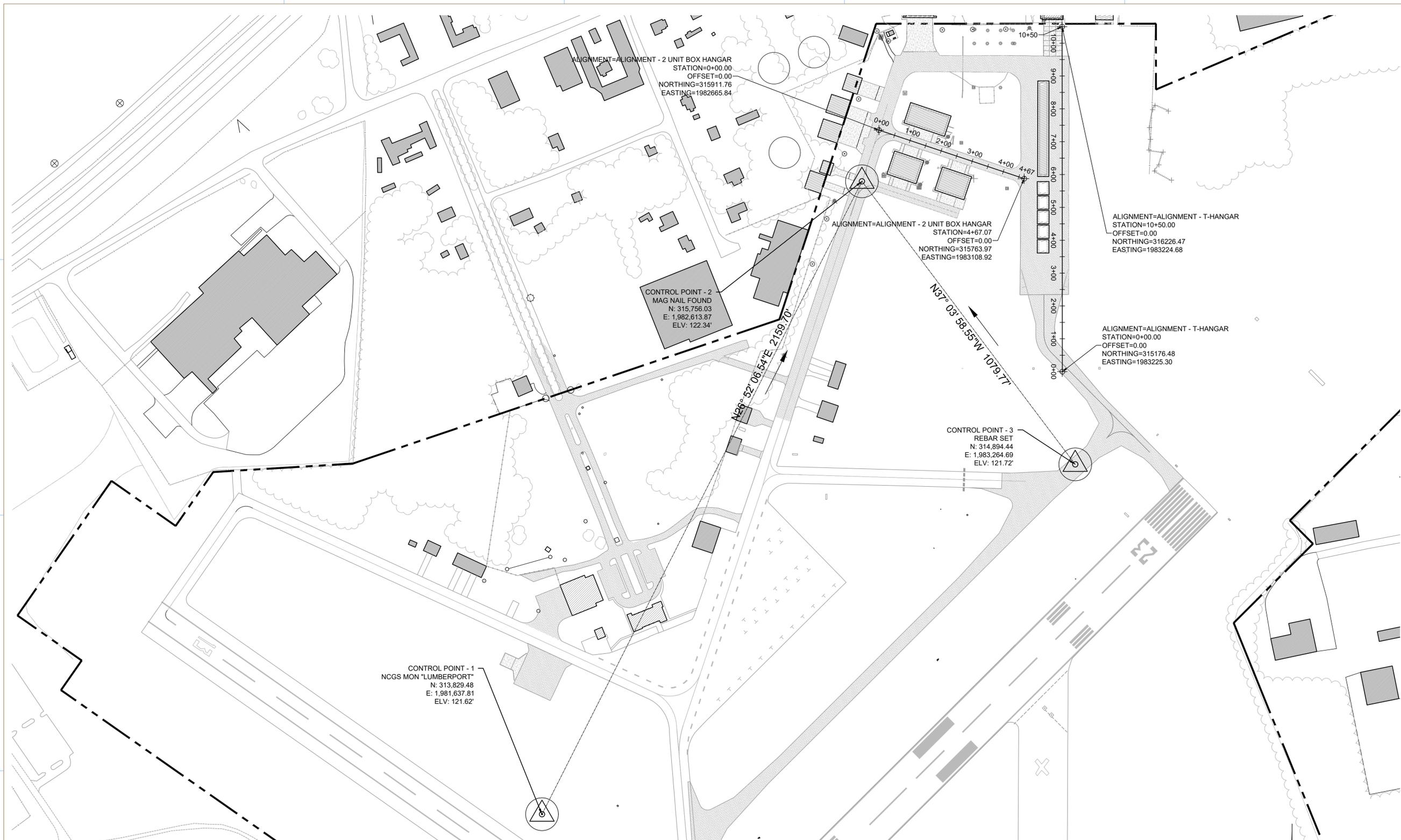
REVISIONS

DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**SURVEY CONTROL PLAN (SCHEDULE 2A)**

SHEET NUMBER

**VB-101**



CONTROL POINT - 1  
NCGS MON "LUMBERTON"  
N: 313,829.48  
E: 1,981,637.81  
ELV: 121.62'

CONTROL POINT - 2  
MAG NAIL FOUND  
N: 315,756.03  
E: 1,982,613.87  
ELV: 122.34'

CONTROL POINT - 3  
REBAR SET  
N: 314,894.44  
E: 1,983,284.69  
ELV: 121.72'

ALIGNMENT=ALIGNMENT - 2 UNIT BOX HANGAR  
STATION=0+00.00  
OFFSET=0.00  
NORTHING=315911.76  
EASTING=1982665.84

ALIGNMENT=ALIGNMENT - 2 UNIT BOX HANGAR  
STATION=4+67.07  
OFFSET=0.00  
NORTHING=315763.97  
EASTING=1983108.92

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STATION=10+50.00  
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NORTHING=316226.47  
EASTING=1983224.68

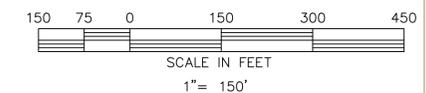
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EASTING=1983225.30

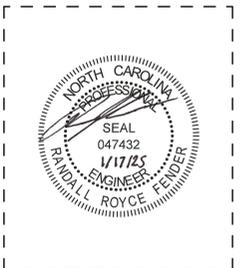
SURVEY CONTROL POINTS NC GRID (NAD88/2011)

NORTHING	EASTING	ELEVATION	DESCRIPTION
313,829.48'	1,981,637.81'	121.62'	NCGS MONUMENT "LUMBERTON"
311,718.38'	1,980,318.55'	121.89'	NCGS MONUMENT "LUMBERTON AZIMUTH"

**NOTES:**

- SURVEY WAS PERFORMED BY COASTALGEOMATICS LAND SURVEYING, DATED AUGUST 2024.
- HORIZONTAL DATUM: NAD83 (2011), VERTICAL DATUM: NAVD88.
- CONTRACTOR SHALL BE REQUIRED TO CONFIRM CONTROL POINT DATA PRIOR TO USE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER.
- COORDINATES SHOWN ARE GROUND COORDINATES. TO CONVERT GROUND TO GRID - MULTIPLY BY 0.99993499.
- CONTRACTOR SHALL PROTECT ALL CONTROL POINTS DURING CONSTRUCTION TO PREVENT DAMAGE. CONTRACTOR SHALL BE REQUIRED TO REINSTALL ANY CONTROL POINTS DAMAGED BY CONSTRUCTION ACTIVITIES THAT WILL BE REQUIRED FOR PROJECT COMPLETION.





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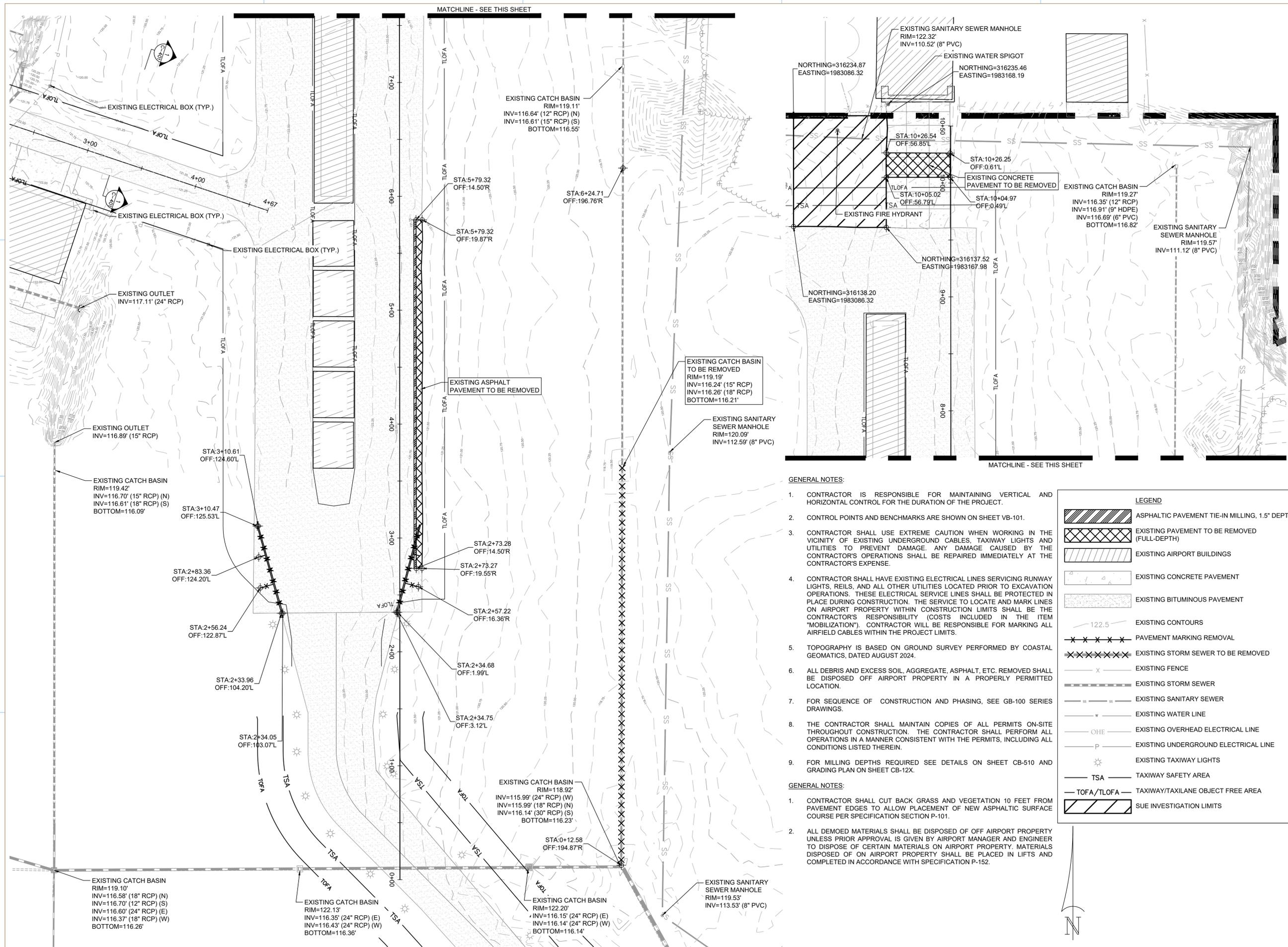
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**REVISIONS**

DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**EXISTING CONDITIONS AND REMOVAL PLAN (SCHEDULE 2A)**

SHEET NUMBER  
**CB-101**



**GENERAL NOTES:**

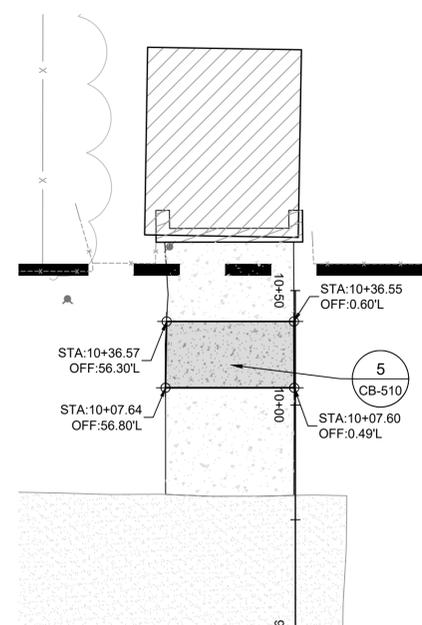
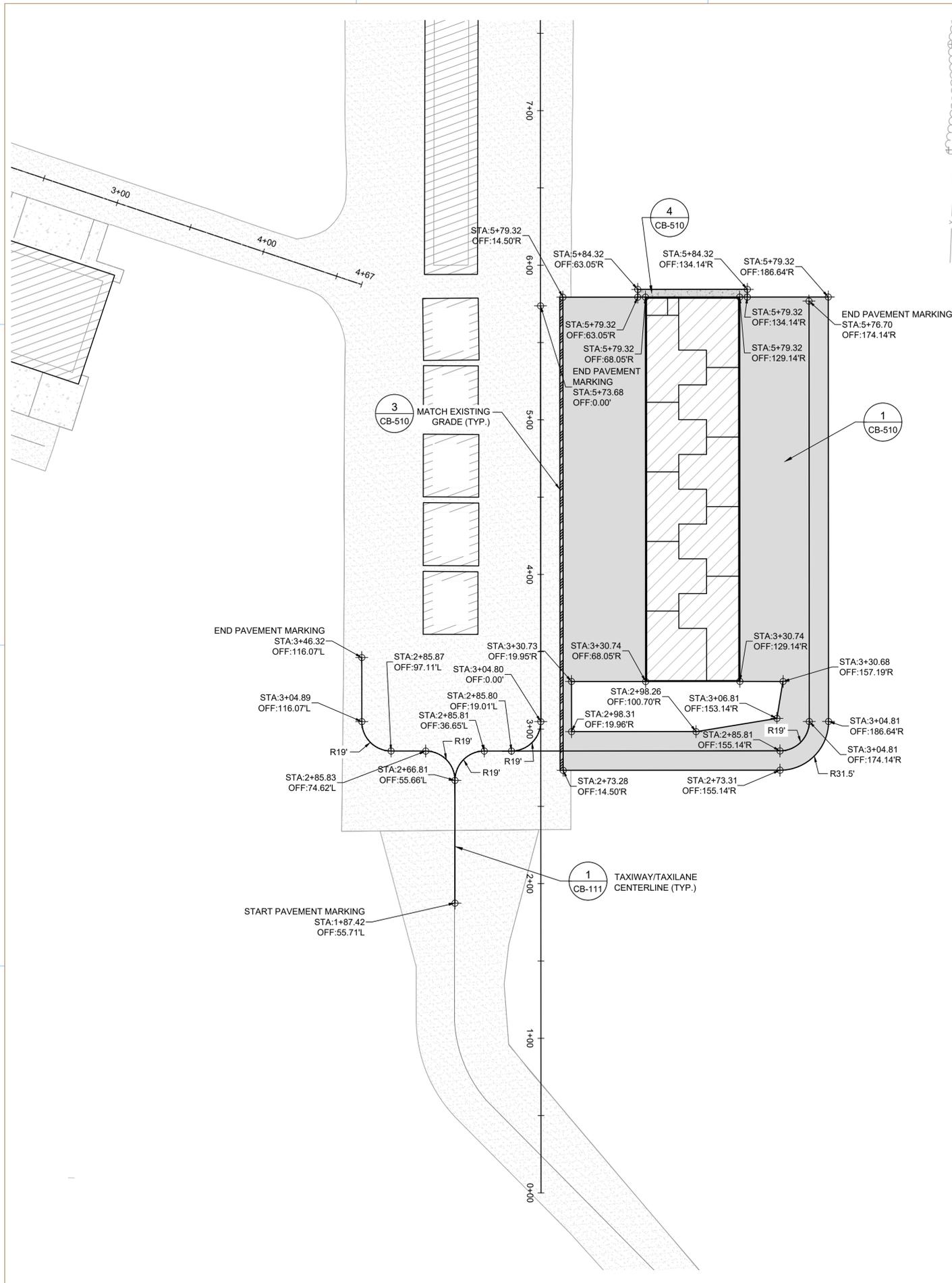
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING VERTICAL AND HORIZONTAL CONTROL FOR THE DURATION OF THE PROJECT.
- CONTROL POINTS AND BENCHMARKS ARE SHOWN ON SHEET VB-101.
- CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF EXISTING UNDERGROUND CABLES, TAXIWAY LIGHTS AND UTILITIES TO PREVENT DAMAGE. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL HAVE EXISTING ELECTRICAL LINES SERVICING RUNWAY LIGHTS, REILS, AND ALL OTHER UTILITIES LOCATED PRIOR TO EXCAVATION OPERATIONS. THESE ELECTRICAL SERVICE LINES SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION. THE SERVICE TO LOCATE AND MARK LINES ON AIRPORT PROPERTY WITHIN CONSTRUCTION LIMITS SHALL BE THE CONTRACTOR'S RESPONSIBILITY (COSTS INCLUDED IN THE ITEM "MOBILIZATION"). CONTRACTOR WILL BE RESPONSIBLE FOR MARKING ALL AIRFIELD CABLES WITHIN THE PROJECT LIMITS.
- TOPOGRAPHY IS BASED ON GROUND SURVEY PERFORMED BY COASTAL GEOMATICS, DATED AUGUST 2024.
- ALL DEBRIS AND EXCESS SOIL, AGGREGATE, ASPHALT, ETC. REMOVED SHALL BE DISPOSED OFF AIRPORT PROPERTY IN A PROPERLY PERMITTED LOCATION.
- FOR SEQUENCE OF CONSTRUCTION AND PHASING, SEE GB-100 SERIES DRAWINGS.
- THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL PERMITS ON-SITE THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL OPERATIONS IN A MANNER CONSISTENT WITH THE PERMITS, INCLUDING ALL CONDITIONS LISTED THEREIN.
- FOR MILLING DEPTHS REQUIRED SEE DETAILS ON SHEET CB-510 AND GRADING PLAN ON SHEET CB-12X.

**GENERAL NOTES:**

- CONTRACTOR SHALL CUT BACK GRASS AND VEGETATION 10 FEET FROM PAVEMENT EDGES TO ALLOW PLACEMENT OF NEW ASPHALTIC SURFACE COURSE PER SPECIFICATION P-101.
- ALL DEMOED MATERIALS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY UNLESS PRIOR APPROVAL IS GIVEN BY AIRPORT MANAGER AND ENGINEER TO DISPOSE OF CERTAIN MATERIALS ON AIRPORT PROPERTY. MATERIALS DISPOSED OF ON AIRPORT PROPERTY SHALL BE PLACED IN LIFTS AND COMPLETED IN ACCORDANCE WITH SPECIFICATION P-152.

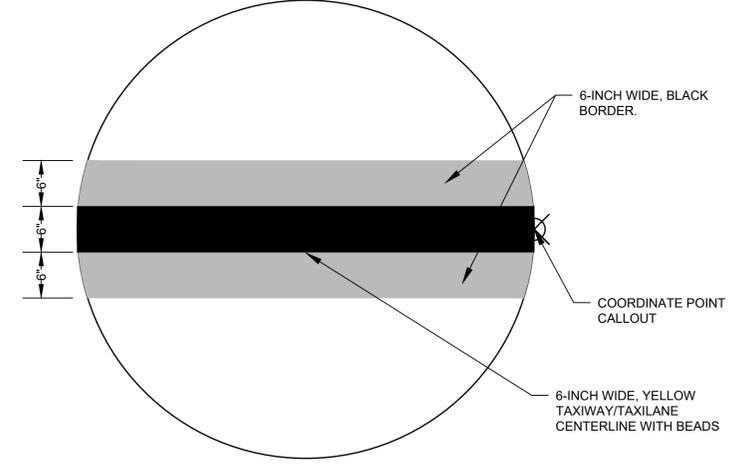
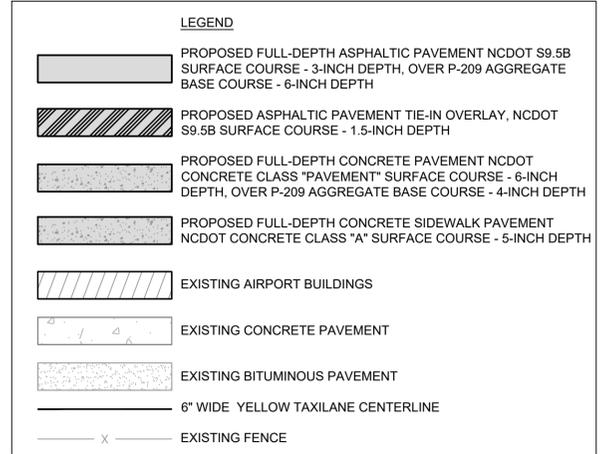
LEGEND	
	ASPHALTIC PAVEMENT TIE-IN MILLING, 1.5" DEPTH
	EXISTING PAVEMENT TO BE REMOVED (FULL-DEPTH)
	EXISTING AIRPORT BUILDINGS
	EXISTING CONCRETE PAVEMENT
	EXISTING BITUMINOUS PAVEMENT
	EXISTING CONTOURS
	PAVEMENT MARKING REMOVAL
	EXISTING STORM SEWER TO BE REMOVED
	EXISTING FENCE
	EXISTING STORM SEWER
	EXISTING SANITARY SEWER
	EXISTING WATER LINE
	EXISTING OVERHEAD ELECTRICAL LINE
	EXISTING UNDERGROUND ELECTRICAL LINE
	EXISTING TAXIWAY LIGHTS
	TAXIWAY SAFETY AREA
	TAXIWAY/TAXILANE OBJECT FREE AREA
	SUE INVESTIGATION LIMITS



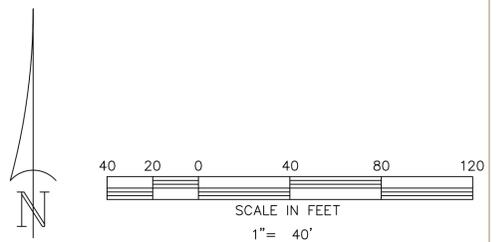


**GENERAL NOTES:**

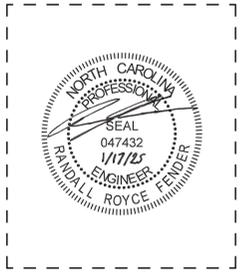
1. FOR SEQUENCE OF CONSTRUCTION AND PHASING, SEE GB-100 SERIES DRAWINGS.
2. SCHEDULE 2A WORK SHALL ONLY BE COMPLETED IF AWARDED.
3. CONTROL POINTS AND BENCHMARKS ARE SHOWN ON SHEET VB-101.
4. SEE SHEET CB-101 FOR EXISTING CONDITIONS AND REMOVAL ITEMS.
5. SEE CB-120 SERIES FOR SITE GRADING.
6. SEE CB-140 SERIES FOR SEDIMENTATION AND EROSION CONTROL PLAN.
7. SEE SHEET CB-200 FOR PROFILES AND CB-300 FOR CROSS-SECTIONS.



