



SITE PLAN REVIEW COMMITTEE MEETING ZEPHYRHILLS, FLORIDA

**Tuesday, January 17, 2023
9:30 PM**

**Zephyrhills
City Hall**

**Council
Chambers**

Call to Order –

1. PLANNING ITEMS

1.1 SPR-0050-22 6923 Gall Blvd Storage

Site development plans submitted by Broward Development for a +/-90820 sq.ft. storage facility at 6923 Gall Blvd

1. 21-2420 Civil Set
2. Zephyrhills Storage_L1_11-11-22_SS
3. Zephyrhills Storage_L2_11-11-22_SS
4. Zephyrhills Storage_L3_11-11-22_SS

1.2 SPR-0056-22 MUV

Refurbishment of the landscaping onsite and in the accessory parking lot and installation of a sidewalk along 6th Ave.

1. MUV Civil Plans

1.3 ANX-0015-22_Providence Village Annexation

Application submitted by Providence Village, LLC for the following land use amendments related to 3 acres of real property generally located at 37518 Geiger Road (Parcel 10-26-21-0000-00400-0000):

1. Request to annex 3.0 acres (37518 Geiger Road) into the municipal boundaries of the city;
2. Request for small-scale future land use amendment, changing the FLU classification from County RES-9 to City RU;
3. Request to rezone from County R3 to City R4.
 1. Environmental Report_ANX15-22
 2. Justification Report_ANX15-22

3. Boundary Survey_ANX15-22

1.4 ANX-0016-22_Geiger Road (Black Marlin Capital)

Application submitted by Black Marlin Capital, LLC for the following land use amendments related to 4.155 acres of real property generally located on the north side of Geiger Rd, west of Hazelwood Drive (Parcel 03-26-21-0010-11700-0020):

1. Request to annex 4.115 acres (Parcel 03-26-21-0010-11700-0020) into the municipal boundaries of the city;
2. Request for small-scale future land use amendment, changing the FLU classification from County RES-9 to City RU;
3. Request to rezone from County R-1MH & RMH to City R4.

1. Boundary Survey_ANX16-22

2. Environmental_ANX16-22

3. Justification Report_ANX16-22

1.5 SPR-0048-22 Summit Apartments

Site Development Plans resubmitted by RealSource for a 240 unit multi-family apartment complex to be located on approximately 12.0 acres of real property generally located at the northwest corner of the intersection of Pretty Pond and Wire Roads (Parcel 35-25-21-0010-04400-0000).

1. 01 Summit Apartments - Civil Plan Set - 11.30.2022 (1)

2. 02 Stormwater Report - Summit Apartments (1)

ADJOURN

*** PLEASE NOTE: This is a Public Meeting. Should any interested party seek to appeal any decision made by the Council with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence upon which the appeal is to be based. F.S. 286.0105. If you are a person with a disability which requires reasonable accommodation in order to participate in this meeting, please contact the City Clerk at 813/780-0000 at least 48 hours prior to the public hearing. A.D.A. and F.S. 286.26.**

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IRRIGATION PLAN

BROWARD / ZEPHYRHILLS

STORAGE FACILITY

SITE PLAN APPLICATION

6923 GALL BLVD
ZEPHYRHILLS, FL 33542

CITY OF ZEPHYRHILLS, FLORIDA
OCTOBER, 2022

OWNER / APPLICANT

BROWARD DEVELOPMENT
3137 E. SHADOWLAND AVENUE NE
ATLANTA, GA 30305

ENGINEER

MILLS, SHORT & ASSOCIATES

700 22ND PLACE, SUITE 2C/2D
VERO BEACH, FLORIDA 32960
PHONE: 772-226-7282

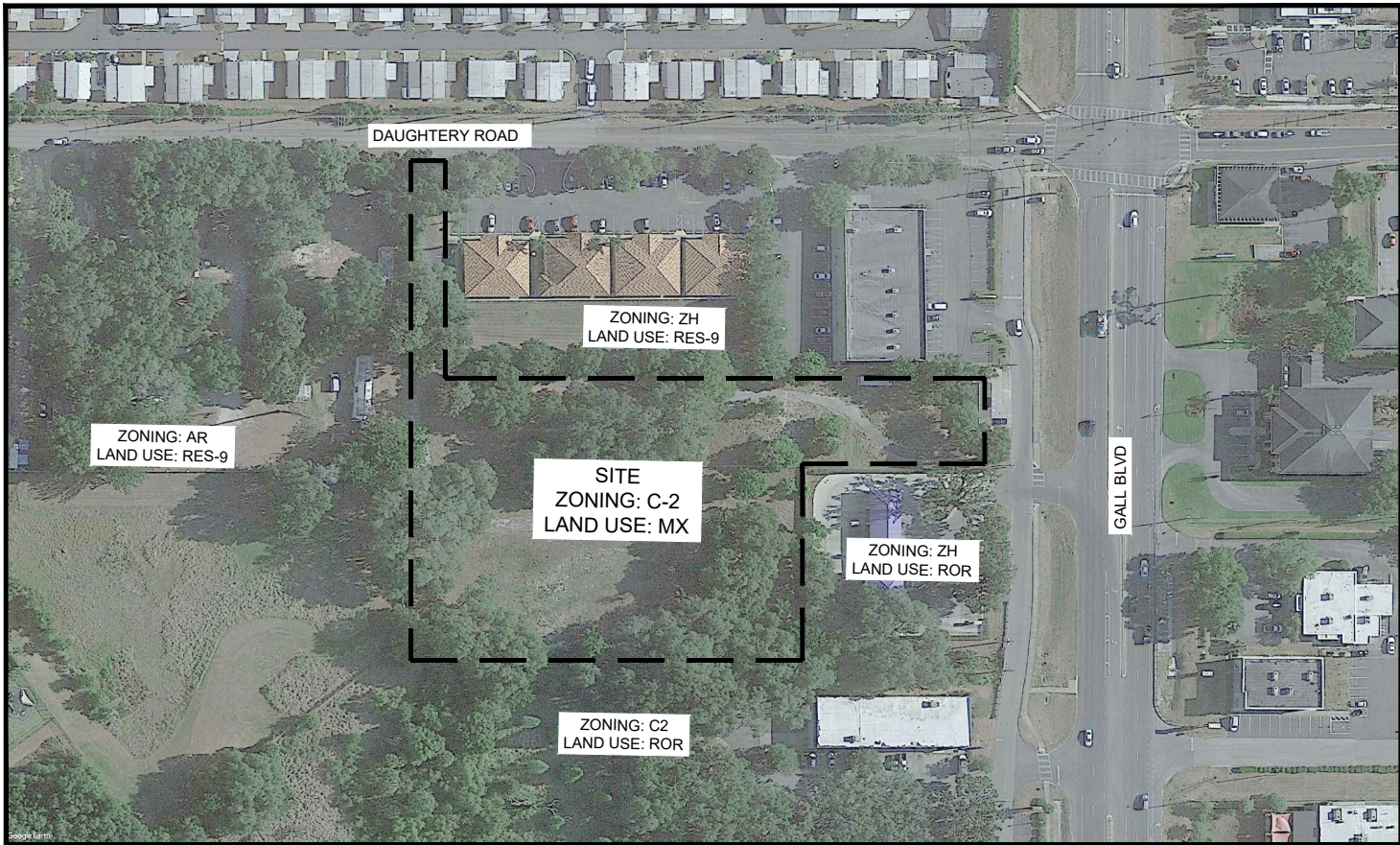
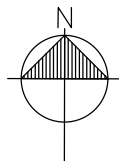
SURVEYOR

GSS SURVEY & MAPPING

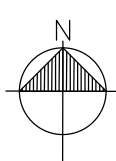
700 22ND STREET, SUITE D-2
VERO BEACH, FLORIDA 32960
PHONE: 772-696-5300



SITE LOCATION MAP
SCALE: N.T.S



SITE VICINITY MAP
SCALE: N.T.S



Mills, Short & Associates

WEBSITE: www.MillsShortAssociates.com
PHONE: 772.226.7282
C.A. #: 30698
700 22nd Place, Suite 2C/2D
Vero Beach, Florida 32960

SEAL

ISSUE	DATE	COMMENTS

BROWARD - ZEPHYRHILLS STORAGE FACILITY

6923 GALL BLVD
ZEPHYRHILLS, FL 33542

THIS SHEET TITLE SHEET

DRAWN BY
WBD

CHECKED BY
JWM

APPROVED BY
JWM

SCALE
N/A

PROJ. NO. 21-2420
DATE 10-21-2022
SHEET NO.

G-1

GENERAL NOTES:

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST JURISDICTIONAL STANDARDS AND FDOT.
2. PAVEMENT STRIPING TO BE IN ACCORDANCE WITH JURISDICTIONAL SPECIFICATIONS AND WITH THE FLORIDA D.O.T. ROADWAY & TRAFFIC STANDARDS, INDEX 17346.
3. ALL TRAFFIC CONTROL SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
4. WHERE MUCK OR OTHER ORGANIC MATERIAL IS FOUND, IT SHALL BE REMOVED AND REPLACED WITH QUALITY BACKFILL MATERIAL OBTAINED FROM THE GRADING OPERATIONS OR OTHER SOURCE APPROVED BY THE ENGINEER. THE ORGANIC MATERIAL SHALL BE THEN USED AS TOP DRESSING WHEN MIXED WITH CLEAN SANDY SOIL.
5. THE CONTRACTOR SHALL NOTIFY JURISDICTIONAL PUBLIC WORKS DIVISION AND MILLS, SHORT & ASSOCIATES AT LEAST ONE WEEK BEFORE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR SHALL OBTAIN AN FDOT R/W PERMIT PRIOR TO COMMENCING WORK WITHIN FDOT RIGHT-OF-WAYS.
6. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.
7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE FOR CONSTRUCTION OPERATIONS.
9. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER.
10. CONTRACTOR SHALL SUPPLY DENSITY TEST TO ENGINEER ON ALL SUB-GRADE AND BASE. TEST SHALL BE PREPARED PER AASHTO T-180 METHOD.
11. SLOPE GRADES FROM ELEVATIONS SHOWN TO THE EXISTING GRADE AT PROPERTY LINE.
12. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST 48 HOURS IN ADVANCE FOR ANY INSPECTIONS.
13. ANY EXISTING FLOW WELLS SHALL BE PLUGGED AS PART OF SITE DEVELOPMENT.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
15. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATION IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
16. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.

PAVING AND DRAINAGE NOTES:

1. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCE BETWEEN CENTERLINES OF DRAINAGE STRUCTURES.
2. DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SECURED WITH CHAIN AND EYEBOLT.
3. FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS AND MITERED END SECTIONS.
4. TOP ELEVATIONS OF MANHOLES IN GRASSED AREAS SHALL BE LOCATED AT FINISHED GRADE ELEVATION.
5. AS AN ALTERNATIVE, CONTRACTOR MAY USE ALTERNATIVE PIPE MATERIALS IN LIEU OF THOSE SPECIFIED IN THE CONSTRUCTION DOCUMENTS. HOWEVER, CONTRACTOR MUST RECEIVE APPROVAL OF ALTERNATIVE PIPE MATERIALS IN WRITING BY THE CONTROLLING JURISDICTION AND MILLS, SHORT & ASSOCIATES PRIOR TO CONSTRUCTION.
6. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. TOP SOIL WHICH HAS BEEN STRIPPED AND STOCK PILED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL REGRADED SURFACES SO AS TO PROVIDE AT LEAST FOUR INCHES OF EVEN COVER TO ALL DISTURBED AREAS OF THE DEVELOPMENT AND SHALL BE STABILIZED BY SEEDING OR PLANTING.
7. ALL DISTURBED AREAS WITH SLOPES UP TO 6:1 SHALL BE SEEDED AND MULCHED. SLOPES STEEPER THAN 6:1 SHALL BE SODDED AND SLOPES 3:1 OR STEEPER SHALL HAVE THE SOD PEGGED.
8. SEE TABLE 2.0 ON SHEET G-3 FOR REQUIRED STORM PIPE COVER BENEATH AN UNPAVED SECTION, RIGID PAVEMENT, AND FLEXIBLE PAVEMENT.
9. THE TABULATED VALUES ARE RECOMMENDED MINIMUM DIMENSIONS TO WITHSTAND ANTICIPATED HIGHWAY TRAFFIC LOADS. ADDITIONAL COVER MAY BE REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT LOADS OR HIGHWAY TRAFFIC LOADS BEFORE PAVEMENT IS COMPLETED. SOME SIZE THICKNESS COMBINATIONS MAY REQUIRE MINIMUM COVER GREATER THAN THOSE LISTED ABOVE. SEE FDOT INDEX 205, SHEETS 1-6.
10. ALL RCP STORM WATER PIPE SHALL MEET THE COVER & CLASS CRITERIA AS OUTLINED IN FDOT INDEX 205.
12. THE LAST FOOT OF STORM WATER POND SHALL NOT BE EXCAVATED UNTIL ALL DISTURBED AREAS ARE STABILIZED.
13. ANY FILL MATERIAL MUST BE APPROVED BY ENGINEER IN WRITING PRIOR TO PLACEMENT.
14. SIGNIFICANT CARE MUST BE TAKEN WHEN GRADING RETENTION PONDS TO ENSURE THAT POND BOTTOMS DO NOT BECOME COMPACTED DURING CONSTRUCTION OR SEALED BY CONSTRUCTION SEDIMENT. IF SEDIMENTATION OR COMPACTION OF A POND BOTTOM OCCURS, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE THE DESIGN HYDRAULIC CONDUCTIVITY.
15. THE SAINT JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD), REQUIRES ALL PROPERTY OWNERS TO PERFORM A STORMWATER SYSTEM INSPECTION TO ASSURE THE PONDS, INLETS, AND PIPES ON SITE ARE BEING WELL-MAINTAINED (E.G., PROPERLY MOVED AND CLEAR OF DEBRIS). THE INTENT IS TO GUARANTEE THAT CONTAMINATED RAIN RUN-OFF FROM THE PROPERTY WILL NOT ADVERSELY AFFECT THE SURROUNDING AREA.
16. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN COUNTY'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR FDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
17. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
18. TRAFFIC CONTROL ON ALL FDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
19. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
20. ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN.
21. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
22. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED, THE CONTRACTOR SHALL SAW CUT FULL DEPTH FOR A SMOOTH AND STRAIGHT JOINT.
23. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
24. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
25. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO FDOT STANDARDS. IN THE EVENT THAT THE CONTRACTOR DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS AS NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
26. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
27. ALL CUT OR FILL SLOPES SHALL BE 4 (HORIZONTAL):1 (VERTICAL) OR FLATTER UNLESS OTHERWISE SHOWN.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
29. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORMWATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.



AS-BUILT NOTES:

1. THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF RECORD DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS.
- A. DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.
- B. DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, WATER, REUSE AND WASTEWATER PIPING AND RELATED APPURTENANCES. ALL PIPING LOCATIONS INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.
- C. DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER.
- D. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.
- E. LOCATION OF ALL INLETS AND MANHOLES, HYDRANTS, VALVES AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO PREFERABLY THREE PERMANENT POINTS.
- F. DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE VERIFIED AND SHOWN. THE INVERTS AND GRADE ELEVATIONS OF ALL INLETS, CONTROL STRUCTURES AND MANHOLES SHALL BE SHOWN.
- G. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR POND GRADING. SPOT ELEVATIONS SHALL BE TAKEN AT TOP OF BANK, POND BOTTOM, AND ALL GRADE BREAKS AT 50' INTERVALS.
- H. DRAWINGS SHALL CLEARLY INDICATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN WATER MAIN AND STORM DRAINAGE/SANITARY SEWER/RECLAIM WATER MAINS AT POINTS OF CROSSING IN ACCORDANCE WITH FDEP CRITERIA.
- I. WHERE THE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCE MAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE CONSTRUCTED ELEVATIONS IN SUCH A WAY THAT THE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND OTHER UTILITIES MAY BE VERIFIED BY THE ENGINEER. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
- J. WHERE THE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCE MAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE LOCATIONS OF PIPE JOINTS IN SUCH A MANNER AS TO DEMONSTRATE THE PIPE IS CENTERED AT ALL THE CROSSING. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
2. EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY REGISTERED SURVEYOR WITH A NOTE READING "THESE AS-BUILT DRAWINGS ACCURATELY DEPICT THE ACTUAL IMPROVEMENTS AS CONSTRUCTED".

CLEARANCES:

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING 90 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.
2. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SIGNED AND SEALED AS-BUILTS OF ALL UTILITY IMPROVEMENTS, PRESSURE TESTS, BACTERIOLOGICAL TESTS, AND ANY OTHER INFORMATION NECESSARY FOR THE CLEARANCE APPROVALS WITH F.D.E.P. AND THE LOCAL UTILITY PROVIDER. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER 60 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.
3. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SIGNED AND SEALED AS-BUILTS OF ALL STORM WATER SYSTEM IMPROVEMENTS AND ANY OTHER INFORMATION NECESSARY FOR THE CLEARANCE APPROVALS AND THE LOCAL UTILITY PROVIDER. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER 60 DAYS PRIOR TO THE ANTICIPATED COMPLETION OF CONSTRUCTION AND/OR CERTIFICATION OF COMPLETION APPROVAL DATE.

DEMOLITION NOTES:

1. ALL MATERIAL REMOVED FROM THIS SITE BY THE CONTRACTOR SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER.
2. REFER TO THE TOPOGRAPHIC SURVEY FOR ADDITIONAL DETAILS OF EXISTING STRUCTURES, ETC., LOCATED WITHIN THE PROJECT SITE. UNLESS OTHERWISE NOTED, ALL EXISTING BUILDINGS, STRUCTURES, SLABS, CONCRETE, ASPHALT, DEBRIS PILES, SIGNS, AND ALL APPURTENANCES ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND PROPERLY DISPOSED OF IN A LEGAL MANNER AS PART OF THIS CONTRACT. SOME ITEMS TO BE REMOVED MAY NOT BE DEPICTED ON THE TOPOGRAPHIC SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND DETERMINE THE FULL EXTENT OF ITEMS TO BE REMOVED. IF ANY ITEMS ARE IN QUESTION, THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO REMOVAL OF SAID ITEMS.

SANITARY SEWER NOTES:

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH JURISDICTIONAL MANUAL OF STANDARD SPECIFICATIONS FOR WASTEWATER CONSTRUCTION.
2. ALL MANHOLES SHALL BE 4 FT. INSIDE DIAMETER.
3. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.
4. ALL SANITARY SERVICE LATERALS SHALL BE 6 INCH DIAMETER, UNLESS SPECIFIED OTHERWISE ON PLANS.
5. INVERTS OF SANITARY SERVICE LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE THE MANHOLE INVERT.
6. MINIMUM AS BUILT 8" PVC SEWER LINE SLOPE WILL BE 0.40% MINIMUM SLOPE OR WILL BE RELAY BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.
7. MARK LATERALS WITH 4" X 4" X 8' PT POST PAINTED GREEN ON END.
8. PIPE MATERIAL IS ASTM D3034, SDR-26 UNLESS OTHERWISE NOTED.
9. A MINIMUM OF 1.00% SLOPE SHALL BE MAINTAINED ON THE SANITARY SEWER SERVICE LATERALS. AT NO TIME SHALL A SANITARY SEWER LATERAL HAVE A SLOPE OF 15% OR GREATER.
10. SANITARY SEWER GRAVITY MAINS ARE TO BE UPGRADED IN MATERIAL TO WATER MAINS STANDARDS AND HYDROSTATICALLY PRESSURE TESTED WITH WATER TO ENSURE JOINT TIGHTNESS IF EITHER OF THE HORIZONTAL OR VERTICAL MINIMUM REQUIRED CLEARANCE FROM A WATER MAIN CANNOT BE MAINTAINED OR IF THE SEWER MAIN IS ABOVE THE WATER MAIN.
11. LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT:
- A. THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.
- B. EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.
- C. AIR TESTS, AS MINIMAL, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES, AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.
12. DEFLECTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES, CHAPTER 33.85, FOR ALL GRAVITY SANITARY SEWER LINES. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY:
- A. NO PIPE SHALL EXCEED A DEFLECTION OF 5%.
- B. USING A RIGID BALL OR MANDREL FOR THE PIPE DEFLECTION TESTS WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX. TO WHICH THE PIPE IS MANUFACTURED.
- C. PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.

FORCE MAIN NOTES:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH THE UTILITY PROVIDERS MANUAL OF STANDARDS AND SPECIFICATIONS FOR FORCE MAIN CONSTRUCTION.
2. PIPE LENGTHS SHOWN IN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.
3. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.
4. VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, THREADED EXTENSIONS WHERE NEEDED, UNLESS OTHERWISE NOTED.
5. ALL PVC FORCE MAIN SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS, MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION (NSF).
6. ALL NON-METALLIC FORCE MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 14 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC FORCE MAINS SHALL BE EITHER A SOLID GREEN COLOR OR WHITE WITH GREEN LETTERING. ALL LETTERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LETTERING SHALL READ AS IS ACCEPTABLE FOR THE INTENDED USE.
7. HYDROSTATIC & LEAKAGE TESTING OF THE FORCE MAIN SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600.
8. PIPE MATERIALS:
PVC SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARDS C900, LATEST EDITION. THE PVC SHALL HAVE A MINIMUM WORKING PRESSURE OF 100 PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 25 UNLESS OTHERWISE NOTED. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE. PVC JOINT- SHALL BE IN ACCORDANCE WITH ASTM D3139. DUCTILE IRON JOINT- SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.
9. AIR RELEASE VALVES SHALL BE REQUIRED AT ALL HIGH POINTS IN THE PROPOSED FORCE MAIN, AS SHOWN ON PLANS. HIGH POINTS IN THE FORCE MAIN ARE DEFINED AS A CHANGE IN ELEVATION TWICE THE DIAMETER OF THE PIPE.
10. ALL FORCE MAINS TO BE CONSTRUCTED WITH A MINIMUM OF 3' FEET OF COVER.
11. TESTING OF THE SEWAGE COLLECTION SYSTEM IS AS FOLLOWS:
- A. ALL GRAVITY SEWER MAINS REQUIRE LOW PRESSURE AIR TESTING IN ACCORDANCE WITH THE LATEST UNI-BELL STANDARD FOR LOW PRESSURE AIR TESTS. AIR TEST, AS A MINIMUM, SHALL CONFORM TO THE TEST PROCEDURES DESCRIBED IN ASTM SPECIFICATIONS, ASTM F1417 FOR PLASTIC PIPE.
- B. ALL MANHOLES SHALL BE INSPECTED FOR INFILTRATION, ALIGNMENT, FLOW CHANNEL CONSTRUCTION AND COAL TAR EPOXY PAINT THROUGHOUT.
- C. HYDRO-STATIC TESTS CONSISTING OF A HYDROSTATIC PRESSURE TEST AND HYDROSTATIC LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY INSTALLED SEWER FORCE MAIN SYSTEM PRESSURE PIPES AND APPURTENANCES IN ACCORDANCE WITH AWWA C800 OR M23 AS APPLICABLE. THE PRESSURE SHALL BE 150 PSI FOR TWO (2) HOURS.
- D. DEFLECTION TESTS ARE REQUIRED FOR ALL FLEXIBLE PIPE EXCLUDING FORCE MAINS. TESTS SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES D MEASURED FROM THE INTERFACE TO THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE NOTED.

