

# GEORGETOWN COUNTY AIRPORT

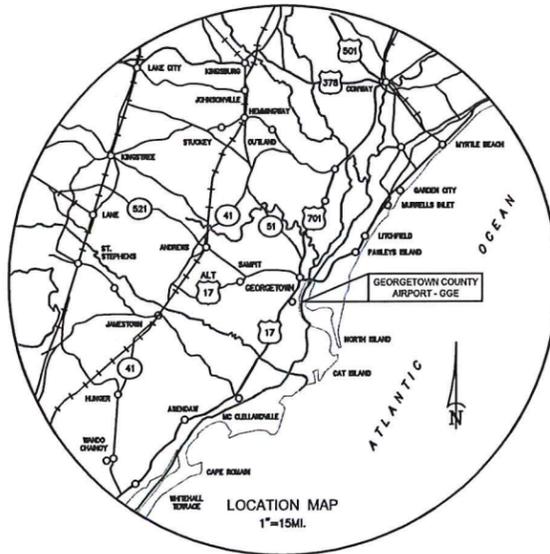
GEORGETOWN, SOUTH CAROLINA

CONSTRUCTION DRAWINGS FOR

## APRON EXPANSION (PHASE IV)

AIP NO. 3-45-0024-019

BID NO. 18-040



LOCATION MAP

PLAN	TITLE OF DRAWING	DATE
A1.1	COVER SHEET	JANUARY 2018
A1.2	PROJECT LAYOUT AND SAFETY PLAN	JANUARY 2018
A1.3	PHASING PLAN	JANUARY 2018
S1.1	SURVEY LAYOUT PLAN	JANUARY 2018
EX1.1	EXISTING CONDITIONS AND REMOVAL PLAN	JANUARY 2018
G1.1	GRADING AND PAVING PLAN	JANUARY 2018
D1.1	TYPICAL SECTIONS AND PAVING DETAILS	JANUARY 2018
EC1.1	SEDIMENTATION AND EROSION CONTROL PLAN	JANUARY 2018
EC1.2	EROSION CONTROL NOTES AND DETAILS	JANUARY 2018
EC1.3	EROSION CONTROL DETAILS	JANUARY 2018
M1.1	MARKING PLAN AND MISCELLANEOUS DETAILS	JANUARY 2018
X1.1	CROSS SECTIONS	JANUARY 2018

**TALBERT & BRIGHT**  
ENGINEERING & PLANNING CONSULTANTS  
WILMINGTON, NC 28405  
PHONE: 910-763-5550  
FAX: 910-762-6281  
4810 SHELLEY DRIVE  
SC LICENSE NO. C00386  
EMAIL: TBILLM@TBLI.COM

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. REPRODUCTION, COPY OR USE OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
TALBERT & BRIGHT, INC.  
© 2018

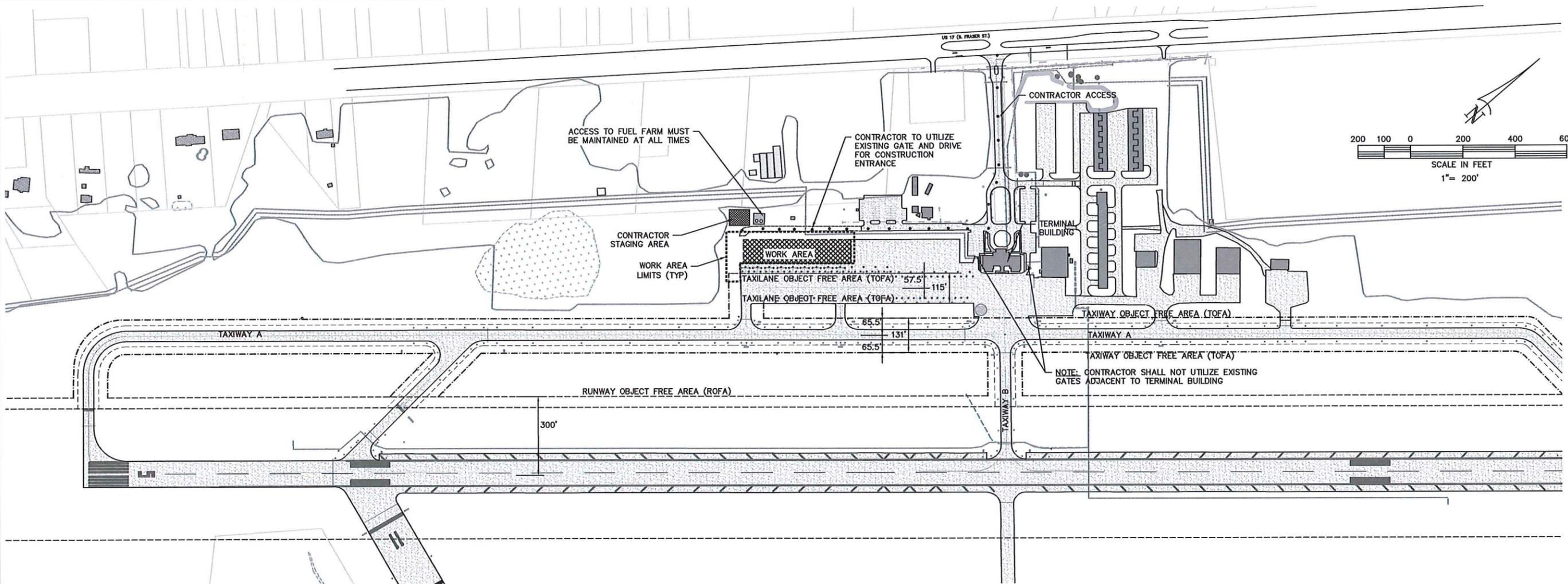
REV. NO.	DESCRIPTION	DATE

GEORGETOWN COUNTY AIRPORT  
GEORGETOWN, SOUTH CAROLINA  
APRON EXPANSION (PHASE IV)  
COVER SHEET



Date: JANUARY 2018  
Scale: NONE  
Drawn: JDL  
Checked: AMS  
Project No. 2601-1702  
Sheet No.

A1.1



**SAFETY PLAN REQUIREMENTS**

THE INTENT OF THIS PLAN IS TO ESTABLISH CERTAIN SAFETY REQUIREMENTS THAT MUST BE ADHERED TO BY THE CONTRACTOR DURING CONSTRUCTION OF THIS PROJECT. A SECTION OF THE APRON WILL BE CLOSED TO AIR TRAFFIC ON AN INTERMITTENT BASIS TO FACILITATE CONSTRUCTION DURING THIS PROJECT. TAXIWAY 'A' AND RUNWAY 5-23 SHALL REMAIN OPEN AT ALL TIMES. THE AIRPORT WILL REMAIN OPEN TO AIR TRAFFIC AT ALL TIMES. SEE SEQUENCE OF CONSTRUCTION ON SHEETS A1.3.

- THE PROJECT AREA IS LOCATED WITHIN THE AIRCRAFT OPERATIONS AREA (AOA). THIS IS A CLOSELY MAINTAINED SECURITY AREA WITH RESTRICTED ACCESS. THE CONTRACTOR WILL BE REQUIRED TO MEET ALL REQUIREMENTS FOR ENTERING AND OPERATING IN THIS AREA AT ALL TIMES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH ALL REQUIREMENTS FOR ENTERING AND OPERATING IN THE AOA. FURTHER, IT WILL REMAIN THE CONTRACTOR'S RESPONSIBILITY TO KEEP HIMSELF ADVISED OF ANY CHANGES IN REQUIREMENTS, TO ADHERE TO CURRENT REGULATIONS. CONTRACTOR SHALL ALSO HAVE PERSONNEL TRAINED TO OPERATE AND MONITOR AIRPORT SECURITY GATES USED DURING THE PROJECT.
  - THE CONTRACTOR SHALL NOT BEGIN WORK UNLESS AND UNTIL 72 HOURS PRIOR NOTICE HAS BEEN GIVEN TO THE ENGINEER AND AIRPORT MANAGEMENT. CROSSING OF RUNWAYS OR TAXIWAYS IS ALLOWED ONLY IF THE RUNWAY OR TAXIWAY IS CLOSED. CONTRACTOR IS PROHIBITED FROM ENTERING THE RUNWAY 5-23 SAFETY AREA AT ANY TIME UNLESS THE RUNWAY IS CLOSED. SEE GENERAL NOTE 1.
  - IN AN EMERGENCY SITUATION THE CONTRACTOR SHALL CALL 911 AND NOTIFY THE AIRPORT MANAGEMENT IMMEDIATELY. THE AIRPORT CAN BE REACHED BY PHONE AT 843-545-3638.
  - SEE GENERAL NOTE 4 FOR AIRPORT ENTRY AND DEPARTURE PROCEDURES AND FOR VEHICLE MARKING REQUIREMENTS.
  - THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL DESIGNATE A REPRESENTATIVE AND ALTERNATE TO CONTACT ON A 24 HOUR BASIS SHOULD PROBLEMS ARISE. THE CONTRACTOR SHALL PROVIDE A CONTACT LIST FOR ALL SUPERVISORY PERSONNEL AND ALL SUBCONTRACTORS.
  - A DAILY START-UP AND SHUT-DOWN CHECKLIST WILL BE JOINTLY PREPARED BY THE CONTRACTOR AND AIRPORT MANAGEMENT. THE CHECKLIST WILL BE FOLLOWED THROUGHOUT THE PROJECT. THIS CHECKLIST SHALL INCLUDE, BUT NOT BE LIMITED TO BARRICADES, FLAGS, HAUL ROUTES, SECURING OF ACCESS GATES, CLEAN UP, ETC. THE CONTRACTOR'S SITE SUPERVISOR AND LABOR CREW SHALL NOT LEAVE THE WORK SITE UNTIL SUCH TIME AS THE AIRPORT HAS INSPECTED THE AREA AND SIGNED OFF ON THE DAILY CHECKLIST.
  - UNDERGROUND UTILITIES ARE KNOWN TO BE LOCATED IN THE PROJECT AREAS. EXISTING UNDERGROUND UTILITIES INCLUDING BUT NOT LIMITED TO AIRFIELD LIGHTING AND NAVAID POWER AND CONTROL CABLES AND OTHER UTILITIES MAY BE IN THE PATH OF CONSTRUCTION. LOCATIONS OF UTILITIES IF SHOWN ON THE PLANS ARE APPROXIMATE ONLY. ALL UTILITIES AND FACILITIES ARE NOT NECESSARILY INDICATED ON PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT EXISTING UTILITIES AND FACILITIES FROM DAMAGE. SEE PROJECT SPECIAL PROVISIONS. THE CONTRACTOR SHALL COORDINATE WITH AIRPORT MANAGEMENT WHEN WORKING IN AREAS CONTAINING AIRFIELD LIGHTING OR NAVAID CABLE.
- CONTACTS ARE:  
 AIRPORT MR. RICK WESTFALL 843-545-3638
- FOR ADDITIONAL REQUIREMENTS RELATED TO PROTECTION OF EXISTING UTILITIES, INCLUDING CABLES, CONTROLS, AND NAVAIDS SEE PROJECT SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS IN REGARD TO CONSTRUCTION NOISE AND EROSION CONTROL DURING CONSTRUCTION.
  - THE CONTRACTOR SHALL CLEAN ALL CONSTRUCTION AREAS OF LITTER, LOOSE PAPERS, DEBRIS, ETC. ON A DAILY BASIS, OR AS DIRECTED BY THE ENGINEER. PRIOR TO THE CLOSE OF DAILY OPERATIONS, CONTRACTOR SHALL INSPECT ALL ACTIVE AIR OPERATIONS AREAS AND CONSTRUCTION AREA FOR FOOD AND LITTER. ALL DEBRIS SHALL BE CLEANED UP AND PROPERLY DISPOSED OF PRIOR TO RELEASE OF CREWS FROM EACH SHIFT.
  - MEN, EQUIPMENT OR OTHER CONSTRUCTION-RELATED MATERIAL ARE NOT ALLOWED WITHIN THE RUNWAY OBJECT FREE AREA (ROFA) OF AN OPEN RUNWAY AT ANY TIME UNLESS THE RUNWAY IS CLOSED OR THE TAXIWAY OBJECT FREE AREA (TOFA) UNLESS THE SECTION OF TAXIWAY IS CLOSED (SEE GENERAL NOTE 1). MEN, EQUIPMENT OR OTHER CONSTRUCTION-RELATED MATERIAL WILL NOT BE PERMITTED CLOSER THAN 150 FEET FROM THE EDGE OF THE RUNWAY OR 50 FEET FROM THE EDGE OF ANY TAXIWAY WITHOUT PRIOR PERMISSION FROM THE AIRPORT MANAGEMENT.
  - DURING CONSTRUCTION, ADJACENT TAXIWAYS AND RUNWAY WILL BE OPEN TO AIRCRAFT UNLESS OTHERWISE NOTED. AIRCRAFT HAVE THE RIGHT OF WAY AT ALL TIMES. CONTRACTOR SHALL BE AWARE OF THE AIRCRAFT MOVEMENTS AND THE JETBLAST AND/OR PROP-WASH ASSOCIATED WITH THESE AIRCRAFT. THE CONTRACTOR SHALL SECURE LOOSE ITEMS AT ALL TIMES AND SHALL LOCATE STOCKPILES OF MATERIALS OR EQUIPMENT AWAY FROM AIRCRAFT OPERATION AREAS.
  - INSPECTION - FREQUENT INSPECTIONS WILL BE MADE BY AIRPORT MANAGEMENT DURING CRITICAL PHASES OF THE WORK TO ENSURE THAT THE CONTRACTOR IS FOLLOWING THE RECOMMENDED AIRFIELD SAFETY PROCEDURES.
  - EXCAVATIONS - CONTRACTOR MUST PROMINENTLY MARK OPEN TRENCHES AND EXCAVATIONS AT THE CONSTRUCTION SITE WITH RED OR ORANGE FLAGS, AS APPROVED BY THE AIRPORT, AND BACKFILL OR LIGHT THEM WITH RED LIGHTS DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS. OPEN TRENCHES OR EXCAVATIONS ARE NOT PERMITTED WITHIN 200 FEET OF THE RUNWAY CENTERLINE WHILE THE RUNWAY IS OPEN. IF THE RUNWAY MUST BE OPENED BEFORE EXCAVATIONS ARE BACKFILLED, COVER OR BACKFILL THE EXCAVATIONS APPROPRIATELY. COVERINGS FOR OPEN TRENCHES OR EXCAVATIONS MUST BE OF SUFFICIENT STRENGTH TO SUPPORT THE WEIGHT OF THE HEAVIEST AIRCRAFT OPERATING ON THE RUNWAY.
  - ALL AIRFIELD LIGHTING AND LIGHTED SIGNS OUTSIDE AREAS CLOSED FOR CONSTRUCTION SHALL BE KEPT OPERATIONAL THROUGHOUT THE DURATION OF THE PROJECT.
  - NO WORK OR CONSTRUCTION ACTIVITY IS ALLOWED WITHIN THE RUNWAY OBJECT FREE AREA OF AN ACTIVE RUNWAY OR TAXIWAY OBJECT FREE AREA OF AN ACTIVE TAXIWAY. ANY WORK WITHIN AN ACTIVE RUNWAY OBJECT FREE AREA WILL REQUIRE CLOSURE OF THE RUNWAY. NO WORK OR CONSTRUCTION ACTIVITY IS ALLOWED WITHIN THE TAXIWAY OBJECT FREE AREA. ANY WORK WITHIN A TAXIWAY OBJECT FREE AREA WILL REQUIRE CLOSURE OF THE EFFECTED SECTION OF TAXIWAY. PULLBACKS FOR MEN AND EQUIPMENT WITHIN THE RUNWAY OBJECT FREE AREA WILL NOT BE ALLOWED (SEE GENERAL NOTE 1).

