Drawing name: K:\ORL_Civil\149973004-Windermere Downtown Property\CADD\CONST\PlanSheets\C0.0 - COVER.dwg COVER Feb 21, 2022 10:41am by: Marcus.Geiger
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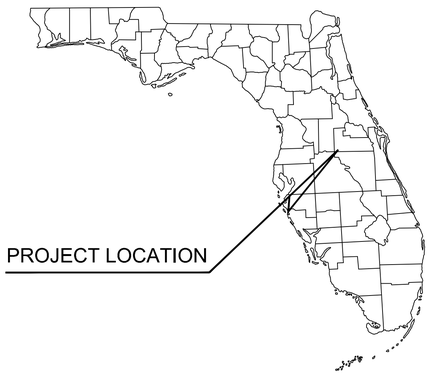
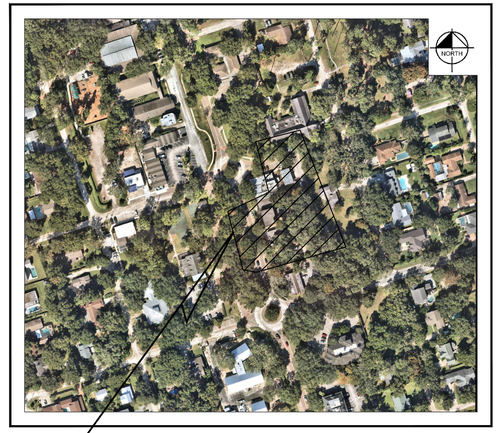
CONSTRUCTION PLANS

FOR

WINDERMERE DOWNTOWN PROPERTY

PARCEL ID #'s: 17-23-28-9336-02-430, 17-23-28-9336-02-470,
17-23-28-9336-02-490, 17-23-28-9336-02-500, 17-23-28-9336-02-510,
17-29-28-9336-02-520





AERIAL PHOTOGRAPH

N.T.S.

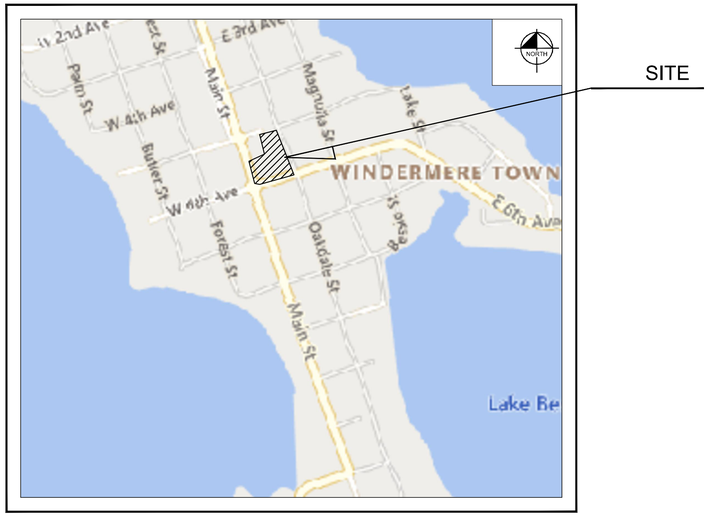
LEGAL DESCRIPTION

That part of Section 33, Township 24 South, Range 27 East, Orange County, Florida, being more particularly described as follows:

Commence at the Southeast corner of said Section 33, Township 24 South, Range 27 East, Orange County, Florida; thence run S8956'28"W along the South line of said Section 33, also being the centerline of State Road 530 (U.S. Highway No. 192), a distance of 994.86 feet to a point on the Southerly projection of the East line of Shoppes of West 192, according to the plat thereof as recorded in Plat Book 93, Pages 127 and 128, Public Records of Orange County, Florida; thence run N00°14'00"E along said Southerly projection, a distance of 100.00 feet to a point on the North right of way line of said State Road 530 (U.S. Highway No. 192); thence continue N0014'00"E along the East line of said Shoppes of West 192 and along the East line of the lands described in Official Records Book 5526, Page 1669, Public Records of Orange County, Florida, a distance of 1037.89 feet for the Point of Beginning; thence run S8946'00"E, a distance of 43.60 feet to a point on a non-tangent curve, concave to the East, having a radius of 91.00 feet; thence from a radial bearing of S8327'27"E run northeasterly along the arc of said curve through a central angle of 2347'55", an arc distance of 37.80 feet, having a chord bearing of N1826'30"E and a chord distance of 37.53 feet; thence run S3020'28"W, a distance of 1.48 feet to the beginning of a curve concave to the West, having a radius of 133.00 feet; thence run Northeasterly along the arc of said curve through a central angle of 26°32'02", an arc distance of 61.59 feet, having a chord bearing of N1704'27"E and a chord distance of 61.04 feet; thence run S8946'00"E, a distance of 80.65 feet; thence run N5830'45"E, a distance of 18.93 feet; thence run N2647'29"E, a distance of 17.99 feet; thence run S8939'32"E, a distance of 227.45 feet; thence run S0057'03"W, a distance of 47.73 feet; thence run S4418'50"E, a distance of 44.13 feet; thence run S8944'58"E, a distance of 177.16 feet; thence run N3754'25"E, a distance of 53.22 feet; thence run S6656'12"E, a distance of 65.35 feet; thence run N1826'28"E, a distance of 59.31 feet; thence run S8936'22"E, a distance of 269.13 feet; thence run N0011'30"E along the East line of said Southeast 1/4 of Section 33, a distance of 414.43 feet; thence run N8939'32"W along the South line of lands described in Official Records Book 5526, Page 1669, a distance of 993.64 feet; thence run S0014'00"W along the aforesaid East line of the lands described in Official Records Book 5526, Page 1669, a distance of 530.38 feet to the Point of Beginning.

Contains 2.17 acres, more or less

TOWN OF WINDERMERE, FL
FEBRUARY 18, 2022



SECTION 17, TOWNSHIP 23S, RANGE 28E

LOCATION MAP

N.T.S.

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C2.1	EROSION CONTROL DETAIL
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C4.0	SITE PLAN
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PROJECT TEAM

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MARCUS I. GEIGER, P.E.
FL. P.E. NO. 89199

WINDERMERE DOWNTOWN PROPERTY
KH PROJECT# 149973004
02/18/2022

REVISIONS:

NO.	DESCRIPTION	DATE	BY
1			
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SHEET NUMBER
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Plotted By:Geiger, Marcus Sheet Set:Windermere Downtown Property Layout:C1.0 GENERAL NOTES February 21, 2022 10:41:12am K:\ORL_Civil\149973004-Windermere Downtown Property\CADD\CONST\PlanSheets\C1.0 - GENERAL NOTES.dwg
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GENERAL

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, SUCH AS DEWATERING PERMITS, RIGHT OF WAY PERMIT(S), EXCAVATION/FILL PERMIT(S), FIRE PROTECTION PERMIT(S), OR UNDERGROUND UTILITY PERMIT(S), PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL INSPECTION CRITERIA OF APPLICABLE AGENCIES, SCHEDULING OF INSPECTIONS, AND OBTAINING REQUIRED INSPECTIONS FROM AGENCY.

2. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE EXISTING UTILITY INFORMATION SHOWN IS BASED ON THE TOPOGRAPHIC SURVEY PROVIDED BY PEC SURVEYING AND MAPPING, LLC. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES, AFFECTING THIS AREA PRIOR TO CONSTRUCTION WORK. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY OF THE SURVEY. SHOULD A DISCREPANCY ARISE BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, WHICH WOULD APPRECIABLY AFFECT THE EXECUTION OF THESE PLANS, THE CONTRACTOR SHALL HALT CONSTRUCTION AND NOTIFY THE OWNER, ENGINEER, AND APPLICABLE GOVERNING AGENCY IMMEDIATELY.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING (HORIZONTALLY AND VERTICALLY) ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND FOR NOTIFYING THE VARIOUS UTILITY COMPANIES (DURING STANDARD BUSINESS HOURS) TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION, TEMPORARY DISTRIBUTION SERVICE, OR CLARIFICATION OF ACTIVITY REGARDING SAID UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THESE PLANS OR FIELD LOCATED. THE CONTRACTOR SHALL COOPERATE WITH UTILITY COMPANY (DURING STANDARD BUSINESS HOURS) DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE OF THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. CONTRACTOR SHALL CALL "SUNSHINE ONE" AT 811 TO HAVE EXISTING UTILITIES LOCATED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

4. ALL DISTURBED AREAS (ON-SITE AND/OR OFF-SITE) NOT DESIGNED OR NOTED TO BE LANDSCAPED OR SODDED, SHALL BE SODDED.

5. THE CONTRACTOR SHALL NOT EXCAVATE, REMOVE, OR OTHERWISE DISTURB ANY MATERIAL, STRUCTURE, OR PART OF A STRUCTURE WHICH IS LOCATED OUTSIDE THE LINES, GRADES, OR GRADING SECTIONS ESTABLISHED FOR THIS PROJECT, EXCEPT WHERE SUCH EXCAVATION OR REMOVAL IS PROVIDED FOR IN THE CONTRACT, PLANS, OR SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED, BY THE CONTRACTOR OR SUB-CONTRACTORS, AS CALLED FOR IN THESE CONTRACT DOCUMENTS.

6. ALL WORK AND MATERIALS FURNISHED SHALL BE IN CONFORMITY WITH THE LINES, GRADES, GRADING SECTIONS, CROSS SECTIONS, DIMENSIONS, MATERIAL REQUIREMENTS, AND TESTING REQUIREMENTS THAT ARE SPECIFIED IN THE CONTRACT PLANS OR SPECIFICATIONS.

7. ALL SPECIFICATIONS AND DOCUMENTS REFERENCED HEREIN SHALL BE OF THE LATEST REVISION, AS APPLICABLE AT THE TIME ALL PERMITS HAVE BEEN OBTAINED.

8. ALL UNDERGROUND UTILITIES MUST BE IN-PLACE, TESTED AND INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION.

9. THE GRAPHIC INFORMATION DEPICTED ON THESE PLANS HAS BEEN COMPILED TO PROPORTION BY SCALE AS ACCURATELY AS POSSIBLE. HOWEVER, DUE TO REPRODUCTIVE DISTORTION, REDUCTION, AND/OR REVISIONS, INFORMATION CONTAINED HEREIN IS NOT INTENDED TO BE SCALED FOR CONSTRUCTION PURPOSES.

10. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO THE OWNER'S ENGINEER FOR REVIEW PRIOR TO ORDERING AND/OR INSTALLATION. FAILURE TO DO SO MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

11. CONTRACTOR TO COORDINATE WITH THE APPLICABLE ELECTRIC UTILITY SUPPLIER REGARDING ANY NECESSARY RELOCATION(S) OF UNDERGROUND AND/OR OVERHEAD ELECTRIC FACILITIES, AND FOR THE LOCATION AND INSTALLATION OF TRANSFORMER PAD(S) AND ASSOCIATED ELECTRIC FACILITIES.

12. THE CONTRACTOR SHALL RESTORE OFF-SITE CONSTRUCTION AREAS TO EQUAL AND/OR BETTER CONDITION THAN EXISTING PRIOR TO START OF CONSTRUCTION.

13. THE CONTRACTOR SHALL COMPLY WITH THE LEGAL LOAD RESTRICTIONS IN HAULING OF MATERIALS IN PUBLIC ROADS BEYOND THE LIMITS OF WORK. A SPECIAL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR THE DAMAGE WHICH MAY RESULT FROM THE MOVING OF MATERIAL AND EQUIPMENT.

14. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A LICENSED LAND SURVEYOR CURRENTLY REGISTERED IN THE STATE OF FLORIDA.

15. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

16. CURBING SHALL BE PLACED AT THE EDGES OF ALL PAVEMENT, UNLESS OTHERWISE NOTED. REFER TO THE THE LATEST EDITION OF F.D.O.T. "DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM" (ED. 2014) FOR DETAILS AND SPECIFICATIONS OF ALL CURB AND GUTTERS CALLED FOR IN THESE PLANS WITHIN PUBLIC RIGHTS OF WAY.

17. WHERE ASPHALT PAVING MEETS CONCRETE PAVING SUCH AS AT CONCRETE CURBING, THE ASPHALT SHOULD BE FINISHED ¼" TO ½" ABOVE THE CONCRETE SURFACE TO ALLOW FOR FURTHER TRAFFIC COMPACTION OF THE ASPHALT.

18. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE SOIL AND/OR PAVEMENT TESTING WITH THE GEOTECHNICAL ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE GEOTECHNICAL SOILS REPORT. UPON COMPLETION OF WORK, THE GEOTECHNICAL ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

19. CONTRACTOR IS TO ADJUST ANY UTILITY ELEMENT MEANT TO BE FLUSH WITH GRADE (CLEAN OUT MANHOLES, CATCH BASINS, INLETS, ETC.) THAT IS AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT.

20. SITEWORK SHALL COMPLY WITH 2012 FLORIDA BUILDING CODE AND FLORIDA ACCESSIBILITY CODE.

21. ANY EXISTING WELLS (I.E. ARTESIAN, IRRIGATION, DRINKING, ETC.) DISCOVERED ON-SITE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL APPLICABLE JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED. ANY WELL DISCOVERED DURING EARTHWORK OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES, OWNER, AND OWNER'S ENGINEER WITHIN 24 HOURS AFTER DISCOVERY IS MADE.

SAFETY

1. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT". THE CONTRACTOR SHALL INSURE THAT THE METHOD OF TRENCH PROTECTION AND CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

2. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS/HER PERSONNEL. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN, APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND CONSTRUCTION PERSONNEL FROM HAZARDS WITHIN THE PROJECT LIMITS. CONTRACTOR SHALL PROVIDE FOR THE SAFETY AND CONTROL OF LOCAL TRAFFIC DURING CONSTRUCTION. ADDITIONAL INFORMATION MAY BE REQUIRED IF LANE CLOSURE DURATIONS ARE LONGER THAN DAYTIME OPERATIONS.

TREES AND VEGETATION

1. THE CONTRACTOR IS TO MINIMIZE THE REMOVAL OF VEGETATION TO THE GREATEST EXTENT PRACTICAL. NO TREES SHALL BE REMOVED OR DAMAGED WITHOUT OWNER'S APPROVAL. TREES IN CLOSE PROXIMITY TO CONSTRUCTION SHALL BE PROTECTED BY ORANGE FENCING.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE BUFFERS AND RETENTION AND DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE OWNER. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.

3. REFER TO TREE MITIGATION PLANS AND BIOTECH ENVIRONMENTAL ASSESSMENT FOR DETAILS REGARDING TREE REMOVAL AND TREE PRESERVATION.

EARTHWORK / GRADING / DEMUCKING PROCEDURES

1. A GEOTECHNICAL ENGINEERING INVESTIGATION REPORT HAS BEEN PREPARED, OF WHICH COPIES ARE AVAILABLE THROUGH THE OWNER OR THEIR SOIL TESTING COMPANY. A GEOTECHNICAL ENGINEER SHALL BE RETAINED BY THE CONTRACTOR TO PROVIDE ON-SITE INSPECTIONS DURING EXCAVATION/FILL OPERATIONS AND TESTING OF THE COMPACTED FILL (SITE WORK, PONDS, FRONTAGE ROAD, EVERGREEN WOODS TRAIL) SO THAT PROPER DOCUMENTATION OF THE REQUIRED COMPACTING CRITERIA CAN BE PROVIDED.

2. CONTRACTOR TO FOLLOW THE GUIDANCE OF THE REFERENCED GEOTECHNICAL ENGINEERING INVESTIGATION REPORT OR INDICATE WHETHER ON-SITE GEOTECHNICAL ENGINEER SHALL DETERMINE DEPTH OF DEMUCKING AND/OR REMOVAL OF UNSUITABLE FILL.

3. ALL EXISTING DEBRIS (ABOVE OR BELOW GROUND), CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS IN A LEGAL MANNER.

4. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES. FINAL GRADES SHOWN INCLUDE SOD HEIGHT. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES, UNLESS OTHERWISE NOTED. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. CONTRACTOR TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES. ALL AREAS SHALL BE GRADED TO DRAIN AWAY FROM THE BUILDINGS.

5. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED AND REPLACED WITH SUITABLE/COMPACTED SOILS, AS DIRECTED BY THE OWNER OR THEIR SOILS TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

7. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOILS TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS.

8. THE CONTRACTOR SHALL INSURE THAT PROPER SOIL DENSITIES ARE ACHIEVED FOR PLACEMENT OF ALL HEADWALL/ENDWALL FOOTINGS, RETAINING WALL FOOTINGS, AND IN GENERAL, ANY FOOTING SUPPORT DESCRIBED ON THESE PLANS. IT WILL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT SUFFICIENT SOILS TESTING HAS BEEN PERFORMED PRIOR TO FINAL INSTALLATION OF IMPROVEMENTS.

9. ANY UNSUITABLE ORGANIC SOIL SHALL BE EXCAVATED TO A MINIMUM MARGIN OF 6 FEET BEYOND ITS PERIPHERY EXCAVATED TO EXPOSE THE UNDERLYING NON-ORGANIC FINE SAND.

10. IF DETERMINED NECESSARY, DEWATERING DURING EXCAVATING/BACKFILLING OPERATIONS MAY BE ACCOMPLISHED BY DITCHING AND THE USE OF SUMP PUMPS AND/OR OTHER METHODS (WELL POINTS), AS NECESSARY. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS FOR DEWATERING ACTIVITIES THAT MAY BE REQUIRED.

11. UPON APPROVAL OF THE GEOTECHNICAL ENGINEER, THE EXCAVATED AREAS MAY BE BACKFILLED WITH CLEAN FINE SAND FREE OF UNSUITABLE OR DELETERIOUS MATERIAL. HOWEVER, THE FILL SHOULD NOT BE PLACED IN MORE THAN 6 INCHES OF STANDING WATER. ONCE THE FILL IS AT LEAST 2 FEET ABOVE THE DEWATERED LEVEL, BACKFILLING MAY PROCEED AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

12. SEDIMENT CONTROL MEASURES SHOULD BE EMPLOYED DURING THE CONSTRUCTION PROCESS TO KEEP THE POND FROM RECEIVING SIGNIFICANT AMOUNTS OF STORMWATER RUNOFF FROM THE SURROUNDING CONSTRUCTION SITE. THIS RUNOFF IS LIKELY TO CONTAIN SUSPENDED FINE-GRAINED SOIL PARTICLES THAT CAN IMPEDE THE INFILTRATION CAPACITY OF THE PONDS IF ALLOWED TO SETTLE OUT ON THE POND BOTTOMS. IF DEWATERING EFFLUENT OR STORMWATER RUNOFF FROM THE ACTIVE CONSTRUCTION SITE IS DISCHARGED TO THE POND, CONTRACTOR SHALL SCRAPE AND REMOVE FINE-GRAINED SEDIMENTS THAT HAVE ACCUMULATED ON THE POND BOTTOM, AND REPLACE WITH SUITABLE SOIL TO THE PLAN SPECIFIED GRADE ELEVATIONS. REQUIRED DEPTH OF SCRAPE AND REMOVAL SHALL BE DETERMINED BY GEOTECHNICAL ENGINEER.

DEWATERING NOTES

1. DURING THE EXCAVATION OF THE STORMWATER FACILITIES, AND IF GROUNDWATER IS ENCOUNTERED, THE CONTRACTOR SHALL CONSTRUCT A SEDIMENT BASIN TO PROVIDE A DISCHARGE POINT FOR DEWATERING. THE SEDIMENT BASIN CAN BE CELL IN THE PROPOSED EXCAVATION AREA OF A POND OR IT CAN BE A BERMED AREA ABOVE GROUND. ALL DEWATERING MUST BE HELD IN THE SEDIMENT AREA UNTIL THE WATER IS CLEAN SUCH THAT THERE WOULD BE NO TURBID DISCHARGE. AFTER THE WATER IN THE SEDIMENT BASIN IS CLEAN, THE WATER MAY BE RELEASED INTO THE ON-SITE POND PROVIDED THERE IS NO ADVERSE IMPACT TO THE EXISTING WATER QUALITY.