BROWARD - ZEPHYRHILLS STORAGE FACILITY

6923 GALL BLVD
ZEPHYRHILLS, FL 33542

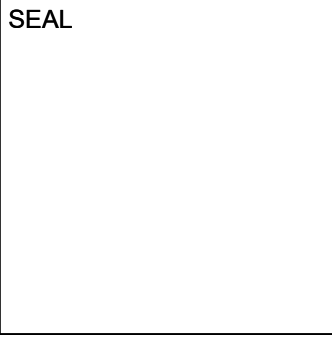
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GENERAL NOTES

DRAWN BY
WBD

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JWM

SCALE
N/A

ISSUE	DATE	COMMENTS



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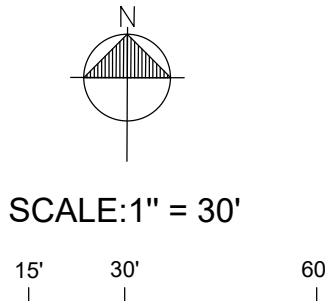
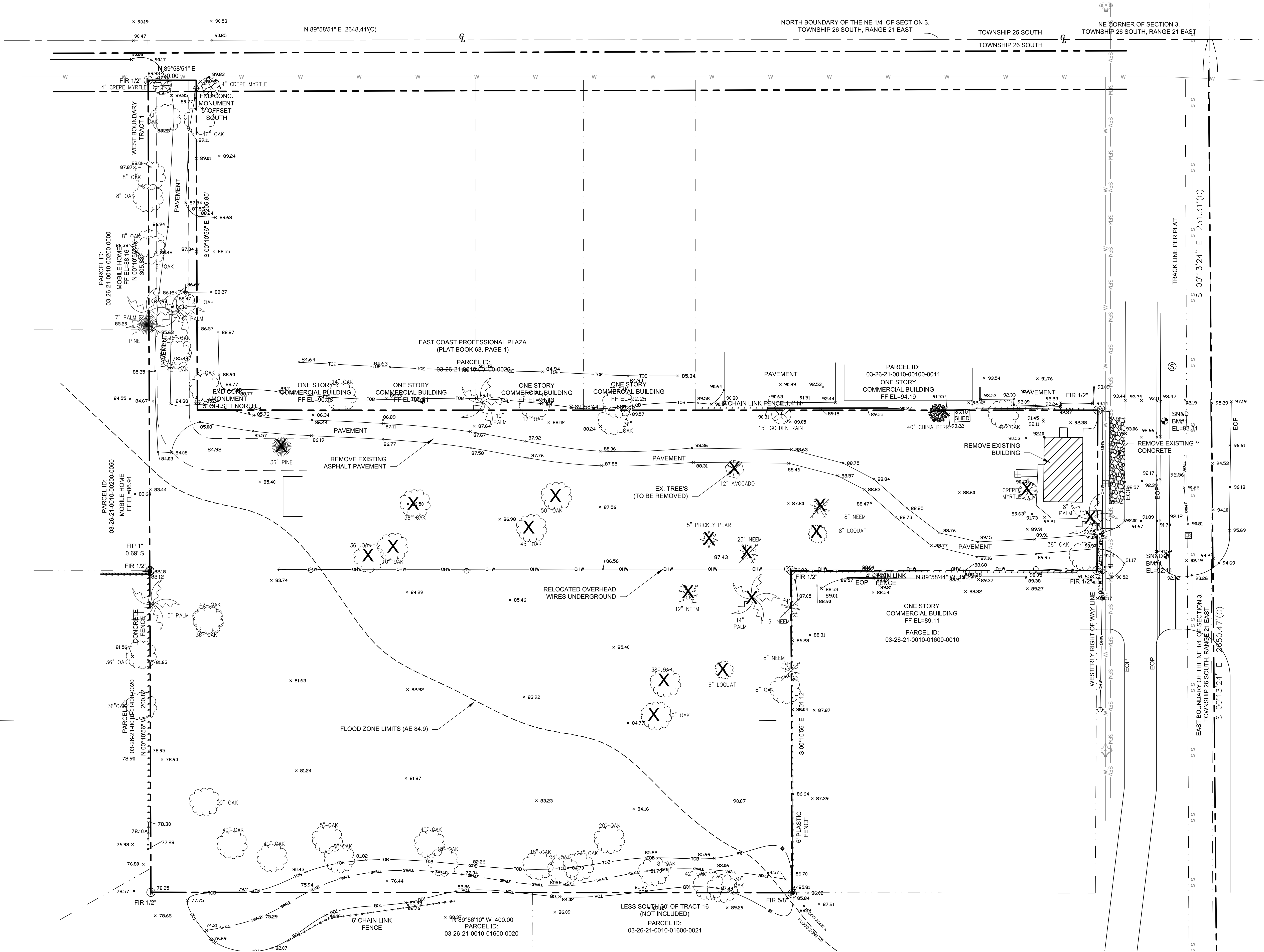
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- =OAK
- =PALM
- =PINE

FLOOD ZONE NOTE:

CONTROLLING BENCHMARK
NATIONAL GEODETIC SURVEY
PID 662 DJ8087
PUBLISHED ELEVATION 123.18 NAVD 1988

LEGAL DESCRIPTION:

THE SOUTH 100 FEET OF TRACT 1 AND THE WEST 30 FEET OF THE NORTH 221.60 FEET OF TRACT 1, AND THE WEST 400 FEET OF TRACT 16 LESS THE SOUTH 130 FEET THEREOF AND LESS RIGHT OF WAY, IN ZEPHYRHILLS COLONY SUBDIVISION AS PER PLAT BOOK 2, PAGE 6, SECTION 3, TOWNSHIP 26 SOUTH, RANGE 21 EAST, PASCO COUNTY

SURVEYORS NOTES:

- LEGAL DESCRIPTION PROVIDED BY CLIENT. ADJOINERS SHOWN HAVE NOT BEEN SURVEYED.
- NO UNDERGROUND FOUNDATIONS HAVE BEEN LOCATED
- LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAY AND/OR EASEMENTS OF RECORD.
- SEPTIC TANKS AND WELLS IF SHOWN ARE APPROXIMATE LOCATIONS AND SHOULD BE FIELD VERIFIED BY A LICENSED CONTRACTOR FOR CORRECT POSITION AND SEPARATION. UNDERGROUND UTILITIES OR FOOTERS HAVE NOT BEEN LOCATED.
- THE CENTERLINE OF DAUGHTERY ROAD OF IS ASSUMED TO BEAR N 89°58'51" E AND ALL OTHER BEARINGS ARE RELATIVE THERETO.
- ALL RIGHTS-OF-WAY SHOWN HEREON ARE OPEN TO TRAVEL UNLESS OTHERWISE NOTED.
- ACCORDING TO THE NATIONAL FLOOD INSURANCE RATE MAP NUMBER 12101C0289F, HAVING AN EFFECTIVE DATE OF SEPTEMBER 26, 2014, THIS PROPERTY APPEARS TO LIE WITHIN ZONE X AND AE (BASE FLOOD ELEVATION=84.90'), INSIDE AND OUTSIDE SPECIAL FLOOD HAZARD AREA.
- ALL DISTANCES SHOWN HEREON ARE HORIZONTAL GROUND DISTANCES AND ARE REFERENCED TO U.S. SURVEY FEET.

- THE BOUNDARY DETERMINATION AND DELINEATION SHOWN ON THIS MAP OF SURVEY WAS BASED UPON THE PROFESSIONAL OPINION OF THE REGISTERED SURVEYOR PURSUANT TO NORMAL PRINCIPALS AND PRACTICES OF LAND SURVEYING AND IS NOT INTENDED TO IMPLY OR DETERMINE OWNERSHIP. THIS SURVEY DOES NOT INTEND TO DELINEATE LOCAL AREAS OF CONCERN OR ANY OTHER JURISDICTIONAL DETERMINATION.
- THIS SURVEY HAS BEEN PREPARED FOR THE EXCLUSIVE BENEFIT AND USE OF THE PERSONS AND/OR ENTITIES NAMED HEREON FOR THE PURPOSES IDENTIFIED HEREON ONLY. UNLESS OTHERWISE STATED, CERTIFICATION OF THIS SURVEY MAP APPLIES ONLY TO THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J17 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES. THE CERTIFICATION IN NO WAY CONSTITUTES NEITHER GUARANTY NOR WARRANTY TO ANY OTHER INFORMATION NOT SHOWN HEREON. ADDITIONS, DELETIONS OR REVISIONS TO THIS DRAWING BY OTHERS ARE NOT PERMITTED AND THIS SURVEY MAY NOT BE TRANSFERRED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE SIGNING SURVEYOR. THIS SURVEY IS NOT VALID FOR ANY OTHER PURPOSE OTHER THAN INTENDED BY THE SIGNING SURVEYOR.
- ELEVATIONS, IF SHOWN, ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988. NAVD 1988.

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ISSUE	DATE	COMMENTS

BROWARD - ZEPHYRHILLS STORAGE FACILITY			
6923 GALL BLVD ZEPHYRHILLS, FL 33542			
THIS SHEET	APPROVED BY	CHECKED BY	DRAWN BY
EXISTING CONDITIONS	JWM	JWM	WBD
SCALE: 1"=20'			

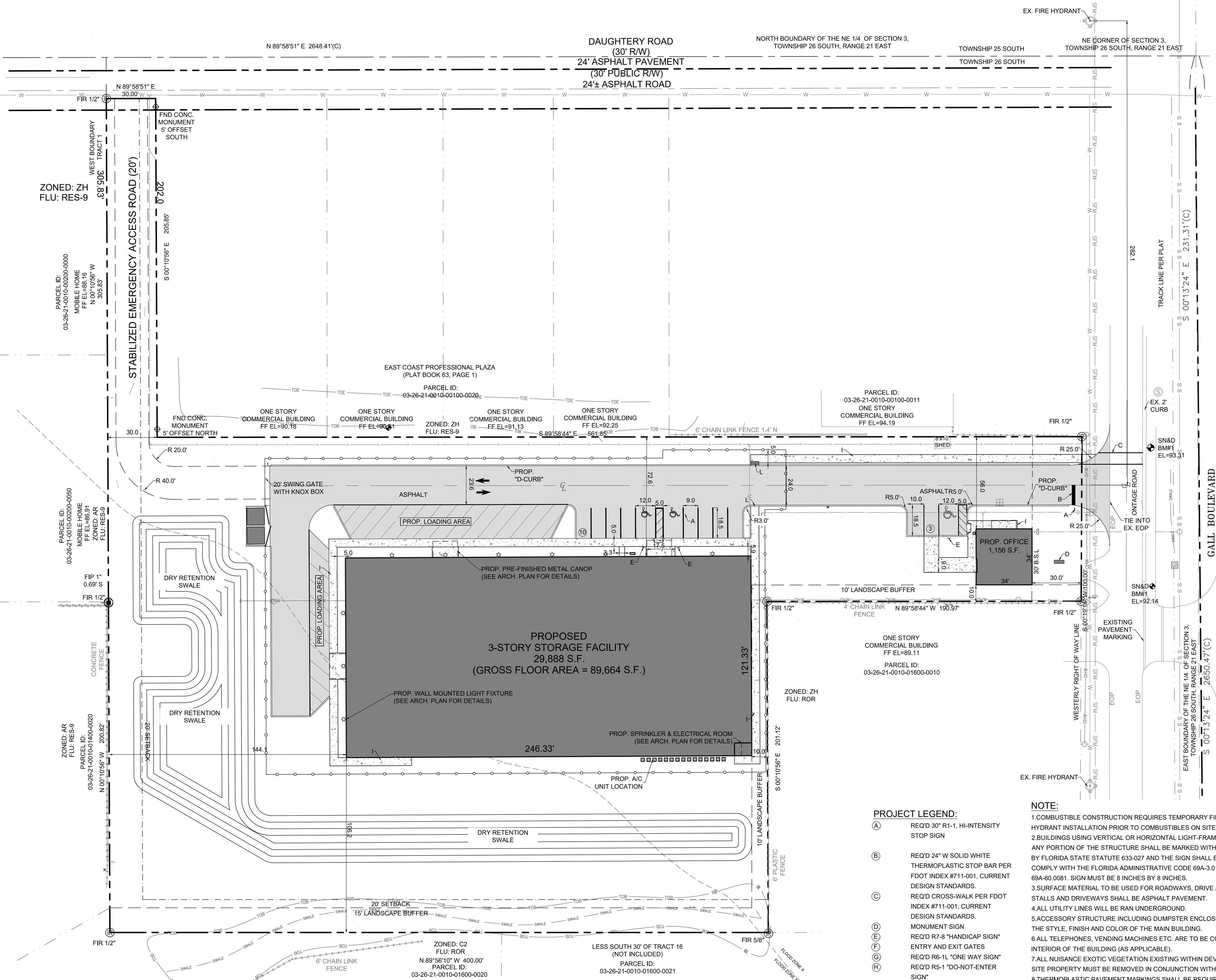
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PROJECTED CONSTRUCTION SCHEDULE:
COMMENCEMENT APRIL 2022
COMPLETION APRIL 2023

JURISDICTIONAL PERMITS:

CITY OF ZEPHYRHILLS SITE PLAN REVIEW PERMIT
CITY OF ZEPHYRHILLS RIGHT OF WAY PERMIT
CITY OF ZEPHYRHILLS UTILITY CONNECTION PERMIT
CITY OF ZEPHYRHILLS ANNEXATION/REZONING APPLICATION
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT ERP

PROJECT DATA:

OWNER/APPLICANT
ZEPHYRHILLS STORAGE, LLC.
3137 E. SHADOWLAWN AVE NE
ATLANTA, GA 30305

ENGINEER:
MILLS, SHORT & ASSOCIATES, LLC.
700 22ND PLACE, STE. 2C
VERO BEACH, FLORIDA 32960
PHONE: (772)-226-7282

SURVEYOR:
GSS SURVEYING & MAPPING, LLC.
700 22ND PLACE, SUITE 2C
VERO BEACH, FL 32960
PHONE: (772) 696-5300

PARCEL ID:
03-26-21-0010-00100-0020

SITE ADDRESS:
6923/6927 GALL BLVD
ZEPHYRHILLS, FL 33542

ZONING:
C-2: COMMERCIAL

LAND USE:
MX

SITE DATA:

3.40 ACRES
148,104 S.F.

BUILDING SETBACKS:	REQUIRED	PROVIDED
FRONT (E)	30'	30.0'
SIDE (E)	0'	10.0'
SIDE (N)	0'	56.0'
SIDE (S)	0'	106.2'
REAR (W)	20'	144.1'

FAR (MAX. 100%):	90,820 S.F. (61.3%)
BUILDING COVERAGE (MAX. 50%):	31,044 S.F. (20.9%)
OPEN SPACE (MAX 20%):	90,963 S.F. (61.4%)
IMPERVIOUS AREA (MAX 80%):	57,141 S.F. (38.5%)
-BUILDING: 31,044 S.F. (20.9%)	
-SIDEWALK: 4,866 S.F. (3.2%)	
-PAVEMENT: 21,231 S.F. (14.3%)	

BUILDING HEIGHT: 38'-8"

PROJECT DESCRIPTION:
PROPOSED THREE-STORY INDOOR STORAGE FACILITY.

EXISTING USE:
VACANT LAND

PARKING CALCULATION:
PARKING CALCULATION PER ITE PARKING GENERATION MANUAL 5TH EDITION, LAND USE 151 "MINI-WAREHOUSE USE" AVERAGE RATE 1.36 SPACES PER 100 UNITS.

REQUIRED:
622 UNITS / 100 UNITS = 6.22 x 1.36 SPACES/100 UNITS
= 8.46 SPACES = 9 SPACES

PROVIDED:
ADA HANDICAP PARKING = 2 SPACES
CONVENTIONAL PARKING = 11 SPACES
TOTAL PARKING = 13 SPACES

LEGAL DESCRIPTION:
THE SOUTH 100 FEET OF TRACT 1 AND THE WEST 400 FEET OF THE NORTH 221.60 FEET OF TRACT 1, AND THE WEST 400 FEET OF TRACT 16 LESS THE SOUTH 130 FEET THEREOF AND LESS RIGHT OF WAY, IN ZEPHYRHILLS COLONY SUBDIVISION AS PER PLAT BOOK 2, PAGE 6, SECTION 3, TOWNSHIP 26 SOUTH, RANGE 21 EAST, PASCO COUNTY

CONTROLLING BENCHMARK
NATIONAL GEODEIC SURVEY
PID W 662 D18087
PUBLISHED ELEVATION 123.18 NAVD 1988

TRAFFIC NOTES

- THERE SHALL BE NO EXCAVATIONS LEFT OPEN AFTER DARK.
- ALL CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED A MINIMUM OF 15 FEET FROM THE EDGE OF PAVEMENT AND SHALL BE PROTECTED BY TYPE II BARRICADES.
- CONSTRUCTION FENCING USED IN THE WORK AREA TO PROTECT EQUIPMENT OR EXCAVATIONS SHALL NOT BLOCK SIGHT DISTANCE NEAR INTERSECTIONS OR DRIVEWAYS.
- ALL IMPACTS TO THE RIGHT-OF-WAY SHALL BE SODDED WITHIN THREE (3) DAYS OF FINAL GRADING

GENERAL NOTES

- PARKING STALL WIDTHS SHALL BE DIMENTIONED FROM CENTERLINE TO CENTERLINE OF WHITE STRIPES. THIS APPLIES TO HANDICAP PARKING STALLS ALSO.
- ALL PARKING SPACES WITH EXCEPTION OF THE HANDICAPPED PARKING SPACES SHALL BE STRIPED IN WHITE, RETRO-REFLECTIVE TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, CURRENT EDITION, SECTION 710.
- ALL HANDICAP PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH THE FDOT STANDARD INDEX 711-001, CURRENT EDITION.
- ALL NUISANCE EXOTIC VEGETATION EXISTING ONSITE MUST BE REMOVED IN CONJUNCTION WITH SITE DEVELOPMENT.
- ALL SOLID, NON-BREAKAWAY OBJECTS (GATE POSTS, BOLLARDS, STREET POLES, ETC.) ALONGSIDE INTERIOR STREETS AND DRIVING AISLES WITH A DESIGN SPEED OF 25MPH OR LESS, THE MINIMUM CLEAR ZONE IS 2.5 FEET FROM THE FACE OF THE CURB (TYPE D OR F), OR 6 FEET FROM THE EDGE OF THE TRAVEL LANE, BOTH PUBLIC AND PRIVATE.

NOTE:

- COMBUSTIBLE CONSTRUCTION REQUIRES TEMPORARY FIRE LANES AND HYDRANT INSTALLATION PRIOR TO COMBUSTIBLES ON SITE.
- BUILDINGS USING VERTICAL OR HORIZONTAL LIGHT-FRAME CONSTRUCTION IN ANY PORTION OF THE STRUCTURE SHALL BE MARKED WITH A SIGN AS REQUIRED BY FLORIDA STATE STATUTE 633-027 AND THE SIGN SHALL BE REQUIRED TO COMPLY WITH THE FLORIDA ADMINISTRATIVE CODE 69A-3.012 AND/OR 69A-60.0081. SIGN MUST BE 8 INCHES BY 8 INCHES.
- SURFACE MATERIAL TO BE USED FOR ROADWAYS, DRIVE AISLES, PARKING STALLS AND DRIVEWAYS SHALL BE ASPHALT PAVEMENT.
- ALL UTILITY LINES WILL BE RAN UNDERGROUND.
- ACCESSORY STRUCTURE INCLUDING DUMPSTER ENCLOSURES SHALL MATCH THE STYLE, FINISH AND COLOR OF THE MAIN BUILDING.
- ALL TELEPHONES, VENDING MACHINES ETC. ARE TO BE CONFINED TO THE INTERIOR OF THE BUILDING (AS APPLICABLE).
- ALL NUISANCE EXOTIC VEGETATION EXISTING WITHIN DEVELOPMENT PROJECT SITE PROPERTY MUST BE REMOVED IN CONJUNCTION WITH SITE DEVELOPMENT.
- THERMOPLASTIC PAVEMENT MARKINGS SHALL BE REQUIRED ON EXISTING/PROPOSED DRIVEWAYS THAT CONNECT TO THE COUNTY RIGHT-OF-WAY (ROW) AND PROPOSE PAVEMENT MARKINGS WITHIN 25' OF THE COUNTY ROW.
- ALL NUISANCE EXOTIC VEGETATION EXISTING WITHIN DEVELOPMENT PROJECT SITE PROPERTY MUST BE REMOVED IN CONJUNCTION WITH SITE DEVELOPMENT

PROJECT LEGEND:

- (A) REQ'D 30" R1-1, HI-INTENSITY STOP SIGN
- (B) REQ'D 24" W SOLID WHITE THERMOPLASTIC STOP BAR PER FDOT INDEX #711-001, CURRENT DESIGN STANDARDS.
- (C) REQ'D CROSS-WALK PER FDOT INDEX #711-001, CURRENT DESIGN STANDARDS.
- (D) MONUMENT SIGN
- (E) REQ'D R7-8 "HANDICAP SIGN" ENTRY AND EXIT GATES
- (F) REQ'D R6-1L "ONE WAY SIGN"
- (G) REQ'D R5-1 "DO-NOT-ENTER SIGN"
- (H) REQ'D 5' CONCRETE SIDEWALK
- (I) REQ'D STREET LIGHT (TYP)
- (J) DUMPSTER ENCLOSURE
- (K) REQ'D ADA MAT (FDOT INDEX 520-02)

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ISSUE DATE COMMENTS

BROWARD - ZEPHYRHILLS STORAGE FACILITY

6923 GALL BLVD
ZEPHYRHILLS, FL 33542

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SITE PLAN

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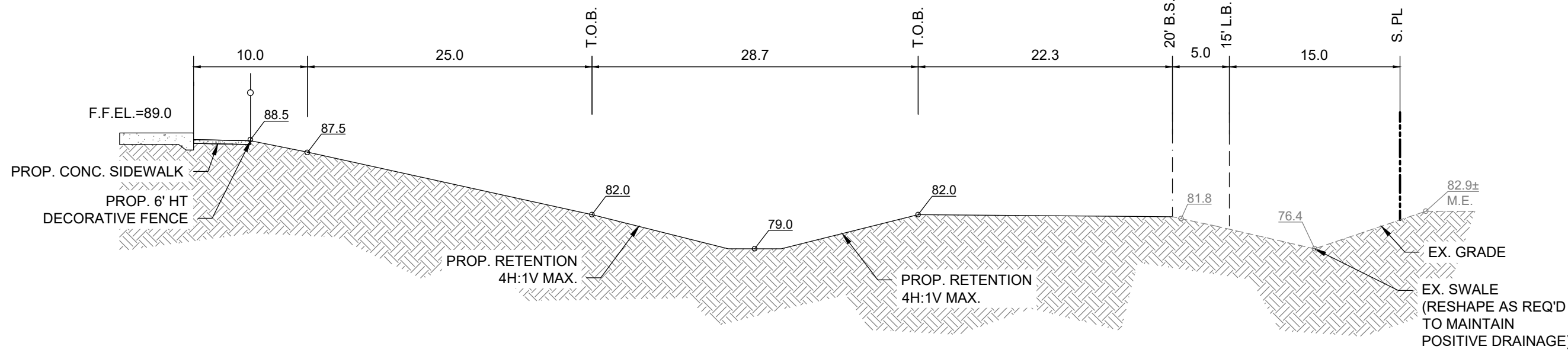
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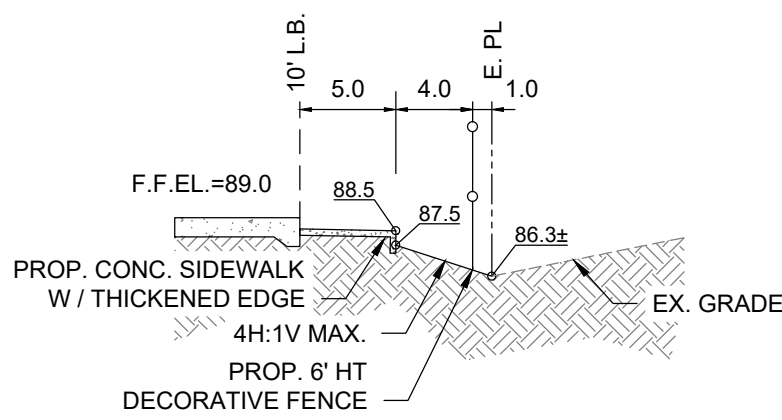
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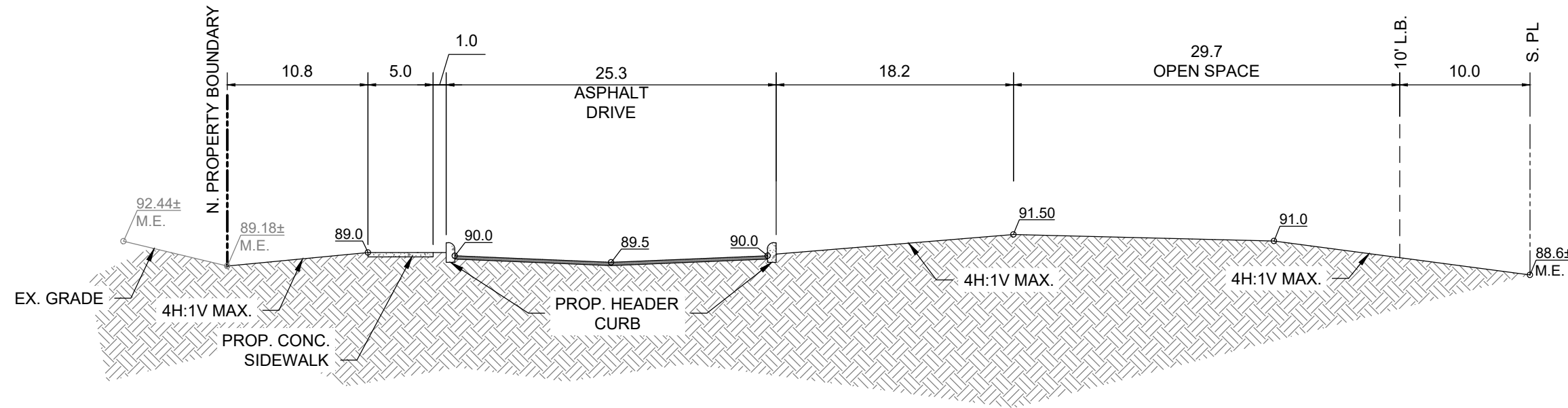
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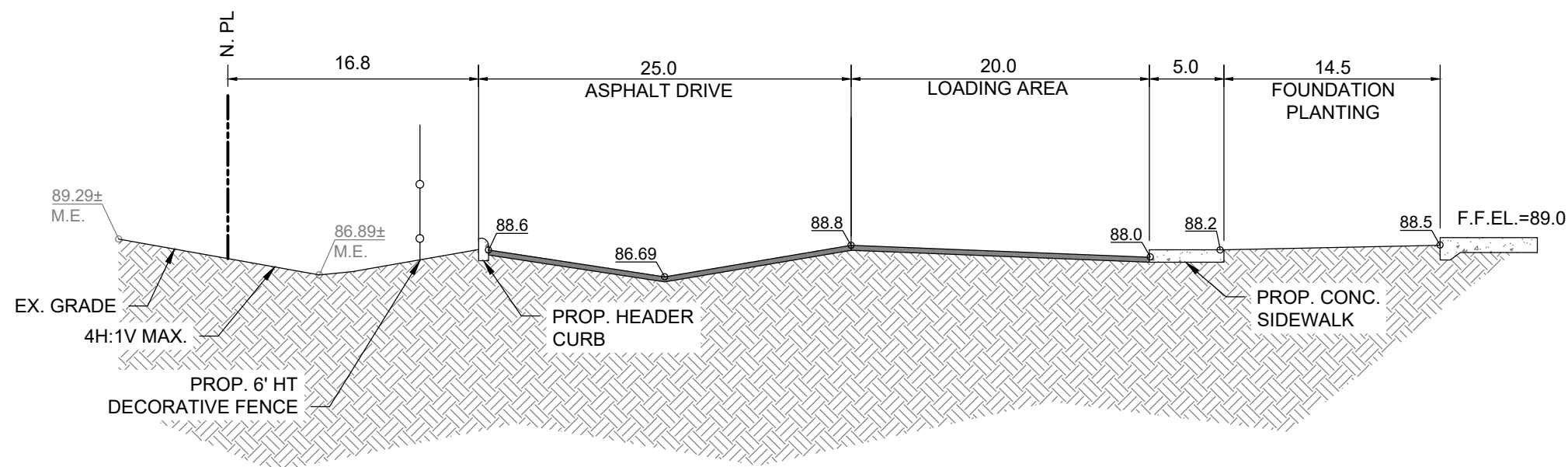
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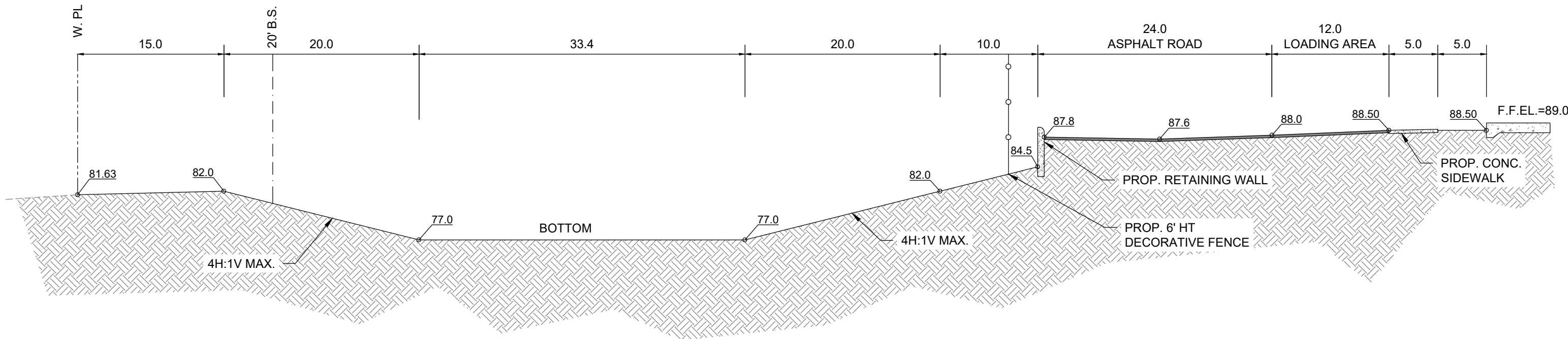
SECTION B
SCALE: 1"=10'