**GENERAL NOTES:**

- IT IS THE INTENT OF THE OWNER THAT THE GEORGETOWN COUNTY AIRPORT WILL REMAIN OPEN TO AIR TRAFFIC AT ALL TIMES. RUNWAY 5-23 OR TAXIWAY 'A' SHALL NOT BE CLOSED. CONTRACTOR SHALL PROVIDE A MINIMUM 7 BUSINESS DAYS NOTICE TO AIRPORT MANAGEMENT AND ENGINEER PRIOR TO THE PROPOSED APRON AREA CLOSURE DATE. PRIOR TO REOPENING THE APRON, CONTRACTOR MUST REMOVE BARRICADES AND PERFORM A WALK THROUGH OF THE CONSTRUCTION AREA WITH AIRPORT MANAGEMENT, THE RESIDENT PROJECT REPRESENTATIVE, AND ENGINEER TO CONFIRM THAT THE APRON AND SAFETY AREAS ARE FREE OF FOOD OR OTHER HAZARDS.
- PRIOR TO LEAVING WORK EACH DAY, CONTRACTOR SHALL RETURN HIS EQUIPMENT AND MATERIALS TO THE STAGING AREA IDENTIFIED ON THE PLANS.
- ALL CONTRACTOR PERSONNEL, INCLUDING BUT NOT LIMITED TO, GENERAL LABORERS, SUBCONTRACTORS, DRIVERS, AND JOURNEYMEN WORKING WITHIN ACTIVE AIR OPERATIONS AREAS MUST AT ALL TIMES REMAIN WITHIN VISUAL AND VOICE RANGE OF CONTRACTOR SUPERVISORY PERSONNEL FOR THE PURPOSES OF THIS PROJECT. THE AIR OPERATIONS AREA (AOA) REFERS TO ALL AREAS WITHIN THE AIRPORT SECURITY FENCE.
- PRIOR TO ENTERING THE SECURED AOA OF THE AIRPORT EACH DAY, THE CONTRACTOR SHALL CHECK IN WITH THE AIRPORT. CLOSE COORDINATION FOR ACCESS TO WORK AREAS AND SCHEDULES BETWEEN THE CONTRACTOR, OTHER CONTRACTORS WORKING IN THE PROJECT AREA, AND AIRPORT WILL BE REQUIRED THROUGHOUT THE PROJECT.

THE CONTRACTOR SHALL COORDINATE INGRESS-EGRESS REQUIREMENTS WITH THE AIRPORT MANAGEMENT AND RESIDENT PROJECT REPRESENTATIVE. ALL OPEN GATES TO SECURED AIRPORT AREAS SHALL BE MONITORED CONTINUOUSLY BY CONTRACTOR'S PERSONNEL TO CONTROL ACCESS TO SECURED AREA OR SHALL BE CLOSED AND LOCKED. CONTRACTOR PERSONNEL SHALL NOT ALLOW ANY UNAUTHORIZED PERSONNEL TO ENTER THROUGH THE CONSTRUCTION GATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING AND LOCKING ALL GATES WHEN NOT IN USE AND AT THE END OF EACH DAY'S OPERATIONS. CONTRACTOR SHALL INTERLOCK AT PADLOCKED GATES. CONTRACTOR SHALL PROVIDE A COPY OF ALL GATE KEYS TO THE AIRPORT AND RPR. CONTRACTOR SHALL PROVIDE A LIST OF ALL KEY HOLDERS WHICH SHALL BE KEPT UPDATED THROUGHOUT THE PROJECT.

ALL CONSTRUCTION VEHICLES MUST BE CLEARED FOR ACCESS BY THE AIRPORT MANAGEMENT AND RESIDENT PROJECT REPRESENTATIVE. PERSONAL CARS SHALL BE PARKED IN STAGING AREA. ALL VEHICLES OPERATING IN THE AOA SHALL BE LIGHTED OR FLAGGED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5370-26. COPIES OF THE ADVISORY CIRCULAR WILL BE MADE AVAILABLE UPON REQUEST.

- THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO ASSURE THAT SUCH OPERATIONS DO NOT IMPED ACCESS TO ANY AREA OF THE AIRFIELD AT ANY TIME FOR THE AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) VEHICLES AND OTHER EMERGENCY VEHICLES. EMERGENCY VEHICLE ACCESS SHALL BE A STANDING AGENDA ITEM FOR ALL PROGRESS MEETINGS. THE CONTRACTOR SHALL COOPERATE FULLY AND IMMEDIATELY WITH ANY DIRECTIVES ISSUED BY AIRPORT MANAGEMENT RELATIVE TO EMERGENCY ACCESS.

**NOTAMS (NOTICE TO AIRMEN)**

THE AIRPORT MANAGEMENT WILL ISSUE THE NECESSARY NOTAMS TO REFLECT HAZARDOUS CONDITIONS. IT IS IMPORTANT THAT NOTAMS BE KEPT CURRENT AND REFLECT THE ACTUAL CONDITIONS WITH RESPECT TO CONSTRUCTION SITUATIONS. ACTIVE NOTAMS SHALL BE REVIEWED PERIODICALLY AND REVISED TO REFLECT THE CURRENT CONDITIONS.

- ACCESS ROADS TO BE USED UNDER THIS CONTRACT SHALL BE THOSE DESIGNATED AND APPROVED BY THE ENGINEER. IN GENERAL, THE CONTRACTOR SHALL CONFINED HIS EQUIPMENT AND HAULING WHERE PRACTICAL TO EXISTING ROADS ON THE AIRPORT. IF EXISTING PAVEMENT OR ROAD SURFACE IS DAMAGED BY THE CONTRACTOR'S HAULING OPERATIONS, IT SHALL BE REPAIRED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. HAUL ROADS ACROSS TURFED AREAS SHALL BE REPAIRED, SCARIFIED, SEEDED, MULCHED, AND FERTILIZED AT THE CONTRACTOR'S EXPENSE. METAL TRACK VEHICLES WILL NOT BE PERMITTED TO OPERATE ON OR ACROSS EXISTING PAVEMENT WITHOUT PROTECTIVE MATTING TO PREVENT MARKING OF THE PAVEMENT SURFACE. ACCESS ROADS SHALL BE CONSTRUCTED BY CONTRACTOR AS REQUIRED. ALL COSTS ASSOCIATED WITH SUPPLYING, CONSTRUCTING, MAINTAINING AND RESTORING TEMPORARY HAUL AND ACCESS ROADS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR "MOBILIZATION"
- ALL EXISTING FACILITIES WILL BE CAREFULLY PROTECTED BY THE CONTRACTOR. ANY FACILITIES DAMAGED BY THE CONTRACTOR WILL BE REPAIRED IMMEDIATELY AND RESTORED TO ORIGINAL CONDITION AT CONTRACTOR'S COST.
- CONTRACTOR WILL, BY WATERING, CHEMICALS, VEGETATION, OR OTHER MEANS, PREVENT THE OCCURRENCE OF DUST WHICH WILL BE OBJECTIONABLE TO THE RESIDENTS OF THE AREA OR VIOLATE EXISTING LAWS OR REGULATION OR CAUSE HAZARDS TO AIR TRAFFIC.
- CONTRACTOR MAY ENCOUNTER WET CONDITIONS DURING CONSTRUCTION. ALL COST FOR DETERIORATION IS CONSIDERED INCIDENTAL TO COST OF ITEMS OF WORK BID UPON.
- SEE PROJECT SPECIAL PROVISIONS FOR PROTECTION OF UTILITIES.

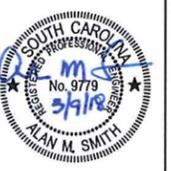
**CONSTRUCTION CONTRACTOR'S RESPONSIBILITIES**

- CONTRACTOR SHALL HAVE AVAILABLE A COPY OF THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) AND PROJECT AIRPORT SAFETY PLAN ON SITE AT ALL TIMES. SEE APPENDIX 'G' OF THE SPECIFICATIONS.
- CONTRACTOR SHALL COMPLY WITH THE AIRPORT SAFETY PLAN ASSOCIATED WITH THE CONSTRUCTION PROJECT AND ENSURE THAT CONSTRUCTION PERSONNEL ARE FAMILIAR WITH SAFETY PROCEDURES AND REGULATIONS ON THE AIRPORT.
- CONTRACTOR SHALL PROVIDE A POINT OF CONTACT WHO WILL COORDINATE AN IMMEDIATE RESPONSE TO CORRECT ANY CONSTRUCTION-RELATED ACTIVITY THAT MAY ADVERSELY AFFECT THE OPERATIONAL SAFETY OF THE AIRPORT.
- CONTRACTOR SHALL PROVIDE A SAFETY/CONSTRUCTION INSPECTOR FAMILIAR WITH AIRPORT SAFETY TO MONITOR CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL RESTRICT MOVEMENT OF CONSTRUCTION VEHICLES TO CONSTRUCTION AREAS BY FLAGGING AND BARRICADING, ERECTING TEMPORARY FENCING, OR PROVIDING FLAGMEN OR ESCORTS AS APPROPRIATE.
- CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION EMPLOYEES, EMPLOYEES OF SUBCONTRACTORS OR SUPPLIERS, OR OTHER PERSONS ENTER ANY PART OF THE ACTIVE AIR OPERATIONS AREAS (AOA) FROM THE CONSTRUCTION SITE UNLESS AUTHORIZED.

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. NO PART OF THIS DRAWING OR THE INFORMATION CONTAINED THEREIN IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN CONSENT OF TALBERT & BRIGHT, INC.  
 © 2018  
 TALBERT & BRIGHT, INC.  
 SC LICENSE NO. C00388

REV. NO.	DESCRIPTION	DATE

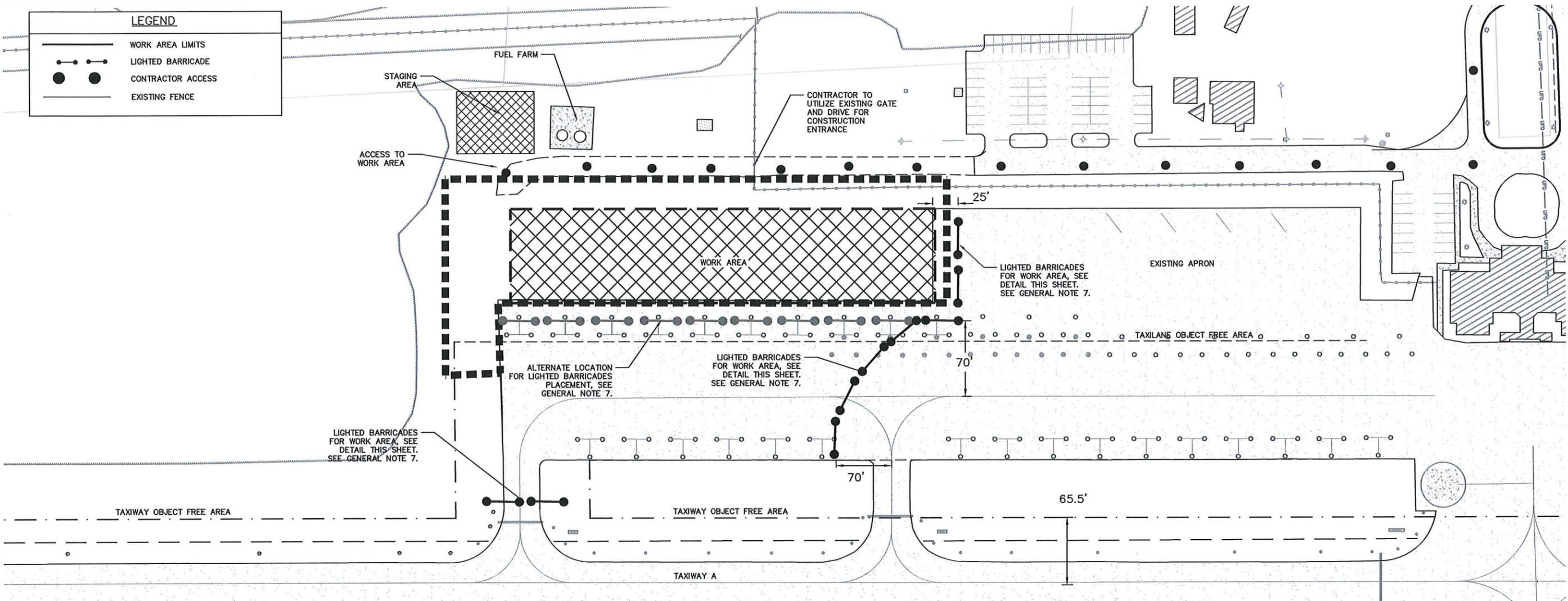
GEORGETOWN COUNTY AIRPORT  
 GEORGETOWN, SOUTH CAROLINA  
 APRON EXPANSION (PHASE IV)  
 PROJECT LAYOUT AND  
 SAFETY PLAN



Date	JANUARY 2018
Scale	1" = 200'
Drawn	BPE/JDL
Checked	AMS
Project No.	2601-1702
Sheet No.	

