NORTH CAROLINA AIR NATIONAL GUARD

C-17 CORROSION CONTROL AND FUEL CELL HANGAR AND FLIGHT SIMULATOR
145th AIRLIFT WING
CHARLOTTE-DOUGLAS IAP, NORTH CAROLINA

CONTRACT NO.: W9133L-15-D-0002
TASK ORDER NO.: D303
PN: FJRP159062

B-3 FINAL DESIGN SUBMISSION
22 SEPTEMBER 2017

VOLUME 1 of 5
GENERAL, LIFE SAFETY, CIVIL, LANDSCAPE
1. PRIOR TO ANY INUCATION, CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL AT (888) 982-5629 TO LOCATE ALL EXISTING UTILITIES TO INCLUDE BUT NOT LIMITED TO: GAS, WATER, TELEPHONE, SEWER, BURIED FIBER OPTIC CABLES, CABLES TO ADJACENT BUILDINGS, AND OTHER MECHANICAL AND ELECTRICAL SERVICES. CONTRACTOR SHALL WORK WITH THE LEVEL OF CONSTRUCTION NECESSARY TO COMPLETE THE項号S WORK.

2. CONTRACTOR SHALL PROVIDE AND INSTALL MINS OF PROTECTION TO THE EXISTING UTILITIES AS SHOWN ON THE SITE UTILITY PLANS. CONTRACTOR SHALL PROVIDE AND INSTALL MRN IN THE LIMITS OF TOPOGRAPHIC SURVEY AS SHOWN ON THE SITE UTILITY PLANS.

3. CONTRACTOR SHALL PROVIDE AND INSTALL MINS OF PROTECTION TO THE EXISTING UTILITIES AS SHOWN ON THE SITE UTILITY PLANS. CONTRACTOR SHALL PROVIDE AND INSTALL MRN IN THE LIMITS OF TOPOGRAPHIC SURVEY AS SHOWN ON THE SITE UTILITY PLANS.

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7. CONTRACTOR SHALL PROVIDE AND INSTALL MINS OF PROTECTION TO THE EXISTING UTILITIES AS SHOWN ON THE SITE UTILITY PLANS.
SITE DEMOLITION PLAN

KEY NOTES

1. REMOVE EXISTING SUMP BASIN (REFER TO SHEET NOTE 1)
2. LIMITS OF DISTURBANCE
3. EXISTING ITEMS TO BE REMOVED BY GOVERNMENT (REFER TO SHEET NOTE 1)
4. REMOVE AND REPLACEMENT CONCRETE (REFER TO SHEET NOTE 1)
5. REMOVE UNDERGROUND COMMUNICATION LINES
6. REMOVE DUCTILE IRON PIPE AND CORRODED CONCRETE
7. REMOVE STREET LIGHT POLES AND RETURN LIGHT FIXTURES TO THE GOVERNMENT
8. REMOVE EXISTING FENCING
9. REMOVE STREET LIGHTS
10. REMOVE ELECTRICAL SITE LIGHTING Fixture
11. REMOVE BARRIERS
12. REMOVE LOW PROFILE BARRIERS (REFER TO SHEET NOTE 1)
13. LOW PROFILE BARRIERS SHALL MEET FAA AC150/5370-2F "OPERATIONAL LIMITS OF DISTURBANCE" REQUIREMENTS
14. REMOVE ASPHALT PAVEMENT/CONCRETE CURB & GUTTER
15. REMOVE LOW PROFILE BARRIERS WITH GOVERNMENT ON LOCATION FOR RELOCATED BARRIERS.
16. REMOVE ASPHALT PAVEMENT/CONCRETE CURB & GUTTER WITH GOVERNMENT ON LOCATION FOR RELOCATED BARRIERS.
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36. REMOVE ASPHALT PAVEMENT/CONCRETE CURB & GUTTER WITH GOVERNMENT ON LOCATION FOR RELOCATED BARRIERS.
37. REMOVE ASPHALT PAVEMENT/CONCRETE CURB & GUTTER WITH GOVERNMENT ON LOCATION FOR RELOCATED BARRIERS.
2. The 7'-0" high chain link fence shall be provided as shown on Sheet C-504, part of the base bid.
SHEET NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT, OR CORNER OF FENCE, UNLESS NOTED OTHERWISE.