SECTION C
SCALE: 1"=10'



SECTION D
SCALE: 1"=10'



SECTION E
SCALE: 1"=10'

- GRADING LEGEND**
- EXISTING GRADE
 - PROPOSED STORM INLET
 - PROPOSED SPOT ELEVATION
 - PROPOSED EDGE OF PAVEMENT ELEVATION
 - PROPOSED TOP OF CURB ELEVATION
 - PROPOSED DRAINAGE PATTERN
 - PROPOSED STORM DRAIN PIPE

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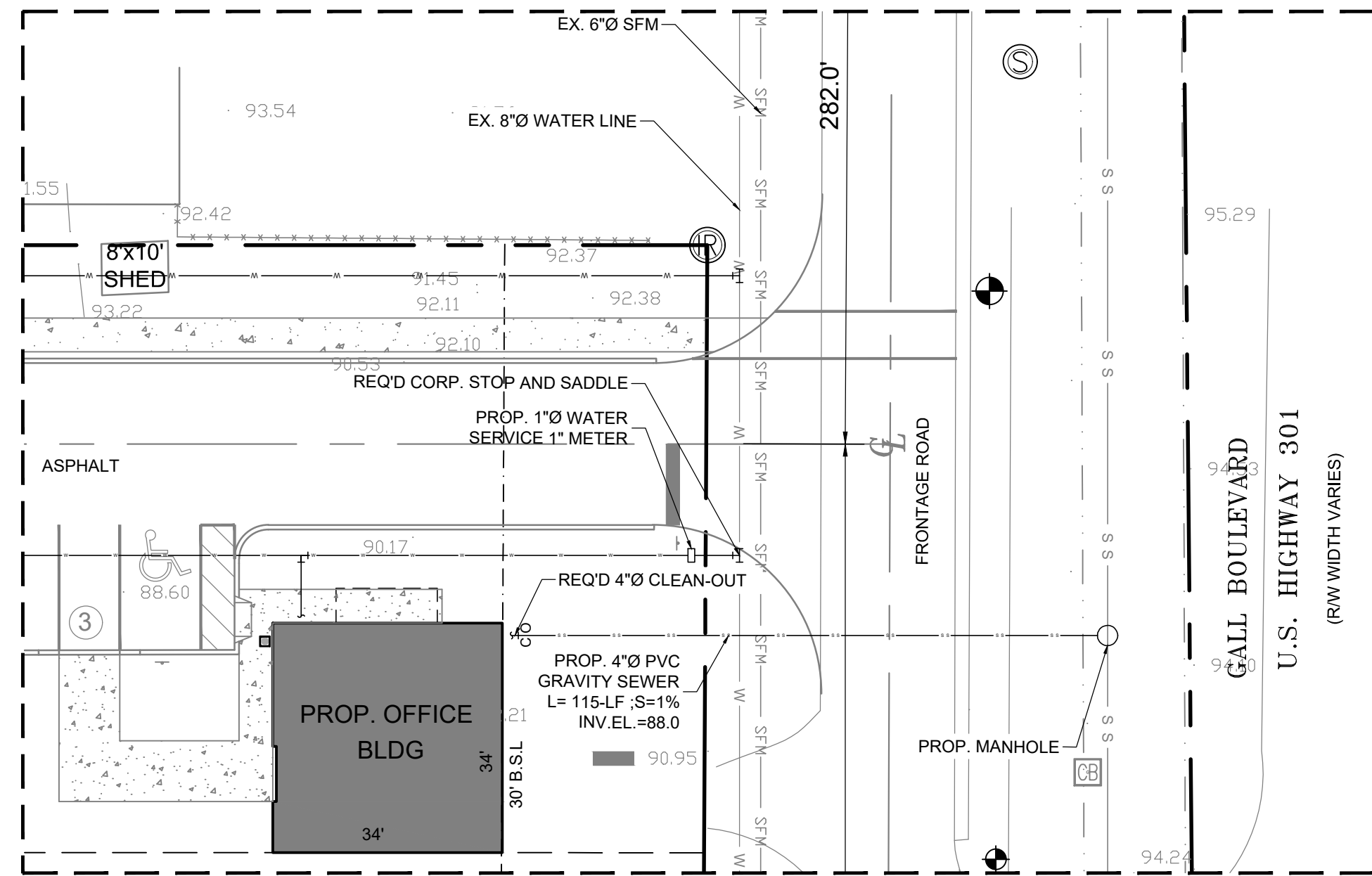
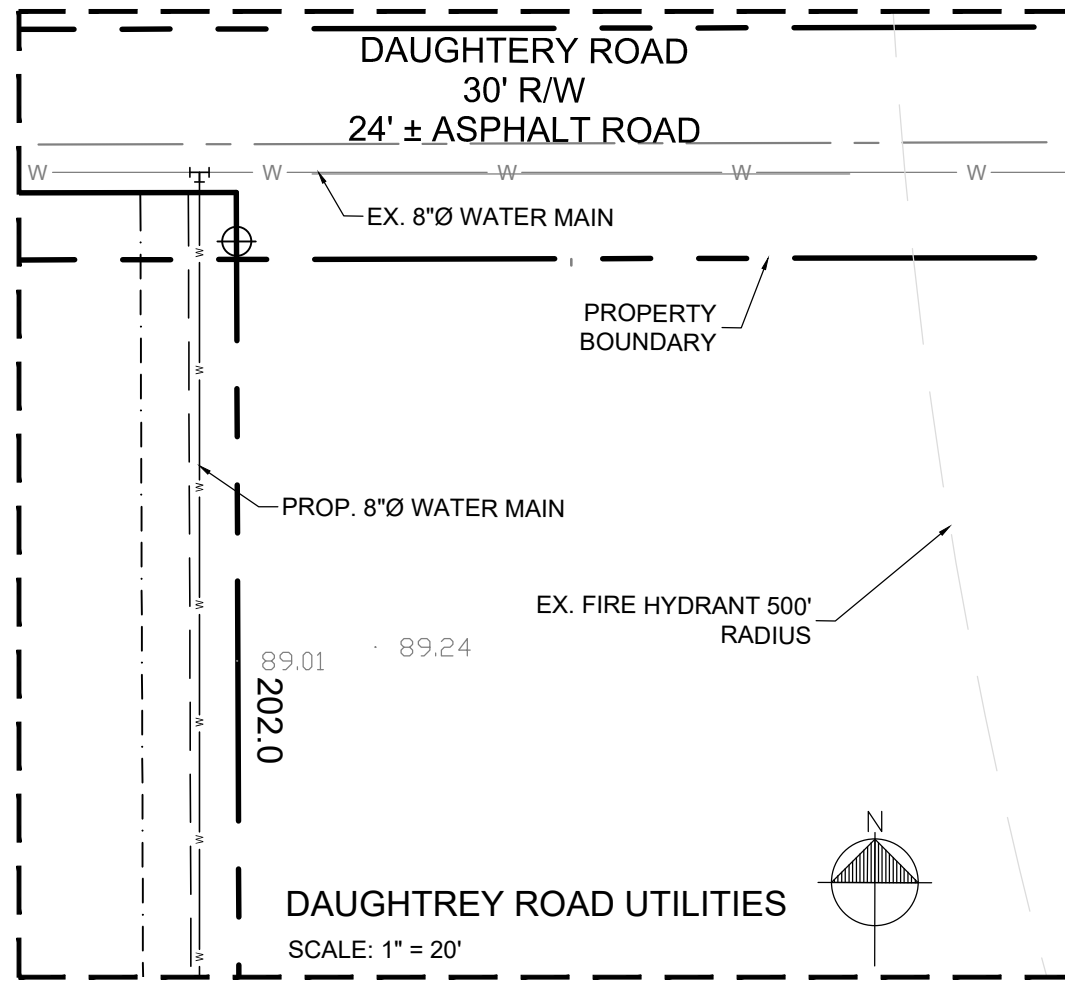
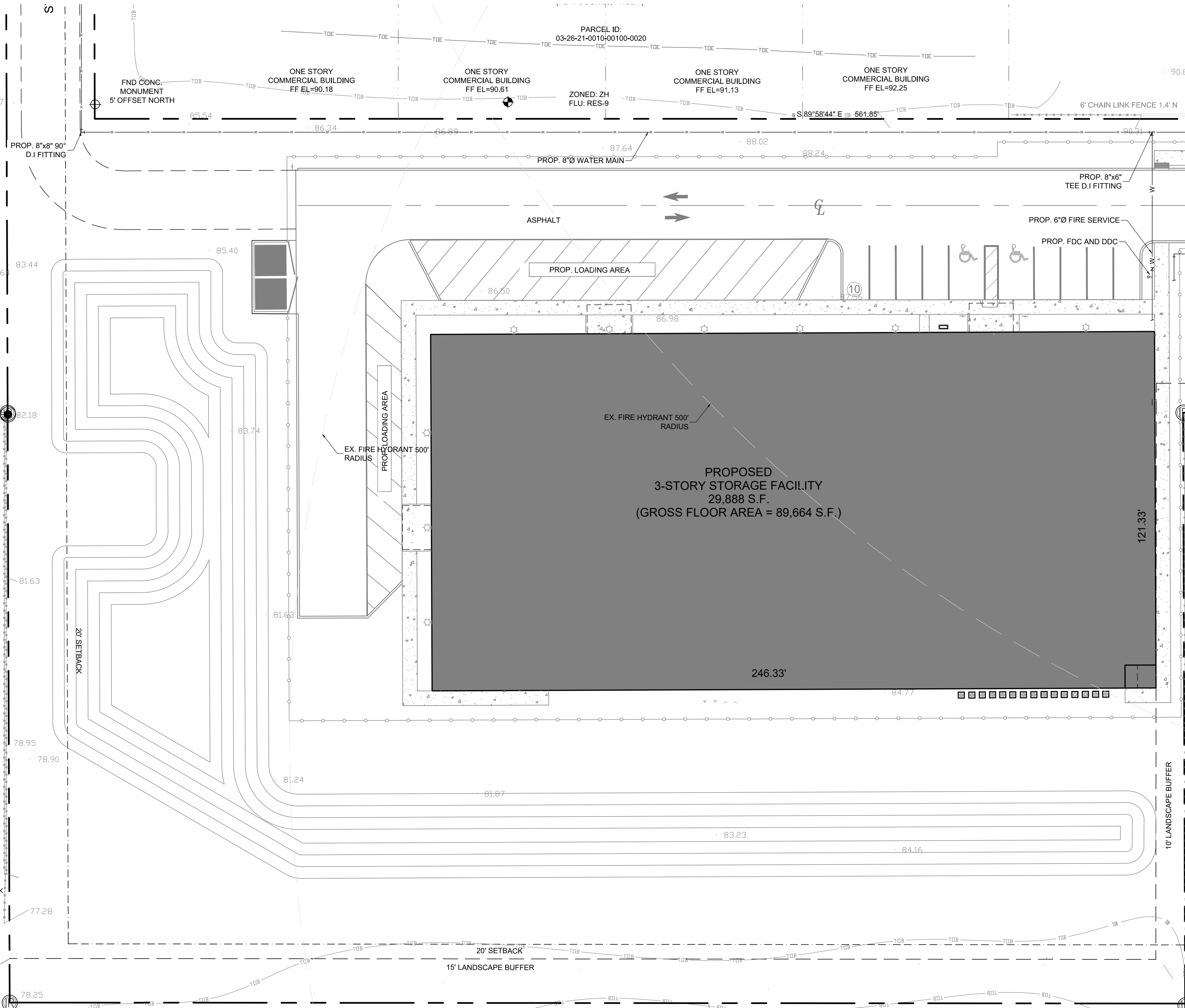
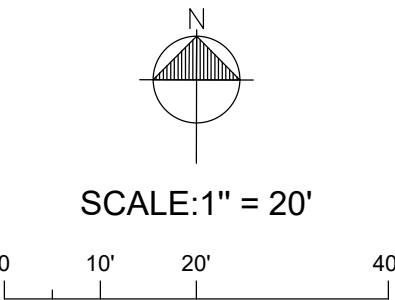
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6923 GALL BLVD ZEPHYRHILLS, FL 33542			
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SECTIONS	JWM	JWM	1"=20'
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BROWARD - ZEPHYRHILLS STORAGE FACILITY

6923 GALL BLVD
ZEPHYRHILLS, FL 33542

UTILITY PLAN

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JWM

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DATE
COMMENTS

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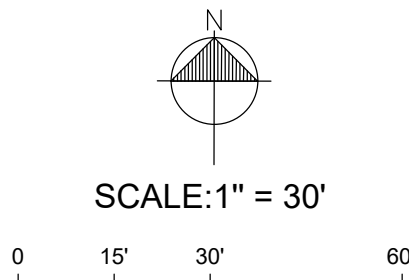
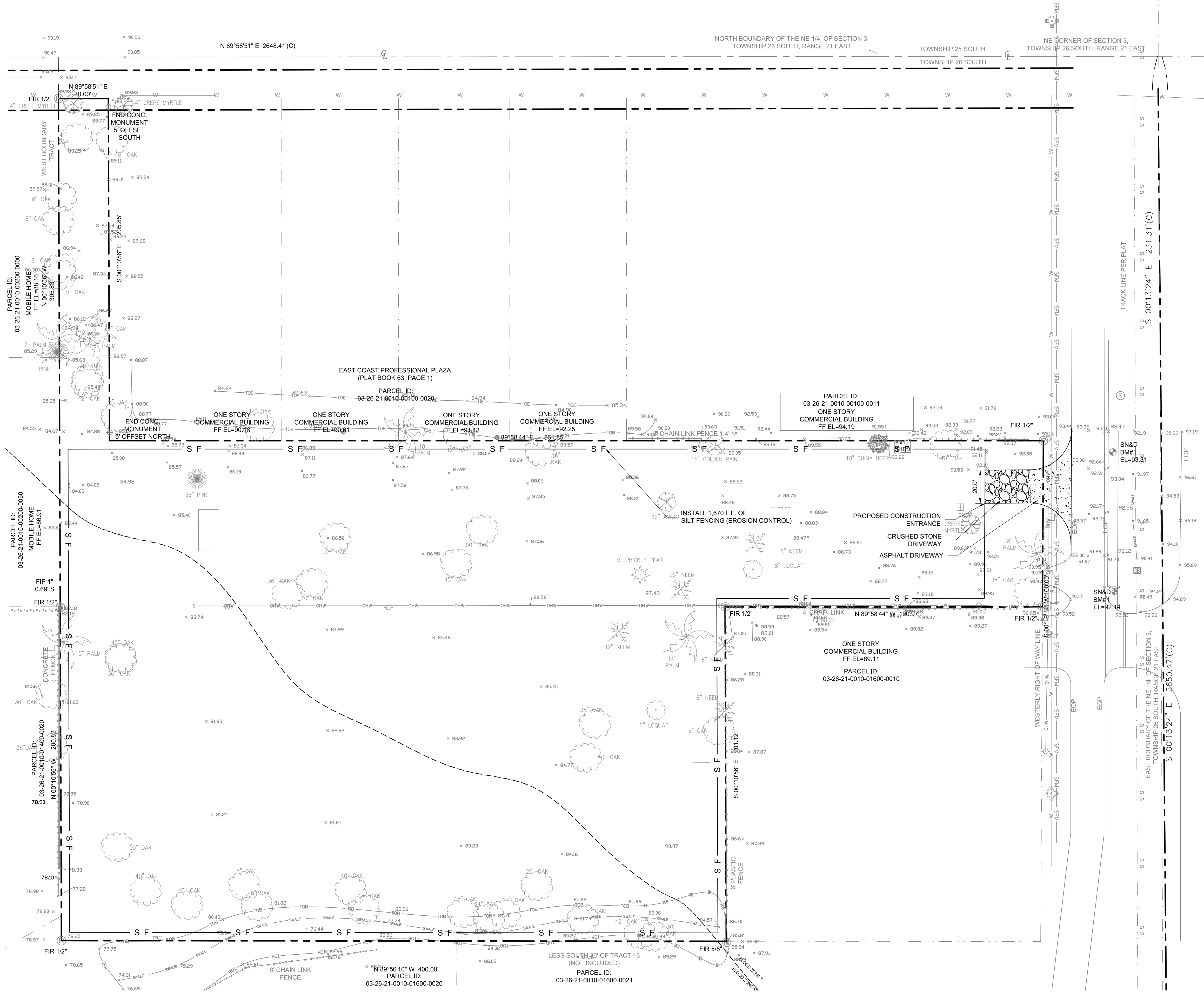
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- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

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BROWARD - ZEPHYRHILLS STORAGE FACILITY

6923 GALL BLVD
ZEPHYRHILLS, FL 33542

STORMWATER POLLUTION PREVENTION PLAN

DRAWN BY
WBD

APPROVED BY
JWM

SCALE:
1" = 30'

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EROSION CONTROL NOTES

1. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED, COVERED OR CONTAINED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED.
6. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
7. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, SLOPE DRAIN STRUCTURE OR APPROVED CONTROL.
8. SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM WATER SYSTEM, DITCH OR CHANNEL. ALL STORM WATER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
9. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION.
10. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT CONTROLS. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
11. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE WITH CURBS AND GUTTERS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND DISTURBING ACTIVITIES.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
13. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND EROSION AT ALL TIMES DURING CONSTRUCTION.
14. EROSION CONTROL DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN INDEX NUMBERS 101, 102 AND 103 OF F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS AND COUNTY PERMITS.
15. CONTRACTOR IS RESPONSIBLE FOR ALL SURFACE WATER DISCHARGES, RAINFALL RUN OFF OR DEWATERING ACTIVITIES.
16. CONTRACTOR MUST INCORPORATE ALL BMP'S NECESSARY TO MEET OR EXCEED STATE WATER QUALITY AND SWPPP REQUIREMENTS.
17. THE POLLUTION PREVENTION PLAN IS A MINIMUM GUIDELINE ONLY. ADDITIONAL BMP'S MAY BE NECESSARY AT CONTRACTOR'S EXPENSE.
18. NOI TO BE POSTED ON SITE.
19. DEWATERING ACTIVITIES:
 - A - DISCHARGE MUST NOT EXCEED STATE WATER QUALITY STANDARDS.
 - B - CONTRACTOR MUST HAVE A TRANSFERABLE SURVIV CONSUMPTIVE USE PERMIT KNOWN AS A "NOTICED GENERAL PERMIT FOR SHORT TERM CONSTRUCTION DE-WATERING".
 - C - NO HYDRAULIC PUMPS MAY BE USED FOR DEWATERING UNLESS APPROVED BY THE WATER MANAGEMENT DISTRICT FOR THAT AREA.
 - D - NO TURBID DISCHARGE. TURBIDITY READINGS ARE REQUIRED ONCE A WEEK AND MUST BE REPORTED TO THE PROJECT ENGINEER.

NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

TRENCH DETAIL

TYPE IV SILT FENCE-N.T.S.

INSTALLATION WITHOUT TRENCHING

TYPE IV SILT FENCE-N.T.S.

TYPE I. DOT FOR WATERS WITH LOW CURRENTS (NO MORE THAN ONE FOOT PER SECOND) FIVE FEET PER SECOND; DEEPER LAKES, STREAMS, INTERCOASTAL AND TIDAL AREAS. INCLUDES AN ENCAPSULATED STEEL LOAD CABLE ALONG TOP OF BARRIER AND 8"X8"X4" FLOTATION LOGS (6"X6"X4")

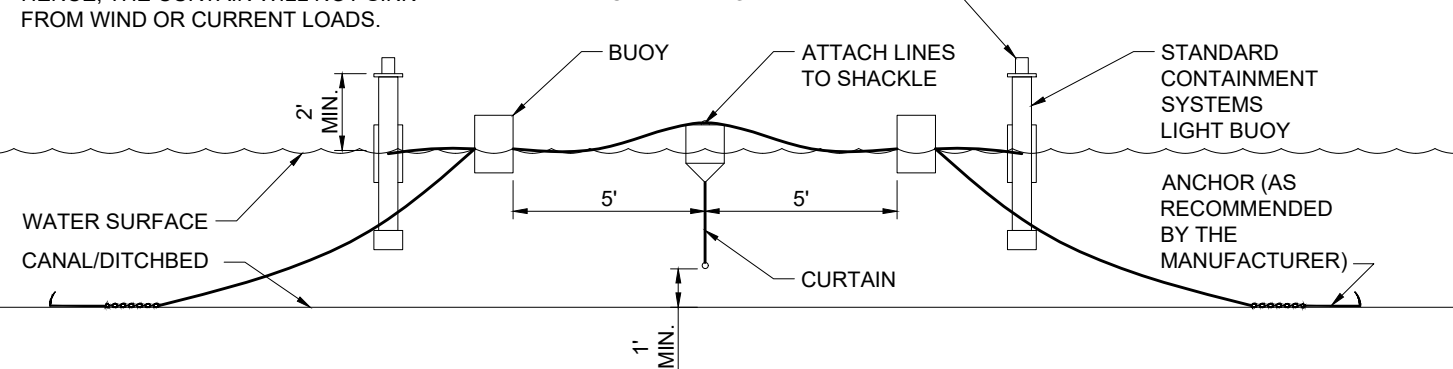
TYPE 2. DOT FOR HIGHER CURRENT WATERS (UP TO FIVE FEET PER SECOND); DEEPER LAKES, STREAMS, INTERCOASTAL AND TIDAL AREAS. INCLUDES AN ENCAPSULATED STEEL LOAD CABLE ALONG TOP OF BARRIER AND 8"X8"X4" FLOTATION LOGS. WEAR STRESS POINTS ARE REINFORCED WITH SHIELDS.

TYPE 3. DOT IS SIMILAR TO TYPE 2. DOT EXCEPT THAT POLYPROPYLENE FILTER FABRIC IS PERMANENTLY INSERTED INTO THE BARRIER SKIRT TO MEET SOME STATE'S SPECIFICATIONS.

