

DONALD W. MCINTOSH ASSOCIATES, INC. RESERVES THE EXCLUSIVE COPYRIGHT AND PROPERTY RIGHTS TO THIS DRAWING WHICH MAY NOT BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER, NOR CAN IT BE ASSIGNED TO ANY PARTY WITHOUT DONALD W. MCINTOSH ASSOCIATES, INC.'S WRITTEN CONSENT.

# FONTANA CONCEPTUAL MASS GRADING PLANS

OSCEOLA COUNTY, FLORIDA

PREPARED FOR  
**FONTANA LAKES, LLC**  
**2405 W. PRINCETON STREET, UNIT 2**  
**ORLANDO, FL 32804**  
**407.293.6562**  
**CONTACT: JEFF FUQUA**

JAMES C. NUGENT  
FLORIDA P.E. No. 57553  
DATE: \_\_\_\_\_

CONSULTANTS

Owner:  
Fontana Lakes, LLC  
2405 W. Princeton Street, Unit 2  
Orlando, FL 32804  
Contact: Jeff Fuqua  
Phone (407) 293-6562

Engineer/Surveyor:  
Donald W. McIntosh Associates, Inc.  
2200 Park Avenue North  
Winter Park, Florida 32789  
Contact: James Nugent, P.E.  
Phone (407) 644-4068

Geotechnical:  
DEVO Engineering  
5500 Alhambra Drive  
Orlando, FL 32808-70004  
Contact: Devo Seereeram, PhD., P.E.  
Phone (407) 290-2371

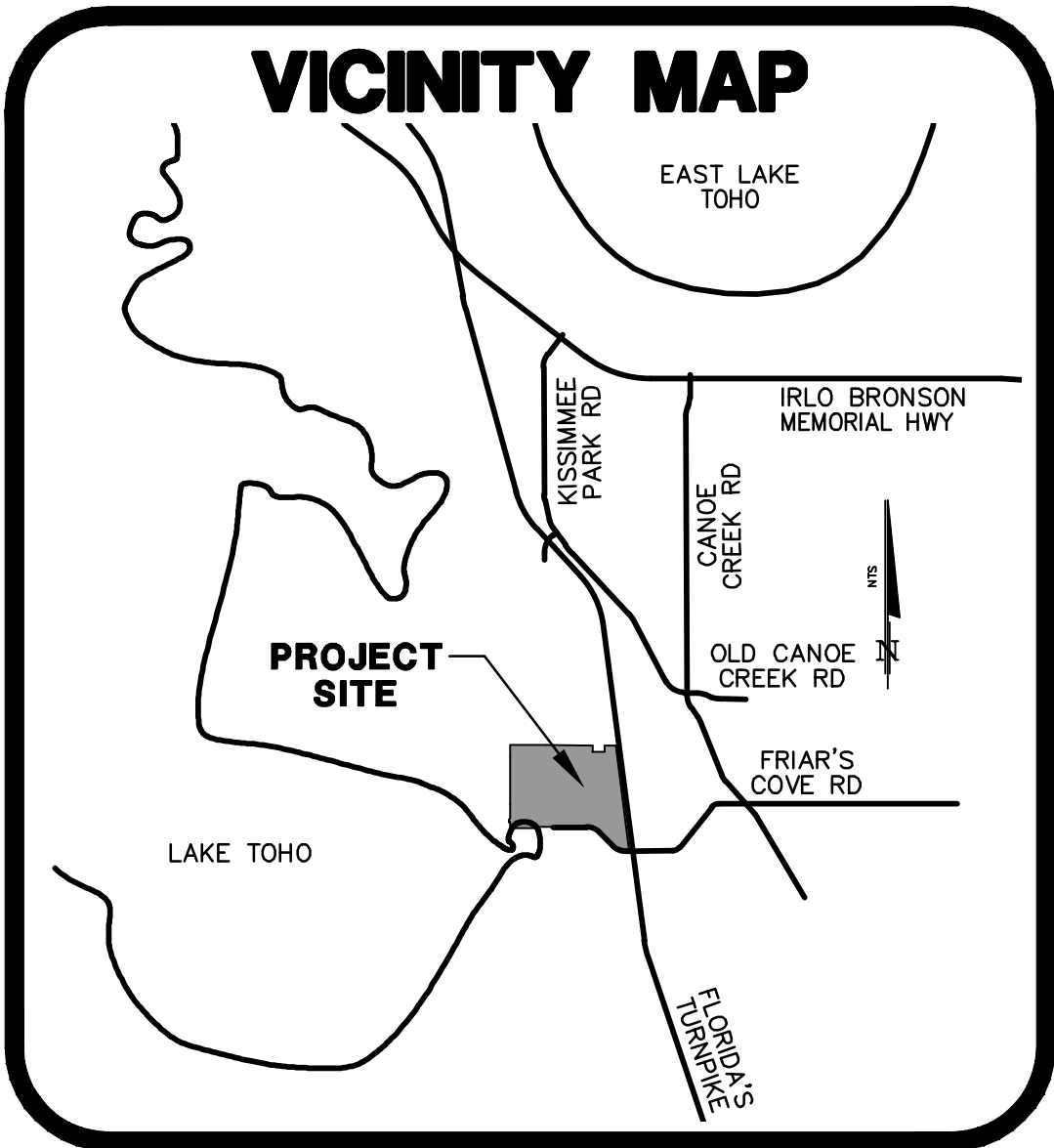
Environmental:  
Bio-Tech Consulting Inc.  
3025 East South Street  
Orlando, FL 32803  
Contact: Steve Butler  
Phone (407) 894-5969

SITE DATA

PROJECT AREA                    ±677.4    ACRES

EXISTING ZONING                MIXED USE

SFWMD APP. NO.                210308-5538

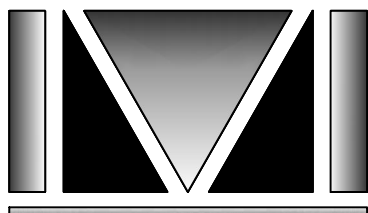


SECTION 27, 28, 33 & 34, TOWNSHIP 26 S, RANGE 30 E  
PROPERTY APPRAISER PARCEL ID #  
27-26-30-4950-0001-1210, 28-26-30-4950-0001-1130,  
28-26-30-4950-0001-1160, 33-26-30-0000-0010-0000,  
33-26-30-0000-0020-0000, 33-26-30-4950-0001-0010,  
33-26-30-4950-0001-0020, 33-26-30-4950-0001-0490,  
34-26-30-4950-0001-0070, 34-26-30-4950-0001-0080  
34-26-30-0000-0020-0000

**SHEET INDEX**

C001	COVER SHEET
C002	NOTES, SPECIFICATIONS AND LEGEND
C003	LEGAL DESCRIPTION AND SKETCH
C011-C014	EXISTING CONDITIONS PLAN
C015	AERIAL
C031	WETLAND PRESERVATION AND IMPACT PLAN
C101	EROSION AND SEDIMENTATION CONTROL PLAN
C102-C103	EROSION CONTROL AND TREE PRESERVATION DETAILS
C301	MASTER DRAINAGE PLAN
C311-C320	GRADING AND DRAINAGE PLAN
C321	TYPICAL POND SECTIONS AND DETAILS
C331-C335	CONTROL STRUCTURE DETAILS
C341-C343	PERIMETER CROSS SECTIONS
C351	GRADING AND DRAINAGE DETAILS

**REVISED JUNE 17, 2021**  
**MAY 2, 2018**



**DONALD W. MCINTOSH ASSOCIATES, INC.**  
**ENGINEERS                    PLANNERS                    SURVEYORS**  
2200 PARK AVENUE NORTH, WINTER PARK, FL 32789 407.644.4068  
CERTIFICATE OF AUTHORIZATION NO. 68

C001

FONTANA - CONCEPTUAL MASS GRADING PLANS -13189 - 5/2/18 - REVISED 06/17/21

DONALD W. MCINTOSH ASSOCIATES, INC. RESERVES THE EXCLUSIVE COPYRIGHT AND PROPERTY RIGHTS TO THIS DRAWING, WHICH MAY NOT BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER, NOR CAN IT BE ASSIGNED TO ANY PARTY WITHOUT DONALD W. MCINTOSH ASSOCIATES, INC.'S WRITTEN CONSENT.

GENERAL NOTES:

01. CONTRACTOR SHALL REVIEW ALL PERMITS PRIOR TO CONSTRUCTION FOR ANY CHANGES TO THE DESIGN INCLUDED THEREIN. NOTIFY ENGINEER/OWNER OF ANY REQUIRED CHANGES PRIOR TO CONSTRUCTION.
02. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL CONDITIONS CONTAINED THEREIN. PERMITS INCLUDED (BUT NOT NECESSARILY LIMITED TO) ARE:
- WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMIT (ERP)
  - WATER MANAGEMENT DISTRICT WATER USE FOR CONSTRUCTION DEWATERING (CUP)
  - ACCE NATIONWIDE OR INDIVIDUAL DREDGE AND FILL
  - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION TORTOISE RELOCATION
  - LOCAL RIGHT OF WAY USE
  - LOCAL UNDERGROUND UTILITIES
  - FDP NPDES STORMWATER
  - F.D.E.P. DISCHARGE OF PROTECTED GROUNDWATER
  - LOCAL ARBOR OR TREE REMOVAL
03. FLORIDA STATUTE 556 MANDATES THAT NOT LESS THAN TWO FULL BUSINESS DAYS BEFORE BEGINNING ANY EXCAVATION OR DEMOLITION THAT IS NOT BENEATH WATERS OF THE STATE, AND NOT LESS THAN 10 FULL BUSINESS DAYS BEFORE BEGINNING EXCAVATION OR DEMOLITION THAT IS BENEATH WATERS OF THE STATE, AN EXCAVATOR SHALL NOTIFY SUNSHINE STATE ONE CALL OF FLORIDA, INC. (800-432-4770) OF PLANNED EXCAVATION OR DEMOLITION ACTIVITIES.
04. CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO WATER, SEWER, POWER, TELEPHONE, GAS AND CABLE TV COMPANIES.
05. IN THE CITY OF ORLANDO, THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN TO THE CITY ENGINEER FOR APPROVAL PRIOR TO SCHEDULING THE PRE-CONSTRUCTION MEETING.
06. PRIOR TO COMMENCEMENT, CONTRACTOR SHALL PROVIDE THE OWNER AND DONALD W. MCINTOSH ASSOCIATES, INC. WITH CONSTRUCTION SCHEDULE FOR VARIOUS SITE WORK ELEMENTS SO THAT PERIODIC SITE VISITS MAY BE COORDINATED TO ENSURE TIMELY CERTIFICATION OF COMPLETION TO AGENCIES AND AVOID DELAYS IN ISSUANCE OF CERTIFICATES OF COMPLETION.
07. CONTRACTOR SHALL FURNISH OWNER WITH ACCURATE RECORD DRAWINGS SURVEY SHOWING AS-CONSTRUCTED HORIZONTAL AND VERTICAL DIMENSIONING OF THE WORK. THE SUBMITTAL COPY OF THE RECORD DRAWINGS WILL NOT BE RETURNED. THE RECORD DRAWING OR A REPRODUCIBLE COPY PREPARED BY ENGINEER SHALL BE CERTIFIED BY THE CONTRACTOR AS CORRECT. ALL INFORMATION WHICH IS UNCHANGED AND CURRENT SHALL BE NOTED BY CHECKING OFF OR CLOUDING. ALL REVERSED INFORMATION SHALL BE CROSSED THROUGH AND NEW DATA ADDED.
08. THE LOCATIONS OF EXISTING UTILITIES AND STORM DRAINAGE SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION PROVIDED FOR CONSTRUCTION ACTIVITY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ARRANGEMENTS FOR FIELD LOCATIONS AND FOR ANY RELOCATIONS OF THE VARIOUS EXISTING UTILITIES WITH THE UTILITY OWNERS, WHICH SHALL BE DONE IN A TIMELY FASHION TO MINIMIZE IMPACT ON CONSTRUCTION. ANY DELAY OR INCONVENIENCE CAUSED BY THE CONTRACTOR BY THE RELOCATION OF THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
09. ANY DIFFERING SITE CONDITION FROM THAT WHICH IS REPRESENTED HEREIN, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND OWNER IN WRITING PRIOR TO CONSTRUCTION IN THE AREA IMPACTED BY THE CONFLICT. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED IF CONTRACTOR FAILS TO PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS FOR REVIEW BY THE ENGINEER AND OWNER.
10. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES FOUND BETWEEN DRAWINGS AND THE FIELD CONDITIONS PRIOR TO CONSTRUCTION IN THE AREA IMPACTED BY THE CONFLICT.
11. ALL RECOMMENDATIONS AND REQUIREMENTS OF INSPECTION PERSONNEL OTHER THAN OWNER'S SHALL BE REPORTED TO ENGINEER/OWNER PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK WHICH IS NOT AUTHORIZED BY ENGINEER/OWNER.
12. ALL WORK SHALL BE OPEN TO AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE CITY, OWNER, INVOLVED UTILITY COMPANIES, PROJECT ENGINEER AND REGULATORY AGENCIES.
13. CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE INFORMATION PROVIDED IN THESE PLANS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL, PRIOR TO THE INSTALLATION ON ANY IMPROVEMENT.
14. CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF PROJECT AND ADVISE ENGINEER OF ANY DISCREPANCIES.
15. NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL PROCESS.
16. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ENGINEERING AND AGENCY APPROVAL PRIOR TO PROCUREMENT OF MATERIALS.
17. CONTRACTOR TO SUBMIT COPIES OF ALL TESTING REPORTS TO THE OWNER AND ENGINEER FOR ACCEPTANCE AND CERTIFICATIONS.
18. CONTRACTOR TO PRESERVE ALL MONITORING WELLS IDENTIFIED ONSITE.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING PROPER TRAFFIC MAINTENANCE AND CONTROLS IN ACCORDANCE WITH REGULATORY STANDARDS. WHERE A TRAFFIC MAINTENANCE PLAN IS REQUIRED, IT SHALL BE PREPARED BY A FDOT CERTIFIED DESIGNER AND SUBMITTED BY CONTRACTOR FOR APPROVAL BY OWNER, ENGINEER AND CITY OR COUNTY.
20. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROJECT SITE DURING CONSTRUCTION TO PREVENT TRESPASSING OF UNAUTHORIZED PEDESTRIANS AND/OR VEHICLES IN ALL WORK AREAS. THE CONTRACTOR SHALL POST SIGNS, CONSTRUCT BARRIERS OR IMPLEMENT OTHER METHODS NECESSARY TO CONTROL ACCESS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR TRESPASSING ON THE CONSTRUCTION SITE OR DAMAGES TO ANY WORK RELATED THERETO.
21. CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTIES FROM DAMAGE BY SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.
22. CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD. CONTRACTOR SHALL BECOME FAMILIAR WITH AND CONFORM WITH ALL TREE PROTECTION/ PRESERVATION PROVISIONS OF THE CONTRACT DOCUMENTS AND LOCAL GOVERNMENT.
23. ALL FDOT DESIGN INDICES ARE HEREBY INCORPORATED AS PLAN REFERENCES HEREIN. CONTRACTOR IS OBTAINING COMPLETE COPIES OF ALL APPLICABLE INDEX DRAWINGS AND CONSTRUCTING ALL WORKS IN CONFORMANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION.
24. IF CONTRACTOR PROPOSES TO DISCHARGE DEWATERING EFFLUENT OFF-SITE, HE SHALL COMPLY WITH FDP'S "GENERIC PERMIT FOR DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY". PERMIT REQUIREMENTS CAN BE OBTAINED FROM FDP AT (407) 893-3985. THIS PERMIT IS INDEPENDENT OF AND IN ADDITION TO WATER MANAGEMENT DISTRICTS' PERMITS FOR CONSTRUCTION DEWATERING.