2. ALL DIMENSIONS ARE PERPENDICULAR TO ONE ANOTHER, UNLESS NOTED OTHERWISE.

3. ALL CURB RADII ARE 5 FEET, UNLESS NOTED OTHERWISE.

4. ALL CONCRETE SIDEWALKS SET AT 5 FEET IN WIDTH, UNLESS NOTED OTHERWISE.

5. INSTALL CONCRETE LANDINGS 5' BY 5' AT ALL DOOR OPENINGS, UNLESS NOTED OTHERWISE.

6. INSTALL CONCRETE LANDINGS 5' BY 5' AT ALL DOOR OPENINGS, UNLESS NOTED OTHERWISE.

7. STANDARD DUTY ASPHALT PAVEMENT. SEE DETAIL 6 ON SHEET C-501.

8. CONCRETE SIDEWALK. SEE DETAIL 3 ON SHEET C-501.

9. RIGID CONCRETE PAVEMENT. SEE DETAIL 2 ON SHEET C-501.

10. 6" HIGH CONCRETE CURB & GUTTER. SEE DETAIL 1 ON SHEET C-502.

11. ADA ACCESSIBLE CURB RAMP. SEE DETAIL 5 ON SHEET C502

12. DEPRESSED CURB. SEE DETAIL 10 ON SHEET C-502

13. PEDESTRIAN CROSS WALK. SEE DETAIL 5 ON SHEET C-501

14. RIGID CONCRETE AIRCRAFT APRON. SEE DETAIL 7 ON SHEET C501

15. 8" DIA. STEEL BOLLARD. SEE DETAIL 4 ON SHEET C-503

16. CONCRETE UTILITY PAD. SEE DETAIL 4 ON SHEET C-505

17. CONCRETE STOOP. SEE DETAIL 7A ON SHEET C-502

KEY NOTES

1. ENLARGED SITE LAYOUT PLAN

2. STANDARD DUTY ASPHALT PAVEMENT

3. RIGID CONCRETE PAVEMENT/SIDEWALK

4. RIGID CONCRETE PAVEMENT/AIRCRAFT APRON

5. STANDARD DUTY ASPHALT PAVEMENT

6. BUILDING FOOTPRINT

7. RIGID CONCRETE PAVEMENT/DOORWAY

8. RIGID CONCRETE PAVEMENT/AIRCRAFT APRON

9. STOPLINE

10. STOPLINE
SHEET NOTES

1. PROVIDE 6" VERTICAL BRED-22 INCHES BELLOWS DRAIN, AND CONNECT TO CAST IRON/COMMERICAL KNOT. PROVIDE PROTECTION FITTING TO CONNECT PVC PIPE TO CAST IRON KNOT. REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS.

2. BRANCH LINES CONNECTING TO DOWNSPOUTS SHALL BE 6" PVC. SEE NOTE 4.

3. MEET EXISTING PAVEMENT FLUSH AND AT GRANITE.

4. APPROXIMATE LOCATION OF EXISTING 24-INCH STORM SEWER BASED ON RECORD DOCUMENTATION PROVIDED BY THE NORTH CAROLINA AIR NATIONAL GUARD. NOTIFY THE NORTH CAROLINA AIR NATIONAL GUARD IF CONFLICTING DIPPER FROM DRAIN IS IDENTIFIED.

5. APPROXIMATE LOCATION OF EXISTING 24-INCH STORM SEWER BASED ON RECORD DOCUMENTATION PROVIDED BY THE NORTH CAROLINA AIR NATIONAL GUARD. NOTIFY THE NORTH CAROLINA AIR NATIONAL GUARD IF CONFLICTING DIPPER FROM DRAIN IS IDENTIFIED.

KEY NOTES

1. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN.

2. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN. SEE SHEET NOTE 7.

3. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN. SEE SHEET NOTE 7.

4. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN. SEE SHEET NOTE 7.

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6. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN. SEE SHEET NOTE 7.

7. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN.

8. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN.

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18. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN.

19. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN.

20. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN.

21. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN. SEE SHEET NOTE 7.

22. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN. SEE SHEET NOTE 7.

23. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN. SEE SHEET NOTE 7.

24. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN. SEE SHEET NOTE 7.

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26. PVC SLIP FIT 8" PVC CONNECT ROOF DRAIN TO STORM DRAIN. SEE SHEET NOTE 7.
REPRESENTATIVE AND INSPECTED BY FACILITY PERSONNEL (COTR) AT LEAST ONCE EVERY 14 DAYS.