**LEGEND**

- WORK AREA LIMITS
- LIGHTED BARRICADE
- CONTRACTOR ACCESS
- EXISTING FENCE



THE SEQUENCE OF CONSTRUCTION FOR THIS PROJECT WILL FOLLOW TYPICAL PATTERN FOR PROJECTS OF THIS TYPE, INCLUDING ESTABLISHMENT OF STAGING AREA AND STOCKPILE AREA, INSTALLATION OF APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES, GRADING, PAVING, MARKING, AND SEEDING AND MULCHING.

THE FOLLOWING SEQUENCE OF CONSTRUCTION HAS BEEN DEVELOPED TO HELP THE CONTRACTOR UNDERSTAND THE OPERATIONAL NEEDS OF THE AIRPORT AND HELP ENSURE MINIMAL CLOSURE TIME TO THE APRON AREA. IN ACCORDANCE WITH THE SPECIFICATIONS THE CONTRACTOR SHALL PROVIDE A DETAILED SCHEDULE OF CONSTRUCTION TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. CONTRACTOR HAS 60 CALENDAR DAYS TO COMPLETE ALL WORK.

**PRIOR TO BEGINNING PROJECT AND CONTRACT START TIME**

1. DEVELOP DETAILED SCHEDULE TO ENSURE CONSTRUCTION CAN BE COMPLETED FOR ALL WORK WITHIN CONSTRUCTION TIME ALLOTTED FOR THE PROJECT.
2. CONTRACTOR MAY COMPLETE REQUIRED SURVEY WORK ON PROJECT AREA PRIOR TO CONSTRUCTION START TIME. SCHEDULING FOR THE SURVEY WORK WILL BE REQUIRED TO BE APPROVED BY AIRPORT MANAGEMENT. SEE PROJECT SPECIAL PROVISIONS.

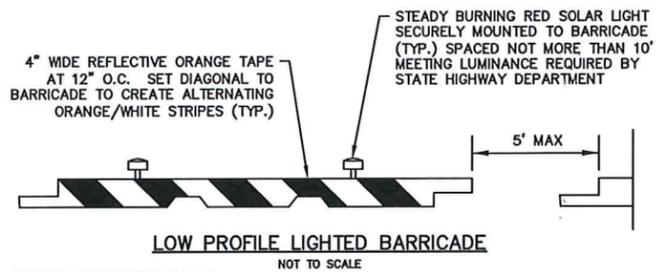
**WORK AREA**

1. MOBILIZE EQUIPMENT AND DEVELOP ACCESS ROAD AS REQUIRED. ESTABLISH STAGING AREA. THE LOCATION OF THE STAGING AREA SHALL BE COORDINATED WITH THE AIRPORT MANAGEMENT.
2. INSTALL LIGHTED BARRICADES AT LOCATIONS SHOWN. CONTRACTOR WILL BE WORKING ADJACENT TO ACTIVE APRON OPERATIONS AREAS AND SHALL UTILIZE CAUTION AS REQUIRED BY THE SAFETY PLAN.
3. INSTALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES.
4. COMPLETE EXCAVATION AND GRADING OPERATIONS AND FINE GRADING APRON SUBGRADE. COMPACT SUBGRADE AS REQUIRED.
5. COMPLETE PLACEMENT, GRADING, AND COMPACTION OF AGGREGATE BASE COURSE.
6. APPLY BITUMINOUS PRIME COAT IN ACCORDANCE WITH SPECIFICATIONS.
7. COMPLETE PAVING OPERATIONS ON THE APRON. PAVEMENT SHALL BE PLACED IN TWO LIFTS INCLUDING 2.5" LIFT (P-401 BITUMINOUS SURFACE COURSE) AND ONE 1.5" LIFT (P-601 FUEL RESISTANT BITUMINOUS SURFACE COURSE).
8. COMPLETE PLACEMENT OF SHOULDER FILL, COMPACT AND FINE GRADE SHOULDERS IN ACCORDANCE WITH DETAILS SHOWN ON THE PLANS.
9. COMPLETE THE FIRST APPLICATION OF PAVEMENT MARKING ON THE APRON. MARKING

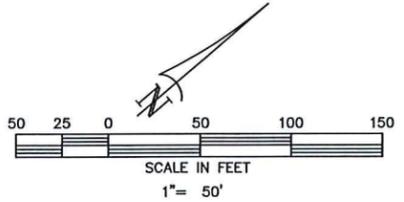
- SHALL BE INSTALLED WITHOUT BEADS.
10. COMPLETE INSTALLATION OF SOD ALONG THE EDGE OF PAVEMENT AND SEEDING AND MULCHING OPERATIONS AS REQUIRED. RESTORE ALL DISTURBED AREAS AND SEED AND MULCH ALL AREAS AS REQUIRED.
  11. REMOVE SILT FENCE ALONG PAVEMENT EDGE. GRADE, SEED, AND MULCH AS REQUIRED.
  12. REMOVE ALL EQUIPMENT, MATERIALS, AND DEBRIS.
  13. REMOVE LIGHTED BARRICADES AND RE-OPEN APRON TO AIR OPERATIONS.
  14. AFTER SPECIFIED WAITING PERIOD, COMPLETE FINAL PAVEMENT MARKING APPLICATION WITH BEADS. CONTRACTOR WILL BE REQUIRED TO CLOSE SECTIONS OF THE APRON DURING MARKING APPLICATION. PLACE LIGHTED BARRICADES AS REQUIRED FOR CLOSING OF APRON AREA AS REQUIRED. REMOVE BARRICADES AFTER MARKING OPERATIONS ARE COMPLETED AND RE-OPEN APRON.

**GENERAL NOTES:**

1. SAFETY REQUIREMENTS AND LIGHTED BARRICADES SHOWN ARE TO BE UTILIZED DURING CONSTRUCTION. LIGHTED BARRICADES SHALL BE INSTALLED, REMOVED, OR RELOCATED AS REQUIRED FOR COMPLIANCE WITH SAFETY PLAN AND PHASING PLANS.
2. DURING WORK OPERATIONS IN PROJECT AREA, TAXIWAY "A" AND NORTHERN APRON AREA SHALL REMAIN OPEN. CONSTRUCTION PERSONNEL AND VEHICLES SHALL NOT ENTER ACTIVE AIR OPERATIONS AREAS WITHOUT PRIOR APPROVAL OF AIRPORT MANAGEMENT.
3. CONTRACTOR ACCESS TO WORK AREA WILL BE ALONG CONTRACTOR ACCESS ROAD AND THE SOUTHWEST END OF THE APRON. TAXIWAY "A" SHALL REMAIN AN ACTIVE AIR OPERATIONS AREA THROUGHOUT THE DURATION OF CONSTRUCTION. AIRCRAFT TRAFFIC SHALL HAVE THE RIGHT OF WAY AT ALL TIMES.
4. TAXILANE ACROSS NORTHERN APRON TO REMAIN OPEN AT ALL TIMES, AS SHOWN. THE NORTHERN PORTION OF THE APRON SHALL REMAIN OPEN AND BE UTILIZED FOR THE PARKING OF AIRCRAFT. CONTRACTOR SHALL UTILIZE EXTREME CAUTION WHEN CROSSING APRON AND APRON TAXILANE. AIRCRAFT SHALL HAVE THE RIGHT OF WAY AT ALL TIMES.
5. SEE SAFETY PLAN REQUIREMENTS, SHEET A1.2, AND PROJECT SPECIAL PROVISIONS FOR OTHER SAFETY RELATED ITEMS.
6. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN A POWER BROOM ON SITE AT ALL TIMES FOR CLEANUP OF SPILLAGE. THE CONTRACTOR SHALL CLOSELY MONITOR ADJACENT ACTIVE AIR OPERATION AREAS FOR SPILLAGE AND/OR DEBRIS. ALL SPILLAGE AND/OR DEBRIS SHALL BE IMMEDIATELY CLEANED UP AND REMOVED FROM THE AIR OPERATIONS AREA.
7. THE CONTRACTOR SHALL INSTALL LIGHTED BARRICADES AS SHOWN. FOR WEEKENDS WHEN CONTRACTOR IS NOT WORKING OR AS REQUESTED BY AIRPORT, THE CONTRACTOR SHALL RELOCATE LIGHTED BARRICADES TO ALTERNATE LOCATION TO OPEN APRON CONNECTOR TAXIWAY AND TO ALLOW AIRCRAFT PARKING ON SOUTHERN EDGE OF APRON. RELOCATION OF THE LIGHTED BARRICADES SHALL BE COORDINATED WITH RPR AND AIRPORT. LIGHTED BARRICADES SHALL BE RETURNED TO ORIGINAL LOCATION WHEN CONTRACTOR IS WORKING OR AS DIRECTED.



- AVIATION BARRICADE NOTES**
1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AVIATION BARRICADES IN SUFFICIENT QUANTITIES TO COMPLETE THE WORK FOR THIS CONTRACT.
  2. LOW PROFILE LIGHTED BARRICADES SHALL BE MULTI-BARRIER AIRPORT RUNWAY BARRICADE AR10X96 AND SOLAR LIGHTS SHALL BE PROVIDED FOR THE BARRICADES AS MANUFACTURED BY OFF THE WALL PRODUCTS, LLC. OR APPROVED EQUAL. THE CONTRACTOR SHALL PROVIDE WATER NECESSARY TO FILL THE BARRICADES AND ENSURE ADEQUATE WATER HAS BEEN PROVIDED TO ANCHOR THE BARRICADES IN PLACE.
  3. CONTRACTOR SHALL CHECK LIGHTS DAILY TO VERIFY THAT THEY ARE IN WORKING CONDITION AND SHALL REPLACE LIGHTS AS REQUIRED.
  4. CONTRACTOR SHALL INSTALL BARRICADES AT LOCATIONS SHOWN ON INDIVIDUAL PLAN SHEETS. BARRICADES SHALL BE MOVED AND RELOCATED AS REQUIRED. BARRICADES SHALL BE INSTALLED WITH MAXIMUM 5' SPACE BETWEEN BARRICADE AND CONTRACTOR SHALL LEAVE ONE 15' SPACE FOR EMERGENCY VEHICLES. PROVIDE HOLD DOWN AND LATERAL SUPPORT TO PREVENT OVERTURNING FROM PROP WASH AND JET BLAST.



**TALBERT & BRIGHT**  
ENGINEERING & PLANNING CONSULTANTS  
4810 SHELLEY DRIVE  
WILMINGTON, NC 28405  
PHONE: 910-763-5350  
FAX: 910-762-6281  
EMAIL: TBILL@TB&B.COM  
SC LICENSE NO. 000386

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. THE USER OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
TALBERT & BRIGHT, INC.  
© 2018

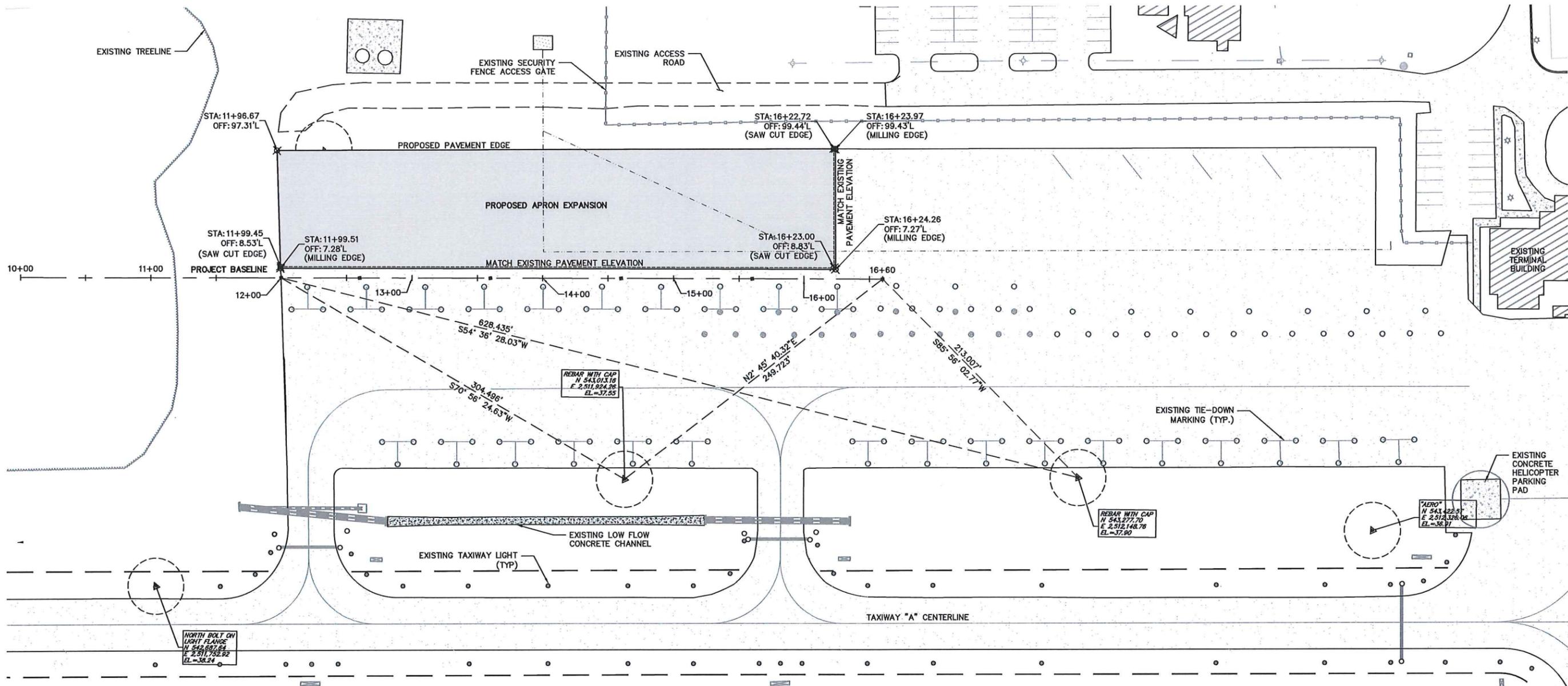
REV. NO.	DESCRIPTION	DATE

GEORGETOWN COUNTY AIRPORT  
GEORGETOWN, SOUTH CAROLINA  
APRON EXPANSION (PHASE IV)  
**PHASING PLAN**



Date	JANUARY 2018
Scale	1" = 50'
Drawn	BPE/JDL
Checked	AMS
Project No.	2601-1702
Sheet No.	