BLOW-UP OF SHACKLE CONNECTION

NOTE: ANCHORING TO BUOYS AS SHOWN REMOVES ALL VERTICAL FORCES FROM THE CURTAIN, HENCE, THE CURTAIN WILL NOT SINK FROM WIND OR CURRENT LOADS.

AUTOMATIC FLASHING LIGHT (ON AT DUSK-OFF AT DAWN) 100' ON CENTER SHALL BE USED IN NAVIGABLE CHANNELS ONLY



ORIENTATION WHEN INSTALLED (TIDAL SITUATION-TYPE III)-N.T.S.

POLY WHATTLES OR GEOHAY CURB INLET FILTER-N.T.S.

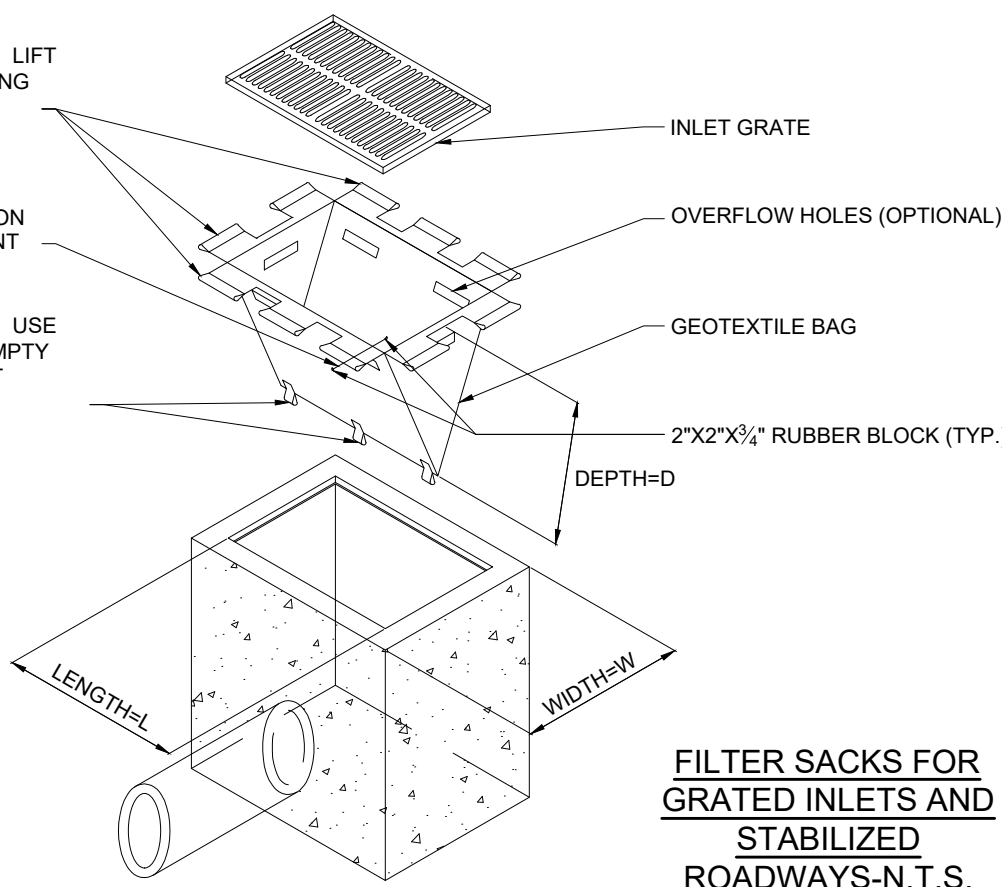
LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS.
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4633	150 LBS.
MULLEN BURST	ASTM D-3786	800 P.S.I.
TEAR/ZIP/ZIP TEAR	ASTM D-4353	80%
UV RESISTANCE	ASTM D-4355	80%
APPEARANT OPENING SIZE	ASTM D-4751	40 US Sieve
FLOW RATE	ASTM D-4491	40 GAL./MIN./SQ. FT.
PERMITTIVITY	ASTM D-4491	0.55 SEC. -1
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS.
GRAB TENSILE ELONGATION	ASTM D-4632	20%
PUNCTURE	ASTM D-4633	135 LBS.
MULLEN BURST	ASTM D-3786	420 P.S.I.
TEAR/ZIP/ZIP TEAR	ASTM D-4353	45 LBS.
UV RESISTANCE	ASTM D-4355	80%
APPEARANT OPENING SIZE	ASTM D-4751	20 US Sieve
FLOW RATE	ASTM D-4491	200 GAL./MIN./SQ. FT.
PERMITTIVITY	ASTM D-4491	1.5 SEC. -1

SOCK-PIPE OR ROCK BAG INLET FILTER-N.T.S.

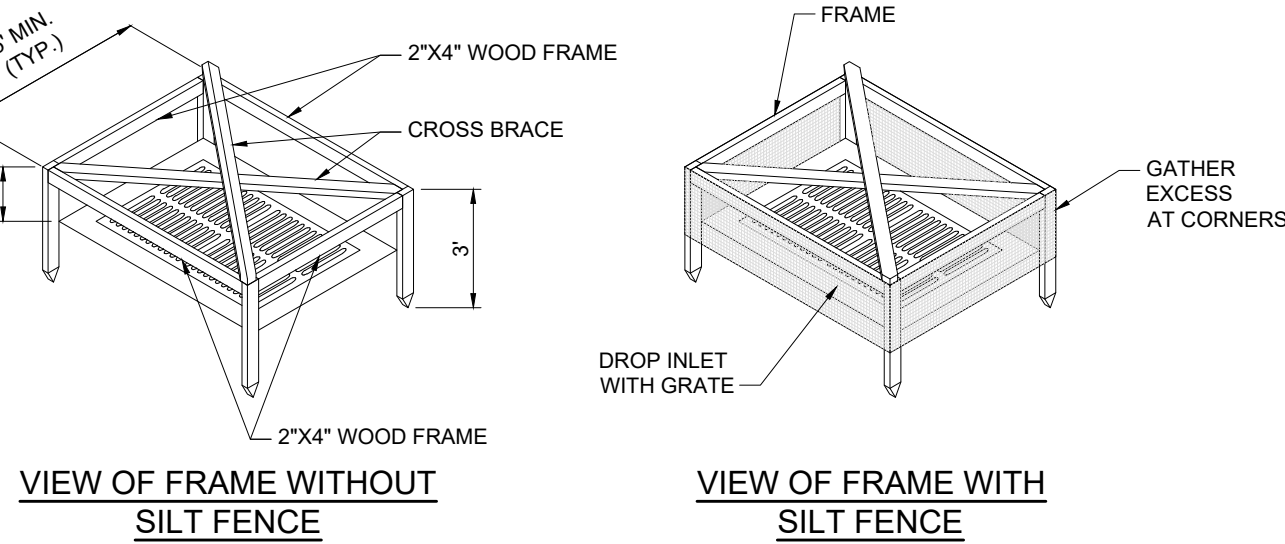
LOOPS SIZED FOR 1" REBAR. LIFT FILTER BAG FROM INLET USING REBAR FOR HANDLES.

1/4" BRIGHTLY COLORED NYLON ROPE, EXPANSION RESISTANT

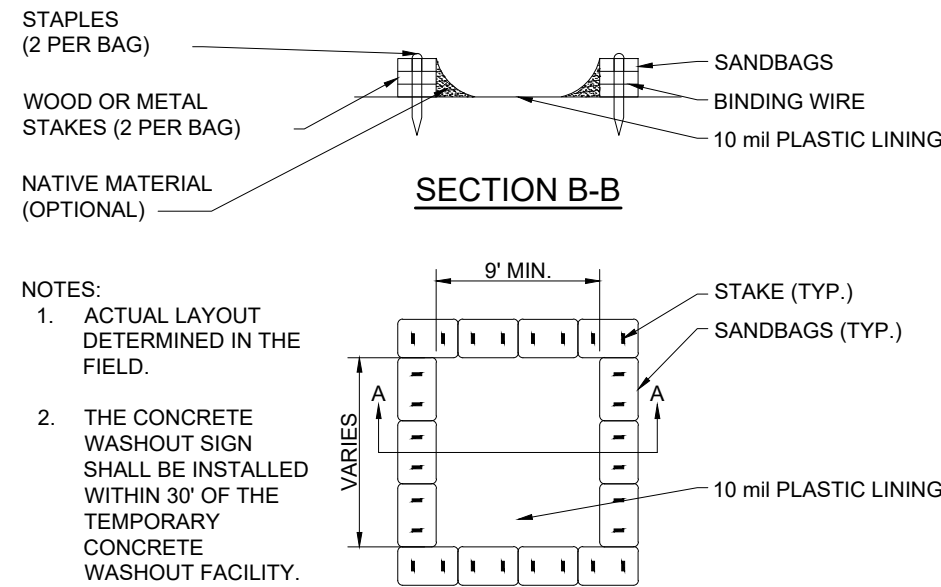
LOOPS SIZED FOR 1" REBAR. USE REBAR FOR A HANDLE TO EMPTY FILTER SACK AT A SEDIMENT COLLECTION LOCATION.



FILTER SACKS FOR GRATED INLETS AND STABILIZED ROADWAYS-N.T.S.

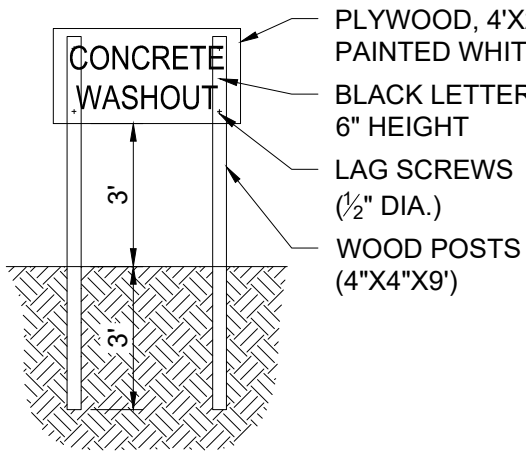


SILT FENCE INLET PROTECTION-N.T.S.



TYPE "ABOVE GRADE" WITH SANDBAGS

CONCRETE & STUCCO WASTE MANAGEMENT-N.T.S.

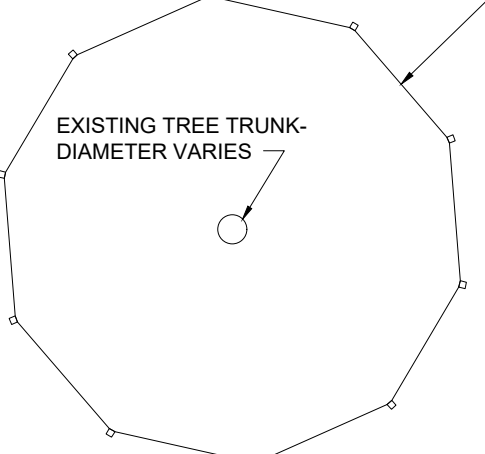


CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)

NOTES:

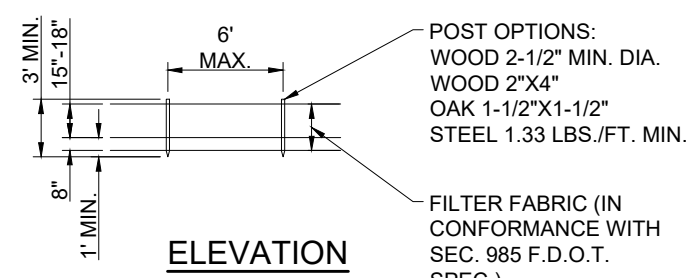
1. ALL TREES RETAINED ON A SITE SHALL BE PROTECTIVELY BARRICADED BEFORE AND DURING CONSTRUCTION ACTIVITIES.
2. UNDERGROUND UTILITY LINES SHALL BE ROUTED AROUND EXISTING TREES TO THE OUTSIDE OF THE DRIFLINE WHERE ABLE.
3. INSTALLATION OF FENCES AND WALLS SHALL TAKE INTO CONSIDERATION THE ROOT SYSTEMS OF EXISTING TREES.
4. FENCE/BARRICADE SHALL BE INSTALLED AT PERIMETER OF ALL TREES OR GROUP OF TREES TO BE PRESERVED. FENCE SHALL BE MAINTAINED DURING CONSTRUCTION.
5. DO NOT PARK HEAVY EQUIPMENT ON TREE ROOTS. DO NOT ADD FILL 4" TO 6" AROUND TREE. ALL WORK WITHIN THE CRZ MUST BE DONE BY HAND.

ELEVATION



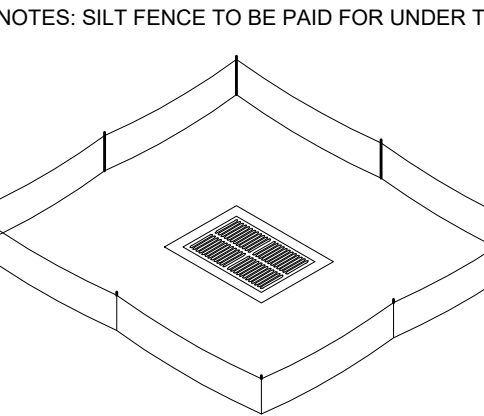
PLAN

PROTECTIVE FENCING FOR TREES-N.T.S.



ELEVATION

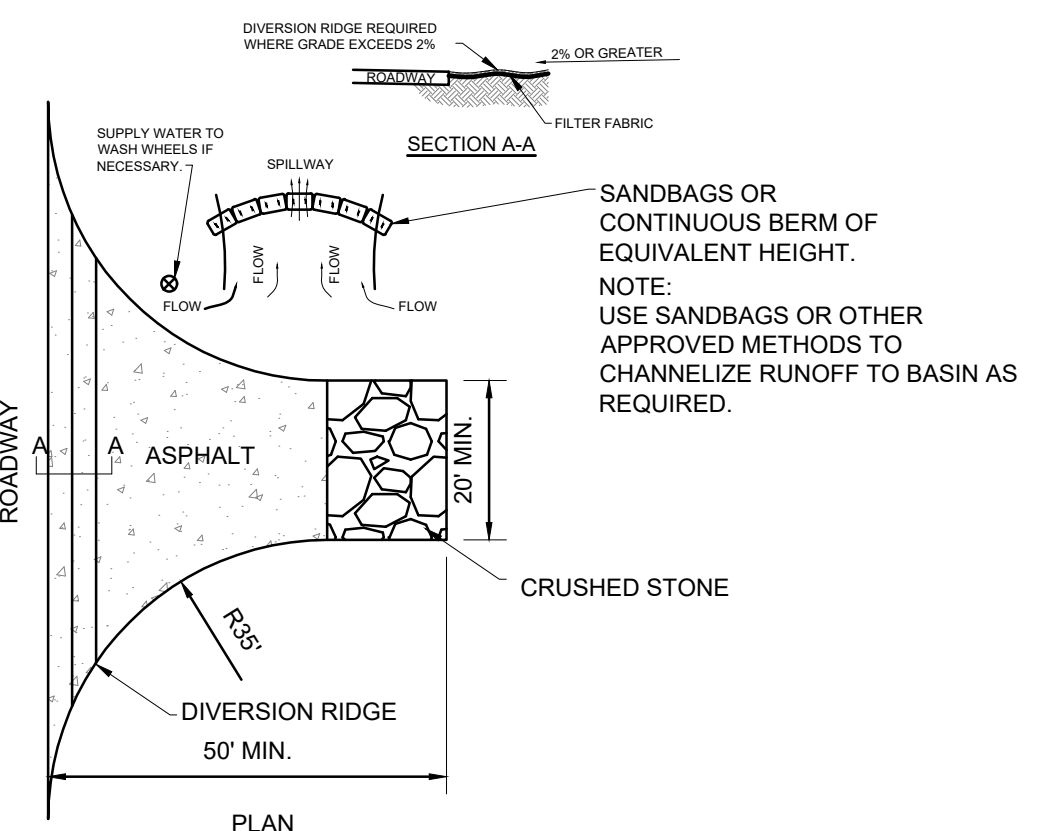
SECTION



TYPE III SILT FENCE

NOTE: SPACING FOR TYPE III FENCE TO BE IN ACCORDANCE WITH CHART I, SHEET 1 OF 3 AND DITCH INSTALLATIONS AT DRAINAGE STRUCTURES SHEET 2 OF 3

SILT FENCE APPLICATIONS-N.T.S.



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT-N.T.S.



Mills, Short & Associates

WEBSITE: www.MillsShortAssociates.com
PHONE: 772.226.7282
C.A. #: 30698
700 22nd Place, Suite 2C/2D
Vero Beach, Florida 32960

SEAL

ISSUE	DATE	COMMENTS

BROWARD - ZEPHYRHILLS STORAGE FACILITY
6923 GALL BLVD
ZEPHYRHILLS, FL 33542
THIS SHEET
STORMWATER POLLUTION PREVENTION DETAILS
CHECKED BY JWM
APPROVED BY JWM
SCALE: N/A

PROJ. NO. 21-2420
DATE 10-21-2022
SHEET NO.

C-9

Location Map



Site Data

PARCEL ID: 03-26-21-0010-00100-0020

ZONING: C2

LAND USE: ROR

Sheet Key

- L-1 Landscape Plan & Landscape Data
- L-2 Tree Management Plan
- L-3 Plant List, Planting Details, & Specifications

Landscape Data

NORTH PROPERTY LINE BUFFER:			
REQUIRED:			562 LF
1 CANOPY TREE / 60 LF	REQ. 9	PROV. 9	
SOUTH PROPERTY LINE BUFFER:			
REQUIRED:			591 LF
1 CANOPY TREE / 60 LF	REQ. 10	PROV. 10 (EXISTING)	
EAST PROPERTY LINE BUFFER:			
REQUIRED:			302 LF
1 CANOPY TREE / 60 LF	REQ. 5	PROV. 5	
WEST PROPERTY LINE BUFFER:			
REQUIRED:			301 LF
1 CANOPY TREE / 60 LF	REQ. 5	PROV. 5	
VUA LANDSCAPING			
LANDSCAPE AREA	REQ.	PROV.	
(10% OF TOTAL VUA AREA 22,438 SF x .10)	2,244	2,302	
TREES (1 TREE / 200 SF)	11	11	

Existing Tree Symbol Legend

- + EXISTING TREE TO REMAIN
- ✕ EXISTING TREE / PALM TO BE REMOVED

Tree Mitigation Requirements

OAK TREES REMOVED REQUIRING MITIGATION (INCHES)	398
EXISTING OAK TREES PRESERVED FOR MITIGATION (INCHES)	601

Tree Mitigation Notes

- ALL INVASIVE EXOTIC VEGETATION SHALL BE REMOVED FROM SITE.
- EXISTING TREES THAT ARE TO REMAIN SHALL BE BARRICADED ACCORDING TO INDIAN RIVER COUNTY TREE PROTECTION AND LAND CLEARING ORDINANCE.
- NO VEGETATION SHALL BE REMOVED FROM THE SITE UNTIL A TREE REMOVAL PERMIT HAS BEEN ISSUED.
- ALL EXISTING TREE MEASUREMENTS ARE IN DBH.
- THIS PLAN PROVIDES FOR THE MITIGATION OF HEALTHY PROTECTED AND SPECIMEN HARDWOOD TREES GREATER THAT 10" DBH THAT ARE PROPOSED FOR REMOVAL.
- THE APPLICABLE MITIGATION RATIO SHALL BE 1" DBH OF REPLACEMENT OAK TREES FOR EVERY 1" DBH OF OAK TREES DESTROYED.

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Plant List

Key	Qty	Scientific Name	Common Name	Size	Spacing
PALMS					
CH^	3	Chamaerops humilis	European Fan Palm	5' OA., multi trunk	AS
SP^	27	Sabal palmetto	Sabal Palm	12', 18', 24' CT, staggered heights	AS
CANOPY TREES					
MG^	9	Magnolia grandiflora	Southern Magnolia	12'x 5', 3" DBH min.	AS
QV^	28	Quercus virginiana	Live Oak	12'x 6', 2" DBH min.	AS
TD^	15	Taxodium distichum	Bald Cypress	10'x 4', 2" DBH min.	AS
UNDERSTORY TREES					
LI^	12	Lagerstroemia fauriei 'Muskogee'	Muskogee Grape Myrtle	8' x 5', multi stem	AS
SHRUBS & GROUNDCOVERS					
DE^	9	Dioon edule	Mexican Fern Palm	3' x 3'	AS
JP^	282	Juniperus chinensis 'Parsonii'	Parson's Juniper	3g, 8"x 16", full	24" OC
IV^	163	Ilex vomitoria 'Schillings'	Stokes Dwarf Yaupon Holly	3g, 14"x 16", full	24" OC
MF^	497	Myrcianthes fragrans	Simpson Stopper	30"x 24", full	48" OC
MUH^	272	Muhlenbergia capillaris	Pink Muhly Grass	3g, 24"x 24"	36" OC
RI^	30	Raphiolepis indica	Indian Hawthorne	3g, 18"x 18", full	24" OC
TDJ^	67	Tabernaemontana divaricata	Crape Jasmine	7g, 30"x 30"	36" OC
VOD^	230	Viburnum obovatum 'densa'	Walter's Viburnum	7g, 24"x 24"	30" OC

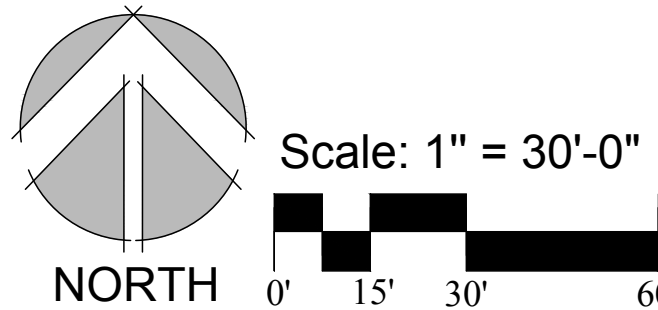
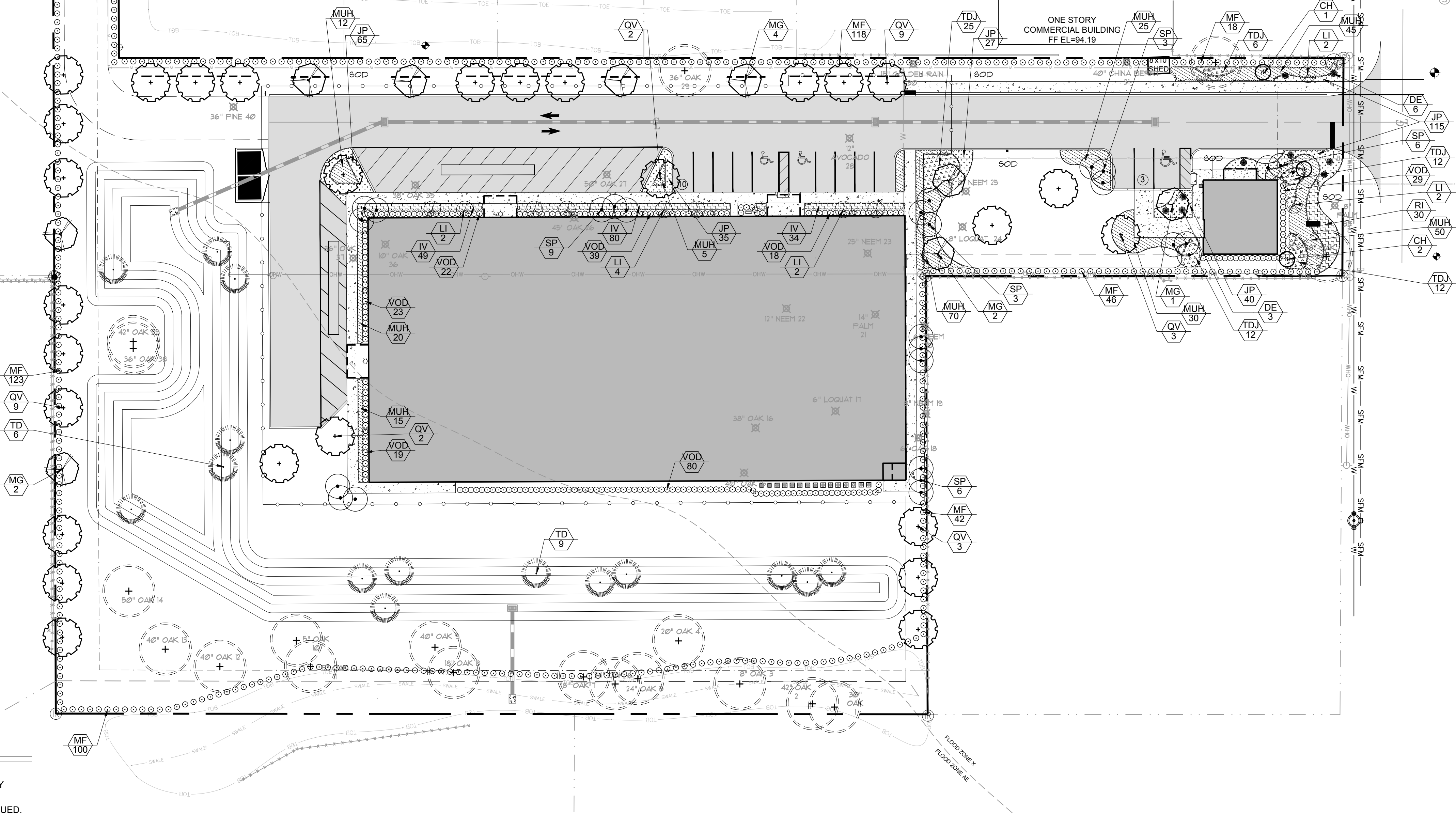
*DENOTES FLORIDA NATIVE PLANT MATERIAL

*DENOTES DROUGHT TOLERANT SPECIES

ALL PLANT MATERIAL SHALL BE MINIMUM FLORIDA #1 GRADE PER THE FLORIDA GRADES & STANDARDS FOR NURSERY PLANTS 2015 EDITION

Misc.