UNDERGROUND UTILITY LINE INSTALLATION

EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED LIQUID TREATMENT SYSTEM TO PREVENT THE INTRUSION OF SEDIMENT INTO Tun-STREAM SYSTEMS. PROVIDE INLET PROTECTION AT THE FIRST EXISTING INLET (ON BOTH SIDES OF THE ROAD) DOWNSTREAM OF ANY PAVED OPEN CUT AREAS.

TRENCHES SHALL NOT BE LEFT OPEN AT THE END OF EACH WORKING DAY.

PORTIONS OF THE SITE HAVE EXISTING SLOPES. CONTRACTOR SHALL EXERCISE CAUTION DURING UTILITY LINE INSTALLATION IN THESE AREAS TO MINIMIZE EROSION.

THE PROJECT SITE IS LOCATED IN THE PIEDMONT PHYSIOGRAPHIC PROVINCE OF NORTH CAROLINA. THE NATIVE SOILS IN THE PIEDMONT PROVINCE CONSIST MAINLY OF RESIDUUM MATERIALS."
Erosion & Sediment Control Notes and Details

1. The length of the riprap which is 24 feet.
2. d = 1.5 times the maximum stone diameter but not less than 6".
3. A filter blanket or filter fabric should be installed between the riprap and soil foundation.
4. Extend riprap to toe of slope 3'.
1. Construct all sanitary and storm sewer beginning at the most downstream location and construct upstream.

2. Provide necessary adapters to transition from different pipe sizes and materials shown on plumbing & fire suppression plans. Provide sides and materials shown on the site utility plans.

3. Provide a minimum of 36" clear cover over all sanitary main.

4. Sanitary sewer main and water main shall be installed with a minimum of 12" of horizontal clearance between all main. The minimum clearances between sanitary sewer main and water main shall be in accordance with the requirements for sanitary sewer main and water main. The minimum separation between sanitary sewer main and water main shall be in accordance with the requirements for sanitary sewer main and water main.

5. The minimum separation between sanitary sewer main and water main shall be in accordance with the requirements for sanitary sewer main and water main.
C-17 CORROSION CONTROL & FUEL CELL HANGAR

1. PROVIDE A MINIMUM 24 INCHES COVER OVER ALL SANITARY SEWER PIPE SIZES AND MATERIALS SHOWN ON PLUMBING & FIRE SUPPRESSION PLANS, TO PIPE SIZES AND MATERIALS SHOWN ON THE SITE UTILITY PLAN.

2. PROVIDE 60 LF 6" DIP WATER LINE. REFER TO PLUMBING PLANS FOR CONTINUATION.

3. PROVIDE A MINIMUM 36 INCHES COVER OVER ALL SANITARY SEWER LINES WITHIN OTHER UTILITIES WITHIN TRUNK STORM SEWERS.

4. PROVIDE NECESSARY ADAPTERS TO TRANSITION FROM DIFFERENT PIPE SIZES AND MATERIALS DETAILED IN THE SITE UTILITY PLAN.

5. PROVIDE A MINIMUM 36 INCHES COVER OVER ALL SANITARY SEWER MAINS.

6. PROVIDE 45° VERTICAL BENDS TO ROUTE WATER LINES BENEATH OTHER UTILITIES WITHIN TRUNK STORM SEWERS.

7. REROUTE AND RELOCATE ANY EXISTING UTILITIES IMPACTED BY CONSTRUCTION TO MINIMUM PROPER COVER AND SERVICE OF EXISTING UTILITIES UPON ESTABLISHMENT OF FINAL GRADE.

8. DIG TEST PITS AT ALL UTILITY TIE IN LOCATIONS AND EXISTING UTILITY CROSSINGS TO VERIFY EXISTING INVERT INFORMATION, PIPE SIZES, SEPARATIONS CAN BE PROVIDED AND/OR THE WATER MAIN NEEDS TO PASS UNDER EXISTING UTILITIES. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER MAIN AS POSSIBLE.

9. REFER TO ELECTRICAL PLANS FOR INFORMATION REGARDING ELECTRICAL LINE SIZES, DUCTBANK DETAILS, AND PAD MOUNTED TRANSFORMERS.