GRADING & DRAINAGE NOTES:

01. SITE GRADING AND DRAINAGE MATERIALS AND CONSTRUCTION SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2008 EDITION, INsofar AS THEY APPLY TO THE DESIGNS HEREIN, AND THE CITY OF ORLANDO ENGINEERING STANDARDS MANUAL, LATEST EDITION AND STORMWATER MANAGEMENT (OUSMM) REGULATIONS AND SPECIFICATIONS, WHERE SUCH SPECIFICATIONS DIFFER, THE MORE STRINGENT SHALL APPLY, SUBJECT TO DETERMINATION OF THE ENGINEER.
02. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SURVEY MONUMENTATION. DISTURBED MONUMENTATION SHALL BE RESTORED BY A FLORIDA-LICENSED LAND SURVEYOR SELECTED BY THE OWNER AT CONTRACTOR'S EXPENSE.
03. BENCHMARK LOCATION AND ELEVATION ARE AS REPRESENTED BY SURVEYOR AT THE TIME OF THE SURVEY. CONTRACTOR SHALL VERIFY ITS CORRECTNESS AT TIME OF CONSTRUCTION.
04. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING, OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING ONSITE AND OFFSITE DRAINAGE SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL PERMIT REQUIREMENTS RELATED TO SUCH MEASURES. METHODS MAY INCLUDE, BUT ARE NOT LIMITED TO, CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, SILT BARRIERS, OR SILT SCREENS. ANY MEASURES SHOWN OR DETAILED IN THESE DRAWINGS SHALL BE CONSIDERED MINIMUMS AND SHALL NOT ALLEVATE CONTRACTOR FROM THE RESPONSIBILITY TO IMPLEMENT ANY MEASURES NECESSARY TO PROVIDE PROTECTION.
05. CONTRACTOR SHALL INCLUDE ACCURATE AS-BUILT DIMENSIONS AND ELEVATIONS OF THE STORMWATER MANAGEMENT AREAS IMMEDIATELY AFTER FINAL GRADING AND PRIOR TO GRASSING THE SLOPES. AT A MINIMUM, CONTRACTOR MUST OBTAIN ENGINEER'S APPROVAL PRIOR TO GRASSING; IF ANY MODIFICATIONS ARE NEEDED, ADDITIONAL AS-BUILTS MUST BE FURNISHED.
06. GEOTECHNICAL SERVICES HAVE BEEN PROVIDED AS REFERENCED BELOW. GEOTECHNICAL RECOMMENDATIONS ARE NOT THE RESPONSIBILITY OF DONALD W. MCINTOSH ASSOCIATES, INC. DONALD W. MCINTOSH ASSOCIATES, INC. HAS RELIED ON THE BELOW REFERENCED GEOTECHNICAL REPORTS IN PREPARATION OF THESE DRAWINGS. ANY CONFLICT BETWEEN INFORMATION WITHIN THE REPORT AND THESE DRAWINGS SHALL BE REPORTED TO ENGINEER/OWNER. DONALD W. MCINTOSH ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, COMPLETENESS OR ACCURACY OF GEOTECHNICAL INFORMATION.
- GEOTECHNICAL ENGINEER: DEVO ENGINEERING  
PROJECT NO.: 17-585.16  
DATE: MAY 4, 2018  
REVISED:
07. ELEVATIONS OF GRASSED AREAS ARE GIVEN AT FINISHED GRADE (TOP OF SOD OR SEEDED SURFACE).
08. PIPE LENGTHS SHOWN REPRESENT SCALE DISTANCES BETWEEN CENTERLINES OF DRAINAGE STRUCTURES AND FROM INVERTS OF ENDWALLS AND/OR MITERED END SECTIONS. BIDDERS SHALL ADJUST FOR PIPE LENGTHS WHEN BIDDING MITERED END SECTIONS.
09. ALL OFF-SITE DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION, OR BETTER.
10. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND DISPOSING OF ALL WASTE MATERIALS CONSISTENT WITH ALL RULES AND REGULATIONS APPLICABLE TO THE SPECIFIC MATERIAL FOUND.
11. IMMEDIATELY AT ONSET OF CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES AND CORRECTING THE PROJECT (INCLUDING WATER, SEWER, POWER, TELEPHONE, GAS, AND CABLE TV) AND SHALL EVALUATE POTENTIAL CONFLICTS. ALL SUCH CONFLICTS SHALL BE REPORTED TO ENGINEER/OWNER IMMEDIATELY UPON DISCOVERY.
12. CONTRACTOR SHALL INSTRUCT THE GEOTECHNICAL TESTING LABORATORY PROVIDING CONSTRUCTION TESTING TO PROVIDE DONALD W. MCINTOSH ASSOCIATES, INC. WITH COPIES OF ALL SITE-WORK TEST REPORTS AS THEY ARE GENERATED. CONTRACTOR SHALL MAINTAIN THE RESPONSIBILITY OF CONSTRUCTING THE PROJECT IN STRICT ACCORDANCE WITH THE PROJECT PLANS, SPECIFICATIONS AND REQUIREMENTS. RECEIPT OF COPIES OF GEOTECHNICAL REPORTS BY DONALD W. MCINTOSH ASSOCIATES, INC. IN NO WAY OBLIGATES DONALD W. MCINTOSH ASSOCIATES TO ANY REVIEW, COMMENTS OR ACTIONS REGARDING THE WORK.
13. DURING CONSTRUCTION, THE GEOTECHNICAL ENGINEER PROVIDING PROJECT TESTING SHALL MONITOR CONSTRUCTION CONDITIONS AND PROVIDE RECOMMENDATIONS FOR ADDITIONAL SPECIFICATIONS AS NEEDED. ENGINEER SHALL BE NOTIFIED OF ANY SUCH RECOMMENDATIONS.
14. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD STAKE AND ROPE OFF CONSERVATION AREA LINES. OWNER RESERVES THE RIGHT TO CHECK THE STAKING AND ROPEING AND REQUIRE IT TO BE RELOCATED IF NECESSARY. IT SHALL REMAIN IN PLACE UNTIL ADJACENT CONSTRUCTION IS COMPLETE.
15. ALL DISTURBED CITY AND PRIVATE RIGHTS OF WAY SHALL BE RESTORED. SOD SHALL BE PLACED FROM BACK OF CURB TO THE TOE OF BANK AND ALL AREAS SHALL MATCH OR EXCEED PRECONSTRUCTION CONDITIONS.
16. OVER-EXCAVATION OF RETENTION BASINS SHALL NOT BE ALLOWED UNLESS SPECIFICALLY AUTHORIZED BY ENGINEER/OWNER. SHOULD UNAUTHORIZED OVER-EXCAVATION OCCUR, IT SHALL BE BACKFILLED, REGRADED, RESLOPED AND/OR RESEDED AS REQUIRED BY OWNER AT CONTRACTOR'S EXPENSE TO OWNER'S SPECIFICATIONS.
17. CONTRACTOR SHALL REMOVE ALL MUCK DEPOSITS IN CONSTRUCTION AREAS AND AREAS TO BE FILLED. SEE GEOTECHNICAL REPORT.
18. ENGINEER RESERVES THE RIGHT TO WITHHOLD AUTHORIZATION FOR PAYMENT FOR ANY ROADWORK WHICH HAS NOT BEEN TESTED BY A FLORIDA-REGISTERED GEOTECHNICAL ENGINEER AND REPORTED TO CONFORM TO PROJECT SPECIFICATIONS.
19. DRAINAGE MANHOLES AND INLETS (NOT INCLUDING CONTROL STRUCTURES) IN THE PLANS ARE IDENTIFIED BY TOP TYPE ONLY. CONTRACTOR SHALL PROVIDE STANDARD DITCH BOTTOM INLET, J OR P STRUCTURE BOTTOMS, SIZED AS REQUIRED TO ACCOMMODATE PIPE SIZES AND ORIENTATIONS SHOWN. SHOP DRAWINGS SHALL BE SUBMITTED WHICH CLEARLY REPRESENT SUCH DATA.
20. NEW PIPES SHALL BE CONNECTED TO EXISTING PIPES AT AN EXISTING FACTORY MADE JOINT. REMOVE PARTIAL PIPES IF AND AS NEEDED.
21. CONTRACTOR SHALL PROVIDE A SOIL TRACKING PREVENTION DEVICE CONFORMING TO SHEET C102 AT ALL PROJECT CONNECTIONS TO PUBLIC OR PRIVATE ROADWAYS THAT ARE TO BE USED BY CONSTRUCTION TRAFFIC.
22. CONTRACTOR SHALL STABILIZE AND PROTECT ALL END WALL, MITERED END SECTION, FLARED END SECTION, ETC. STRUCTURES THROUGHOUT THE PROJECT UNTIL THE BANK SLOPES OF THE RECEIVING WATER BODY ARE STABILIZED AND ACCEPTED BY OWNER.
23. STORM DRAINS SHALL BE REINFORCED CONCRETE PIPE, PER ASTM C-76 CLASS III, UNLESS OTHERWISE SPECIFIED. LIFTING HOLES ARE PROHIBITED. JOINTS SHALL BE BELL AND SPIGOT WITH COMPRESSION GASKETS CONFORMING TO ASTM C443-85 AND WRAPPED PER FDOT INDEX 280.
24. ALL STORM STRUCTURES SHALL CONFORM TO OSCEOLA STANDARDS AND FDOT STANDARD INDEX DRAWINGS AND SPECIFICATIONS, LATEST EDITION. GRATES SHALL BE CAST IRON UNLESS OTHERWISE SPECIFIED OR APPROVED.
25. ALL TYPE "P" STRUCTURE BOTTOMS SHALL BE ROUND UNLESS OTHERWISE SPECIFIED AND SHALL HAVE 4 FT. MINIMUM DIAMETER, IF GREATER THAN 4 FEET DIAMETER THEN TYPE J STRUCTURE STRUCTURE SHALL BE USED.
26. ALL CONCRETE WORK SHALL BE 3000 PSI MINIMUM, UNLESS OTHERWISE
27. STORM SEWERS WILL BE TESTED ACCORDING TO THE REQUIREMENTS OF SECTION 9.03.05 OF THE CITY OF ORLANDO E.S.M., INCLUDING VIDEO TAPING OF CONCRETE PIPE AND CLEANING, VIDEO TAPING AND MANDREL TESTING OF PLASTIC AND METAL PIPE.
28. FILL PLACEMENT AND SPECIFICATIONS SHALL CONFORM TO THE RECOMMENDATIONS OF THE PROJECTS GEOTECHNICAL CONSULTANT.