1 TAXIWAY/TAXILANE CENTERLINE DETAIL  
CB-111 NOT TO SCALE



**Schedule 2A:  
10-Unit T-Hangar**  
Lumberton Regional Airport  
Lumberton, NC 28358



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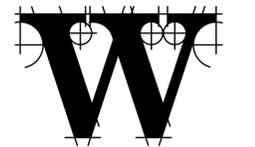
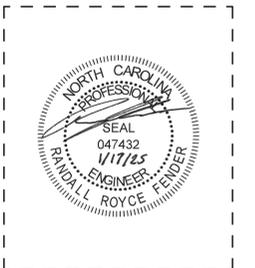
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**REVISIONS**

DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**SITE LAYOUT  
PAVING AND  
MARKING PLAN  
(SCHEDULE 2A)**

SHEET NUMBER  
**CB-111**



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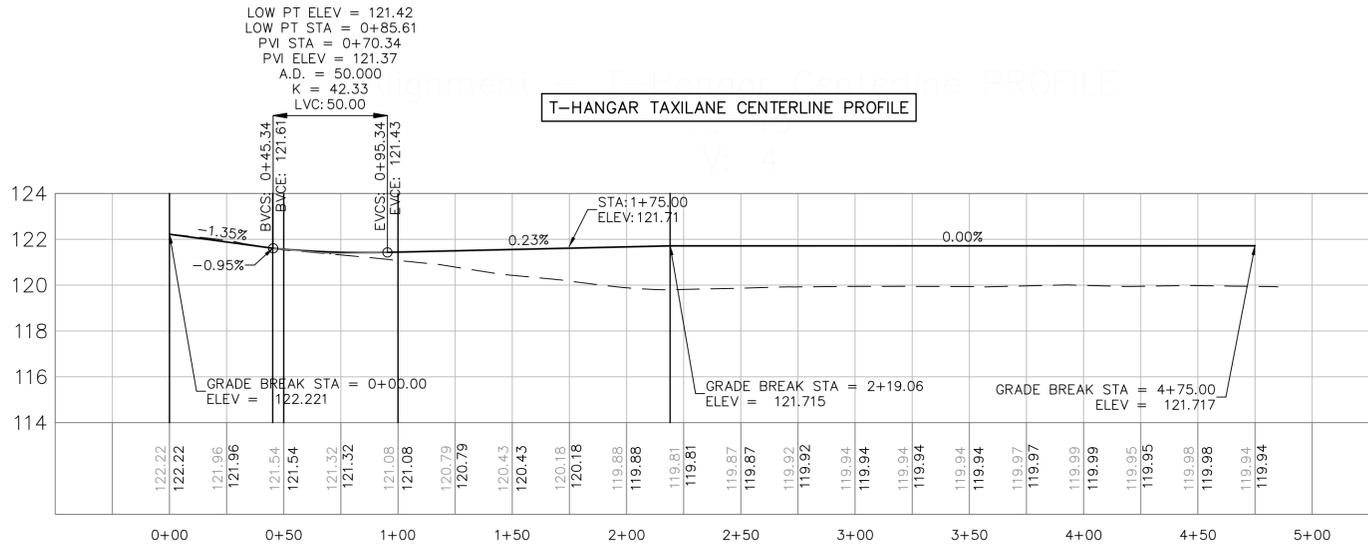
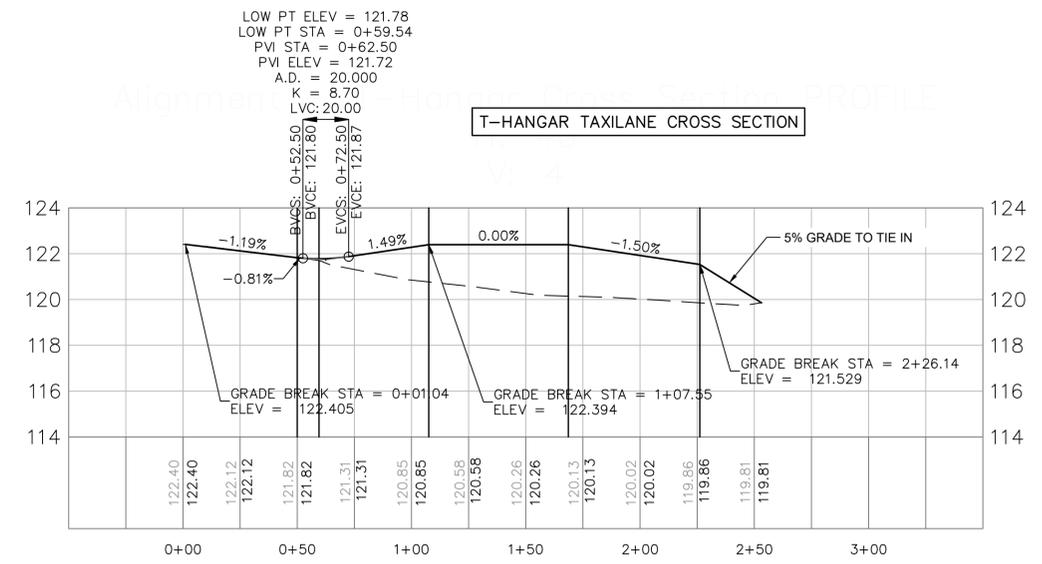
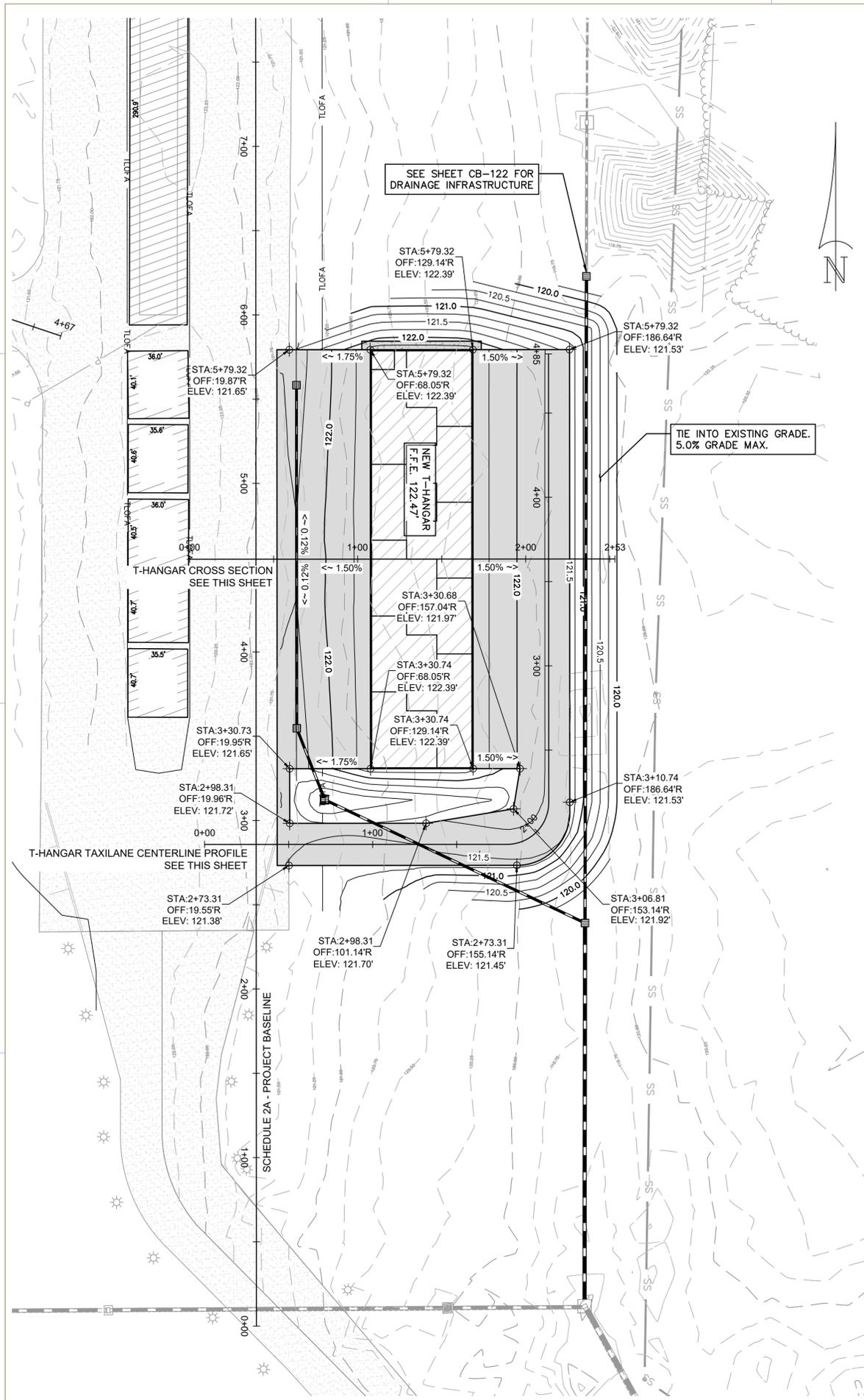
**REVISIONS**

DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**GRADING & ELEVATION PLAN (SCHEDULE 2A)**

SHEET NUMBER

**CB-121**

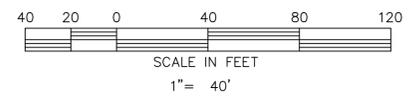


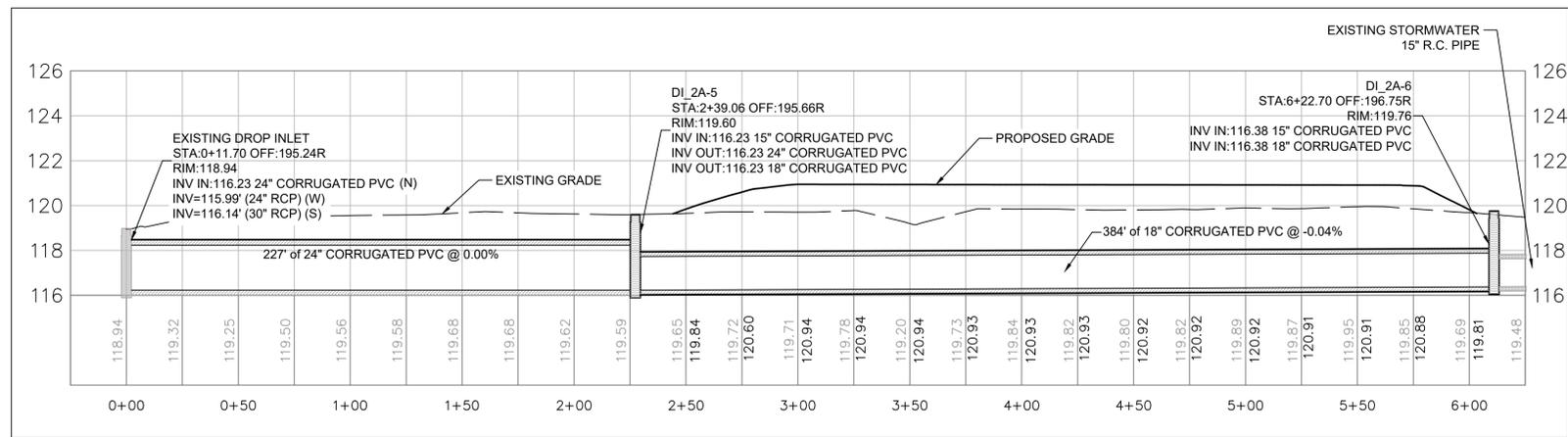
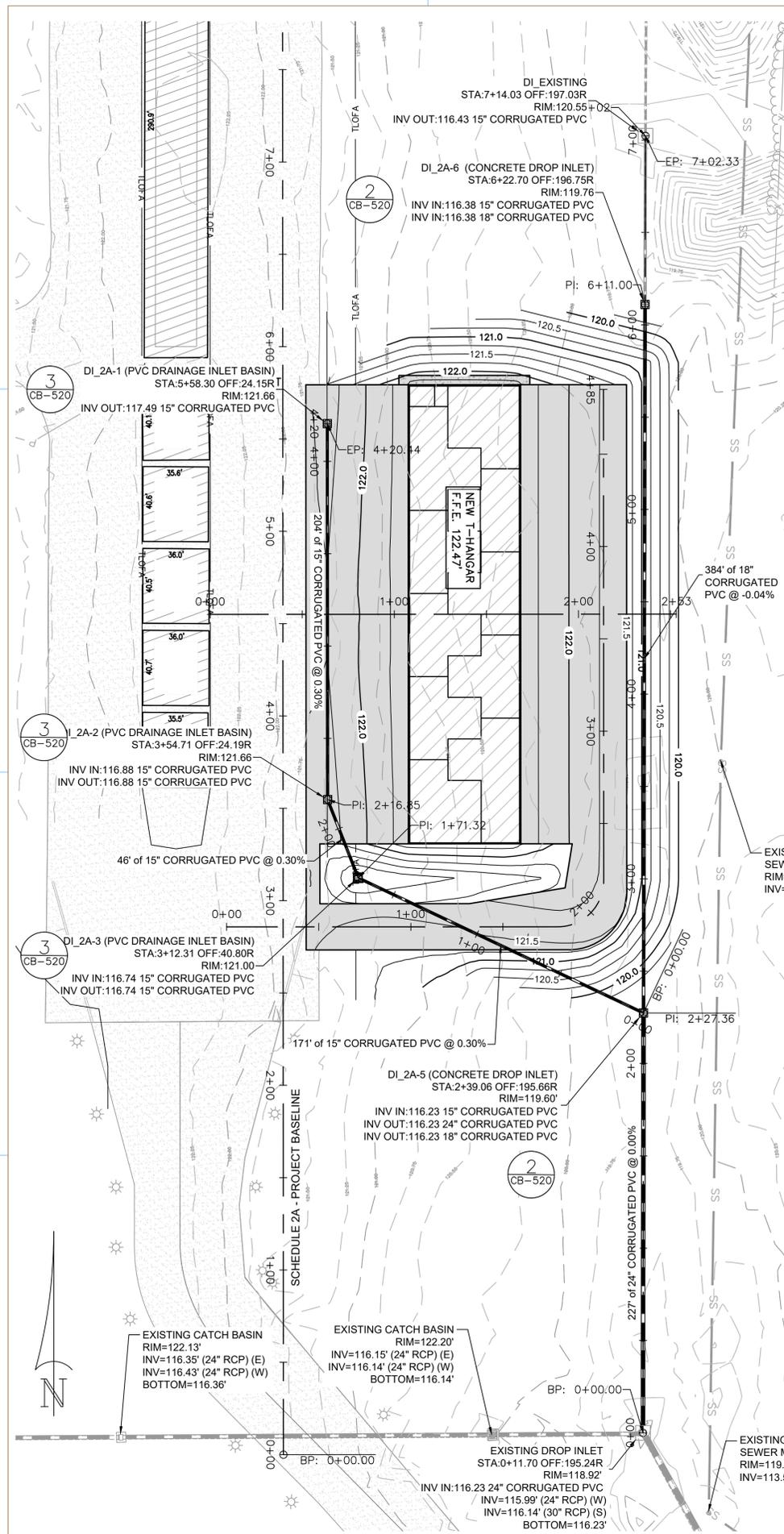
**GENERAL NOTES:**

- SEE SHEET CB-111 FOR SITE LAYOUT PLAN.
- SEE SHEET CB-122 FOR DRAINAGE PLAN AND PROFILES.
- SEE CB-500 SERIES FOR DETAILS.
- PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL CONTACT THE LOCAL UTILITY LOCATING COMPANIES AND FAA FACILITIES TO MARK LOCATION OF EXISTING UNDERGROUND UTILITIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE EXISTING UTILITIES VERTICALLY AND HORIZONTALLY.
- CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF EXISTING UNDERGROUND CABLES AND RUNWAY AND TAXIWAY LIGHTS AND EXISTING FUEL FARM TO PREVENT DAMAGE. CONTRACTOR SHALL PROTECT ALL UTILITIES IN PLACE DURING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION DESCRIBED ON SHEETS CB-141.
- DUE TO SHALLOW GROUND WATER AND LOOSE OR SOFT SOILS, IT IS RECOMMENDED THAT WIDE TRACKED VEHICLES BE USED DURING CONSTRUCTION. HEAVY RUBBER-TIRE VEHICLES SHOULD BE KEPT OFF OF THE SITE UNTIL A STABLE SURFACE IS ESTABLISHED.
- SITE GRADING SHOULD INITIALLY BEGIN WITH THE REMOVAL OF ANY TOPSOIL AND SURFACE VEGETATION FROM WITHIN THE LIMITS OF THE NEW CONSTRUCTION. THE ANTICIPATED DEPTH OF TOPSOIL AND VEGETATION IS 3 INCHES.
- FOR ONSITE MATERIAL THAT IS SUITABLE FOR USE IN PROJECT EMBANKMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR DRYING OR WETTING THE MATERIAL TO WITHIN 2% OF OPTIMUM MOISTURE AND COMPACT THE MATERIAL IN ACCORDANCE WITH SPECIFICATION SECTION P-152.
- THE FINE GRAINED SOILS PRESENT IN THE PROJECT AREA ARE SENSITIVE TO EXCESSIVE MOISTURE, AND MAY RUT AND PUMP, ESPECIALLY UNDER RUBBER TIRE TRAFFIC LOADING WHEN WET. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRO-ACTIVELY CONTROL SURFACE RUNOFF AND GROUND WATER, TO EXERCISE DISCRETION IN SELECTING EQUIPMENT TYPES & SIZES AND TO SEQUENCE HIS OPERATIONS SO AS TO MINIMIZE DETERIORATION OF EXPOSED SUBGRADE SOILS AND TO PROTECT THE SUBGRADE UNTIL THE OVERLYING MATERIALS CAN BE PLACED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING OPERATIONS DURING CONSTRUCTION. COST FOR DEWATERING SHALL BE INCLUDED IN ITEMS BID UPON. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING ALL SEDIMENT PRODUCED FROM DEWATERING OPERATIONS.
- WITHIN THE LIMITS OF THE NEW PAVEMENT, THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH SPECIFICATION ITEM P-152. IF MATERIAL IS REQUIRED TO ESTABLISH THE GRADES SHOWN ON THIS PLAN, EXCESS PULVERIZED MATERIALS SHALL BE UTILIZED FROM OTHER ON-SITE WORK AREAS. SUBGRADE SHALL BE COMPACTED IN ACCORDANCE WITH SPECIFICATION ITEM P-152.
- CONSTRUCTION OF THE NEW ASPHALTIC PAVEMENT SHALL INCLUDE PLACEMENT OF THE ASPHALTIC PAVEMENT SURFACE COURSE TWO LIFTS. EACH LIFT OF PAVEMENT SHALL BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION. AFTER THE FIRST LIFT HAS BEEN PLACED AND HAD ADEQUATE TIME TO COOL, TACK COAT SHALL BE APPLIED TO THE PAVEMENT SURFACE PRIOR TO PAVING THE NEXT LIFT.
- UPON COMPLETION OF THE PAVING OPERATIONS, STOCKPILED TOPSOIL SHALL BE PLACED ON DISTURBED AREAS PRIOR TO SEEDING AND MULCHING. ALL EXCESS STOCKPILED TOPSOIL AND EXCAVATED SOIL PREVIOUSLY STOCKPILED SHALL BE DISPOSED OF OFF AIRPORT PROPERTY. THERE SHALL BE NO SEPARATE MEASUREMENT AND PAYMENT FOR STOCKPIILING THE TOPSOIL AND PLACING THE TOPSOIL IN ITS FINAL LOCATION OR HAULING OFFSITE AND DISPOSAL OF EXCESS MATERIAL.
- INSTALL 5' OF SOD ALONG ALL NEW PAVEMENT EDGES.

**LEGEND**

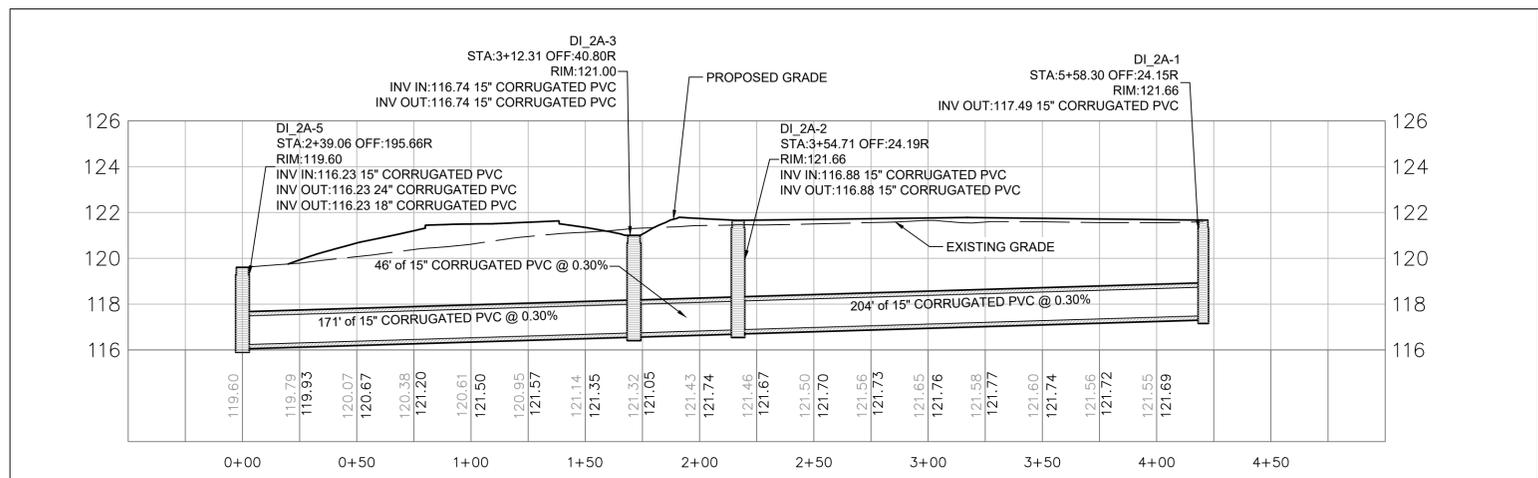
	PROPOSED ASPHALTIC PAVEMENT
	PROPOSED CONCRETE SIDEWALK
	EXISTING AIRPORT BUILDINGS
	EXISTING CONCRETE PAVEMENT
	EXISTING BITUMINOUS PAVEMENT
	EXISTING CONTOURS
	PROPOSED CONTOURS
	EXISTING FENCE
	EXISTING SANITARY SEWER
	EXISTING WATER LINE
	EXISTING OVERHEAD ELECTRICAL LINE
	EXISTING UNDERGROUND ELECTRICAL LINE
	EXISTING STORMWATER PIPE
	EXISTING STORMWATER DROP INLET
	PROPOSED STORMWATER PIPE
	PROPOSED STORMWATER DROP INLET





SCHEDULE 2A PROPOSED STORMWATER – STRUCTURE DI\_2A-6 TO EXISTING DROP INLET (DOWNSTREAM CONNECTION)

H: 1"=40'  
V: 1"=4'



SCHEDULE 2A PROPOSED STORMWATER – STRUCTURE DI\_2A-6 TO EXISTING DROP INLET (DOWNSTREAM CONNECTION)

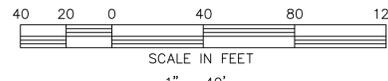
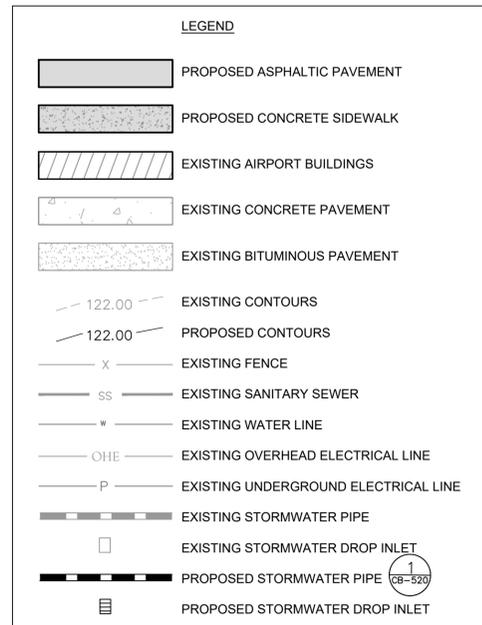
H: 1"=40'  
V: 1"=4'

GENERAL NOTES:

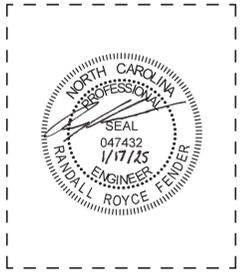
- SEE SHEET CB-111 FOR SITE LAYOUT PLAN.
- SEE SHEET CB-121 FOR GRADING AND ELEVATIONS PLAN.
- SEE CB-500 SERIES FOR DETAILS.
- PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL CONTACT THE LOCAL UTILITY LOCATING COMPANIES AND FAA FACILITIES TO MARK LOCATION OF EXISTING UNDERGROUND UTILITIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE EXISTING UTILITIES VERTICALLY AND HORIZONTALLY.
- CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF EXISTING UNDERGROUND CABLES AND RUNWAY AND TAXIWAY LIGHTS AND EXISTING FUEL FARM TO PREVENT DAMAGE. CONTRACTOR SHALL PROTECT ALL UTILITIES IN PLACE DURING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION DESCRIBED ON SHEETS CB-141.
- DUE TO SHALLOW GROUND WATER AND LOOSE OR SOFT SOILS, IT IS RECOMMENDED THAT WIDE TRACKED VEHICLES BE USED DURING CONSTRUCTION. HEAVY RUBBER-TIRE VEHICLES SHOULD BE KEPT OFF OF THE SITE UNTIL A STABLE SURFACE IS ESTABLISHED.
- SITE GRADING SHOULD INITIALLY BEGIN WITH THE REMOVAL OF ANY TOPSOIL AND SURFACE VEGETATION FROM WITHIN THE LIMITS OF THE NEW CONSTRUCTION. THE ANTICIPATED DEPTH OF TOPSOIL AND VEGETATION IS 3 INCHES.
- FOR ONSITE MATERIAL THAT IS SUITABLE FOR USE IN PROJECT EMBANKMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR DRYING OR WETTING THE MATERIAL TO WITHIN 2% OF OPTIMUM MOISTURE AND COMPACT THE MATERIAL IN ACCORDANCE WITH SPECIFICATION SECTION P-152.

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WITHIN THE LIMITS OF THE NEW PAVEMENT, THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH SPECIFICATION ITEM P-152. IF MATERIAL IS REQUIRED TO ESTABLISH THE GRADES SHOWN ON THIS PLAN, EXCESS PULVERIZED MATERIALS SHALL BE UTILIZED FROM OTHER ON-SITE WORK AREAS. SUBGRADE SHALL BE COMPACTED IN ACCORDANCE WITH SPECIFICATION ITEM P-152.



**Schedule 2A:**  
**10-Unit T-Hangar**  
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REVISIONS

DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**DRAINAGE PLAN**  
**(SCHEDULE 2A)**

SHEET NUMBER

**CB-122**

**PERMANENT SEED MIXES SHALL BE APPLIED AS FOLLOWS:**

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
COMMON BERMUDAGRASS (HULLED)	50	MAR. 1 - JUL. 31
COMMON BERMUDAGRASS (UNHULLED)	70	AUG. 1 - FEB. 28

**TEMPORARY SEED MIXES SHALL BE APPLIED AS FOLLOWS:**

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
RYE (GRAIN)	120	JAN. 1 - MAR. 31
KOBE LESPEDEZA	50	APR. 1 - AUG. 15
HULLED BERMUDA GRASS	50	APR. 1 - AUG. 15
RYE (GRAIN)	120	AUG. 16 - DEC. 31

**FERTILIZER:**  
FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 LB/ACRE OF A 10-10-10 COMMERCIAL FERTILIZER. FERTILIZER SHALL BE APPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION T-901 SEEDING OF THE PROJECT SPECIFICATIONS.

**LIME:**  
LIME SHALL BE APPLIED AT THE RATE OF 3,000 LBS/ACRE. LIME SHALL BE APPLIED IN ACCORDANCE WITH SECTION T-901 SEEDING OF THE PROJECT SPECIFICATIONS.