2. UNDER NO CIRCUMSTANCES WILL THE DISCHARGE FROM THE ON-SITE DEWATERING BE DIRECTLY DISCHARGED OFFSITE.

3. IF CONTRACTOR ENCOUNTERS SILTY/CLAY SAND, WHICH CAUSES THE WATER TO BECOME TURBID, HE/SHE SHALL TREAT THE SEDIMENT BASIN WITH CHEMICAL ADDITIVE SUCH AS ALLUM IN ORDER TO PROMOTE THE COAGULATION OF THE PARTICLES WHICH ALLOW THE TO SETTLE AND THE WATER TO BECOME LESS TURBID. IF TURBID WATER ENCOUNTERED DURING EXCAVATION OF THE PONDS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY TO DETERMINE THE COURSE OF ACTION THAT IS APPROPRIATE TO ELIMINATE THE TURBIDITY AND ALLOW DISCHARGE THAT MEETS WATER QUALITY STANDARDS.

4. THE CONTRACTOR SHALL SEQUENCE THE EXCAVATION OF THE STORMWATER PONDS SUCH THAT A SEDIMENT BASIN WILL BE AVAILABLE AT ALL TIMES. THE SEDIMENT BASIN CAN BE RELOCATED AS NECESSARY SUBJECT TO THE WATER WITHIN THE SEDIMENT BASIN BEING NON-TURBID AND ACCEPTABLE FOR DISCHARGE OFF-SITE.

DEMOLITION

1. CONTRACTOR SHALL SUBMIT DEMOLITION SCHEDULE TO OWNER PRIOR TO PROCEEDING WITH DEMOLITION ACTIVITIES.

2. EXTENT OF SITE CLEARING IS SHOWN ON DRAWINGS.

3. CONTRACTOR SHALL CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.

4. CONTRACTOR SHALL PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN "EXISTING TO REMAIN".

5. CONTRACTOR SHALL RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.

6. CONTRACTOR SHALL REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF-SITE IN A LEGAL MANNER.

7. CONTRACTOR SHALL DEMOLISH AND COMPLETELY REMOVE FROM SITE MATERIAL INDICATED ON PLAN OR NOTES "TO BE REMOVED".

8. CONTRACTOR SHALL PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION.

STORM DRAINAGE SYSTEM

1. THE LATEST EDITION OF F.D.O.T. "STANDARD PLANS" (ED. 2019/2020) IS REFERRED TO FOR THE STRUCTURAL DESIGN OF DRAINAGE STRUCTURES SPECIFIED IN THESE PLANS, AS REFERENCED BY STANDARD INDEX. ALL SPECIALTY DRAINAGE STRUCTURES REQUIRE SEPARATE STRUCTURAL DESIGN, WHICH IS NOT INCLUDED IN THESE PLANS. STATION OFFSETS ARE TO THE CENTERLINE OF THE STRUCTURE TOP (I.E. DITCH BOTTOM INLET OR CURB INLET TOP), AS OPPOSED TO THE STRUCTURE BASE.

2. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS.

3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURES, WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS. LENGTHS OF PIPE SHOWN WHICH TERMINATE WITH MITERED END OR FLARED END SECTIONS ARE MEASURED TO THE DOWNSTREAM INVERT OF THE MITERED END OR FLARED END SECTION.

4. ALL DRAINAGE STRUCTURE GRATES AND COVERS, EITHER EXISTING OR PROPOSED SHALL BE TRAFFIC RATED FOR H-20 LOADINGS.

5. CONSTRUCTION OF THE STORM WATER MANAGEMENT SYSTEM MUST BE COMPLETE AND ALL DISTURBED AREAS STABILIZED IN ACCORDANCE WITH THE PERMITTED PLANS AND CONDITIONS PRIOR TO ANY OF THE FOLLOWING: ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY; INITIATION OF INTENDED USE OF THE INFRASTRUCTURE; OR TRANSFER OF RESPONSIBILITY FOR MAINTENANCE OF THE SYSTEM TO A LOCAL GOVERNMENT OR OTHER RESPONSIBLE ENTITY.

6. STORM WATER PIPES, STRUCTURES, MINIMUM COVER, AND INSTALLATION PROCEDURES TO BE IN ACCORDANCE WITH FDOT STANDARD PLANS AND SPECIFICATIONS (LATEST ED.) AND ORANGE COUNTY STANDARDS AND SPECIFICATIONS.

7. DURING CONSTRUCTION, NO DIRECT DISCHARGE OF WATER TO DOWNSTREAM RECEIVING WATERS WILL BE ALLOWED. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WATER QUALITY AND SHALL ROUTE DISCHARGE WATER IN SUCH A MANNER AS TO ADEQUATELY REMOVE SILT PRIOR TO RUNOFF FROM THE SITE.

8. ALL DRAINAGE PIPES SHALL BE FILTER FABRIC WRAPPED PER FDOT STANDARD PLANS (ED. 2019/2020) INDEX 430-001.

9. THE CONTRACTOR SHALL MAINTAIN AND PROTECT THE STORMWATER COLLECTION SYSTEM (INLETS, PIPES) FROM EXCESSIVE MUD, SILT, DIRT, DEBRIS, TRASH, ETC. UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE INSPECTED BY THE OWNER'S ENGINEER PRIOR TO APPROVAL FOR CERTIFICATE OF OCCUPANCY PURPOSES. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL CLEAN AND FLUSH STORM PIPES AND INLETS OF ALL EXCESSIVE SILT, DEBRIS, ETC.

PAVING, GRADING AND DRAINAGE

1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS, ETC.) IS TO BE EXCAVATED AND REPLACED WITH SUITABLE/COMPACTED SOILS, AS DIRECTED BY THE GEOTECHNICAL ENGINEER OF RECORD OR THE OWNERS ENGINEERS. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS AND PER THE GEOTECHNICAL REPORT. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOILS TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS.

4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES, UNLESS OTHERWISE NOTED.

5. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. CONTRACTOR TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.

6. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

7. CURBING SHALL BE PLACED AT THE EDGES OF ALL PAVEMENT, UNLESS OTHERWISE NOTED. REFER TO THE 2015/2016 EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURB AND GUTTERS CALLED FOR IN THESE PLANS.

8. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE SOILS ENGINEER FOR APPROVAL.

9. CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (STRUCTURES, OTHER POURED)

10. ALL PAVEMENT MARKINGS SHALL BE MADE IN ACCORDANCE WITH F.D.O.T. STANDARD INDEX #711-001.

11. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD, OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION REQUIREMENTS.

12. THE CONTRACTOR SHALL RESTORE OFF-SITE CONSTRUCTION AREAS TO EQUAL AND/OR BETTER CONDITION THAN EXISTING PRIOR TO START OF CONSTRUCTION.

13. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATION AT PROPERTY LINES.

14. SURVEY MONUMENTS OR BENCHMARKS, WHICH HAVE TO BE DISTURBED BY THIS WORK, SHALL BE REPLACED UPON COMPLETION OF WORK BY A REGISTERED LAND SURVEYOR AT CONTRACTORS EXPENSE.

15. FINAL GRADES SHOWN INCLUDE SOD HEIGHT. ALL AREAS SHALL BE GRADED TO DRAIN AWAY FROM THE BUILDINGS.

16. LIME ROCK AS-BUILTS ARE TO BE APPROVED BY OWNER'S ENGINEER PRIOR TO PAVING.

17. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH ALL LOCAL, STATE AND JURISDICTIONAL PERMITTING AGENCIES.

18. ALL WORK SHALL COMPLY WITH THE GEOTECHNICAL REPORT BY TERRACON CONSULTANTS, INC. ON NOVEMBER 18, 2019.

GRADING TESTING AND INSPECTION

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE SOILS REPORT. UPON COMPLETION OF WORK THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

2. A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS AND GEOTECHNICAL REPORT, THE VARIOUS AGENCIES AND PERMIT CONDITIONS. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THESE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

Always call 811 two full business days before you dig to have underground utilities located and marked.

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Kimley»Horn

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189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801
PHONE: 407-898-1511
WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER 89199
DATE: —

KHA PROJECT 149973004
DATE 02/18/2022
SCALE AS SHOWN
DESIGNED BY MIG
DRAWN BY CML
CHECKED BY MIG

GENERAL NOTES

WINDERMERE DOWNTOWN PROPERTY
TOWN OF WINDERMERE FL

SHEET NUMBER C1.0

Plotted By:Geiger, Marcus Sheet Set:Windermere Downtown Property Layout:C1.1 GENERAL NOTES February 21, 2022 10:41:17am K:\ORL_Civil\149973004-Windermere Downtown Property\CAD\CONST\PlanSheets\C1.0 - GENERAL NOTES.dwg
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CONTRACTOR'S AS-BUILT

1. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION, CERTIFIED BY A LICENSED LAND SURVEYOR CURRENTLY REGISTERED IN THE STATE OF FLORIDA. AT A MINIMUM, THIS "AS-BUILT" INFORMATION SHALL INCLUDE: TOP OF PIPE/INVERT ELEVATIONS AND HORIZONTAL LOCATIONS OF ALL WATER, SANITARY SEWER, AND RECLAIM WATER UTILITIES INSTALLED (AS APPLICABLE); PAVEMENT GRADE BREAK LOCATIONS AND SUFFICIENT ELEVATIONS OF FINISHED GRADE SURFACES WHICH ALLOW THE ENGINEER TO DETERMINE COMPLIANCE WITH THE PROPOSED DESIGN; TOP, GRATE, & INVERT ELEVATIONS OF THE STORMWATER COLLECTION SYSTEM, INCLUDING THE POND GRADES (TOP, BANK, BOTTOM), POND CONTROL STRUCTURE, & SWALES; ANY IMPROVEMENTS WITHIN FDOT OR COUNTY RIGHT-OF-WAYS.
2. THE DIGITAL "AS-BUILT" FILE, PROVIDED IN AUTOCAD .DWG FORMAT, SHALL ALSO BE PROVIDED IN THE FLORIDA STATE PLANE COORDINATE SYSTEM. NO ENGINEER'S CERTIFICATIONS OF COMPLETION OR REQUESTS FOR FINAL ACCEPTANCE WILL BE SUBMITTED UNTIL THIS INFORMATION HAS BEEN RECEIVED AND APPROVED BY THE OWNER'S ENGINEER.

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LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
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KHA PROJECT	149973004
DATE	02/18/2022
SCALE	AS SHOWN
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GENERAL NOTES

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE FL

SHEET NUMBER
C1.1

STORMWATER POLLUTION PREVENTION PLAN

SITE DESCRIPTION

PROJECT NAME AND LOCATION
WINDERMERE DOWNTOWN PROPERTY
TAX PARCELS: 17-23-28-9336-02-430, 17-23-28-9336-02-470, 17-23-28-9336-02-490, 17-23-28-9336-02-500, 17-23-28-9336-02-510, 17-29-28-9336-520
TOWN OF WINDERMERE, FL

*SEE COVER SHEET FOR LOCATION MAP

DEVELOPER NAME AND ADDRESS
WINDERMERE DOWNTOWN PROPERTY, LLC
496 S. HUNT CLUB BOULEVARD
APOPKA, FL 32703
CONTACT: BRETT DARGIS
PHONE: (407)848-1663
EMAIL: brett@v3capgroup.com

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF PROPOSED COMMERCIAL BUILDINGS ON A 2.17 ACRE SITE.

THIS SITE IS LOCATED ON THE CORNER OF MAIN STREET AND 6TH AVENUE.

STORMWATER RUNOFF FORM THE PROPOSED SITE WILL BE MANAGED BY MULTIPLE BMP'S, INCLUDING A PROPOSED WET DETENTION POND, PERVIOUS PAVERS, AND DRY RETENTION POND TO PROVIDE THE REQUIRED TREATMENT (QUALITY) AND ATTENUATION (QUANTITY) VOLUMES. THE STORMWATER MANAGEMENT SYSTEM WAS DESIGNED TO MEET OR EXCEED ALL THE REQUIREMENTS OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), RCID, AND ORANGE COUNTY.

PROJECT AREA: ±2.17 ACRES
CONTRIBUTING DRAINAGE AREA: ±2.17 ACRES

CONTROL STRUCTURES : CS-A
LONGITUDE : W 81° 32' 01.47" LATITUDE: N 28° 29' 41.33"

CONTROL STRUCTURES : CS-B
LONGITUDE : W 81° 32' 03.73" LATITUDE: N 28° 29' 44.99"

ULTIMATE RECEIVING WATERS: LAKE BUTLER

ACTIVITIES THAT REQUIRE EROSION CONTROL

SITE CLEARING AND GRUBBING; PROVIDING A STABILIZED CONSTRUCTION ENTRANCE, PERIMETER, AND OTHER EROSION AND SEDIMENT CONTROLS; EXCAVATION FOR THE RETENTION POND; SITE GRADING; INSTALLATION OF STORM WATER, SANITARY SEWER, AND WATER STRUCTURES; CURB, ROADWAYS, AND PARKING FACILITIES.

*SEE PLANS FOR THE LOCATION OF TEMPORARY SEDIMENT BARRIERS AND OTHER EROSION CONTROL METHODS.

SOIL PARAMETERS
SOIL TYPES:

SERIES NAME	HYDROLOGIC GROUP
POMELLO FINE SAND	A
SANIBEL MUCK	D
IMMOKALEE FINE SAND	B/D
BASINGER FINE SAND	A/D
TAVARES FINE SAND	A

SEQUENCE OF MAJOR ACTIVITIES

THE ORDER OF CONSTRUCTION IS AS FOLLOWS:

1. PROVIDE STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND OTHER EROSION CONTROL METHODS
3. CLEAR AND GRUB FOR SEDIMENT BASIN AND EARTH DIKE
4. CONSTRUCT EARTH DIKE AND SEDIMENT BASIN
5. FINISH CLEARING AND GRUBBING
6. REMOVE AND STORE TOPSOIL
7. PROVIDE INITIAL GRADING AS REQUIRED
8. STABILIZE ALL DISTURBED AREAS AS SOON AS POSSIBLE
9. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER
10. INSTALL BASE TO ROAD AND PARKING AREA
11. FINISH GRADING ENTIRE SITE
12. CONSTRUCT FINAL PAVING
13. REMOVE ACCUMULATED SEDIMENT
14. REMOVE ANY ITEMS THAT ARE NOT REQUIRED

TIMING OF CONTROL MEASURES

THE INSTALLATION OF SILT FENCE (AND OTHER EROSION CONTROL MEASURES), A STABILIZED ENTRANCE AND SEDIMENT BASIN SHALL OCCUR PRIOR TO CLEARING AND GRUBBING ACTIVITY. AFTER CONSTRUCTION IS COMPLETE, THE ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE AREAS SHALL BE REGRADED AND PERMANENTLY STABILIZED AS SHOWN ON THE PLANS.

EROSION AND SEDIMENT CONTROLS

BEST MANAGEMENT PRACTICES SHALL BE USED FOR THIS PROJECT TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN-OFF. THE LOCATION AND DETAILS OF EROSION CONTROL METHODS ARE SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING THESE CONTROL METHODS AS SHOWN ON THE PLANS OR AS REQUIRED. HE/SHE SHALL ALSO PROVIDE THE REQUIRED EROSION PROTECTION AS REQUIRED BY LOCAL, STATE AND FEDERAL LAW.

STORM WATER MANAGEMENT

STORMWATER RUNOFF FORM THE PROPOSED SITE WILL BE MANAGED BY AN EXFILTRATION/PAVE DRAIN SYSTEM TO PROVIDE THE REQUIRED TREATMENT (QUALITY) AND ATTENUATION (QUANTITY) VOLUMES. THE STORMWATER MANAGEMENT SYSTEM WAS DESIGNED TO MEET OR EXCEED ALL THE REQUIREMENTS OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD), TOWN OF WINDERMERE, AND ORANGE COUNTY.

STABILIZATION PRACTICES:

TEMPORARY STABILIZATION - TOPSOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE, SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED REQUIRED CAN BE FOUND IN TABLE 1.65 A OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, WHERE SOILS ARE ACIDIC 2 TONS OF PULVERIZED AGRICULTURAL LIMESTONE SHOULD BE ADDED PER ACRE AND 450 POUNDS OF 10-20-20 FERTILIZER SHALL BE APPLIED TO EACH ACRE. AFTER SEEDING, EACH AREA SHALL BE IMMEDIATELY MULCHED WITH STRAW OR EQUIVALENT EQUAL. AREAS OF THE SITE WHICH ARE TO BE PAVED SHALL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED.

PERMANENT STABILIZATION - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE APPROPRIATE PERMANENT SEED MIX CAN BE FOUND IN TABLES 1.66A, 1.66B AND 1.66C OF THE FLORIDA DEVELOPMENT MANUAL. PRIOR TO SEEDING, 2 TONS/ACRE OF FINELY GROUND AGRICULTURAL LIMESTONE AND THE PROPER FERTILIZER BASED ON THE TYPE OF SEEDING SHALL BE APPLIED TO EACH ACRE TO PROVIDE PLANT NUTRIENTS. AFTER SEEDING, EACH AREA SHALL BE MULCHED IMMEDIATELY. ALL RETENTION/DETENTION BASINS SHALL BE SODDED AT LEAST TO THE NORMAL WATER LINE. ALL EXPOSED AREAS WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE SOLID SODDED, OTHER AREAS WITH SLOPES STEEPER THAN 4:1 SHALL BE SODDED.

STRUCTURAL PRACTICES:

EARTH DIKE - IF REQUIRED, AN EARTH DIKE SHALL BE CONSTRUCTED ALONG THE SITE PERIMETER. A PORTION OF THE DIKE SHALL DIVERT RUN-ON AROUND THE CONSTRUCTION SITE. THE REMAINING PORTION OF THE DIKE SHALL COLLECT RUNOFF FROM THE DISTURBED AREA AND DIRECT THE RUNOFF TO THE SEDIMENT BASIN.

SEDIMENT BASIN - A SEDIMENT BASIN SHALL BE CONSTRUCTED IN THE COMMON DRAINAGE AREA FOR THE SITE. ALL SEDIMENT COLLECTED IN THE BASIN MUST BE REMOVED FROM THE BASIN UPON COMPLETION OF CONSTRUCTION. SEDIMENT FROM THE BASIN MAY BE USED AS FILL ON THE SITE IF IT IS SUITABLE SOIL.

WASTE DISPOSAL

WASTE MATERIALS - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A METAL DUMPSTER WITH A SECURE LID IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITIES TO HAVE THE DUMPSTER EMPTIED AT LEAST TWICE A WEEK AND THE WASTE TAKEN TO AN APPROPRIATE LANDFILL. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE. THE SUPERINTENDENT SHALL ORGANIZE TRAINING FOR THE EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH WASTE MATERIALS. THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR POSTING AND ENFORCING WASTE MATERIAL PROCEDURES.

HAZARDOUS WASTE - HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS OR AS DIRECTED BY THE MANUFACTURER. THE SUPERINTENDENT SHALL ORGANIZE THE PROPER TRAINING FOR EMPLOYEES IN THE PROPER PRACTICES WHEN DEALING WITH HAZARDOUS WASTE MATERIALS. THESE PROCEDURES SHALL BE POSTED ON THE SITE. THE PERSON WHO MANAGES THE SITE SHALL BE RESPONSIBLE FOR ENFORCING THE PROCEDURES.

SANITARY WASTE - SANITARY WASTE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL AND STATE LAWS. THE SUPERINTENDENT SHALL COORDINATE WITH THE LOCAL UTILITY FOR COLLECTION OF THE SANITARY WASTE AT LEAST THREE TIMES A WEEK TO PREVENT SPILLAGE ONTO THE SITE.

OFF-SITE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO REDUCE SEDIMENT TRACKING OFFSITE. THE CONTRACTOR SHALL PROMPTLY REMOVE ALL MUD, DIRT, OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC ROADS AND FACILITIES, DUE TO CONSTRUCTION. ALL TRUCKS HAULING MATERIALS OFFSITE SHALL BE COVERED WITH A TARPAULIN.