MASS GRADING SPECIFICATIONS (PREPARED BY DEVO ENGINEERING)

- MATERIALS TO BE USED FOR FILLING SHALL BE FINE SANDS, SLIGHTLY SILTY FINE SANDS, AND SILTY FINE SANDS. THE DISTINCTION BETWEEN THE SOIL TEXTURAL CLASSIFICATIONS IS BASED ON THE PERCENT BY WEIGHT PASSING THE U.S. NO. 200 SIEVE (I.E., THE FINES FRACTION), THIS DISTINCTION AND THE ENGINEERING USES OF THE VARIOUS SOILS ARE GENERALLY ARTICULATED IN TABLE 14.
- ENGINEERING SUITABILITY OF FILL FROM STORMWATER PONDS:
- THE DEEP BORINGS DRILLED IN THE POND FOOTPRINTS GENERALLY DISCLOSED BOTH AREAS WHERE SIGNIFICANT AMOUNTS OF SOILS THAT ARE SUITABLE FOR USE FOR MASS GRADING THE SITE CAN BE OBTAINED AS WELL AS AREAS WHERE QUANTITIES OF SUITABLE FILL MATERIAL WILL BE MORE LIMITED. THE AREA WHERE SIGNIFICANT AMOUNTS OF FILL CAN BE OBTAINED ARE INDICATED IN ATTACHED FIGURE 1-4.
- THE LIGHTER AND DARKER COLORED FINE SANDS ARE PREFERRED FOR THE VENEER FILL AND THESE ARE IDENTIFIED BY THE COLOR BANDS IN THE BORING PROFILES IN FIGURES 2.1 TO 2.18. THE SANDS WITH HIGHER SILT CONTENT WILL TEND TO BECOME HYDRAULICALLY RESTRICTIVE ONCE COMPACTED, CREATING LOT DRAINAGE AND WEETNESS ISSUES. TABLE 14 PROVIDES A DESCRIPTION OF THE USES OF THE DIFFERENT TYPES OF SOILS.
- IT IS RECOMMENDED THAT THE PORTIONS OF THE ROAD ALIGNMENT AND THE FOOTPRINT OF ANY DEVELOPMENT ELEMENT PLUS A DISTANCE OF 5 FT ON THE SIDES, WHICH CONTAIN SURFICIAL AND/OR BURIED ORGANICS BELOW THE EXCAVATION LINES, BE COMPLETELY DEMUCKED AND BACKFILLED WITH CLEAN SAND. THE DEMUCKING EXCAVATION SHOULD HAVE A 2H:1V TRANSITION SLOPE ADJACENT TO ORGANIC DEPOSITS WHICH ARE TO REMAIN.
- RECOMMENDATIONS FOR GENERAL MASS GRADING OPERATIONS:
1. ENSURE THAT THE SITE IS PROPERLY CLEARED AND GRUBBED.
  2. STRIP THE TOPSOIL TO A DEPTH OF AT LEAST 8 INCHES, ROOT RAKE TO A DEPTH OF 12 INCHES AND THEN COMPACT TO 95% MODIFIED PROCTOR DENSITY.
  3. CUT AND FILL THE AREAS IDENTIFIED FOR RE-PROFILING AND COMPACT THE FILL MATERIAL AND RESULTING SUBGRADE TO 95% MODIFIED PROCTOR DENSITY.
  4. FOR COMPACTION OF THE SAND, WE RECOMMEND A LARGE SELF-PROPELLED VIBRATORY ROLLER WHICH HAS A MINIMUM STATIC WEIGHT OF 12,000 POUNDS AND IS CAPABLE OF EXERTING A MINIMUM IMPACT ENERGY OF 20,000 POUNDS (I.E., DYNAPAC CA-152 OR EQUIVALENT), COMPACT IN LIFT THICKNESSES NECESSARY TO ACHIEVE 95% DENSITY. THE MAXIMUM LIFT THICKNESS SHALL NOT EXCEED 1 FT.
  5. ONE (1) COMPACTION TEST IS RECOMMENDED FOR EVERY 15,000 SQUARE FEET OF FILL FOR EACH 1 FT. VERTICAL INTERVAL. THIS RECOMMENDATION WORKS OUT TO BE ONE (1) COMPACTION TEST PER 500 CUBIC YARDS OF IN-PLACE FILL MATERIAL. COMPACTION TESTS SHALL BE PERFORMED AT 1 FT. VERTICAL INTERVALS.
- RECOMMENDATIONS FOR DEMUCKING AND BACKFILLING:
1. THE AREAS WHICH CONTAINS ORGANIC DEPOSITS SHOULD BE DEMUCKED AND BACKFILLED WITH CLEAN FINE SAND OR SLIGHTLY SILTY FINE SAND RELATIVELY FREE OF ORGANICS AND DEBRIS. THE SURFICIAL ORGANIC MATERIAL SHALL BE EXCAVATED TO EXPOSE THE UNDERLYING MINERAL SOIL.
  2. DEWATERING DURING EXCAVATING AND BACKFILLING SHALL BE ANTICIPATED AND MAY BE ACCOMPLISHED BY DITCHING AND THE USE OF SUMP PUMPS AND/OR OTHER METHODS SUCH AS SANDED WELL POINTS, AND VERTICAL OR HORIZONTAL SUCTION WELLS. THE WATER TABLE SHALL BE MAINTAINED A MINIMUM OF 2 FEET BELOW THE EXCAVATED SURFACE. THE METHOD OF DEWATERING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
  3. UPON APPROVAL OF THE PROJECT GEOTECHNICAL ENGINEER, THE EXCAVATED AREA MAY BE BACKFILLED WITH CLEAN FINE SAND FREE OF UNSUITABLE OR DELETERIOUS MATERIAL. THE FILL SHOULD NOT BE PLACED IN STANDING WATER.
  4. THE BACKFILL MATERIAL SHALL CONSIST OF RELATIVELY CLEAN FINE SAND WITH LESS THAN 10 PERCENT PASSING THE U.S. NO. 200 SIEVE AND SHALL BE FREE OF ROOTS AND/OR OTHER DELETERIOUS MATERIAL. THE MATERIAL SHALL BE COMPACTED TO A MINIMUM DENSITY EQUAL TO AT LEAST 95 PERCENT OF THE SOIL'S MODIFIED PROCTOR DENSITY VALUE (AASHTO T-180). THE FILL SHALL BE PLACED IN LOOSE LIFT THICKNESSES NOT EXCEEDING 12 INCHES.
  5. A REPRESENTATIVE OF THE PROJECT GEOTECHNICAL ENGINEER SHOULD BE RETAINED TO PROVIDE ONSITE INSPECTION DURING THE DEMUCKING OPERATION AND TESTING OF THE COMPACTED FILL TO ENSURE COMPLIANCE WITH THE RECOMMENDATIONS ABOVE.
- ALLOWABLE TOLERANCES FOR FINISHED GRADES SHALL BE 0.0 FEET BELOW AND 0.2 FEET ABOVE THE GRADES INDICATED ON THE MASS GRADING DRAWINGS. OWNER RESERVES THE RIGHT TO MODIFY FINAL FILL ELEVATIONS PRIOR TO COMPLETION OF FILL PLACEMENT.

EROSION & SEDIMENT CONTROL NOTES:

01. BECAUSE OF THE PROJECT'S PROXIMITY TO ADJACENT LAKES, CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE EROSION, TO RETAIN SEDIMENT WHICH UNAVOIDABLY WILL RESULT FROM ONSITE CONSTRUCTION ACTIVITIES, TO PREVENT SEDIMENTATION AND OTHERWISE PROTECT ONSITE WETLANDS WHICH ARE TO BE RETAINED. THE BASIC PRINCIPLES DESCRIBED HEREIN ARE INTENDED TO DEFINE THE DEVELOPER'S INTENT AND REQUIRE THE CONTRACTOR TO STUDY THE SPECIFIC REQUIREMENTS OF GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
02. THE SCHEDULING, SEQUENCING AND CONTROL MEASURES, WHICH ARE OUTLINED HEREIN, ARE SUBJECT TO FINAL DEFINITION BY THE CONTRACTOR WHO WILL BE RESPONSIBLE FOR IMPLEMENTATION AND COMPLIANCE.
03. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A CONSTRUCTION SCHEDULE DEPICTING EACH PHASE OF THE WORK. THE CONTRACTOR SHALL ALSO BE REQUIRED TO SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN TO THE OWNER, THE ENGINEER AND OSCEOLA COUNTY ENCOMPASSING THE CONTRACTOR'S EXACT PLAN OF IMPLEMENTING THE PRINCIPLES AND THE REQUIREMENTS DESCRIBED HEREIN. NO CONSTRUCTION CAN BEGIN UNTIL SAID PLAN HAS BEEN APPROVED BY OSCEOLA COUNTY.
04. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO ENSURE AGAINST POLLUTING, SILTATION OR DISTURBANCE TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE ADJACENT WATER BODIES IN COMPLIANCE WITH ALL PERMIT REQUIREMENTS RELATED TO SUCH MEASURES.
05. EROSION CONTROL METHODS SHALL INCLUDE TEMPORARY CONTROL STRUCTURES SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, SILT BASINS, SILT SCREENS, TURBIDITY BARRIERS OR THEIR BEST MANAGEMENT PRACTICE AVAILABLE TO THE INDUSTRY.
06. EROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE MAINTAINED BY CONTRACTOR THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL NEW VEGETATIVE GROWTH HAS BEEN ESTABLISHED.
07. THROUGHOUT THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL DAILY INSPECT PROTECTIVE INSTALLATIONS FOR FAILURES OR SIGNS OF FAILURE OR MALFUNCTION AND EFFECT REPAIRS OR REPLACEMENT IMMEDIATELY UPON DISCOVERY.
08. THE RECOMMENDED GENERAL SEQUENCE OF CONSTRUCTION FOR ALL BASINS IS AS FOLLOWS:
- A. PLACEMENT OF PERIMETER PROTECTIVE MEASURES (SILT FENCE, HAY BALES, ETC.) AROUND ONSITE LAKES, AT POINTS OF OFFSITE DISCHARGE, AND AROUND WORK AREAS.
  - B. REROUTE RUNOFF FROM AREAS OUTSIDE OF THE DEVELOPMENT AREA TO MINIMIZE FLOW THROUGH AREAS TO BE DISTURBED BY CONSTRUCTION. BERMS, SWALES AND OTHER MEANS USED FOR SUCH CONVEYANCE SHALL BE VEGETATED AND MEASURES TAKEN TO PROVIDE PROTECTION UNTIL STABILIZATION HAS BEEN ESTABLISHED.
  - C. SELECT LOCATIONS FOR PLACEMENT OF MATERIAL, WHETHER SUITABLE FOR FILL OR UNSUITABLE, AND CONSTRUCT CONTAINMENT BERMS AROUND THE AREA. THE USE OF STRIPPINGS FOR THIS PURPOSE MAY ACCELERATE BERM REVEGETATION. CONSTRUCT TEMPORARY OUTLETS FROM CONTAINMENT AREAS WITH SCREENS, HAY BALES, SETTLING BASINS OR OTHER MEASURES TO PREVENT SILT TRANSPORTATION.
  - D. SELECT/DESIGNATE ACCESS ROUTING FOR CONSTRUCTION EQUIPMENT AND VEHICLES AND PROVIDE PERIMETER PROTECTIVE MEASURES WHERE EXISTING TERRAIN WILL BE SUBJECT TO DISRUPTION BY SUCH TRAFFIC.
  - E. IF REQUIRED, CONSTRUCT ABOVE GROUND OR OTHER CONTAINMENT AREAS FOR CONSTRUCTION AREA RUNOFF. PROVIDE SCREENS, HAY BALES, ETC., TO PREVENT DISCHARGE FROM THESE AREAS.
  - F. GRASSING, SODDING, ETC. SHALL BE IN PLACE IMMEDIATELY UPON COMPLETION OF DISTURBED AREAS WITHIN PROJECT AREA.
  - G. IN ANY EVENT, CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING ANY AND ALL MEASURES ARE TAKEN TO COMPLY WITH LOCAL, STATE, FEDERAL AND OWNER REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION.
09. BAHIA 500 REQUIRED AROUND ALL STORM INLETS IN UNPAVED AREAS.
10. THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY HAS AUTHORIZED THE STATE OF FLORIDA TO ADMINISTER THE NATIONAL POLLUTANTS DISCHARGE ELIMINATION SYSTEM (NPDES). CONTRACTOR IS ADVISED THAT OPERATORS ARE REQUIRED TO FILE WITH FDP A NOTICE OF INTENT (NOI) TO USE THE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES THAT DISTURB ONE OR MORE ACRES OF LAND. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO SUBMIT THE NOTICE OF INTENT (NOI) TO FDP WITH A COPY TO THE OWNER, THE ENGINEER AND THE CITY AT LEAST 48 HOURS BEFORE INITIATING CONSTRUCTION.
11. AS REQUIRED BY THE GENERIC PERMIT, CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PURSUANT TO ALL REQUIREMENTS OF THE GENERIC PERMIT.
12. PURSUANT TO THE NPDES, CONTRACTOR SHALL MAINTAIN RECORDS OF DATES WHEN MAJOR GRADING ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE AND SHALL INITIATE STABILIZATION MEASURES WITHIN 14 DAYS AFTER SUCH TEMPORARY OR PERMANENT CESSATION OF CONSTRUCTION ACTIVITY. STABILIZATION REQUIREMENTS (SODDING WHERE SHOWN ON THE PLANS, SEEDING AND MULCHING ELSEWHERE) APPLY TO ALL AREAS DISTURBED BY CONSTRUCTION, ON-SITE AND OFF-SITE.
13. CONTRACTOR SHALL PROVIDE INSPECTIONS BY QUALIFIED PERSONNEL OF ALL POINTS OF DISCHARGE, DISTURBED AREAS NOT YET FINALLY STABILIZED, STORAGE AREAS EXPOSED TO RAINFALL, STRUCTURAL CONTROLS AND VEHICULAR ACCESS LOCATIONS. INSPECTIONS SHALL BE MADE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER.
14. CONTRACTOR SHALL MAINTAIN A COPY OF THE S.W.P.P.P. AT THE SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.
15. CONTRACTOR SHALL AMEND THE SWPPP WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION OR MAINTENANCE THAT MAY HAVE A SIGNIFICANT EFFECT ON THE POTENTIAL FOR OFF-SITE DISCHARGE OF POLLUTANTS, INCLUDING THE ADDITION OF OR CHANGE IN LOCATION OF DISCHARGE POINTS AND REVISION TO CONTROLS WHICH MAY HAVE PROVED TO BE INEFFECTIVE.
16. CONTRACTOR SHALL REMAIN RESPONSIBLE FOR OPERATION AND MAINTENANCE OF POLLUTION PROTECTION MEASURES UNTIL CONSTRUCTION HAS BEEN COMPLETED IN SUBSTANTIAL CONFORMANCE WITH THE CONTRACT PLANS, CERTIFIED AS SUCH BY THE ENGINEER AND ACCEPTED BY THE CITY, WHETHER OR NOT CONTRACTOR HAS SUBMITTED A NOTICE OF TERMINATION (NOT) TO FDP.
17. IF CONTRACTOR PROPOSES TO DISCHARGE DEWATERING EFFLUENT OFF-SITE, HE SHALL COMPLY WITH FDP'S "GENERIC PERMIT FOR DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY". PERMIT REQUIREMENTS CAN BE OBTAINED FROM FDP AT (407)894-7555 EXT. 3985. THIS PERMIT IS INDEPENDENT OF AND IN ADDITION TO WATER MANAGEMENT DISTRICTS' PERMITS FOR CONSTRUCTION DEWATERING.

