

GEOTECHNICAL EARTHWORK REQUIREMENTS:

THE SITE SHOULD BE CAREFULLY INSPECTED FOR ANY OBSTACLES OR MATERIALS CURRENTLY ON THE SITE AND REMOVED OR RELOCATED PRIOR TO THE RECOMMENDED CONSTRUCTION. IT IS RECOMMENDED THAT ALL UNDESIRABLE MATERIALS BE REMOVED TO THE PROXIMITY OF THE EXISTING ROADWAY OR TO THE PROXIMITY OF THE EXISTING STRUCTURE/PAVEMENT REMAINS. RESULTING EXCAVATIONS SHOULD BE BACKFILLED WITH COMPACTED STRUCTURAL FILL, AS A MINIMUM, IT IS RECOMMENDED THAT THE CLEANING OPERATIONS EXTEND AT LEAST FIVE (5) FEET BEYOND THE DEVELOPMENT PERIMETERS.

1. FOLLOWING THE CLEANING OPERATIONS, THE SITE SHOULD BE REPROCESSED. THE REPROCESSING MAY CONSIST OF CORRECTION WITH A LARGE DRAINAGE, HEAVY VIBRATORY DRUM ROLLER OR NOT WITHIN 50 FEET OF EXISTING STRUCTURES). THE VIBRATORY DRUM ROLLER SHOULD HAVE A STATIC DRUM WEIGHT ON THE ORDER OF 4 TO 10 TONS AND SHOULD BE CAPABLE OF EXERTING A MINIMUM DYNAMIC FORCE OF 30,000 POUNDS (DYNAMIC CA-150 OR EQUIVALENT IS DIRECTED TO PROVIDE ACCEPTABLE RESULTS). THE REPROCESSING EQUIPMENT SHOULD HAVE A MINIMUM OF 1000 (10) OVERLAPPING PASSES OVER THE STRUCTURE AND PAVEMENT AREAS WITH THE SUCCESSIVE PASSES ALIGNED PERPENDICULAR.

2. CAREFUL OBSERVATIONS SHOULD BE MADE DURING SURFACE EVALUATION TO HELP IDENTIFY ANY AREAS OF SOFT YIELDING SOILS THAT MAY REQUIRE OVER EXCAVATION AND REPLACEMENT. IT IS RECOMMENDED THAT WITHIN THE DEVELOPMENT AREA, THE NATURAL GROUND, TO A MINIMUM DEPTH OF ONE (1) FOOT BELOW STRIPPED GRADE, BE CORRECTED TO A DRY DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY.

3. FOLLOWING SATISFACTORY COMPLETION OF THE INITIAL CORRECTION, THE STRUCTURE AND PAVEMENT AREAS MAY BE BROUGHT UP TO FINISHED SURFACE LEVELS, IF NEEDED, USING STRUCTURAL FILL. IMPROVED FILL SHOULD CONSIST OF FINE TO MEDIUM SAND WITH LESS THAN 12% PASSING THE NO. 200 SIEVE, FREE OF RUBBLE, ORGANICS, CLAY, DEBRIS AND OTHER UNDESIRABLE MATERIAL. FILL SHOULD BE TESTED AND APPROVED PRIOR TO ACQUISITION. APPROVED SAND FILL SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING 12 INCHES IN THICKNESS AND SHOULD BE CORRECTED TO A MINIMUM DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. DENSITY TESTS TO CONFIRM CORRECTION SHOULD BE PERFORMED IN EACH FILL LIFT BEFORE THE NEXT LIFT IS PLACED.

4. PRIOR TO BEGINNING CORRECTION, SOIL MOISTURE CONTENTS MAY NEED TO BE CONTROLLED IN ORDER TO FACILITATE PROPER CORRECTION. IF ADDITIONAL MOISTURE IS NECESSARY TO ACHIEVE CORRECTION OBJECTIVES, THEN WATER SHOULD BE APPLIED IN SUCH A WAY THAT IT WILL NOT CAUSE EROSION OR REMOVAL OF THE SURFACE SOILS. MOISTURE CONTROL WITHIN THE PRESCRIBED RANGE NEEDED TO ACHIEVE CORRECTION IS RECOMMENDED PRIOR TO CORRECTION OF THE NATURAL GROUND AND FILL.

5. AFTER CORRECTION AND REPROCESSING, THE FOUNDATION EXCAVATIONS CAN BEGIN. FOUNDATION EXCAVATIONS SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER OR A REPRESENTATIVE TO EXPLORE THE EXTENT OF ANY LOOSE, SOFT, OR OTHERWISE UNSUITABLE MATERIALS. IF THE FOUNDATION EXCAVATIONS AREAL SUITABLE AS LOAD BEARING MATERIALS, THE BOTTOM OF THE FOUNDATION EXCAVATIONS SHOULD BE CORRECTED TO A MINIMUM DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR A MINIMUM DEPTH OF ONE (1) FOOT BELOW THE BOTTOM OF THE FOOTING DEPTH, AS DETERMINED BY FIELD DENSITY TESTS.