10. REFER TO PLUMBING PLANS FOR CONTINUATION OF EXISTING 16" DIP WATER LINE IF FIELD CONDITIONS DIFFER FROM VENT 5 SHOWN. NOTIFY THE CONTRACTING OFFICER'S REPRESENTATIVE IMMEDIATELY PRIOR TO PROCEEDING WITH ANY FURTHER CONSTRUCTION.

11. 16" TEE

12. 20 89 LF 16" DIP WATER LINE

13. 17 16" TEE

14. 23 48.7 LF ELECTRICAL DUCTBANK. REFER TO ELECTRICAL PLANS FOR CONTINUATION.

15. 18 251.6 LF 16" DIP WATER LINE

16. 16 1 LF 16" DIP WATER LINE

17. 13 92.4 LF TELECOM DUCTBANK

18. 22 482 LF 16" DIP WATER LINE

19. 11 INV=726.57. REFER TO PLUMBING PLANS FOR CONTINUATION.

20. 89 LF 16" DIP WATER LINE

21. CONNECT TO EXISTING WATER LINE WITH A 12" TAPPING SLEEVE AND 8" 8" X 1" TEE WITH (1) 1" VALVE

22. 21 CONNECT TO EXISTING WATER LINE WITH A 12" TAPPING SLEEVE AND 8" 8" X 1" TEE WITH (1) 1" VALVE

23. 48.7 LF ELECTRICAL DUCTBANK. REFER TO ELECTRICAL PLANS FOR CONTINUATION.

24. 26.8 LF ELECTRICAL DUCTBANK. REFER TO ELECTRICAL PLANS FOR CONTINUATION.

25. 22.4 LF 4" PVC SANITARY SEWER

26. 21 CONNECT TO EXISTING WATER LINE WITH A 12" TAPPING SLEEVE AND 8" 8" X 1" TEE WITH (1) 1" VALVE

27. 22.5 LF TYPE K COPPER WATER LINE. SEE PLUMBING PLANS FOR CONTINUATION.

28. 24 26 LF ELECTRICAL DUCTBANK. REFER TO ELECTRICAL PLANS FOR CONTINUATION.
DO NOT SET THEM WITHIN THE INTERSECTION AREA ESTABLISHED BY BISECTING OF WHEELCHAIR RAMPS.

GATE NOTES:
1. GATE RIDES ON GALVANIZED STEEL V-TRACK #274120-G. TRACK LENGTH IS TO BE EQUAL TO GATE OPENING PLUS OVERALL LENGTH OF GATE. TRACK TO BE ANCHORED TO SUBGRADE.
2. POSTS AVAILABLE AS OPTION
3. CONTRACTOR SHALL COORDINATE POST SIZE & TYPE AT TIME OF ORDER FOR APPROPRIATE HARDWARE.
4. SPECIFICATIONS SHOWN CAN BE CHANGED BY COR AND MUST BE COORDINATED WITH THE MANUFACTURER.
5. 2" X 9 GA. GALVANIZED CHAINLINK FABRIC TO COVER THE ENTIRE LENGTH OF GATE.
6. OPTIONAL FILLER MATERIALS SHALL BE COORDINATED WITH COR AND GATE MANUFACTURER.

PEDESTRIAN CROSSWALK DETAIL

1. COMPACT CRUSHED STONE SUBBASE COURSE TO AT LEAST 100 PERCENT OF ITS MAXIMUM MODIFIED PROCTOR.
2. 5' WIDE SIDEWALK - TRANSVERSE CONTROL JOINTS AT 5' INTERVALS, NO LONGITUDINAL JOINTS.
3. EXPANSION JOINTS TO BE PLACED BETWEEN ADJACENT COURSES (S9.5B). (SEE NOTE 3)
4. PROVIDE A MEDIUM TEXTURE BROOM FINISH TO ALL SIDEWALKS.

CONCRETE SIDEWALK DETAIL

1. 6 STANDARD DUTY ASPHALT PAVEMENT DETAIL
2. 2 RIGID CONCRETE PAVEMENT DETAIL
3. 2 CONCRETE SIDEWALK DETAIL

CONCRETE BASE COURSE

1. 8" AGGREGATE BASE COURSE (MIN. 650 PSI FLEXURAL STRENGTH)
2. 2.5" INTERMEDIATE COURSE
3. 1.5 " ASPHALT SURFACE

ENG. PROJ. NO.