VERTICAL DATUM NOTES:

01. EXISTING TOPOGRAPHY AND CONTOURS BASED ON THE FOLLOWING: OSCEOLA COUNTY 2016 LIDAR TOPOGRAPHY.
02. REFERENCE BENCHMARK:  
DESCRIPTION: SURVEY DISC IN CONCRETE (C 514 2001)  
ELEVATION: 87.65 (NAV888)  
LOCATION: IN THE FLORIDA TURNPIKE R/W 4320 FEET SOUTHEAST OF THE SOUTHWEST CORNER OF THE FONTANA PROPERTY
03. SITE BENCHMARK:  
DESCRIPTION: 5/8" ROD AND CAP (D 514 2001)  
ELEVATION: 57.31 (NAV888)  
LOCATION: ON THE SOUTH R/W LINE OF FRIAR'S COVE ROAD ±560 FEET EAST OF THE WEST LIMIT OF SAID R/W.
04. BENCHMARK LOCATION AND ELEVATION ARE AS REPRESENTED BY SURVEYOR AT THE TIME OF THE SURVEY. CONTRACTOR SHALL VERIFY ITS CORRECTNESS AT TIME OF CONSTRUCTION.
05. 100-YEAR FLOOD ELEVATIONS SHOWN HEREIN ARE DERIVED FROM FEMA/FLOOD INSURANCE RATE MAP OF OSCEOLA COUNTY, COMMUNITY PANELS 12097C0255G, 12097C0260G, 12097C0265G & 12097C0270G DATED JUNE 18, 2013 & LOMR CASE NO. 16-04-322P DATED MARCH 31, 2017
06. 100-YEAR FLOOD LIMITS SHOWN GRAPHICALLY HEREIN ARE TAKEN FROM THE REFERENCED FEMA FIRM PANELS BY GRAPHIC CORRELATION OF TOPOGRAPHY.

DEMOLITION NOTES:

01. THE LOCATIONS OF EXISTING UTILITIES AND STORM DRAINAGE SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. ENGINEER AND OWNER ASSUMES NO RESPONSIBILITY FOR INACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ARRANGEMENTS FOR FIELD LOCATIONS AND FOR ANY RELOCATIONS OF THE VARIOUS EXISTING UTILITIES WITH THE UTILITY OWNERS, WHICH SHALL BE DONE IN A TIMELY FASHION TO MINIMIZE IMPACT ON THE CONSTRUCTION SCHEDULE. ANY DELAY OR INCONVENIENCE CAUSED BY THE CONTRACTOR BY THE RELOCATION OF THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
02. CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO WATER, SEWER, POWER, TELEPHONE, GAS, AND CABLE TV COMPANIES.
03. ANY DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER IN WRITING. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED.
04. CONTRACTOR SHALL PROTECT ADJACENT RIGHT-OF-WAYS AND ALL ADJACENT PROPERTIES FROM DAMAGE BY SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.
05. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO ENSURE AGAINST POLLUTING, SILTING, OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING DRAINAGE SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL PERMIT REQUIREMENTS RELATED TO SUCH MEASURES. METHODS MAY INCLUDE, BUT ARE NOT LIMITED TO, FLOATING TURBIDITY BARRIERS, CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, SILT BARRIERS, OR SILT SCREENS. ANY MEASURES SHOWN OR DETAILED IN THESE DRAWINGS SHALL BE CONSIDERED MINIMUMS AND SHALL NOT ALLEVATE CONTRACTOR FROM THE RESPONSIBILITY TO IMPLEMENT ANY MEASURES NECESSARY TO PROVIDE PROTECTION.
06. CONTRACTOR SHALL REMOVE ALL NON-REUSABLE WASTE MATERIAL. AT THE OWNERS DIRECTION, FOR DISPOSAL OFF-SITE. DISPOSAL SHALL CONFORM TO ALL APPLICABLE REGULATIONS.
07. CONTRACTOR SHALL ACQUAINT HIMSELF WITH THE CONSTRUCTION DOCUMENTS AND BE RESPONSIBLE FOR PROTECTING ANY EXISTING FACILITY SO DESIGNATED OR DESIGNATED TO BE UTILIZED IN THE WORK.
08. CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD. CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE ARCHITECT AND LANDSCAPE PLANS REGARDING TREES AND OTHER LANDSCAPING TO BE SALVAGED.
09. CONTRACTOR SHALL BE ADVISED THAT WHILE EXCAVATING AND WORKING WITHIN PROJECT LIMITS, PREVIOUSLY DEMOLISHED OR UNDEMOLISHED MATERIAL MAY BE ENCOUNTERED. CONTRACTOR SHALL COLLECT AND STOCKPILE ENCOUNTERED DEMOLISHED MATERIAL WITHIN AN AREA DESIGNATED ONSITE BY THE OWNER.

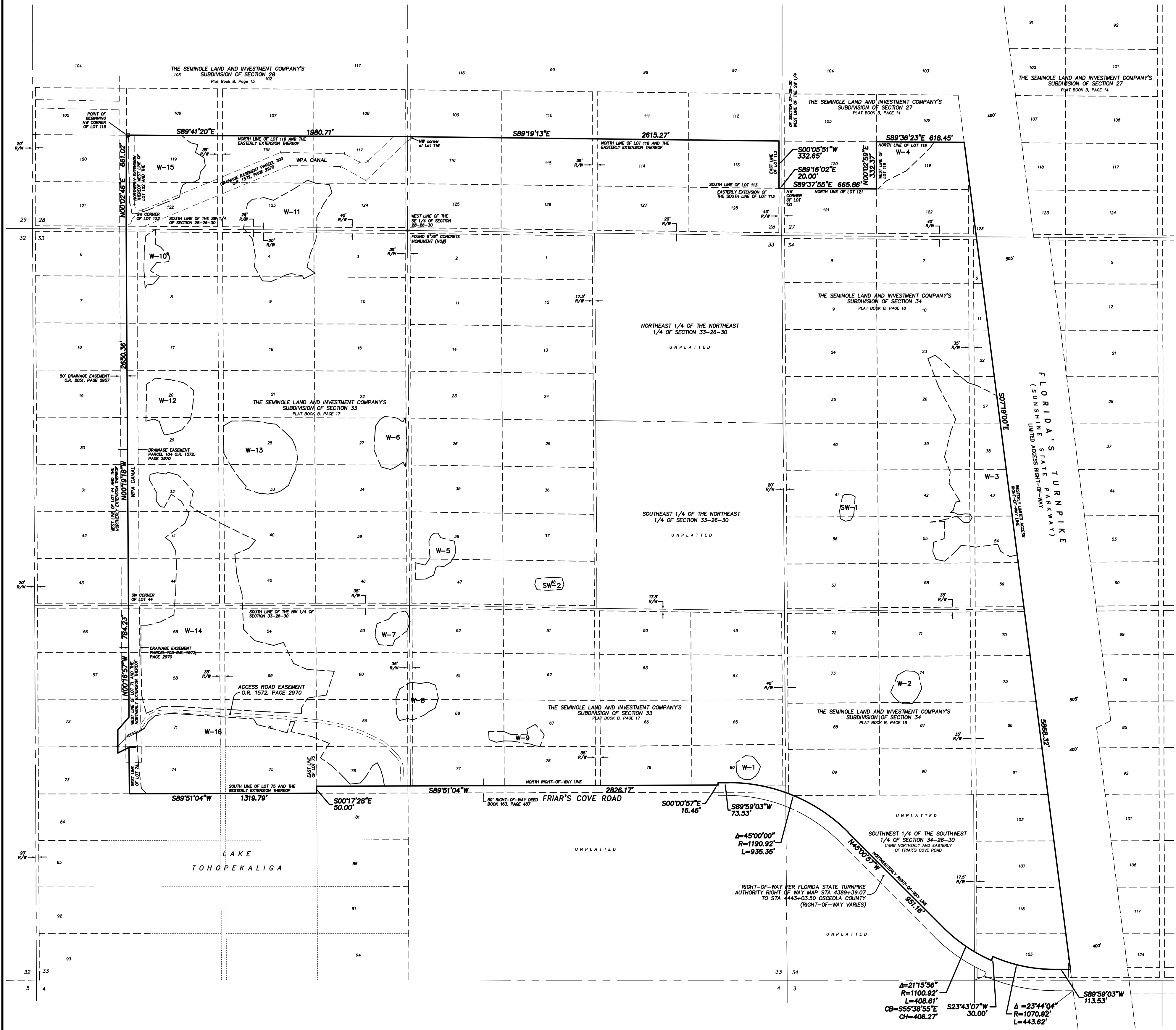
DRAWING 13189-NOTE		FONATANA CONCEPTUAL MASS GRADING PLANS OSCEOLA COUNTY, FLORIDA		DONALD W. MCINTOSH ASSOCIATES, INC. ENGINEERS 2800 PARK AVENUE NORTH, WINTER PARK, FL 32789 407.644.4088 CERTIFICATE OF AUTHORIZATION NO. 68		PLANNERS SURVEYORS JAMES C. NUGENT FLORIDA P.E. No. 57553		NO. DATE		REVISIONS			
SHEET C002		NOTES, SPECIFICATIONS AND LEGEND		CHECKED BY JCN		DATE 5/2/18		DESIGNED BY DSW		JOB NUMBER 13189		SCALE NTS	
2		OF		33									

GENERAL NOTES:

1. SEE NOTES, SPECIFICATIONS & LEGEND SHEET FOR ADDITIONAL INFORMATION.
2. THE SCALE OF THIS DRAWING MAY HAVE CHANGED DUE TO REPRODUCTION.