DUST & DEBRIS CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL WITHIN THE CONSTRUCTION LIMITS AS WELL AS ALONG HAUL ROUTES AND ROADWAYS USED BY THE EQUIPMENT AND VEHICLES. THE CONTRACTOR SHALL ENSURE THAT EXCESSIVE DUST IS NOT TRANSPORTED BEYOND THE LIMITS OF CONSTRUCTION IN POPULATED AREAS. THE CONTRACTOR MAY CONTROL DUST FOR EMBANKMENTS OR OTHER CLEARED OR UNSURFACED AREAS BY APPLYING WATER. INSTALL MULCH, SEED, SOD, OR TEMPORARY PAVING AS EARLY AS PRACTICAL. CONTROL DUST DURING STORAGE AND HANDLING OF DUSTY MATERIALS BY WETTING, COVERING, OR OTHER MEANS AS APPROVED BY THE ENGINEER.
DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE ON THE PROJECT SITE.

ITEMS REQUIRING POLLUTION PREVENTION

THE FOLLOWING ITEMS ARE EXPECTED TO BE PRESENT ON THE PROJECT SITE:

-ASPHALT
-CONCRETE
-FERTILIZERS
-METAL PIECES
-PETROLEUM BASED PRODUCTS
-TAR
-CLEANING SUPPLIES
-DETERGENTS
-MASONARY BLOCK/BRICKS
-PAINT
-WOOD

THE FOLLOWING ARE NON-STORM WATER SOURCES THAT WILL BE ENCOUNTERED AT THE SITE AND SHOULD BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE:

-UNCONTAMINATED GROUNDWATER EXPOSED DURING EXCAVATION
-WATER FROM WATER LINE FLUSHING
-PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).

SPILL PREVENTION AND CONTROL

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

-SUPERINTENDENT SHALL INSPECT PROJECT AREA DAILY FOR PROPER STORAGE, USE, AND DISPOSAL OF CONSTRUCTION MATERIALS.

-STORE ONLY ENOUGH MATERIAL ON SITE FOR PROJECT COMPLETION.

-ALL SUBSTANCES SHOULD BE USED BEFORE DISPOSAL OF CONTAINER.

-ALL CONSTRUCTION MATERIALS STORED SHALL BE ORGANIZED AND IN THE PROPER CONTAINER AND IF POSSIBLE, STORED UNDER A ROOF OR PROTECTIVE COVER.

-PRODUCTS SHALL NOT BE MIXED UNLESS DIRECTED BY THE MANUFACTURER.

-ALL PRODUCTS SHALL BE USED AND DISPOSED OF ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

HAZARDOUS PRODUCTS

-MATERIALS SHOULD BE KEPT IN ORIGINAL CONTAINER WITH LABELS UNLESS THE ORIGINAL CONTAINERS CANNOT BE RESEALED. IF ORIGINAL CONTAINERS CANNOT BE USED, LABELS AND PRODUCT INFORMATION SHALL BE SAVED.

-PROPER DISPOSAL PRACTICES SHALL ALWAYS BE FOLLOWED IN ACCORDANCE WITH MANUFACTURER AND LOCAL/STATE REGULATIONS.

PRODUCT SPECIFIC PRACTICES

-PETROLEUM PRODUCTS MUST BE STORED IN PROPER CONTAINERS AND CLEARLY LABELED. VEHICLES CONTAINING PETROLEUM PRODUCTS SHALL BE PERIODICALLY INSPECTED FOR LEAKS. PRECAUTIONS SHALL BE TAKEN TO AVOID LEAKAGE OF PETROLEUM PRODUCTS ON SITE.

-THE MINIMUM AMOUNT OF FERTILIZER SHALL BE USED AND MIXED INTO THE SOIL IN ORDER TO LIMIT EXPOSURE TO STORM WATER. FERTILIZERS SHALL BE STORED IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

-PAINT CONTAINERS SHALL BE SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT MUST BE DISPOSED OF IN AN APPROVED MANNER.

-CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

-SPILL CLEANUP INFORMATION SHALL BE POSTED ON SITE TO INFORM EMPLOYEES ABOUT CLEANUP PROCEDURES AND RESOURCES.

-THE FOLLOWING CLEAN-UP EQUIPMENT MUST BE KEPT ON-SITE NEAR THE MATERIAL STORAGE AREA: GLOVES, MOPS, RAGS, BROOMS, DUST PANS, SAND, SAWDUST, LIQUID ABSORBER, GOGGLES, AND TRASH CONTAINERS.

-ALL SPILLS SHALL BE CLEANED UP AS SOON AS POSSIBLE.

-WHEN CLEANING A SPILL, THE AREA SHOULD BE WELL VENTILATED AND THE EMPLOYEE SHALL WEAR PROPER PROTECTIVE COVERING TO PREVENT INJURY.

-TOXIC SPILLS MUST BE REPORTED TO THE PROPER AUTHORITY REGARDLESS OF THE SIZE OF THE SPILL.

-AFTER A SPILL, THE PREVENTION PLAN SHALL BE REVIEWED AND CHANGED TO PREVENT FURTHER SIMILAR SPILLS FROM OCCURRING. THE CAUSE OF THE SPILL, MEASURES TO PREVENT IT, AND HOW TO CLEAN THE SPILL UP SHALL BE RECORDED.

-THE SUPERINTENDENT SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR AND IS RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS. THE SUPERINTENDENT ALSO OVERSEES THE SPILL PREVENTION PLAN AND SHALL BE RESPONSIBLE FOR EDUCATING THE EMPLOYEES ABOUT SPILL PREVENTION AND CLEANUP PROCEDURES.

MAINTENANCE AND INSPECTION PRACTICES

THE FOLLOWING ARE MAINTENANCE AND INSPECTION PRACTICES THAT SHALL BE COMPLETED BY THE CONTRACTOR:

-ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE CHECKED DAILY AND AFTER EACH 0.5 INCH OR GREATER RAINFALL BY THE SUPERINTENDENT OR SOMEONE UNDER HIS/HER DIRECT SUPERVISION.

-ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE KEPT IN GOOD CONDITION. REPAIRS MUST BE MADE WITHIN 24 HOURS OF REPORT.

-THE SILT FENCE SHALL BE INSPECTED PERIODICALLY FOR HEIGHT OF SEDIMENT AND CONDITION OF FENCE.

-THE SILT FENCE SHALL BE CLEARED OF SEDIMENT WHEN SEDIMENT MEASURES ONE-THIRD THE HEIGHT OF THE FENCE.

-THE SEDIMENT BASINS/DITCHES SHALL BE CHECKED MONTHLY FOR DEPTH OF SEDIMENT. THEY SHALL BE CLEANED WHEN SEDIMENT REACHES 10% OF TOTAL CAPACITY AND AFTER CONSTRUCTION IS COMPLETE.

-DIVERSION DIKES SHALL BE INSPECTED MONTHLY. ANY BREACHES SHALL BE PROMPTLY REPAIRED.

-ALL SEEDING SHALL BE CHECKED FOR PROPER GROWTH AND UNIFORMITY. UNSTABALIZED AREAS SHALL BE RE-SODDED.

-A MAINTENANCE REPORT SHALL BE COMPLETED DAILY AFTER EACH INSPECTION OF THE SEDIMENT AND EROSION CONTROL METHODS. THE REPORTS SHALL BE FILED IN AN ORGANIZED MANNER AND RETAINED ON-SITE DURING CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETED, THE REPORTS SHALL BE SAVED FOR AT LEAST THREE YEARS. THE REPORTS SHALL BE AVAILABLE FOR ANY AGENCY THAT HAS JURISDICTION OVER EROSION CONTROL.

-THE SUPERINTENDENT SHALL ORGANIZE THE TRAINING FOR INSPECTION PROCEDURES AND PROPER EROSION CONTROL METHODS FOR EMPLOYEES THAT COMPLETE INSPECTIONS AND REPORTS.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FORM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

SIGNATURE AND DATE	NAME AND TITLE, COMPANY / ADDRESS AND TELEPHONE NUMBER	RESPONSIBILITY

Plotted By:Geiger Marcus Sheet Set:Windermere Downtown Property Layout:C2.0 SWPP NOTES February 21, 2022 10:41:27am K:\ORL_Civil\149973004-Windermere Downtown Property\CADD\CONST\PlanSheets\C2.0 - SWPP.dwg
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LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER 89199
DATE: ———

KHA PROJECT 149973004
DATE 02/16/2022
SCALE AS SHOWN
DESIGNED BY MIG
DRAWN BY CML
CHECKED BY MIG

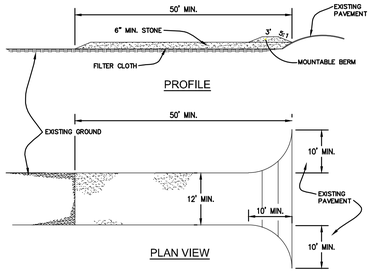
SWPP NOTES

WINDERMERE DOWNTOWN PROPERTY
TOWN OF WINDERMERE FL

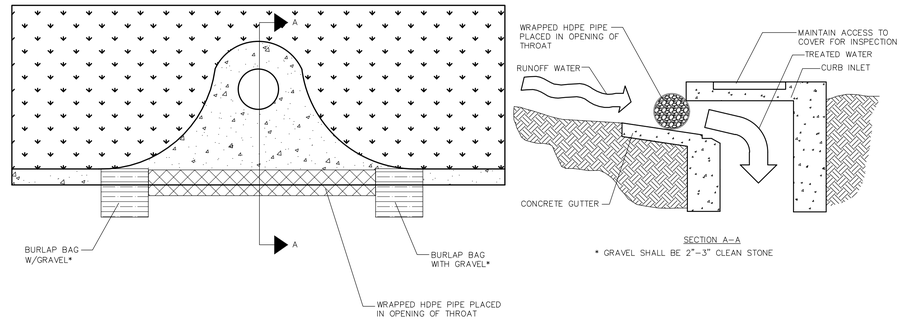
SHEET NUMBER C2.0

STABILIZED CONSTRUCTION ENTRANCE NOTES:

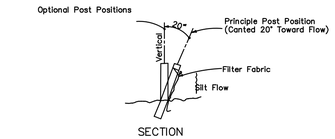
1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA, PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVED SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

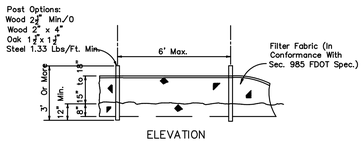


STABILIZED CONSTRUCTION ENTRANCE DETAIL
NTS

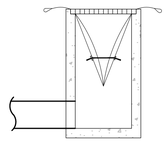


SOCK DRAIN INLET SEDIMENT FILTER
NTS

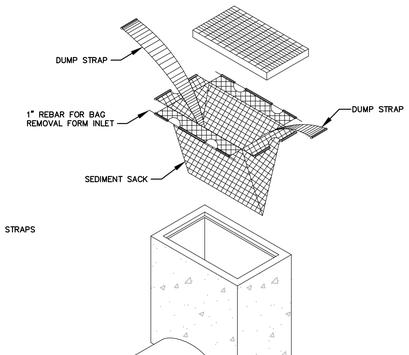




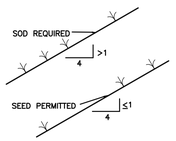
TYPE III SILT FENCE
NTS



INSTALLATION DETAIL



STANDARD INLET SEDIMENT CONTROL DEVICE
NTS



GRASS SLOPES
NTS

FIGURE 8

NOTES:

1) CONTRACTOR TO MAINTAIN DEBRIS ON–SITE, VEHICLES SHALL BE FREE OF EXCESS DEBRIS PRIOR TO ENTERING COUNTY RIGHT–OF–WAYS.

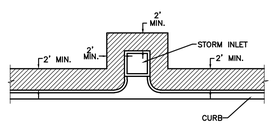
2) DURING ALL TIME OF CONSTRUCTION, THE CONTRACTOR MUST PROVIDE FILTER FABRIC AT ALL EXIST. OR PROP. CATCH BASIN TO PREVENT SYSTEM POLLUTION.

3) CONTRACTOR SHALL PROVIDE TRUCK WASH RACKS TO REMOVE CONSTRUCTION DEBRIS FROM VEHICLES PRIOR TO EGRESS.

4) DURING ALL TIME OF CONSTRUCTION, THE CONTRACTOR MUST PROVIDE SILT SCREENS AT CONSTRUCTION PERIMETER

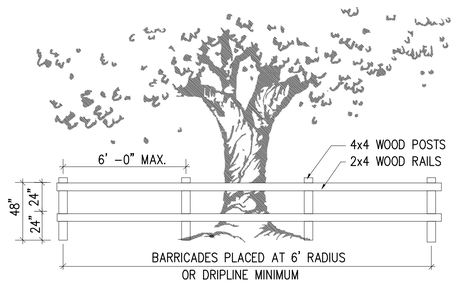
5) UPON COMPLETION OF CONSTRUCTION, SYSTEM IS TO BE CLEANED BY "CAMELVAC" OR OTHER APPROVED SYSTEM TO THE SATISFACTION OF THE PROJECT ENGINEER AND COUNTY ENGINEER WHEN OR AFTER THE OVERALL SYSTEM IS CLEANED.

6) THE CONTRACTOR SHALL MAINTAIN THE FULL SET OF PLANS INCLUDING THESE POLLUTION PREVENTION REQUIREMENTS ON–SITE AT ALL TIMES.



SOD ALONG CURB AND AROUND INLET
NTS

FIGURE 7



TREE PROTECTION DETAIL
NTS

1. ORANGE CONSTRUCTION FENCING CAN BE USED IN LIEU OF WOOD FENCE PER ENGINEER'S REVIEW AND APPROVAL.
2. NO STOCKPILING OF MATERIAL, TRASH OR DEBRIS SHALL BE PERMITTED WITHIN THE BARRIER. CONTRACTOR SHALL ADJUST AND MAINTAIN BARRIER LIMITS AS NECESSARY TO ACCOMMODATE ADJACENT CONSTRUCTION AS DIRECTED BY OWNER. REMOVE PROTECTION AFTER OWNER'S FINAL ACCEPTANCE OF THE PROJECT.

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LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER 89199
DATE: ———

KHA PROJECT 149973004			
DATE	02/18/2022	DESIGNED BY	MIG
SCALE	AS SHOWN	DRAWN BY	CML
		CHECKED BY	MIG

EROSION CONTROL DETAIL

WINDERMERE DOWNTOWN PROPERTY
TOWN OF WINDERMERE FL

SHEET NUMBER
C2.1

Plotted By:Geiger, Marcus Sheet Set:Windermere Downtown Property Layout:C2.1 EROSION CONTROL DETAIL February 21, 2022 03:41:37pm K:\ORL_Civil\149973004–Windermere Downtown Property\CADD\CONSTY\PlanSheets\C2.1 – ERO.dwg
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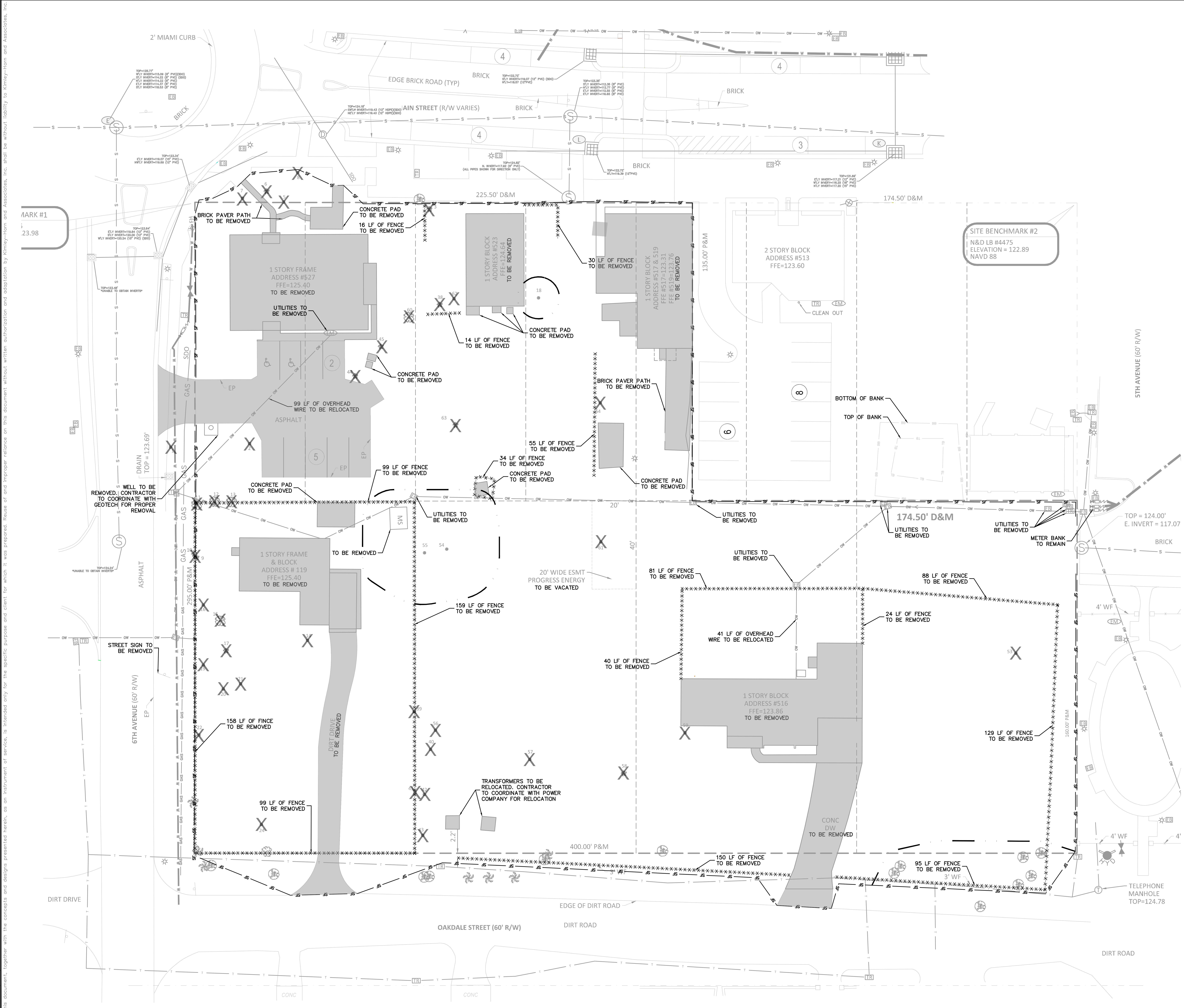

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- EXISTING SANITARY MAIN
- EXISTING REUSE MAIN
- EXISTING WATER MAIN
- EXISTING UNDERGROUND TELE.COMM. LINE
- EXISTING OVERHEAD LINE
- EXISTING NATURAL GAS LINE
- EXISTING STORM PIPE
- X — TO BE REMOVED
- PROPOSED SILT FENCE
- TREE TO BE REMOVED
- TREE TO REMAIN
- PROPOSED TREE PROTECTION FENCE
- TO BE REMOVED

DATUM/BENCHMARK NOTE:

1. ELEVATIONS SHOWN PER NAVD 88. REFER TO SURVEY FOR ADDITIONAL DETAILS AND BENCHMARKS

EXISTING UTILITY NOTE:

1. THERE MAY BE ON–SITE UNDERGROUND UTILITIES (INCLUDING BUT NOT LIMITED TO IRRIGATION, SANITARY SEWER, POTABLE WATER LINES, NATURAL GAS LINES, ELECTRIC, TELEPHONE AND CABLE LINES) THAT WERE NOT LOCATED OR IDENTIFIED BY THE PROJECT SURVEYOR. PRIOR TO CONSTRUCTION START, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ON–SITE UTILITIES AND RIGHT–OF–WAY UTILITIES.

DEMOLITION NOTES:

1. SEE ADDITIONAL NOTES, SHEET C1.0–C1.1.
2. ANY EXISTING WELLS (I.E. ARTESIAN, IRRIGATION, DRINKING, ETC.) DISCOVERED ON–SITE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL APPLICABLE JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED. ANY WELL DISCOVERED DURING EARTHWORK OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES, OWNER, AND OWNER'S ENGINEER WITHIN 24 HOURS AFTER DISCOVERY IS MADE.