SOD - Stenotaphrum secundatum 'Floratan' - St. Augustine Floratan - solid sod, laid tight



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772.341.9322
www.McCartyLandPlanning.com
Mike@McCartyLandPlanning.com

Broward Development
Storage Facility
Pasco County, Florida
Landscape Plan



Daniel
McRae
Sugg, P.L.A.
ASLA

Digitally signed
by Daniel McRae
Sugg, P.L.A.
Date: 2022.11.14
14:54:31 -0500

Drawn By _____ DMS

Checked By _____ MM

Scale _____

Drawing Date _____ 1/10/22

_____ 11/11/22

L-1

Location Map



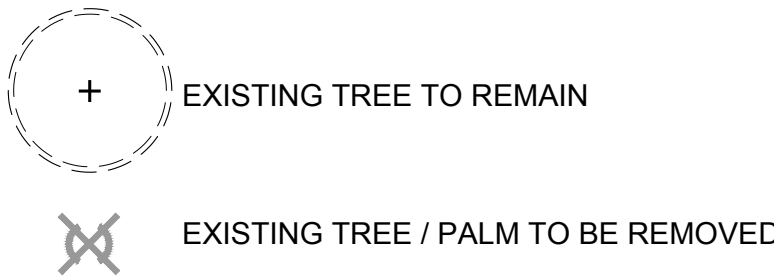
Site Data

PARCEL ID: 03-26-21-0010-00100-0020

ZONING: C2

LAND USE: ROR

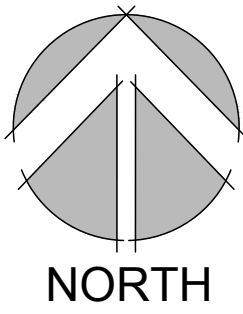
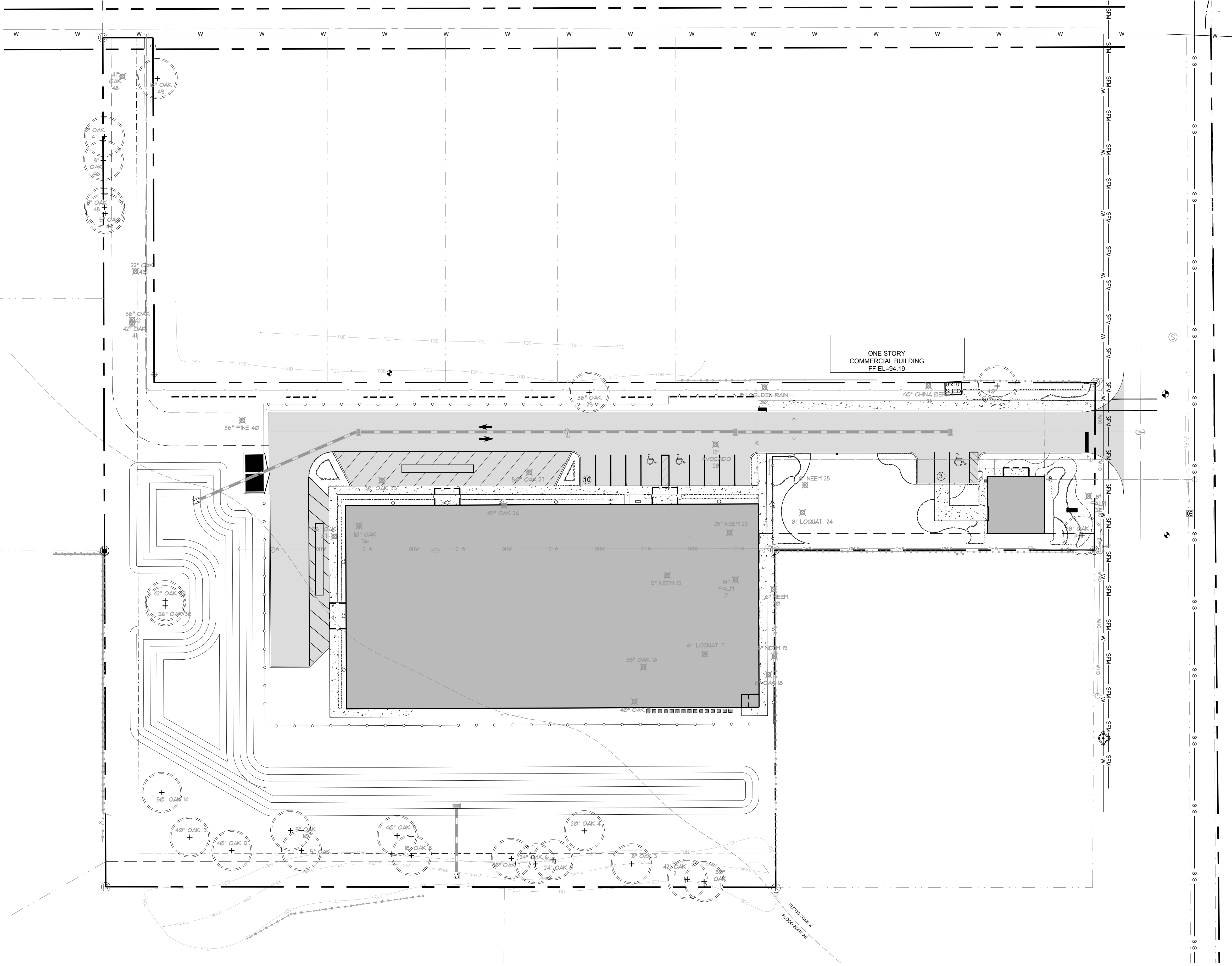
Existing Tree Symbol Legend



Existing Tree Chart

NO.	SPECIES	SPECIFICATION	STATUS	MITIGATION REQ. (INCHES) & (PALMS)	TREE CREDIT
1	OAK	30"	REMAIN		30
2	OAK	42"	REMAIN		42
3	OAK	8"	REMAIN		8
4	OAK	20"	REMAIN		20
5	OAK	24"	REMAIN		24
6	OAK	24"	REMAIN		24
7	OAK	18"	REMAIN		18
8	OAK	18"	REMAIN		18
9	OAK	40"	REMAIN		40
10	OAK	5"	REMAIN		5
11	OAK	5"	REMAIN		5
12	OAK	40"	REMAIN		40
13	OAK	40"	REMAIN		40
14	OAK	50"	REMAIN		50
15	OAK	40"	REMOVE	40	
16	OAK	38"	REMOVE	38	
17	LOQUAT	6"	REMOVE		
18	OAK	6"	REMOVE		
19	NEEM	8"	REMOVE		
20	NEEM	6"	REMOVE		
21	PALM	14"	REMOVE		
22	NEEM	12"	REMOVE		
23	NEEM	25"	REMOVE		
24	LOQUAT	8"	REMOVE		
25	NEEM	8"	REMOVE		
26	OAK	45"	REMOVE	45	
27	OAK	50"	REMOVE	50	
28	AVOCADO	12"	REMOVE		
29	OAK	36"	REMAIN		36
30	GOLDEN RAIN TREE	15"	REMOVE		
31	CHINA BERRY	40"	REMOVE		
32	OAK	40"	REMAIN		40
33	PALM	8"	REMOVE		
34	OAK	38"	REMAIN		38
35	OAK	38"	REMOVE	38	
36	OAK	10"	REMOVE	10	
37	OAK	36"	REMOVE	36	
38	OAK	36"	REMAIN		36
39	OAK	42"	REMAIN		42
40	PINE	36"	REMOVE		
41	OAK	42"	REMOVE	42	
42	OAK	36"	REMOVE	36	
43	OAK	22"	REMOVE	22	
44	OAK	5"	REMAIN		5
45	OAK	8"	REMAIN		8
46	OAK	8"	REMAIN		8
47	OAK	8"	REMAIN		8
48	OAK	41"	REMOVE	41	
49	OAK	16"	REMAIN		16

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Scale: 1" = 30'-0"

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Mike@McCartyLandPlanning.com

Broward Development
Storage Facility
Pasco County, Florida
Tree Management Plan



Daniel
McRae Sugg, PLA, ASLA
Date: 2022-11-10
14:54:47 -0500

Drawn By _____ DMS
Checked By _____ MM
Scale _____
Drawing Date _____ 11/10/22
11/11/22

L-2

Plant Specifications

SPECIES AND SIZE shall conform to those indicated on the drawings. Nomenclature shall conform to STANDARDIZED PLANT NAMES, current edition. All nursery stock shall be in accordance with Grades and Standards for Nursery Plants Parts I & II, latest edition published by the Florida Department of Agriculture and Consumer Services. All plants not otherwise specified as being Florida Fancy or Specimen shall be as determined by the Florida Division of Plant Industry. Specimen means an exceptionally heavy, symmetrical, tightly knit plant, so trained or favored in its development that first appearance is unquestionable and outstandingly superior in form, number of branches, compactness and symmetry.

GENERAL REQUIREMENTS

All plants shall be freshly dug, sound, healthy, vigorous, well branched, and free of disease and insect eggs and larvae, and shall have adequate root systems. Trees for planting rose shall be uniform in size and shape. All materials shall be subject to approval by the Landscape Architect. Where any requirements are omitted from the plant list, the plants furnished shall be normal for the variety. Plants shall be pruned prior to delivery only upon the approval of the Landscape Architect.

CONTAINER GROWN STOCK

All container grown material shall be healthy, vigorous, well rooted plants, and established in the container in which they are sold. The plants shall have tops which are good quality and in a healthy growing condition. An established container grown plant shall be grown in that container sufficiently long enough for the new fibrous roots to have developed so that the root mass will retain its shape and hold together when removed from the container. Plant root bound in containers are unacceptable.

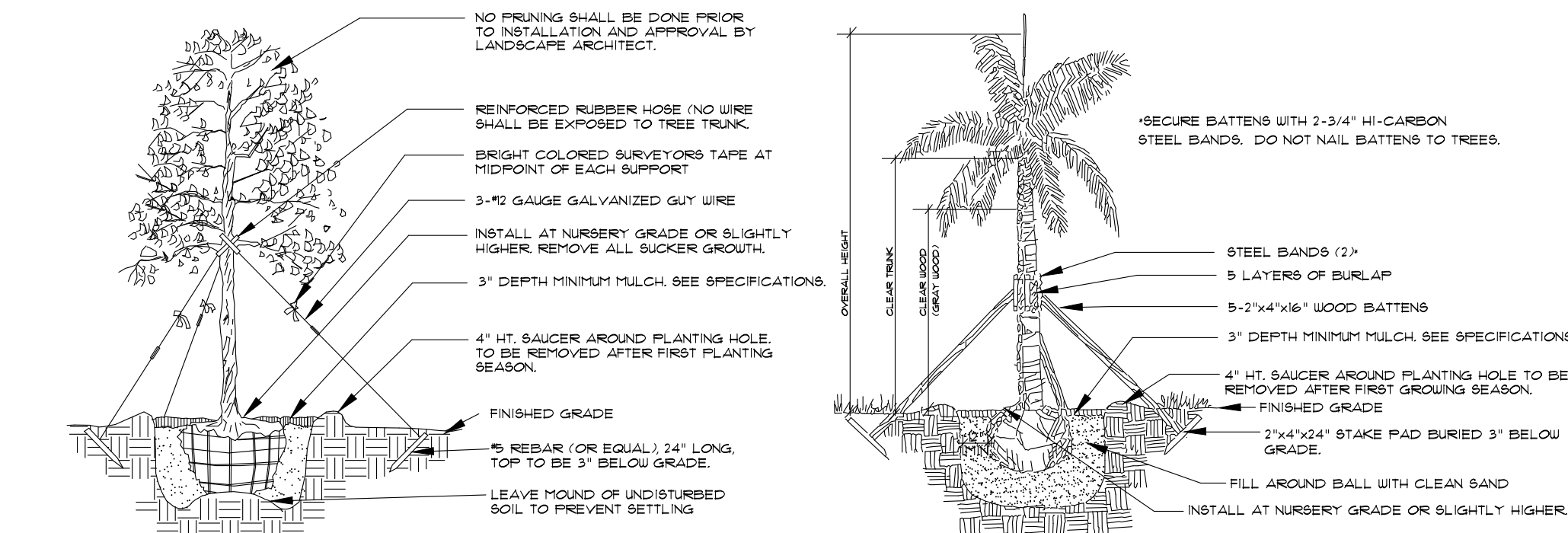
MEASUREMENTS

- Trees:** Height shall be measured from ground to the average height of canopy. Spread shall be measured to the end of branching equally around the crown from the center of the trunk. Measurements are not to include any terminal growth. Single trunk trees shall be free of "Y" crotches that could be points of weak limb structure or disease infestation.
- Shrubs:** Heights shall be measured from the ground to the average points where mature plant growth stops. Spread shall be measured to the end of branching equally around the shrub mass. Measurements are not to include any terminal growth.
- Palms:** Clear Trunk (C.T.) shall be measured from the ground at the time of installation to the point where the mature aged trunk joins the immature or green portion of the trunk or the head.
- Overall height (O.H.) shall be measured from the ground at the time of installation to a point three quarters the length of the unopened bud. Palms with marred or burned trunks will not be accepted.

SOIL

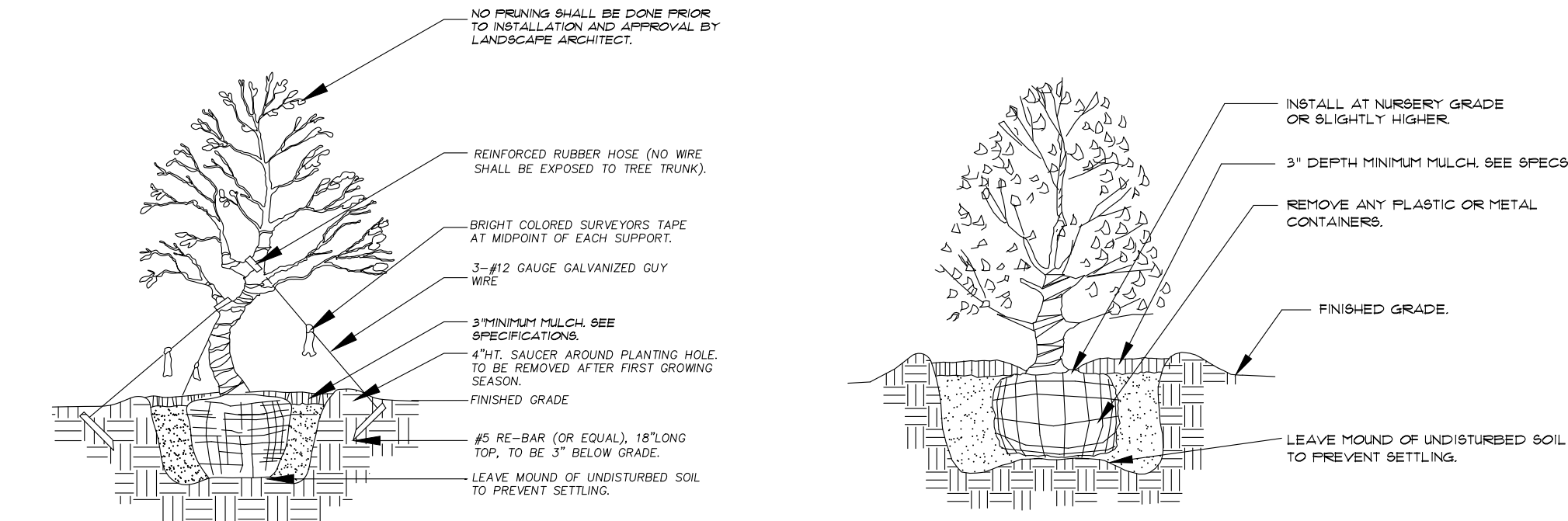
Planting soil for use in preparing backfill for plant pits shall be added at a rate of seventy-five (75%) percent to twenty-five (25%) percent existing soil. This soil mix shall be used in all plant pits except Sabal palms which shall be backfilled with clean sand. Planting soil shall be a fertile, friable natural loessil or loamy character. It shall contain forty (40) to fifty (50) percent decomposed organic matter and shall be free from heavy clay, stones, lime, plants, roots or other foreign materials or noxious grasses (such as Bermuda or nut grass) and noxious weeds. It shall not contain toxic substances which may be harmful to plant growth.

Planting Details



Tree Planting

- SEE SPECIFICATIONS FOR BACKFILL MIXTURE AND FERTILIZATION.
- BRACING - SPECIAL SITE CONDITIONS MAY REQUIRE MODIFICATION TO BRACING TECHNIQUE. LANDSCAPE CONTRACTOR WILL ADEQUATELY BRACE (OR WIRE) ALL TREES TO PREVENT EXCESSIVE MOVEMENT & MAINTAIN A VERTICAL POSITION.

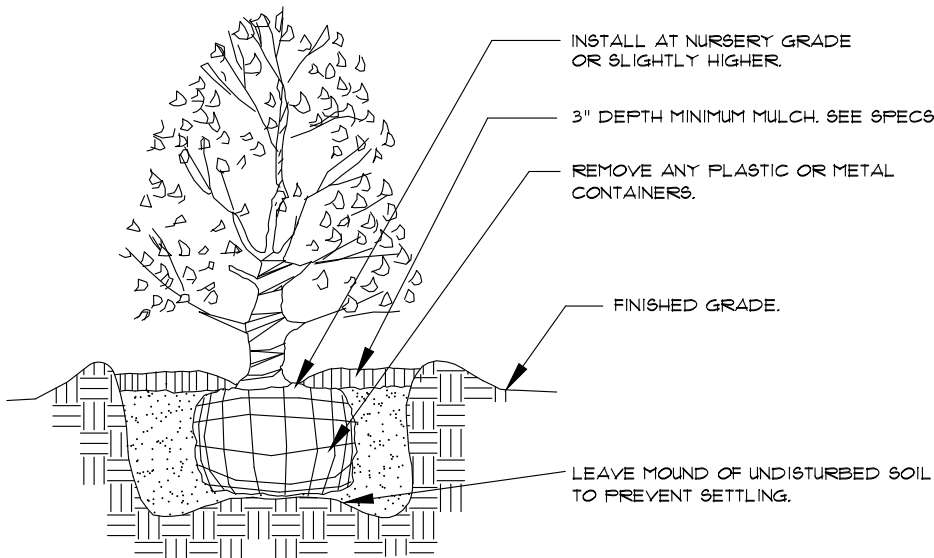


Irregular & Multi-Stem Tree Planting

FOR TREES 6"-14" HT.
NOTE:
SEE SPECIFICATIONS FOR BACKFILL MIXTURES AND FERTILIZATION.
BRACING-SPECIAL SITE CONDITIONS MAY REQUIRE MODIFICATION TO BRACING TECHNIQUE. LANDSCAPE CONTRACTOR WILL ADEQUATELY BRACE (OR WIRE) ALL TREES TO PREVENT EXCESSIVE MOVEMENT AND MAINTAIN A VERTICAL POSITION.

Palm Planting

- APPLIES TO: ROYAL PALMS, QUEEN PALMS, ALEXANDER PALMS, MANILA PALMS.
- SEE SPECIFICATIONS FOR BACKFILL MIXTURE AND FERTILIZATION.
- BRACING - SPECIAL SITE CONDITIONS MAY REQUIRE MODIFICATION TO BRACING TECHNIQUE. LANDSCAPE CONTRACTOR WILL ADEQUATELY BRACE ALL PALMS TO PREVENT EXCESSIVE MOVEMENT AND MAINTAIN A VERTICAL POSITION.



Shrub Planting

- SEE SPECIFICATIONS FOR BACKFILL MIXTURE AND FERTILIZATION.

COMMERCIAL FERTILIZER

Two fertilizer shall be used in all types of plantings, except palms. Granular fertilizer shall be uniform in composition, dry and free flowing. This fertilizer shall be delivered to the site in the original unopened bags, each bearing the manufacturer's statement of analysis, and shall meet the following requirements: sixteen (16%) percent nitrogen, seven (7%) percent phosphorus, twelve (12%) percent potassium, plus iron. Tablet fertilizer ("Agriform" or equal) in 21 gram size shall meet the following requirements: twenty (20%) percent nitrogen, ten (10%) percent phosphorus, five (5%) percent potassium.

The two fertilizers will be applied at the following rates:

PLANT SIZE 16"-1-12 "AGRIFORM" TABLET (21 Grams)

1 gal.	1/4 lb.	1
3 gal.	1/3 lb.	2
1-15 gal.	1/2 lb.	4
1"-6" caliper	2 lbs./1" caliper	2 1/1" caliper
6" and larger	3 lbs./1" caliper	2 1/1" caliper

"Florida East Coast Palm Special" will be applied to all palms at installation at a rate of 1/2 lb. per inch of trunk caliper unless otherwise specified.

MULCH

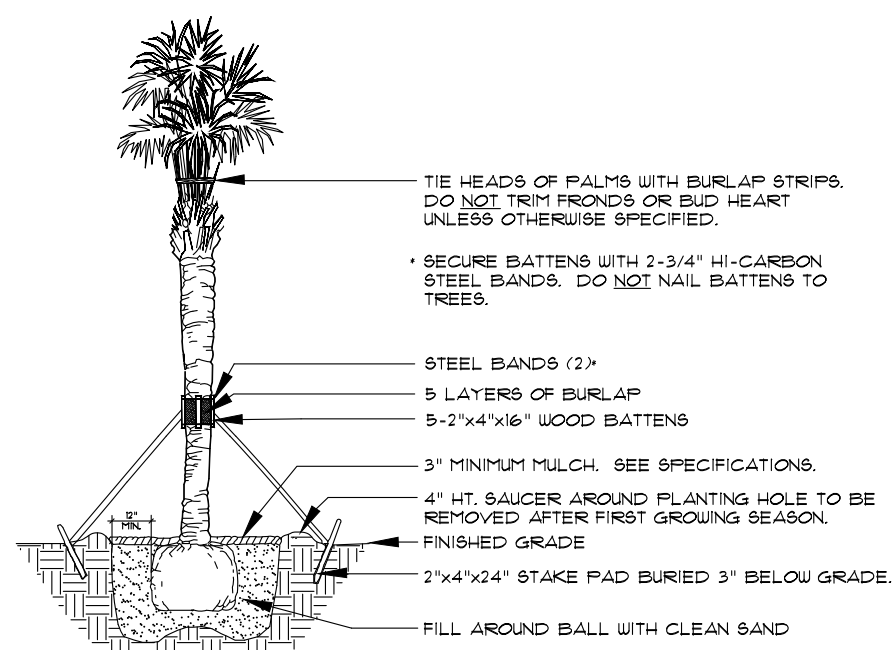
Mulch material shall be three (3) inches of shredded melaleuca mulch (sterilized and free of seeds) or approved equal, moistened at the time of application to prevent wind displacement.

SUBSTITUTIONS

No substitutions of plant material types or size will be allowed without written consent of the Landscape Architect. B4B material will not be accepted as substitute for container grown material unless previously approved. Alternate substitutions shall be indicated in bid.