DONALD W. MCINTOSH ASSOCIATES, INC. RESERVES THE EXCLUSIVE COPYRIGHT AND PROPERTY RIGHTS TO THIS DRAWING WHICH MAY NOT BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER, NOR CAN IT BE ASSIGNED TO ANY PARTY WITHOUT DONALD W. MCINTOSH ASSOCIATES, INC.'S WRITTEN CONSENT.



Legal Description

Lots 121 and 122 and that portion of Lots 119 and 123, lying westerly of Florida's Turnpike, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 27, according to the plat thereof, as recorded in Plat Book B, Page 14; AND Lots 113 through 119 and Lots 122 through 128, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 28, according to the plat thereof, as recorded in Plat Book B, Page 15; AND Lots 1 through 5, Lots 8 through 17, Lots 20 through 29, Lots 32 through 41, Lots 44 through 55, Lots 58 through 71, Lots 74 through 80 and a portion of Lots 72 and 73, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 33, according to the plat thereof, as recorded in Plat Book B, Page 17; AND Lots 7 through 10, Lots 23 through 26, Lots 39 through 42, Lots 55 through 58, Lots 71 through 74, Lots 87 through 90 and that portion of Lots 6, 11, 22, 27, 36, 43, 54, 59, 70, 75, 86, 91, 102, 107, 118, 123 and 124, lying westerly of Florida's Turnpike, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 34, according to the plat thereof, as recorded in Plat Book B, Page 18, all being of the Public Records of Osceola County, Florida; AND the Northeast 1/4 of the Northeast 1/4 and the Southeast 1/4 of the Northeast 1/4 of Section 33, Township 26 South, Range 30 East; AND that part of the Southwest 1/4 of the Southwest 1/4 of Section 34, Township 26 South, Range 30 East, lying northeasterly of Friar's Cove Road; LESS right-of-way for Friar's Cove Road and LESS right-of-way as shown on the aforesaid plats of THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION; all lying in Sections 27, 28, 33 and 34, Township 26 South, Range 30 East, Osceola County, Florida, being more particularly described as follows:

BEGIN at the northwest corner of said Lot 119 of said THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 28; thence run S 89°41'20" E, along the north line of said Lot 119 and the easterly extension thereof, a distance of 1980.71 feet to a point on the west line of the Southwest 1/4 of said Section 28; thence run S 89°19'13" E, a distance of 17.50 feet to the northwest corner of said Lot 116; thence continue S 89°19'13" E, along the north line of said Lot 116 and the easterly extension thereof, a distance of 2597.77 feet to a point on the east line of said Lot 113; thence run S 00°05'51" W, along said east line, a distance of 332.65 feet to a point on the south line of said Lot 113; thence run S 89°16'02" E, along the easterly extension of the south line of said Lot 113, a distance of 20.00 feet to a point on the west line of the Southwest 1/4 of said Section 27; thence run N 00°02'59" E, along said west line, a distance of 332.37 feet to a point on the north line of said Lot 119; thence run S 89°37'55" E, a distance of 20.00 feet to the northwest corner of said Lot 121 of said THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 27; thence continue S 89°37'55" E, along the north line of said Lot 121, a distance of 645.86 feet to a point on the west line of said Lot 119 of said THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 27; thence run N 00°02'59" E, along said west line, a distance of 332.37 feet to a point on the north line of said Lot 119; thence run S 89°36'23" E, along said north line, a distance of 618.45 feet to a point on the westerly limited access right-of-way line of Florida's Turnpike; thence run S 07°19'00" E, along said westerly limited access right-of-way line, a distance of 5868.32 feet to a point on the northeasterly right-of-way line of Friar's Cove Road, as shown and described on Florida State Turnpike Authority Right Of Way Map Station 43894+39.07 to Station 4443+03.50, Osceola County, Florida; thence northwesterly, along said northeasterly right-of-way line, the following courses and distances: run S 89°59'03" W, a distance of 113.53 feet to a point of curvature of a curve, concave northeasterly, having a radius of 1070.92 feet and a central angle of 23°44'04"; thence run northwesterly, along the arc of said curve, a distance of 443.62 feet to a point; thence run S 23°43'07" W, a distance of 30.00 feet to a point on a non-tangent curve, concave northeasterly, having a radius of 1100.92 feet and a central angle of 21°15'56"; thence on a chord bearing of N 55°38'55" W, run 408.61 feet along the arc of said curve to the point of tangency thereof; thence run N 45°00'57" W, a distance of 951.16 feet to a point of curvature of a curve, concave southwesterly, having a radius of 1190.92 feet and a central angle of 45°00'00"; thence run northwesterly, along the arc of said curve, a distance of 935.35 feet to the point of tangency thereof; thence run S 89°59'03" W, a distance of 73.53 feet; thence run S 00°00'57" E, a distance of 16.46 feet to a point on the north right-of-way line of said Friar's Cove Road, as described and recorded in Deed Book 163, Page 407, Public Records of Osceola County, Florida; thence run S 89°51'04" W, along said north right-of-way line, a distance of 2826.17 feet to a point on the east line of Lot 75, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 33; thence run S 00°17'28" E, along said east line, a distance of 50.00 feet to a point on the south line of said Lot 75; thence run S 89°51'04" W, along the south line of said Lot 75 and the westerly extension thereof, a distance of 1319.79 feet to a point on the west line of said Lot 74; thence run N 00°16'57" W, along the west line of said Lot 74, a distance of 327.03 feet; thence run S 63°03'39" W, a distance of 88.16 feet; thence run N 00°16'57" W, a distance of 162.82 feet; thence run N 41°03'55" E, a distance of 119.30 feet to a point on the west line of said Lot 71, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 33; thence run N 00°16'57" W, along the west line of said Lot 71 and the northerly extension thereof, a distance of 784.23 feet to a point on the south line of the Northwest 1/4 of said Section 33; thence run N 00°19'18" W, a distance of 17.50 feet to the southwest corner of said Lot 44; thence continue N 00°19'18" W, along the west line of said Lot 44 and the northerly extension thereof, a distance of 2632.86 feet to a point on the south line of the Southwest 1/4 of said Section 28; thence run N 00°02'46" E, a distance of 20.00 feet to the southwest corner of said Lot 122, THE SEMINOLE LAND AND INVESTMENT COMPANY'S (INCORPORATED) SUBDIVISION OF SECTION 28; thence continue N 00°02'46" E, along the west line of said Lot 122 and the northerly extension thereof, a distance of 641.02 feet to the POINT OF BEGINNING.

Containing 677.34 acres, more or less.

Subject to existing platted right-of-ways.

Surveyor's Notes:

- Lands shown hereon were not abstracted for easements, rights of way, ownership or other matters by this firm.
- The legal description was supplied by the client and this Survey certifies only to lands described in said legal description.
- Lines shown hereon are radial unless noted NR (non-radial).
- Locations of surrounding improvements are shown for informational purpose only.
- Underground utilities, septic tanks and foundations were not located as part of this survey.
- Lands shown hereon may contain navigable waterways which may be owned by the State of Florida. Users of this survey and the information shown hereon are placed on notice that the use of such information is at their peril as regards to any state owned lands, riparian boundaries or littoral boundaries shown hereon. This Survey does not attempt to resolve any issues of navigability or of ownership by the State of Florida.

GENERAL NOTES:

- BOUNDARY SURVEY DATA OBTAINED FROM APPROVED OSCEOLA COUNTY CONCEPT PLAN CP-15-0001. PREVIOUSLY SUBMITTED BY POULLOS & BENNETT, LLC.
- THE SCALE OF THIS DRAWING MAY HAVE CHANGED DUE TO REPRODUCTION.

DONALD W. MCINTOSH ASSOCIATES, INC.  
ENGINEERS  
2800 PARK AVENUE NORTH, WINTER PARK, FL 32789 407.644.4088  
CERTIFICATE OF AUTHORIZATION NO. 68

FONTANA  
CONCEPTUAL MASS GRADING PLANS  
OSCEOLA COUNTY, FLORIDA

LEGAL DESCRIPTION AND SKETCH

DRAWING  
13189-SURVEY

SHEET  
C003

3 OF 33

JAMES C. NUGENT  
FLORIDA P.E. No. 57553

JOB NUMBER  
13189

SCALE  
1"=400'

CHECKED BY  
JCN

DESIGNED BY  
DSW

DRAWN BY  
DSW

NO. DATE

REVISIONS

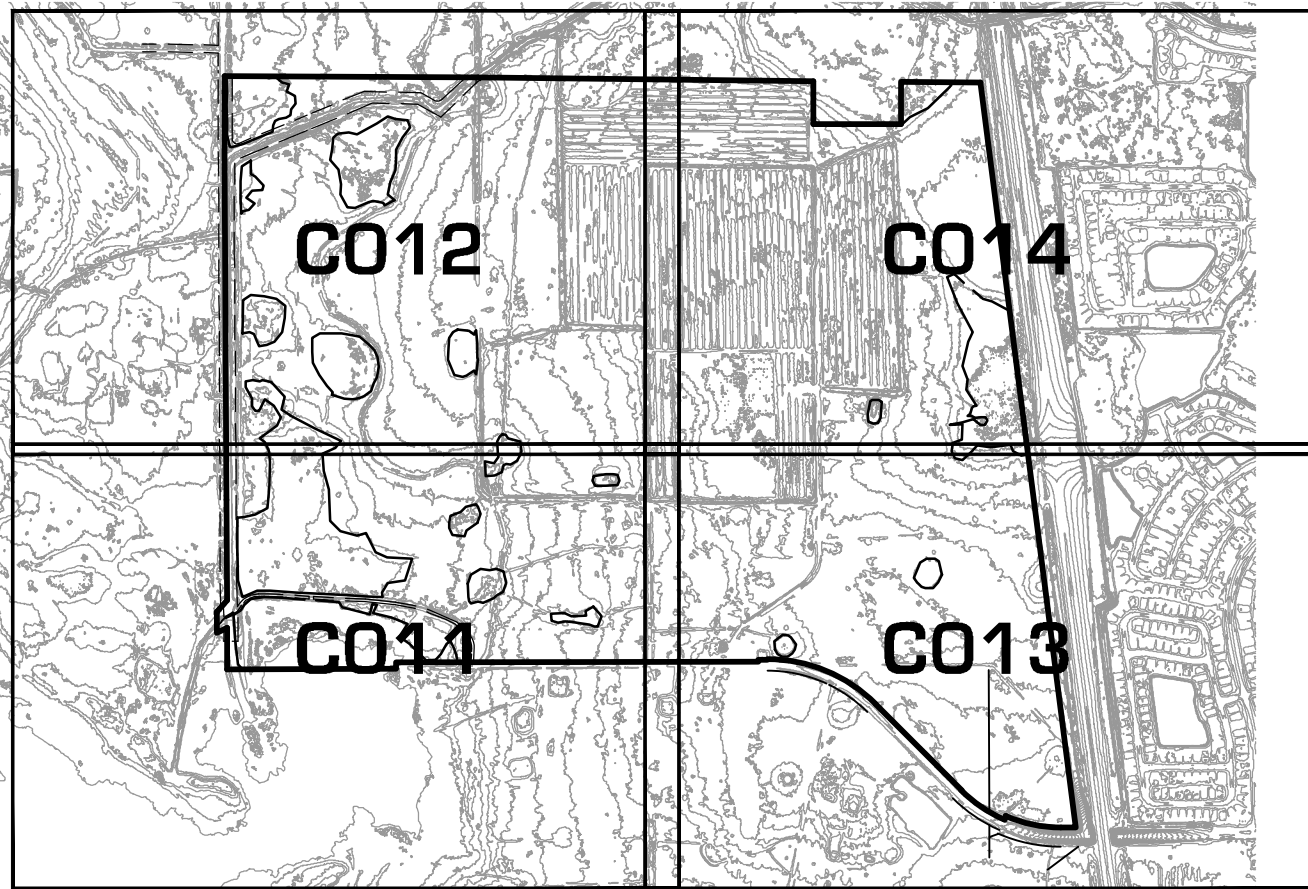
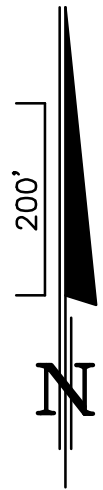
CHK.