**MULCH:**  
MULCH SHALL CONSIST OF MANUFACTURED MULCH. MULCH SHALL BE EVENLY APPLIED AT THE RATE OF 2 TO 3 TONS PER ACRE TO PROVIDE A LOOSE DEPTH OF 1 1/2"-3". MANUFACTURED MULCH SHALL BE APPLIED AT THE RATE AS RECOMMENDED BY THE MANUFACTURER. MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION T-908 - MULCHING OF THE SPECIFICATIONS.

**MAINTENANCE OF SEEDED AREAS:**  
THE CONTRACTOR SHALL BE REQUIRED TO ESTABLISH A GOOD STAND OF GRASS OF UNIFORM COLOR AND DENSITY TO THE SATISFACTION OF THE ENGINEER AND OWNER. THE CONTRACTOR SHALL WATER THE SEEDED AREAS AS REQUIRED FOR SEED GERMINATION AND AS REQUIRED TO MAINTAIN AREAS OF ESTABLISHED GRASS. THE CONTRACTOR SHALL MOW GRASS AREAS AND CONTROL THE PRESENCE OF INVASIVE SPECIES AS REQUIRED. CONTRACTOR WILL BE REQUIRED TO RESEED AND MULCH ALL AREAS WHERE SEEDING EMERGENCE IS POOR. ALL AREAS OF EROSION SHALL BE REPAIRED AND RESEEDED AS SOON AS POSSIBLE. CONTRACTOR SHALL PROTECT SEEDED AREAS FROM TRAFFIC AS MUCH AS POSSIBLE.

**GENERAL SEQUENCE OF CONSTRUCTION:**

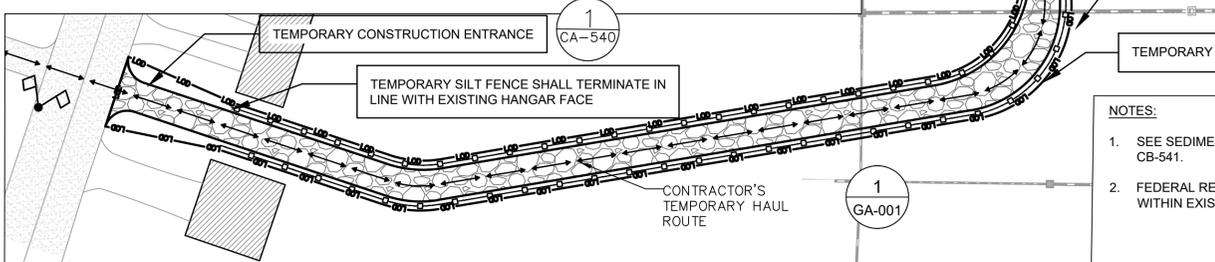
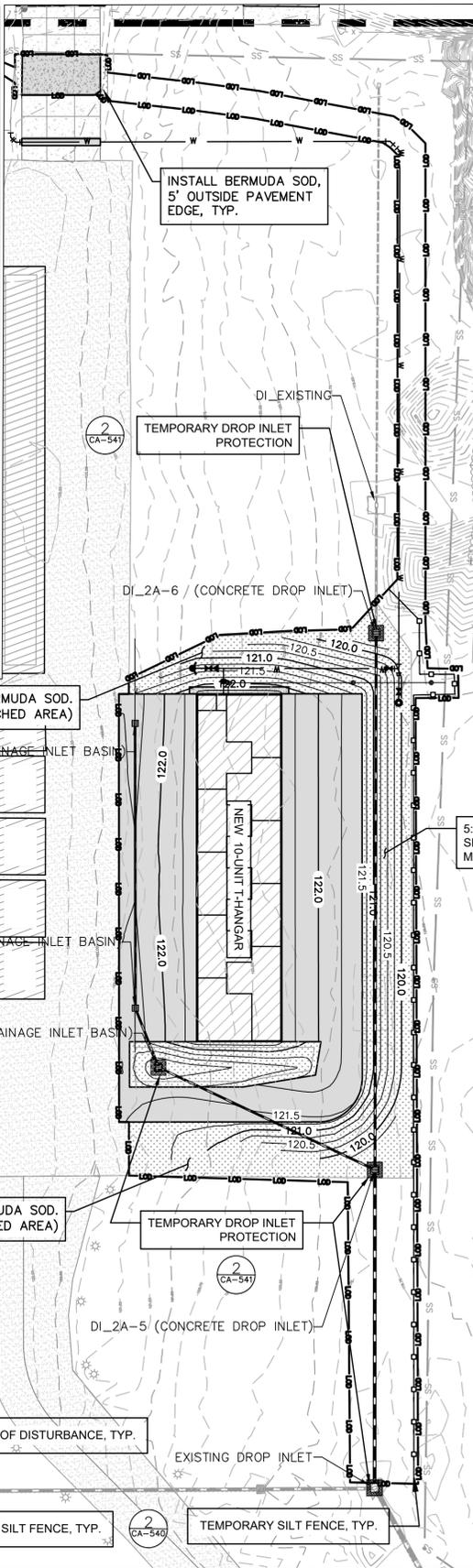
THE FOLLOWING GENERAL SEQUENCE OF CONSTRUCTION HAS BEEN DEVELOPED TO OUTLINE THE REQUIREMENTS FOR EROSION AND SEDIMENTATION CONTROL. IN ACCORDANCE WITH THE CONTRACT PROVISIONS, THE CONTRACTOR SHALL DEVELOP AND SUBMIT A DETAILED PROJECT CONSTRUCTION SCHEDULE.

**SEQUENCE OF CONSTRUCTION - SEDIMENT AND EROSION CONTROL**

- PERFORM PROJECT LAYOUT (SURVEY), MARK UTILITIES AND FLAG CLEARING LIMITS FOR REVIEW BY ENGINEER.
- AIRPORT WILL HOLD PRECONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.
- INSTALL TEMPORARY CONSTRUCTION ENTRANCE.
- CLOSE CONSTRUCTION AREA FOR AIRPORT TRAFFIC WITH APPROPRIATE BARRICADES AND TAXIWAY CLOSURE CROSSES.
- INSTALL TEMPORARY SILT FENCE AND OTHER TEMPORARY EROSION CONTROL MEASURES.
- SET UP STAGING AND STOCKPILE AREAS.
- STRIP APPROXIMATELY 4 INCHES TO REMOVE TOPSOIL AND GRASS ROOTMATS.
- INSTALL NEW PIPE AND DRAINAGE STRUCTURES.
- BEGIN PLACING FILL TO BRING SITE TO PROPOSED GRADES.
- INSTALL TEMPORARY DROP INLET PROTECTION.
- COMPLETE WATER AND SANITARY SEWER UTILITIES INSTALLATION AND GRADING.
- COMPLETE FINAL GRADING.
- COMMENCE PLACEMENT OF STONE BASE COURSE, COMPACT, AND GRADE TO SPECIFIED ELEVATIONS AND GRADE.
- CONSTRUCT ASPHALTIC PAVEMENT AND CONCRETE PAVEMENT.
- COMPLETE SHOULDER GRADING OPERATIONS AS NECESSARY.
- BEGIN SODDING, SEEDING, AND MULCHING OPERATIONS FOR DISTURBED AREAS.
- REMOVE MISCELLANEOUS EQUIPMENT, STOCKPILES, DEBRIS, ETC., FROM PROJECT AND STAGING AREA TO DISPOSE OF OFF AIRPORT PROPERTY, AS REQUIRED.
- COMPLETE RESTORATION OF ALL DISTURBED AREAS AND COMPLETE SODDING, SEEDING AND MULCHING ON ALL AREAS THROUGHOUT THE PROJECT. FOLLOWING STABILIZATION OF THE SITE, INCLUDING ESTABLISHMENT OF A GOOD STAND OF GRASS IN ALL AREAS, THE CONTRACTOR SHALL REQUEST FINAL INSPECTION BY NCDENR. REMOVE REMAINING TEMPORARY EROSION CONTROL MEASURES AS THE PROJECT IS COMPLETED OR GRASSED AREAS ARE REESTABLISHED AS DIRECTED BY THE ENGINEER.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS. NEEDED REPAIRS WILL BE MADE IMMEDIATELY. SEE MAINTENANCE REQUIREMENTS FOR EACH EROSION AND SEDIMENT CONTROL PRACTICE.

**LEGEND**

	AIRPORT PROPERTY LINE
	TAXIWAY/TAXILANE OBJECT FREE AREA (TOFA/TLOFA)
	EXISTING STORM SEWER
	EXISTING BUILDING
	EXISTING VEGETATION
	EXISTING FENCE
	PROPOSED PAVEMENT
	EXISTING MAJOR CONTOUR (2.5')
	EXISTING MINOR CONTOUR (0.5')
	PROPOSED MAJOR CONTOUR, 2.5'
	PROPOSED MINOR CONTOUR, 0.5'
	TEMPORARY SILT FENCE
	TEMPORARY DROP INLET PROTECTION
	LIMITS OF DISTURBANCE
	PROPOSED STORM SEWER
	TEMPORARY DIVERSION DITCH
	CONTRACTOR'S ACCESS ROUTE
	CONTRACTOR'S STAGING AREA

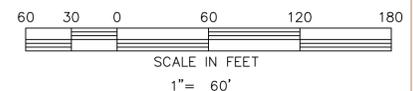


- NOTES:**
- SEE SEDIMENTATION AND EROSION CONTROL NOTES AND DETAILS ON SHEETS CB-540 AND CB-541.
  - FEDERAL REGULATIONS WILL NOT ALLOW MEASURES SUCH AS SILT FENCE TO BE PLACED WITHIN EXISTING TAXILANE OBJECT FREE AREAS THAT ARE OPEN FOR USE.

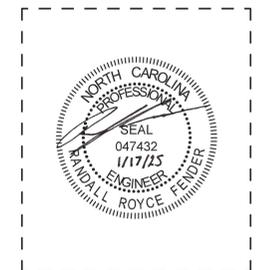
**EROSION AND SEDIMENT CONTROL NOTES:**

- ALL TEMPORARY OR PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES NECESSARY FOR RETAINING SEDIMENTS ON THE CONSTRUCTION SITE SHALL BE INSTALLED AT THE LOCATIONS AS SPECIFIED ON THE PLANS PRIOR TO ANY LAND CLEARING OR GRUBBING ACTIVITIES. A RAIN GAUGE PROVIDED BY CONTRACTOR MUST BE LOCATED ON SITE AT ALL TIMES.
- SUFFICIENT MATERIALS REQUIRED FOR STABILIZATION AND/OR REPAIR OF EROSION CONTROL MEASURES AND STORMWATER ROUTING AND TREATMENT SHALL BE ON SITE AT ALL TIMES.
- CRITICAL EROSION AREAS SHALL BE GIVEN SPECIAL ATTENTION PRIOR TO AND DURING CONSTRUCTION OF THE PROJECT AND UNTIL SUCH TIME AS STABILIZATION OF THE PROJECT HAS BEEN ESTABLISHED.
- CONTRACTOR SHALL MAKE PERIODIC SITE INSPECTIONS OF THE EROSION AND SEDIMENT CONTROL MEASURES TO DETERMINE THEIR CONDITION AND PERFORMANCE. IF SEDIMENT HAS DEPOSITED IN A STREAM OR WETLAND, CONTRACTOR SHALL NOTIFY OWNER AND THE DIVISION OF WATER QUALITY OFFICE WITHIN 24 HOURS AND WRITTEN NOTICE MUST BE PROVIDED WITHIN 5 DAYS. SHOULD ANY ADJUSTMENTS OR REPAIRS NEED TO BE MADE, THE CONTRACTOR SHALL RESPOND IMMEDIATELY IN MAKING NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT. ANY SEDIMENT WHICH HAS BEEN TRANSPORTED BEYOND THE PROJECT LIMITS SHALL BE REMOVED AND/OR STABILIZED AS DIRECTED BY THE ENGINEER.
- TOPSOIL AND AGGREGATE STOCKPILES SHALL BE PLACED AT THE LOCATION AS DIRECTED BY THE ENGINEER. DEDICATED DEMOLITION AND OTHER WASTE AREAS AND EARTHEN MATERIAL STOCKPILES MUST BE LOCATED AT LEAST 50' FROM STORM DRAINS OR STREAMS UNLESS NO ALTERNATIVE IS FEASIBLE. SILT FENCE SHALL BE ERRECTED AT THE TOE OF THE STOCKPILES. SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
- WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICLES TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- CONTRACTOR SHALL MAINTAIN AND REPAIR EXISTING AGGREGATE BASE ON ACCESS ROADS, PARKING AREAS AND/OR OTHER VEHICLE TRANSPORTATION ROUTES AS REQUIRED OR AS DIRECTED BY THE ENGINEER.
- EROSION AND SEDIMENT CONTROL MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. THE MEASURES ARE TO BE KEPT CLEAR OF DEBRIS AND SEDIMENTS SHALL BE CLEANED OUT PERIODICALLY DURING AND AFTER CONSTRUCTION ACTIVITIES. ALL OTHER STORM WATER MANAGEMENT FACILITIES SHALL BE INSTALLED AND MADE OPERATIONAL AS SHOWN OR REQUIRED BY CONSTRUCTION ACTIVITIES.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DISTURBED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION. PERMANENT VEGETATIVE COVER SHALL CONSIST OF LIMING, FERTILIZING, SEEDING, AND MULCHING TO ASSURE A FIRM STAND OF GRASS. TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED ONLY WHEN STABILIZATION HAS BEEN ESTABLISHED.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE SCHEDULED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH RAINFALL PRODUCING RUNOFF DURING THE PROJECT. NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT SHALL BE PERFORMED IMMEDIATELY. RAINY SEASONS OR WET PERIODS WILL BE OF PARTICULAR CONCERN AND THE PROJECT SHALL BE INSPECTED DAILY BY THE CONTRACTOR.

SITE AREA DESCRIPTION	STABILIZATION TIMEFRAMES	
	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.



**Schedule 2A:**  
**10-Unit T-Hangar**  
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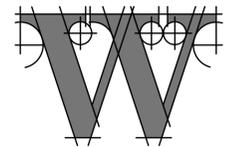
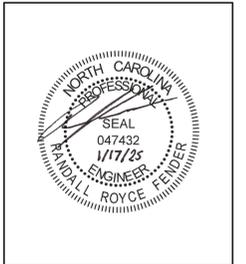
**REVISIONS**

DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**SEDIMENTATION & EROSION CONTROL PLAN (SCHEDULE 2A)**

SHEET NUMBER

**CB-141**



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**REVISIONS**

DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**10-UNIT T-HANGAR LAYOUT AND FOUNDATION PLAN (SCHEDULE 2A)**

SHEET NUMBER

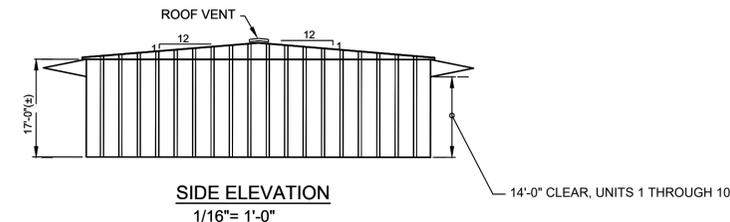
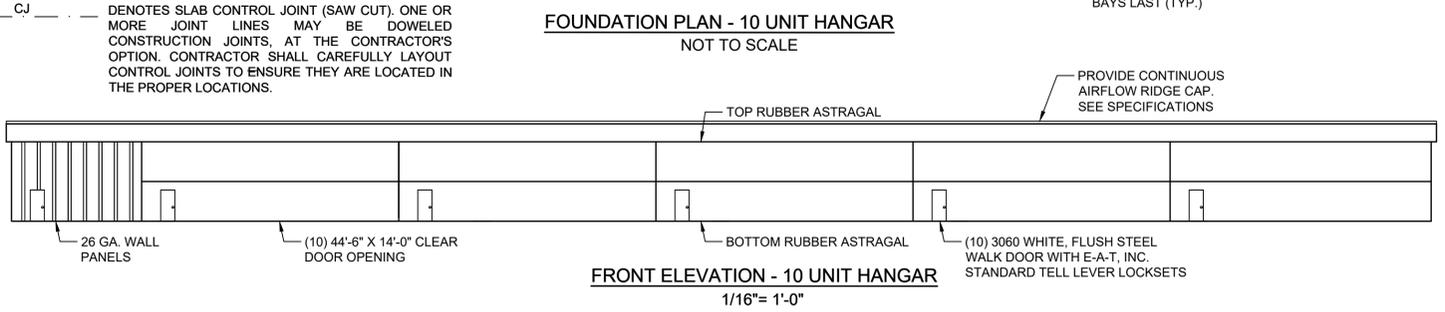
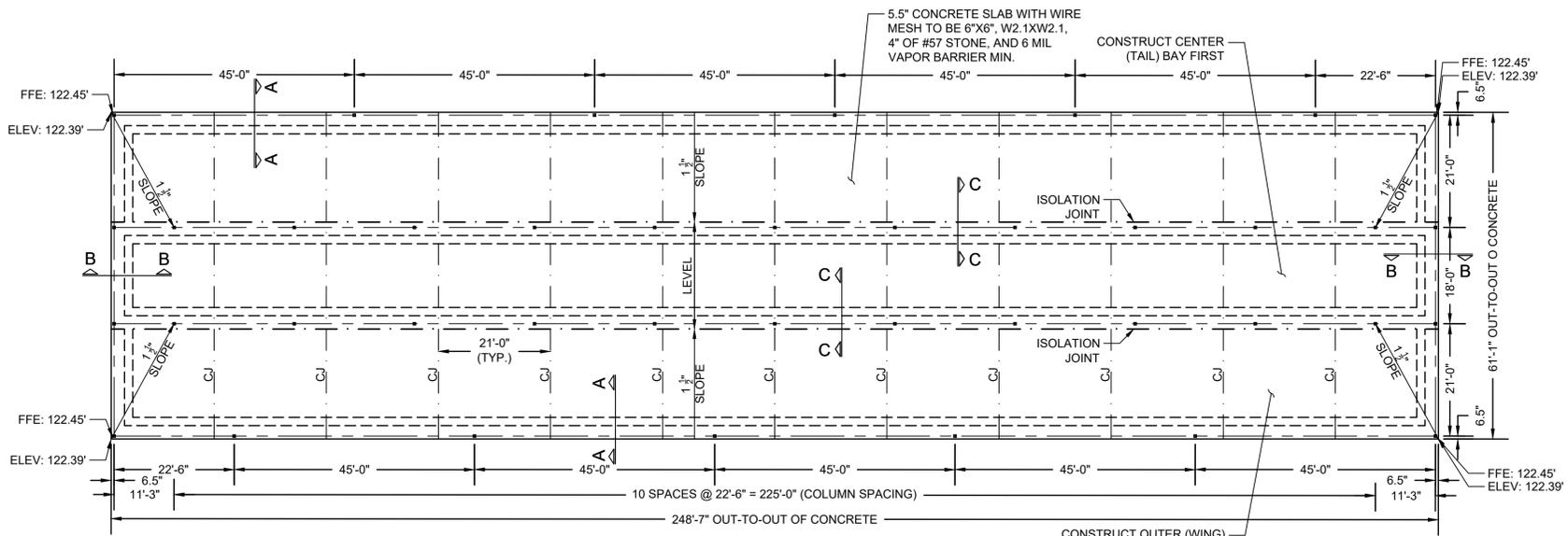
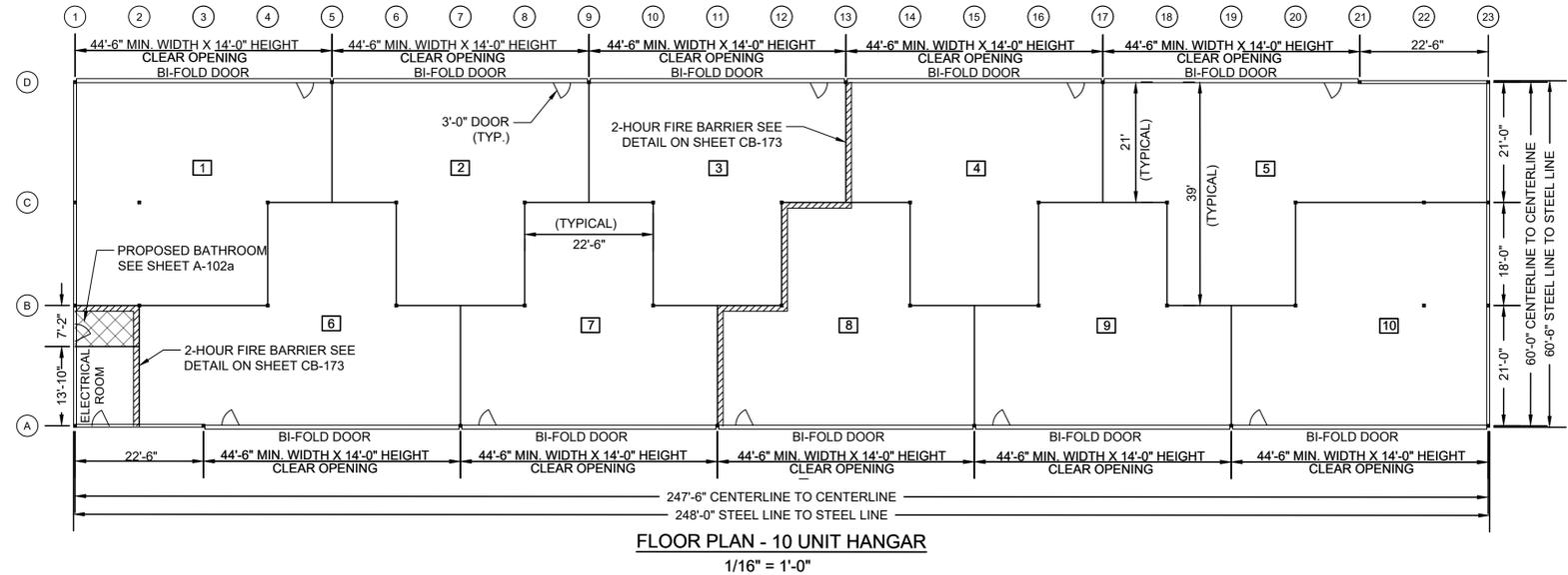
**CB-171**

- GENERAL NOTES: (FOUNDATIONS AND SLAB)**
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND EXISTING FIELD CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION. CONTRACTOR SHALL CORRELATE ALL DIMENSIONS AND ELEVATIONS SHOWN ON THESE DRAWINGS WITH SHOP DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION. ANY DIFFERENCES SHALL BE REPORTED TO THE ENGINEER FOR RESOLUTION PRIOR TO COMMENCING CONSTRUCTION.
  - THE CONTRACTOR SHALL FOLLOW ALL SAFETY AND OSHA REGULATIONS. CONFORMANCE WITH SAFETY REGULATIONS, METHODS OF CONSTRUCTION, AND ERECTION OF STRUCTURAL ELEMENTS ARE THE CONTRACTOR'S RESPONSIBILITY.
  - ALL SLABS ON GRADE SHALL BE PLACED OVER 4" BASE OF WELL COMPACTED STONE. THE STONE SHALL BE PLACED ON COMPACTED ORIGINAL SOIL OR ON EARTH FILL COVER STONE BASE WITH APPROVED VAPOR BARRIER BEFORE PLACING CONCRETE (10 MIL MINIMUM) MEETING THE REQUIREMENTS OF ASTM E 1643 AND INSTALLED IN ACCORDANCE TO ASTM E 1643.
  - PLACE CONCRETE FOR WALL FOOTINGS MONOLITHICALLY WITH EXTERIOR COLUMN FOOTINGS.
  - ALL FOOTINGS ARE TO BE EXCAVATED TO FINAL GRADE AND POURED IN THE SAME DAY.
  - MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 4,000 PSI.
  - REINFORCING BARS SHALL BE ROLLED FROM NEW BILLET STEEL CONFORMING TO "SPECIFICATION FOR DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT", ASTM A-615, AND SHALL BE GRADE 60.
  - ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS SHALL CONFORM WITH ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURE" (ACI SP-66) AND THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI-318, LATEST EDITION).
  - WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 1064.
  - GROUT UNDER BASE PLATES TO BE "EMBECO" NON-SHRINK GROUT OR EQUAL AS APPROVED BY THE ENGINEER.
  - DETAILS, WORKMANSHIP AND PROCEDURE OF CONCRETE PLACEMENT SHALL CONFORM TO ACI SP-66, ACI-318, AND ACI-301. THE FINISHED FLOOR FLATNESS AND LEVELNESS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF ASTM E 1115.
  - LAP LENGTH FOR ALL SPLICES SHALL BE AS SHOWN, BUT SHALL BE AT LEAST 36 BAR DIAMETERS (12" MINIMUM) FOR TENSION OR 24 BAR DIAMETERS FOR COMPRESSION, UNLESS OTHERWISE CALLED FOR.
  - WELDED WIRE FABRIC SHALL HAVE END LAPS OF ONE FULL MESH PLUS 2" BETWEEN CROSS WIRES AND EDGE LAPS OBTAINED BY OVERLAPPING LONGITUDINAL SALVAGE WIRES 2" AND WIRING ALL LAPS SECURELY TOGETHER. WELDED WIRE FABRIC SHOULD EXTEND INTO SUPPORTING BEAMS AND WALLS FOR ANCHORAGE UNLESS AN EXPANSION JOINT IS CALLED FOR.
  - ALL REINFORCING SHALL BE SECURELY WIRED TOGETHER IN FORMS AS CALLED FOR IN "PLACING REINFORCING BARS" BY CRSI.
  - ANCHOR BOLTS SHALL BE LOCATED AND INSTALLED AS RECOMMENDED BY BUILDING MANUFACTURER. ALL ANCHOR BOLTS SHALL BE PLACED PRIOR TO POURING SLAB AND FOUNDATIONS.