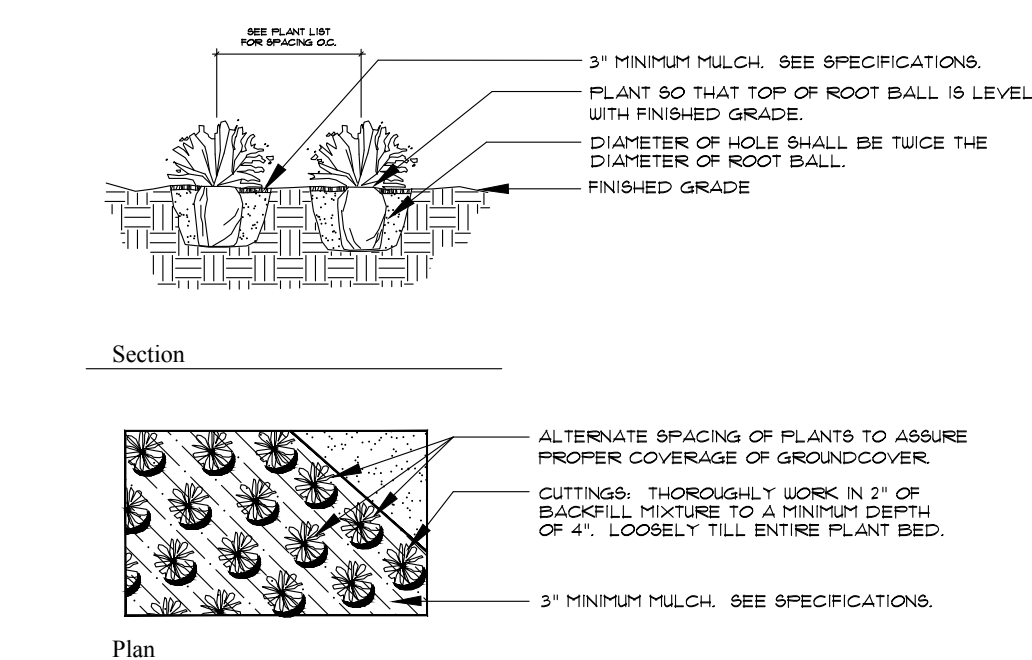
Notes

- Prior to the installation of any plant material all existing and imported soils shall be tested and amended to meet the soil specifications and specific plant needs as shown on this plan.
- All plant material, unless specified as being Florida Fancy or Specimen, shall be Florida Grade Number 1 or better as determined by the Florida Division of Plant Industry.
- All plant materials and sod shall have an automatic irrigation system providing 100% coverage that complies with Section 926.11 of the LCR and the restrictions on irrigation use as specified by SURMPD.
- Maintain positive drainage away from building.
- All plant material shall be planted, fertilized and mulched as per the Plant Details and Plant Specifications noted on this plan.
- Landscape Contractor shall research plans and contact appropriate agencies to determine location of utilities and obstructions prior to commencing work. Any utilities or anticipated obstructions shall be reported immediately to the Landscape Architect.
- Landscape Contractor will be responsible for obtaining all necessary permits, licenses, inspections, and insurance as required by the State and local agencies.
- Quantities shown on plant list are for convenience only. If a discrepancy occurs between the plan and plant list the plan shall prevail.



Palm Planting

- APPLIES TO: SABAL PALMS, WASHINGTON PALMS, CANARY ISLAND DATE PALMS, BIRDIE DATE PALMS.
- SEE SPECIFICATIONS FOR BACKFILL MIXTURE AND FERTILIZATION.



Groundcover Planting

- SEE SPECIFICATIONS FOR BACKFILL MIXTURE AND FERTILIZATION.

Plant List

Key	Qty	Scientific Name	Common Name	Size	Spacing
PALMS					
CH^	3	Chamaerops humilis	European Fan Palm	5' O.A., multi trunk	AS
SP^A	27	Sabal palmetto	Sabal Palm	12', 18', 24' CT, staggered heights	AS
CANOPY TREES					
MG^A	9	Magnolia grandiflora	Southern Magnolia	12'x 5', 3" DBH min.	AS
QV^A	28	Quercus virginiana	Live Oak	12'x 6', 2" DBH min.	AS
TD^A	15	Taxodium distichum	Bald Cypress	10'x 4', 2" DBH. min.	AS
UNDERSTORY TREES					
LI^	12	Lagerstroemia fauriei 'Muskogee'	Muskogee Grape Myrtle	8' x 5', multi stem	AS
SHRUBS & GROUNDCOVERS					
DE^	9	Dioon edule	Mexican Fern Palm	3' x 3'	AS
JP^	282	Juniperus chinensis 'Parsonii'	Parson's Juniper	3g, 8"x 16", full	24" OC
IV^A	163	Ilex vomitoria 'Schillings'	Stokes Dwarf Yaupon Holly	3g, 14"x 16", full	24" OC
MF^A	497	Myrcianthes fragrans	Simpson Stopper	30"x 24", full	48" OC
MUH^A	272	Muhlenbergia capillaris	Pink Muhly Grass	3g, 24"x 24"	36" OC
RI^A	30	Rhaphiolepis indica	Indian Hawthorne	3g, 18"x 18", full	24" OC
TDJ^A	67	Tabernaemontana divaricata	Crape Jasmine	7g, 30"x 30"	36" OC
VOD^A	230	Viburnum obovatum 'densa'	Walter's Viburnum	7g, 24"x 24"	30" OC

*DENOTES FLORIDA NATIVE PLANT MATERIAL

*DENOTES DROUGHT TOLERANT SPECIES

ALL PLANT MATERIAL SHALL BE MINIMUM FLORIDA #1 GRADE PER THE FLORIDA GRADES & STANDARDS FOR NURSERY PLANTS 2015 EDITION

Misc.

SOD - Stenotaphrum secundatum 'Floratum' - St. Augustine Floratam - solid sod, laid tight

Landscape Notes

- ALL NUISANCE EXOTIC VEGETATION EXISTING ON SITE MUST BE REMOVED IN CONJUNCTION WITH SITE DEVELOPMENT.
- EXISTING TREES THAT ARE TO REMAIN SHALL BE BARRICADED ACCORDING TO INDIAN RIVER COUNTY TREE PROTECTION AND LAND CLEARING ORDINANCE.
- NO VEGETATION SHALL BE REMOVED FROM THE SITE UNTIL A TREE REMOVAL PERMIT HAS BEEN ISSUED.
- PLANT CONTAINERS SHALL BE REMOVED PRIOR TO PLANTING. IF PLANTS ARE NOT CONTAINER GROWN, REMOVE A MINIMUM OF THE TOP 1/3 OF BURLAP, FABRIC, OR WIRE MESH. NEVER LIFT OR HANDLE THE TREE BY THE TRUNK.
- THE UPPERMOST ROOT ON ALL TREES SHALL BE COVERED BY LESS THAN 1" OF SOIL. USE HAND TOOLS TO CAREFULLY REMOVE ALL EXCESS SOIL. THE TOP OF ROOT BALL SHALL BE SET 1"-2" ABOVE FINISH GRADE AND SET PLUMB TO THE HORIZON. IF PLANTING PIT IS TOO DEEP, REMOVE THE TREE AND FIRMLY PACK ADDITIONAL SOIL IN THE BOTTOM OF THE PLANTING PIT TO RAISE THE ROOTBALL. AFTER POSITIONING THE TREE IN THE PLANTING PIT, SLICE THROUGH ROOTBALLS WITH 3 OR 4 VERTICAL SLICES (TOP TO BOTTOM) EQUALLY DISTRIBUTED AROUND THE TREE.
- BACKFILL SHALL BE LOOSENEED EXISTING SOIL. REMOVE ROCKS, STICKS, OR OTHER DELETERIOUS MATERIAL GREATER THAN 1" IN ANY DIRECTION PRIOR TO BACKFILLING. WATER AND TAMP TO REMOVE AIR POCKETS. IF EXISTING SOILS CONTAIN EXCESSIVE SAND, CLAY, OR OTHER MATERIAL NOT CONDUCIVE TO PROPER PLANT GROWTH, CONTACT ENGINEER PRIOR TO PLANTING.
- SOIL RINGS SHALL BE CONSTRUCTED OF EXISTING SOIL AT THE OUTER EDGE OF THE PLANTING PIT, WITH A HEIGHT OF 3" AND GENTLY SLOPING SIDES. DON NOT PILE SOIL ON TOP OF ROOTBALL.
- MULCH SHALL BE A 3" DEEP LAYER PLACED TO THE EDGE OF THE TRUNK FLARE, AROUND THE BASE OF SHRUB, OR SOLIDLY AROUND GROUND COVER. NEVER PILE MULCH AGAINST THE TREE TRUNK.
- STRAPS SHALL BE MINIMUM 1" WIDE NYLON OR POLYPROPYLENE. ALL WOOD STAKES OR ANCHORS SHALL BE LOCATED BEYOND THE EDGE OF SOIL RING AND LOCATED BELOW FINISHED GRADE, UNLESS OTHERWISE SPECIFIED.
- SABAL PALMS MAY BE HURRICANE CUT. ALL OTHER PALMS MUST HAVE FRONDS TIED WITH BIODEGRADABLE TWINE. PALM TRUNKS SHALL HAVE NO BURN MARKS, SCARS, OR SANDING.
- ALL DIMENSIONS PROVIDED FOR WOOD MATERIALS ARE NOMINAL.
- WHEN A PERMANENT, SUBSURFACE, OR DRIP IRRIGATION SYSTEM IS PROVIDED, A SOIL RING IS NOT REQUIRED. MULCH TO EDGE OF PLANTING PIT.
- ALTERNATE TREE PROTECTION SYSTEMS APPROVED BY THE ENGINEER MAY BE USED IN LIEU OF THE TREE PROTECTION BARRICADE DETAILED.
- REMOVE ABOVE GROUND GUYING SYSTEM AT THE END OF THE ESTABLISHMENT PERIOD.
- ALL SHRUBS USED TO FORM AN OPAQUE FEATURE MUST BE PLANTED IN AN OFFSET DOUBLE ROW.
- ALL PLANT MATERIALS SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO. 1 OR BETTER.
- ALL PLANT MATERIALS IN SHOCK MUST BE REPLACED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY (C.O.).
- THE IRRIGATION SYSTEM SHALL BE DESIGNED TO CONFORM TO THE REQUIREMENTS OF IRC ORDINANCE SECTION 926.11 AND THE RESTRICTIONS ON IRRIGATION USE AS SPECIFIED BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
- ALL LANDSCAPED AREAS SHALL BE 100% IRRIGATED WITH AN AUTOMATIC SPRINKLER SYSTEM. WATER WILL BE SUPPLIED TO THE PROPOSED IRRIGATION SYSTEM THROUGH AN IRRIGATION WELL.
- ROOT BARRIERS ARE REQUIRED FOR CANOPY TREES WITHIN 6' OF A SIDEWALK, PAVED AREA, OR BUILDING.
- ALL NUISANCE EXOTIC VEGETATION EXISTING ON SITE MUST BE REMOVED IN CONJUNCTION WITH SITE DEVELOPMENT.



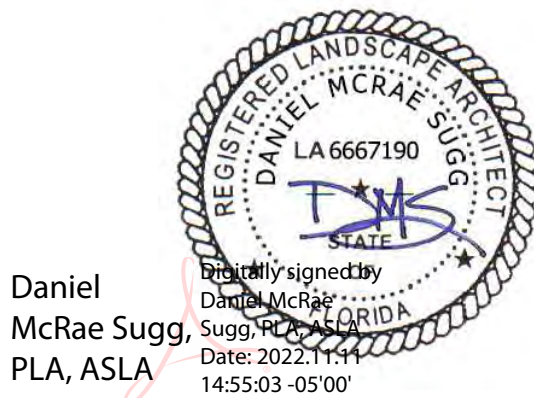
McCARTY & ASSOCIATES

LAND PLANNING
AND DESIGN

STUART • FT. PIERCE

772.341.9322
www.McCartyLandPlanning.com
Mike@McCartyLandPlanning.com

Broward Development
Storage Facility
Pasco County, Florida
Landscape Details



Drawn By _____ DMS
Checked By _____ MM
Scale _____
Drawing Date _____ 1/10/22
_____ 11/11/22

L-3

SIDEWALK EXTENSIONPLANS

FOR

MuV ZEPHYRHILLS

5230 SIXTH STREET
ZEPHYRHILLS, FL 33542

CLIENT:
GREEN RE ZEPHYRHILLS LLC
3323 NE 163RD STREET, SUITE 305
NORTH MIAMI BEACH, FL 33160
(813) 645-2528
CONTACT: JOHN TIPTON

DEVELOPMENT CONTACTS

DEVELOPMENT SERVICES:	ELECTRIC UTILITY PROVIDER:
CITY OF ZEPHYRHILLS PLANNING DEPARTMENT	CROWD ENERGY
5335 8TH STREET	4922 AIRPORT ROAD
ZEPHYRHILLS, FL 33542	ZEPHYRHILLS, FL 33542
(813) 780-0006	(855) 732-8872
ZONING:	CABLE UTILITY PROVIDER:
CITY OF ZEPHYRHILLS PLANNING DEPARTMENT	SPECTRUM
5335 8TH STREET	5040 GALL BOULEVARD
ZEPHYRHILLS, FL 33542	ZEPHYRHILLS, FL 33542
(813) 780-0006	(813) 344-1315
POTABLE WATER:	TELEPHONE UTILITY PROVIDER:
CITY OF ZEPHYRHILLS UTILITIES DEPARTMENT	SPECTRUM
39825 ALSTON AVENUE	5040 GALL BOULEVARD
ZEPHYRHILLS, FL 33542	ZEPHYRHILLS, FL 33542
(813) 780-0029	(813) 344-1315
SANITARY SEWER:	
CITY OF ZEPHYRHILLS UTILITIES DEPARTMENT	
39825 ALSTON AVENUE	
ZEPHYRHILLS, FL 33542	
(813) 780-0029	

PROJECT INFORMATION

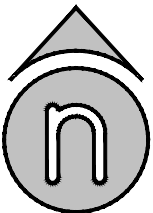
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SITE ADDRESS:	5230 SIXTH STREET	
	ZEPHYRHILLS, FL 33542	ZEPHYRHILLS, FL 33542
PARCEL AREA:	0.48 AC	0.32 AC
SECTION/TOWNSHIP/RANGE:	11/26S/21E	11/26S/21E
ZONING:	FBC5	FBC5
FUTURE LAND USE:	MIXED USE (VILLAGE CENTER OVERLAY)	MIXED USE (VILLAGE CENTER OVERLAY)
FEMA PANEL:	12101C0456F	12101C0456F
FEMA FLOOD ZONE:	ZONE X (NO BFE)	ZONE X (NO BFE)



PROJECT LOCATION

VICINITY MAP

SCALE: 1" = 500'



SHEET INDEX

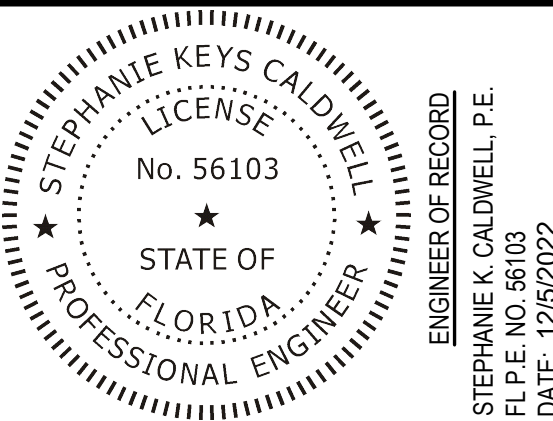
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1	COVER SHEET	223408C01.DWG
2	EXISTING CONDITIONS PLAN	223408C05.DWG
3	STORMWATER POLLUTION PREVENTION PLAN	223408C10.DWG
4	SIDEWALK EXTENSION PLAN & DETAILS	223408C20.DWG



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NOTE: PLANS MAY HAVE BEEN MODIFIED IN SIZE THROUGH REPRODUCTION PROCESSES. PLEASE CONSIDER THIS WHEN OBTAINING SCALED DATA.

CU-Stephanie Caldwell
in-Quattro-A0410000001788A6C67A000011C02
O-Florida, C-US
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Stephanie Caldwell, P.E., State of Florida, License No.
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engineering, inc.

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FORT MYERS, FL 33907
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WWW.GREENSITE-ENG.COM