A. WILLIAMSON
D. DEIBLE

DESIGNED BY

NCANG CIVIL ENGINEERING

SCALE

DRAWN BY

A. WILLIAMSON
D. DEIBLE

C-501

NORTH CAROLINA AIR NATIONAL GUARD

C-17 CORROSION CONTROL & FUEL CELL HANGAR

CONSTRUCTION DETAILS

REVISIONS

C-501

DATE

01/12/2016

SHEET

1

HEADINGS

SUBGRADE

CONCRETE BASE

TRUSSING ASSEMBLY

GATE NOTES:
CONCRETE CURB AND GUTTER DETAIL

PAVEMENT UNDERDRAIN

ADA ACCESSIBLE CURB RAMP DETAIL

PAVEMENT OVERLAY DETAIL

CONCRETE STAIR DETAIL

CONCRETE LANDING DETAIL

CONCRETE STOOP DETAIL

CURB RUNDOWN FOR ALL CURVES

SIGN MOUNTING DETAIL

ASPHALT TO CONCRETE PAVEMENT TRANSITION

CONSTRUCTION DETAILS

1. REMOVE A SPADE FULL OF SOIL (APPROXIMATELY 2" DEEP) FROM WHERE THE BASE POST WILL BE LOCATED.


5. REPLACE SOIL REMOVED IN STEP 1.

4. INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6. IN TRIPLE POST INSTALLATIONS USING 4 LB./FT. POSTS IN WEAK SOIL, A 1'-0"W x 6"H SOIL PLATE IS REQUIRED.

1. SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE SPECIFICATIONS.

3. THE GOLD ANODIZED BAR SPACER IS FOR USE WITH 3 AND 4 LB./FT. RIB-BAK POST GRADE SP-80 ONLY.

5. REPLACE SOIL REMOVED IN STEP 1.

2. THE SILVER ANODIZED BAR SPACER IS FOR USE WITH 2, 2.5 AND 2.75 LB./FT. RIB-BAK POST GRADE SP-80 ONLY.

4. NEST THE TOP POST OVER THE PROTRUDING BOLTS ON THE BASE POST. PLACE A SELF-LOCKING FLANGE NUT ON EACH BOLT TO 20 FT. LBS. OF TORQUE. REPEAT THIS PROCESS FOR THE LOWER BOLT.

1. FOR CONCRETE PAVEMENTS LOCATE THE PIPE IN (SEE DETAIL "A")

2. DRIVE THE BASE POST IN THE CENTER OF THE HOLE JUST CREATED, TO WITHIN 4" OF GRADE LEVEL.

3. THE GOLD ANODIZED BAR SPACER IS FOR USE WITH 3 AND 4 LB./FT. RIB-BAK POST GRADE SP-80 ONLY.

6. IN TRIPLE POST INSTALLATIONS USING 4 LB./FT. POSTS IN WEAK SOIL, A 1'-0"W x 6"H SOIL PLATE IS REQUIRED.
1. Surface Drainage System shall be Polycor Concrete Channel System with ductile iron rails and grates.
2. The channel system shall be certified to withstand loadings to load 54321 psi.
4. Drainage System shall be secured using a metal locking system. Grate and ילוס a countersunk brass screw plug.
5. Cleanouts shall be standard type unless noted on plans.

NOTES:
1. Surface Drainage System shall be Polycor Concrete Channel System with ductile iron rails and grates.
2. The channel system shall be certified to withstand loadings to load 54321 psi.
4. Drainage System shall be secured using a metal locking system. Grate and ילוס a countersunk brass screw plug.
5. Cleanouts shall be standard type unless noted on plans.
1. REMOVE A SPADE FULL OF SOIL (APPROXIMATELY 2" DEEP) FROM WHERE THE BASE POST WILL BE LOCATED.

3. PLACE ONE BOLT AND FLAT WASHER IN THE TOP HOLE OF THE BASE POST. (IF THE TOP HOLE ON THE BASE POST, OR THE GOLD ANODIZED BAR SPACER IS FOR USE WITH 3 AND 4 LB./FT. RIB-BAK POST GRADE SP-80 ONLY.