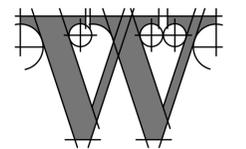
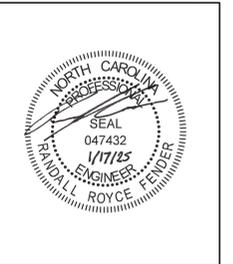
- GENERAL NOTES (T-HANGAR BUILDING)**
- BUILDING DIMENSIONS SHALL BE ESTABLISHED TO PROVIDE MINIMUM CLEAR DIMENSIONS SHOWN.
  - THE BUILDING DIMENSIONS SHOWN ON THIS SHEET ARE APPROXIMATE. THEY ARE SHOWN TO INDICATE THE GENERAL TYPE AND SIZE OF BUILDING TO BE APPROVED. ACTUAL DIMENSIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S APPROVED SHOP DRAWINGS. MODIFICATIONS REQUIRED IN THE LAYOUT OF THE SLAB AND FOUNDATIONS SHALL BE SUBMITTED TO THE ENGINEER BY THE CONTRACTOR FOR REVIEW AND APPROVAL PRIOR TO BEGINNING FOUNDATION EXCAVATION.
  - PROVIDE RIDGE VENT FOR T-HANGAR UNITS IN ACCORDANCE WITH THE SPECIFICATIONS.
  - ALL EXPOSED SCREW ENDS IN HANGAR INTERIORS WITHIN 7'-0" HEIGHT FROM FLOOR SHALL BE CUT OR CAPPED SUCH THAT NO SHARP ENDS WILL REMAIN EXPOSED.
  - T-HANGAR CONFIGURATION AND FINISHED FLOOR ELEVATIONS SHALL BE AS SHOWN ON GRADING & ELEVATION PLAN SHEET CB-121.
  - SEE SHEET CB-172 FOR T-HANGAR FOUNDATION DETAILS AND SECTIONS AND SHEET CB-173 FOR DRY WALL FIRE BARRIER DETAILS.
  - SEE E SERIES SHEETS FOR ELECTRICAL LAYOUT AND DETAILS.
  - FLOOR SLAB SHALL BE SLOPED TO THE OUTSIDE FACE OF THE BUILDING ON BOTH SIDES OF THE BUILDINGS AS SHOWN ON THE PLANS. CONTRACTOR SHALL MODIFY THE LENGTH OF THE COLUMNS ALONG COLUMN LINES A AND D TO ACCOMMODATE THE EDGE OF THE SLAB BEING LOWER THAN THE CENTER PORTION OF THE SLAB.
  - SEE T-HANGAR DETAILS ON SHEETS CB-172 AND CB-173.

**HANGAR DOOR NOTES:**  
12- UNIT HANGAR UNITS 1 THROUGH 12 WITH ELECTRICALLY OPERATED BI-FOLD DOORS.

LEGEND	
	INDICATES PERSONNEL DOORS. PROVIDE 3'-0" WIDE DOORS WITHIN HANGAR DOORS.
	CONTRACTION JOINT
	COLUMN CENTERLINE
	PARTITION WALLS
	HANGAR UNIT NUMBER
	COLUMN LINE LOCATION
	COLUMN LOCATION



- PRE-ENGINEERED METAL BUILDING SUPPLIED FOR THIS PROJECT SHALL BE DESIGNED IN ACCORDANCE WITH THE NORTH CAROLINA STATE BUILDING CODE, LOCAL BUILDING CODE REQUIREMENTS AND ADA STANDARDS. WHERE CONFLICTS OCCUR WITH THE STANDARDS AND THE REQUIREMENTS SET FORTH, THE MORE STRINGENT REQUIREMENT SHALL GOVERN. ALL BUILDING LOADS FOR STRUCTURAL DESIGN SHALL BE AS REQUIRED BY THE STATE BUILDING CODE AND LOCAL BUILDING CODE.
- THE CONTRACTOR SHALL HAVE THE CONCRETE FOUNDATION DESIGNED SPECIFICALLY FOR THE COLUMN LOCATIONS AND REACTIONS FOR THE PROPOSED PRE-ENGINEERED METAL BUILDING SYSTEM TO BE INSTALLED FOR THIS PROJECT. ALL LOADS FOR THE FOUNDATION STRUCTURAL DESIGN SHALL BE AS REQUIRED BY THE STATE BUILDING CODE AND LOCAL BUILDING CODE. SLAB/FOUNDATION SHALL BE BASED ON A SOIL BEARING VALUE OF 2,000 LBS/SF.
- THE CONTRACTOR SHALL DETERMINE AND ABIDE BY THE REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION REGARDING THE FIRE PROTECTION REQUIREMENTS FOR THE HANGAR.
- THE CONTRACTOR WILL BE REQUIRED TO PREPARE AND SUBMIT SHOP DRAWINGS AND PROVIDE DESIGN CALCULATIONS FOR THE PRE-ENGINEERED METAL BUILDING SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA.
- THE CONTRACTOR WILL BE REQUIRED TO PREPARE AND SUBMIT SHOP DRAWINGS AND PROVIDE DESIGN CALCULATIONS FOR THE CONCRETE FOUNDATIONS DESIGNED SPECIFICALLY FOR THE PRE-ENGINEERED METAL BUILDING SELECTED FOR THIS PROJECT. THE SHOP DRAWINGS AND CALCULATIONS SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA.
- THE CONTRACTOR WILL BE REQUIRED TO SUBMIT THIS DESIGN AND SHOP DRAWING INFORMATION INCLUDING AN APPENDIX B CODE SUMMARY TO THE ENGINEER AND CITY OF WASHINGTON AND THE FIRE MARSHALL FOR REVIEW AND APPROVAL. CONTRACTOR SHALL ALSO BE PREPARED TO SUBMIT ANY ADDITIONAL INFORMATION REQUIRED BY THE CITY OF WASHINGTON OR FIRE MARSHALL. THE CONTRACTOR WILL BE REQUIRED TO OBTAIN ALL LOCAL PERMITS NECESSARY TO CONSTRUCT THE NEW HANGAR.



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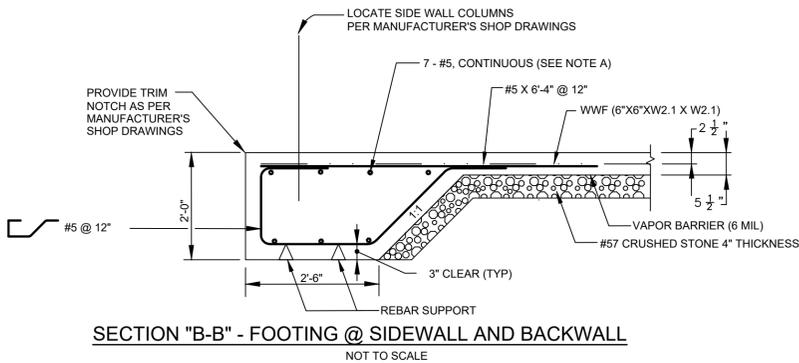
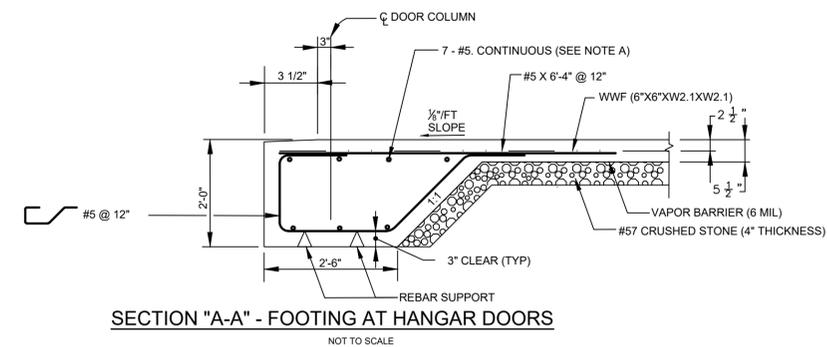
**REVISIONS**

DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

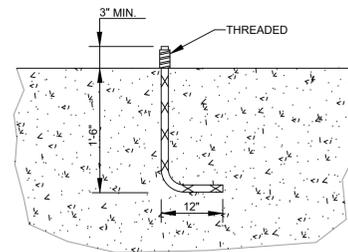
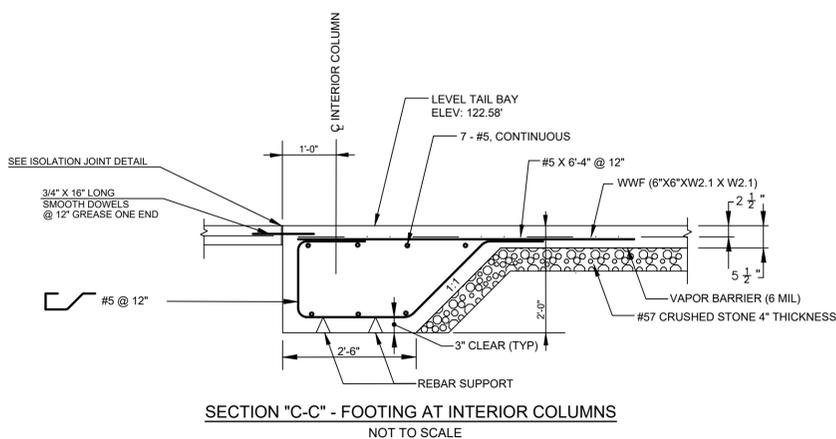
**T-HANGAR DETAILS**  
**(SHEET 1 OF 2)**  
**(SCHEDULE 2A)**

SHEET NUMBER

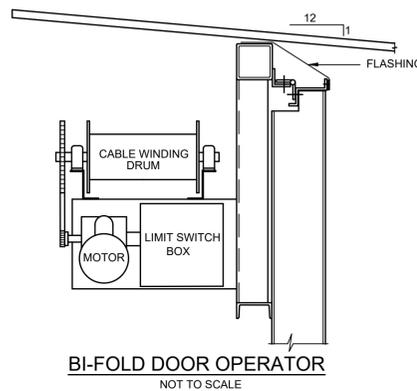
**CB-172**



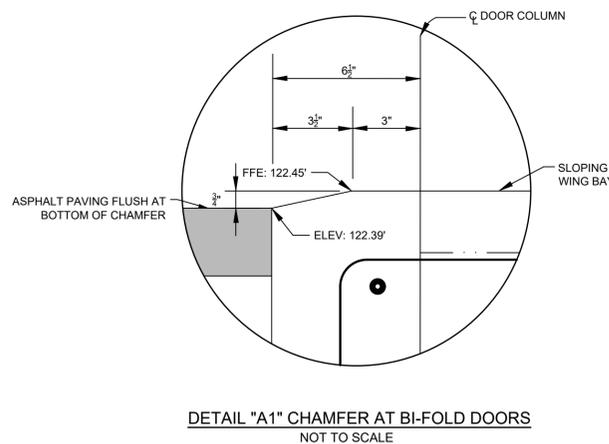
NOTE A: #5 LONGITUDINAL BARS SHALL BE CONTINUOUS THROUGH ALL CONTROL JOINTS AND CONSTRUCTION / ISOLATION JOINTS. LAP SPLICES SHALL BE 2'-11" LONG. PROVIDE 3'-0" X 3'-0" CORNER BARS FOR EACH #5 AT THE 4 BUILDING CORNERS.



NOTE:  
1. FABRICATE ANCHOR BOLTS FROM MATERIAL AS SPECIFIED IN ASTM 1554 OR A 36 ROD. ANCHOR BOLTS REQUIRE HEAVY HEX NUT.  
2. ANCHOR BOLT QUANTITY, LOCATION AND PROJECTION SHALL BE DETERMINED BY HANGAR BUILDING MANUFACTURER.  
NOT TO SCALE

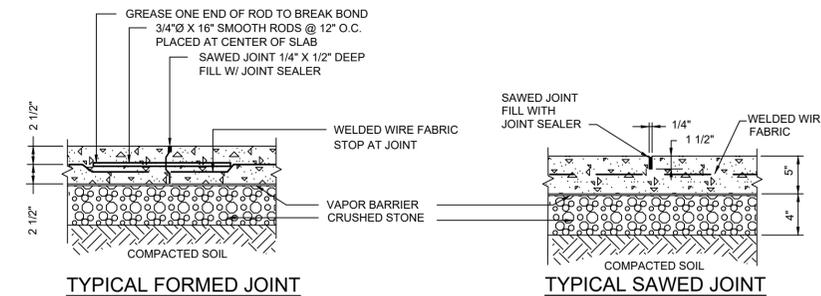


NOTE:  
TOP MOUNTED DOOR OPERATOR SHOWN. IF MOTOR AND OTHER ELECTRICAL COMPONENTS ARE LOCATED WITHIN 13' OF FLOOR, COMPONENTS SHALL BE EXPLOSION PROOF.



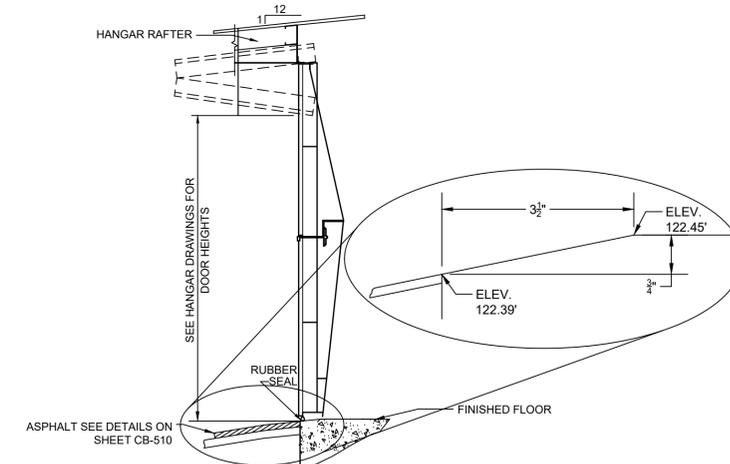
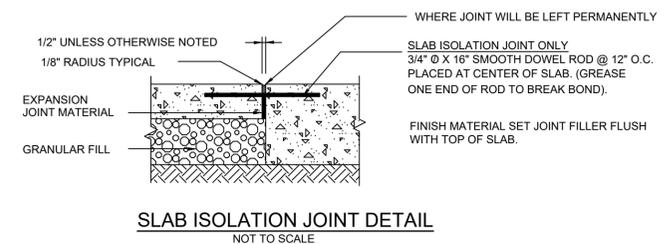
**SIGNAGE NOTES:**  
THE FOLLOWING SIGNAGE SHALL BE INSTALLED IN ALL T-HANGAR UNITS. SIGNAGE SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH SPECIFICATION SECTION 101423.

- NO-SMOKING SIGNS: PROVIDE 10" HIGH X 14" WIDE MIN. SIGNS WITH MIN. 2" HIGH LETTERS INDICATING "NO SMOKING". LOCATION TO BE COORDINATED WITH ENGINEER. LETTER COLOR TO CONTRAST WITH SIGN COLOR.
- FIRE EXTINGUISHER SIGNS: PROVIDE 10" HIGH X 18" WIDE MIN. SIGNS WITH MIN. 2" HIGH LETTERS INDICATING "THIS AREA TO REMAIN CLEAR" AT ALL PORTABLE FIRE EXTINGUISHER LOCATIONS FOR EACH HANGAR UNIT. LETTER COLOR TO CONTRAST WITH SIGN COLOR.
- HAZARDOUS OPERATION SIGNS: PROVIDE 10" HIGH X 18" WIDE MIN. SIGNS WITH MIN. 2" HIGH LETTERS INDICATING "NO HAZARDOUS OPERATIONS, INCLUDING FUEL TRANSFER, WELDING, TORCH CUTTING, TORCH SOLDERING, DOPING, AND SPRAY PAINTING ARE TO OCCUR IN THE HANGAR." LETTER COLOR TO CONTRAST WITH SIGN COLOR. LOCATION TO BE COORDINATED WITH ENGINEER.
- FUEL CAPACITY SIGNS: PROVIDE 10" HIGH X 18" WIDE MIN. SIGNS WITH MIN. 2" HIGH LETTERS INDICATING "TOTAL FUEL CAPACITY OF ALL AIRCRAFT WITHIN THIS HANGAR SPACE LIMITED TO 320 GALLONS." LETTER COLOR TO CONTRAST WITH SIGN COLOR. CONFIRM LOCATIONS, COLORS AND TEXT WITH ENGINEER.



NOTES:  
TYPE OF JOINT IS OPTIONAL WITH CONTRACTOR. SAWED JOINT SHALL BE MADE WITHIN 24 HOURS OR LESS AFTER PLACING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR DETERMINATION OF WHEN TO SAW CONTROL JOINT DEPENDENT ON WEATHER CONDITIONS AND FIELD CONDITIONS. JOINT SHALL BE SAWED AFTER SLAB HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING AND PRIOR TO SHRINKAGE CRACKS FORMING. IF FORMED JOINT IS USED, FLOOR SHALL BE POURED IN ALTERNATE BAYS IN BOTH DIRECTIONS. REMAINING BAYS SHALL NOT BE POURED UNTIL FIRST POURS HAVE REACHED THEIR INITIAL SET.

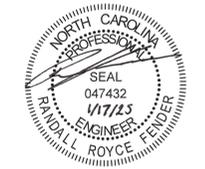
**SLAB CONTROL JOINTS**  
NOT TO SCALE



**NOTES (BI-FOLD ELECTRIC HANGAR DOORS)**  
NOT TO SCALE

- DOORS SHALL BE OVERHEAD BI-FOLD DOORS. DOOR MANUFACTURER SHALL SUPPLY ALL STRUCTURAL AND ELECTRICAL COMPONENTS AND HARDWARE FOR COMPLETE DOOR INSTALLATION. BUILDING COMPONENTS SHALL MEET TOLERANCES AS REQUIRED BY THE DOOR MANUFACTURER TO INSURE PROPER DOOR OPERATIONS.
- ONE 3'-0" X 6'-6" ACCESS DOOR SHALL BE INSTALLED FOR EACH HANGAR AREA. DOORS IN HANGAR DOOR SHALL BE SLIM PROFILE, SIDE HINGED, AND SWING OUTWARD. INSTALLATION SHALL INCLUDE ALL HARDWARE, INCLUDING LOCKS, REQUIRED FOR COMPLETE INSTALLATION. CONTRACTOR SHALL PROVIDE 2 SETS OF KEYS FOR EACH LOCK AT THE COMPLETION OF THE PROJECT. DOOR LOCATIONS MAY BE SET BY MANUFACTURER TO ALLOW FOR INSTALLATION COMPATIBLE WITH DOOR FRAMING SYSTEM.
- DOORS SHALL BE INSTALLED WITH ADEQUATE WINDSEALS/WEATHERSTRIPPING TO PROVIDE A WEATHER TIGHT STRUCTURE. SEE PROJECT SPECIFICATIONS.
- DOOR SECTION, OPERATOR, AND ROLLER DETAIL ARE SHOWN TO INDICATE GENERAL TYPE OF DOOR TO BE PROVIDED. CONTRACTOR MAY SUBMIT DOORS WITH OPTIONAL DETAILS.





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DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**TYPICAL  
PAVEMENT  
SECTIONS  
(SCHEDULE 2A)**

SHEET NUMBER

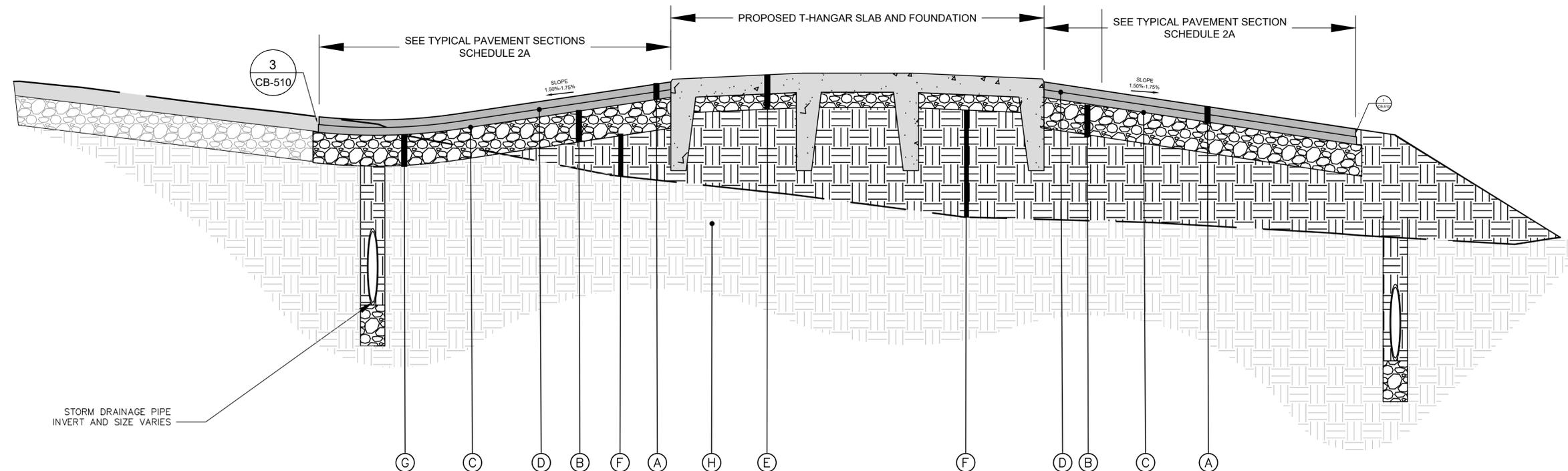
**CB-401**

**LEGEND:**

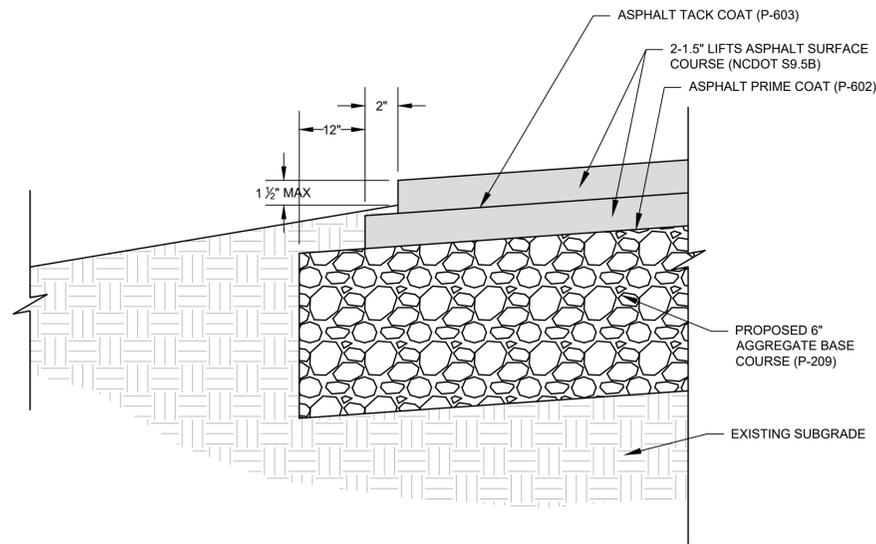
- (A) PROPOSED HOT MIX ASPHALT SURFACE COURSE,  
3-INCH DEPTH (2 - 1.5" LIFTS, S9.5D)
- (B) PROPOSED AGGREGATE BASE COURSE, 6-INCH DEPTH (P-209)
- (C) PROPOSED ASPHALTIC PRIME COAT (P-603)
- (D) PROPOSED ASPHALTIC TACK COAT (P-603)
- (E) PROPOSED HANGAR SLAB/FOUNDATIONS
- (F) BORROW EMBANKMENT (P-152)
- (G) UNCLASSIFIED EXCAVATION (P-152)
- (H) EXISTING SUB-GRADE

**NOTES:**

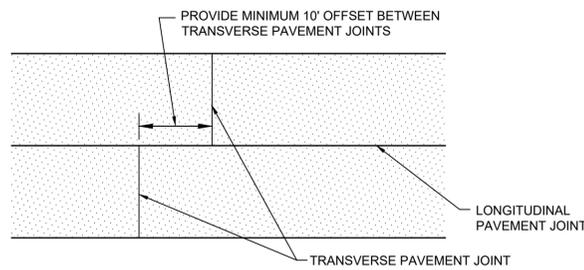
1. SEE CB-111 FOR SCHEDULE 2A PAVING LIMITS.
2. SEE THE CB-120 SERIES DRAWINGS FOR GRADING.