A1.3



**GENERAL NOTES:**

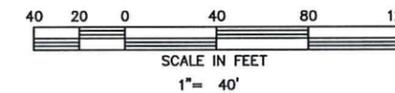
- PROJECT BASE MAPPING AND CONTROL FROM CUNNINGHAM LAND SURVEYING, LLC SURVEY DATED OCTOBER 24, 2017.
- THIS PROPERTY IS LOCATED IN FLOOD ZONE X, PER F.I.R.M. COMMUNITY PANEL 4500B5 0379 D, REVISED MARCH 16, 1989.

**LAYOUT PLAN NOTES:**

- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING VERTICAL AND HORIZONTAL CONTROL FOR THE PROJECT. BENCHMARKS AND CONTROL POINTS ARE AS SHOWN ON THIS SHEET. CONTRACTOR SHALL PROVIDE ADDITIONAL TEMPORARY BENCH MARKS FOR CONTROL OF CONSTRUCTION ACTIVITIES IF REQUIRED. CONTRACTOR SHALL COMPLETE NECESSARY LEVEL LOOPS TO VERIFY ACCURACY OF INSTALLED BENCH MARKS.
- FOR SEQUENCE OF CONSTRUCTION, SEE SHEETS A1.3.

**HORIZONTAL AND VERTICAL CONTROL NOTES**

- CONTRACTOR SHALL USE SOUTH CAROLINA GEODETIC SURVEY MONUMENT "USC & GS AERO AS MK 3" AS PRIMARY CONTROL POINT FOR THE PROJECT.
- ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM 1983.
- ELEVATIONS SHOWN HEREON BASED ON VERTICAL DATUM NAVD '88.
- COORDINATE VALUES ARE SC GRID LOCALIZED ABOUT SCGS MONUMENT "USC & GS AERO AS MK 3". THE COMBINED FACTOR IS 0.99981317.
- ALL DISTANCES ARE HORIZONTAL GROUND IN U.S. SURVEY FEET UNLESS OTHERWISE SHOWN.



LEGEND	
	EXISTING CONCRETE PAVEMENT
	EXISTING BITUMINOUS PAVEMENT
	PAVEMENT TO BE MILLED
	EXISTING CONTOUR
	EXISTING TREELINE
	EXISTING DRAINAGE DITCH/SWALE
	EXISTING MANHOLE
	EXISTING DROP INLET
	EXISTING SECURITY FENCE
	EXISTING TAXIWAY CIRCUIT
	EXISTING TAXIWAY LIGHT (BASE MOUNTED)
	EXISTING ELECTRICAL DUCT
	EXISTING LIGHTED SIGN
	EXISTING STORM DRAIN
	EXISTING LIGHTING CONDUIT
	APPROXIMATE BORING LOCATION
	WORK AREA LIMITS
	EXISTING AIRCRAFT TIE DOWNS

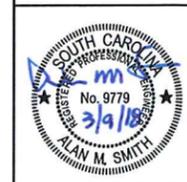


**TALBERT & BRIGHT**  
ENGINEERING & PLANNING CONSULTANTS  
4810 SHELLEY DRIVE  
WILMINGTON, NC 28405  
PHONE: 910-762-5350  
FAX: 910-762-6281  
EMAIL: TBILLMOT@TALB.COM  
SC LICENSE NO. C00386

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. NO REUSE OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
TALBERT & BRIGHT, INC.  
© 2018

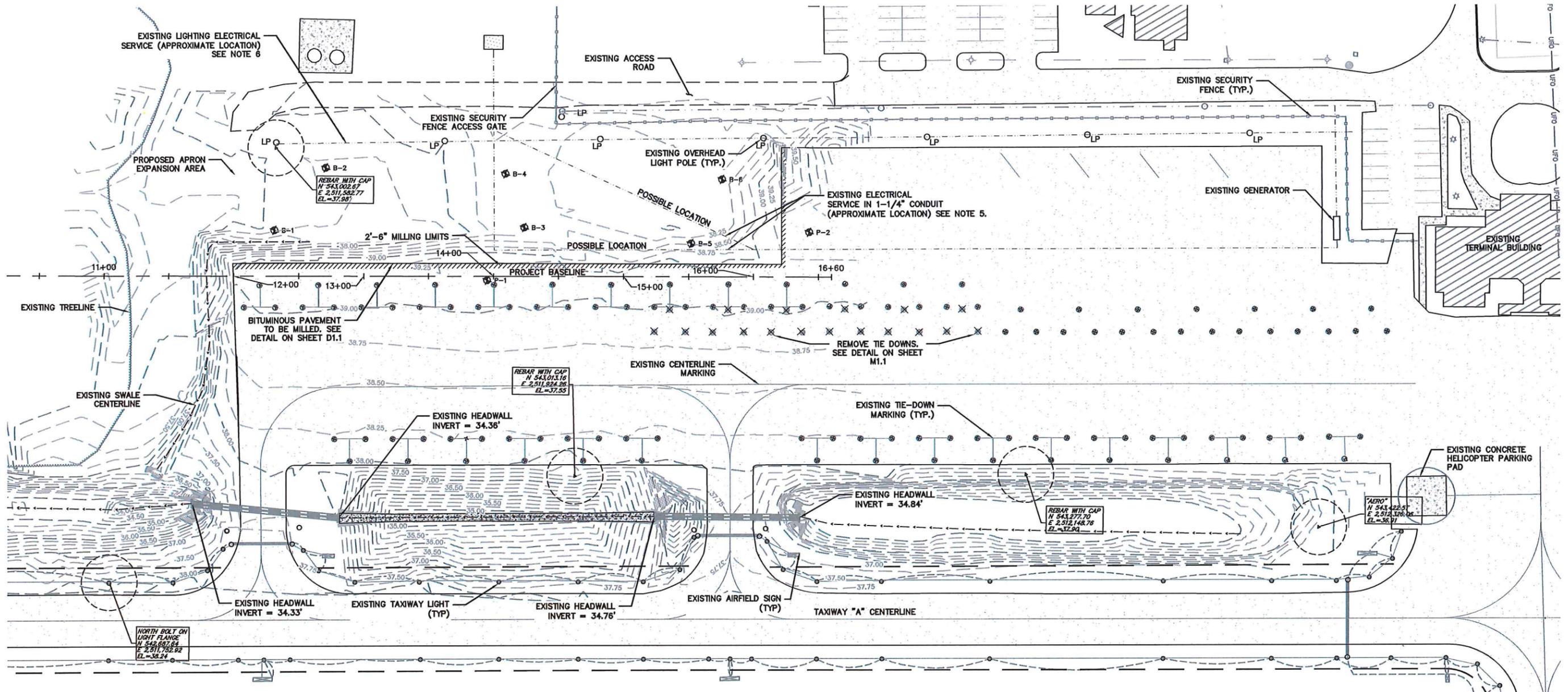
REV. NO.	DESCRIPTION	DATE

GEORGETOWN COUNTY AIRPORT  
GEORGETOWN, SOUTH CAROLINA  
APRON EXPANSION (PHASE IV)  
SURVEY LAYOUT PLAN



Date: JANUARY 2018  
Scale: 1" = 40'  
Drawn: JDL  
Checked: AMS  
Project No. 2601-1702  
Sheet No.

S1.1

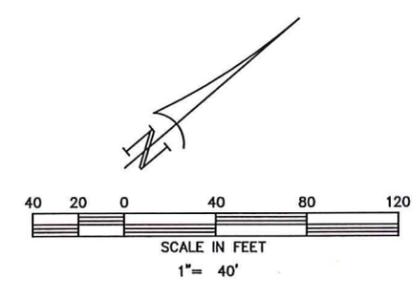


**LEGEND**

- EXISTING CONCRETE PAVEMENT
- EXISTING BITUMINOUS PAVEMENT
- MARKING TO BE REMOVED
- 15.0' EXISTING CONTOUR
- EXISTING TREELINE
- EXISTING DRAINAGE DITCH/SWALE
- EXISTING MANHOLE
- EXISTING DROP INLET
- EXISTING SECURITY FENCE
- EXISTING ELECTRICAL CIRCUIT
- EXISTING TAXIWAY LIGHT (BASE MOUNTED)
- EXISTING ELECTRICAL DUCT
- EXISTING LIGHTED SIGN
- EXISTING STORM DRAIN
- EXISTING LIGHTING CONDUIT
- APPROXIMATE BORING LOCATION
- EXISTING TIE DOWN TO BE REMOVED
- EXISTING TIE DOWN

**GENERAL NOTES:**

1. SEE SHEET S1.1 FOR BENCHMARKS AND CONTROL POINT LOCATIONS.
2. BORING LOGS AND TEST DATA ARE CONTAINED IN APPENDIX "F" OF THE SPECIFICATIONS AND ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL USE DATA AT HIS OWN RISK.
3. FOR SEQUENCE OF CONSTRUCTION SEE SHEETS A1.3.
4. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF EXISTING UNDERGROUND CABLES, DUCTS, AND TAXIWAY LIGHTS TO PREVENT DAMAGE. LOCATIONS SHOWN ARE APPROXIMATE AND ARE BASED ON RECORD INFORMATION. ANY DAMAGE CAUSED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
5. EXISTING ELECTRICAL CONDUIT ENCASED IN CONCRETE UNDER EXISTING APRON. THE CONTRACTOR SHALL LOCATE CONDUIT IN PROJECT AREA BY HAND DIGGING PRIOR TO BEGINNING EXCAVATION OPERATIONS. CONTRACTOR SHALL USE EXTREME CAUTION DURING EXCAVATION OPERATIONS NOT TO DAMAGE EXISTING CONDUIT INSTALLATION ELECTRICAL CONDUIT SHALL REMAIN IN PLACE AND BE CONCRETE ENCASED. SEE DETAIL SHEET D1.1. IF CONDUIT IS DAMAGED, CONTRACTOR SHALL COMPLETE NECESSARY REPAIR AS DIRECTED BY ENGINEER. REPAIRS SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE. COST OF LOCATING CONDUIT, EXCAVATION, CONCRETE ENCASEMENT AND BACKFILL SHALL BE PAID FOR UNDER ITEM "CONCRETE ENCASEMENT FOR 1 1/2" CONDUIT."
6. THE CONTRACTOR SHALL LOCATE EXISTING LIGHTING SERVICE AND PROTECT DURING CONSTRUCTION. IF THE SERVICE IS DAMAGED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL COMPLETE NECESSARY REPAIR AS DIRECTED BY ENGINEER. REPAIRS SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.



**TALBERT & BRIGHT**  
 ENGINEERING & PLANNING CONSULTANTS  
 WILMINGTON, NC 28405  
 4810 SHELLEY DRIVE  
 PHONE: 910-785-3350  
 FAX: 910-782-8281  
 EMAIL: TB@TALBERTBRIGHT.COM  
 SC LICENSE NO. C00386

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. THE USER OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
 TALBERT & BRIGHT, INC.  
 © 2018

REV. NO.	DESCRIPTION	DATE

GEORGETOWN COUNTY AIRPORT  
 GEORGETOWN, SOUTH CAROLINA  
 APRON EXPANSION (PHASE IV)  
**EXISTING CONDITIONS AND  
 REMOVAL PLAN**

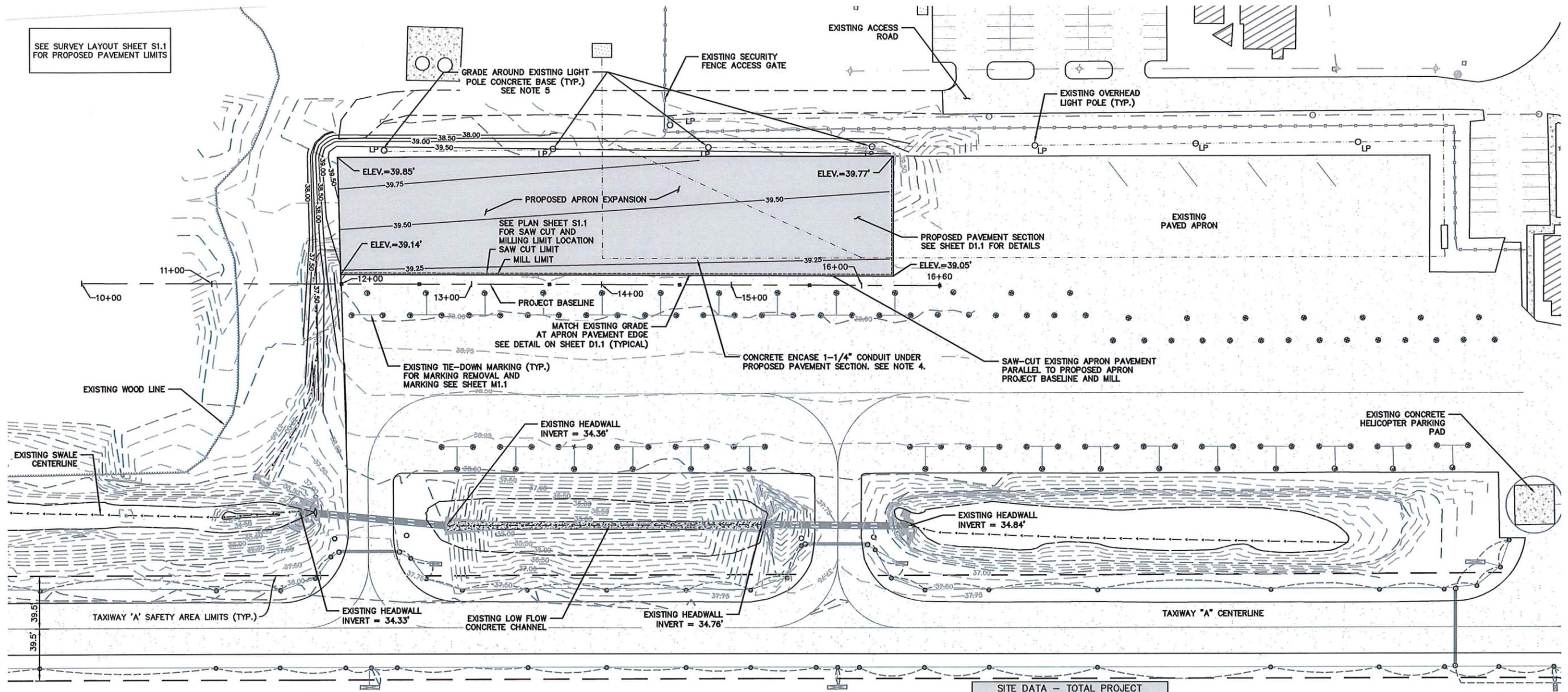


Date	JANUARY 2018
Scale	1" = 40'
Drawn	JDL
Checked	AMS
Project No.	2601-1702
Sheet No.	