F:\Proj2013\13189\EDWG\Final\FE-MG\Conceptual Mass Grading 2020 Mod\13189-SURVEY.dwg

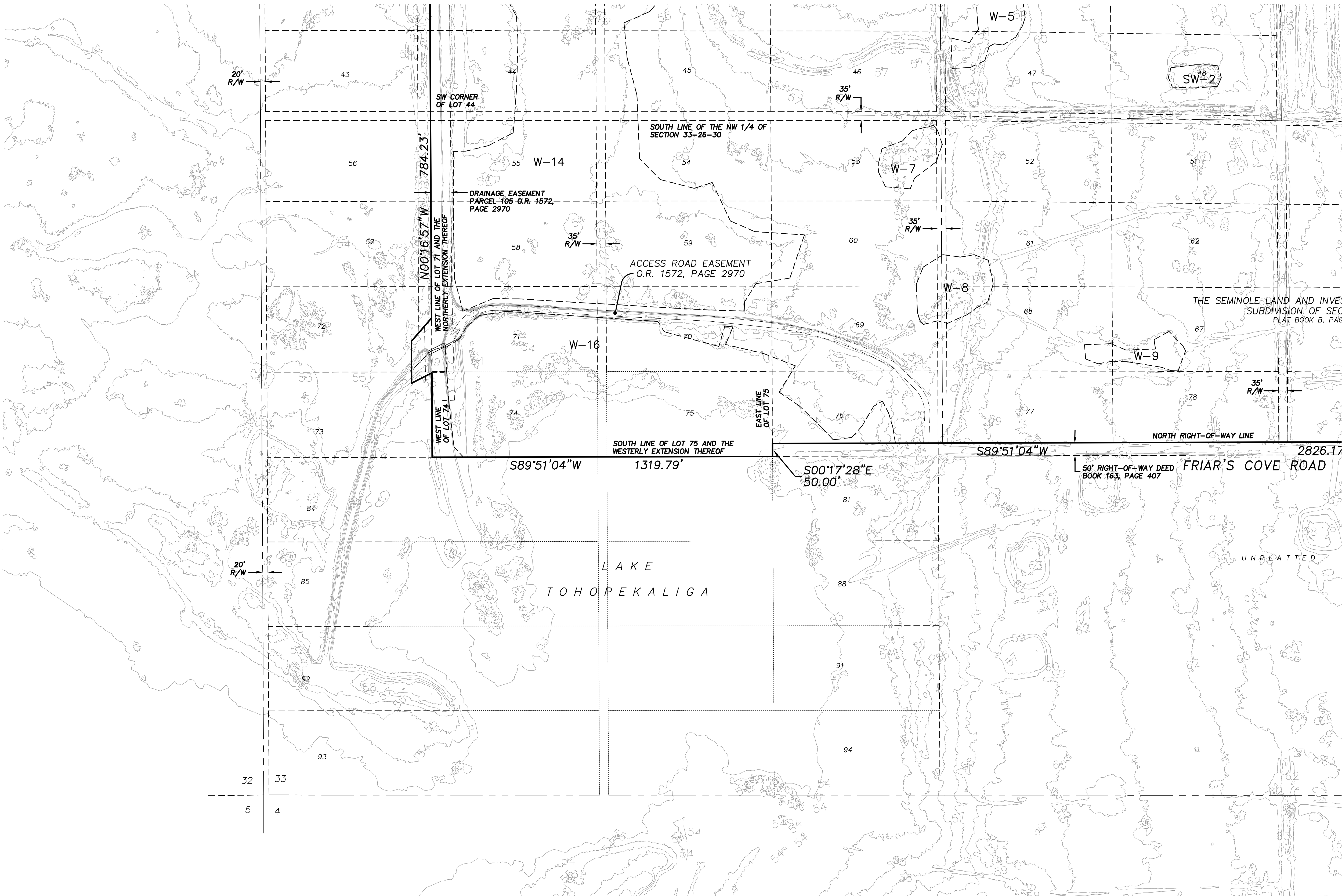


DONALD W. MCINTOSH ASSOCIATES, INC. RESERVES THE EXCLUSIVE COPYRIGHT AND PROPERTY RIGHTS TO THIS DRAWING WHICH MAY NOT BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER, NOR CAN IT BE ASSIGNED TO ANY PARTY WITHOUT DONALD W. MCINTOSH ASSOCIATES, INC.'S WRITTEN CONSENT.

NOTE: TOPOGRAPHIC DATA SHOWN BASED ON  
OSCEOLA COUNTY 2016 LIDAR TOPOGRAPHY.



KEY MAP  
1"=150'

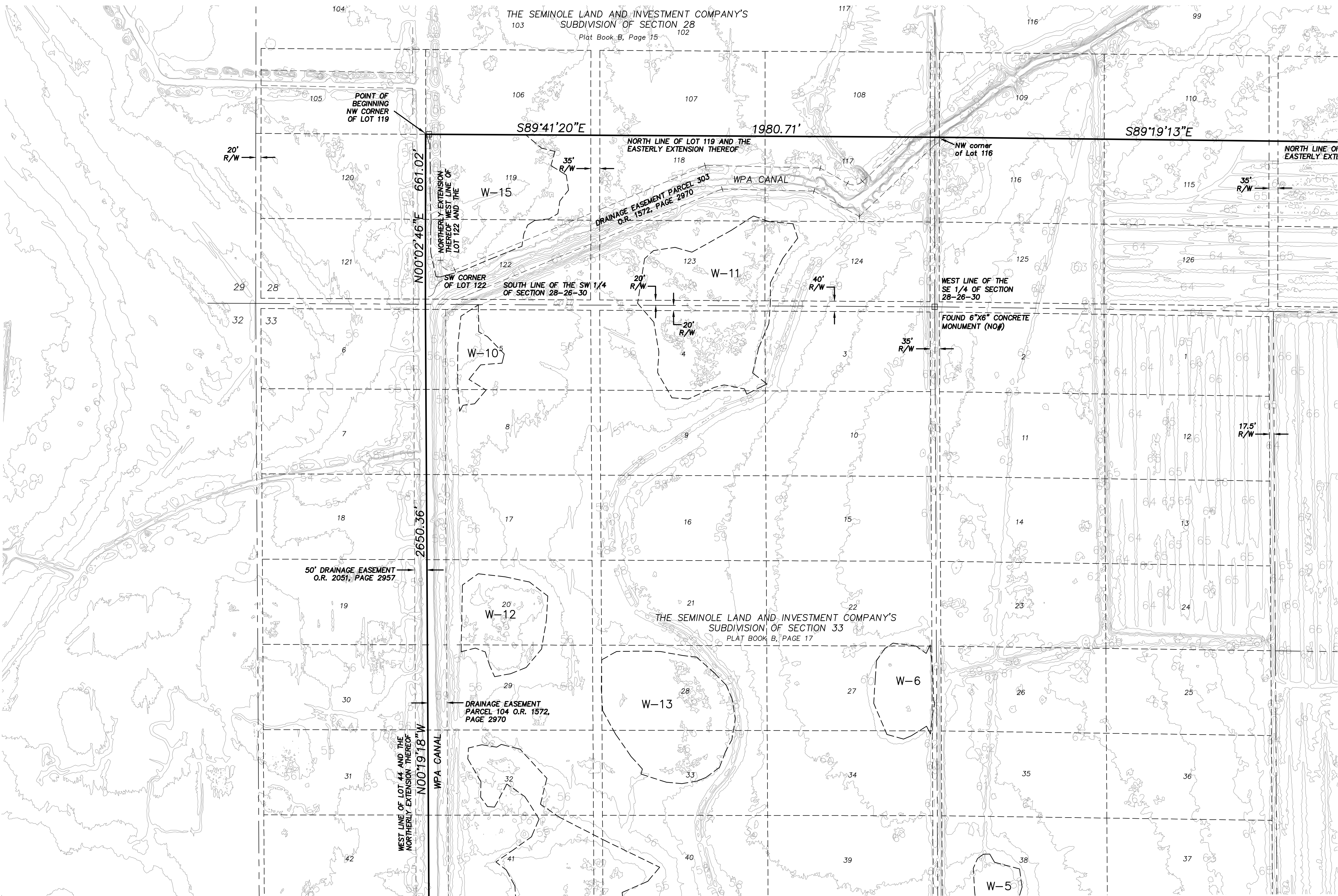
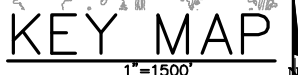
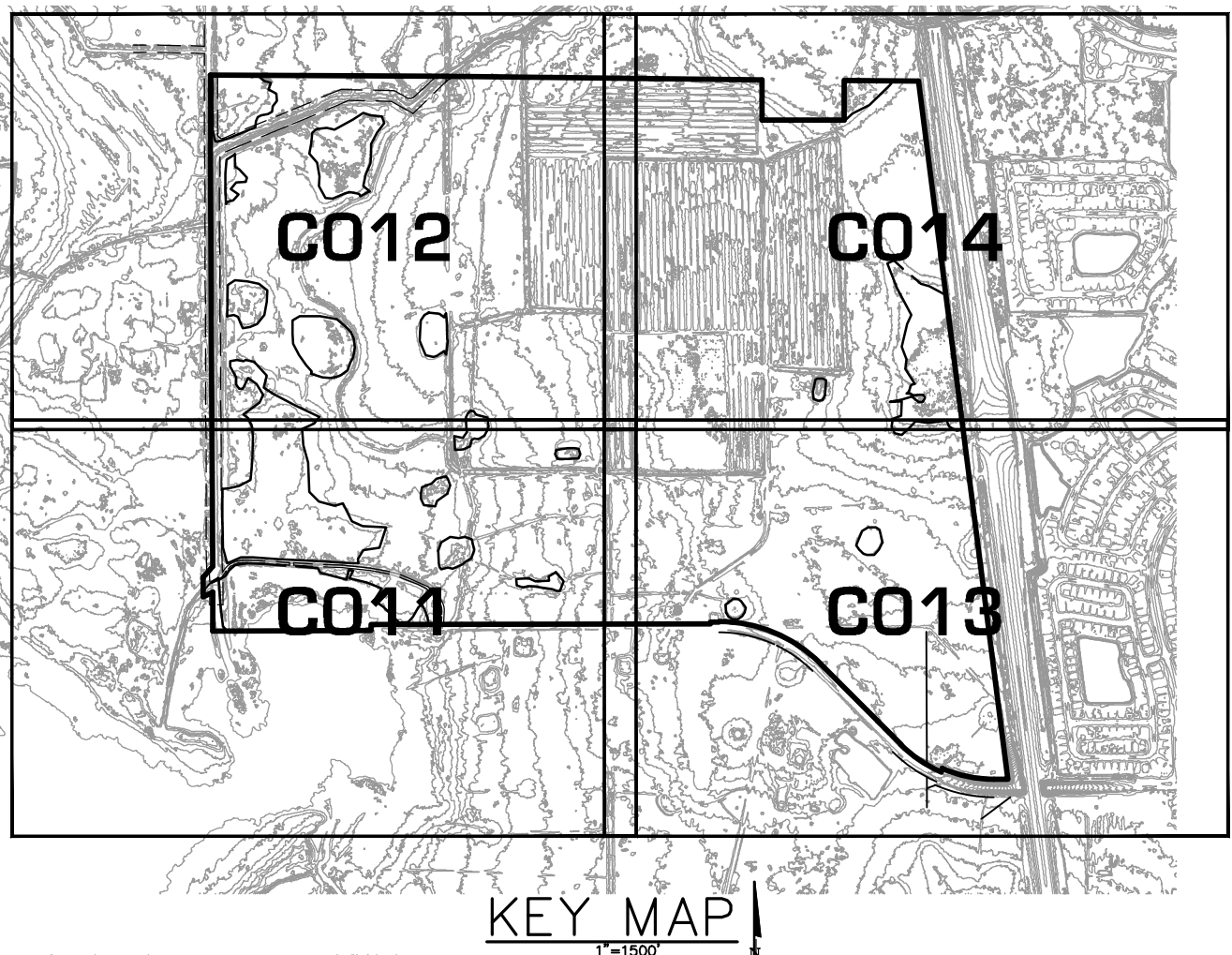


- GENERAL NOTES:
1. SEE NOTES, SPECIFICATIONS & LEGEND SHEET FOR ADDITIONAL INFORMATION.
  2. THE SCALE OF THIS DRAWING MAY HAVE CHANGED DUE TO REPRODUCTION.

DRAWING 13189-EXIST	SHEET C011	4 OF 33	FONTANA CONCEPTUAL MASS GRADING PLANS OSCEOLA COUNTY, FLORIDA EXISTING CONDITIONS PLAN		DONALD W. MCINTOSH ASSOCIATES, INC. ENGINEERS 2200 PARK AVENUE NORTH, WINTER PARK, FL 32789 407.644.4088 CERTIFICATE OF AUTHORIZATION NO. 68	DESIGNED BY DSW	CHECKED BY JCN	DATE 5/2/18	SCALE 1"=200'	JOB NUMBER 13189	JAMES C. NUGENT FLORIDA P.E. No. 57553 DATE: _____	NO. _____	DATE _____	REVISIONS _____	CHK.



F:\Proj2013\13189\EDWG\Final\FE-MG\Conceptual Mass Grading 2020 Mod\13189-EXIST.dwg



GENERAL NOTES:

1. SEE NOTES, SPECIFICATIONS & LEGEND SHEET FOR ADDITIONAL INFORMATION.
2. THE SCALE OF THIS DRAWING MAY HAVE CHANGED DUE TO REPRODUCTION.