PROJECT NAME
MuV DISPENSARY
SITE IMPROVEMENTS

ZEPHYRHILLS, FLORIDA

CLIENT
GREEN RE
ZEPHYRHILLS LLC

3323 NE 163RD STREET, SUITE 305
NORTH MIAMI BEACH, FL 33160
PHONE: (XXX) XXXXXXX

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PLAN STATUS:
PERMIT APPROVAL
NOT FOR CONSTRUCTION

ISSUE DATE:
DEC 2022

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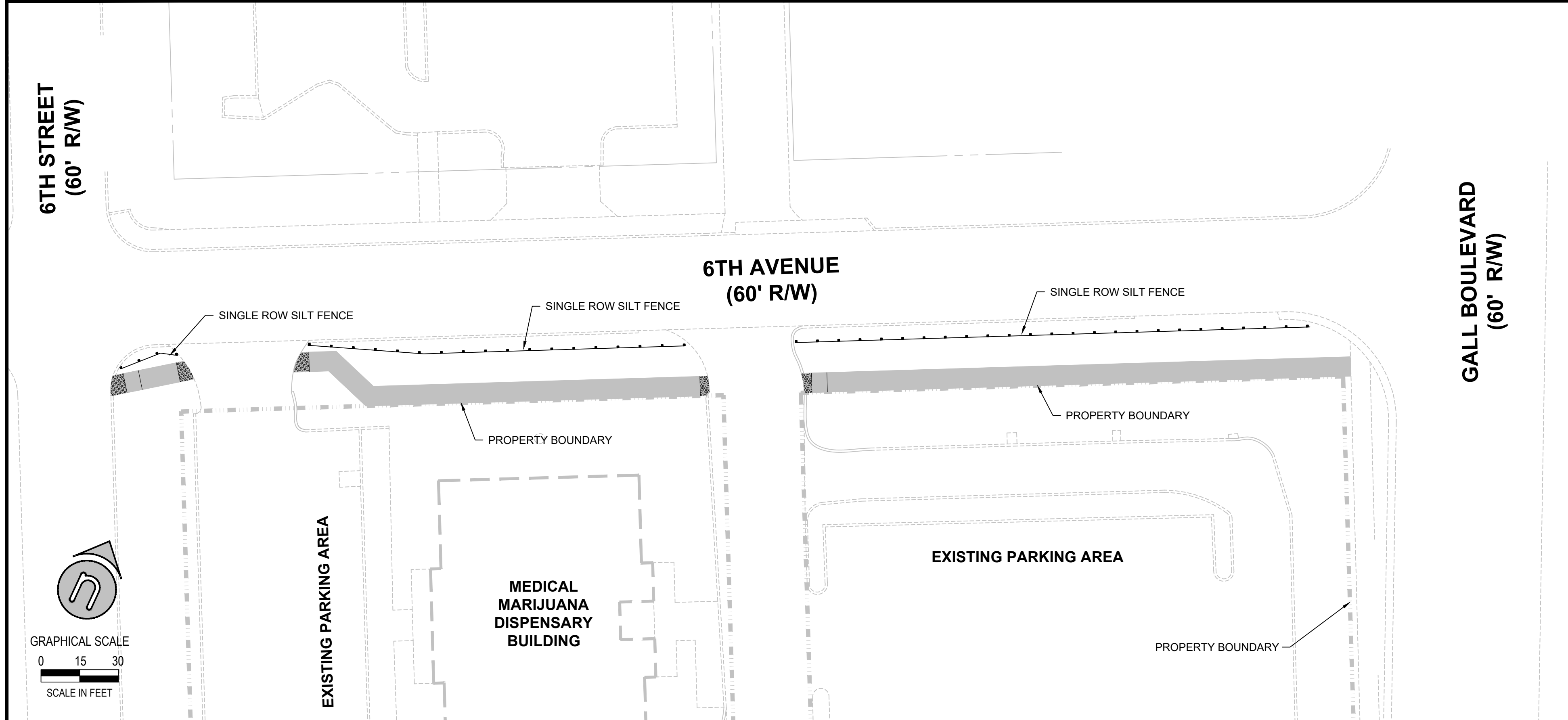
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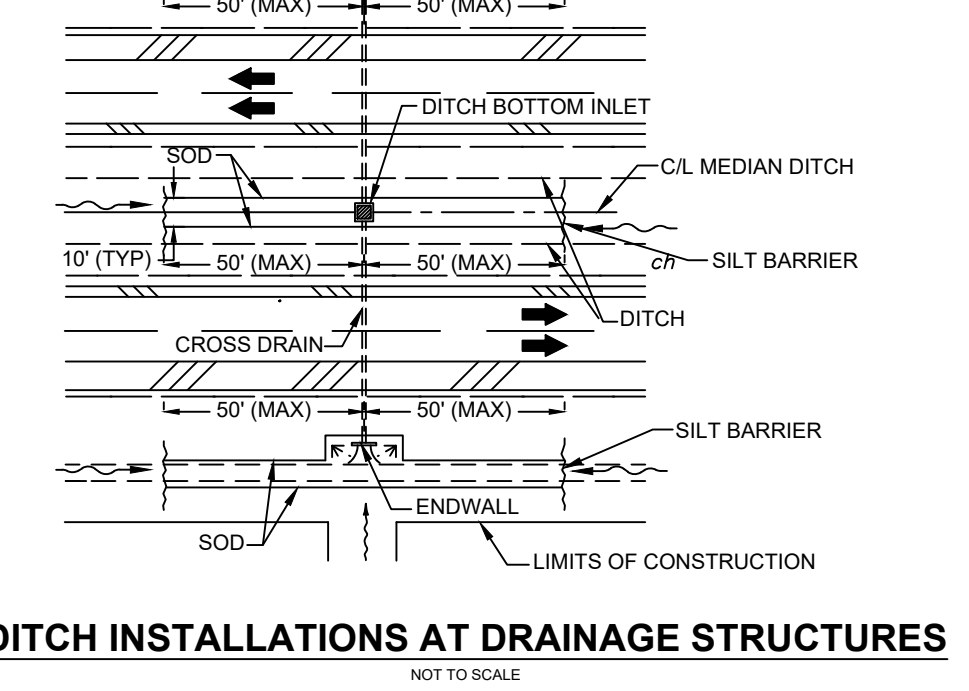
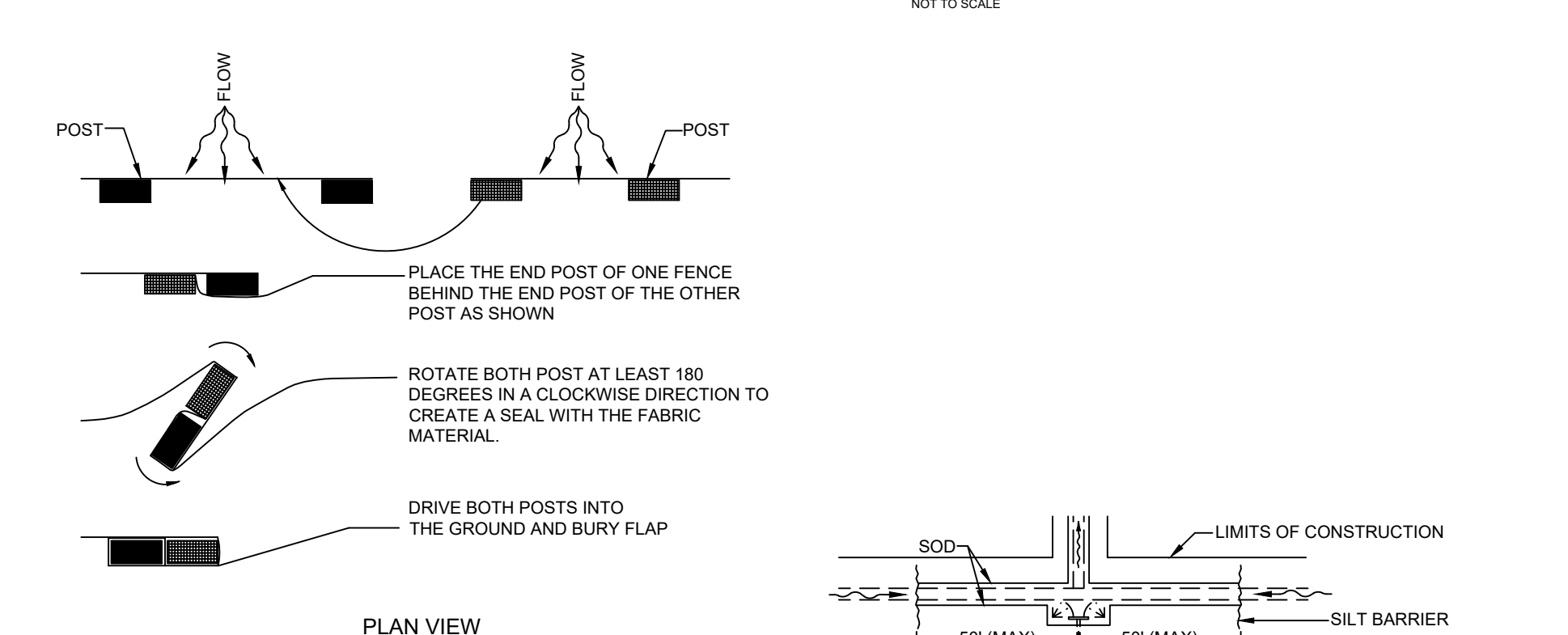
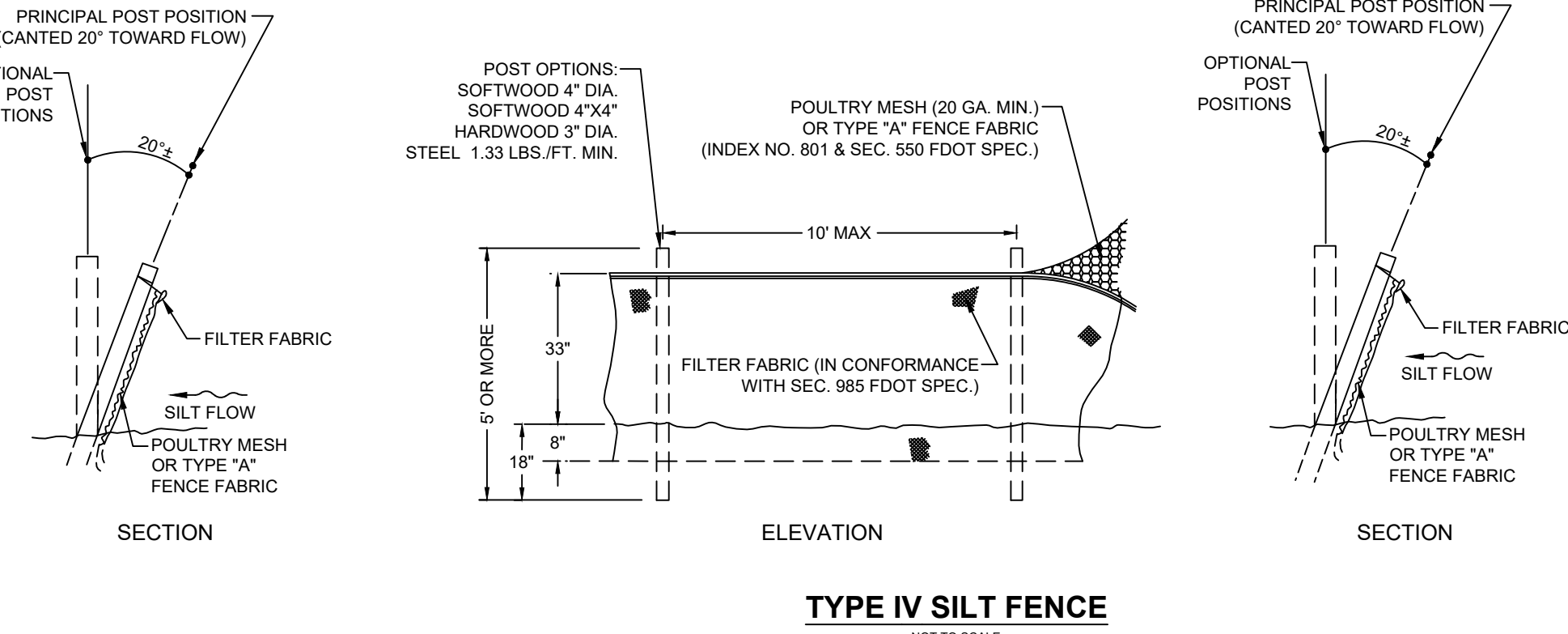
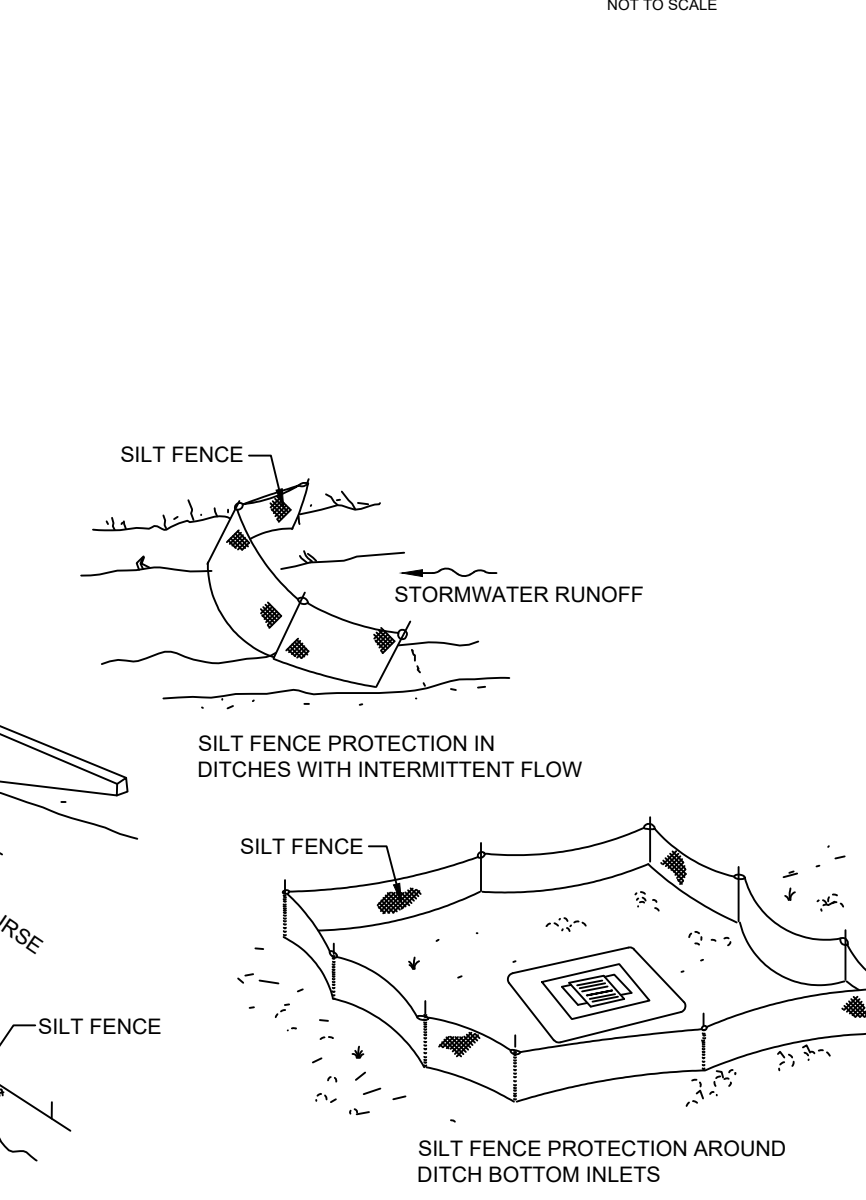
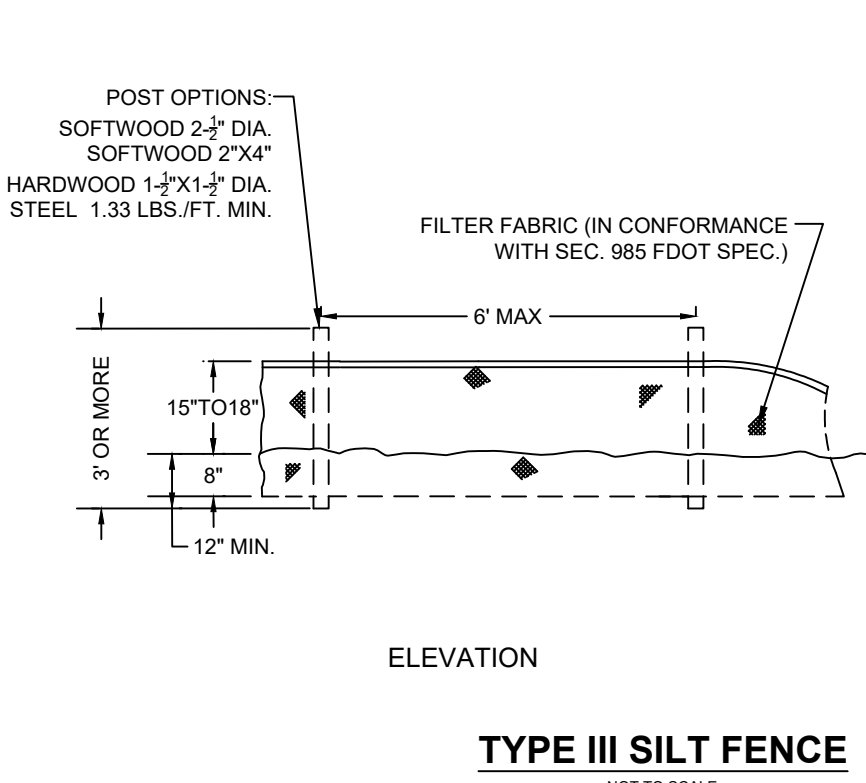
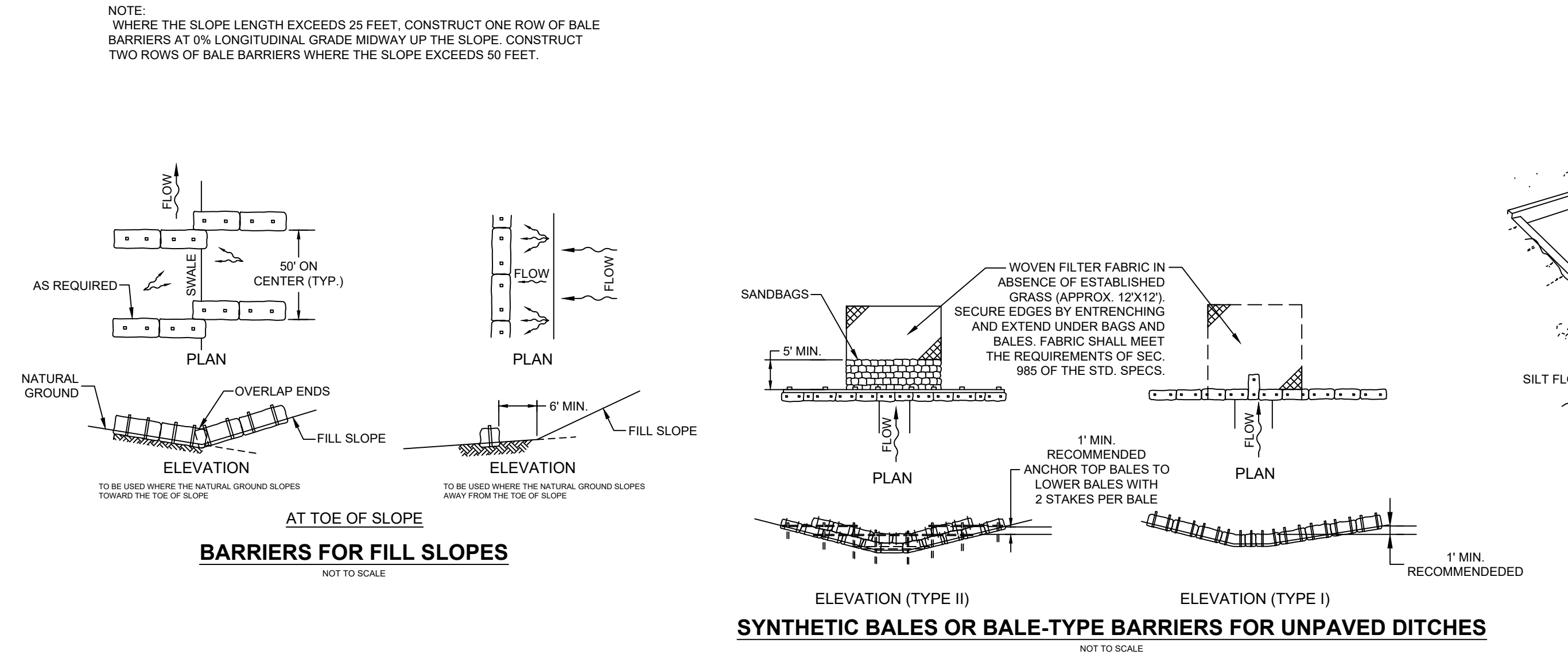
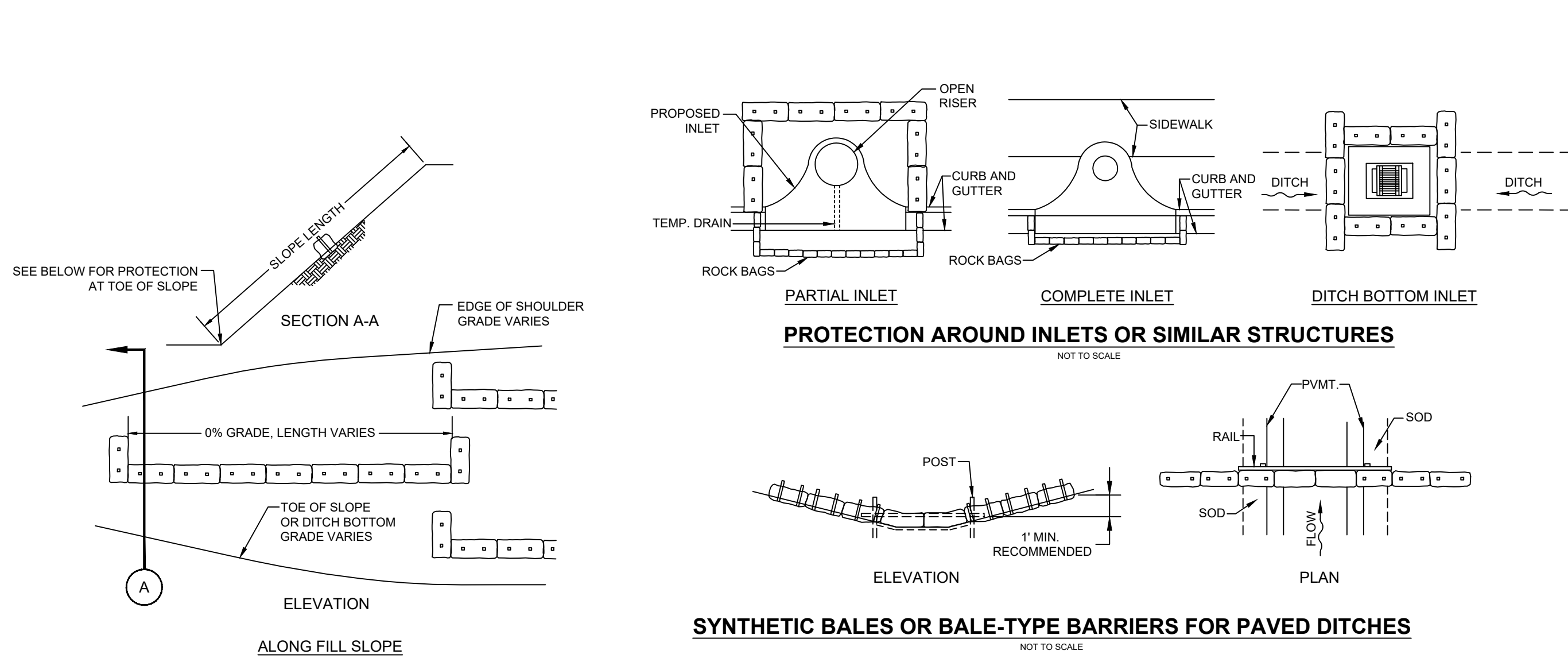
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SHEET NUMBER

1



EROSION CONTROL PLAN



TEMPORARY EROSION AND SEDIMENTATION CONTROL DETAILS

EROSION CONTROL NOTES

- ALL CONSTRUCTION PROJECTS ONE (1) OR MORE ACRE IN SIZE THAT DISCHARGE TO OFFSITE AREAS ARE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORMWATER DISCHARGE FROM SMALL AND LARGE CONSTRUCTION ACTIVITIES. TO MEET NPDES REQUIREMENTS, CONTRACTOR IS RESPONSIBLE FOR PREPARING A STORMWATER POLLUTION PREVENTION PLAN (SWPPP), IMPLEMENTING, INSPECTING, MAINTAINING, AND REPORTING ON ALL ELEMENTS OF THE SWPPP, COMPLETING AND SUBMITTING THE REQUIRED NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT) FORMS AS THE OPERATOR, AND PAYING ALL ASSOCIATED FEES. FOR PROJECTS LESS THAN ONE (1) ACRE IN SIZE THAT ARE NOT REQUIRED TO COMPLY WITH THE NPDES GENERAL PERMIT, THE CONTRACTOR IS STILL RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO AND DURING CONSTRUCTION IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATION.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY APPROPRIATE EROSION CONTROL DEVICES SHALL BE INSTALLED TO CONTROL AND MINIMIZE SOIL EROSION AND SEDIMENT TRANSPORT TO OFFSITE AREAS. THE CONTRACTOR SHALL MAINTAIN THESE DEVICES THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL PERMANENT EROSION CONTROL IS ESTABLISHED.
- THE CONTRACTOR SHALL SUPPLEMENT THIS PLAN AS MAY BE REQUIRED TO CONTROL AND MINIMIZE SOIL EROSION BASED ON THE CONTRACTORS MEANS, METHODS, AND TECHNIQUE OF CONSTRUCTION.
- CONTRACTOR SHALL INSPECT EROSION AND SEDIMENTATION CONTROLS ONCE EVERY SEVEN (7) CALENDAR DAYS AND IMMEDIATELY FOLLOWING A RAIN EVENT OF 0.5 INCHES OR GREATER DURING CONSTRUCTION. REMOVE ANY SEDIMENT BUILD-UP, REPAIR, AND REINSTALL ANY DAMAGED OR MISSING SEDIMENT CONTROL MEASURES. WHEN BUILDUP REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE, CONTRACTOR SHALL REMOVE SEDIMENT DEPOSITS. INSTALL ADDITIONAL MEASURES IF INSPECTION REVEALS ADDITIONAL SEDIMENTATION CONTROL IS NECESSARY.
- THESE DETAILS REPRESENT TYPICAL BEST MANAGEMENT PRACTICES FOR SOIL EROSION CONTROL. THEY MAY NOT SATISFY ALL REQUIREMENTS FOR COMPLIANCE WITH REGULATORY AGENCIES AND/OR SPECIFIC PERMIT CONDITIONS.
- THE CONTRACTOR AND/OR OWNER SHALL VERIFY THAT THE RESPONSIBLE ENTITY HAS OBTAINED A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND LOCAL REGULATORY AGENCY AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL CREATE, IMPLEMENT, AND MAINTAIN A STORMWATER POLLUTION PREVENTION PLAN AS REQUIRED BY THE NPDES GENERAL PERMIT.
- IF SILT FENCE FABRIC DEGRADES OR OTHERWISE RESULTS IN AN INEFFECTIVE DEVICE FOR CONTROL OF SEDIMENTATION TRANSPORT TO OFFSITE AREAS, CONTRACTOR SHALL REPLACE FABRIC PROMPTLY.
- CONTRACTOR SHALL BE PREPARED TO RESPOND TO REGULATORY INQUIRIES BY SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND CITY OF ZEPHYRHILLS RELATED TO COMPLIANCE WITH THE RESPECTIVE EROSION AND SEDIMENTATION CONTROL REQUIREMENTS. COST ASSOCIATED WITH THESE COMPLIANCE REQUESTS SHALL BE INCLUDED IN THE OVERALL COST OF CONSTRUCTION.
- CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL METHODS UPON COMPLETION OF SOIL STABILIZATION FOR THE PROJECT. AT THAT TIME THE RESPONSIBLE ENTITY SHALL FILE AN NPDES STORMWATER POLLUTION PREVENTION PLAN NOTICE OF TERMINATION (NOT) WITH THE FDEP.
- DURING CONSTRUCTION, INLET OPENINGS, WHERE APPROPRIATE, SHALL BE COVERED WITH FILTER FABRIC (MIRAFI 140N OR APPROVED EQUAL) TO PREVENT DEBRIS FROM FALLING INTO THE INLET.
- CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES AND PIPES ARE CLEANED OUT AND FUNCTIONAL UPON COMPLETION OF CONSTRUCTION.
- FOR ADDITIONAL EROSION CONTROL DETAILS AND INFORMATION NOT SHOWN ON THIS SHEET, CONSULT THE FDEP STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL.

ENGINEER OF RECORD
STEPHANIE K. CALDWELL, P.E.
FL P.E. NO. 56103
DATE: 12/5/2022

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13300-56 S CLEVELAND AVENUE
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PROJECT NAME
MuV DISPENSARY
SITE IMPROVEMENTS

ZEPHYRHILLS, FLORIDA
CLIENT
GREEN RE ZEPHYRHILLS LLC

3323 NE 163RD STREET, SUITE 305
NORTH MIAMI BEACH, FL 33160
PHONE: (XXX) XXXXXXXX

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DEC 2022

DRAWING TITLE
STORMWATER POLLUTION PREVENTION PLAN

GEI PROJECT NUMBER
223408
SHEET NUMBER
3

GENERAL NOTES

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, FDOT DESIGN STANDARDS INDEX AND ALL LOCAL DEVELOPMENT CODES.
2. BENCHMARK DATUM FOR THIS PROJECT IS NATIONAL AMERICAN VERTICAL DATUM (NAVD) OF 1988.
3. ALL APPROVALS REQUIRED BY THE OWNER OR ENGINEER OF RECORD IN CONJUNCTION WITH THESE NOTES MUST BE OBTAINED IN WRITING BY THE CONTRACTOR FROM THE APPROPRIATE PARTY. CONTRACTOR IS REQUIRED TO OBTAIN APPROVAL FROM THE ENGINEER FOR ANY DEVIATIONS FROM THE PLANS AND / OR SPECIFICATIONS.
4. CONTRACTOR SHALL ENSURE THAT ALL PERMITS ARE IN PLACE PRIOR TO CONSTRUCTION AND THAT COPIES OF ALL PERMITS ARE RETAINED ON SITE AT ALL TIMES.
5. ALL CONSTRUCTION SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
6. A VEGETATION REMOVAL PERMIT MAY BE REQUIRED PRIOR TO COMMENCEMENT OF ANY SITE WORK. PROTECTIVE BARRIERS MUST BE CONSTRUCTED AND INSPECTED PRIOR TO PERMIT ISSUANCE.
7. SIDEWALKS ARE DESIGNED FOR AND INTENDED FOR PEDESTRIAN TRAFFIC ONLY. ALL SIDEWALKS AND CURB CUTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX 522-001 AND SHALL PROVIDE DETECTABLE WARNING SURFACES PER FDOT INDEX 522-002.
8. CONTRACTOR SHALL NOTIFY OWNER AND CONTACT ALL UTILITY COMPANIES FOR LOCATIONS OF EXISTING UTILITIES IN THE AREA A MINIMUM OF 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL DETERMINE IF UTILITIES OTHER THAN THOSE SHOWN ON THESE PLANS EXIST. CONTRACTOR SHALL NOTIFY THE APPROPRIATE AGENCY A MINIMUM OF 72 HOURS PRIOR TO ALL INSPECTIONS REQUIRED BY THE LOCAL DEVELOPMENT CODE.
9. THE LOCATION OF EXISTING UTILITIES, PAVEMENT, VEGETATION, AND OTHER IMPROVEMENTS ARE APPROXIMATE ONLY. THE EXACT SIZES, ELEVATIONS AND LOCATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION OR ORDERING MATERIALS. CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
10. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED AND IF IN DANGER OF BEING DESTROYED, MUST BE PROPERLY REFERENCED BY THE CONTRACTOR.
11. EXISTING IMPROVEMENTS SHALL BE RESTORED TO A CONDITION EQUIVALENT TO THAT WHICH EXISTED PRIOR TO COMMENCING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY RIGHT-OF-WAY, CLEARING, TREE REMOVAL, OR VEGETATION REMOVAL PERMITS REQUIRED FOR THIS PROJECT.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT. ALL TRAFFIC MAINTENANCE CONTROL SHALL BE IN ACCORDANCE WITH THE FLORIDA MANUAL OF TRAFFIC CONTROL DEVICES (MUTCD) AND SAFE PRACTICES FOR STREET CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS. CONTRACTOR SHALL ASSURE THAT ALL TRAFFIC CONTROL DEVICES MEET ACCEPTABLE STANDARDS AS OUTLINED IN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATIONS (ATSSA's) "QUALITY STANDARDS FOR WORK ZONE TRAFFIC CONTROL DEVICES," AND SHALL IMMEDIATELY REPAIR, REPLACE, OR CLEAN/DAMAGED, DEFACED OR DIRTY DEVICES. TRAFFIC CONTROL OPERATION PROCEDURES SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO COMMENCING CONSTRUCTION. ANY IMPACTS TO TRAFFIC FLOW SHALL BE COORDINATED WITH AND APPROVED BY THE APPROPRIATE LOCAL AGENCY.
14. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY PLAN DEVIATION SHALL BE IMMEDIATELY REPORTED TO ENGINEER AND OWNER.
15. THE CONTRACTOR IS REQUIRED TO ADJUST ALL EXISTING AND PROPOSED VALVE BOXES, MANHOLE RIMS, GRATES AND OTHER IMPROVEMENTS AS REQUIRED TO MATCH THE FINAL GRADE.
16. PRIOR TO COMMENCEMENT OF CONSTRUCTION APPROPRIATE EROSION CONTROL DEVICES SHALL BE INSTALLED TO CONTROL AND REDUCE SOIL EROSION AND SEDIMENT TRANSPORT TO OFFSITE AREAS. CONTRACTOR SHALL MAINTAIN THESE DEVICES THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL THE SURROUNDING AREAS ARE ESTABLISHED.
17. BASE SURVEY INFORMATION INCLUDING BUT NOT LIMITED TO ELEVATIONS, EASEMENTS, RIGHTS-OF-WAY, AND OTHER TOPOGRAPHIC INFORMATION HAS BEEN PREPARED BY OTHER PROFESSIONALS. GREENSITE ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.
18. CONTRACTOR IS RESPONSIBLE FOR ALL QUALITY CONTROL TESTING REQUIRED BY THE CITY OF ZEPHYRHILLS. CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION THEREWITH AND SHALL FURNISH OWNER AND ENGINEER THE REQUIRED CERTIFICATES OF INSPECTION, TESTING, OR APPROVAL.
19. ANY DESIGN OR TESTING LABORATORY UTILIZED BY CONTRACTOR SHALL BE AN INDEPENDENT LABORATORY ACCEPTABLE TO OWNER AND ENGINEER, APPROVED IN WRITING, AND COMPLYING WITH THE LATEST EDITION OF THE "RECOMMENDED REQUIREMENTS FOR INDEPENDENT LABORATORY QUALIFICATION," PUBLISHED BY THE AMERICAN COUNCIL OF INDEPENDENT LABORATORIES.
20. TESTING RESULTS SHALL BE PROVIDED TO OWNER AND ENGINEER. ALL TEST RESULTS SHALL BE PROVIDED (PASSING AND FAILING) ON A REGULAR AND IMMEDIATE BASIS.
21. THE ENTIRE PROJECT SITE SHALL BE THOROUGHLY CLEANED AT THE COMPLETION OF THE WORK. CLEAN ALL INSTALLED PIPELINES, STRUCTURES, SIDEWALKS, PAVED AREAS, ACCUMULATED SILT IN PONDS, PLUS ALL ADJACENT AREAS AFFECTED BY CONSTRUCTION, AS DIRECTED BY OWNER OR JURISDICTIONAL AGENCY. EQUIPMENT TO CLEAN THESE SURFACES SHALL BE SUBJECT TO APPROVAL FROM OWNER.
22. AS-BUILT DRAWINGS SHALL BE PROVIDED BY CONTRACTOR TO ENGINEER PRIOR TO FINAL INSPECTION. ALL AS-BUILT DATA SHALL BE PROVIDED BY A FLORIDA LICENSED SURVEYOR, SIGNED, SEALED, AND DATED BY THE RESPONSIBLE PARTY.