GEOTECH NOTE:

1. CONTRACTOR TO FOLLOW THE GUIDANCE AND RECOMMENDATIONS AS SPECIFIED WITHIN THE SUBSURFACE SOIL EXPLORATION GEOTECHNICAL ENGINEERING REPORT(S) PERFORMED BY UNIVERSAL ENGINEERING SCIENCES. (DATED APRIL 28, 2010).

EROSION CONTROL NOTE:

1. REFER TO SWPPP SHEETS C2.0 FOR ADDITIONAL NOTES & DETAILS.
2. INSTALL AND MAINTAIN SILT FENCE PER FDOT.
3. PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT ALL CONSTRUCTION ACCESS POINTS.
4. UTILIZE PERFORATED SOCK DRAIN (OR EQUIVALENT) IN FRONT OF EXISTING/PROPOSED CURB INLETS ADJACENT TO CONSTRUCTION ACTIVITIES. ALONG ALL ROADWAYS.
5. INSTALL AND MAINTAIN FILTER FABRIC UNDER GRATES OF ALL EXISTING/PROPOSED INLETS.
6. PROVIDE TREE PROTECTION BARRIERS AROUND ALL EXISTING TREES LOCATED ON–SITE WHICH ARE DESIGNATED TO BE PRESERVED. REFER TO LANDSCAPE PLANS FOR TREES TO REMAIN AND TREE PROTECTION DETAILS/NOTES.

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LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER 89199
DATE: ____

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
149973004	02/18/2022	AS SHOWN	MIG	CML	MIG

EXISTING CONDITIONS

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE FL

SHEET NUMBER
C3.0

Plotted By: Geiger, Marcus Sheet Set: Windermere Downtown Property Layout: C3.0 EXISTING CONDITIONS February 21, 2022 10:41:51am K:\ORL_Civil\149973004–Windermere Downtown Property\CADD\CONST\PlanSheets\C3.0 – EXCON.dwg
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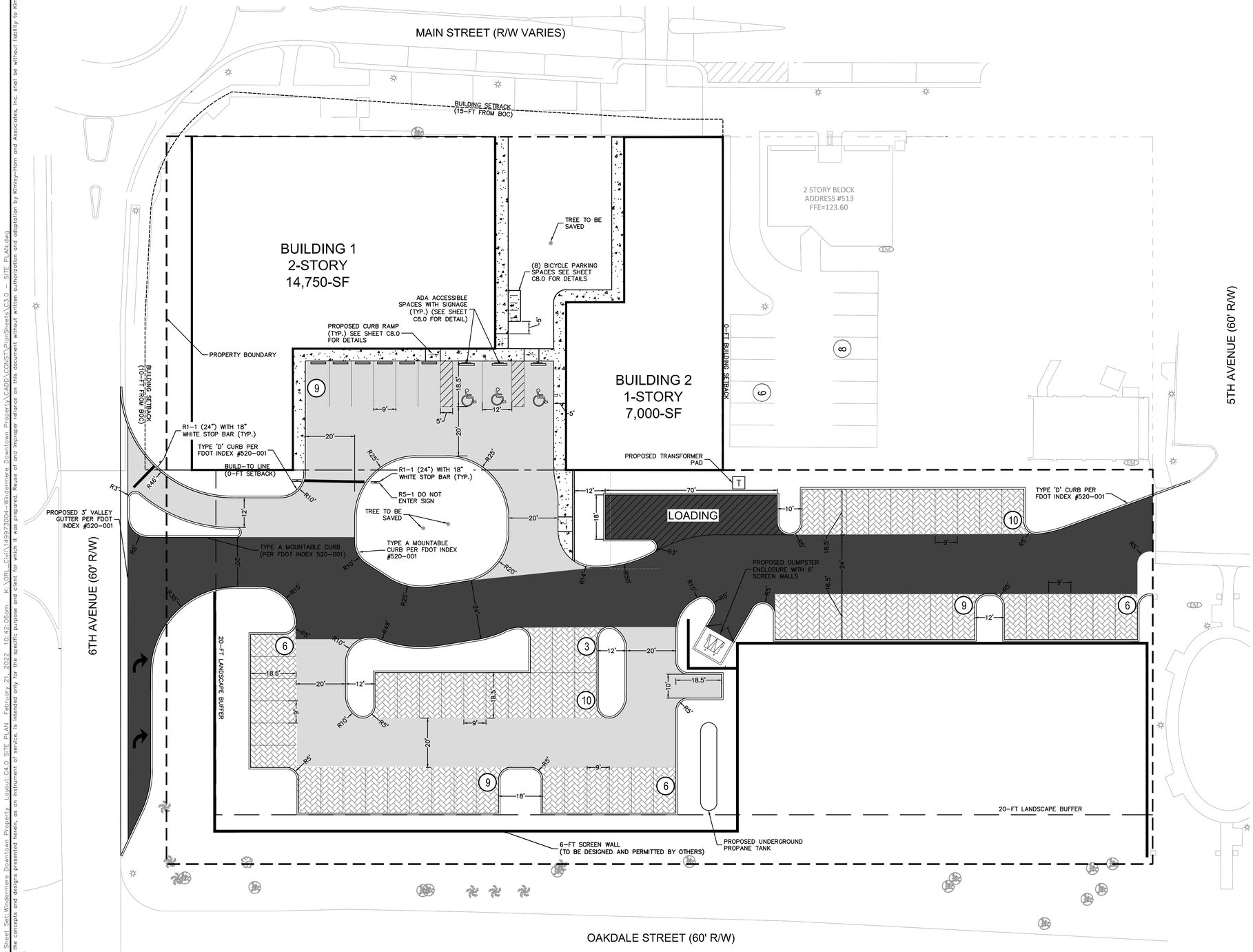

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

OVERALL SITE DATA:

PROJECT AREA:	2.17 ACRES (94,401 SF)
ZONING:	PD – PLANNED DEVELOPMENT
FUTURE LAND USE:	COMMERCIAL/GROWTH CENTER OVERLAY
PROPOSED USE:	COMMERCIAL
MAXIMUM BUILDING HEIGHT:	60 FEET

BUILDING COVERAGE:

BUILDING AREA:	21,750 SF (0.50 AC)
MAXIMUM ALLOWABLE F.A.R.:	0.30
F.A.R. (21,750 SF/94,401 SF) :	0.23

SETBACKS	BUILDING	PAVING
OAKDALE STREET (SOUTH)	15 FT	20 FT
6TH AVENUE (WEST)	10 FT	20 FT
5TH AVENUE (EAST)	0 FT	0 FT
MAIN STREET (NORTH)	15 FT	0 FT

IMPERVIOUS CALCULATIONS

MAXIMUM ALLOWABLE IMPERVIOUS AREA (80%):	1.74 AC
BUILDING AREA:	0.45 AC
ASPHALT/CONCRETE AREA:	0.58 AC
TOTAL IMPERVIOUS AREA:	1.03 AC (47.5%)

REQUIRED PARKING:

4 SPACES / 1000 GSF: 21,750 GSF / (4 SPACES / 1000 GSF):	87 SPACES
TOTAL PARKING SPACES REQUIRED:	87 SPACES

PROVIDED PARKING:

REGULAR SPACES (9'x18.5'):	66 SPACES
HANDICAP SPACES:	3 SPACES
TOTAL SPACES PROVIDED	69 SPACES

COMMERCIAL REQUIRED BICYCLE PARKING:

REQUIRED: 0.10 PER REQUIRED PARKING SPACE 0.10 X 79:	8 SPACES
TOTAL SPACES PROVIDED	8 SPACES

LEGEND

- PROPERTY BOUNDARY
- PROPOSED PAVEDRAIN/RETENTION TRENCH AREA (SEE SHEET C8.0 FOR DETAIL)
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT (SEE SHEET C8.0 FOR DETAIL)
- PROPOSED LIGHT DUTY ASPHALT PAVEMENT (SEE SHEET C8.0 FOR DETAIL)

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FL LICENSE NUMBER 89199
DATE:

KHA PROJECT 149973004			
DATE 02/18/2022			
SCALE AS SHOWN	DESIGNED BY	MIG	
	DRAWN BY	CML	
	CHECKED BY	MIG	

SITE PLAN

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE FL

SHEET NUMBER
C4.0

Plotted By:Geiger, Marcus Sheet Set:Windermere Downtown Property Layout:C4.0 SITE PLAN February 21, 2022 10:42:06am K:\ORL_Civil\149973004-Windermere Downtown Property\CADD\CONST\PlanSheets\C3.0 – SITE PLAN.dwg
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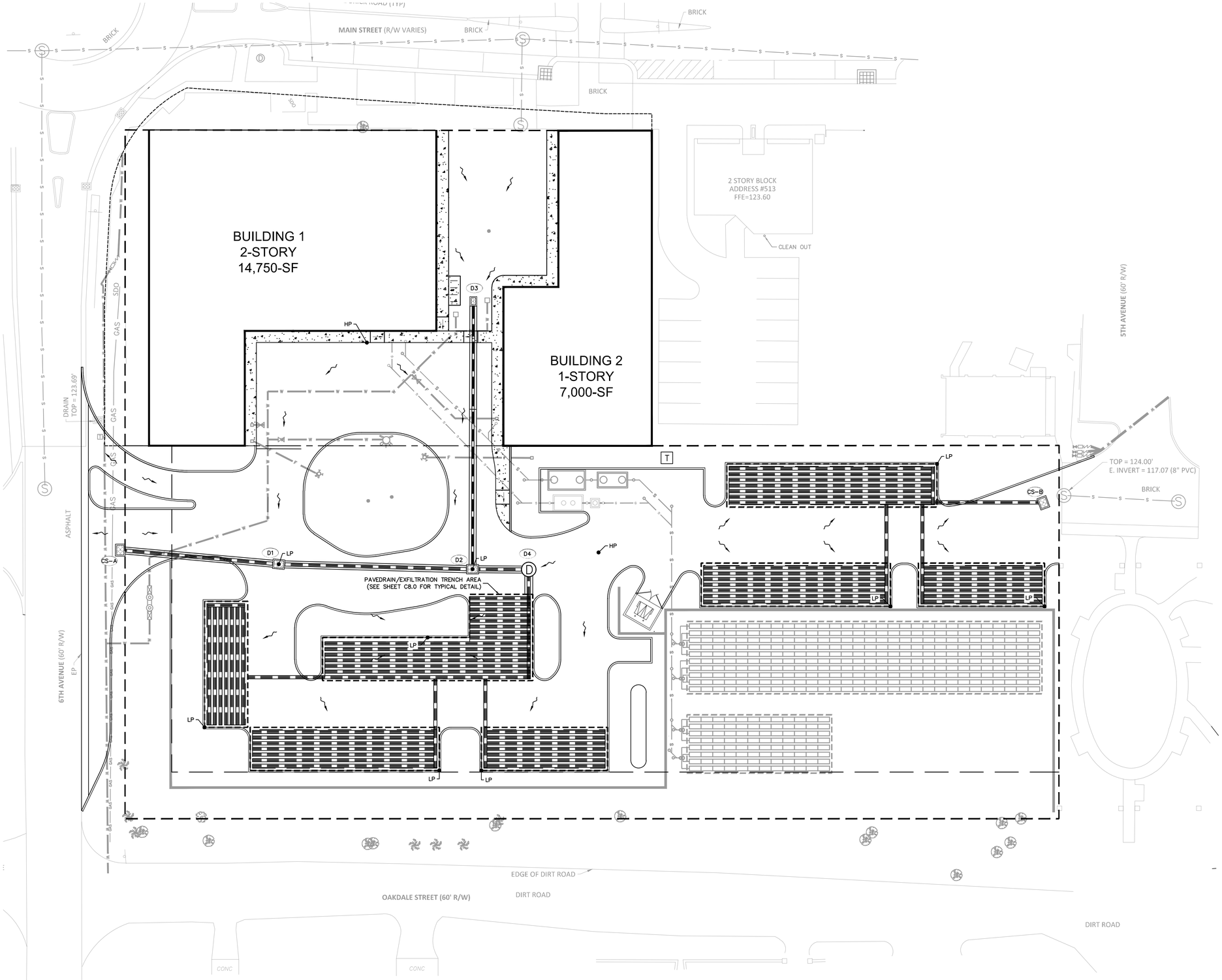

GRAPHIC SCALE IN FEET
0 10 20 40

NORTH

NOTES:

1. ALL STORM DRAIN INLETS CONSTRUCTED AS PART OF NEW DEVELOPMENT PROJECTS IN ORANGE COUNTY SHALL HAVE METAL MEDALLION INLET MARKERS INSTALLED. TEXT ON THE MARKER SHALL BE EVENLY SPACED AND READ "NO DUMPING, ONLY RAIN IN THE DRAIN". MARKERS MUST BE COMMERCIAL GRADE STAINLESS STEEL, ALUMINUM, BRASS OR BRONZE AND EITHER STAMPED FROM SHEET METAL OR CAST. METAL MARKER COLOR MUST BE NON-REFLECTIVE BLUE OR GREEN. AQUATIC CREATURE OR SYMBOL SHOWN ON MARKER SHALL BE CONSISTENT THROUGHOUT THE SUBDIVISION. MARKERS MUST BE AFFIXED TO A CLEAN, PREPARED SURFACE WITH ADHESIVES, FASTENERS, OR HEAT AS RECOMMENDED BY THE MANUFACTURER. MARKERS SHALL BE ALIGNED WITH THE CENTER OF DRAINAGE INLETS AT THE TOP OF THE CURB. LETTERING MUST BE BETWEEN 0.4 – 0.5 INCHES AND THE TOTAL DIAMETER OF THE MARKER BETWEEN 3.75 – 4.25 INCHES.

VERTICAL INFORMATION SHOWN HEREON BASED ON NAVD88.

2. PRIOR TO THE START OF LAND DISTURBING ACTIVITIES, WHICH INCLUDES DEMOLITION, EARTHWORK AND/OR CONSTRUCTION, THE DEVELOPER/CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) A NOTICE OF INTENT (NOI) TO OBTAIN COVERAGE UNDER THE NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP) PURSUANT TO THE REQUIREMENTS OF 62-621.300(4)(A) F.A.C. A COPY OF THE NOI SHALL BE SUBMITTED TO THE ORANGE COUNTY ENVIRONMENTAL PROTECTION DIVISION (OC EPD). COPIES OF THE SWPPP, NOI, AND FDEP ACKNOWLEDGEMENT LETTER ARE TO BE KEPT ON THE PROJECT SITE AND MADE AVAILABLE UPON REQUEST. UPON COMPLETION OF ALL LAND DISTURBING ACTIVITIES AND AFTER FINAL STABILIZATION OF THE SITE IS COMPLETE, THE DEVELOPER/CONTRACT SHALL SUBMIT TO FDEP A NOTICE OF TERMINATION (NOT) TO END THEIR COVERAGE UNDER THE CGP AND PROVIDE A COPY OF THE NOT TO OC EPD.

3. THE SITE SHALL BE STABILIZED FOLLOWNG CLEARING, GRUBBING, EARTH WORK OR MASS GRADING TO ESTABLISH A DENSE STAND OF GRASS, OR SHALL INCORPORATE OTHER APPROVED BEST MANAGEMENT PRACTICES, ON ALL DISTURBED AREAS IF DEVELOPMENT DOES NOT BEGIN WITHIN 7 DAYS. FINAL STABILIZATION SHALL ACHIEVE 100% COVERAGE AND A MINIMUM OF 70% DENSITY OF THE DISTURBED LAND AREA AND SHALL INCLUDE A MAINTENANCE PROGRAM TO ENSURE MINIMUM COVERAGE SURVIVAL AND OVERALL SITE STABILIZATION UNTIL SITE DEVELOPMENT.

4. DISCHARGE OF GROUNDWATER FROM DEWATERING OPERATIONS REQUIRES APPROVAL FROM FDEP AND THE APPLICABLE WATER MANAGEMENT DISTRICT. THE DEVELOPER/CONTRACTOR SHALL OBTAIN AND FDEP GENERIC PERMIT FOR THE DISCHARGE OF GROUND WATER FROM DEWATERING OPERATIONS PURSUANT TO THE REQUIREMENTS OF 62-621.300(2)(A) AND 62-620 F.A.C. AND FLORIDA STATUTES CHAPTER 403. DISCHARGES DIRECTED TO THE COUNTY'S MS4 REQUIRE AN ORANGE COUNTY RIGHT-OF-WAY UTILIZATION PERMIT FOR DEWATERING PRIOR TO THE START OF ANY DISCHARGES. TO OBTAIN RIGHT-OF-WAY APPROVAL, COPIES OF THE FDEP PERMIT, NOI, DOCUMENTATION SHOWING DEWATERING AT THE SITE IS NOT WITHIN 500 FT OF KNOWN CONTAMINATION, AND A DEWATERING PLAN SHALL BE SUBMITTED TO ALEXIS CLARK, ORANGE COUNTY ENVIRONMENTAL PROTECTION DIVISION (407-836-1433) AND ORANGE COUNTY PUBLIC WORKS DEVELOPMENT ENGINEERING PERMITTING SECTION. ANALYTICAL SAMPLING OF GROUNDWATER MAY BE REQUESTED BY ORANGE COUNTY ON A CASE-BY-CASE BASIS TO CONFIRM SITE CONTAMINATION STATUS.

5. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING FDEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUNDWATER FROM ANY NON-CONTAMINATED SITE ACTIVITY IN ACCORDANCE WITH FLORIDA ADMINISTRATIVE CODE 62-621.300(2) AND 62-620, AND FLORIDA STATUTES CHAPTER 403.

6. THE RIGHT-OF-WAY AND ADJACENT PROPERTIES SHALL BE RESTORED TO EQUAL OR BETTER CONDITIONS.

7. PROVIDE A 6 FOOT HIGH SCREEN FENCE FOR DUST ABATEMENT ON ALL PROPERTY LINES ADJACENT TO ROADS.

8. REFER TO TREE MITIGATION PLANS FOR TREE REMOVAL DETAILS.

GEOTECHNICAL NOTE:

1. CONTRACTOR TO FOLLOW THE GUIDANCE AND RECOMMENDATIONS AS SPECIFIED WTHIN THE SUBSURFACE SOIL EXPLORATION GEOTECHNICAL ENGINEERING REPORT(S) PERFORMED BY UNIVERSAL ENGINEERING SCIENCES (DATED APR. 28, 2010)

PAVEDRAIN GENERAL NOTES:

1. REFER TO PAVEDRAIN SPECIFICATIONS AND DETAILS, SHEETS C8.0.

2. ALL PAVEDRAIN PAVER SYSTEMS SHALL BE CONSTRUCTED NOT TO EXCEED MAX. 1.0% SLOPE (ANY DIRECTION).

IMPORT FILL NOTES:

1. IMPORT FILL PLACED ON SITE SHALL BE A SOIL WITH LESS THAN 5% FINES WITH A HORIZONTAL PERMEABILITY OF NO LESS THAN 20 FT/DAY.

2. PRIOR TO IMPORT FILL PROCUREMENT, CONTRACTOR SHALL PROVIDE SOILS REPORT AND SPECIFICATIONS OF THE PROPOSED FILL FOR REVIEW BY E.C.S. FLORIDA, LLC (GEOTECHNICAL ENGINEER) AND ENGINEER OF RECORD. PROVIDED FILL SHALL MEET OR EXCEED THE HYDRAULIC CONDUCTIVITY OF THE EXISTING IN SITU SOILS.