**EX1.1**



SEE SURVEY LAYOUT SHEET S1.1 FOR PROPOSED PAVEMENT LIMITS



NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR COMPLETION OF AS-BUILT SURVEY. SEE SECTION PSP-20 OF THE PROJECT SPECIFICATIONS FOR AS-BUILT SURVEY REQUIREMENTS.
2. THE MODIFICATION OF THE EXISTING DRY DETENTION POND WAS DESIGNED TO ACCOMMODATE THIS CURRENT PROJECT IMPERVIOUS AREA.

NOTES:

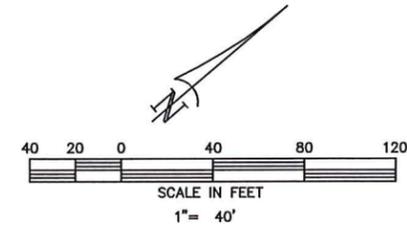
1. PROPOSED CONTOURS SHOWN ON THIS SHEET ARE THE FINISHED GRADE CONTOURS AFTER COMPLETION OF ALL PAVING.
2. FOR TYPICAL PAVEMENT SECTION AND DETAILS SEE SHEET D1.1.
3. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH FOR ALL CONDUITS AND ELECTRICAL SERVICES PRIOR TO BEGINNING EXCAVATION OPERATIONS. FIELD VERIFICATION SHALL BE INCLUDED UNDER ITEM "CONCRETE ENCASEMENT FOR 1 1/4\" CONDUIT."
4. CONTRACTOR SHALL LOCATE EXISTING CONDUIT BY HAND DIGGING PRIOR TO BEGINNING EXCAVATION OPERATIONS. CONTRACTOR SHALL USE EXTREME CAUTION DURING EXCAVATION OPERATIONS SO AS TO NOT DAMAGE EXISTING CONDUIT INSTALLATION. ELECTRICAL CONDUIT SHALL REMAIN IN PLACE AND BE CONCRETE ENCASED. SEE DETAIL SHEET D1.1. IF CONDUIT IS DAMAGED, CONTRACTOR SHALL COMPLETE NECESSARY REPAIRS AS DIRECTED BY THE ENGINEER. REPAIRS SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE. COST OF LOCATING CONDUIT, EXCAVATION, CONCRETE ENCASEMENT AND BACKFILL SHALL BE PAID FOR UNDER ITEM "CONCRETE ENCASEMENT FOR 1 1/4\" CONDUIT."
5. CONTRACTOR SHALL USE EXTREME CAUTION DURING GRADING TO NOT DAMAGE LIGHTS BASES OR POLES. IF LIGHT BASES OR POLES ARE DAMAGED, CONTRACTOR SHALL COMPLETE NECESSARY REPAIRS AS DIRECTED BY THE ENGINEER. REPAIRS SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.

SITE DATA - TOTAL PROJECT DRAINAGE AREA	
DRAINAGE AREA =	17.29 AC
TOTAL IMPERVIOUS AREA =	7.49 AC
GRASSED AREA =	9.80 AC
WEIGHTED CN =	65
SOIL =	LAKELAND

SITE DATA - IMPERVIOUS AREA	
BUILDINGS =	0.02 AC
PAVEMENTS =	7.47 AC
SIDEWALKS =	0.00 AC
PADS =	0.00 AC
PONDS =	0.00 AC
TOTAL =	7.49 AC

EXISTING DRY DETENTION BASIN - POND SUMMARY TABLE		
STAGE-STORAGE ELEVATION	ELEVATION	
2-YR STORM =	34.96'	
10-YR STORM =	35.72'	
25-YR STORM =	35.82'	
100-YR STORM =	36.10'	
TOP OF BANK =	38.00'	
EMERGENCY SPILLWAY =	37.00'	
OUTLET STRUCTURE WEIR =	35.30'	
OUTLET STRUCTURE ORIFICE =	31.39'	
BOTTOM OF DRY DETENTION BASIN =	31.39'	

NOTE: ABOVE DATA GENERATED UNDER PREVIOUSLY COMPLETED APRON EXPANSION - PHASE III PROJECT (TBI NO 2601-1502)



LEGEND	
	EXISTING CONCRETE PAVEMENT
	EXISTING BITUMINOUS PAVEMENT
	PROPOSED PAVEMENT
	EXISTING CONTOUR
	EXISTING TREELINE
	EXISTING DRAINAGE DITCH/SWALE
	EXISTING MANHOLE
	EXISTING DROP INLET
	EXISTING SECURITY FENCE
	EXISTING TAXIWAY LIGHT (BASE MOUNTED)
	EXISTING ELECTRICAL DUCT
	EXISTING LIGHTED SIGN
	EXISTING STORM DRAIN
	PROPOSED CONTOUR
	PROPOSED STORM DRAIN



**TALBERT & BRIGHT**  
ENGINEERING & PLANNING CONSULTANTS  
WILMINGTON, NC 28405  
4810 SHELLEY DRIVE  
PHONE: 910-783-5350  
FAX: 910-782-6281  
EMAIL: TBILL@TBILL.COM  
SC LICENSE NO. 000386

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. ANY REPRODUCTION OR USE WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
TALBERT & BRIGHT, INC.  
© 2018

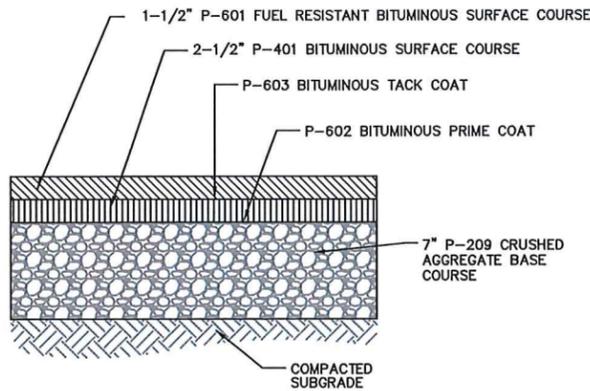
REV. NO.	DESCRIPTION	DATE

GEORGETOWN COUNTY AIRPORT  
GEORGETOWN, SOUTH CAROLINA  
APRON EXPANSION (PHASE IV)  
GRADING AND PAVING PLAN



Date: JANUARY 2018  
Scale: 1" = 40'  
Drawn: JDL  
Checked: AMS  
Project No. 2601-1702  
Sheet No.

G1.1

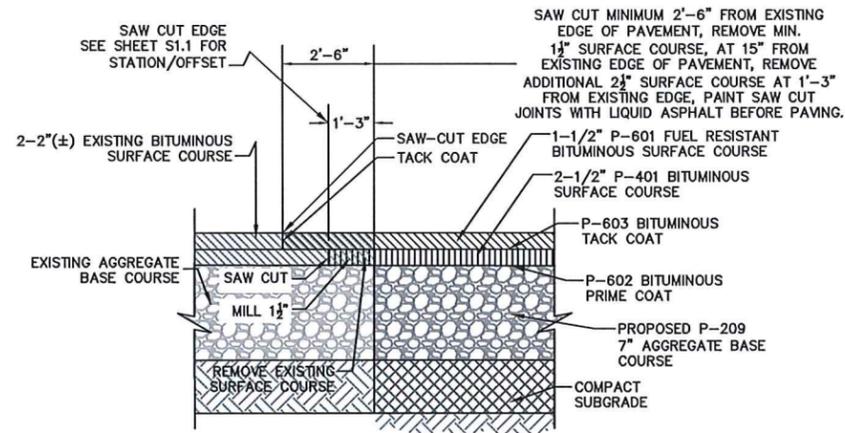


**APRON PAVEMENT SECTION**  
NOT TO SCALE

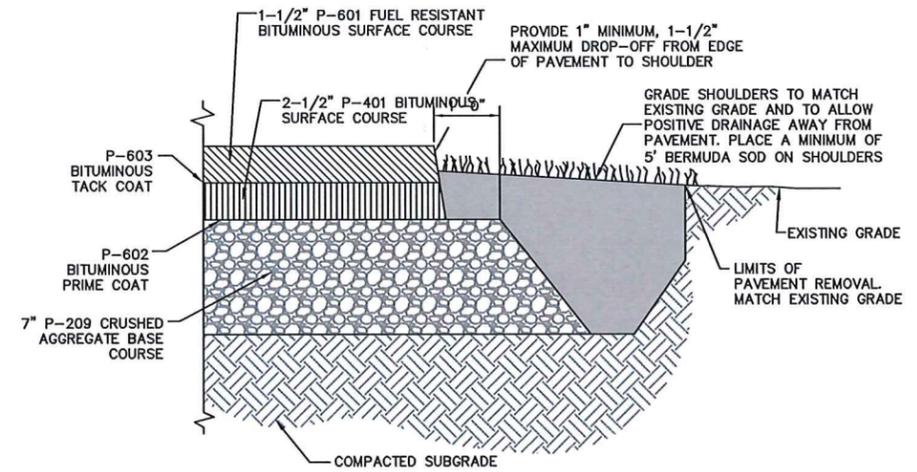
**NOTE:**

WHERE REQUIRED, FILL MATERIAL PLACED UNDER THE PROPOSED PAVEMENT SECTION SHALL BE BORROW EMBANKMENT (P-152) COMPACTED IN ACCORDANCE WITH SPECIFICATION SECTION P-152.

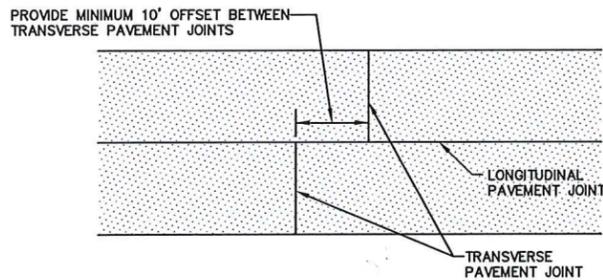
WHERE PAVEMENT SECTION IS CONSTRUCTED DIRECTLY ON EXISTING SUBGRADE, THE EXPOSED SUBGRADE SHALL BE COMPACTED IN ACCORDANCE WITH SPECIFICATION SECTION P-152.



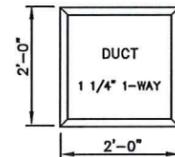
**TYPICAL PAVEMENT TIE-IN DETAIL AT APRON EDGE - 4" (±) OF EXISTING BITUMINOUS**  
NOT TO SCALE



**APRON PAVEMENT EDGE DETAIL**  
NOT TO SCALE

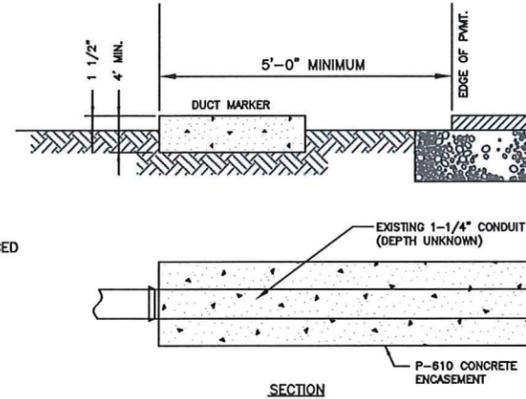


**TRANSVERSE PAVEMENT JOINTS**  
NOT TO SCALE



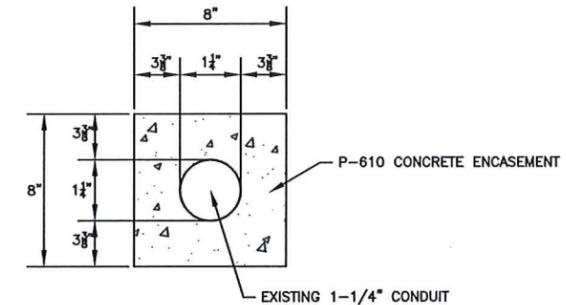
1. MARKER DESIGNATIONS SHALL BE INSCRIBED ON MARKER IN LETTERS 4" HIGH x 3" WIDE WITH 1/2" LINE THICKNESS SPACED 1 1/2" APART IN A MANNER ACCEPTABLE TO THE ENGINEER. SEE ITEM L-108 OF THE SPECS.
2. DUCT MARKER SHOULD INDICATE NUMBER AND SIZE (i.e. 2W-4in.) OF DUCT.
3. ARROWS SHALL BE ADDED, WHEN NECESSARY, TO INDICATE CHANGE OF DIRECTION OF CABLE RUN.

**DUCT MARKER DETAIL**  
NOT TO SCALE



**UNDERGROUND DUCT & MARKER**  
NOT TO SCALE

NOTE: CONTRACTOR SHALL USE EXTREME CAUTION DURING EXCAVATION OPERATIONS TO NOT DAMAGE CONDUIT INSTALLATION. ELECTRICAL CONDUIT SHALL REMAIN IN PLACE AND BE CONCRETE ENCASED. IF CONDUIT IS DAMAGED, CONTRACTOR SHALL COMPLETE NECESSARY REPAIR AS DIRECTED BY ENGINEER. REPAIRS SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.