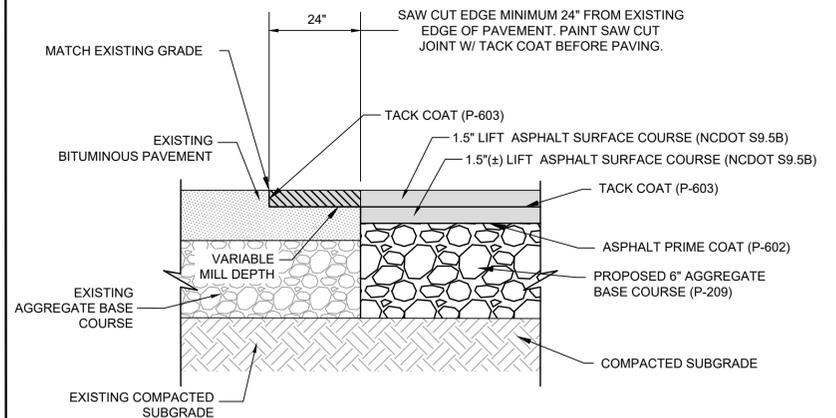
1 TYPICAL PAVEMENT SECTION  
CB-101 NOT TO SCALE  
CB-111



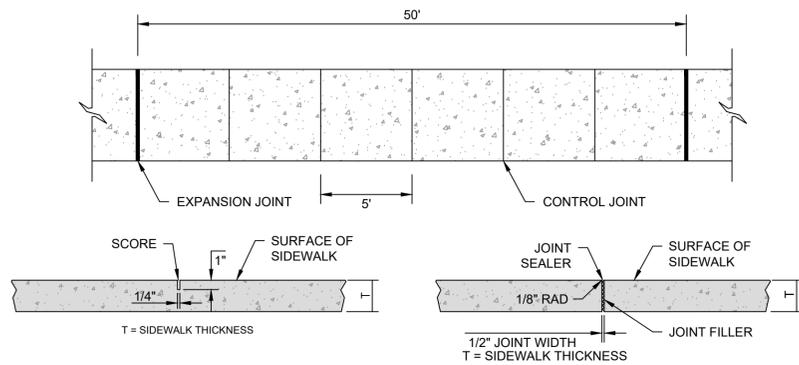
**1** TYPICAL PAVEMENT SHOULDER STEPPING DETAIL - ASPHALTIC PAVEMENT  
 CB-111 NOT TO SCALE  
 CB-401



**2** TRANSVERSE PAVEMENT JOINTS  
 CB-510 NOT TO SCALE

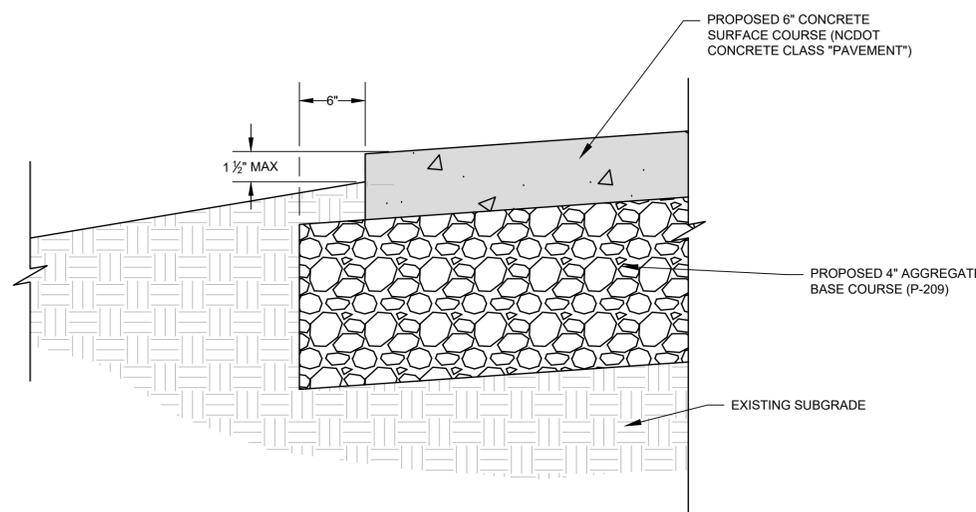


**3** TYPICAL PAVEMENT TIE-IN DETAIL  
 CB-111 NOT TO SCALE

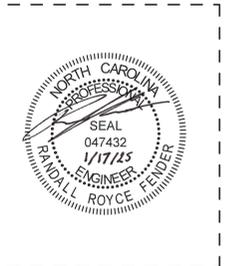


- CONTROL JOINT**
- EXPANSION JOINT**
- NOTES:
- CONSTRUCT STANDARD SIDEWALK 5' WIDE AND 5" THICK UNLESS OTHERWISE DENOTED ON PLANS.
  - PLACE A GROOVE JOINT 1" DEEP WITH 1/8" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
  - JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
  - CONCRETE FOR ALL SIDEWALKS SHALL BE CLASS "A" - 3,000 PSI.
  - MINIMUM GRADE FOR PROPER DRAINAGE IS 1% IN AT LEAST 1 DIRECTION. MAX GROSS SLOPE IS 2%. MAX LONGITUDINAL SLOPE IS 8.3%.

**4** CONCRETE SIDEWALK DETAIL  
 CB-510 NOT TO SCALE



**5** TYPICAL PAVEMENT SHOULDER STEPPING DETAIL - CONCRETE PAVEMENT  
 CB-111 NOT TO SCALE  
 CB-401



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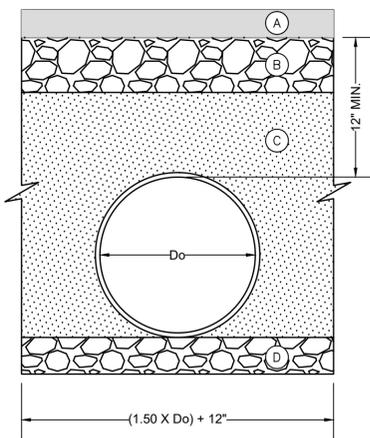
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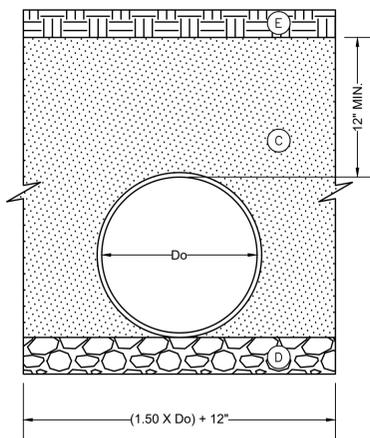
DATE JANUARY 2025  
 PROJECT NUMBER 3105-2401  
 SHEET TITLE

**PAVING DETAILS  
 (SCHEDULE 2A)**

SHEET NUMBER  
**CB-510**



PAVED AREAS  
NOT TO SCALE



TURFED AREAS  
NOT TO SCALE

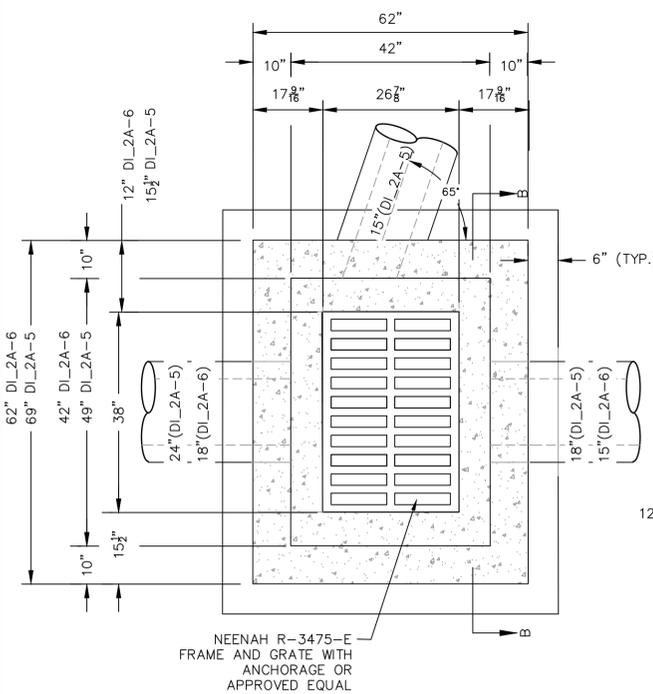
**TRENCH MATERIALS:**

- (A) PROPOSED ASPHALTIC PAVEMENT. SEE SHEET CB-401 FOR PAVEMENT SECTION.
- (B) PROPOSED AGGREGATE BASE COURSE. SEE SHEET CB-401 FOR PAVEMENT SECTION.
- (C) SELECT GRANULAR FILL MATERIAL TO BE ASTM D2321 CLASS 1 OR APPROVED EQUAL. COMPACTED TO DENSITIES SPECIFIED IN SPECIFICATION ITEM P-152. MAX. PARTICLE SIZE IS 1.5" +/-.
- (D) RELATIVELY LOOSE GRANULAR BEDDING, ROUGHLY SHAPED TO FIT BOTTOM OF PIPE, 4" TO 6" IN DEPTH. (ASTM D2321 CLASS 1 OR OTHER SUITABLE GRANULAR MATERIAL)
- (E) 4" TOPSOIL. SOD OR SEED/MULCH.

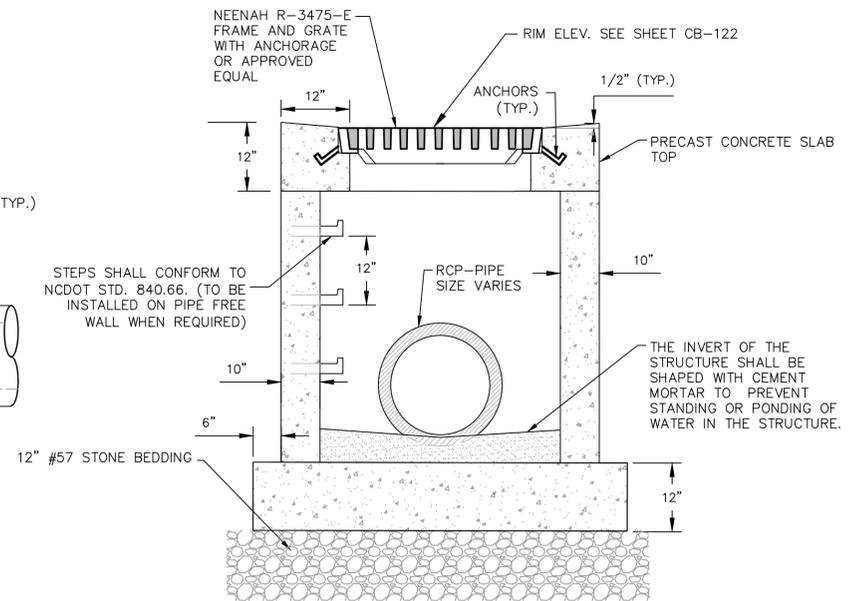
**NOTES:**

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MANIPULATE WET SOILS FOR DRYING OR TO ADD WATER AS NECESSARY TO ACHIEVE THE SPECIFIED DENSITY.
2. ALL MATERIALS SHALL BE COMPACTED IN 8" MAXIMUM LOOSE LIFTS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION SUPPORT AND DEWATERING.
4. PIPE JOINTS SHALL HAVE ELASTOMERIC GASKETS MEETING ASTM F477.
5. SELECT GRANULAR FILL MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE TO PREVENT SOIL MIGRATION.
6. ALL EXCAVATION, BEDDING & BACKFILL (WHETHER FROM THE EXCAVATION OR FROM OFF-SITE SOURCES), DEWATERING, EXCAVATION SUPPORT, PIPE MATERIALS, FABRIC FOR WRAPPING JOINTS, INCIDENTALS AND LABOR SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAR FOOT OF PIPE.

1 TYPICAL PIPE TRENCH DETAIL - CORRUGATED PVC  
CB-122 NOT TO SCALE



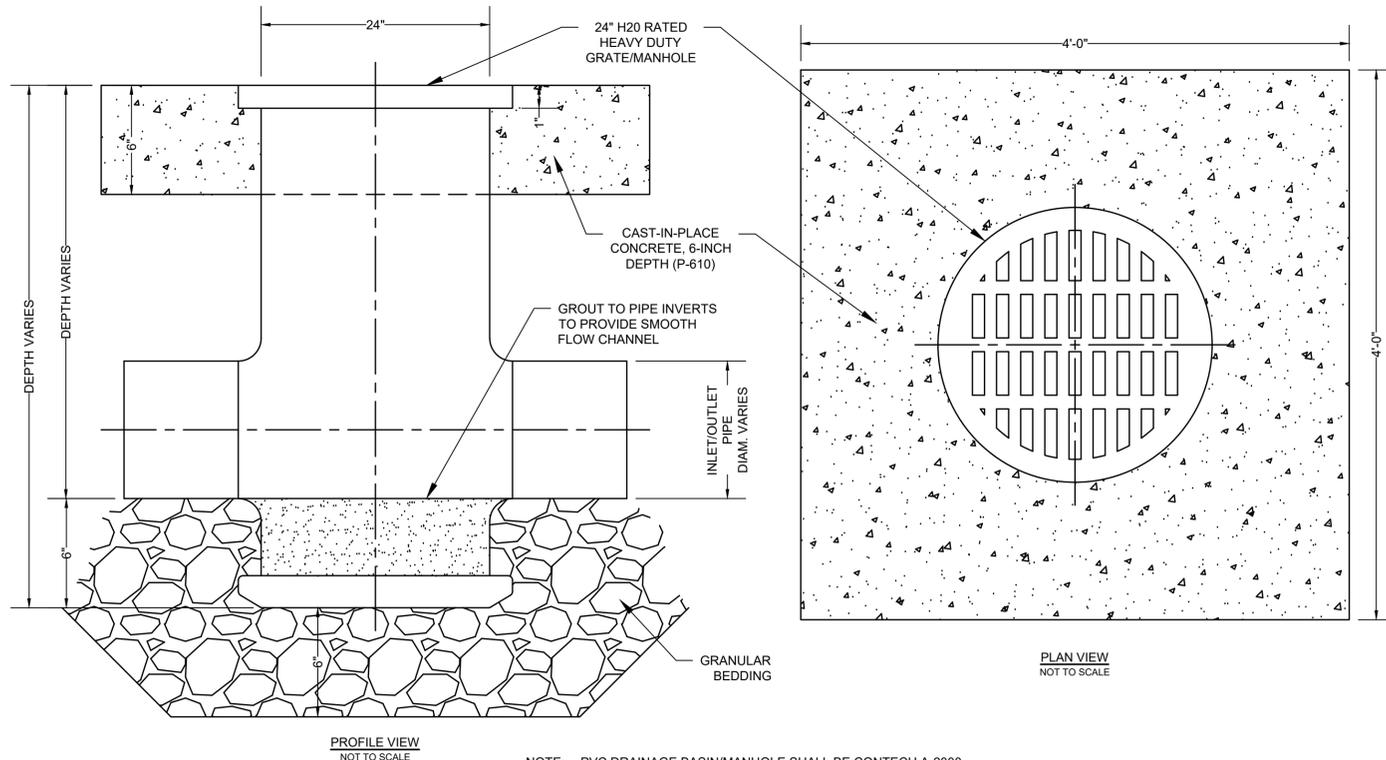
PLAN VIEW - STRUCTURE DI\_2A-5 AND DI\_2A-6



SECTION B-B

NOTE: BACKFILL ALL DRAINAGE STRUCTURES EXCAVATIONS WITH SAND FILL (COST INCLUDED IN UNIT PRICE PER EACH STRUCTURE).

2 PRECAST CONCRETE DROP INLETS  
CB-122 NOT TO SCALE

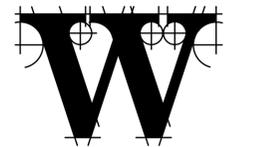
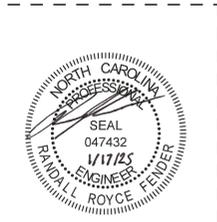


NOTE: PVC DRAINAGE BASIN/MANHOLE SHALL BE CONTECH A-2000 OR APPROVED EQUAL.

3 PVC DRAINAGE INLET BASIN/MANHOLE DETAIL  
CB-122 NOT TO SCALE

**GENERAL NOTES FOR PRECAST CONCRETE DROP INLET**

1. THE DETAIL SHOWN FOR 'PRECAST CONCRETE DROP INLET' IS TO SHOW NOMINAL SIZE AND DIMENSIONS OF PROPOSED STRUCTURES ONLY AND MAY VARY BASED ON DESIGN. FOR ALL PRECAST CONCRETE STRUCTURES, THE CONTRACTOR WILL BE REQUIRED TO SUBMIT DESIGN CALCULATIONS, DETAILED SHOP DRAWINGS, AND DESIGN PREPARED AND SEALED BY A NORTH CAROLINA PROFESSIONAL ENGINEER. PRECAST CONCRETE STRUCTURES SHALL BE DESIGNED TO CARRY ALL APPLICABLE LOADINGS, INCLUDING VERTICAL AND LATERAL EARTH PRESSURES, DEAD LOADS, LIFTING LOADS AND AIRCRAFT LIVE LOADS. AIRCRAFT LIVE LOADS SHALL BE TREATED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5320-5D, CHAPTER 7, USING A 28,500 POUND DUAL GEAR AIRCRAFT LOAD FOR DIRECT LOADING AND LOADING ON BURIED STRUCTURES.
2. ALL MATERIALS, DESIGN, MANUFACTURE, TESTING, AND PRODUCT PERFORMANCE FOR THE PRECAST CONCRETE COMPONENTS AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ASTM C913.
3. BASE SECTIONS SHALL HAVE A BOTTOM POURED MONOLITHICALLY WITH THE WALLS OR AN APPROVED WATER-STOP CAST INTO THE BOTTOM FOR THE JOINT TO THE WALLS.
4. JOINTS SHALL BE TONGUE AND GROOVE. JOINT SEALANT SHALL BE BUTYL RUBBER AND SHALL MEET THE REQUIREMENTS OF AASHTO M 198, TYPE B. SIZE AND AMOUNT OF SEALANT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
5. CONCRETE SHALL BE 4000 PSI COMPRESSIVE STRENGTH MEETING THE REQUIREMENTS OF SECTION P-610 OF THE PROJECT SPECIFICATIONS.
6. REINFORCING STEEL SHALL BE ASTM A-706, LOW-ALLOY STEEL DEFORMED AND PLAIN BARS FOR CONCRETE REINFORCEMENT, GRADE 60. WIRE AND WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M 221.
7. FLOW LINE OF BASE TO BE GROUTED TO OUTLET PIPE FLOW LINE TO MAINTAIN A CONTINUOUS FLOW. GROUT SHALL BE TYPE M MORTAR MATERIAL.
8. IF STRUCTURE DEPTH EXCEEDS 4'-6", STEPS ARE TO BE PLACED ON WALL. SEE NCDOT STANDARD DRAWING FOR STEP. STEPS SHALL BE ALIGNED IN ALL SECTIONS TO FORM A CONTINUOUS LADDER. STEPS SHALL BE ALIGNED WITH OPENING IN TOP OR FLAT SLAB ADAPTER SO AS TO PROVIDE REASONABLE ACCESS. STEP SPACING SHALL NOT EXCEED 1'-0".
9. LIFT HOLES AND/OR DEVICES MAY BE PLACED AS NECESSARY. ALL LIFT HOLES SHALL BE GROUTED CLOSED PRIOR TO COMPLETION OF THE INSTALLATION. ALL LIFTING METHODS MUST MEET OSHA REGULATIONS.
10. AFTER PIPE IS SET INTO THE DRAINAGE STRUCTURE, THE REMAINING OPENING AROUND THE PIPE MUST BE SEALED WITH BRICK AND MORTAR OR CONCRETE FOR THE FULL WALL THICKNESS OF THE STRUCTURE.
11. THE CONTRACT UNIT PRICE PRECAST DROP INLETS SHALL INCLUDE THE COST OF FURNISHING ALL MATERIALS AND WORK INCIDENTAL TO THE CONSTRUCTION OF THE STRUCTURE COMPLETE IN PLACE AS SHOWN.



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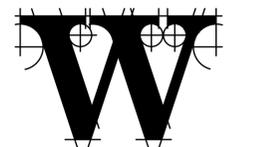
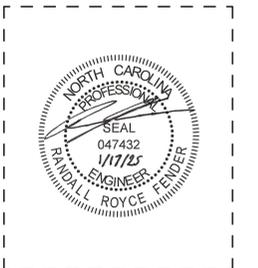
**REVISIONS**

DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**DRAINAGE  
DETAILS  
(SCHEDULE 2A)**

SHEET NUMBER

**CB-520**



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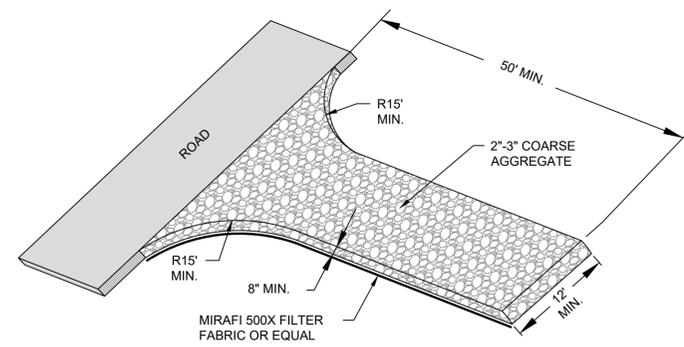
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**REVISIONS**

DATE: JANUARY 2025  
PROJECT NUMBER: 3105-2401  
SHEET TITLE:

**SEDIMENTATION & EROSION CONTROL DETAILS - 1**  
(SCHEDULE 2A)  
SHEET NUMBER

**CB-540**



NOTE: CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCE TO MAINTAIN EXISTING DRAINAGE FLOWS.

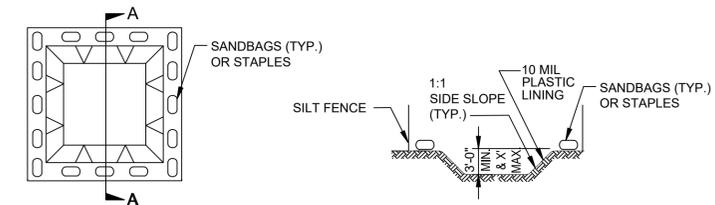
**CONSTRUCTION SPECIFICATIONS:**

- CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.
- CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCE TO MAINTAIN EXISTING DRAINAGE FLOWS.
- PROVIDE DRAINAGE TO CARRY WATER TO SUITABLE OUTLET.

**MAINTENANCE REQUIREMENTS:**

MAINTAIN MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

**1**  
CB-1XX  
TEMPORARY CONSTRUCTION ENTRANCE/EXIT  
NOT TO SCALE

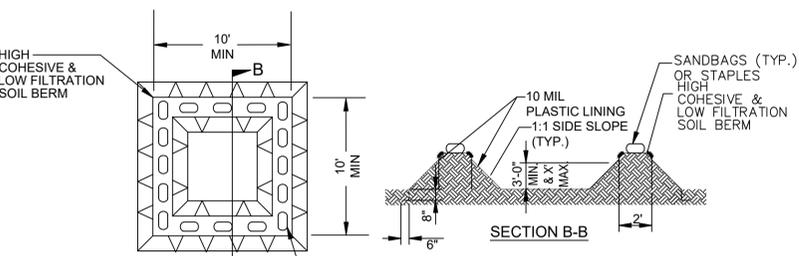


SECTION A-A

- NOTES:
- ACTUAL LOCATION DETERMINED IN FIELD
  - THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
  - CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

**BELOW GRADE WASHOUT STRUCTURE**

NOT TO SCALE



SECTION B-B

- NOTES:
- ACTUAL LOCATION DETERMINED IN FIELD
  - THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
  - CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

**ABOVE GRADE WASHOUT STRUCTURE**

NOT TO SCALE

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER

**PART III**  
**SELF-INSPECTION, RECORDKEEPING AND REPORTING**

- SECTION C: REPORTING**
- 1. Occurrences that Must be Reported**
- Permittees shall report the following occurrences:
- Visible sediment deposition in a stream or wetland.
  - Oil spills if:
    - They are 25 gallons or more,
    - They are less than 25 gallons but cannot be cleaned up within 24 hours,
    - They cause sheen on surface waters (regardless of volume), or
    - They are within 100 feet of surface waters (regardless of volume).
  - Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
  - Anticipated bypasses and unanticipated bypasses.
  - Noncompliance with the conditions of this permit that may endanger health or the environment.