LEGEND

- 93.5 — EXISTING SPOT ELEVATION
- HP — HIGH POINT
- LP — LOW POINT
- 95 — EXISTING CONTOUR
- 95 — PROPOSED CONTOUR
- PROPOSED STORM PIPE
- PROPOSED GRATE INLET
- PROPOSED CURB INLET
- D — PROPOSED STORM MANHOLE
- EXISTING STORM PIPE
- EXISTING GRATE INLET
- PROPOSED DIRECTION OF SURFACE WATER RUNOFF

DATUM/BENCHMARKS:

1. ELEVATIONS SHOWN PER NAVD 88. REFER TO SURVEY FOR ADDITIONAL DETAILS AND BENCHMARKS.

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PHONE: 407-898-1511 WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER
89199
DATE: ———

KHA PROJECT	149973004
DATE	02/16/2022
SCALE	AS SHOWN
DESIGNED BY	MIG
DRAWN BY	CML
CHECKED BY	MIG

GRADING AND DRAINAGE PLAN

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE FL

SHEET NUMBER
C5.0

Plotted By: Geiger, Marcus Sheet Set: Windermere Downtown Property Layout: C5.0 GRADING AND DRAINAGE PLAN February 21, 2022 10:42:18am K:\ORL_Civil\149973004-Windermere Downtown Property\CAD\CONST\PlanSheets\C5.0 — PAVING GRADING AND DRAINAGE PLAN.dwg
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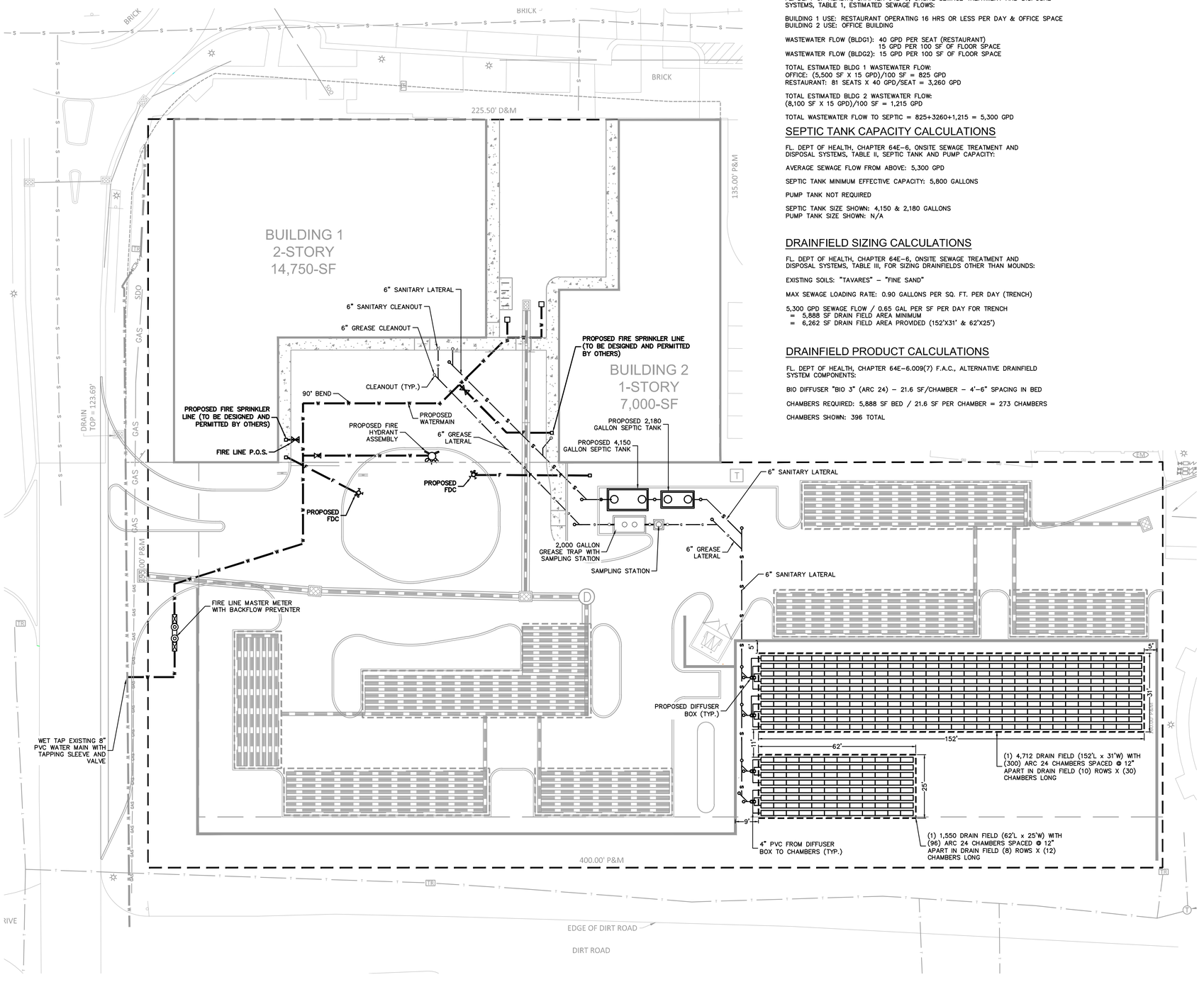

SEWAGE FLOW CALCULATIONS

FL. DEPT OF HEALTH, CHAPTER 64E-6, ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS, TABLE 1, ESTIMATED SEWAGE FLOWS:

BUILDING 1 USE: RESTAURANT OPERATING 16 HRS OR LESS PER DAY & OFFICE SPACE
BUILDING 2 USE: OFFICE BUILDING

WASTEWATER FLOW (BLDG1): 40 GPD PER SEAT (RESTAURANT)
15 GPD PER 100 SF OF FLOOR SPACE
WASTEWATER FLOW (BLDG2): 15 GPD PER 100 SF OF FLOOR SPACE

TOTAL ESTIMATED BLDG 1 WASTEWATER FLOW:
OFFICE: (5,500 SF X 15 GPD)/100 SF = 825 GPD
RESTAURANT: 81 SEATS X 40 GPD/SEAT = 3,260 GPD

TOTAL ESTIMATED BLDG 2 WASTEWATER FLOW:
(8,100 SF X 15 GPD)/100 SF = 1,215 GPD

TOTAL WASTEWATER FLOW TO SEPTIC = 825+3260+1,215 = 5,300 GPD

SEPTIC TANK CAPACITY CALCULATIONS

FL. DEPT OF HEALTH, CHAPTER 64E-6, ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS, TABLE II, SEPTIC TANK AND PUMP CAPACITY:

AVERAGE SEWAGE FLOW FROM ABOVE: 5,300 GPD

SEPTIC TANK MINIMUM EFFECTIVE CAPACITY: 5,800 GALLONS

PUMP TANK NOT REQUIRED

SEPTIC TANK SIZE SHOWN: 4,150 & 2,180 GALLONS
PUMP TANK SIZE SHOWN: N/A

DRAINFIELD SIZING CALCULATIONS

FL. DEPT OF HEALTH, CHAPTER 64E-6, ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS, TABLE III, FOR SIZING DRAINFIELDS OTHER THAN MOUNDS:

EXISTING SOILS: "TAVARES" - "FINE SAND"

MAX SEWAGE LOADING RATE: 0.90 GALLONS PER SQ. FT. PER DAY (TRENCH)

5,300 GPD SEWAGE FLOW / 0.65 GAL PER SF PER DAY FOR TRENCH
= 5,888 SF DRAIN FIELD AREA MINIMUM
= 6,262 SF DRAIN FIELD AREA PROVIDED (152'X31' & 62'X25')

DRAINFIELD PRODUCT CALCULATIONS

FL. DEPT OF HEALTH, CHAPTER 64E-6.009(7) F.A.C., ALTERNATIVE DRAINFIELD SYSTEM COMPONENTS:

BIO DIFFUSER "BIO 3" (ARC 24) - 21.6 SF/CHAMBER - 4'-6" SPACING IN BED

CHAMBERS REQUIRED: 5,888 SF BED / 21.6 SF PER CHAMBER = 273 CHAMBERS

CHAMBERS SHOWN: 396 TOTAL

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- EXISTING SANITARY MAIN
- EXISTING REUSE MAIN
- EXISTING WATER MAIN
- EXISTING UNDERGROUND TELE.COMM. LINE
- EXISTING OVERHEAD LINE
- EXISTING FIBER OPTIC LINE
- EXISTING NATURAL GAS LINE
- EXISTING STORM PIPE
- PROPOSED WATER LINE
- PROPOSED POTABLE WATER SERVICE
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY SERVICE
- PROPOSED STORM PIPE
- PROPOSED STORM INLET

GENERAL UTILITY NOTES:

1. PRIOR TO CONSTRUCTION START, CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF EXISTING FIBER OPTIC CABLES, UNDERGROUND ELECTRIC LINES, AND UNDERGROUND TELECOM LINES. CONTRACTOR TO COORDINATE SERVICE LINE ADJUSTMENTS WITH RESPECTIVE SERVICE PROVIDER AND OWNER. BOX ADJUSTMENTS AND SERVICE LINES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DESIGNED BY OTHERS.
2. PRIOR TO CONSTRUCTION START, CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF EXISTING NATURAL GAS LINES. CONTRACTOR TO COORDINATE SERVICE LINE, VALVE, AND/OR BOX ADJUSTMENTS WITH SERVICE PROVIDER AND OWNER. SERVICE LINES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DESIGNED BY OTHERS.
3. CONTRACTOR TO COORDINATE PROPOSED TRANSFORMER LOCATIONS AND ELECTRIC SERVICE WITH POWER COMPANY AND OWNER. TRANSFORMERS AND SERVICE LINES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DESIGNED BY OTHERS.
4. PRIOR TO CONSTRUCTION START, THE CONTRACTOR SHALL BE RESPONSIBLE TO SCHEDULE A PRE-CONSTRCUTION MEETING WITH ORANGE COUNTY UTILITIES (OCU) AND TOWN OF WINDERMERE. CIVIL ENGINEER OF RECORD TO BE PRESENT AT PRE-CON MEETING.

POTABLE WATER & SANITARY WASTEWATER UTILITY NOTES:

1. ALL POTABLE WATER AND SANITARY WASTEWATER UTILITIES SHALL BE IN ACCORDANCE WITH ORANGE COUNTY UTILITIES (OCU) STANDARDS, SPECIFICATIONS, AND DETAILS, 2017 ED.' CONTRACTOR SHALL BE RESPONSIBLE TO BE FAMILIAR WITH THESE STANDARDS.
2. ALL CLEAN-OUTS WITHIN ASPHALT AND/OR CONCRETE AREAS SHALL BE H-20 TRAFFIC BEARING.

GENERAL FIRE SERVICE NOTES:

1. ALL UNDERGROUND MAINS SERVING FIRE HYDRANTS OR FIRE PROTECTION SPRINKLER SYSTEMS ON PRIVATE PROPERTY MUST BE PERMITTED PRIOR TO INSTALLATION. THE DRAWING SHALL INDICATE THAT ALL UNDERGROUND FIRE MAINS WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24 (2013 EDITION, "STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES". [F.A.C. 69A-60.005(2)]
2. ALL FIRE SERVICE MAIN LOCATED DOWNSTREAM OF THE FIRE POINT OF SERVICE (POS) SHALL BE INSTALLED BY A QUALIFIED AND LICENSED CONTRACTOR. CONSTRUCTION AND MATERIALS SHALL COMPLY WITH APPLICABLE FIRE CODE. CONTRACTOR TO VERIFY REQUIREMENTS WITH ORANGE COUNTY UTILITIES DEPARTMENT PRIOR TO SHOP DRAWING REVIEW.
3. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED NOT MORE THAN 100 FT FROM THE NEAREST FIRE HYDRANT. [NFPA 14: 6.3.5.4]
4. PROVIDE SIGNAGE, INDICATING ITS LOCATION AND THE BUILDING IT SERVICES, FOR ALL PROPOSED FIRE DEPARTMENT CONNECTIONS (F.D.C.).
5. PRIOR TO FIRE INSTALLATION, THE FLORIDA LICENSED CONTRACTOR SHALL SUBMIT LAYOUT DESIGN DRAWINGS TO THE OFFICE OF THE FIRE MARSHAL. IF REQUIRED BY FLORIDA STATUE 553.79, DRAWINGS MUST BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER. THE DRAWINGS MUST SHOW ALL UNDERGROUND FIRE LINES AND COMPONENTS STARTING FROM THE POINT OF SERVICE AS DEFINED UNDER FLORIDA STATUE 663.102. THE DESIGN SHALL BE IN ACCORDANCE TO THE CURRENT FLORIDA FIRE PREVENTION CODE AND ALL ADOPTED NFPA CODES AND STANDARDS.

DATUM NOTE:
ELEVATIONS BASED ON NAVD 88 DATUM

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

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149973004
DATE
02/18/2022
SCALE AS SHOWN
DESIGNED BY MIG
DRAWN BY CML
CHECKED BY MIG

UTILITY PLAN

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE FL

SHEET NUMBER
C6.0

Plotted By:Geiger, Marcus Sheet Set:Windermere Downtown Property Layout:C6.0 UTILITY PLAN February 21, 2022 10:42:32am K:\ORL_Civil\149973004-Windermere Downtown Property\CAD\CONST\PlanSheets\C6.0 - UTILITY PLAN.dwg
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Plotted By: Gelner, Marcus Sheet Set: Windermere Downtown Property Layout: C7.0 TRUCK ROUTING PLAN February 21, 2022 10:42:45am K:\ORL_Civil\149973004 - Windermere Downtown Property\CADD\CONST\PlanSheets\C7.0 - TRUCK ROUTING PLAN.dwg
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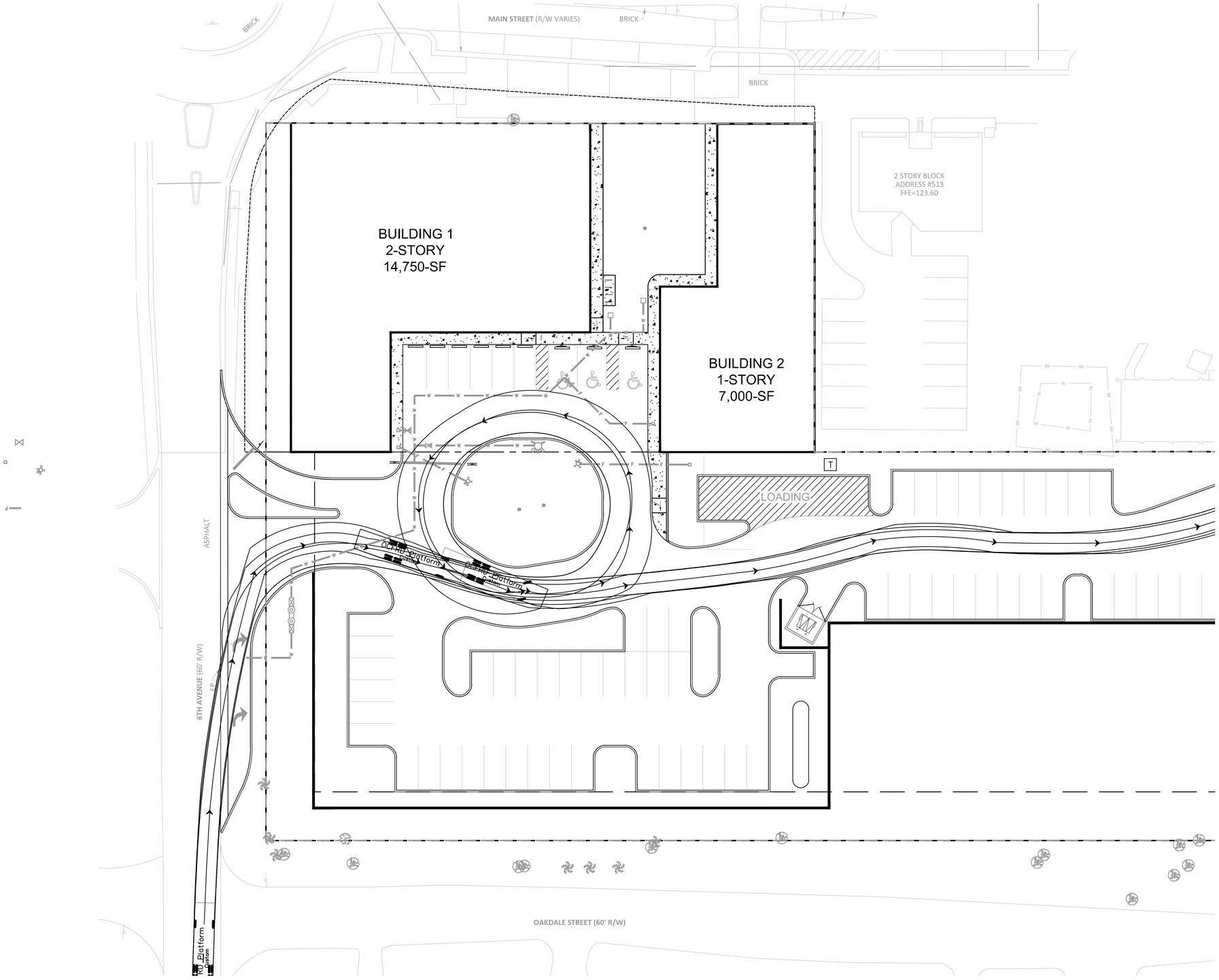

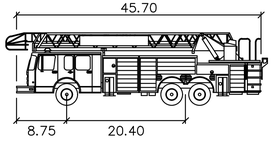

OCFRD Platform

	feet
Width	: 8.33
Track	: 8.33
Lock to Lock Time	: 6.0
Steering Angle	: 44.2

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

No.	REVISIONS	DATE	BY

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DESIGNED BY MJG
DRAWN BY CML
CHECKED BY MJG

TRUCK ROUTING PLAN

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE FL

SHEET NUMBER
C7.0

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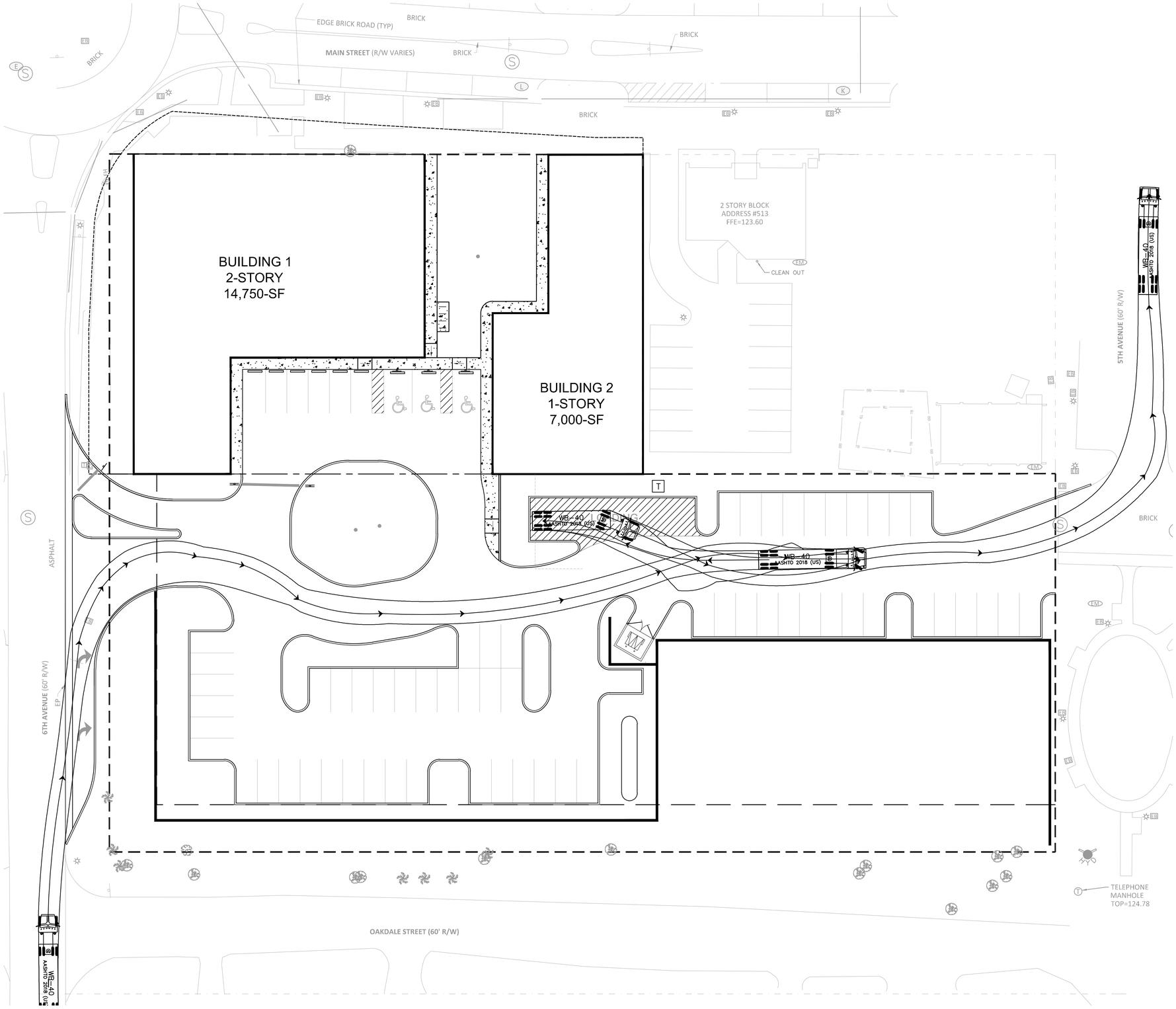