6. EXISTING CONTOURS AND ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF NAVD 1988.

7. FUGITIVE DUST SHALL BE CONTROLLED ON SITE. ONLY AREAS SCHEDULED FOR IMMEDIATE CONSTRUCTION SHALL BE CLEARED OR STURPED OF VEGETATION. WATERING APPLICATION OF APS 605 SILT STOP OR OTHER PRIOR APPROVED MEANS OF DUST CONTROL SHALL BE EMPLOYED TO PREVENT THE EMANATION OF DUST FROM THE SITE. PERMANENT GRASSING, LANDSCAPING, AND OTHER SITE WORK SHALL BE INITIATED AS SOON AS POSSIBLE.

8. BUILDING PAD AREA REQUIRING MORE THAN TWO (2) FEET OF FILL SHALL BE COMPACTED IN 6" LIFTS TO A MINIMUM DENSITY OF 95% (MAXIMUM PROCTOR DRY DENSITY 1557). THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER TESTING RESULTS BEFORE CONSTRUCTION IS COMPLETE.

9. LOT GRADING SHALL CONSIST OF NATIVE MATERIAL FREE FROM DEBRIS AND YIELDING CLAYS. EACH LOT SHALL BE TESTED FOR COMPLIANCE WITH PROJECT EARTHWORK SPECIFICATIONS. FINAL LOT GRADING DETAILS AND CORRECTION STANDARDS SHALL BE THE RESPONSIBILITY OF THE BUILDING CONTRACTOR BASED ON FINAL BUILDING PRODUCT SPECIFIED BY CLIENT.

10. ALL SLOPES GRADED AT 4H:1V OR LESS SHALL BE SODDED.

11. GRASS AREAS SHALL SLOPE PER PLAN AND IN THE DIRECTION OF THE DRAINAGE FLOW SHOWN ON THIS SHEET.

12. ON-SITE SOIL MATERIAL MEETING THE PROJECT SPECIFICATIONS FOR SUITABLE FILL SHALL BE UTILIZED FOR BACKFILL. WHERE APPROPRIATE, IMPORT FILL FROM OFF-SITE MAY ALSO BE REQUIRED. MATERIALS UNSUITABLE FOR BACKFILL SHALL BE REMOVED FROM SITE AND PROPERLY DISPOSED OF.

13. FRESH GRADES SHOWN IN UNPAVED AREAS ARE AFTER CORRECTION AND STABILIZATION.

14. GRADING/BACKFILL FOR UNPAVED AREAS SHALL BE COMPLETED IN MAXIMUM 12" LIFTS AND COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS. MINIMUM CORRECTION FOR ANY FILLED AREA SHALL BE 95% OF MAX. DENSITY PER ASTM D-1557. DENSITY SAMPLING AND TESTING SHALL BE COMPLETED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

15. SITE STABILIZATION SHALL BE PROVIDED FOR ANY/ALL DISTURBED AREAS. SLOPES TO BE SODDED. GRA BOTTOM TO BE SEED/MULCH UNLESS SPECIFIED OTHERWISE 500 ROADWAY SHOULDERS.

16. ALL DISTURBED AREAS SHALL BE RESTORED WITH BANJA 500 PER FOOT SPEC 981 UNLESS SHOWN OTHERWISE.

17. ALL DRAINAGE STRUCTURES IN PAVED AREAS SHALL INCLUDE H-20 TRAFFIC BEARING STEEL GRATES PER FOOT STANDARD PLANE 425-052.

18. ALL DRAINAGE STRUCTURES, INCLUDING END TREATMENTS, SHALL BE PER FOOT STANDARDS FOR THE TYPE DESIGNATED & TYPE PER FOOT STANDARD PLANE 430-000 UNLESS APPROVED OTHERWISE. YARD INLETS ARE EXCLUDED FROM FOOT STANDARDS.

19. DRAINAGE PIPE UNDER PAVING SHALL BE REINFORCED CONCRETE PER FOOT SPECIFICATION SECTION 425 UNLESS APPROVED OTHERWISE.

20. CORRUGATED POLYETHYLENE, CORRUGATED POLYPROPYLENE, OR CORRUGATED POLYVINYLCHLORIDE PIPE, MEETING FOOT SPECIFICATIONS 430 AND 548 SHALL BE ALLOWED FOR AREAS NOT UNDER PAVING.

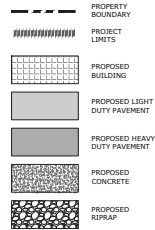
21. ALL PIPE LENGTHS ARE APPROXIMATE AND INCLUDE THE END SECTIONS ACTUAL LENGTH MAY VARY SLIGHTLY BASED ON STRUCTURE INSTALLATION.