- 2. Reporting Timeframes and Other Requirements**
- After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.</li> <li>If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring. Inspectors or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.</li> </ul>
(b) Oil spills and release of hazardous substances per Item 1(b)(2) above	<ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.</li> </ul>
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> <li>A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass.</li> </ul>
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.</li> </ul>
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(j)(7)]	<ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrences of the noncompliance. [40 CFR 122.41(j)(8)].</li> <li>Division staff may waive the requirement for a written report on a case-by-case basis.</li> </ul>



EFFECTIVE: 04/01/19

**PART III**  
**SELF-INSPECTION, RECORDKEEPING AND REPORTING**

- SECTION A: SELF-INSPECTION**
- Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rain-fall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual rainfall information is available, record the cumulative rain measurement for those unattended days (note this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&S Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the measures were operating properly. 5. Description of maintenance needs for the measure. 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDCs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Evidence of indicators of nonwater pollution such as oil sheen, floating or suspended solids or discoloration. 5. Indication of visible sediment leaving the site. 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. If visible sedimentation is found outside site limits, then a record of the following shall be made: a. Actions taken to clean up or stabilize the sediment that has left the site limits. b. Date, evidence, and date of corrective actions taken, and c. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands on-site or off-site (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(b) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&S measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

**PART II, SECTION G, ITEM (4)**  
**DRAW DOWN OF SEDIMENT BASIN FOR MAINTENANCE OR CLOSE OUT**

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- The E&S plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&S plan authority has approved these items.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit.
- Dewatering discharges are treated with controls to minimize discharges of pollutants that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices.
- Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

**NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING**

EFFECTIVE: 04/01/19

**GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT**

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

**SECTION E: GROUND STABILIZATION**

Site Area Description	Required Ground Stabilization Timeframes	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	Stabilize within this many calendar days after ceasing land disturbance: 7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed. -7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones
(d) Slopes 3:1 to 4:1	14	-10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

**GROUND STABILIZATION SPECIFICATION**

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Rollered erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul>	<ul style="list-style-type: none"> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil reinforcement matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt or retaining walls</li> <li>Rollered erosion control products with grass seed</li> </ul>

**POLYACRYLAMIDES (PAMS) AND FLOCCULANTS**

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

**EQUIPMENT AND VEHICLE MAINTENANCE**

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

**LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE**

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

**PAINT AND OTHER LIQUID WASTE**

- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

**PORTABLE TOILETS**

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

**EARTHEN STOCKPILE MANAGEMENT**

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter ditches and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

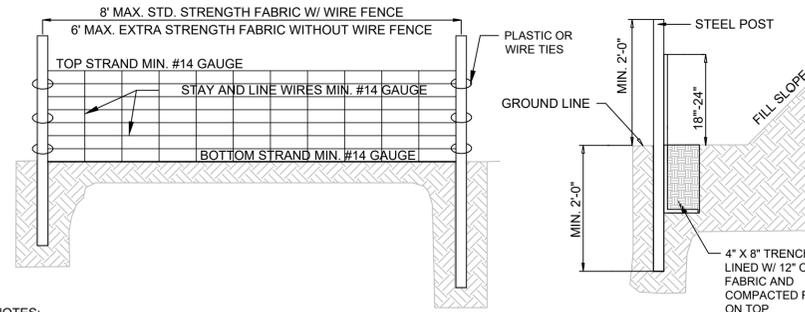


EFFECTIVE: 04/01/19

**NCG01 GROUND STABILIZATION AND MATERIALS HANDLING**

**EROSION AND SEDIMENT CONTROL NOTES:**

- ALL TEMPORARY OR PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES NECESSARY FOR RETAINING SEDIMENTS ON THE CONSTRUCTION SITE SHALL BE INSTALLED AT THE LOCATIONS AS SPECIFIED ON THE PLANS PRIOR TO ANY LAND CLEARING OR GRUBBING ACTIVITIES. A RAIN GAUGE PROVIDED BY CONTRACTOR MUST BE LOCATED ON SITE AT ALL TIMES.
- NO WASTE, SPOIL, SOLIDS, OR FILL OF ANY KIND SHALL OCCUR IN WETLANDS, WATERS OUTSIDE THE LIMITS PERMITTED BY THE 404/401 PERMITS, OR RIPARIAN AREAS BEYOND THE FOOTPRINT OF THE IMPACTS DEPICTED FOR THIS PROJECT. ALL CONSTRUCTION ACTIVITIES, INCLUDING THE DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL BEST MANAGEMENT PRACTICES SHALL BE PERFORMED SO THAT NO VIOLATIONS OF STATE WATER QUALITY STANDARDS, STATUTES, OR RULES OCCUR.
- SEDIMENT AND EROSION CONTROL MEASURES SHALL NOT BE PLACED IN WETLANDS OR WATERS. EXCEPTIONS TO THIS CONDITION REQUIRE APPLICATION SUBMITTAL TO AND WRITTEN APPROVAL BY THE DIVISION. IF PLACEMENT OF SEDIMENT AND EROSION CONTROL DEVICES IN WETLANDS AND WATERS IS UNAVOIDABLE, THEN DESIGN AND PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE CONDUCTED IN A MANNER THAT MAY RESULT IN DIS-EQUILIBRIUM OF WETLANDS, STREAM BEDS, OR BANKS, ADJACENT TO OR UPSTREAM AND DOWNSTREAM OF THE ABOVE STRUCTURES. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE REMOVED AND THE NATURAL GRADE RESTORED WITHIN TWO MONTHS OF THE DATE THAT DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES (DEMRLR) OR LOCALLY DELEGATED PROGRAM HAS RELEASED THE SPECIFIC AREA WITHIN THE PROJECT.
- SUFFICIENT MATERIALS REQUIRED FOR STABILIZATION AND/OR REPAIR OF EROSION CONTROL MEASURES AND STORMWATER ROUTING AND TREATMENT SHALL BE ON SITE AT ALL TIMES.
- CRITICAL EROSION AREAS SHALL BE GIVEN SPECIAL ATTENTION PRIOR TO AND DURING CONSTRUCTION OF THE PROJECT AND UNTIL SUCH TIME AS STABILIZATION OF THE PROJECT HAS BEEN ESTABLISHED.
- CONTRACTOR SHALL MAKE PERIODIC SITE INSPECTIONS OF THE EROSION AND SEDIMENT CONTROL MEASURES TO DETERMINE THEIR CONDITION AND PERFORMANCE. IF SEDIMENT HAS DEPOSITED IN A STREAM OR WETLAND, CONTRACTOR SHALL NOTIFY OWNER AND THE DIVISION OF WATER QUALITY OFFICE WITHIN 24 HOURS AND WRITTEN NOTICE MUST BE PROVIDED WITHIN 5 DAYS. SHOULD ANY ADJUSTMENTS OR REPAIRS NEED TO BE MADE, THE CONTRACTOR SHALL RESPOND IMMEDIATELY IN MAKING NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT. ANY SEDIMENT WHICH HAS BEEN TRANSPORTED BEYOND THE PROJECT LIMITS SHALL BE REMOVED AND/OR STABILIZED AS DIRECTED BY THE ENGINEER.
- TOPSOIL AND AGGREGATE STOCKPILES SHALL BE PLACED AT THE LOCATION AS DIRECTED BY THE ENGINEER. DEDICATED DEMOLITION AND OTHER WASTE AREAS AND EARTHEN MATERIAL STOCKPILES MUST BE LOCATED AT LEAST 50' FROM STORM DRAINS OR STREAMS UNLESS NO ALTERNATIVE IS FEASIBLE. SILT FENCE SHALL BE ERECTED AT THE TOE OF THE STOCKPILES. SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
- WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICLES TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- CONTRACTOR SHALL MAINTAIN AND REPAIR EXISTING AGGREGATE BASE ON ACCESS ROADS, PARKING AREAS AND/OR OTHER VEHICLE TRANSPORTATION ROUTES AS REQUIRED OR AS DIRECTED BY THE ENGINEER.
- EROSION AND SEDIMENT CONTROL MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. THE MEASURES ARE TO BE KEPT CLEAR OF DEBRIS AND SEDIMENTS SHALL BE CLEANED OUT PERIODICALLY DURING AND AFTER CONSTRUCTION ACTIVITIES. ALL OTHER STORM WATER MANAGEMENT FACILITIES SHALL BE INSTALLED AND MADE OPERATIONAL AS SHOWN OR REQUIRED BY CONSTRUCTION ACTIVITIES.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DISTURBED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION. PERMANENT VEGETATIVE COVER SHALL CONSIST OF LIMING, FERTILIZING, SEEDING, AND MULCHING TO ASSURE A FIRM STAND OF GRASS. TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED ONLY WHEN STABILIZATION HAS BEEN ESTABLISHED.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE SCHEDULED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH RAINFALL PRODUCING RUNOFF DURING THE PROJECT. NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT SHALL BE PERFORMED IMMEDIATELY. RAINY SEASONS OR WET PERIODS WILL BE OF PARTICULAR CONCERN AND THE PROJECT SHALL BE INSPECTED DAILY BY THE CONTRACTOR.
- AIRBORNE SEDIMENTS (DUST) SHALL BE CONTROLLED IN ACCORDANCE WITH REQUIREMENTS OF THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- A PERMANENT GROUND COVER MUST BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 30 CALENDAR DAYS (WHICHEVER IS SHORTER), FOLLOWING COMPLETION OF EACH PHASE OF CONSTRUCTION.
- ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY AND PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED BY THE CONTRACTOR EVERY SEVEN (7) DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ONE-HALF (1/2) INCH DURING THE PROJECT AND FINAL STABILIZATION OF PROJECT. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED, AS NECESSARY.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED BY THE CONTRACTOR DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE NORTH CAROLINA SEDIMENTATION CONTROL LAW AND THE RELATED REGULATIONS, INCLUDING IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN AND THE REQUIREMENTS OF THE NPDES GENERAL PERMIT.
- THE CONTRACTOR SHALL MAINTAIN ON SITE AT ALL TIMES A COPY OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, DATED MAY, 2013.



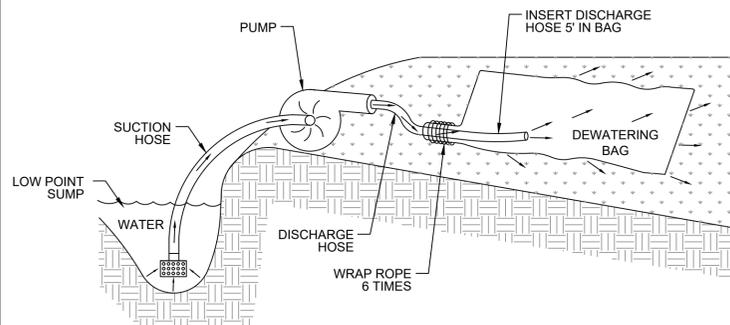
**SILT FENCE NOTES:**

- WIRE FENCE (IF USED) SHALL BE MINIMUM 14 GAUGE WITH A MAXIMUM MESH OPENING OF 6-INCHES.
- SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFIN OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461 AND ALSO SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS ACCORDING TO ASTM D 4355.
- SEE THE NC EROSION CONTROL MANUAL FOR SPECIFICATIONS INSTALLING SEDIMENT FENCE USING THE SLICING METHOD MACHINERY.

**SILT FENCE MAINTENANCE REQUIREMENTS:**

- INSPECT SILT FENCE AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING OR DAMAGING THE FENCE DURING CLEANOUT.
- REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

**1 TEMPORARY SILT FENCE**  
CB-1XX NOT TO SCALE  
CB-1XX



**NOTE:**

- A SEDCATCH DEWATERING BAG OR APPROVED EQUAL SHOULD BE USED ANYTIME WATER IS PUMPED FROM EXCAVATED AREAS ON SITE.

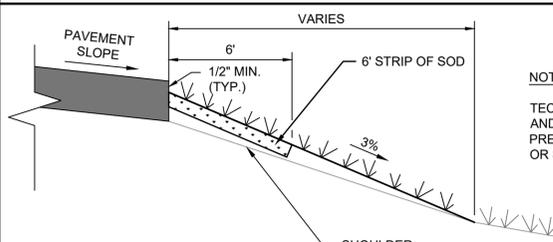
**INSTALLATION AND USE:**

- PLACE DEWATERING BAG ON THE GROUND OR ON A TRAILER OVER A LEVEL STABILIZED AREA.
- INSERT DISCHARGE PIPE A MINIMUM OF 5 FEET INSIDE DEWATERING BAG AND SECURE WITH A ROPE WRAPPED 6 TIMES AROUND THE SNOOT OVER A 6 INCH WIDTH OF THE BAG.
- REPLACE DEWATERING BAG WHEN HALF FULL OF SEDIMENT OR WHEN THE SEDIMENT HAS REDUCED THE FLOW RATE OF THE PUMP DISCHARGE TO AN IMPRACTICAL AMOUNT.

**MAINTENANCE AND DISPOSAL:**

- REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT AWAY FROM WATERWAYS OR ENVIRONMENTALLY SENSITIVE AREAS. SLIT OPEN SEDIMENT BAG AND REMOVE ACCUMULATED SEDIMENT AND DISPERSE IN GRADED AREAS AND STABILIZE. DISPOSE OF BAG AT AN APPROPRIATE RECYCLING OR SOLID WASTE FACILITY.

**2 DEWATERING BAG DETAIL**  
CB-541 NOT TO SCALE



**NOTE:**

TECHNICAL SPECIFICATIONS T-904 AND T-901 SHALL APPLY TO SOIL PREPARATION, SOD INSTALLATION OR SEEDING, AND MAINTENANCE.

**3 SOD PLACEMENT DETAIL**  
CB-541 NOT TO SCALE  
CC-XXX

**PERMANENT SEED MIXES SHALL BE APPLIED AS FOLLOWS:**

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
COMMON BERMUDAGRASS (HULLED)	50	APRIL 1 - AUGUST 31
COMMON BERMUDAGRASS (UNHULLED)	70	SEPTEMBER 1 - MARCH 31

NOTE: MILLET IS NOT ALLOWED.

**TEMPORARY SEED MIXES SHALL BE APPLIED AS FOLLOWS:**

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
RYE (GRAIN)	120	DECEMBER 1 - MARCH 31
KOBE LESPEDEZA	50	DECEMBER 1 - MARCH 31
HULLED BERMUDA GRASS	50	APRIL 1 - AUGUST 31
RYE (GRAIN)	120	SEPTEMBER 1 - NOVEMBER 1

**FERTILIZER:** FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 LB/ACRE OF A 10-10-10 COMMERCIAL FERTILIZER. FERTILIZER SHALL BE APPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION T-901 SEEDING OF THE PROJECT SPECIFICATIONS.

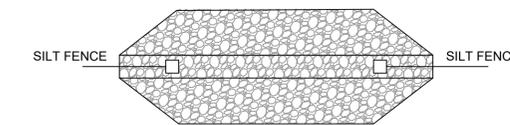
**LIME:** LIME SHALL BE APPLIED AT THE RATE OF 3,000 LBS/ACRE. LIME SHALL BE APPLIED IN ACCORDANCE WITH SECTION T-901 SEEDING OF THE PROJECT SPECIFICATIONS.

**MULCH:** MULCH SHALL CONSIST OF MANUFACTURED MULCH. MULCH SHALL BE EVENLY APPLIED AT THE RATE OF 2 TO 3 TONS PER ACRE TO PROVIDE A LOOSE DEPTH OF 1 1/2"-3". MANUFACTURED MULCH SHALL BE APPLIED AT THE RATE AS RECOMMENDED BY THE MANUFACTURER. MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION T-908 - MULCHING OF THE SPECIFICATIONS.

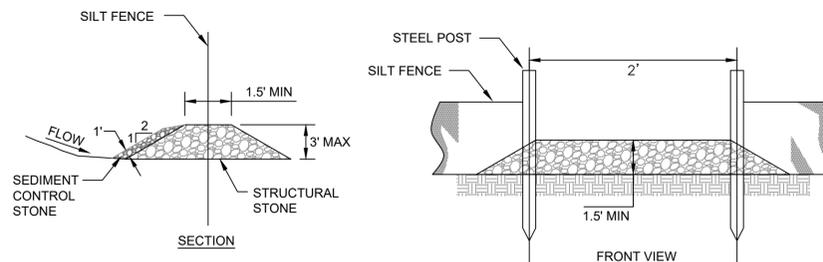
**CONTRACTOR MAINTENANCE OF SEEDED AREAS:** THE CONTRACTOR SHALL BE REQUIRED TO ESTABLISH A GOOD STAND OF GRASS OF UNIFORM COLOR AND DENSITY TO THE SATISFACTION OF THE ENGINEER AND OWNER. THE CONTRACTOR SHALL WATER THE SEEDED AREAS AS REQUIRED FOR SEED GERMINATION AND AS REQUIRED TO MAINTAIN AREAS OF ESTABLISHED GRASS. THE CONTRACTOR SHALL MOW GRASS AREAS AND CONTROL THE PRESENCE OF INVASIVE SPECIES AS REQUIRED. CONTRACTOR WILL BE REQUIRED TO RESEED AND MULCH ALL AREAS WHERE SEEDING EMERGENCE IS POOR. ALL AREAS OF EROSION SHALL BE REPAIRED AND RESEEDED AS SOON AS POSSIBLE. CONTRACTOR SHALL PROTECT SEEDED AREAS FROM TRAFFIC AS MUCH AS POSSIBLE.

**TEMPORARY AND PERMANENT SEEDING OPERATIONS**

SITE AREA DESCRIPTION	STABILIZATION TIMEFRAMES	
	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.



**TOP VIEW**



**SECTION**

**FRONT VIEW**

**NOTES:**

- STRUCTURAL STONE SHALL BE CLASS B EROSION CONTROL STONE. SEDIMENT CONTROL STONE SHALL BE NO.5 OR NO.57 STONE. REFER TO NCDOT STANDARD DETAIL 1633.02.
- CONTRACTOR SHALL INSTALL A STONE OUTLET AT ANY LOW POINT ALONG THE TEMPORARY SILT FENCE.

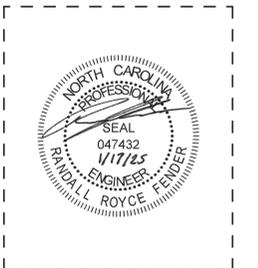
**CONTRACTOR MAINTENANCE REQUIREMENTS:**

- CONTRACTOR SHALL INSPECT SILT FENCE AND STONE OUTLET AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE AND STONE OUTLET. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
- REMOVE ALL FENCING MATERIALS, STONE AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

**4 TEMPORARY SILT FENCE STONE OUTLET**  
CB-1XX NOT TO SCALE  
CB-XXX



**Schedule 2A:**  
**10-Unit T-Hangar**  
Lumberton Regional Airport  
Lumberton, NC 28358



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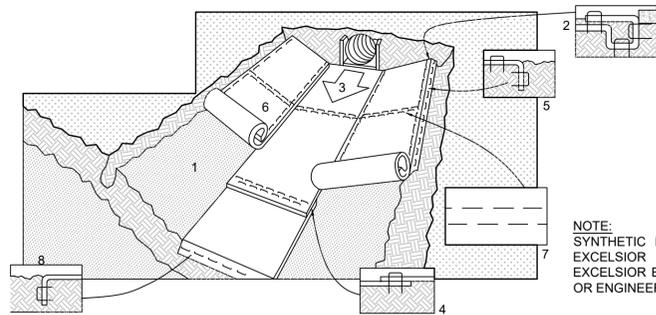
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**REVISIONS**

DATE JANUARY 2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**SEDIMENTATION & EROSION CONTROL DETAILS - 2 (SCHEDULE 2A)**  
SHEET NUMBER

**CB-541**



NOTE:  
 SYNTHETIC MATTING TO BE AMERICAN  
 EXCELSIOR COMPANY CURLEX I  
 EXCELSIOR EROSION CONTROL BLANKET  
 OR ENGINEER APPROVED EQUAL.

**EROSION CONTROL MATTING NOTES:**

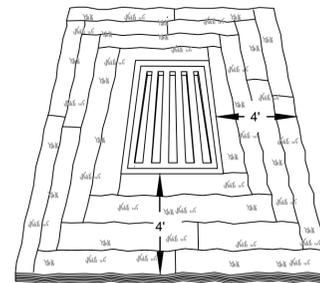
HORIZONTAL STAPLE SPACING MAY BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE. REFER TO MANUFACTURE'S GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE RECOMMENDATIONS FOR CHANNELS.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.
4. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.
5. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED.
6. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

**MAINTENANCE:**

INSPECT ALL MATTING PERIODICALLY, AND AFTER RAINSTORMS TO CHECK FOR RILL EROSION, DISLOCATION, OR FAILURE. WHERE EROSION IS OBSERVED, REPAIR EROSION AND MATTING IN ERODED AREA. IF WASHOUT OCCURS, REPAIR THE SLOPE GRADE, RESEED, AND REINSTALL MATTING. CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.

**1** EXCELSIOR MATTING DETAIL  
 CB-542 NOT TO SCALE



**CONSTRUCTION NOTES:**

1. BRING THE AREA TO BE SODDED TO FINAL GRADE ELEVATION WITH TOP SOIL. ADD FERTILIZER AND LIME, AND INSTALL SOD. SOD SHALL BE BERMUDA.
2. LAY ALL SOD STRIPS PERPENDICULAR TO THE DIRECTION OF FLOWS.
3. KEEP THE WIDTH OF THE SOD AT LEAST 4 FT IN THE DIRECTION OF FLOWS.
4. STAGGER SOD STRIPS SO THAT ADJACENT STRIP ENDS ARE NOT ALIGNED.

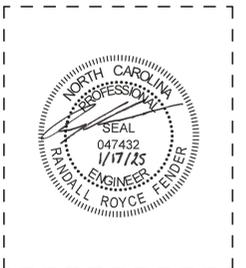
**MAINTENANCE:**

1. DURING THE FIRST 4 WEEKS, WATER SOD AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF 2 INCHES.
2. MAINTAIN GRASS HEIGHT AT LEAST 2 INCHES WITH NO MORE THAN ONE-THIRD THE SHOOT HEIGHT (GRASS LEAF) REMOVED IN ANY MOWING.
3. APPLY FERTILIZER AS NECESSARY TO MAINTAIN THE DESIRED GROWTH AND SOD DENSITY. ADD LIME AS NEEDED TO MAINTAIN THE PROPER pH.

**2** TEMPORARY SOD INLET PROTECTION DETAIL  
 CB-1XX NOT TO SCALE  
 CB-1XX



**Schedule 2A:**  
**10-Unit T-Hangar**  
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**REVISIONS**

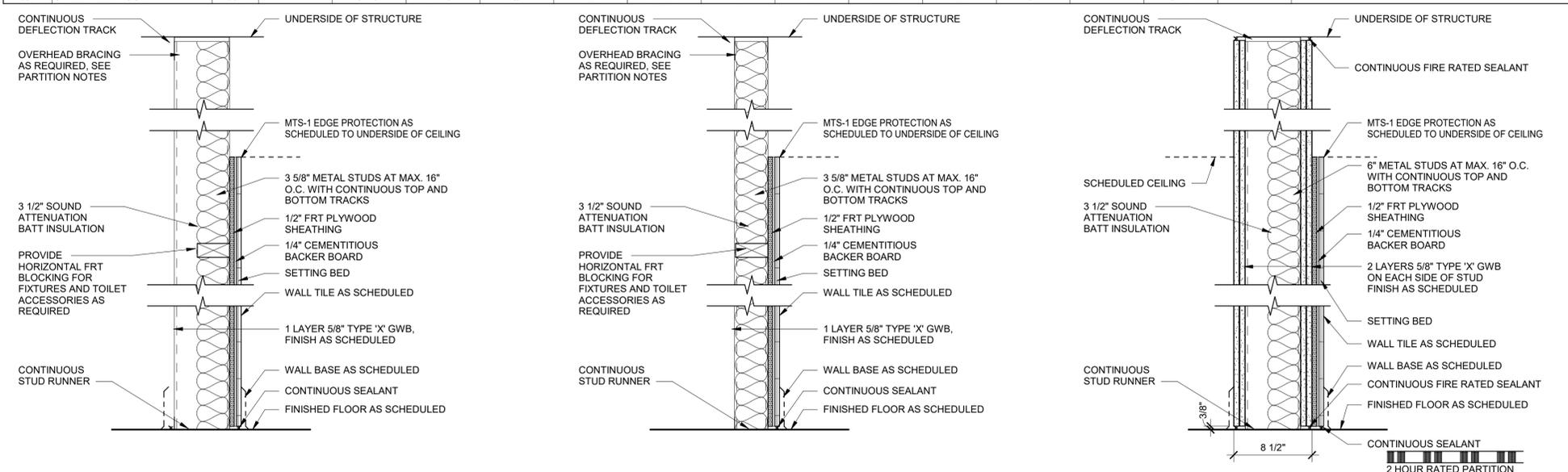
DATE JANUARY 2025  
 PROJECT NUMBER 3105-2401  
 SHEET TITLE

**SEDIMENTATION  
 & EROSION  
 CONTROL  
 DETAILS - 3  
 (SCHEDULE 2A)**  
 SHEET NUMBER

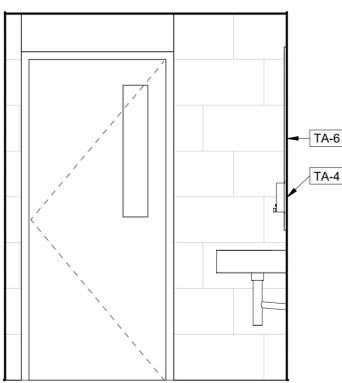
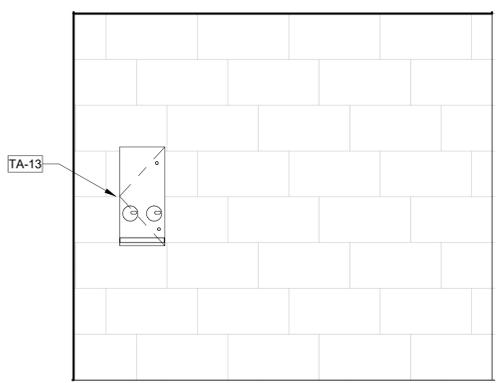
**CB-542**