**CONCRETE ENCASEMENT FOR 1 1/4\"/>**

NOTE: CONCRETE ENCASEMENT OF CONDUIT SHALL BE MEASURED AND PAID FOR ON A LINEAR FOOT BASIS UNDER ITEM "CONCRETE ENCASEMENT FOR 1 1/4" CONDUIT" INCLUDING CONDUIT LOCATING, EXCAVATION, CONDUIT ENCASEMENT AND BACKFILL. THIS PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS AND FOR ALL PREPARATION, DELIVERY AND INSTALLATION OF THESE MATERIALS AND FOR ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

**LEGEND**

	P-601 FUEL RESISTANT BITUMINOUS SURFACE COURSE
	P-401 BITUMINOUS PAVEMENT
	P-209 CRUSHED AGGREGATE BASE COURSE
	SHOULDER GRADING
	EXISTING SUBGRADE

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. THE REUSE OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
TALBERT & BRIGHT, INC.  
© 2018

REV. NO.	DESCRIPTION	DATE

GEORGETOWN COUNTY AIRPORT  
GEORGETOWN, SOUTH CAROLINA  
APRON EXPANSION (PHASE IV)  
**TYPICAL SECTIONS AND PAVING DETAILS**



Date	JANUARY 2018
Scale	NOT TO SCALE
Drawn	JDL
Checked	AMS
Project No.	2601-1702
Sheet No.	



**NOTE:**  
FOR DEWATERING EXCAVATION FOR EXCAVATED PAVEMENT SECTION, CONTRACTOR SHALL USE PUMP AND DEWATERING BAG INSTALLED AT LOW POINT. SEE DETAIL SHEET EC1.2. CONTRACTOR SHALL REMOVE AND DISPOSE OF FULL BAGS AS REQUIRED. CONTRACTOR SHALL INSTALL NEW BAGS AS REQUIRED.

**NOTE:** CONTRACTOR SHALL LAYOUT ACCESS ROAD AND STOCKPILE AREA FOR REVIEW BY ENGINEER AND OWNER PRIOR TO BEGINNING CONSTRUCTION

STOCKPILE AREA  
INSTALL SILT FENCE AROUND AREA AND ON THE WEST SIDE OF THE CONTRACTOR ACCESS ROAD

TEMPORARY CONSTRUCTION ENTRANCE  
SEE DETAIL ON SHEET EC1.2

INSTALL TEMPORARY ROCK SEDIMENT DIKE  
SEE DETAIL ON SHEET EC1.3

CONCRETE WASH OUT AREA  
SEE DETAIL BELOW

EXISTING GATE

INSTALL 5' WIDTH (DISTURBED SHOULDER) WITH SOD. SEED AND MULCH REMAINING DISTURBED AREAS. SEE TYPICAL APRON PAVEMENT EDGE DETAIL ON SHEET D1.1.

LIMITS OF DISTURBANCE

INSTALL SILT FENCE (TYP.)  
SEE DETAIL ON SHEET EC2.1

APRON EXPANSION

EXISTING APRON

EXISTING APRON

TAXIWAY A

**SEQUENCE OF CONSTRUCTION**

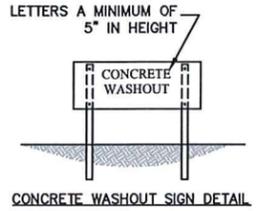
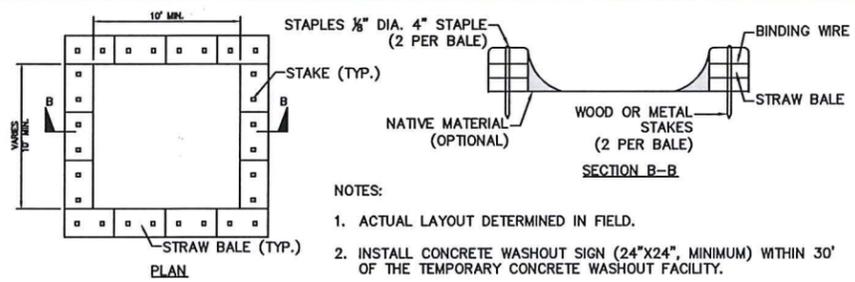
THE FOLLOWING SEQUENCE OF CONSTRUCTION HAS BEEN DEVELOPED TO HELP THE CONTRACTOR UNDERSTAND THE OPERATIONAL NEEDS OF THE AIRPORT AND HELP ENSURE MINIMAL CLOSURE TIME TO APRON AREA. IN ACCORDANCE WITH THE SPECIFICATIONS THE CONTRACTOR SHALL PROVIDE A DETAILED SCHEDULE OF CONSTRUCTION TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. CONTRACTOR HAS 60 CALENDAR DAYS TO COMPLETE ALL WORK.

- PRIOR TO BEGINNING PROJECT AND CONTRACT START TIME**
- OBTAIN ALL NECESSARY PERMITS BEFORE STARTING CONSTRUCTION.
  - NOTIFY DHEC AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
  - DEVELOP DETAILED SCHEDULE TO ENSURE CONSTRUCTION CAN BE COMPLETED WITHIN CONSTRUCTION TIME ALLOTTED FOR THE PROJECT.
  - CONTRACTOR MAY COMPLETE REQUIRED SURVEY WORK ON PROJECT AREA PRIOR TO CONSTRUCTION START TIME. SCHEDULING FOR THE SURVEY WORK WILL BE REQUIRED TO BE APPROVED BY AIRPORT MANAGEMENT. SEE PROJECT SPECIAL PROVISIONS.

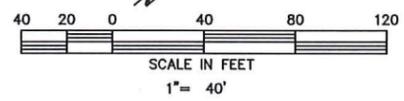
- WORK AREA**
- MOBILIZE EQUIPMENT AND DEVELOP ACCESS ROAD AS REQUIRED. ESTABLISH STAGING AREA. THE LOCATION OF THE STAGING AREA SHALL BE COORDINATED WITH THE AIRPORT MANAGEMENT.
  - INSTALL LIGHTED BARRICADES AT LOCATIONS SHOWN.
  - INSTALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES.
  - COMPLETE EXCAVATION AND GRADING OPERATIONS AND FINE GRADING APRON SUBGRADE. COMPACT SUBGRADE AS REQUIRED.
  - COMPLETE PLACEMENT, GRADING, AND COMPACTION OF AGGREGATE BASE COURSE.
  - APPLY BITUMINOUS PRIME COAT IN ACCORDANCE WITH SPECIFICATIONS.
  - COMPLETE PAVING OPERATIONS ON THE APRON. PAVEMENT SHALL BE PLACED IN TWO LIFTS INCLUDING A 2-1/2" LIFT (P-401 BITUMINOUS SURFACE COURSE) AND A 1-1/2" LIFT (P-601 FUEL RESISTANT BITUMINOUS SURFACE COURSE).
  - COMPLETE PLACEMENT OF SHOULDER FILL, COMPACT, AND FINE GRADE SHOULDERS IN ACCORDANCE WITH DETAILS SHOWN ON THE PLANS.
  - COMPLETE THE FIRST APPLICATION OF PAVEMENT MARKING ON THE APRON. MARKING SHALL BE INSTALLED WITHOUT BEADS.
  - COMPLETE INSTALLATION OF SOD ALONG THE EDGE OF PAVEMENT AND SEEDING AND MULCHING OPERATIONS AS REQUIRED. RESTORE ALL DISTURBED AREAS AND SEED AND MULCH ALL AREAS AS REQUIRED.
  - REMOVE SILT FENCE ALONG EDGE OF WORK AREA. GRADE, SEED, AND MULCH AS REQUIRED.
  - REMOVE ALL EQUIPMENT, MATERIALS, AND DEBRIS FROM WORK AREA.
  - REMOVE LIGHTED BARRICADES AND RE-OPEN APRON TO AIR OPERATIONS.
  - AFTER SPECIFIED WAITING PERIOD, COMPLETE FINAL PAVEMENT MARKING APPLICATION. CONTRACTOR WILL BE REQUIRED TO CLOSE SECTIONS OF THE APRON DURING MARKING APPLICATION. PLACE LIGHTED BARRICADES AS REQUIRED FOR CLOSING OF APRON AREA AS REQUIRED. REMOVE BARRICADES AFTER MARKING OPERATIONS ARE COMPLETED AND RE-OPEN APRON.
  - SUBMIT NOTICE OF TERMINATION (NOT) AND AS-BUILT TO DHEC.

**GENERAL NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE OS-SWPPP FOR THE PROJECT. THE OS-SWPPP SHALL BE LOCATED AND MAINTAINED IN ROOM 119 OF THE AIRPORT TERMINAL BUILDING.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE AN AS-BUILT SURVEY FOR THE PROJECT IN ACCORDANCE WITH SECTION PSP-13 OF THE SPECIAL PROVISIONS. THE SURVEY SHALL BE PREPARED BY A SOUTH CAROLINA LICENSED LAND SURVEYOR.



**CONCRETE WASHOUT AREA DETAIL**  
NOT TO SCALE



LEGEND	
	EXISTING BITUMINOUS PAVEMENT
	EXISTING STORMDRAIN
	EXISTING DRAINAGE DITCH/SWALE
	EXISTING RSA
	EXISTING ROFA
	PROPOSED BITUMINOUS PAVEMENT
	LIMITS OF DISTURBANCE
	TEMPORARY SILT FENCE
	PROPOSED BERMUDA SOD
	CONTRACTOR'S ACCESS

- NOTES:**
- ACTUAL LAYOUT DETERMINED IN FIELD.
  - INSTALL CONCRETE WASHOUT SIGN (24"x24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
  - TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
  - CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL.
  - THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
  - SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT.

**TALBERT & BRIGHT**  
ENGINEERING & PLANNING CONSULTANTS  
WILMINGTON, NC 28405  
4810 SHELLEY DRIVE  
FAX: 910-762-6281  
PHONE: 910-762-5350  
EMAIL: TALBERT@TALB.COM  
SC LICENSE NO. 000386

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. THE REPRODUCTION, COPIING, OR USE THEREOF WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
© 2018  
TALBERT & BRIGHT, INC.

REV. NO.	DESCRIPTION	DATE

GEORGETOWN COUNTY AIRPORT  
GEORGETOWN, SOUTH CAROLINA  
APRON EXPANSION (PHASE IV)  
EROSION AND SEDIMENT CONTROL PLAN

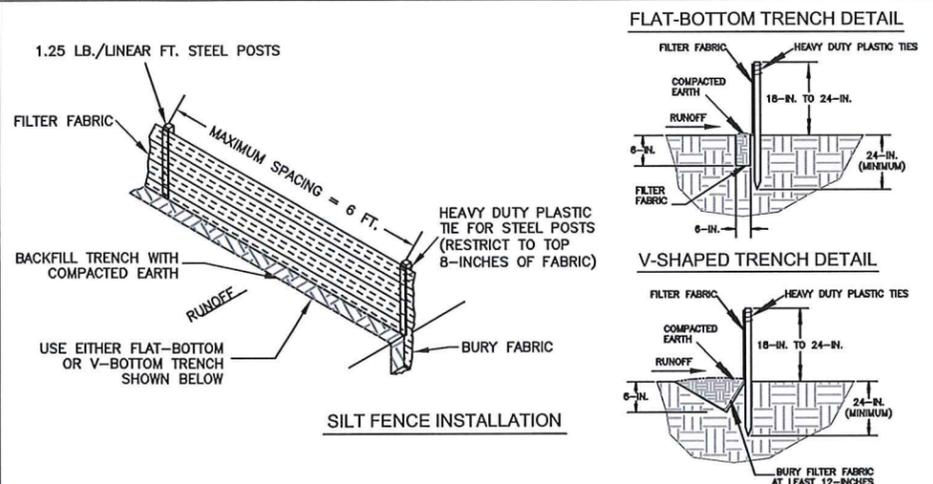


Date: JANUARY 2018  
Scale: NOT TO SCALE  
Drawn: JDL  
Checked: AMS  
Project No.: 2601-1702  
Sheet No.:

EC1.1

I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976, AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000.





**WHEN AND WHERE TO USE IT**

DO NOT PLACE SILT FENCE ACROSS CHANNELS OR IN OTHER AREAS SUBJECT TO CONCENTRATED FLOWS. SILT FENCE SHOULD NOT BE USED AS A VELOCITY CONTROL BMP. CONCENTRATED FLOWS ARE ANY FLOWS GREATER THAN 0.5 CFS. MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH TO THE SILT FENCE SHALL BE 100- FEET. MAXIMUM SLOPE STEEPNESS (NORMAL [PERPENDICULAR] TO THE FENCE LINE) SHALL BE 2:1. SILT FENCE JOINTS, WHEN NECESSARY, SHALL BE COMPLETED BY ONE OF THE FOLLOWING OPTIONS: WRAP EACH FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 1-FOOT MINIMUM OVERLAP; OVERLAP SILT FENCE BY INSTALLING 3- FEET PASSED THE SUPPORT POST TO WHICH THE NEW SILT FENCE ROLL IS ATTACHED. ATTACH OLD ROLL TO NEW ROLL WITH HEAVY-DUTY PLASTIC TIES; OR, OVERLAP ENTIRE WIDTH OF EACH SILT FENCE ROLL FROM ONE SUPPORT POST TO THE NEXT SUPPORT POST.

ATTACH FILTER FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED WITHIN THE TOP 8-INCHES OF THE FABRIC. INSTALL THE SILT FENCE PERPENDICULAR TO THE DIRECTION OF THE STORMWATER FLOW AND PLACE THE SILT FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND CLEANOUT. INSTALL SILT FENCE CHECKS (TIE-BACKS) EVERY 50-100 FEET, DEPENDENT ON SLOPE, ALONG SILT FENCE THAT IS INSTALLED WITH SLOPE AND WHERE CONCENTRATED FLOWS ARE EXPECTED OR ARE DOCUMENTED ALONG THE PROPOSED/INSTALLED SILT FENCE.

**MATERIALS**  
**STEEL POSTS**  
 USE 48-INCH LONG STEEL POSTS THAT MEET THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS: COMPOSED OF HIGH STRENGTH STEEL WITH MINIMUM YIELD STRENGTH OF 50,000 PSI. HAVE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND NOMINAL "T" LENGTH OF 1.48-INCHES. WEIGH 1.25 POUNDS PER FOOT (± 8%). HAVE A SOIL STABILIZATION PLATE WITH A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES ATTACHED TO THE STEEL POSTS. PAINTED WITH A WATER BASED BAKED ENAMEL PAINT.