22. A QUALIFIED AND CERTIFIED MATERIALS ENGINEERING FIRM SHALL BE RETAINED TO PROVIDE OBSERVATION AND TESTING OF CONTRACTOR ACTIVITIES INVOLVED IN FOUNDATION EARTHWORK, AND RELATED ACTIVITIES OF THIS PROJECT.

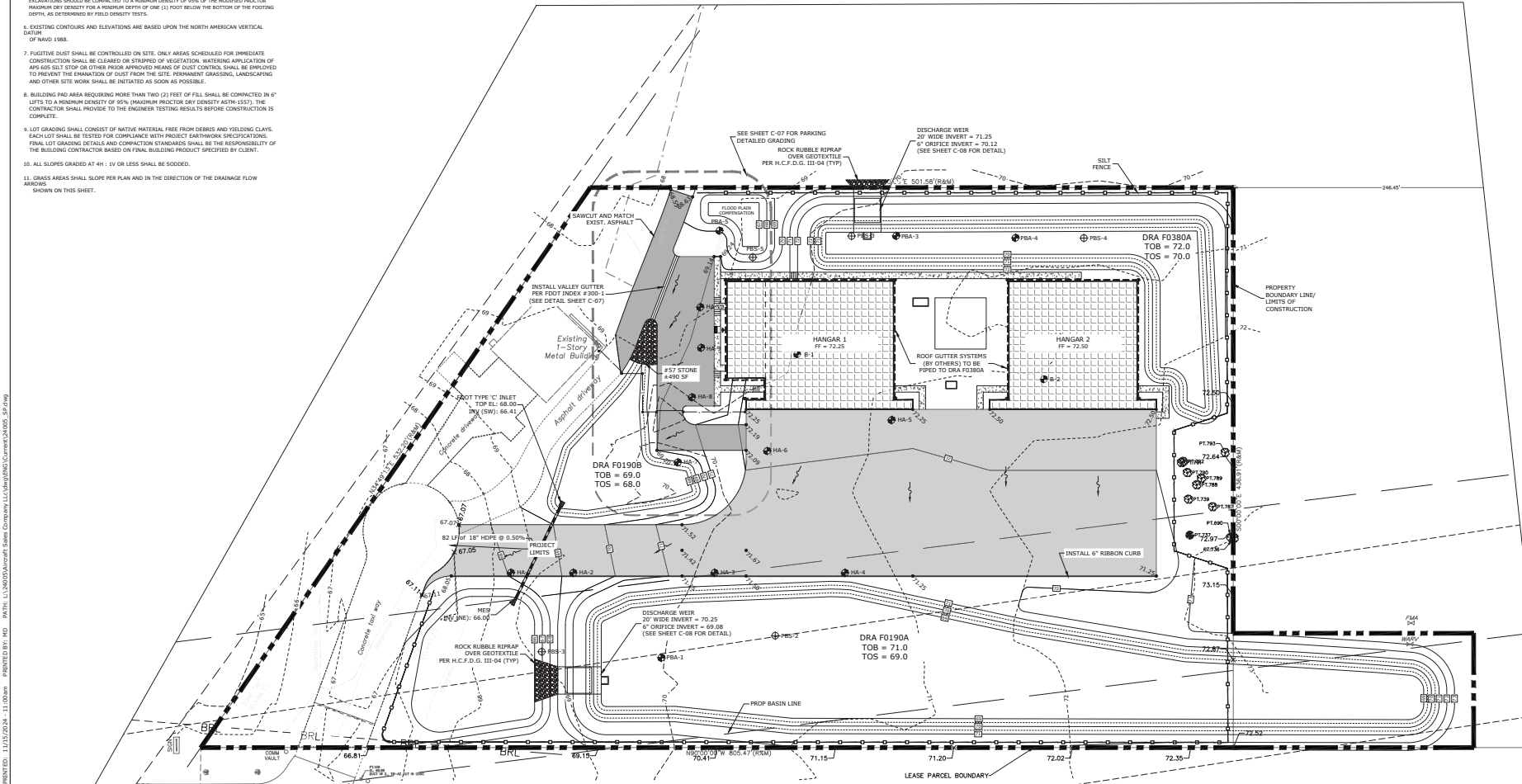
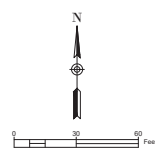
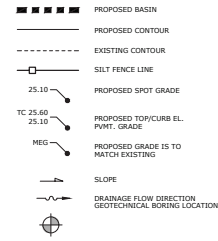
NOTES:

1. PROJECT DATUM: NAVD88. CONVERSION NAVD88 + 0.282 = NGVD29
2. ALL ROOF DRAINS WILL BE CONNECTED DIRECTLY TO THE RETENTION PONDS FOR STORM DRAIN SYSTEM.

LEGEND



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GRADING, DRAINAGE AND PAVING PLAN

FLIGHTPATH AVIATION SERVICES



Coastal
Engineering Associates, Inc.
1900 Commodore Boulevard, Suite 3400
Tampa, FL 33601
(813) 794-4421 • Fax (813) 794-8359
EIS-1000142

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