## SCHEDULE 2A - DOOR SCHEDULE

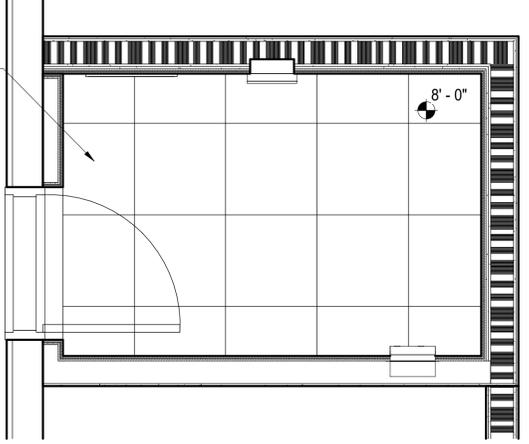
DOOR NUMBER	ROOM NAME	ROOM NUMBER	DOOR					FRAME			DETAILS			FIRE RATING	HARDWARE SET	COMMENTS	
			DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HEAD	JAMB				THRESHOLD
001	UNISEX RESTROOM	001		3'-0"	7'-0"	1 3/4"	HM	PAINT	F1	HM	PAINT	H2	J2				



E3a	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #	D3b	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #	E3e	FIRE RATING	ASSEMBLY NO.	STC	STC TEST #
	0 HR	N/A	N/A	N/A		0 HR	N/A	N/A	N/A		N/A	2 HR	U419	N/A



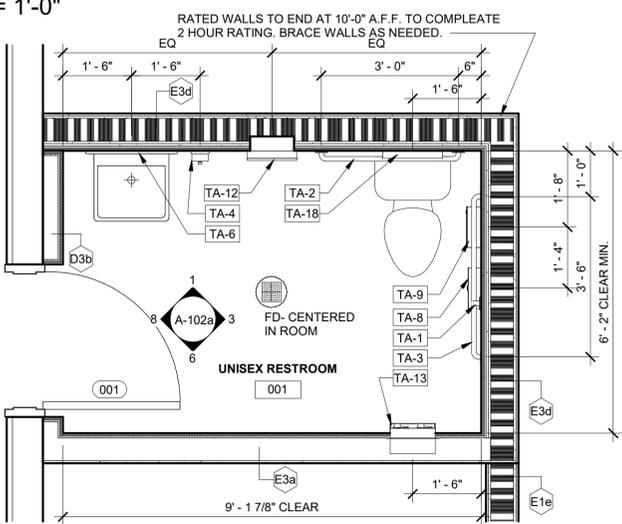
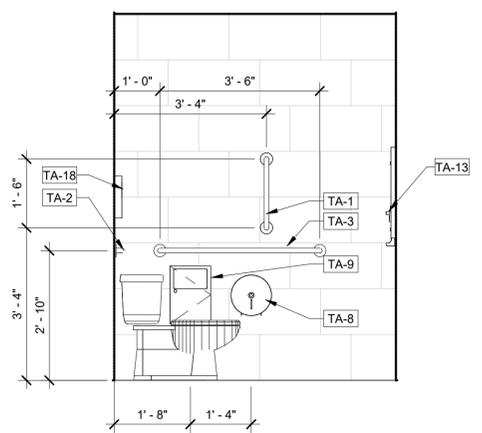
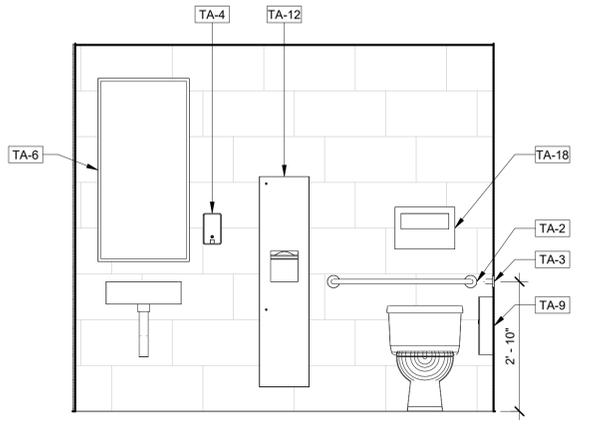
ABOVE LAY-IN CEILING CONTRACTOR TO INSTALL 2 HOUR HORIZONTAL ASSEMBLY (UL U419) AT 10'-0" A.F.F.



**6 UNISEX RESTROOM ELEV 4 - 2A**  
1/2" = 1'-0"

**8 UNISEX RESTROOM ELEV 3 - 2A**  
1/2" = 1'-0"

**9 UNISEX REFLECTED CEILING PLAN - 2A**  
1/2" = 1'-0"



**1 UNISEX RESTROOM ELEV 1 - 2A**  
1/2" = 1'-0"

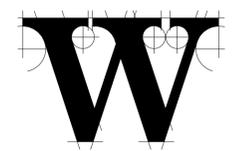
**3 UNISEX RESTROOM ELEV 2 - 2A**  
1/2" = 1'-0"

**4 UNISEX RESTROOM - 2A**  
1/2" = 1'-0"



### Schedule 2A: T-Hangar

Lumberton, NC 28358



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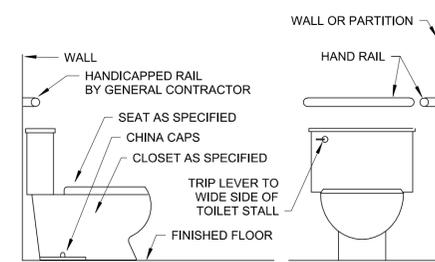
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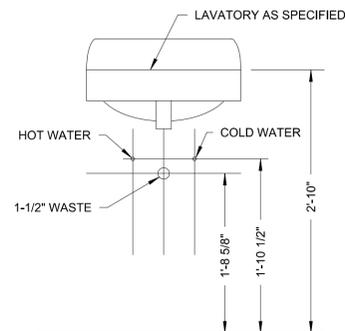
DATE 01/17/2025  
PROJECT NUMBER 2024  
SHEET TITLE

### T-HANGAR TOILET - SCHEDULE 2A

SHEET NUMBER  
**A-102a**



**A**  
P-101A  
**ADULT ADA WATER CLOSET (WC-1) DETAIL**  
SCALE: NONE

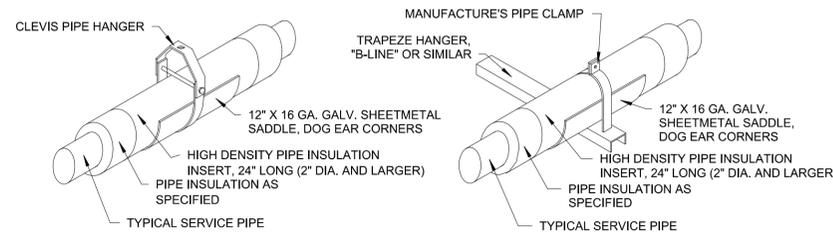


**B**  
P-101A  
**ADULT ADA LAVATORY (L-1) DETAIL**  
SCALE: NONE

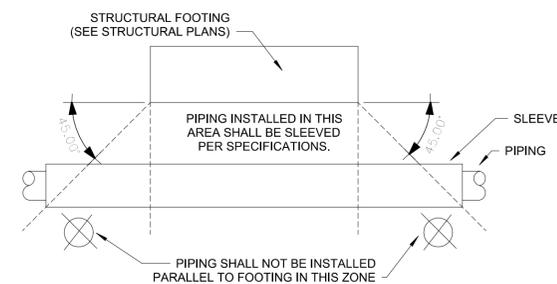
WATER HEATER SCHEDULE										
SYMBOL	DESCRIPTION	ROUGH-IN SIZES		TEMP. SETTING	STORAGE CAPACITY	TEMP RISE @ .75GPM	FUEL	LOAD	ELEC.	DETAIL
		C.W.	H.W.							
WH-1T	TANKLESS ELECTRIC WATER HEATER	3/4"	3/4"	140°F	N/A	42"	ELECTRIC	4.6KW	240V, 1Ø	J/P-001

PLUMBING FIXTURE SCHEDULE					
SYMBOL	DESCRIPTION	ROUGH-IN SIZES			REMARKS
		WASTE	C.W.	H.W.	
WC-1	WATER CLOSET	4"	1/2"	-	ADULT ADA/DETAIL A/P-101A
L-1	LAVATORY	1-1/2"	1/2"	1/2"	ADULT ADA/DETAIL B/P-101A
HB-1	WALL HYDRANT	-	3/4"	-	MOUNT 24" AFG
HB-2	HOSE BIBB	-	1/2"	-	MOUNT 12" AFF
FD-1	FLOOR DRAIN	2"	-	-	

NOTE: MIXING VALVES SHALL BE PROVIDED AT ALL LAVATORIES AND SINKS. SEE SPECIFICATIONS.



**C**  
P-101A  
**PIPE HANGER DETAILS**  
SCALE: NONE

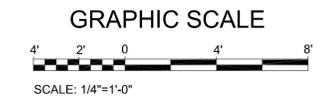


**D**  
P-101A  
**PIPING UNDER FOOTINGS**  
SCALE: NO SCALE

**LEGEND**

W	WASTE PIPING	VTR	VENT THRU ROOF
V	VENT PIPING	CO	CLEANOUT
CW	COLD WATER PIPING	ECO	EXTERIOR CLEANOUT
HW	HOT WATER PIPING	WCO	WALL CLEANOUT
	BALL/BUTTERFLY VALVE	FCO	FLOOR CLEANOUT
	CHECK VALVE	BFF	BELOW FINISHED FLOOR
	VALVE IN RISE	BFG	BELOW FINISHED GRADE
	PIPE ELBOW TURNED DOWN	AFF	ABOVE FINISHED FLOOR
	PIPE ELBOW TURNED UP	AFG	ABOVE FINISHED GRADE
	PIPE TEE TURNED DOWN	INV.	INVERT ELEVATION
	PIPE TEE TURNED UP	CONT.	CONTINUATION
	UNION	CONTR.	CONTRACTOR
	STRAINER	MECH	MECHANICAL
	DOUBLE CHECK VALVE BACKFLOW PREVENTER	EQ	EQUIPMENT
	REDUCED PRESSURE BACKFLOW PREVENTER		
	SHOCK ARRESTER, 'A' INDICATES PLUMBING DRAINAGE INSTITUTE STANDARD SIZE		
	ASME PRESSURE TEMPERATURE RELIEF VALVE		

TOTAL CONNECTED LOAD	
WASTE FIXTURE UNITS =	7 F.U.
COLD WATER DEMAND =	16 GPM
HOT WATER DEMAND =	5 GPM



**Schedule 2A:**  
**10-Unit T-Hangar**  
Lumberton Regional Airport  
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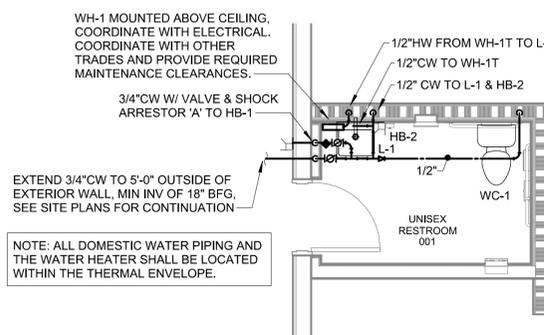
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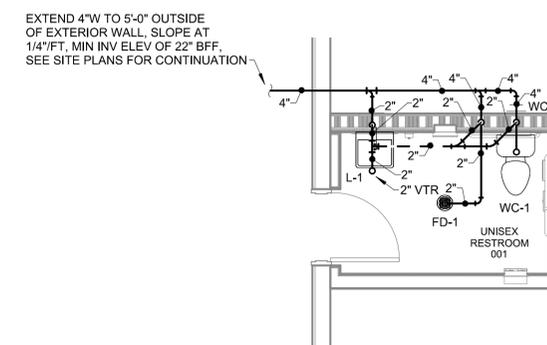
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PROJECT NUMBER 3105-2401  
SHEET TITLE

**T-HANGAR PLUMBING PLANS (SCHEDULE 2A)**

SHEET NUMBER  
**P-101A**



**2**  
P-101A  
**T-HANGAR RESTROOM - DOMESTIC WATER - SCHEDULE 2A**  
SCALE: 1/4" = 1'-0"

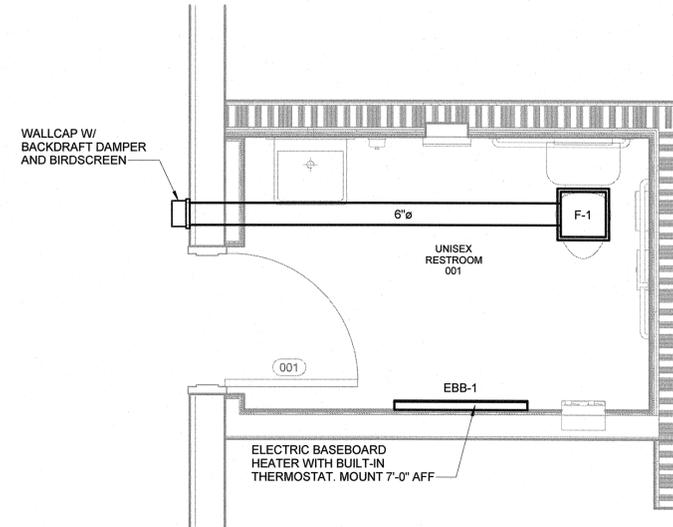


**1**  
P-101A  
**T-HANGAR RESTROOM- WASTE & VENT - SCHEDULE 2A**  
SCALE: 1/4" = 1'-0"

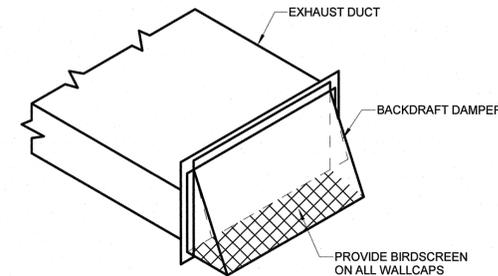
POWER VENTILATOR SCHEDULE										
SYMBOL	CFM	ESP	RPM	TIP SPEED	ELECTRICAL		TYPE	DRIVE	CONTROL	REMARKS
					WATTS	VOLTAGE				
F-1	75	0.50"	765	1355	29	115V-1Ø	CEILING EXHAUST	DIRECT	(1)	

(1) VIA LIGHTING CONTROL SYSTEM'S OCCUPANCY SENSOR.

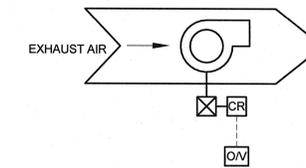
ELECTRIC BASEBOARD HEATER SCHEDULE						
SYMBOL	BTU/HR	ELECTRICAL		MAXIMUM LENGTH	MOUNTING HEIGHT	REMARKS
		WATTS	VOLTAGE			
EBB-1	2560	750	240V-1Ø	40"	7'-0" AFF	PROVIDE BUILT IN THERMOSTAT KIT



**1**  
M-102A MECHANICAL T-HANGAR TOILET - SCHEDULE 2A  
SCALE: 1/2" = 1'-0"



**A**  
M-102A WALLCAP DETAIL  
SCALE: NONE



EXHAUST FAN

**SEQUENCE OF OPERATION**

**DESCRIPTION:** CONSTANT AIR VOLUME EXHAUST FAN, AS SCHEDULED.

**FAN START/STOP CONTROL:** START/STOP UNIT FAN BASED ON INTERLOCK WITH SPACES OCCUPANCY/VACANCY SENSORS.

**LEGEND**

	RECTANGULAR DUCTWORK
SA	SUPPLY AIR
RA	RETURN AIR
OA	OUTSIDE AIR
EX.A	EXHAUST AIR
AFF	ABOVE FINISHED FLOOR
CONC.	CONCRETE
CONT.	CONTINUATION
CONTR.	CONTRACTOR
	OCCUPANCY/VACANCY SENSOR

**PARTITION LEGEND**

	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION

NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**MECHANICAL  
T-HANGAR  
TOILET -  
SCHEDULE 2A**

SHEET NUMBER  
**M-102A**

**ELECTRICAL NOTES**

- ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- PERMITS FOR ELECTRICAL WORK SHALL BE OBTAINED BY AND PAID BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL PAY FOR ANY ADDITIONAL FEES FOR INSPECTIONS, TESTS, AND OTHER SERVICES AS REQUIRED FOR THE COMPLETION OF THE WORK.
- THE ELECTRICAL CONTRACTOR AND ANY OF HIS SUBCONTRACTORS SHALL VISIT THE PROJECT SITE TO WITNESS EXISTING CONDITIONS AND BECOME FAMILIAR WITH THE SCOPE OF THE WORK REQUIRED PRIOR TO SUBMITTING PROPOSALS. WORK REQUIRED BY EXISTING JOB CONDITIONS NOT INDICATED ON DRAWINGS SHALL BE INCLUDED IN THE PROPOSALS.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO RESULT IN THE PRODUCTION OF A COMPLETE AND FUNCTIONAL ELECTRICAL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND OTHER SERVICES AS NECESSARY TO COMPLETE THE WORK.
- DISCREPANCIES IN THE DRAWINGS AND SPECIFICATIONS THAT WILL AFFECT THE WORK SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER, AND OWNER PRIOR TO SUBMITTING PROPOSALS.
- UNLESS NOTED OTHERWISE, ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND INCLUDE A 3RD PARTY LABEL (I.E.: UL, CSA, ETL, ETC.) LISTING APPROVAL FOR ITS INSTALLED APPLICATION.
- REVIEW PLANS OF OTHER TRADES FOR COORDINATION OF WORK AND FOR RELATED AND ADJOINING WORK.
- REVIEW COMPLETE PLAN SET FOR CONSTRUCTION TYPE, FINISHES, HEADROOM, ROOF FINISHES, ETC. REVIEW COMPLETE PLAN SET FOR PROJECT PHASING AND STAGING. REVIEW COMPLETE PLAN SET FOR WORK COVERED BY ALTERNATE BID ITEMS.
- PENETRATIONS OF EXTERIOR BUILDING WALLS, FLOORS, OR ROOFS SHALL BE SEALED WATERTIGHT. INTERIORS OF RACEWAY PENETRATIONS THROUGH EXTERIOR WALLS SHALL BE SEALED WITH NON-HARDENING ELECTRICAL PUTTY.
- VERIFY PROPER SIZING OF OVERLOAD DEVICES IN STARTERS BASED ON EQUIPMENT NAMEPLATE DATA.
- IF HORSEPOWER OR LOAD RATINGS OF EQUIPMENT DIFFER FROM THOSE INDICATED ON THE DRAWINGS, NOTIFY THE ENGINEER, AND OWNER FOR DIRECTION.
- PROVIDE NATIONAL ELECTRICAL CODE REQUIRED CLEARANCES FOR ALL ELECTRICAL EQUIPMENT. COORDINATE RESOLUTION OF CONFLICTS WITH OTHER TRADES.
- EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO THE NEAREST UNSWITCHED CIRCUIT THAT SERVES LIGHT FIXTURES WITHIN THE SAME SPACE.
- NO MOUNTING HARDWARE SHALL BE ATTACHED TO ROOF DECKS. ATTACHMENTS SHALL BE MADE TO THE ROOF SUPPORTING STRUCTURE.
- PANEL BUS MATERIAL: COPPER.
- CONDUCTOR MATERIAL: COPPER WITH THWN INSULATION.
- SHARED NEUTRAL CONDUCTORS SHALL NOT BE USED UNLESS SPECIFICALLY INDICATED SO ON HOMERUN CIRCUITRY DESIGNATIONS.
- PANEL BREAKER CONFIGURATIONS SHALL BE INSTALLED AS INDICATED ON THE PANEL SCHEDULES OR AS NOTED. BREAKER POSITION REVISIONS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE ENGINEER.
- LOAD CIRCUITS SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS. CIRCUITRY REVISIONS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE ENGINEER.

**ABBREVIATIONS**

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPS INTERRUPTING CAPABILITY
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
C/B	CIRCUIT BREAKER
CKT	CIRCUIT
CU	COPPER
DIA	DIAMETER
DTTS	DOUBLE THROW TRANSFER SWITCH
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ENCL	ENCLOSED
ERCCS	EMERGENCY RESPONDER COMMUNICATION COVERAGE SYSTEM
EXSTG	EXISTING
FACP	FIRE ALARM CONTROL PANEL
G	EQUIPMENT GROUND
GEC	GROUNDING ELECTRODE CONDUCTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
K	KILO (THOUSAND)
LED	LIGHT EMITTING DIODE
LTG	LIGHTING
LTS	LIGHTS
MCB	MAIN CIRCUIT BREAKER
MFR	MANUFACTURER
MLO	MAIN LUG ONLY
MTD	MOUNTED
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
NTS	NOT TO SCALE
P	PHASE OR POLE
PH	PHASE
PNL	PANEL
REC	RECEPTACLE
RECPT	RECEPTACLE
REQ.	REQUIRED
RMS	ROOT MEAN SQUARE
SYS	SYSTEM
S/N	SOLID NEUTRAL
TYP	TYPICAL
TVSS	TRANSVOLTAGE SURGE SUPPRESSOR
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
UNO	UNLESS OTHERWISE NOTED
V	VOLTS
VA	VOLT-AMPS
W	WATTS
W	WIRE
W/	WITH
WP	WEATHERPROOF
XFMR	TRANSFORMER

**MISC. ELECTRICAL SYMBOL LEGEND**

	ENCLOSED DISCONNECT SWITCH, NEMA 3R OUTSIDE, AMPERAGE AS INDICATED OR BASED ON SUPPLY CIRCUIT RATING.
	PANELBOARD, SEE PANEL SCHEDULE
	GROUND ROD, 3/4" X 10' COPPER CLAD. WHERE TWO RODS ARE INDICATED, SPACE A MINIMUM OF 22' APART.
	PUSH BUTTON SWITCH CONTROLLER FOR HANGAR DOOR. MOUNT 42" AFF.
	EQUIPMENT CONNECTION, IF DOOR OPERATORS ARE PROVIDED WITH PLUG AND CORD, PROVIDE MATCHING OUTLET
HOMERUN DESIGNATION, #12 CONDUCTORS UNLESS NOTED OTHERWISE.	
	EQUIPMENT GROUND CONDUCTOR PHASE CONDUCTOR NEUTRAL CONDUCTOR
	LETTER INDICATES ELEVATION OR DETAIL; NUMBER INDICATES PLAN OR SECTION
	SHEET NUMBER WHERE PLAN, SECTION, ELEVATION OR DETAIL IS DRAWN
	2 HR FIRE BARRIER

**FIRE ALARM LEGEND**

SYMBOL	DESCRIPTION	MOUNTING
	EMERGENCY RESPONDER COMMUNICATION COVERAGE SYSTEM	WALL
	FIRE ALARM CONTROL PANEL	WALL
	MONITOR MODULE FOR MONITORING A DRY CONTACT CLOSURE DEVICE	
	SMOKE DETECTOR	CEILING

**SWITCH LEGEND**

SYMBOL	DESCRIPTION	NOTES
	OCCUPANCY SENSOR, LOW VOLTAGE, DUAL TECHNOLOGY; CEILING MTD	INCORPORATE POWER PACK FOR CIRCUITRY SWITCHING, SEE WIRING DIAGRAMS
	PHOTOCELL, EXTERIOR	MOUNT ON NORTH FACE OF BLDG, FACING NORTH
	TOGGLE SWITCH, SINGLE POLE	20A; MTD 42" AFF UNO

**RECEPTACLE & OUTLET LEGEND**

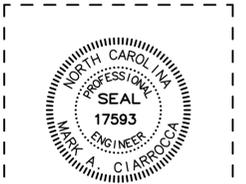
SYMBOL	NEMA	VOLTS	DESCRIPTION
	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 6" ABOVE COUNTER OR 6" ABOVE BACKSPLASH IF APPLICABLE. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL BACKSPLASH DETAILS.
	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 42" AFF UNO
		120V 1P 2W	POWER FOR EMERGENCY RESPONDER COMMUNICATION COVERAGE SYSTEM
		120V 1P 2W	POWER FOR FIRE ALARM CONTROL PANEL
		120V 1P 2W	EXHAUST FAN; SEE MECHANICAL SCHEDULE.