**FONTANA  
CONCEPTUAL MASS GRADING PLANS  
OSCEOLA COUNTY, FLORIDA  
EXISTING CONDITIONS PLAN**



**DONALD W. MCINTOSH ASSOCIATES, INC.**  
ENGINEERS PLANNERS SURVEYORS  
2200 PARK AVENUE NORTH, WINTER PARK, FL 32789 407.644.4068

JAMES C. NUGENT  
FLORIDA P.E. No. 57553  
DATE: \_\_\_\_\_

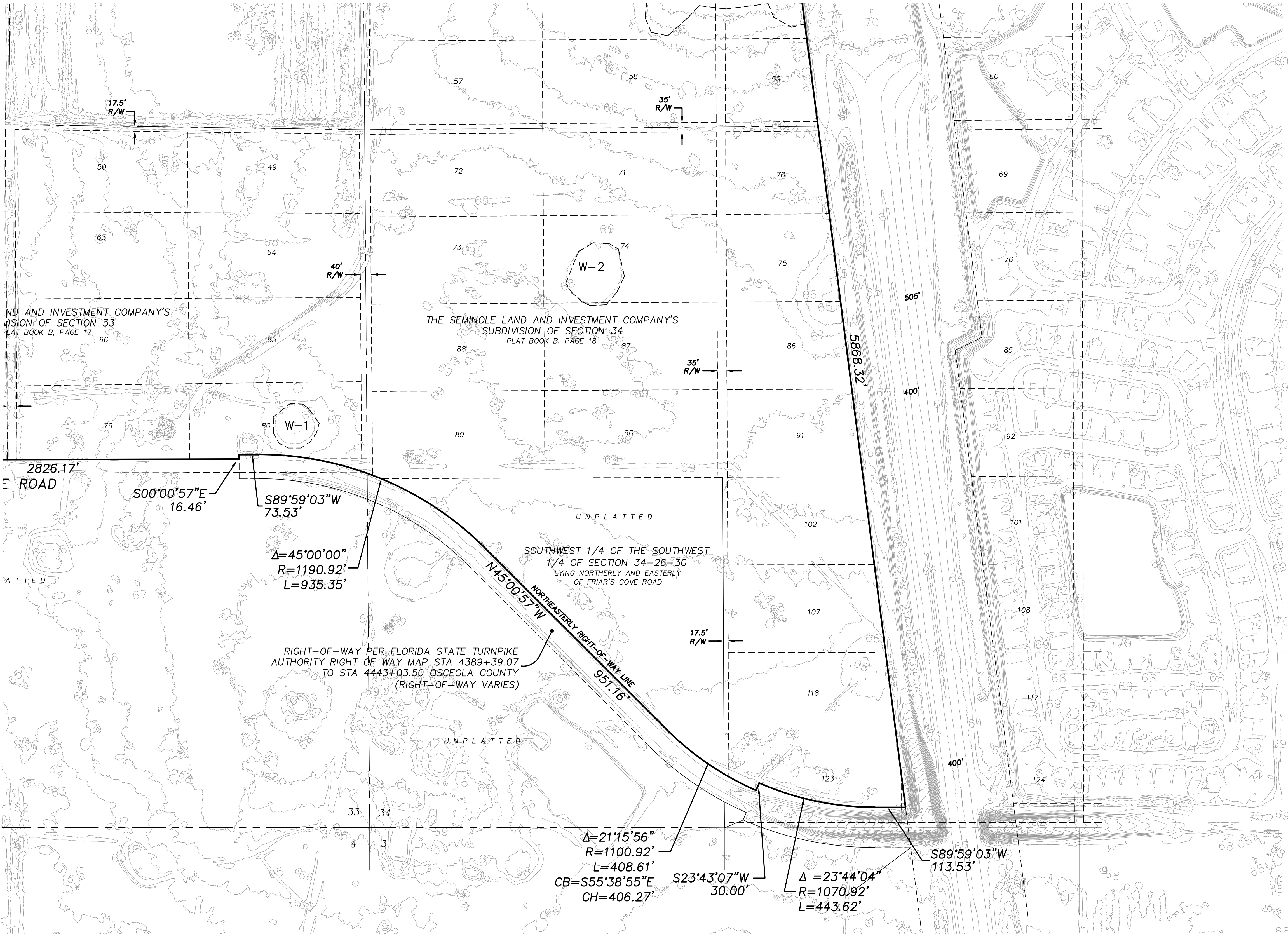
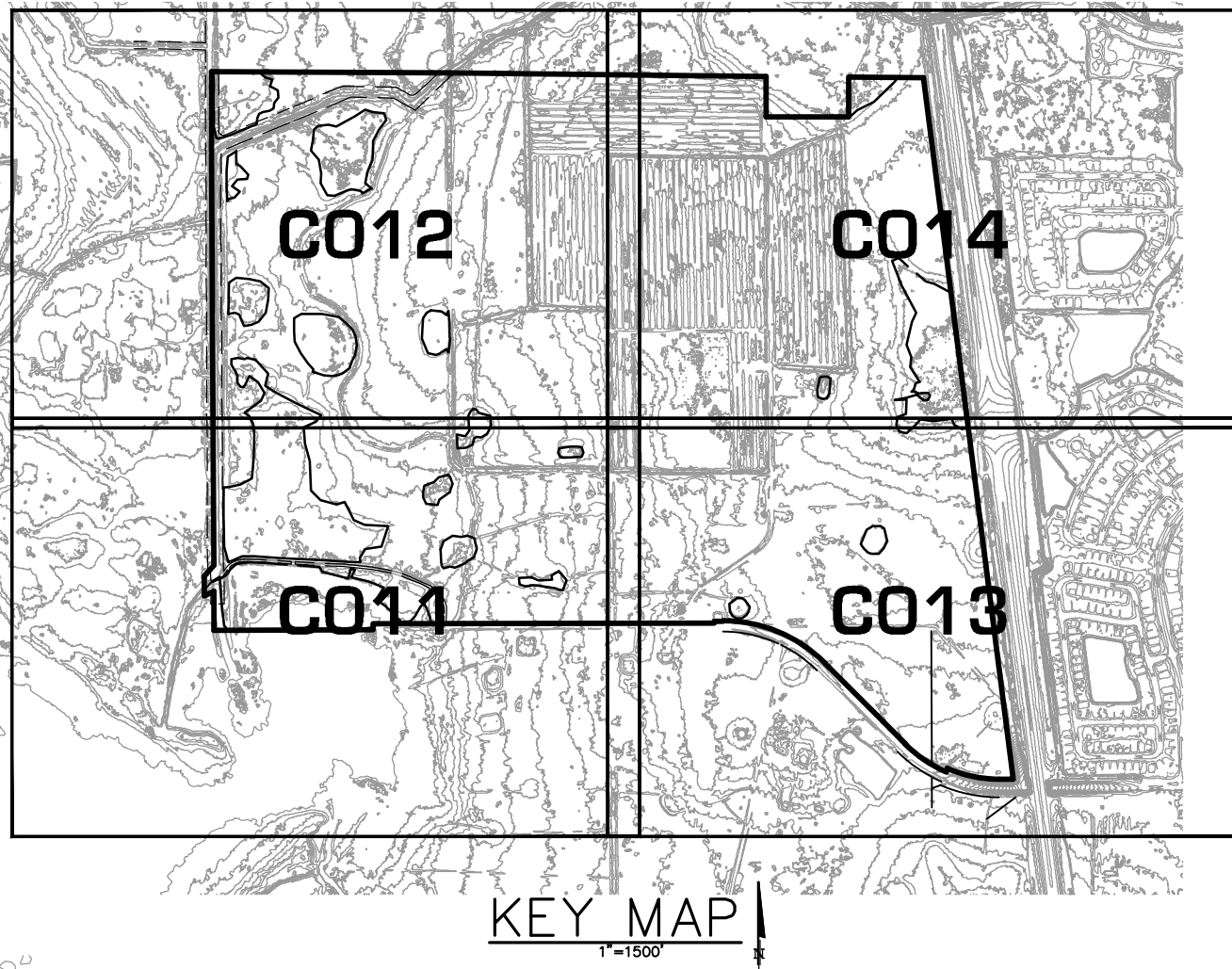
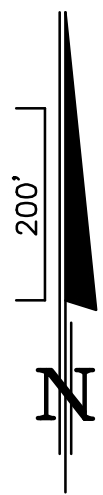
[illegible]

DRAWING  
13189-EXIST  
SHEET  
C012  
5 OF 33



DONALD W. MCINTOSH ASSOCIATES, INC. RESERVES THE EXCLUSIVE COPYRIGHT AND PROPERTY RIGHTS TO THIS DRAWING WHICH MAY NOT BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER, NOR CAN IT BE ASSIGNED TO ANY PARTY WITHOUT DONALD W. MCINTOSH ASSOCIATES, INC.'S WRITTEN CONSENT.

NOTE: TOPOGRAPHIC DATA SHOWN BASED ON  
OSCEOLA COUNTY 2016 LIDAR TOPOGRAPHY.



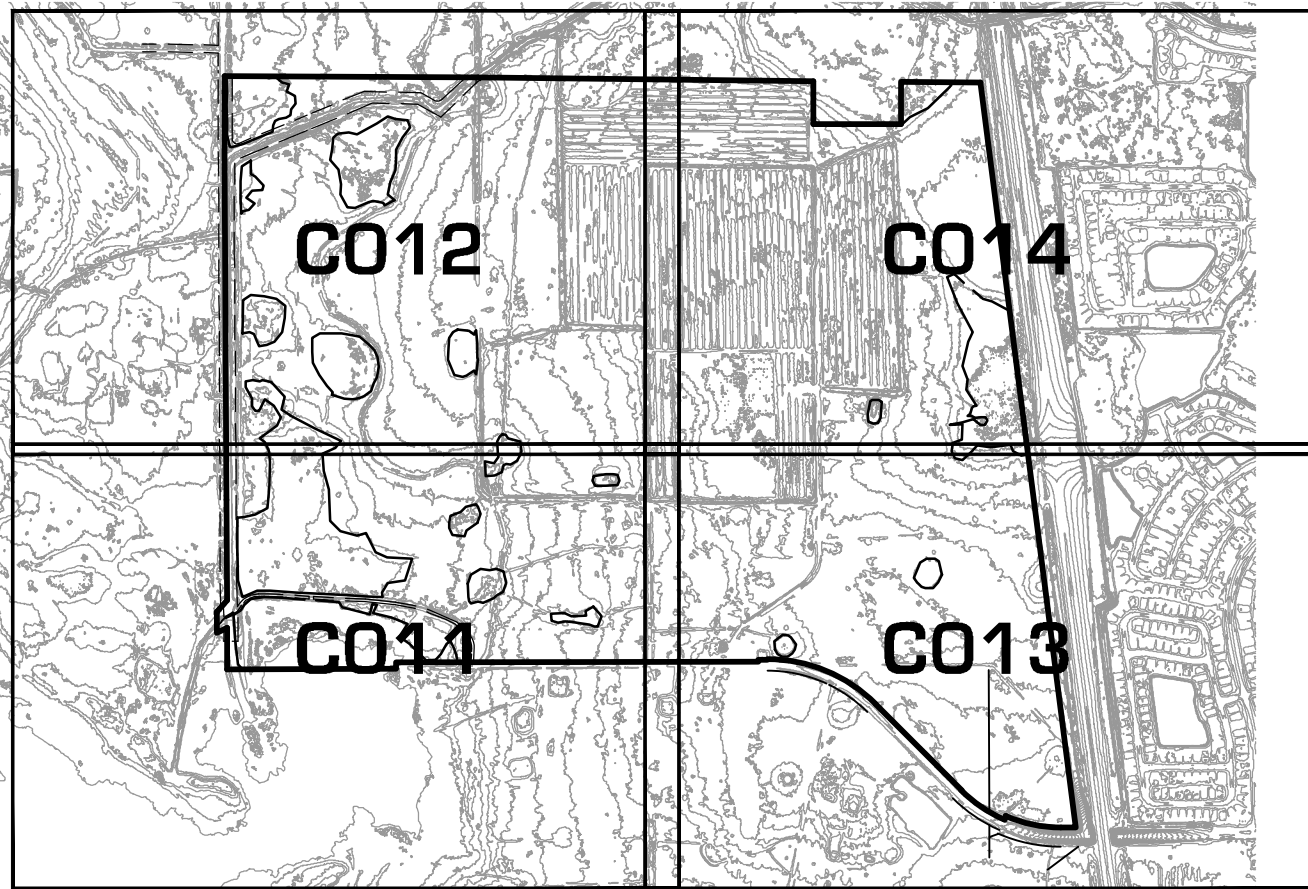
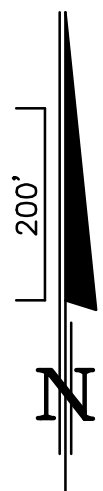
- GENERAL NOTES:
- SEE NOTES, SPECIFICATIONS & LEGEND SHEET FOR ADDITIONAL INFORMATION.
  - THE SCALE OF THIS DRAWING MAY HAVE CHANGED DUE TO REPRODUCTION.