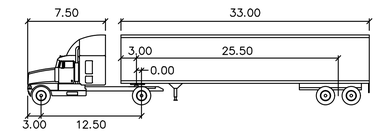

WB-40

feet			
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.00	Steering Angle	: 20.3
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.00		

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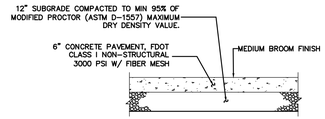
TRUCK ROUTING PLAN

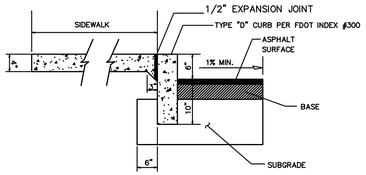
WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE, FL

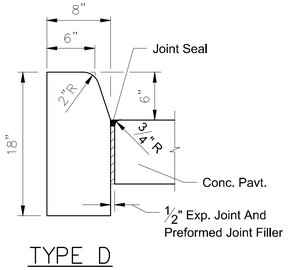
SHEET NUMBER
C7.1



FDOT CONCRETE PAVEMENT DETAIL
NTS



SIDEWALK INTEGRAL CURB DETAIL
NTS



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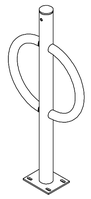

PRODUCT: DERO BIKE HITCH (OR EQUIVALENT)
FINISH: STAINLESS STEEL (OR OWNER APPROVED)
NOTE: INSTALL PER MANUFACTURER'S SPECIFICATIONS

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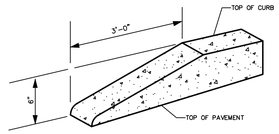
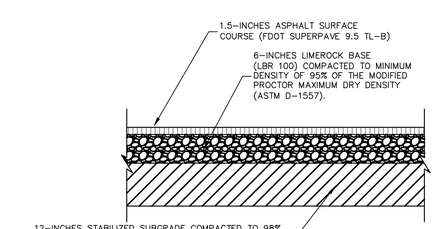
STANDARD BICYCLE RACK DETAIL
NTS



CURB TERMINUS TRANSITION DETAIL
NTS

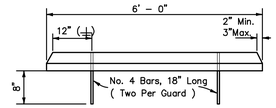
NOTE:
ALL CURBS TO HAVE STANDARD 3' TRANSITION FROM 6" HEIGHT TO FLUSH (0" HEIGHT). A STANDARD TEMPLATE SHALL BE USED AT ALL LOCATIONS TO PROVIDE UNIFORM CURB TRANSITION THROUGHOUT THE PROJECT.



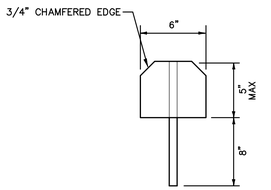
TYPICAL 'STANDARD LIGHT DUTY' ASPHALT PAVEMENT DETAIL
USED FOR PARKING AREAS ONLY

NOTE:

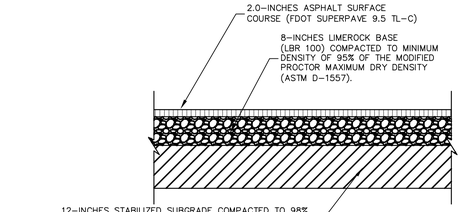
1. ALTERNATIVE CRUSHED CONCRETE BASE MAY BE USED. 8-INCHES CRUSHED CONCRETE BASE SHALL MEET THE MATERIAL SPEC'S PER FDOT ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS (ED. 2022), SECTION 204 "GRADED AGGREGATE BASE".



WHEEL STOP FRONT VIEW
NTS



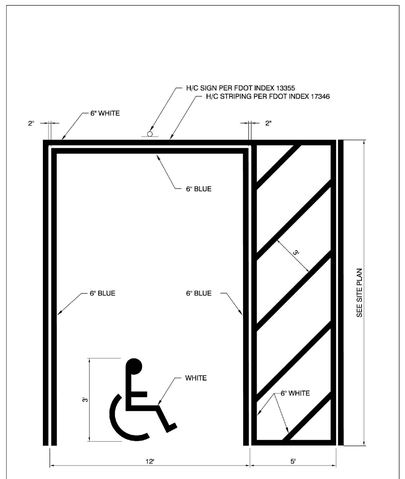
WHEEL STOP PROFILE (TYP.)
NTS



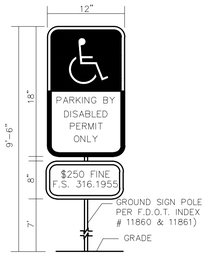
TYPICAL 'HEAVY DUTY' ASPHALT PAVEMENT DETAIL
NTS

NOTE:

1. ALTERNATIVE CRUSHED CONCRETE BASE MAY BE USED. 8-INCHES CRUSHED CONCRETE BASE SHALL MEET THE MATERIAL SPEC'S PER FDOT ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS (ED. 2022), SECTION 204 "GRADED AGGREGATE BASE".



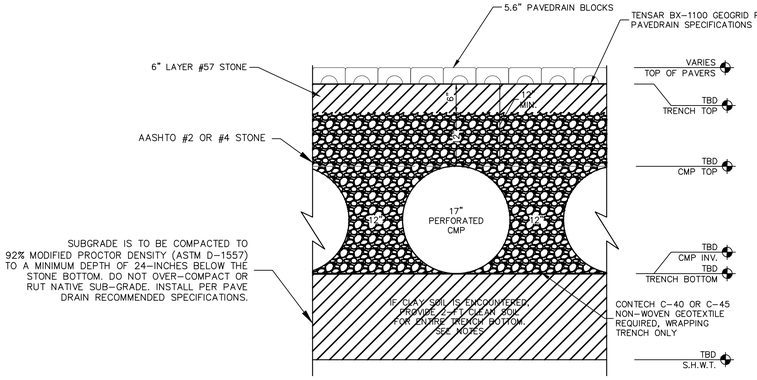
HANDICAP PARKING PAVEMENT MARKING
NTS



NOTES:

1. ALL LETTERS ARE 1" SERIES "C" PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
4. FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
5. ONE (1) SIGN REQUIRED FOR EACH PARKING SPACE.
6. INSTALLATION HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

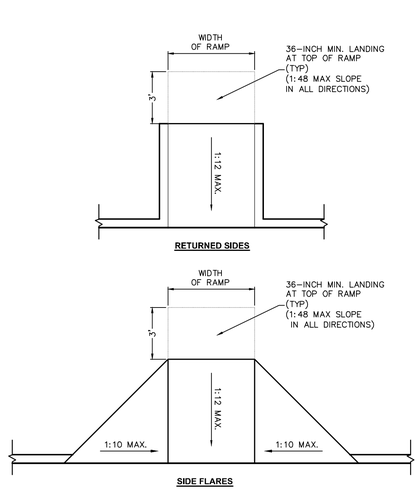
HANDICAP SIGN DETAIL
NTS



TYPICAL PAVEDRAIN / RETENTION TRENCH SECTION
NTS

NOTE:

1. TRENCH BOTTOM FILL SHALL BE CLEAN, INORGANIC, GRANULAR SOIL (FINE SAND) WITH A FINES CONTENT OF NO MORE THAN 5 PERCENT. CARE SHOULD BE TAKEN NOT TO OVER-COMPACT THE BOTTOM DURING EXCAVATION AND GRADING.



TYPICAL 'ONSITE' ACCESSIBLE CURB RAMPS
CONSTRUCT PER F.A.C. 2012: CHAPTER 4, SECTION 406 REQUIREMENTS

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GENERAL CONSTRUCTION DETAILS

WINDERMERE DOWNTOWN PROPERTY
TOWN OF WINDERMERE FL

SHEET NUMBER
C8.0

Plotted By:Geiger Marcus Sheet Set:Windermere Downtown Property Layout:C8.0 GENERAL CONSTRUCTION DETAILS February 21, 2022 10:43:00am K:\ORL_Civil\149973004-Windermere Downtown Property\CADD\CONST\PlanSheets\C8.0 - GENERAL CONSTRUCTION DETAILS.dwg
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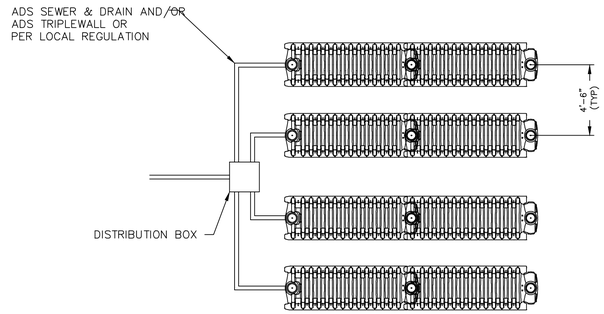
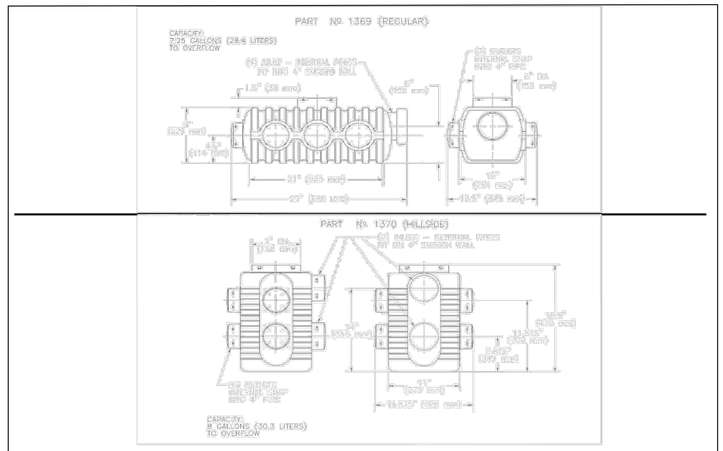


NOTES:

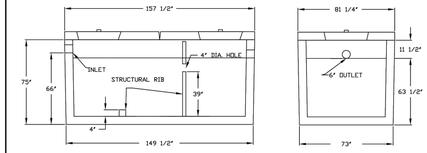
1. EXCAVATE AND LEVEL INSTALLATION AREAS.
2. SMOOTH IRREGULARITIES IN THE EXCAVATION. A LEVEL, FLAT SURFACE IS REQUIRED.
3. INSTALL ARC LEACHING CHAMBERS IN ADJACENT ROWS TO COVER DESIRED AREA.
4. INSTALL UNIVERSAL END CAP AND SECURE IN PLACE WITH BACKFILL.
5. INSTALL 4" PIPE TO EACH ROW OF ARC CHAMBER USING KNOCKOUTS PROVIDED IN THE UNIVERSAL END CAPS.
6. ENDS OF ROWS MAY BE CONNECTED WITH PIPING TO IMPROVE DISTRIBUTION.
7. FILL PERIMETER AND INTERIOR SIDEWALL AREAS TO TOP OF CHAMBERS AND WALK INTO PLACE. AVOID LARGE ROCKS OR DEBRIS IN COVER MATERIAL.
8. COVER ARC LEACHING CHAMBERS TO A MINIMUM OF 12" OF GRANULAR OVER AFTER CONSOLIDATION FOR H-10 APPLICATIONS. AVOID LARGE ROCKS OR DEBRIS IN COVER MATERIAL. COVER HEIGHTS AND LIVE LOADING LIMITS ARE IMPACTED BY BOTH SOIL TYPE AND COMPACTION REQUIREMENTS. CONTACT ADS WHEN POOR SOILS ARE ENCOUNTERED AND FOR MAXIMUM FILL HEIGHTS. LIVE LOAD CONDITIONS ARE NOT RECOMMENDED.

ARC 24 CLUSTER INSTALLATION
NTS



NOTE: ALL FITTINGS DIMENSIONS ARE FOR REFERENCE ONLY

DISTRIBUTION BOXES
NTS



SIDE VIEW END VIEW

TANK: CATEGORY 4, 6" 2180 GALLON 2 COMPARTMENT TANK REINFORCED WITH #4 STEEL 12" O/C. BOTH WAYS. 6" WALLS AND 6" BOTTOM. INLET AND OUTLET RESILIENT CONNECTORS PER ASTM-923-98. CONNECTORS MUST BE USED WITH APPROVED CLAMP. CONNECTOR WILL ACCEPT 6" PVC PIPE.

LIDS: 5" LID WITH 1-22" ROUND MANHOLE COVER AT EACH END OF TANK
8" LID WITH 1-22" ROUND MANHOLE COVER AT EACH END OF TANK
BOTH LIDS ARE REINFORED WITH GRADE 60 REBAR.

TANK & LIDS: 4000 PSI CONCRETE AT 28 DAYS

IMPRINTED ON INLET END OF TANK:
LEGEND: FSI2180 STATE APPROVAL: 01-011-45D-C4

WEIGHTS: TANK ONLY 20,657
TANK W/ 5" LID 24,869
TANK W/ 8" LID 29,081

THIS TANK IS RATED FOR H-20 LOADING WHEN USED WITH 8" TRAFFIC LID AND TANK BURIAL DEPTH IS AT LEAST 18" BELOW GROUND SURFACE.

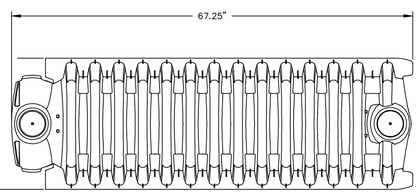
THIS TANK COMPLIES WITH SECTION 1003.5 OF THE 2007 FLORIDA PLUMBING CODE.

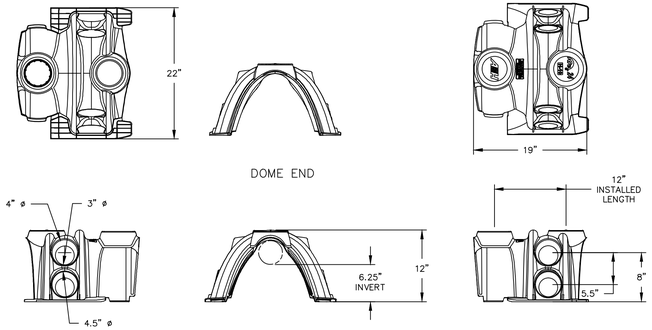
INTERCEPTOR CAPACITY PER 1003.5.1 IS SITE SPECIFIC.

THIS SEWAGE TREATMENT RECEPTACLE HAS BEEN DESIGNED, CONSTRUCTED AND STRUCTURALLY TESTED IN ACCORDANCE WITH CHAPTER 64E-6.013, FLORIDA ADMINISTRATIVE CODE, (FAC) DATED APRIL 28, 2010.

DRAWING NOT TO SCALE

FLORIDA SEPTIC, INC. P.O. BOX 545 HAWTHORNE, FLORIDA 32640 (800) 940-8265	MODEL: 6" 2180 GAL. TANK	
	REVISED: 05/01/2011	APPROVAL DATE: 04/25/2008





ARC 24 SIDE PORT COUPLER
NTS

END CAPS

ARC 24 CHAMBER AND END CAP
NTS

SIDE VIEW END VIEW

TANK: CATEGORY 4, 6" 4150 GALLON 2 COMPARTMENT TANK REINFORCED WITH #4 STEEL 12" O/C. BOTH WAYS. 6" WALLS AND 6" BOTTOM. INLET AND OUTLET RESILIENT CONNECTORS PER ASTM-923-98. CONNECTORS MUST BE USED WITH APPROVED CLAMP. CONNECTOR WILL ACCEPT 6" PVC PIPE.

LIDS: 5" LID WITH 1-22" ROUND MANHOLE COVER AT EACH END OF TANK
8" LID WITH 1-22" ROUND MANHOLE COVER AT EACH END OF TANK
BOTH LIDS ARE REINFORED WITH GRADE 60 REBAR.

TANK & LIDS: 4000 PSI CONCRETE AT 28 DAYS

IMPRINTED ON INLET END OF TANK:
LEGEND: FSI4150 STATE APPROVAL: 01-011-71D-C4

WEIGHTS: TANK ONLY 30,307
TANK W/ 5" LID 38,689
TANK W/ 8" LID 43,687

THIS TANK IS RATED FOR H-20 LOADING WHEN USED WITH 8" TRAFFIC LID AND TANK BURIAL DEPTH IS AT LEAST 18" BELOW GROUND SURFACE.

THIS TANK COMPLIES WITH SECTION 1003.5 OF THE 2007 FLORIDA PLUMBING CODE.

INTERCEPTOR CAPACITY PER 1003.5.1 IS SITE SPECIFIC.

THIS SEWAGE TREATMENT RECEPTACLE HAS BEEN DESIGNED, CONSTRUCTED AND STRUCTURALLY TESTED IN ACCORDANCE WITH CHAPTER 64E-6.013, FLORIDA ADMINISTRATIVE CODE, (FAC) DATED APRIL 28, 2010.

DRAWING NOT TO SCALE

FLORIDA SEPTIC, INC. P.O. BOX 545 HAWTHORNE, FLORIDA 32640 (800) 940-8265	MODEL: 6" 4150 GAL. TANK	
	REVISED: 05/01/2011	APPROVAL DATE: 02/14/2008

No.	REVISIONS	DATE	BY

Kimley»Horn
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LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER
89199
DATE:

KHA PROJECT 149973004	DESIGNED BY MIG	DRAWN BY CML	CHECKED BY MIG
DATE 02/16/2022			
SCALE AS SHOWN			

GENERAL CONSTRUCTION DETAILS

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE FL

SHEET NUMBER
C8.1

Plotted By: Geiger, Marcus Sheet Set: Windermere Downtown Property Layout: C8.1 GENERAL CONSTRUCTION DETAILS February 21, 2022 10:43:07am K:\ORL_Civil\149973004-Windermere Downtown Property\CAD\CONST\PlanSheets\C8.0 - GENERAL CONSTRUCTION DETAILS.dwg
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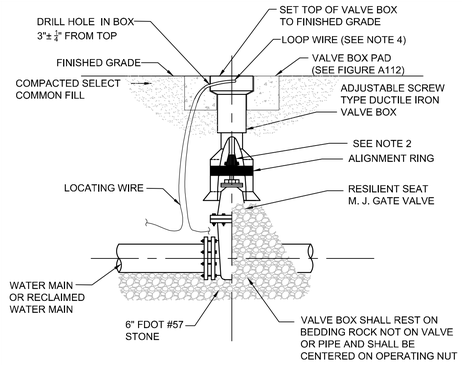
ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | STANDARD DRAWINGS | GENERAL

DATE: February 11, 2011

GATE VALVE AND BOX
WATER AND RECLAIMED WATER MAINS

FIGURE A107



NOTES:
1. PVC PIPE OR DUCTILE IRON PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3' OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12" ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
6. REFER TO FIGURE A111 FOR INSTALLATIONS AT A DEPTH OF 6' OR GREATER.