**LUMINAIRE SCHEDULE**

CALLOUT	SYMBOL	DESCRIPTION	LAMP	BALLAST	VOLTS	MOUNTING	MANUFACTURER / MODEL	NOTES	CALLOUT
A2L		2x2, PRISMATIC LENS	(1) 33W LED	LED DIMMABLE DRIVER	277V 1P 2W	RECESSED	COLUMBIA #LJT SERIES DAYBRITE #2T LED SERIES METALUX #22GR LED SERIES	4000 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. 0.156" NOMINAL LENS.	A2L
I8		8' INDUSTRIAL	(1) 90W LED	LED DRIVER	120V 1P 2W	PENDANT; MTD 15' AFF	COLUMBIA #LCL-8-40-ML SERIES DAYBRITE #FSS-110L SERIES METALUX #SNLED-95SL SERIES	10,000 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. WIRE GUARD.	I8
W		LED FLOOD LIGHT	(1) 206W LED	LED DRIVER	120V 1P 2W	MAST; MTD 23' AFG	VIPER #MICRO STRIKE LUMARK #PREVAIL SERIES GARCCO #ECF-S SERIES	TYPE 4 WIDE DISTRIBUTION; 4000K; 29000 LUMENS; FINISH SELECTION BY ARCHITECT. MOUNTED ON 2" RIGID MAST. SEE DETAIL D/E-501.	W
XC		COMBINATION EXIT/EMERGENCY EGRESS, BATTERY	(2) 4W MR 16 LED	BATTERY	120V 1P 2W	WALL	EMERGLITE #PREMIER 612H SERIES CHLORIDE #TPC SERIES LIGHTALARMS #GRANDE GR612H SERIES	CONNECT TO NEAREST UNSWITCHED LIGHT CIRCUIT IN SAME SPACE. THESE FIXTURES ARE NOT TAGGED WITH "XC" ON THE DRAWINGS; ONLY THE SYMBOL IS USED.	XC



**Schedule 2A:**  
**10-Unit T-Hangar**  
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SHEET TITLE

**ELECTRICAL NOTES, LEGENDS**

SHEET NUMBER

**E-001**



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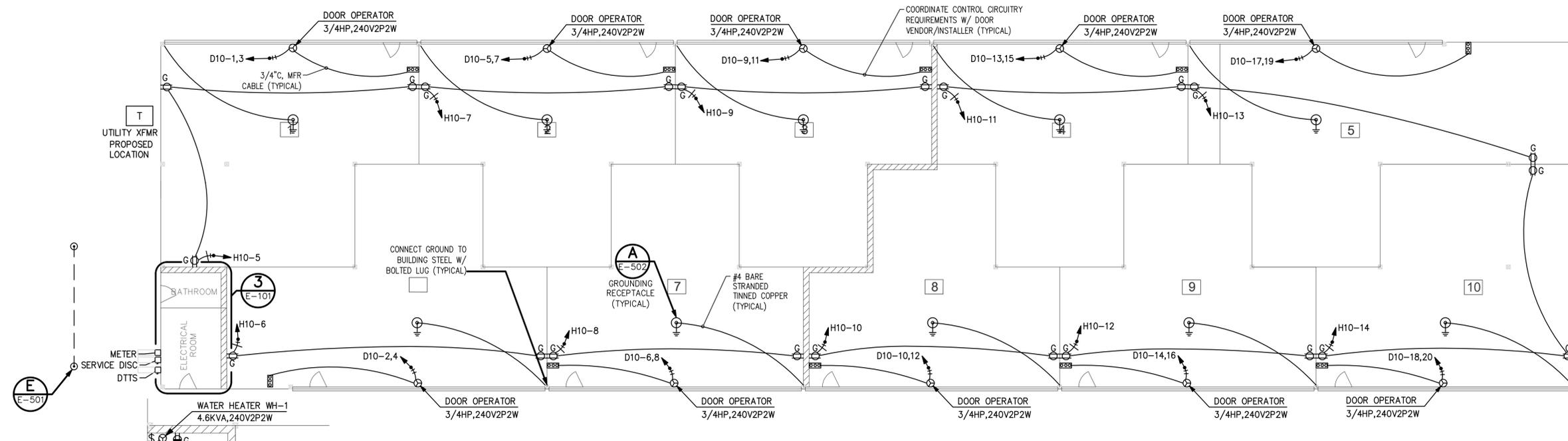
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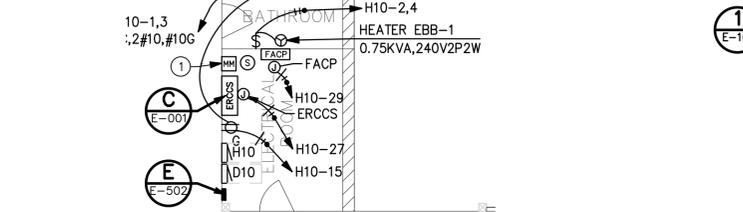
**ELECTRICAL  
PLANS**

SHEET NUMBER

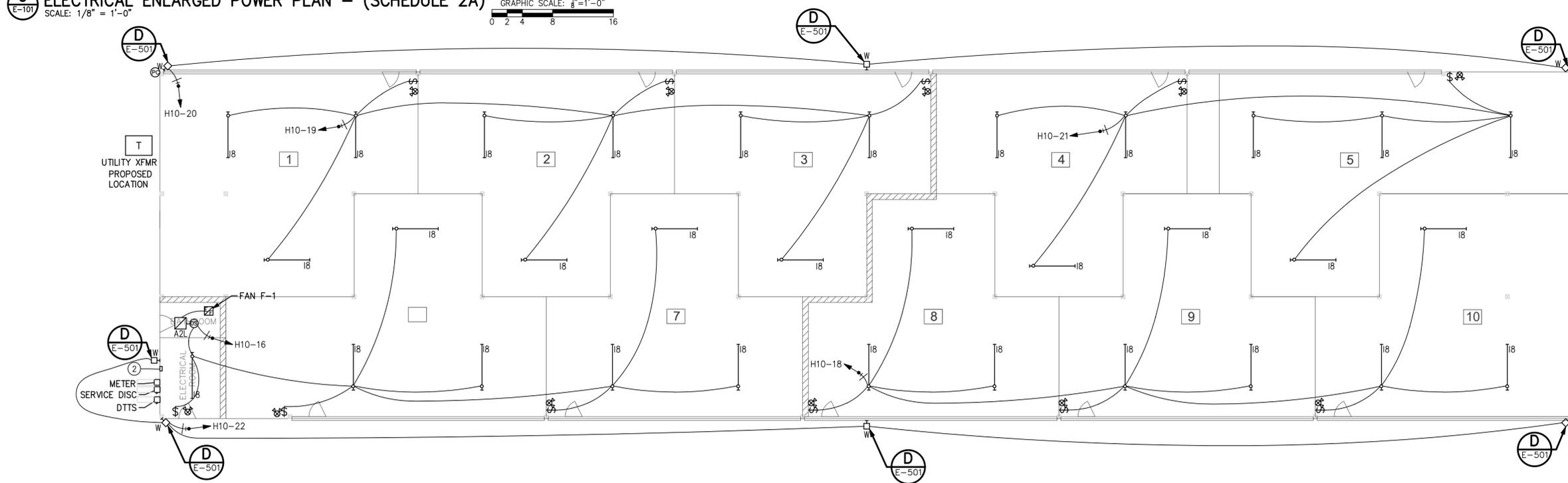
**E-101**



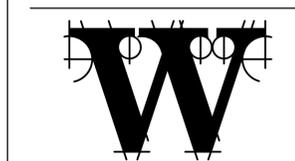
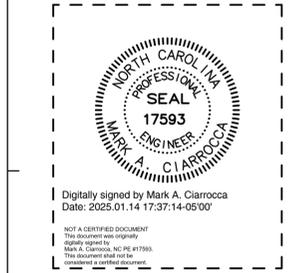
**1** ELECTRICAL POWER AND AUXILIARY SYSTEMS PLAN - (SCHEDULE 2A)  
SCALE: 3/32" = 1'-0"



**3** ELECTRICAL ENLARGED POWER PLAN - (SCHEDULE 2A)  
SCALE: 1/8" = 1'-0"



**2** ELECTRICAL LIGHTING PLAN - (SCHEDULE 2A)  
SCALE: 3/32" = 1'-0"



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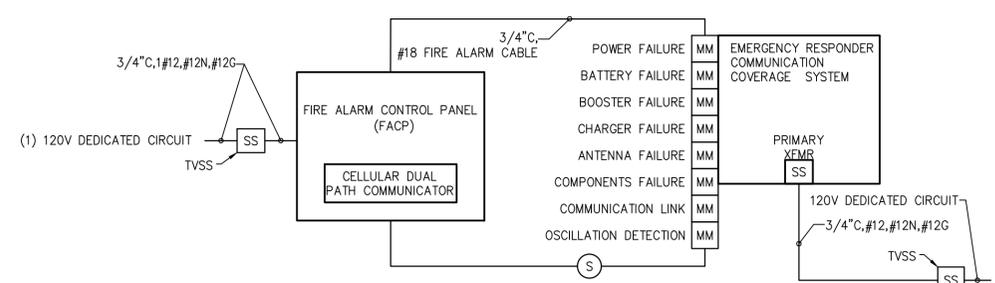
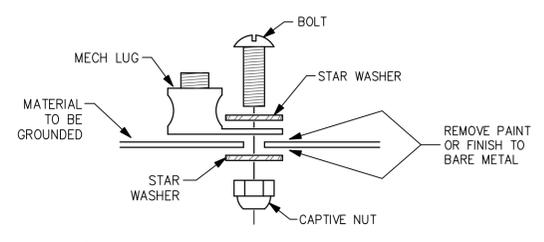
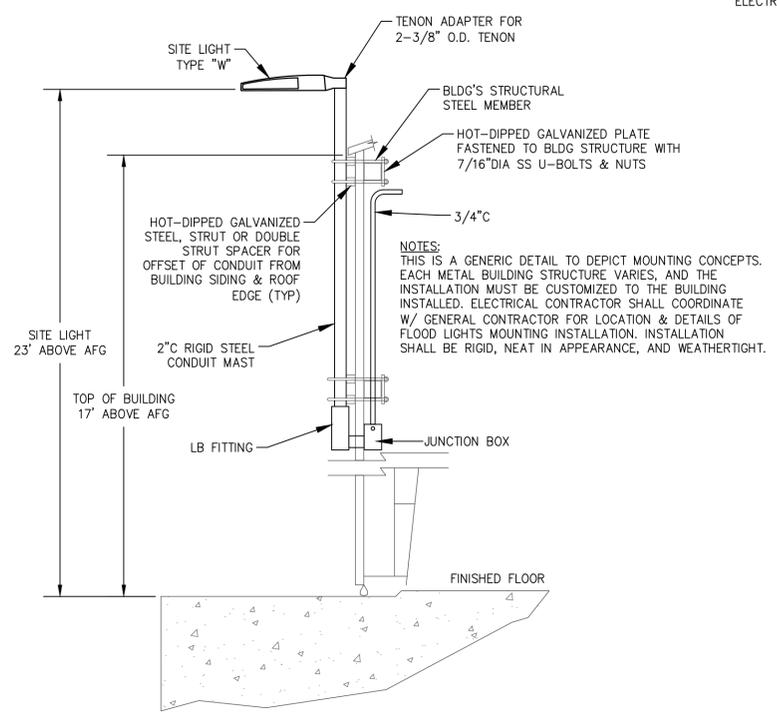
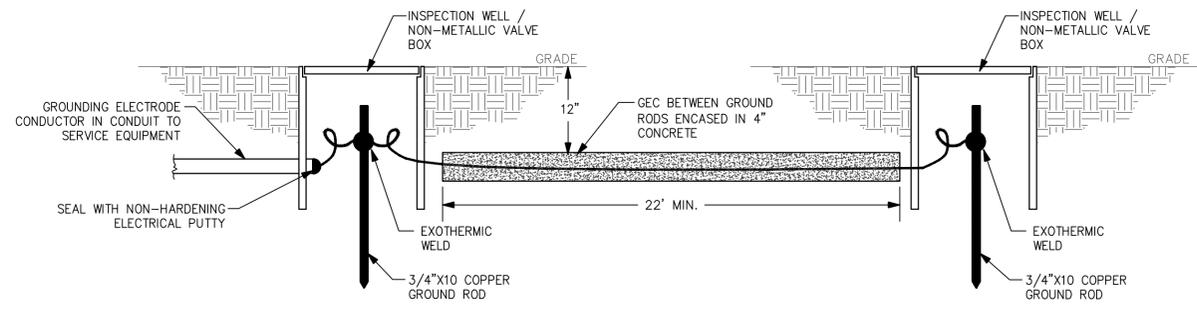
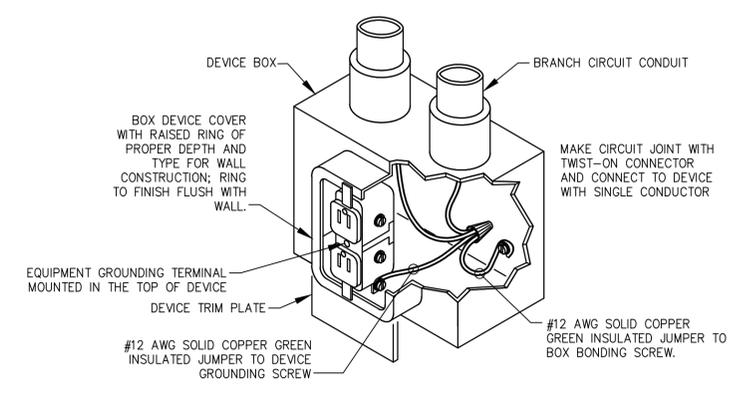
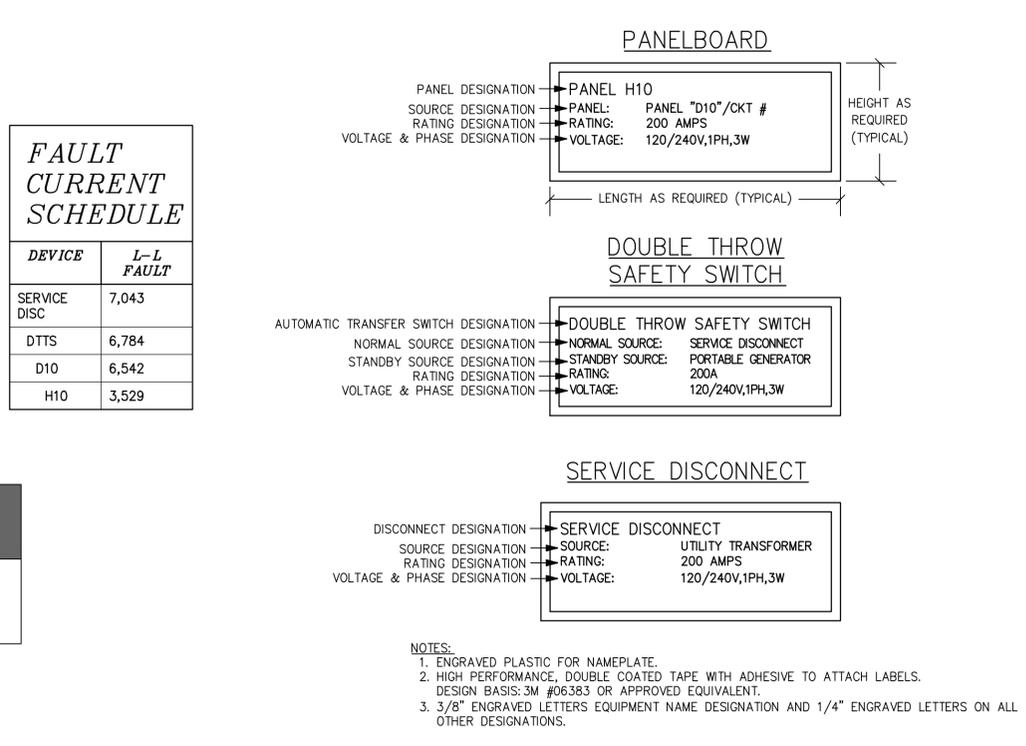
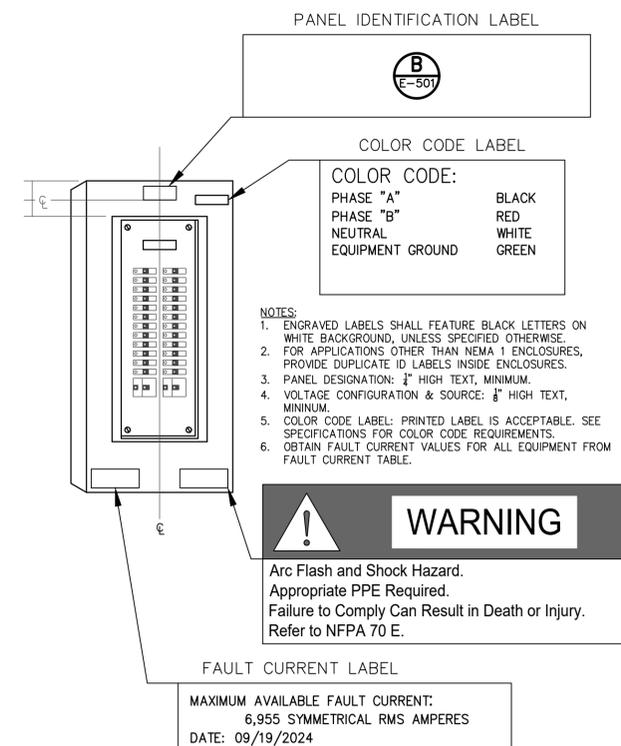
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REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

**ELECTRICAL  
DETAILS**

SHEET NUMBER  
**E-501**



FIRE ALARM OPERATION MATRIX	ALARM TROUBLE SUPERVISORY						
	A	B	C	D	E	F	G
SYSTEM INPUTS							
1 SMOKE DETECTOR	X	X					1
2 FIRE ALARM SYSTEM LOW BATTERY			X	X			2
3 OPEN CIRCUIT			X	X			3
4 NOTIFICATION CIRCUIT FAULT			X	X			4
5 GROUND FAULT			X	X			5
6 FIRE ALARM SYSTEM POWER FAILURE (60 MINUTES)			X	X			6
7 ERCCS ANTENNA MALFUNCTION					X	X	7
8 ERCCS BDA FAILURE					X	X	8
9 ERCCS LOW BATTERY					X	X	9
10 ERCCS AC POWER LOSS					X	X	10
11 ERCCS SYSTEM COMPONENTS FAILURE					X	X	11
12 ERCCS BATTERY CHARGER FAILURE					X	X	12
13 ERCCS COMMUNICATION LINK TO FACP					X	X	13
14 ERCCS OSCILLATION DETECTION					X	X	14



Digitally signed by Mark A. Ciarrocca  
Date: 2025.01.14 17:37:15-05'00'

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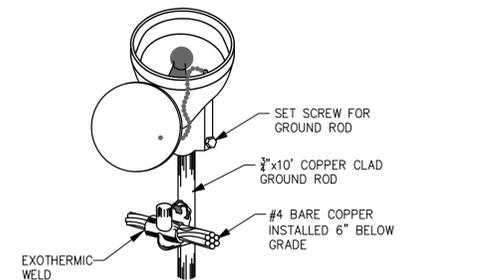
REVISIONS

DATE 01/17/2025  
PROJECT NUMBER 3105-2401  
SHEET TITLE

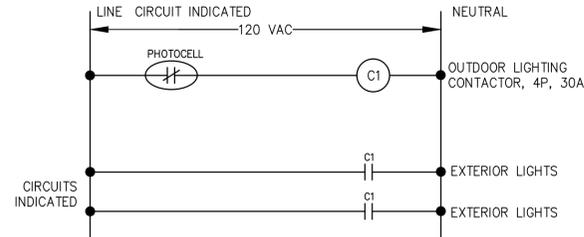
**ELECTRICAL  
DETAILS**

SHEET NUMBER

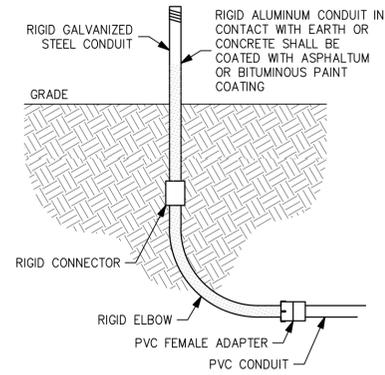
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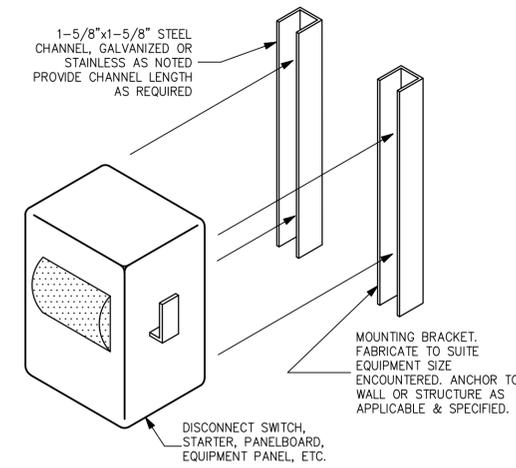
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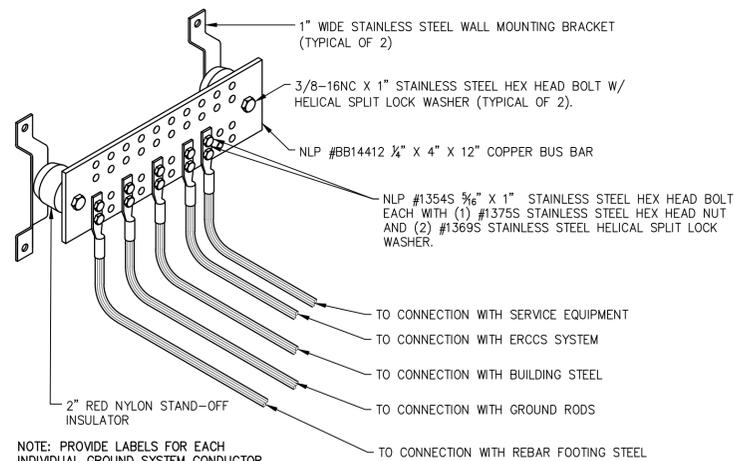
**B LIGHTING CONTROL SCHEMATIC**  
NO SCALE



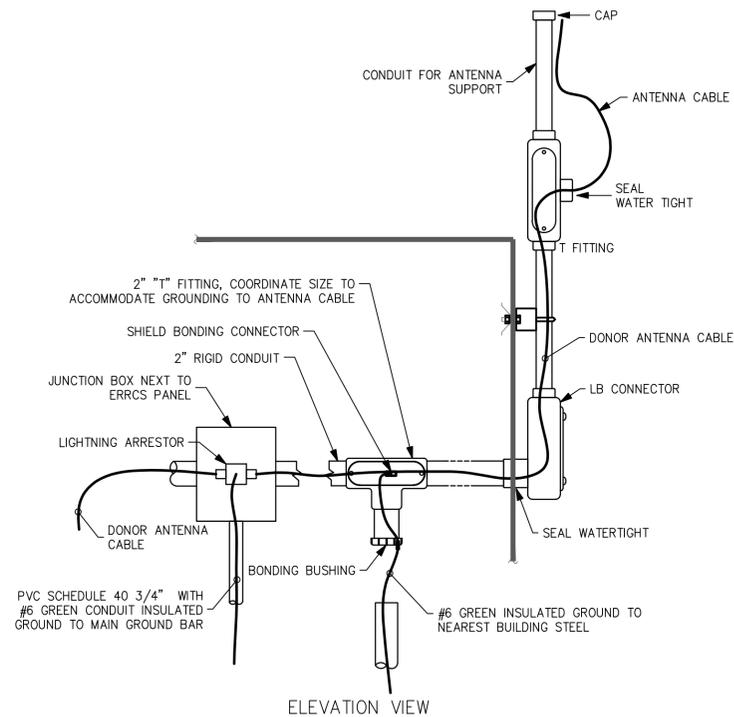
**C CONDUIT STUB-UP**  
NO SCALE



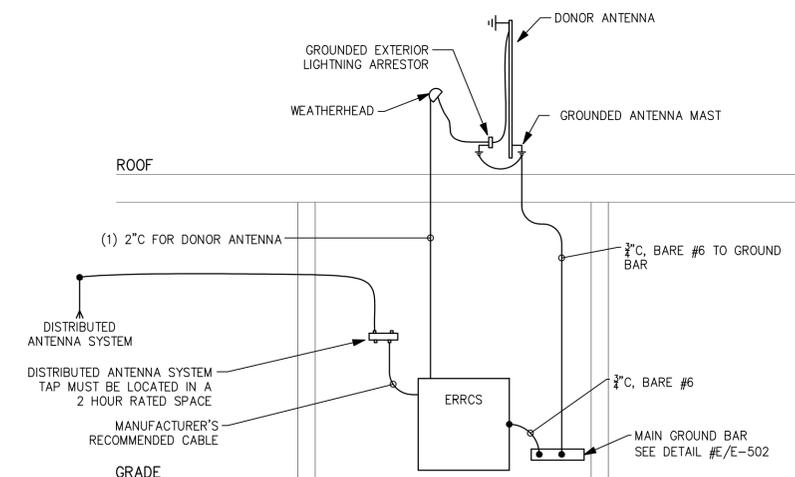
**D EQUIPMENT MOUNTING DETAIL**  
NO SCALE



**E MAIN GROUND BAR**  
NO SCALE



**F ERCCS ANTENNA MAST MOUNTING DETAIL**  
NO SCALE



**G ERCCS COMMUNICATIONS RISER**  
NO SCALE

**WARNING**

Maximum Available Fault Current:  
3,529 Symmetrical RMS Amperes

Date: 01/08/2025

Based on:

- Utility Transformer: 25 kVA (Maximum)
- Utility Transformer: 1.5% Impedance (Minimum)
- Service Feeder: #3/0 (Maximum) Copper
- Service Feeder Length: 15' (Minimum)
- Motor Load: 6 kVA (Maximum)

**H FAULT CURRENT LABEL FOR SERVICE EQUIPMENT**  
NO SCALE