DRAWING 13189-EXIST	SHEET C013	6 OF 33	FONTANA CONCEPTUAL MASS GRADING PLANS OSCEOLA COUNTY, FLORIDA EXISTING CONDITIONS PLAN		DONALD W. MCINTOSH ASSOCIATES, INC. ENGINEERS 2200 PARK AVENUE NORTH, WINTER PARK, FL 32789 407.644.4088 CERTIFICATE OF AUTHORIZATION NO. 68	DRAWN BY DSW	DESIGNED BY DSW	CHECKED BY JCN	DATE 5/2/18	SCALE 1"=200'	JOB NUMBER 13189	JAMES C. NUGENT FLORIDA P.E. No. 57553 DATE: _____	NO.	DATE	REVISIONS	CHK.

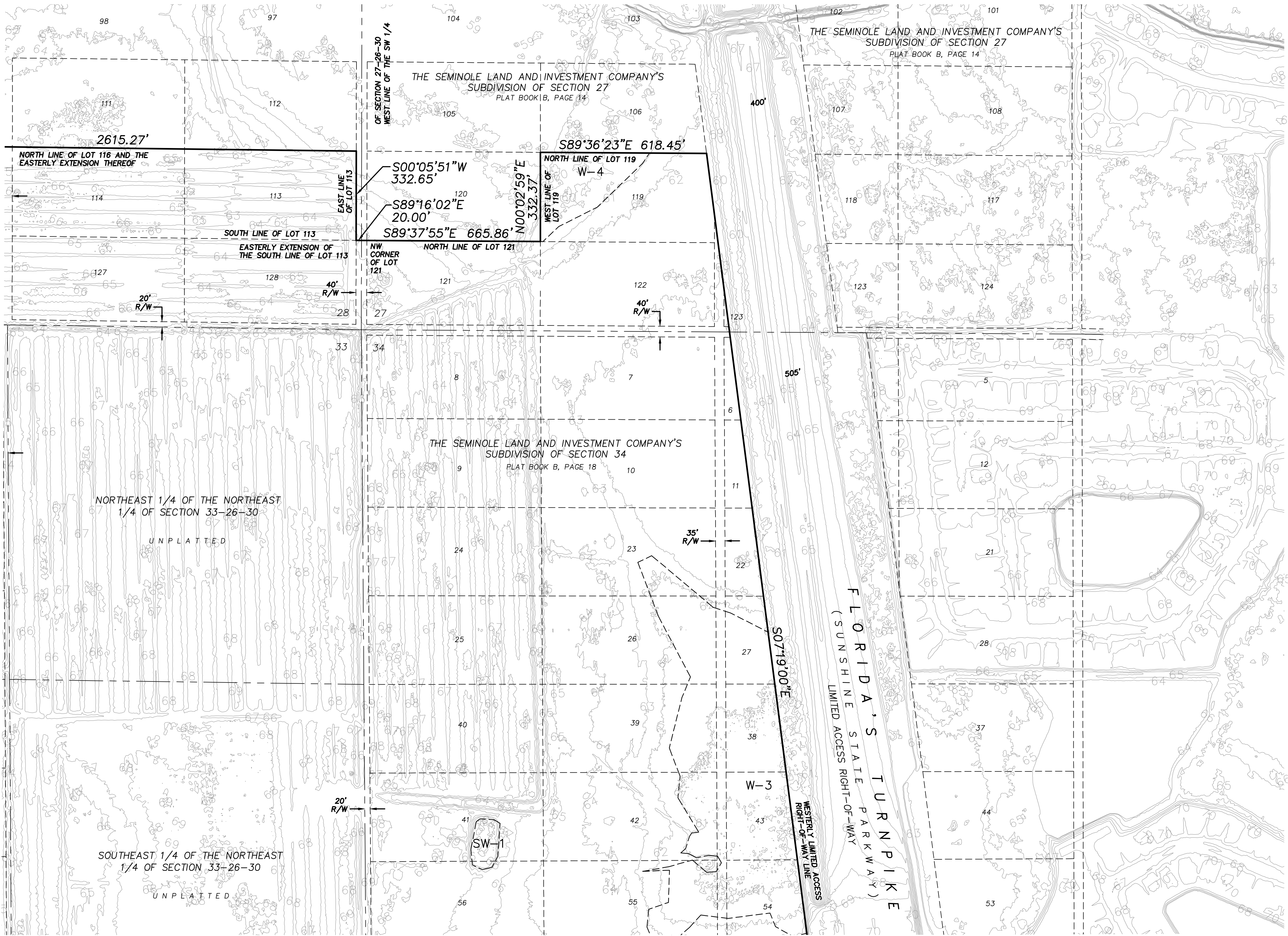


DONALD W. MCINTOSH ASSOCIATES, INC. RESERVES THE EXCLUSIVE COPYRIGHT AND PROPERTY RIGHTS TO THIS DRAWING WHICH MAY NOT BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER, NOR CAN IT BE ASSIGNED TO ANY PARTY WITHOUT DONALD W. MCINTOSH ASSOCIATES, INC.'S WRITTEN CONSENT.

NOTE: TOPOGRAPHIC DATA SHOWN BASED ON  
OSCEOLA COUNTY 2016 LIDAR TOPOGRAPHY.



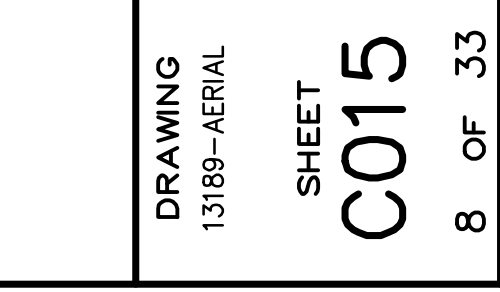
KEY MAP  
1"=150'



- GENERAL NOTES:
- SEE NOTES, SPECIFICATIONS & LEGEND SHEET FOR ADDITIONAL INFORMATION.
  - THE SCALE OF THIS DRAWING MAY HAVE CHANGED DUE TO REPRODUCTION.

DRAWING 13189-EXIST	SHEET C014	7 OF 33	FONTANA CONCEPTUAL MASS GRADING PLANS OSCEOLA COUNTY, FLORIDA EXISTING CONDITIONS PLAN	 DONALD W. MCINTOSH ASSOCIATES, INC. ENGINEERS 2200 PARK AVENUE NORTH, WINTER PARK, FL 32789 407.644.4088 CERTIFICATE OF AUTHORIZATION NO. 68	DESIGNED BY DSW	CHECKED BY JCN	DATE 5/2/18	SCALE 1"=200'	JOB NUMBER 13189	JAMES C. NUGENT FLORIDA P.E. No. 57553 DATE: _____	NO.	DATE	REVISIONS	CHK.





GENERAL NOTES:

1. SEE NOTES, SPECIFICATIONS & LEGEND SHEET FOR ADDITIONAL INFORMATION.
2. THE SCALE OF THIS DRAWING MAY HAVE CHANGED DUE TO REPRODUCTION.

FONTANA  
CONCEPTUAL MASS GRADING PLANS  
OSCEOLA COUNTY, FLORIDA  
AERIAL

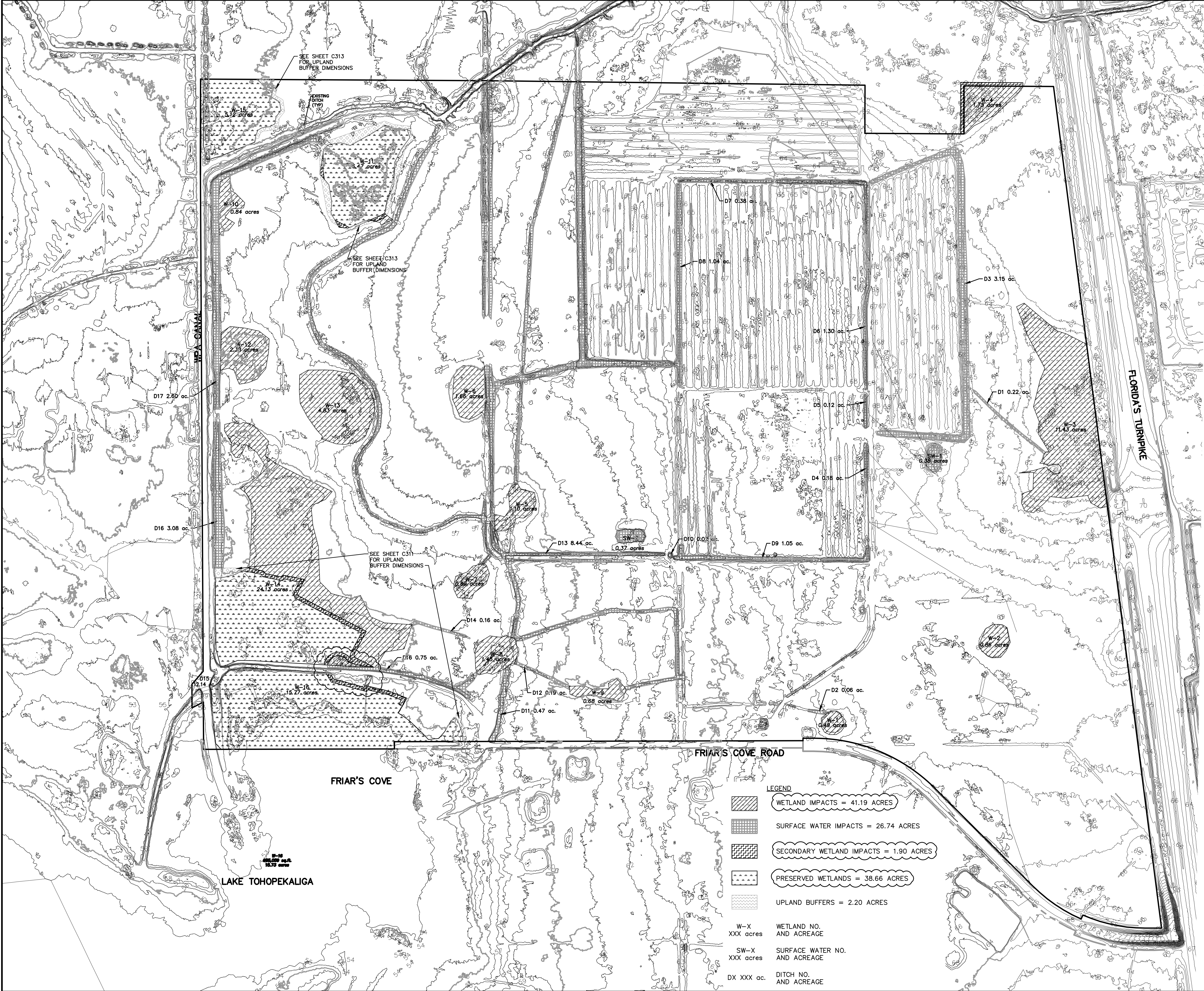
**DONALD W. MCINTOSH ASSOCIATES, INC.**  
ENGINEERS PLANNERS SURVEYORS  
2200 PARK AVENUE NORTH, WINTER PARK, FL 32789 407.644.4068  
CERTIFICATE OF AUTHORIZATION NO. 68


JAMES C. NUGENT  
FLORIDA P.E. No. 57553  
DATE: \_\_\_\_\_

[illegible]



DONALD W. MCINTOSH ASSOCIATES, INC. RESERVES THE EXCLUSIVE COPYRIGHT AND PROPERTY RIGHTS TO THIS DRAWING WHICH MAY NOT BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER, NOR CAN IT BE ASSIGNED TO ANY PARTY WITHOUT DONALD W. MCINTOSH ASSOCIATES, INC.'S WRITTEN CONSENT.



DRAWING 13189-WETIMP SHEET C031 9 OF 33	FONTANA CONCEPTUAL MASS GRADING PLANS OSCEOLA COUNTY, FLORIDA WETLAND PRESERVATION AND IMPACT PLAN		<b>DONALD W. MCINTOSH ASSOCIATES, INC.</b> ENGINEERS 2200 PARK AVENUE NORTH, WINTER PARK, FL 32789 407.644.4068 CERTIFICATE OF AUTHORIZATION NO. 68				JAMES C. NUGENT FLORIDA P.E. NO. 57553 DATE: _____							
			DRAWN BY DSW		CHECKED BY JCN		SCALE 1"=300'		JOB NUMBER 13189					
					DATE 5/2/18									
							PLANNERS SURVEYORS							
							REVISED PER SP/MD COMMENTS		7/20/18		REVISED PER SP/MD COMMENTS			
							ADDED SURFACE WATER & WETLAND AC PER SP/MD COMMENTS		11/25/18		REVISED IMPACTS			
							REVISED IMPACTS W-14, W-16 & D18		2/13/19		REVISED PER SP/MD COMMENTS			
						6/17/21		REVISED PER SP/MD COMMENTS		JCN				