2. THE SILVER ANODIZED BAR SPACER IS FOR USE WITH 2, 2.5 AND 2.75 LB./FT. RIB-BAK POST GRADE SP-80 ONLY.

4. INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER’S RECOMMENDATIONS.

5. PLACE TWO HOLE SMASHER IN THE Bottom HOLE ON THE Top POST IS LESS THAN 3/4" FROM END OF THE POST USE THE SECOND AND SIXTH HOLES.)

1. EXACT PAD DIMENSIONS AND LOCATIONS

2. PAD DIMENSIONS TO EXTEND A MINIMUM OF 6" BEYOND EQUIPMENT ON ALL SIDES.

5. SUBGRADE SHALL BE COMPACTED AT 95%

3. 1'-0" TYP

4. 18" - SEE NOTES 1 AND 2

7'-0" MIN. (RURAL AREAS)

BASE POST TO BE SAME WEIGHT PER FOOT AS TOP POST (4'-6" LENGTH)

1 UNEVEN GRADE UTILITY PAD DETAIL

2. REFER TO B3/C-501 FOR

3. REFER TO SITE LAYOUT PLANS FOR PAD DIMENSIONS

4. EITHER ONE PIECE OR DOWEL MAY BE USED

THREADED SPLIT TYPE

NOTE: ALL DOWEL BARS TO BE #4 BARS

h = DEPTH OF NEW PAVEMENT

CONTRACTION JOINT DETAIL

TRANSVERSE

D* DENOTES DOWEL DIAMETER

3/4" CHAMFER

TRANSVERSE

CONSTRUCTION DETAILS

NOTE: ALL DOWEL BARS TO BE #4 BARS

h = DEPTH OF NEW PAVEMENT

1'-0" TYP

1" TYP

3" CLR TYP AT FOOTINGS

#4 @ 12" O.C. EA WAY EACH FACE

LONG WAY BOT

10'-0" MAX

10'-0" (MAX.) - SEE NOTES 1 AND 2

3" CLR

NOTE: SAW CUT WILL NOT EXTEND BELOW STEEL REINFORCING.

4" MIN.

CONSTRUCTION JOINT

IN TURF AREAS

3/4" CHAMFER

CONSTRUCTION JOINT

NOTE: ALL DOWEL BARS TO BE #4 BARS

h = DEPTH OF NEW PAVEMENT

1'-0" TYP

1" TYP

3" CLR TYP AT FOOTINGS

#4 @ 12" O.C. EA WAY EACH FACE

LONG WAY BOT

10'-0" MAX

10'-0" (MAX.) - SEE NOTES 1 AND 2

3" CLR

NOTE: SAW CUT WILL NOT EXTEND BELOW STEEL REINFORCING.

4" MIN.

EXPANSION JOINT DETAIL

4

1. MIN. CONCRETE STRENGTH fc'=4500 psi

2. REFER TO SITE LAYOUT PLANS FOR PAD DIMENSIONS

3. EITHER ONE PIECE OR DOWEL MAY BE USED

THREADED SPLIT TYPE

NOTE: ALL DOWEL BARS TO BE #4 BARS

h = DEPTH OF NEW PAVEMENT

SILICONE JOINT SEALANT

NOTE: SAW CUT WILL NOT EXTEND BELOW STEEL REINFORCING.

4" MIN.

CONSTRUCTION JOINT

IN TURF AREAS

3/4" CHAMFER

CONSTRUCTION JOINT

NOTE: ALL DOWEL BARS TO BE #4 BARS

h = DEPTH OF NEW PAVEMENT

1'-0" TYP

1" TYP

3" CLR TYP AT FOOTINGS

#4 @ 12" O.C. EA WAY EACH FACE

LONG WAY BOT

10'-0" MAX

10'-0" (MAX.) - SEE NOTES 1 AND 2

3" CLR

NOTE: SAW CUT WILL NOT EXTEND BELOW STEEL REINFORCING.

4" MIN.

EXPANSION JOINT DETAIL

4

1. MIN. CONCRETE STRENGTH fc'=4500 psi

2. REFER TO SITE LAYOUT PLANS FOR PAD DIMENSIONS

3. EITHER ONE PIECE OR DOWEL MAY BE USED

THREADED SPLIT TYPE

NOTE: ALL DOWEL BARS TO BE #4 BARS

h = DEPTH OF NEW PAVEMENT

SILICONE JOINT SEALANT

NOTE: SAW CUT WILL NOT EXTEND BELOW STEEL REINFORCING.