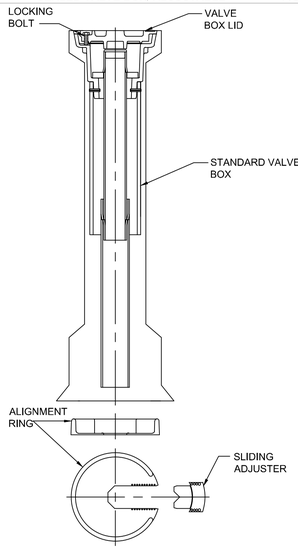
ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | STANDARD DRAWINGS | GENERAL

DATE: February 11, 2011

SEALED VALVE BOX, ADJUSTABLE

FIGURE A111



NOTES:
1. FOR ALL MAINS 6' DEEP OR GREATER.
2. FOR MAINS 16" IN DIAMETER OR GREATER REGARDLESS OF DEPTH.

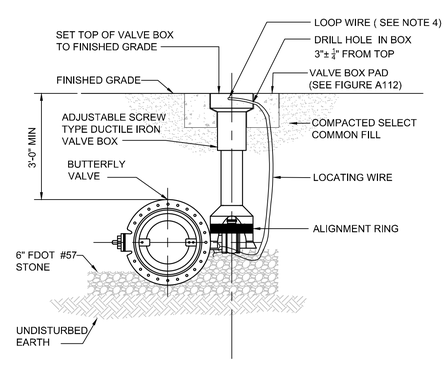
ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | STANDARD DRAWINGS | GENERAL

DATE: February 11, 2011

BUTTERFLY VALVE AND BOX
WATER AND RECLAIMED WATER MAINS

FIGURE A108



NOTES:
1. PVC PIPE OR DUCTILE IRON PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3' OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12" ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
6. REFER TO FIGURE A111 FOR INSTALLATIONS AT A DEPTH OF 6' OR GREATER.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

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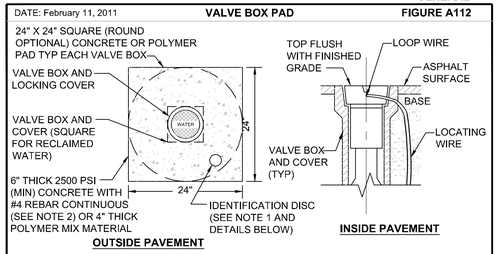
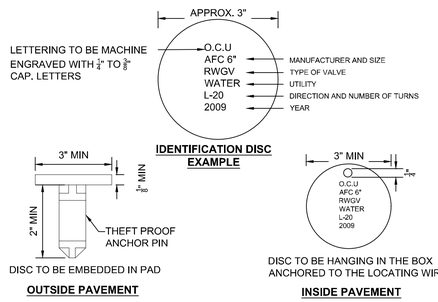
DATE: February 11, 2011

VALVE BOX PAD

FIGURE A112





NOTES:
1. BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.
2. IN LIEU OF PRECAST CONCRETE PAD, A 6" THICK X 24" (ROUND OR SQUARE) POURED CONCRETE PAD WITH TWO #4 REBAR AROUND PERIMETER MAY BE USED.

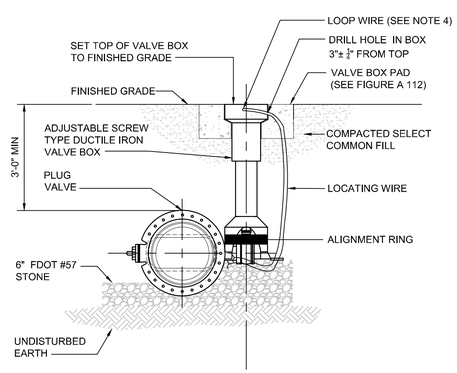
ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | STANDARD DRAWINGS | GENERAL

DATE: February 11, 2011

PLUG VALVE AND BOX
WASTEWATER

FIGURE A109



NOTES:
1. PVC PIPE OR DUCTILE IRON PIPE EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3' OF FINISHED GRADE.
3. PROVIDE A PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THIS SHIELD SHALL CENTER THE RISER PIPE BOX OVER THE ACTUATING NUT AND MINIMIZE INFILTRATION.
4. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12" ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
6. REFER TO FIGURE A111 FOR INSTALLATIONS AT A DEPTH OF 6' OR GREATER.

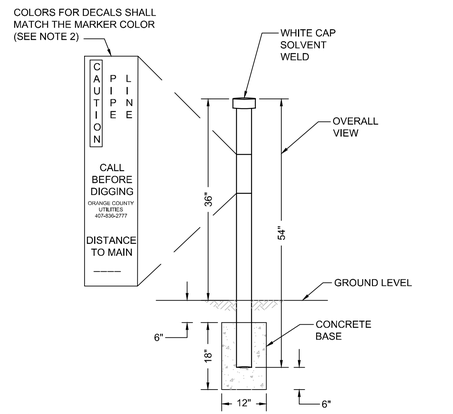
ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | STANDARD DRAWINGS | GENERAL

DATE: February 11, 2011

UTILITY MAIN MARKER

FIGURE A113



NOTES:
1. MARKERS ARE REQUIRED WHEN UTILITY MAIN IS LOCATED OVER 30 FEET FROM EDGE OF PAVEMENT OR IN AN EASEMENT NOT ADJACENT TO THE RIGHT OF WAY.
2. MARKERS SHALL BE 4" DIAMETER SCH. 80 OR DR18 PVC: BLUE FOR WATER; GREEN FOR WASTEWATER; AND PANTONE PURPLE 522C FOR RECLAIMED WATER.
3. MARKERS SHALL BE PLACED AT ALL DIRECTIONAL CHANGES AND AT ALL VALVES EXCEPT WATER VALVES NEAR FIRE HYDRANTS. ADDITIONAL MARKERS SHALL BE INSTALLED AS NEEDED SO THAT THE DISTANCE BETWEEN MARKERS DOES NOT EXCEED 1000 FEET.

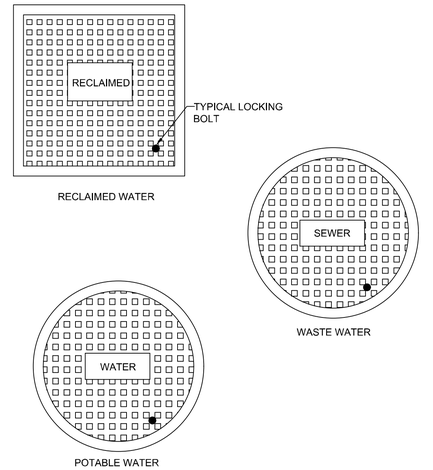
ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | STANDARD DRAWINGS | GENERAL

DATE: February 11, 2011

TYPICAL VALVE BOX COVER

FIGURE A110



NOTE:
1. LOCKING LIDS ARE REQUIRED ON ALL VALVE BOXES.

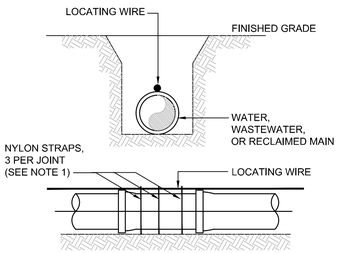
ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | STANDARD DRAWINGS | GENERAL

DATE: February 11, 2011

PIPE LOCATING WIRE

FIGURE A114



NOTES:
1. ALL PIPE SHALL REQUIRE INSULATED LOCATING WIRE (10 GAUGE SOLID COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE WRAPPED WITH NYLON STRAPS TO TOP CENTERLINE OF THE PIPE.
2. LOCATING WIRE SHALL BE CONTINUOUS INSIDE VALVE BOXES AND SHALL EXTEND 12" ABOVE TOP OF COLLAR.
3. WIRE INSULATION SHALL BE COLOR CODED FOR THE TYPE OF PIPE BEING INSTALLED.

No.	REVISIONS	DATE	BY

Kimley»Horn

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PHONE: 407-898-1511
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LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER 89199
DATE: ——

KHA PROJECT 149973004	DATE 02/18/2022	SCALE AS SHOWN	DESIGNED BY MIG	DRAWN BY CML	CHECKED BY MIG

UTILITY DETAILS

WINDERMERE DOWNTOWN PROPERTY
TOWN OF WINDERMERE FL

SHEET NUMBER
9.1

Plotted By: Geiger, Marcus Sheet Set: Windermere Downtown Property Layout: C09 UTILITY DETAILS February 21, 2022 10:43:20am K:\ORL_Civil\149973004-Windermere Downtown Property\CAD\CONST\PlanSheets\C X UTILITY DETAILS.dwg
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ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | **STANDARD DRAWINGS** | **GENERAL**

DATE: February 11, 2011 — **SEPARATION REQUIREMENTS FOR WATER, WASTEWATER AND RECLAIMED WATER MAINS** — **FIGURE A116**

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS								
PROPOSED UTILITY	POTABLE WATER		RECLAIMED WATER		WASTEWATER (GRAVITY & FM)		STORM SEWER	
	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT
POTABLE WATER	3' NOTE 1	12"	3' NOTE 1 & 3	12" NOTE 3	6' NOTE 3	12" NOTE 3	3' NOTE 1 & 3	12"/18" NOTE 2 & 3
RECLAIMED WATER	3' NOTE 1 & 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12"/18" NOTE 2
WASTEWATER (GRAVITY AND FM)	6' NOTE 3	12" NOTE 3	3' NOTE 1	12"	3' NOTE 1	12"	3' NOTE 1	12"/18" NOTE 2
RIGHT OF WAY	3' NOTE 1	N/A	3' NOTE 1	N/A	3' NOTE 1	N/A	N/A	N/A

NOTES:

1. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. THREE FEET OF HORIZONTAL SEPARATION IS THE MINIMUM FOR PIPES WITH THREE FEET OF COVER. FOR PIPES INSTALLED AT GREATER DEPTHS, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
2. THE 18-INCH SEPARATION REQUIREMENT APPLIES WHEN THE STORM PIPE CROSSES ABOVE THE OCU MAIN, AND WHEN THE STORM PIPE HAS A DIAMETER EQUAL TO OR GREATER THAN 24 INCHES. OTHERWISE, THE REQUIRED SEPARATION IS 12 INCHES.
3. THIS SEPARATION REQUIREMENT COMPLIES WITH MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND OCU.
4. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.

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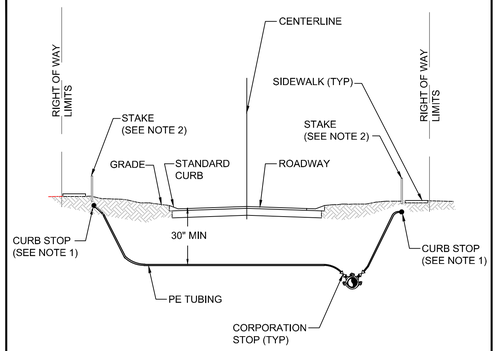
APPENDIX A | **STANDARD DRAWINGS** | **GENERAL**

DATE: February 11, 2011 — **WATER AND RECLAIMED WATER SERVICES (TYPICAL)** — **FIGURE A120**



NOTES:
1. CURB STOP SHALL BE INSTALLED ON STREET SIDE OF THE SIDEWALK BETWEEN SIDEWALK AND CURB.
2. CONTRACTOR TO LOCATE CURB STOP BY PLACING A 2" X 2" SQUARE STAKE RISING 24" ABOVE THE GROUND. TOP OF STAKE SHALL BE PAINTED THE COLOR OF THE UTILITY SERVICE AND LABELED WITH THE LOT NUMBER(S) IT SERVES.

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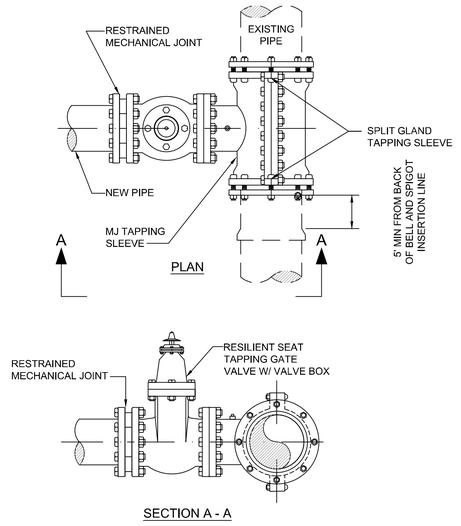
DATE: February 11, 2011 — **MJ TAPPING SLEEVE AND GATE VALVE ASSEMBLY FOR WATER AND RECLAIMED WATER** — **FIGURE A121-1**



ORANGE COUNTY UTILITIES
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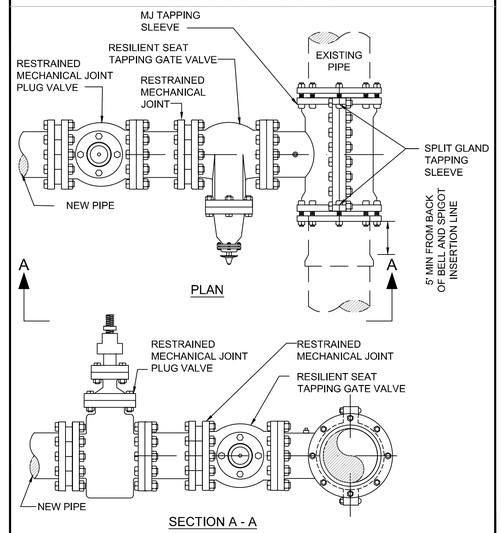
DATE: February 11, 2011 — **MJ TAPPING SLEEVE AND GATE VALVE WITH PLUG VALVE FOR WASTEWATER** — **FIGURE A121-2**



NOTES:
1. PLUG VALVES GREATER THAN 4" SHALL BE GEAR ACTUATED.
2. PLUG VALVE TO BE INSTALLED VERTICALLY, AND TAPPING GATE VALVE TO BE INSTALLED HORIZONTALLY AND ABANDONED IN THE OPEN POSITION.

ORANGE COUNTY UTILITIES
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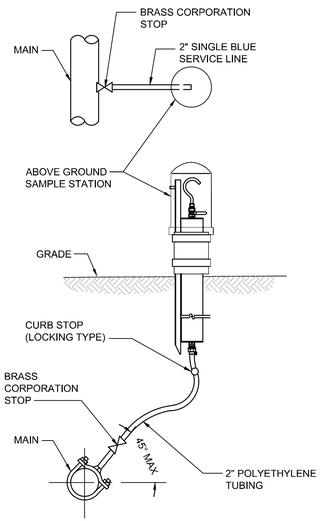
DATE: February 11, 2011 — **WATER SAMPLE STATION** — **FIGURE A201**



NOTES:
1. A 2 INCH SAMPLE STATION INSTALLED AT THE END OF A CUL-DE-SAC CAN ALSO SERVE AS A BLOW -OFF VALVE WHEN BOTH ARE REQUIRED.

ORANGE COUNTY UTILITIES
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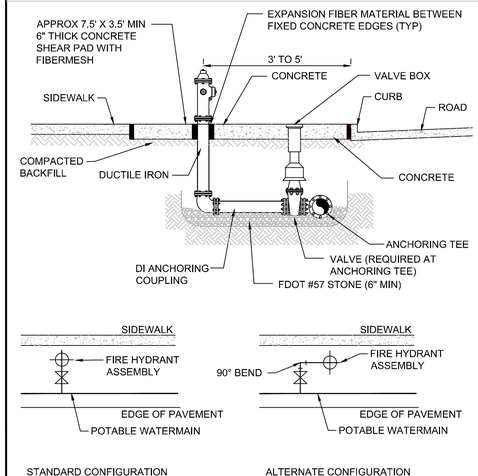
APPENDIX A | **STANDARD DRAWINGS** | **GENERAL**

DATE: February 11, 2011 — **FIRE HYDRANT ASSEMBLY** — **FIGURE A203**

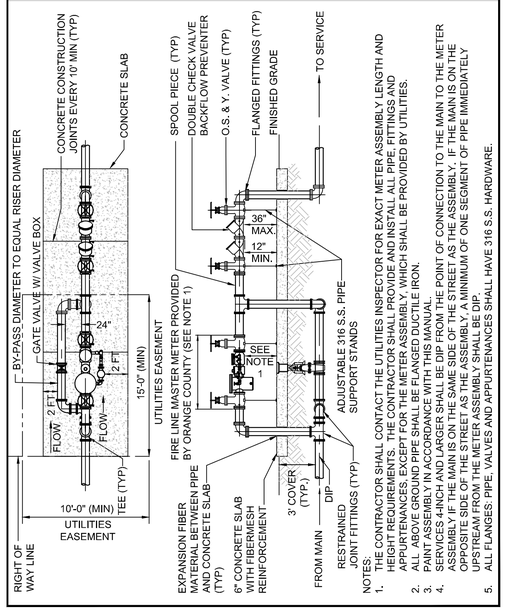


NOTES:
1. CENTER OF THE FLANGE CONNECTION SHALL BE 5" FROM THE TOP OF THE SLAB.
2. BARREL COLORS: PRIVATE HYDRANTS - RED; PUBLIC HYDRANTS - SILVER.
3. BONNET COLORS: TO BE DETERMINED BY FLOW TEST.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | **STANDARD DRAWINGS** | **GENERAL**

DATE: February 11, 2011 — **FIRE LINE MASTER METER ASSEMBLY** — **FIGURE A204**

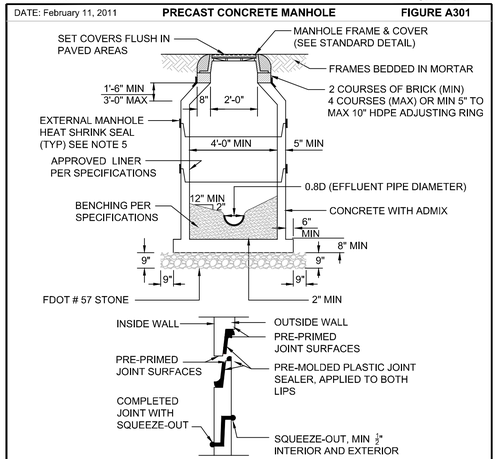


NOTES:
1. THE CONTRACTOR SHALL CONTACT THE UTILITIES INSPECTOR FOR EXACT METER ASSEMBLY LENGTH AND HEIGHT REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL PIPE, FITTINGS AND APPURTENANCES FROM THE FIRE LINE MASTER METER ASSEMBLY WHICH SHALL BE PROVIDED BY UTILITIES.
2. ALL ABOVE GROUND PIPE SHALL BE FLANGED DUCTILE IRON.
3. PAINT ASSEMBLY IN ACCORDANCE WITH THIS MANUAL.
4. SERVICES 4-INCH AND LARGER SHALL BE DIP FROM THE POINT OF CONNECTION TO THE MAIN TO THE METER ASSEMBLY IF THE MAIN IS ON THE SAME SIDE OF THE STREET AS THE ASSEMBLY. IF THE MAIN IS ON THE OPPOSITE SIDE OF THE STREET AS THE ASSEMBLY, A MINIMUM OF ONE SEGMENT OF PIPE IMMEDIATELY UPSTREAM FROM THE METER ASSEMBLY SHALL BE DIP.
5. ALL FLANGES, PIPE, VALVES AND APPURTENANCES SHALL HAVE 316 S.S. HARDWARE.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | **STANDARD DRAWINGS** | **GENERAL**

DATE: February 11, 2011 — **PRECAST CONCRETE MANHOLE** — **FIGURE A301**



NOTES:
1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAIL.
2. ECCENTRIC CONE DESIGN MAY BE USED FOR CONFLICT RESOLUTION WITH OCU APPROVAL.
3. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
4. LIFT HOLES THROUGH STRUCTURE ARE NOT PERMITTED.
5. WRAP TIGHTLY AROUND CASTING JOINTS AND APPLY HIGH INTENSITY PROPANE TORCH TO EFFECTIVELY SEAL THEM FROM GROUND WATER INFILTRATION.
6. HDPE ADJUSTING RINGS MAY BE SUBSTITUTED FOR BRICK RISERS.
7. SECTION HEIGHTS VARY AS REQUIRED, AND AS AVAILABLE, FROM APPROVED MANUFACTURERS LISTED IN APPENDIX D.