USE STEEL POSTS WITH A MINIMUM LENGTH OF 48 INCHES, WEIGHING 1.25 POUNDS PER LINEAR FOOT (± 8%) WITH PROJECTIONS TO AID IN FASTENING THE FABRIC. WHEN HEAVY CLAY SOILS ARE PRESENT ON SITE, STEEL POSTS WILL HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM SUCH THAT WHEN THE POST IS DRIVEN TO THE PROPER DEPTH, THE PLATE WILL BE BELOW THE GROUND LEVEL FOR ADDED STABILITY. THE SOIL PLATES SHOULD HAVE THE FOLLOWING CHARACTERISTICS: BE COMPOSED OF MINIMUM 15 GAUGE STEEL AND HAVE A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES.

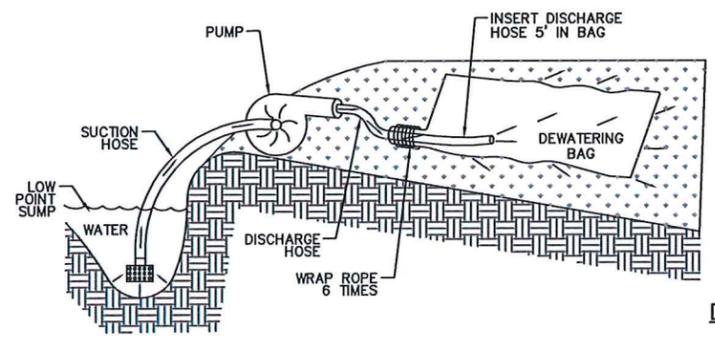
**GEOTEXTILE FILTER FABRIC**  
 SILT FENCE MUST BE COMPOSED OF WOVEN GEOTEXTILE FILTER FABRIC THAT CONSISTS OF THE FOLLOWING REQUIREMENTS: COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS, POLYESTERS, OR POLYAMIDES THAT ARE FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER; FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION; FREE OF ANY DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES; AND HAVE A MINIMUM WIDTH OF 36-INCHES.

USE ONLY FABRIC APPEARING ON SC DOT'S QUALIFIED PRODUCTS LISTING (QPL), APPROVAL SHEET #34, MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SC DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. 12-INCHES OF THE FABRIC SHOULD BE PLACED WITHIN EXCAVATED TRENCH AND TOED IN WHEN THE TRENCH IS BACKFILLED. FILTER FABRIC SHALL BE PURCHASED IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. FILTER FABRIC SHALL BE INSTALLED AT A MINIMUM OF 24-INCHES ABOVE THE GROUND.

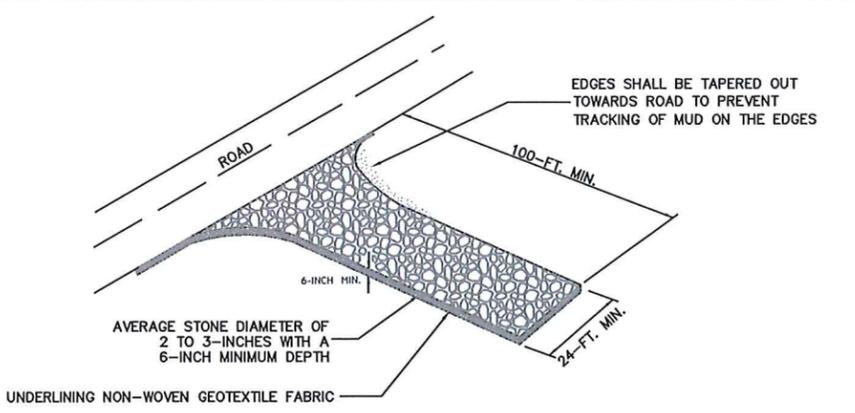
**INSTALLATION**  
 EXCAVATE A TRENCH APPROXIMATELY 6-INCHES WIDE AND 6-INCHES DEEP WHEN PLACING FABRIC BY HAND. PLACE 12-INCHES OF GEOTEXTILE FABRIC INTO THE 6-INCH DEEP TRENCH, EXTENDING THE REMAINING 6-INCHES TOWARDS THE UPSLOPE SIDE OF THE TRENCH. BACKFILL THE TRENCH WITH SOIL OR GRAVEL AND COMPACT. BURY 12-INCHES OF FABRIC INTO THE GROUND WHEN PNEUMATICALLY INSTALLING SILT FENCE WITH A SLICING METHOD. PURCHASE FABRIC IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, WRAPPED THE FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 6-INCH MINIMUM OVERLAP. INSTALL POSTS TO A MINIMUM DEPTH OF 24-INCHES. INSTALL POSTS TO A MINIMUM OF 1 TO 2 INCHES ABOVE THE FABRIC, WITH NO MORE THAN 3- FEET OF THE POST ABOVE THE GROUND. SPACE POSTS TO MAXIMUM 6- FEET CENTERS. ATTACH FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED AND PLACED IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC. IN ALL CASES, TIES SHOULD BE AFFIXED IN NO LESS THAN 4 PLACES. INSTALL THE FABRIC A MINIMUM OF 24-INCHES ABOVE THE GROUND. WHEN NECESSARY, THE HEIGHT OF THE FENCE ABOVE GROUND MAY BE GREATER THAN 24-INCHES. IN TIDAL AREAS, EXTRA SILT FENCE HEIGHT MAY BE REQUIRED. THE POST HEIGHT WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING WILL REMAIN THE SAME AND EXTRA HEIGHT FABRIC WILL BE 4-, 5-, OR 6- FEET TALL. LOCATE SILT FENCE CHECKS EVERY 100 FEET MAXIMUM AND AT LOW POINTS. INSTALL THE FENCE PERPENDICULAR TO THE DIRECTION OF FLOW AND PLACE THE FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND CLEANOUT.

**INSPECTION AND MAINTENANCE**  
 THE KEY TO FUNCTIONAL SILT FENCE IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL. REGULAR INSPECTIONS OF SILT FENCE SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED, WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2-INCH OR MORE OF PRECIPITATION. ATTENTION TO SEDIMENT ACCUMULATIONS ALONG THE SILT FENCE IS EXTREMELY IMPORTANT. ACCUMULATED SEDIMENT SHOULD BE CONTINUALLY MONITORED AND REMOVED WHEN NECESSARY. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SILT FENCE REMOVED SEDIMENT SHALL BE PLACED IN STOCKPILE STORAGE AREAS OR SPREAD THINLY ACROSS DISTURBED AREA. STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED. CHECK FOR AREAS WHERE STORMWATER RUNOFF HAS ERODED A CHANNEL BENEATH THE SILT FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED DUE TO RUNOFF OVERTOPPING THE SILT FENCE. INSTALL CHECKS/TIE-BACKS AND/OR REINSTALL SILT FENCE, AS NECESSARY. CHECK FOR TEARS WITHIN THE SILT FENCE, AREAS WHERE SILT FENCE HAS BEGUN TO DISINTEGRATE, AND FOR ANY OTHER CIRCUMSTANCE THAT MAY RENDER THE SILT FENCE INEFFECTIVE. REMOVED DAMAGED SILT FENCE AND REINSTALL NEW SILT FENCE IMMEDIATELY. SILT FENCE SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED AND ONCE IT IS REMOVED, THE RESULTING DISTURBED AREA SHALL BE PERMANENTLY STABILIZED.

**TEMPORARY SILT FENCE**  
 NOT TO SCALE



**DEWATERING BAG**  
 NOT TO SCALE



**WHEN AND WHERE TO USE IT**  
 STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD.

**IMPORTANT CONSIDERATIONS**  
 IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF-SITE. WASHDOWN FACILITIES SHALL BE REQUIRED AS DIRECTED BY SDHCEC AS NEEDED. WASHDOWN AREAS IN GENERAL MUST BE ESTABLISHED WITH CRUSHED GRAVEL AND DRAIN INTO A SEDIMENT TRAP OR SEDIMENT BASIN. CONSTRUCTION ENTRANCES SHOULD BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY VEHICLES.

**INSTALLATION:**  
 REMOVE ALL VEGETATION AND ANY OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM STONES TO A SEDIMENT TRAP OR BASIN. INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO PLACING ANY STONE. THE ENTRANCE SHALL CONSIST OF 1-INCH TO 3-INCH D50 STONE PLACED AT A MINIMUM DEPTH OF 6-INCHES. MINIMUM DIMENSIONS OF THE ENTRANCE SHALL BE 24- FEET WIDE BY 100- FEET LONG, AND MAY BE MODIFIED AS NECESSARY TO ACCOMMODATE SITE CONSTRAINTS. THE EDGES OF THE ENTRANCE SHALL BE TAPERED OUT TOWARDS THE ROAD TO PREVENT TRACKING OF MUD AT THE EDGE OF THE ENTRANCE.

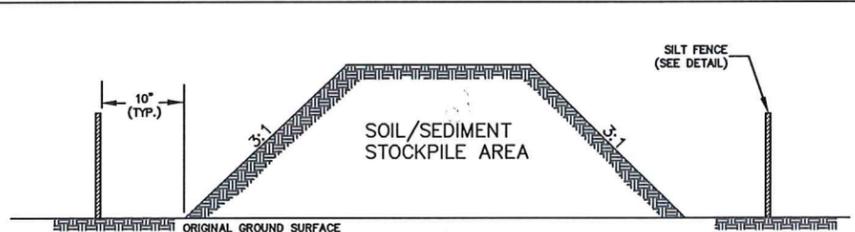
**INSPECTION AND MAINTENANCE:**  
 INSPECT CONSTRUCTION ENTRANCES EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2-INCHES OR MORE OF PRECIPITATION, OR AFTER HEAVY USE. CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING PERIODS OF WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS. RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.

WASH OR REPLACE STONES AS NEEDED AND AS DIRECTED BY THE INSPECTOR. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF-SITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE.

IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN.

REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.

**TEMPORARY CONSTRUCTION ENTRANCE/EXIT**  
 NOT TO SCALE



**NOTES:**

- SILT FENCE TO EXTEND AROUND ENTIRE PERIMETER OF STOCKPILE, OR IF STOCKPILE AREA IS LOCATED ON/NEAR A SLOPE THE SILT FENCE IS TO EXTEND ALONG CONTOURS OF THE DOWN-GRADIENT AREA.
- IF STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, TEMPORARY STABILIZATION MEASURES MUST BE IMPLEMENTED.
- SILT FENCE SHALL BE MAINTAINED UNTIL STOCKPILE AREA HAS EITHER BEEN REMOVED OR PERMANENTLY STABILIZED.
- THE KEY TO FUNCTIONAL TEMPORARY STOCKPILE AREAS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.

**TEMPORARY STOCKPILE AREA**  
 NOT TO SCALE

**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 SNOUT 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.

**EROSION AND SEDIMENT CONTROL**  
**STANDARD NOTES:**

- IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
  - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
  - WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE A CALENDAR WEEK. IF PERIODIC INSPECTIONS OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED 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 MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C REG. 72-300 ET SEQ. AND SCRI00000.
- TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
- LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).
- THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
  - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
  - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
  - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
  - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- IF EXISTING BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICAL, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPs MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

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

SEED	MINIMUM SEED PURITY (PERCENT)	MINIMUM GERMINATION (PERCENT)	RATE OF APPLICATION (LBS/ACRE)	SEEDING DATES
HULLED COMMON BERMUDA GRASS	80%	70%	70	MARCH 1 - JULY 31
UNHULLED COMMON BERMUDA GRASS	80%	70%	70	AUGUST 1 - FEB. 28
RYE (GRAIN)	80%	70%	120	

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

SEED	MINIMUM SEED PURITY (PERCENT)	MINIMUM GERMINATION (PERCENT)	RATE OF APPLICATION (LBS/ACRE)	SEEDING DATES
HULLED COMMON BERMUDA GRASS	80%	70%	70	MARCH 1 - JULY 31
RYE (GRAIN)	76%	70%	120	AUGUST 1 - FEB. 28

**SEED MIXTURE AND PLANTING DATES**  
 NOT TO SCALE



**TALBERT & BRIGHT**  
 ENGINEERING & PLANNING CONSULTANTS  
 4810 SHELLEY DRIVE  
 WILMINGTON, NC 28405  
 PHONE: 910-763-5350  
 EMAIL: TB@TALBERTBRIGHT.COM  
 SC LICENSE NO. C00386

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. THE USER OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
 TALBERT & BRIGHT, INC.  
 © 2018

REV. NO.	DESCRIPTION	DATE

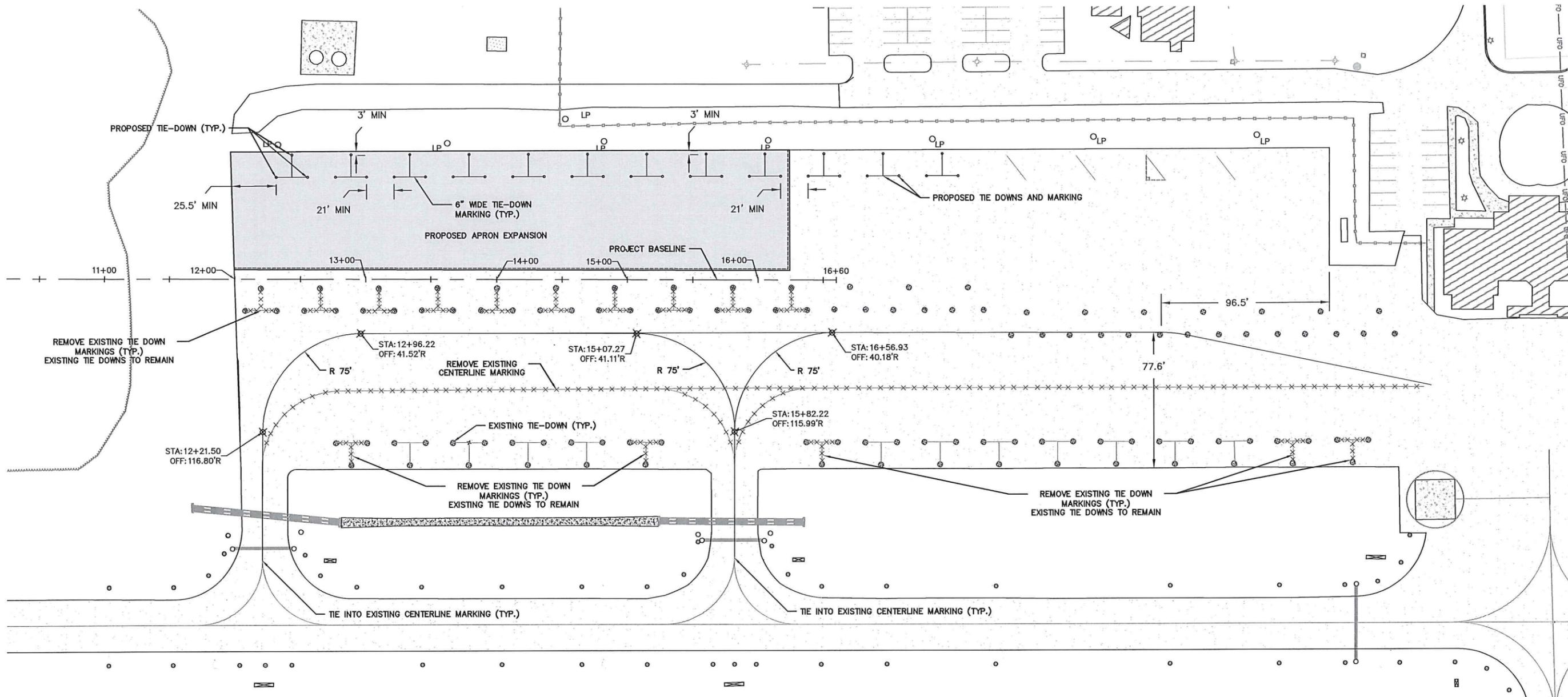
GEORGETOWN COUNTY AIRPORT  
 GEORGETOWN, SOUTH CAROLINA  
 APRON EXPANSION (PHASE IV)  
**EROSION CONTROL NOTES AND DETAILS**



Date: JANUARY 2018  
 Scale: NOT TO SCALE  
 Drawn: JDL  
 Checked: AMS  
 Project No. 2601-1702  
 Sheet No.