4" MIN.

CONSTRUCTION JOINT

IN TURF AREAS

3/4" CHAMFER

CONSTRUCTION JOINT

NOTE: ALL DOWEL BARS TO BE #4 BARS

h = DEPTH OF NEW PAVEMENT

1'-0" TYP

1" TYP

3" CLR TYP AT FOOTINGS

#4 @ 12" O.C. EA WAY EACH FACE

LONG WAY BOT

10'-0" MAX

10'-0" (MAX.) - SEE NOTES 1 AND 2

3" CLR

NOTE: SAW CUT WILL NOT EXTEND BELOW STEEL REINFORCING.

4" MIN.
1. **Thickened Edge Expansion Joint**
   - 1/2" Expansion Joint Material
   - To nearest joint but not less than 10 ft.

2. **Dowelled Contraction Joint**
   - Smooth Bar Dowel 1" dia., 12" c/c
   - Paint & grease exposed end of dowel

3. **Construction Joint (Longitudinal or Transverse)**
   - Concreted Sealant
   - Sealant recessed to 1/8" below pavement surface
   - 1 1/4" diameter, closed cell, expanded polyethylene foam backer rod
   - Saw joint 2 1/4" to 2 3/8" deep to allow correct placement of backer rod and sealant

4. **Preformed Joint Detail**
   - 2" x 1/2" or as required by manufacturer of seal
   - Existing P.C.C. pavement (see note 10)

5. **Joint Seal Detail**
   - Joint sealant
   - 5/8" diameter, closed cell, expanded polyethylene foam backer rod
   - Saw cut

6. **Silicone Joint Sealant Detail**
   - Concrete
   - Asphalt

7. **Reinforcing Detail**
   - Welded wire fabric W65x56, 6" C-C

8. **Apron Slab to Hangar Detail Type H**
   - 1" Expansion Joint Material
   - 12" Concrete
   - 10" Crushed aggregate base 12" deep
   - 12" Drained Lavel

9. **Apron Slab to Existing Concrete Type S**
   - 6" Minimum
   - No. 6 Deformed Steel Bar & Lonsdale Hanger 1/4" thick x 2 1/4" long x 1 1/8" deep x 1 1/4" thick x 2 1/4" long

**Civil Construction Details**

- **CIVIL CONSTRUCTION DETAILS**
- **CONSTRUCTION DETAILS**
- **REVISIONS**
- **INITIALS**
- **DATE**
- **DESIGNER**
- **DRAWN BY**
- **CHECKED**
- **REV**
- **DRAWN**
- **DESIGN**
- **CONSTRUCTION**
- **REVISIONS**

**Scale**

**Prepared by:**

- A. WILLIAMSON
- D. DEIBLE

**Reviewed by:**

- A. WILLIAMSON

**Date:**

- 11/16/2016 1:49:46 PM

**Path:**

- C:\pwworking\gbna\crowlera\d0968121\C-506.dwg
1. **TREE PLANTING DETAIL**

2. **SHRUB PLANTING DETAIL**

3. **MOW STRIP DETAIL**

4. **BIKE RACK DETAIL**

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**PLANT LIST**

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**OPTIONS LINE ITEM NO. 003 (COLIN 004): GENERAL EXTERIOR ITEMS:**

1. LANDSCAPING. "ADD" COST FOR ALL MATERIALS, EQUIPMENT, LABOR, AND INCIDENTALS TO INSTALL LANDSCAPING (TREES, SHRUBS, AND GRASSES) AS SHOWN ON LANDSCAPE PLANS FOR BOTH THE HANGAR AND SIMULATION BUILDINGS. NOTE THAT MOW STRIPS INDICATED AND LAWN TO BE PROVIDED AS PART OF THE BASE BID.

2. ORNAMENTAL FENCE AND KNEE WALL. "ADD" COST FOR ALL MATERIALS, EQUIPMENT, LABOR, AND INCIDENTALS TO INSTALL 7'-0" HIGH FENCE CONSISTING OF A 3'-0" HIGH CAST-IN-PLACE CONCRETE KNEE WALL WITH A 4'-0" HIGH ALUMINUM COMPLIANT ORNAMENTAL FENCE ABOVE. NOTE THAT THE 7'-0" HIGH CHAIN LINK FENCE SHALL BE PROVIDED AS PART OF THE BASE BID.