Plotted By: Geiger, Marcus Sheet Set: Windermere Downtown Property Layout: C9.2 UTILITY DETAILS February 21, 2022 10:43:25am K:\ORL_Civil\149973004-Windermere Downtown Property\CAD\CONST\PlanSheets\C-X UTILITY DETAILS.dwg
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MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER 89199
DATE: ———

KHA PROJECT 149973004
DATE 02/18/2022
SCALE AS SHOWN
DESIGNED BY MIG
DRAWN BY CML
CHECKED BY MIG

UTILITY DETAILS

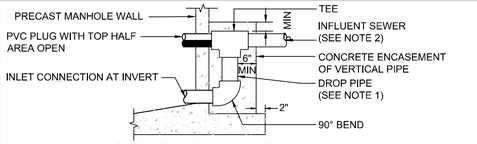
WINDERMERE DOWNTOWN PROPERTY
TOWN OF WINDERMERE FL

SHEET NUMBER
9.2

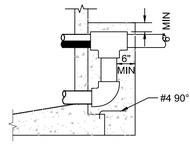
ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | **STANDARD DRAWINGS** | **GENERAL**

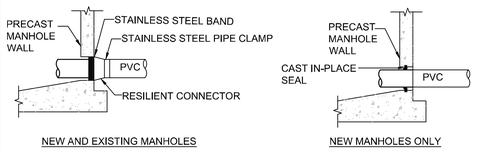
DATE: February 11, 2011 — **GRAVITY MANHOLE CONNECTION** — **FIGURE A302**



GRAVITY OUTSIDE DROP CONNECTION (NEW MANHOLE)



GRAVITY OUTSIDE DROP CONNECTION (EXISTING MANHOLE)



NEW AND EXISTING MANHOLES — NEW MANHOLES ONLY

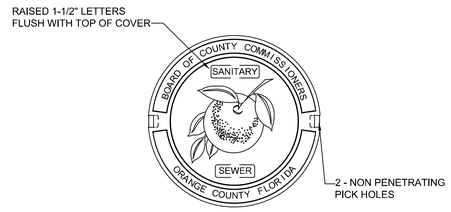
STANDARD CONNECTION

NOTES:
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT LINES WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.
3. CONTRACTOR TO COORDINATE THE PRESENCE OF UTILITIES INSPECTOR DURING CORING AND CONNECTIONS TO EXISTING MANHOLES.

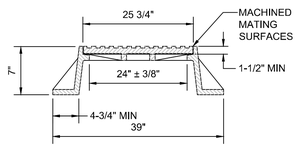
ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | **STANDARD DRAWINGS** | **GENERAL**

DATE: February 11, 2011 — **STANDARD MANHOLE FRAME AND COVER** — **FIGURE A304**



PLAN



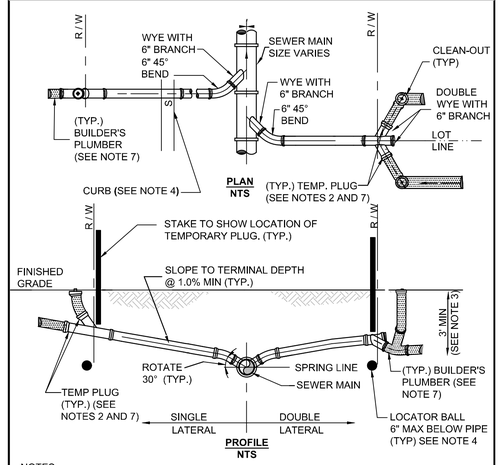
ELEVATION

NOTES:
1. ONLY APPLIES TO UTILITIES OWNED AND MAINTAINED MANHOLES. "ORANGE COUNTY" SHALL NOT APPEAR ON PRIVATE MANHOLES.

ORANGE COUNTY UTILITIES
STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL

APPENDIX A | **STANDARD DRAWINGS** | **GENERAL**

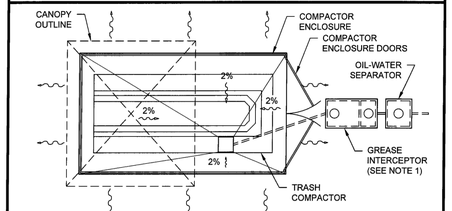
DATE: February 11, 2011 — **SERVICE LATERAL** — **FIGURE A305**



NOTES:
1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
2. SERVICE LATERAL SHALL BE CAPPED BY DEVELOPER'S SITE-WORK CONTRACTOR.
3. WYE TO BE NO SHALLOWER THAN 3-FEET AND NO DEEPER THAN 5-FEET.
4. LOCATOR BALLS TO BE INSTALLED BY DEVELOPER'S SITE-WORK CONTRACTOR, ONE PER SERVICE.
5. ALL FITTINGS SHOWN ARE TO BE INSTALLED.
6. SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY CUTTING AN "S" IN THE CURB DIRECTLY OVER THE LATERAL.
7. BUILDER'S PLUMBER WILL REMOVE PLUG, INSTALL CLEANOUT, AND CONNECT SERVICE LATERAL TO HOUSE.

APPENDIX A | **STANDARD DRAWINGS**

TRASH COMPACTOR DRAINAGE



NOTES:
1. REFER TO DETAIL A308-1 FOR GREASE INTERCEPTOR REQUIREMENTS.
2. SMALLER SIZE GREASE INTERCEPTOR MAY BE APPROVED BY UTILITIES BASED ON VOLUME OF DISCHARGE.
3. EDGE OF SLAB SHALL BE 1-FT ABOVE 100-YEAR FLOOD ELEVATION.
4. DRAIN SHALL BE VISIBLE & ACCESSIBLE AT ALL TIMES FOR INSPECTION & MAINTENANCE.

ORANGE COUNTY UTILITIES
STANDARDS & CONSTRUCTION SPECIFICATIONS MANUAL

FIGURE A309-2
04/25/2019

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WINDERMERE DOWNTOWN PROPERTY
TOWN OF WINDERMERE FL

UTILITY DETAILS

SHEET NUMBER
9.3

OCU GENERAL NOTES:

1. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF WATER MAINS, WASTEWATER FORCE MAINS, GRAVITY MAINS AND RECLAIMED WATER MAINS. MAIN LOCATIONS SHOWN ON PLANS MAY NOT BE EXACT. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.
2. SHOULD A PIPE EMERGENCY OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OCU DISPATCH OPERATOR (407-836-2777) AND THE OCU INSPECTOR.
3. THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION DIVISION AT LEAST SEVEN DAYS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION PROJECT BY CALLING (407) 254-9798.
4. THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION DIVISION AT LEAST 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION BY CALLING (407) 254-9798.
5. THE MATERIALS, PRODUCTS, AND CONSTRUCTION OF ALL UTILITIES CONNECTING TO THE OCU SYSTEM SHALL BE IN CONFORMANCE WITH THE ORANGE COUNTY UTILITIES STANDARDS AND CONSTRUCTION SPECIFICATIONS MANUAL.
6. ALL OCU MAINS AND FACILITIES WITHIN THE LIMITS OF THE PROJECT SHALL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION.
7. THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL IMMEDIATELY REPAIR ALL DAMAGES TO OCU MAINS AND FACILITIES. IF THE REPAIR IS NOT MADE IN A TIMELY MANNER, AS DETERMINED BY OCU, OCU MAY PERFORM REQUIRED REPAIRS AND CLEANUP. THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR.
8. THE CONTRACTOR SHALL ADJUST ALL EXISTING OCU MAINS AND FACILITIES IN CONFLICT WITH NEW GRADE, NEW OR ALTERED ROADWAYS, SIDEWALKS, DRIVEWAYS, OR STORM WATER IMPROVEMENTS. OCU FACILITIES TO BE ADJUSTED INCLUDE, BUT ARE NOT LIMITED TO PIPELINES, PUMP STATIONS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, MANHOLE COVERS, AND METERS.
9. ONLY OCU SHALL OPERATE OCU WATER, WASTEWATER, AND RECLAIMED WATER VALVES. THE CONTRACTOR SHALL COORDINATE VALVE OPERATION WITH THE OCU INSPECTOR. FOR OPERATION OF MAINS NOT OWNED BY OCU, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE APPROPRIATE UTILITY REPRESENTATIVE.
10. CONSTRUCTION ACTIVITIES SHALL NOT CAUSE INTERRUPTIONS IN WATER, WASTEWATER, OR RECLAIMED WATER SERVICE. THE CONTRACTOR SHALL COORDINATE PRE-APPROVED INTERRUPTIONS OF SERVICE WITH THE OCU INSPECTOR 7 WORKING DAYS IN ADVANCE.
11. THE CONTRACTOR SHALL PROVIDE FOR BYPASSING AND/OR HAULING WASTEWATER DURING APPROVED INTERRUPTIONS OF WASTEWATER FLOWS AND CONNECTIONS. THE CONTRACTOR SHALL SUBMIT A BYPASS PLAN SIGNED AND SEALED BY A PROFESSIONAL ENGINEER TO OCU DEVELOPMENT ENGINEERING FOR APPROVAL PRIOR TO IMPLEMENTATION BY CONTRACTOR.
12. ALL VALVES INSTALLED AS PART OF THIS CONSTRUCTION PROJECT SHALL REMAIN CLOSED DURING CONSTRUCTION. KEEP VALVES ON ALL WET TAPS CLOSED UNTIL CLEARED BY FDEP. DO NOT CONNECT NEWLY CONSTRUCTED WATER MAINS TO ANY EXISTING WATER MAINS UNLESS CLEARED BY FDEP AND OCU.
13. THE CONTRACTOR SHALL PROVIDE A JUMPER ASSEMBLY WITH A BACKFLOW PREVENTER FOR MAKING TEMPORARY CONNECTIONS TO AN EXISTING POTABLE WATER SOURCE IN ORDER TO CHLORINATE AND FLUSH NEW WATER MAINS WITH POTABLE WATER. ANY TEMPORARY POTABLE WATER CONNECTIONS TO RECLAIMED WATER OR FORCEMAIN SHALL ALSO BE EQUIPPED WITH A BACKFLOW PREVENTER.
14. FOR PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY OCU, NO PIPE BENDING IS ALLOWED. THE MAXIMUM ALLOWABLE TOLERANCE FOR JOINT DEFLECTION IS 0.75 DEGREES (3-INCHES PER JOINT PER 20 FT STICK OF PIPE.) ALIGNMENT CHANGE SHALL BE MADE ONLY WITH SLEEVES AND FITTINGS.
15. FOR NON-PVC PIPE THAT WILL BE OWNED AND MAINTAINED BY OCU, LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE INSTALLED WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS, FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75 PERCENT OF THE PIPE MANUFACTURER'S RECOMMENDATION.

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)										
TYPE	PIPE SIZE									
	PVC					DIP				
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	25	36	46	55	64	65	77	89	105	120
45° BEND	10	15	19	23	26	27	32	37	44	50
22-1/2° BEND	5	8	9	11	13	13	15	18	21	24
11-1/4° BEND	3	4	5	6	8	7	8	9	10	12
PLUG OR BRANCH OF TEE	53	74	97	117	135	138	166	194	231	265
VALVE	27	38	49	59	68	69	83	97	116	133
REDUCER	VARIES BY SIZE; TO BE DETERMINED BY THE DESIGN ENGINEER.									

NOTES:
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL INLINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:

   WORKING PRESSURE: 150 PSI
   SOIL DESIGNATION: SM (SAND SILT)
   LAYING CONDITIONS: 3
   DEPTH OF COVER: 3 FT
   SAFETY FACTOR: 1.5
   CONVERSION FACTOR FOR PVC PIPE: 1.25

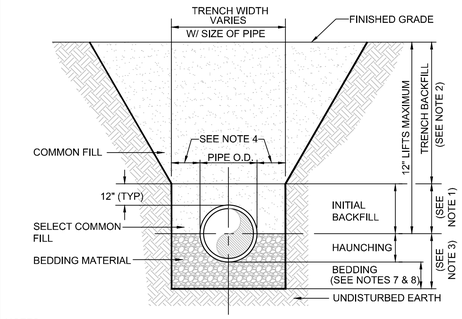
   THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC SOIL DESIGNATIONS, LAYING CONDITIONS, PIPE MATERIAL, ETC. FOR DIP ENCASED IN POLYETHYLENE, INCREASE THE GIVEN VALUE BY A FACTOR OF 1.25.

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)										
TYPE	PVC PIPE SIZE									
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	18	24	31	38	43	55	65	75	88	100
45° BEND	8	10	13	15	18	23	26	31	38	43
22-1/2° BEND	4	5	6	8	9	11	13	15	18	20
11-1/4° BEND	2	3	4	5	6	8	9	10	11	13
PLUG OR BRANCH OF TEE	38	50	65	79	90	117	139	163	194	223
VALVE	19	25	32	40	45	59	70	82	98	112
REDUCER	VARIES BY SIZE; TO BE DETERMINED BY THE DESIGN ENGINEER.									

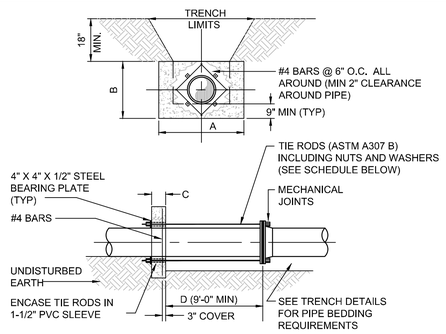
NOTES:
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL INLINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:

   WORKING PRESSURE: 100 PSI
   SOIL DESIGNATION: SM (SAND SILT)
   LAYING CONDITIONS: 3
   DEPTH OF COVER: 3 FT
   SAFETY FACTOR: 1.5
   CONVERSION FACTOR FOR PVC PIPE: 1.25

   THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.



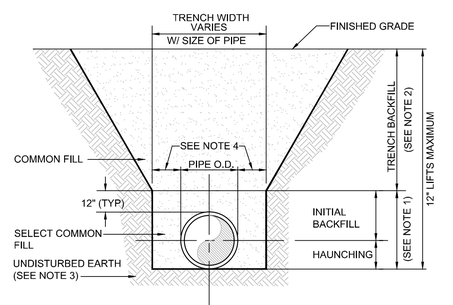
NOTES:
1. INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. TYPE A BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF R/W UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.



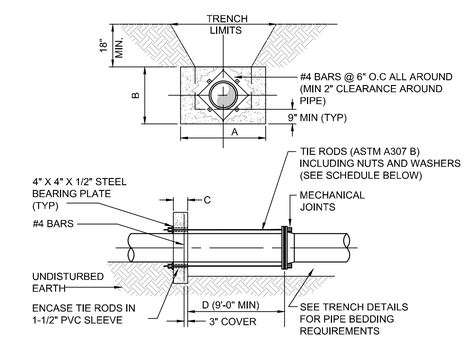
NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
3. BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE: 150 PSI.
7. REQUIRED FOR LINE STOPS.

SCHEDULE OF DIMENSIONS AND MATERIALS						
PIPE SIZE (INCHES)	DIMENSIONS (FT.)				TIE RODS REQ'D	
	A	B	C	D	DIA.	NO.
6	2.0	2.0	1.0		3/4	2
8	2.5	2.5	1.0		3/4	2
10	3.5	3.0	1.0		3/4	4
12	5.0	3.0	1.0		3/4	4
16	6.0	4.0	1.5		3/4	4
20	8.0	5.0	1.5		3/4	6
24	9.0	6.0	1.5		3/4	8

NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.



NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.



NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
3. BEDDING, BACKFILL, AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE: 100 PSI.
7. REQUIRED FOR LINE STOPS.

SCHEDULE OF DIMENSIONS AND MATERIALS						
PIPE SIZE (INCHES)	DIMENSIONS (FT.)				TIE RODS REQ'D	
	A	B	C	D	DIA.	NO.
6	2.0	2.0	1.0		3/4	2
8	2.5	2.5	1.0		3/4	2
10	3.0	2.5	1.0		3/4	4
12	4.0	3.0	1.0		3/4	4
16	5.5	3.5	1.5		3/4	4
20	7.5	4.0	1.5		3/4	4
24	8.5	5.0	1.5		3/4	6

NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF SOIL RESTRAINT BEARING.

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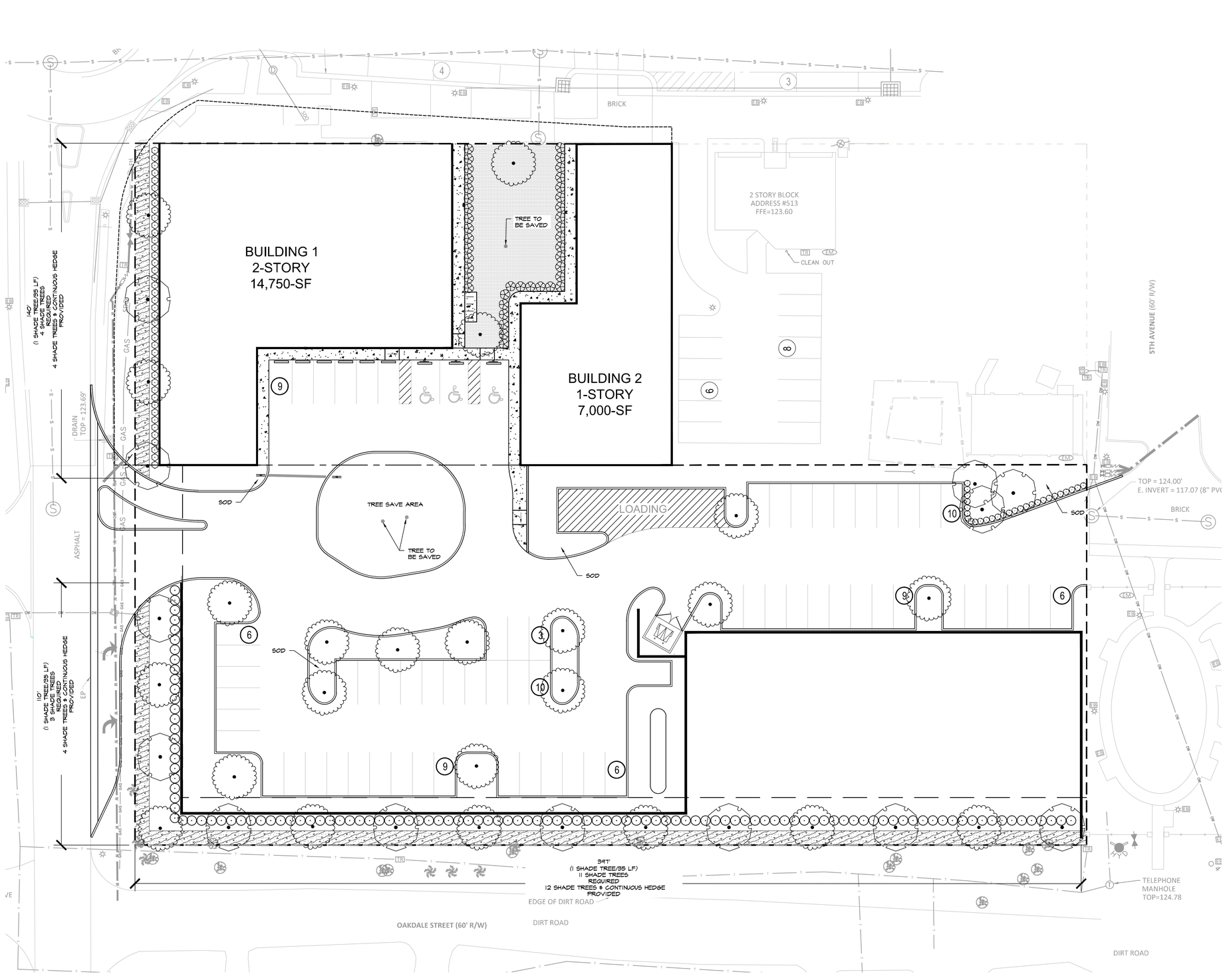

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189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801
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WWW.KIMLEY-HORN.COM REGISTRY No. 35106

LICENSED PROFESSIONAL
MARCUS I. GEIGER, P.E.
FL LICENSE NUMBER
89199
DATE: ———

KHA PROJECT
149973004
DATE
02/18/2022
SCALE AS SHOWN
DESIGNED BY MIG
DRAWN BY CML
CHECKED BY MIG

LANDSCAPE PLAN

WINDERMERE DOWNTOWN PROPERTY

TOWN OF WINDERMERE FL

SHEET NUMBER
L1.00