**EC1.2**

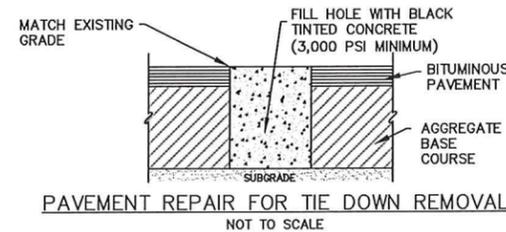
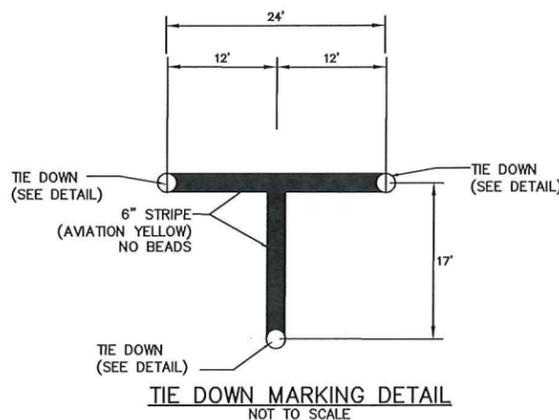
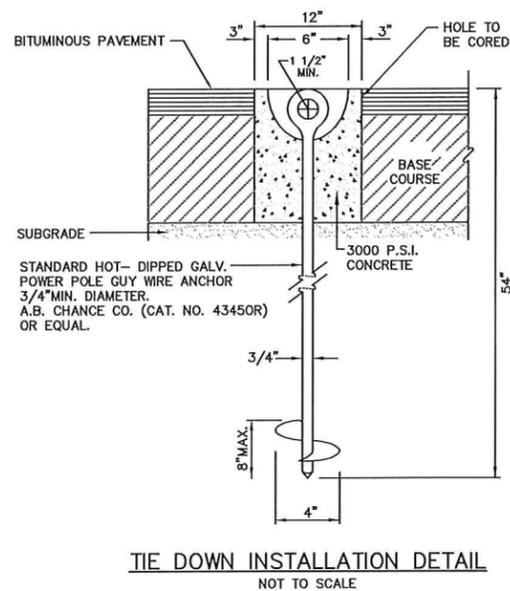




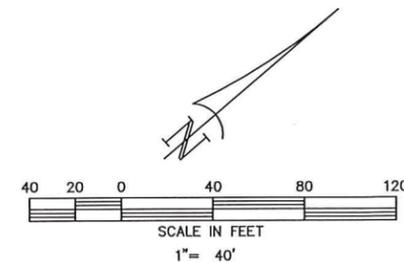
**NOTES:**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT OF MARKINGS FOR APRON. THE ENGINEER SHALL REVIEW LAYOUT PRIOR TO CONTRACTOR BEGINNING PAINTING OPERATIONS.
2. REFLECTIVE BEADS SHALL BE APPLIED ON ALL APPLICATIONS OF MARKINGS (EXCEPT BLACK OUTLINES). ALL MARKING SHALL HAVE NEAT AND SHARP FINISHED EDGES AND ENDS. CONTRACTOR MAY UTILIZE SHINGLES OR OTHER MEANS TO MARK LINE ENDS AND MINIMIZE OVERSPRAY.
3. SEE PROJECT SPECIFICATIONS FOR SEAL COAT REQUIREMENTS.

LEGEND	
	PROPOSED SEAL COAT
	EXISTING BITUMINOUS PAVEMENT
	PROPOSED PAVEMENT
	EXISTING TREELINE
	EXISTING SECURITY FENCE
	EXISTING TAXIWAY LIGHT (BASE MOUNTED)
	EXISTING ELECTRICAL DUCT
	EXISTING LIGHTED SIGN
	PROPOSED STORM DRAIN
	PROPOSED MARKING



- TIE DOWN REMOVAL NOTES:**
1. CORE THROUGH PAVEMENT AND AGGREGATE BASE COURSE. CONTRACTOR SHALL UTILIZE 8" DIAMETER CORE (MINIMUM) TO REMOVE ALL REMNANTS OF EXISTING TIE DOWNS. CONTRACTOR SHALL REMOVE EXISTING PAVEMENT AND TIE DOWN ANCHOR. ALL DEBRIS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY.
  2. CONTRACTOR SHALL USE CARE DURING REMOVAL OPERATIONS TO MINIMIZE DAMAGE TO EXISTING PAVEMENT TO REMAIN.
  3. BACKFILL CORED HOLE WITH CONCRETE. MINIMUM DEPTH OF CONCRETE SHALL BE 12". MATCH EXISTING GRADES WITH CONCRETE PLACEMENT. USE CARE WHEN PLACING CONCRETE TO PROVIDE A NEAT AND FINISHED REPAIR.
  4. TIE DOWN REMOVAL SHALL BE MEASURED AND PAID FOR ON A PER EACH BASIS.
- NOTE:** TIE DOWNS TO BE INSTALLED SHALL BE MEASURED AND PAID FOR ON A PER EACH BASIS. THIS PRICE SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS AND FOR PREPARATION, DELIVERY AND INSTALLATION OF THESE MATERIALS AND FOR ALL LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.



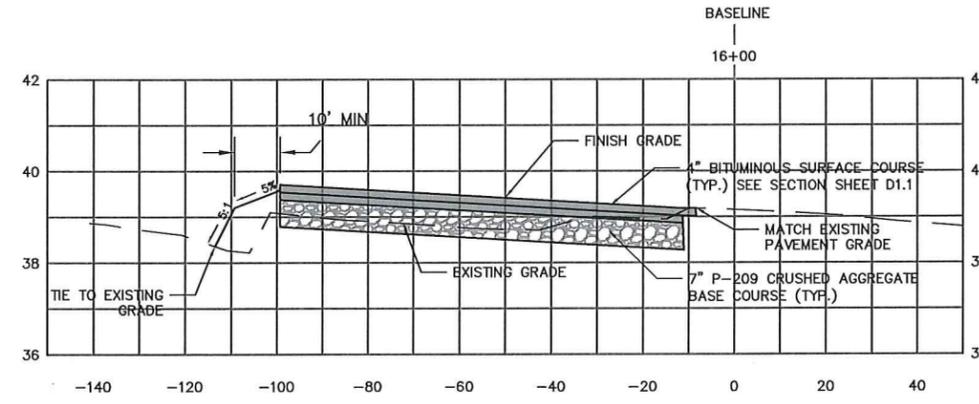
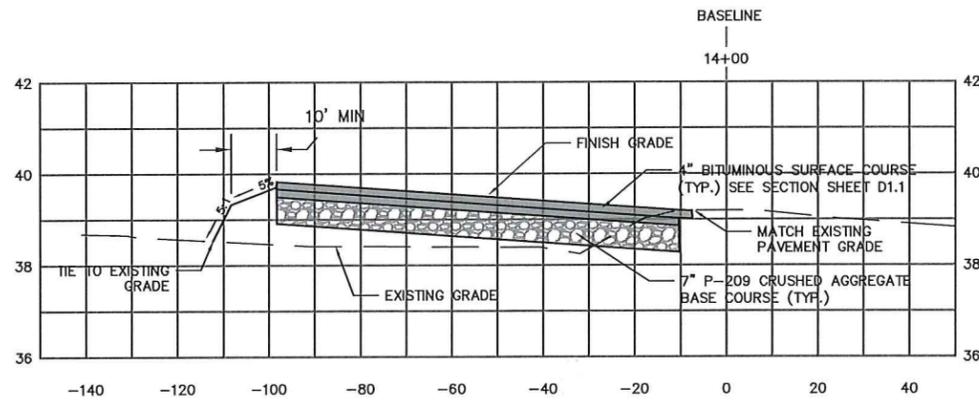
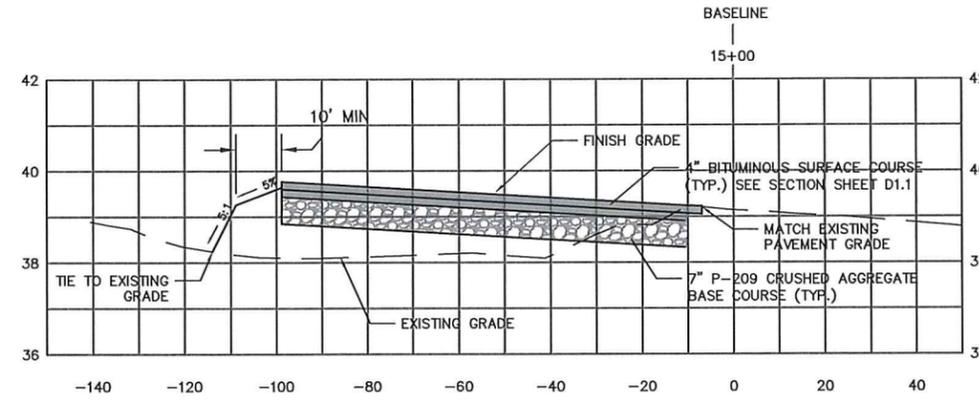
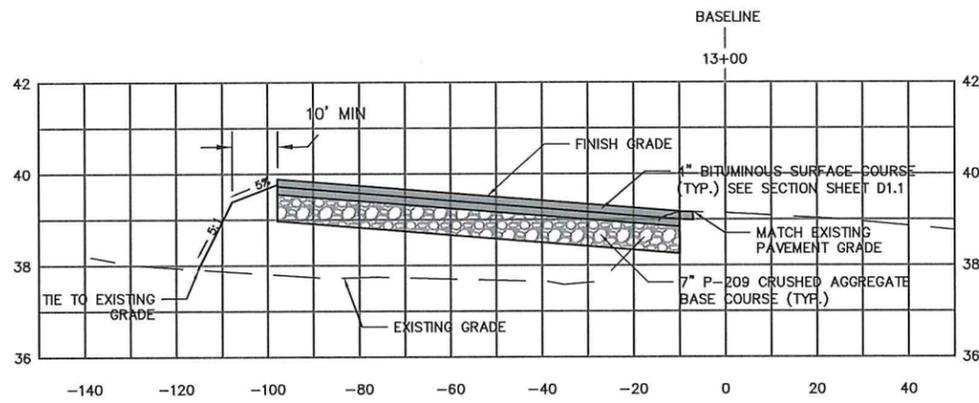
**TALBERT & BRIGHT**  
ENGINEERING & PLANNING CONSULTANTS  
WILMINGTON, NC 28405  
PHONE: 910-762-5550  
FAX: 910-762-6281  
EMAIL: TBILLMOTILLUM.COM  
SC LICENSE NO. C00386

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. THE USER OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
TALBERT & BRIGHT, INC.  
© 2018

REV. NO.	DESCRIPTION	DATE

GEORGETOWN COUNTY AIRPORT  
GEORGETOWN, SOUTH CAROLINA  
APRON EXPANSION (PHASE IV)  
MARKING PLAN AND  
MISCELLANEOUS DETAILS

Date: JANUARY 2018  
Scale: 1" = 40'  
Drawn: JDL  
Checked: AMS  
Project No.: 2601-1702  
Sheet No.: M1.1



PROJECT BASELINE CROSS SECTIONS (APRON)  
 H: 1"=20'  
 V: 1"=2'

**TALBERT & BRIGHT**  
 ENGINEERING & PLANNING CONSULTANTS  
 4810 SHELLEY DRIVE  
 WILMINGTON, NC 28405  
 PHONE: 910-783-5350  
 FAX: 910-782-6281  
 EMAIL: TBILL@TBILL.COM  
 SC LICENSE NO. C00386

THIS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY OF TALBERT & BRIGHT, INC. THE USER OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED.  
 TALBERT & BRIGHT, INC.  
 © 2018  
 SC LICENSE NO. C00386

REV. NO.	DESCRIPTION	DATE

GEORGETOWN COUNTY AIRPORT  
 GEORGETOWN, SOUTH CAROLINA  
 APRON EXPANSION (PHASE IV)  
 CROSS SECTIONS



Date	JANUARY 2018
Scale	H: 1" = 40' V: 1" = 4'
Drawn	JDL
Checked	AMS
Project No.	2601-1702
Sheet No.	X1.1