PROJECT PHASING NOTES

THE PROJECT INFRASTRUCTURE SHALL BE CONSTRUCTED IN A SINGLE PHASE.

SITE PREPARATION NOTES

1. UNLESS OTHERWISE DIRECTED BY OWNER OR ENGINEER, CONTRACTOR IS EXPECTED TO CONTAIN ALL CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY, RIGHT-OF-WAY, AND EASEMENTS AS INDICATED ON THE DRAWINGS. AT NO TIME SHALL CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. ANY REPAIR OR RECONSTRUCTION OF DAMAGED AREAS ON SURROUNDING PROPERTIES SHALL BE REPAIRED BY CONTRACTOR ON AN IMMEDIATE BASIS. ALL COSTS FOR REPAIRS SHALL BE THE RESPONSIBILITY OF CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED.
 2. AREAS TO RECEIVE CLEARING AND GRUBBING SHALL INCLUDE ALL AREAS TO BE OCCUPIED BY THE PROPOSED IMPROVEMENTS AND AREAS FOR SITE GRADING. REMOVE TREES OUTSIDE OF THESE AREAS ONLY AS INDICATED ON THE DRAWINGS OR AS APPROVED IN WRITING BY ENGINEER.
 3. EXERCISE EXTREME CARE DURING THE CLEARING AND GRUBBING OPERATIONS. DO NOT DAMAGE EXISTING STRUCTURES, PIPES, OR UTILITIES.
 4. ALL COMBUSTIBLE DEBRIS AND REFUSE FROM SITE PREPARATION OPERATIONS SHALL BE REMOVED TO LEGAL OFFSITE DISPOSAL AREAS.
- GRADING:**
5. GRADING SHOWN ON THESE PLANS ARE PROVIDED TO CONTRACTOR TO EXPRESS THE GENERAL GRADING INTENT OF THE PROJECT. CONTRACTOR SHALL BE EXPECTED TO GRADE THE ENTIRE SITE TO PROVIDE POSITIVE DRAINAGE IN ALL AREAS THROUGHOUT THE SITE. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING HAS BEEN COMPLETED.
 6. NEWLY GRADED AREAS SHALL BE PROTECTED FROM TRAFFIC AND EROSION. ALL SETTLEMENT OR WASHING AWAY THAT MAY OCCUR FROM ANY CAUSE PRIOR TO SEEDING OR ACCEPTANCE SHALL BE REPAIRED AND GRADES RE-ESTABLISHED TO THE REQUIRED ELEVATIONS AND SLOPES AT NO ADDITIONAL COST TO OWNER.

EXCAVATION, TRENCHING, FILL:

7. PROVIDE BARRIERS, WARNING LIGHTS, AND OTHER PROTECTIVE DEVICES AT ALL EXCAVATIONS.
8. SIDEWALKS, ROADS, STREETS, AND PAVEMENTS SHALL NOT BE BLOCKED OR OBSTRUCTED BY EXCAVATED MATERIALS, EXCEPT AS AUTHORIZED BY ENGINEER. IN THAT CASE, ADEQUATE TEMPORARY PROVISIONS MUST BE MADE FOR SATISFACTORY TEMPORARY PASSAGE OF PEDESTRIANS AND VEHICLES.
9. MINIMUM DENSITY REQUIREMENT (ASTM D1557 OR AASHTO T180):
BACKFILL AND FILL UNDER AND WITHIN THE INFLUENCE AREA OF ROADWAYS, STRUCTURES, SLABS, FOUNDATIONS = 98%;
BACKFILL AND FILL PLACED WITHIN PUBLIC ROAD RIGHTS-OF-WAY AND UTILITY EASEMENTS = 95%;
BACKFILL AND FILL PLACED WITHIN POND AND ROAD EMBANKMENT - 95%;
BACKFILL AND FILL PLACED IN ALL OTHER AREAS = 90%.

PAVING NOTES

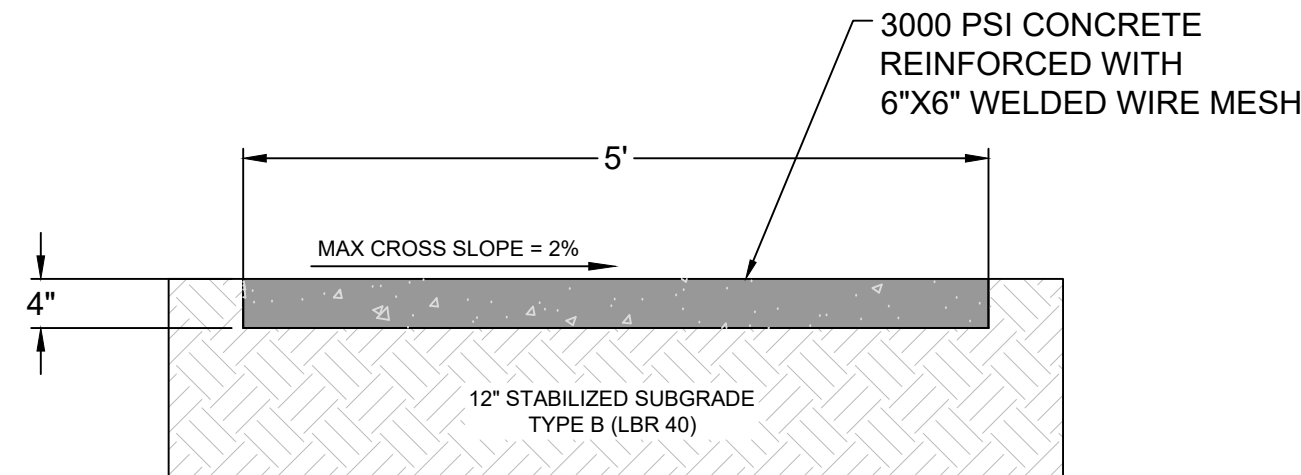
1. MATERIALS AND CONSTRUCTION METHODS FOR THE ROADWAY AND PAVING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
2. SIDEWALKS ARE TO BE CONSTRUCTED IN THE AREAS AS SHOWN ON THE CONSTRUCTION DRAWINGS. SIDEWALK SHALL BE CONSTRUCTED OF 4" THICK CONCRETE WITH A 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI. JOINTS SHALL BE EITHER TOoled OR SAW CUT AT A DISTANCE NOT TO EXCEED 24 TIMES THE THICKNESS OF SIDEWALK. ACCESSIBLE RAMPS SHALL BE PROVIDED AT ALL INTERSECTIONS AND SHALL BE IN ACCORDANCE WITH THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, LATEST EDITION.
3. ANY SIDEWALK PRESENTLY DAMAGED OR DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY SECTION AT THE DISCRETION OF OWNER OR ENGINEER.

PAVEMENT MARKING/TRAFFIC CONTROL/SIGNING NOTES

1. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION, THE F.D.O.T DESIGN STANDARDS INDEX, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ALL APPLICABLE LOCAL STANDARDS.
2. DURING CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH THE "STATE OF FLORIDA MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS," THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," AND WITH ALL OTHER GOVERNING SAFETY REGULATIONS.
3. INSPECT TRAFFIC CONTROL DEVICES ON A DAILY BASIS TO ENSURE PLACEMENT OF BARRICADES AND FUNCTION OF LIGHTS ARE MAINTAINED THROUGHOUT CONSTRUCTION.
4. CONTACT PROPERTY OWNERS AFFECTED BY CONSTRUCTION. COORDINATE TEMPORARY DRIVEWAY CLOSURES AND SEQUENCING. MAINTAIN ACCESS FOR ALL PROPERTY OWNERS DURING CONSTRUCTION.
5. WET UNSTABILIZED AREAS AS NECESSARY TO CONTROL DUST.
6. ADJUST TRAFFIC CONTROL DEVICES AS REQUIRED UNDER EMERGENCY CONDITIONS.

GENERAL DRAINAGE NOTES

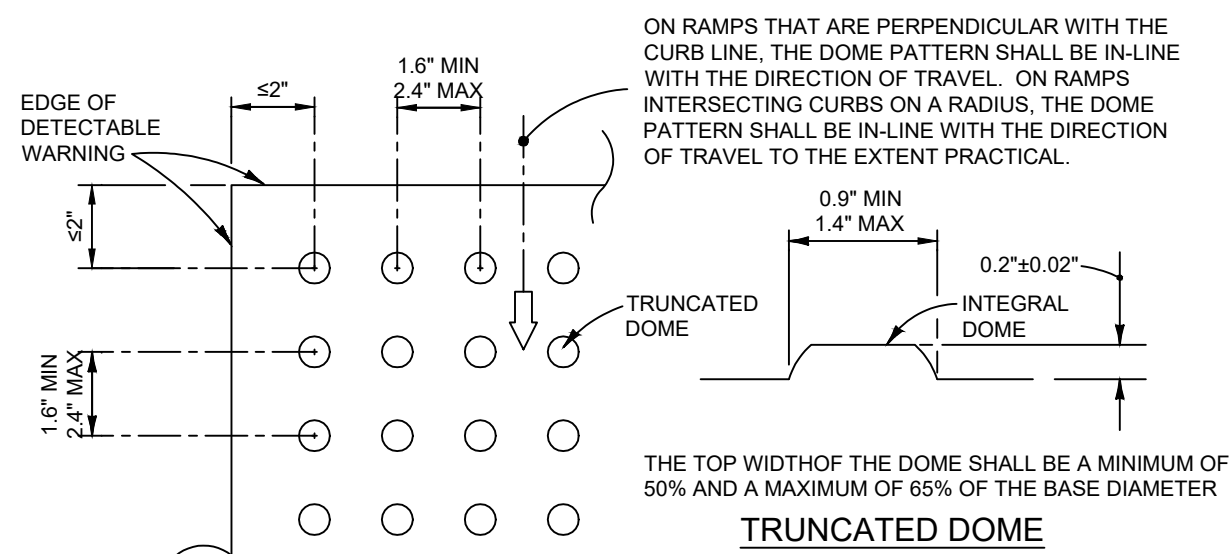
7. EXISTING OFFSITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.



NOTE:
MAXIMUM RUNNING (LONGITUDINAL) SLOPE FOR SIDEWALKS SHALL NOT BE STEEPER THAN 5%, OR 1:20.
MAXIMUM CROSS SLOPE SHALL NOT BE STEEPER THAN 2%, OR 1:50.

CONCRETE SIDEWALK

NOT TO SCALE

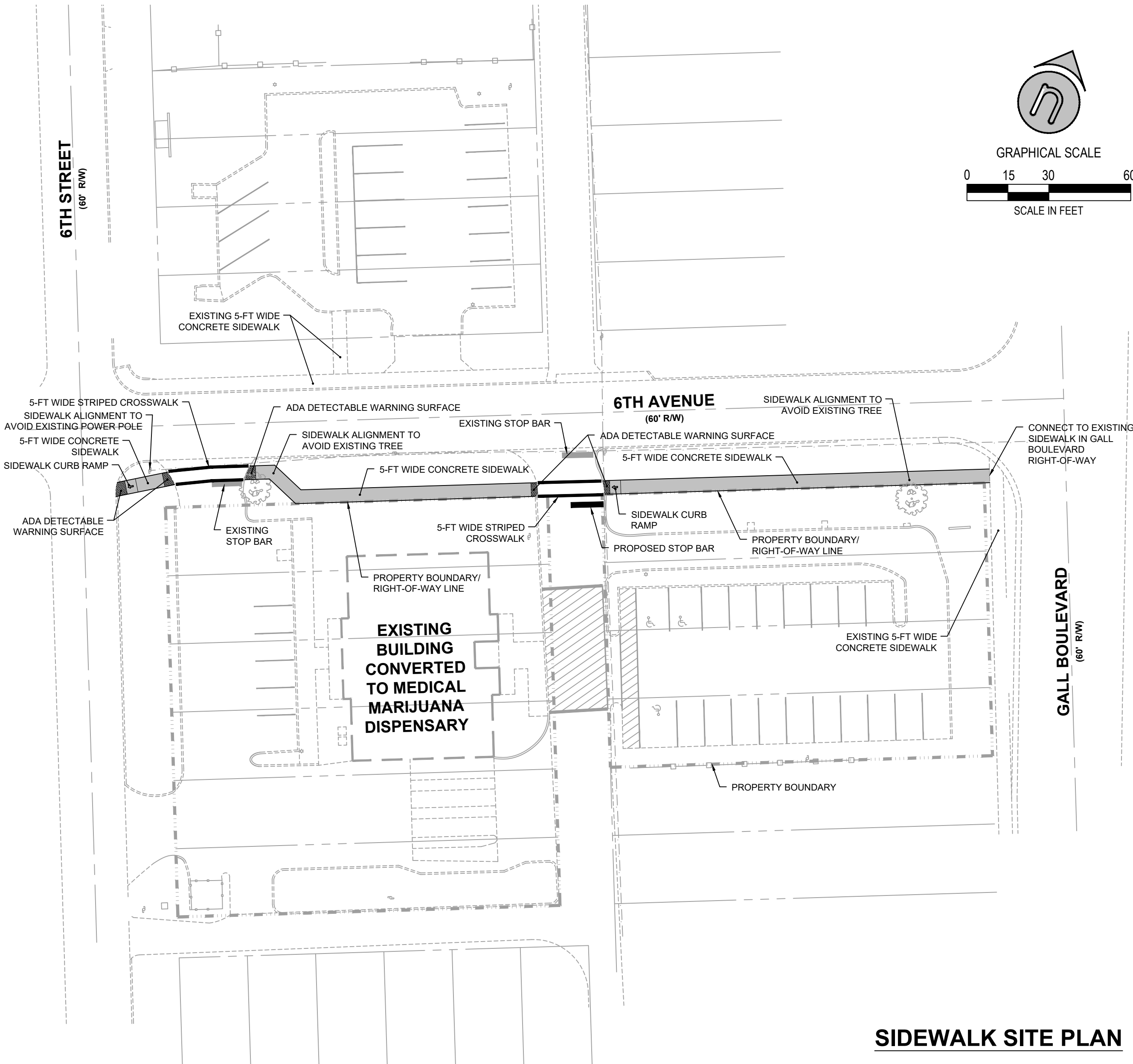
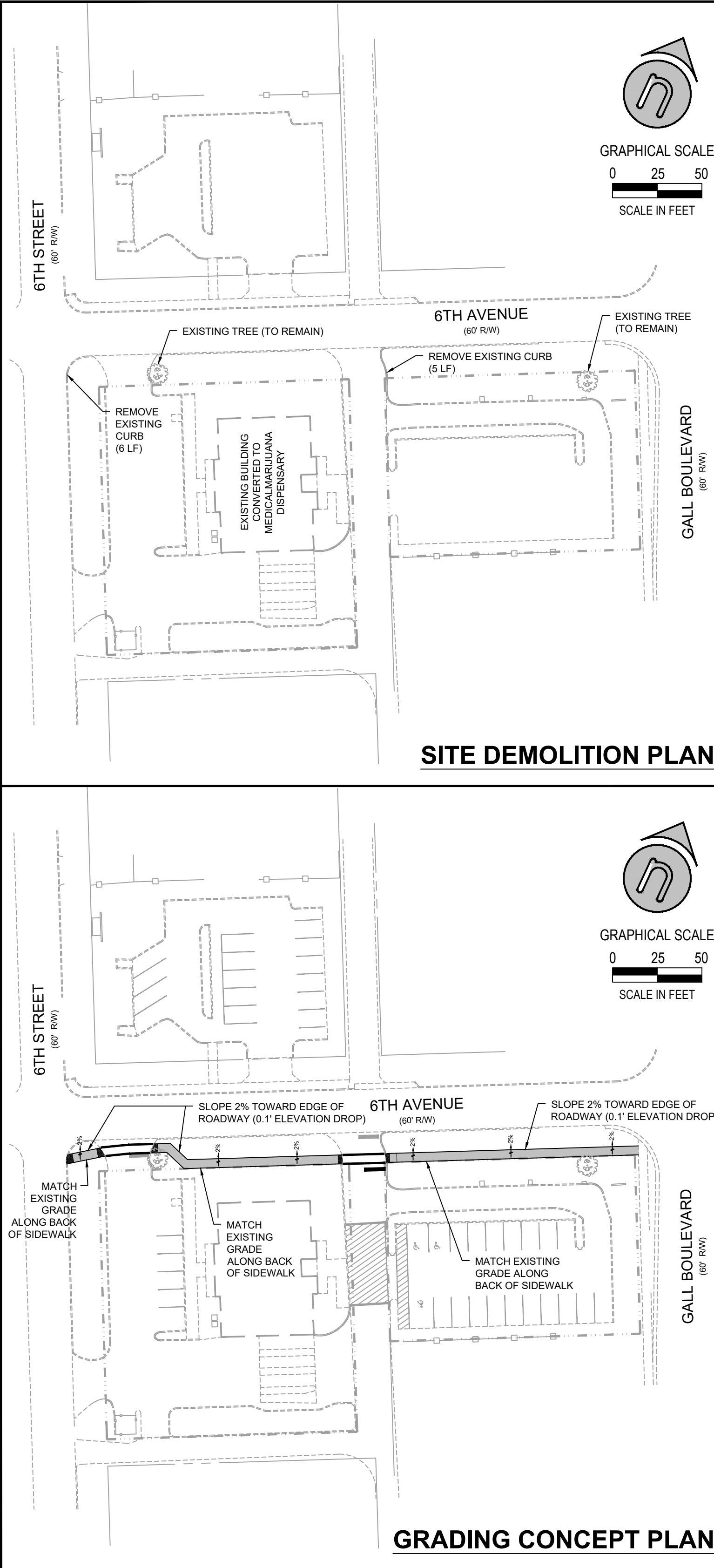


PLAN VIEW

ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 MM) FROM THE BACK OF CURB.

CURB RAMP DETECTABLE WARNING

NOT TO SCALE



ENGINEER OF RECORD
STEPHANIE K. CALDWELL, P.E.
FL P.E. NO. 56103
DATE: 12/5/2022

greensite
engineering, inc.
13300-56 S CLEVELAND AVENUE
FORT MYERS, FL 33907
PHONE (239) 433-9498
FL CERT OF AUTH #28713
WWW.GREENSITE-ENG.COM

PROJECT NAME
MuV DISPENSARY
SITE IMPROVEMENTS

ZEPHYRHILLS, FLORIDA
CLIENT
**GREEN RE
ZEPHYRHILLS LLC**

3323 NE 163RD STREET, SUITE 305
NORTH MIAMI BEACH, FL 33160
PHONE: (XXX) XXXXXXX

FILE NAME:
223408C20.DWG
FILE PATH:
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PLOT DATE:
MONDAY 12/5/2022 1:41 PM
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										BY
										DATE
										REVISIONS
10	9	8	7	6	5	4	3	2	1	NO

PLAN STATUS:
PERMIT APPROVAL
NOT FOR CONSTRUCTION
ISSUE DATE:
DEC 2022

DRAWING TITLE
**SIDEWALK
EXTENSION PLAN**

GEI PROJECT NUMBER
223408
SHEET NUMBER
4

P | (844) 772-2726
E | info@pacskon.com



4517 George Rd., Suite 220
Tampa, FL 33634

October 7, 2022

Mr. Chad Pettinato
Chief Executive Officer
Premiere Housing Solutions, LLC
38606 Foss Lane
Zephyrhills, FL 33542

Subject: Wildlife Assessment Report
37518 Geiger Road
Zephyrhills, Pasco County, Florida
PACSCON No. 2022-1708

Dear Mr. Pettinato:

PACSCON GeoEnvironmental, Inc. (PACSCON) has completed the authorized Wildlife Assessment for the above-referenced project. The work was performed in general accordance with PACSCON Proposal Number 2022-1708, dated July 8, 2022.

We appreciate your selection of PACSCON and the opportunity to be of service on this project. We look forward to continuing to work with you on the project. Please contact the undersigned if you have any questions, or if we may be of further assistance.

Sincerely,
PACSCON


Leigh Ann Anderson, MS, PWS, CA
Senior Ecologist | Project Manager


Christopher B. Poole, PG, CPG
President | Founding Principal

Attachment: Wildlife Assessment Report

WILDLIFE ASSESSMENT REPORT

37518 GEIGER ROAD
ZEPHYRHILLS, PASCO COUNTY, FLORIDA



PREPARED FOR:

Mr. Chad Pettinato
Chief Executive Officer
Premiere Housing Solutions, LLC
38606 Foss Lane
Zephyrhills, FL 33542

PACSCON No.: 2022-1708

REPORT DATE: October 7, 2022

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- FIGURE 3 – Soils Map
- FIGURE 4 – Gopher Tortoise Burrow Map

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1.0 INTRODUCTION & SCOPE

PACSCON GeoEnvironmental, Inc. (PACSCON) was authorized by Premiere Housing Solutions, LLC (the Client) to perform a wildlife assessment and subsequent report for property located at 37518 Geiger Road in Pasco County, Florida (the Subject Property). Specifically, the Subject Property consists of Pasco County Property Appraiser (PCPA) parcel number 10-26-21-0000-00400-0000 and reportedly contains ± 3 acres of residential and vacant land.

Figures provided as attachments to this report include:

- **Figure 1** – a site location map for the Subject Property,
- **Figure 2** – a Florida Land Use, Cover, and Forms Classification System (FLUCCS) map,
- **Figure 3** – a soils map, and
- **Figure 4** – a Gopher Tortoise Burrow Map.

2.0 SITE CONDITIONS

To help evaluate environmental risk at the Subject Property, this report was prepared by PACSCON based on a desktop review which was performed on October 6, 2022, and a site visit and pedestrian survey performed on October 4, 2022. PACSCON personnel walked a series of meandering transects across the property to identify the potential presence of listed species and other site features. It was confirmed during the site visit that there are no wetlands located on the Subject Property.

The Subject Property is currently a residential parcel that is located within a primarily residential area and consists of one generally rectangularly-shaped parcel, which is accessed from Geiger Road along the northern property boundary. The north portion of the property contains a single-family home (FLUCCS 110). Directly behind the house is a mowed and maintained lawn containing *Paspallum notatum* (bahia grass). The south portion of the property is wooded mixed hardwood (FLUCCS 438). Vegetation within the forested area is primarily *Quercus laurifolia* (laurel oak) and *Prunus laurocerasus* (cherry laurel). There is minimal *Urina lobata* (caesarweed) and *Psychotria nervosa* (wild coffee). See **Figure 2** for FLUCCS codes for the Subject Property and immediately surrounding area.

The soils on the Subject Property have been mapped as Lake fine sand, 0 to 5 percent slopes (32) and Arredondo fine sand, 0 to 5 percent slopes (43). See **Figure 3** for a soils map of the Subject Property and immediately surrounding area.

Photographs of the Subject Property taken during our site visit are provided in **Appendix A** hereto.

3.0 FINDINGS

A desktop analysis using the U.S. Fish and Wildlife Service (FWS) Environmental Conservation Online System (IPaC) indicated four listed threatened and endangered species that could potentially be found within the project area including the *Laterallus jamaicensis* ssp. *jamaicensis* (Eastern black rail), *Drymarchon couperi* (Eastern indigo snake), *Gopherus polyphemus* (gopher tortoise), and *Mycteria americana* (wood stork). PACSCON walked several transects within the site. One gopher tortoise burrow was identified onsite. See **Figure 4** for a Gopher Tortoise Burrow Map.

A desktop review of the Florida Natural Areas Inventory (FNAI) Florida Biodiversity Matrix Map indicated an additional four threatened species, species of special concern, or species otherwise protected by the federal government and/or the state of Florida. These species include *Athene cunicularia floridana* (Florida burrowing owl), *Rostrhamus sociabilis* (snail kite), *Antigone canadensis pratensis* (Florida sandhill crane), and *Dryobates borealis* (red cockaded woodpecker).

None of the above listed species with the exception of the gopher tortoise were observed onsite. The Eastern black rail, wood stork, snail kite, and Florida sandhill crane utilize freshwater marsh habitat, which is not present on the Subject Property, nor is there longleaf pine forest habitat present onsite, which is habitat required by the red cockaded woodpecker. Additionally, no owl burrows were identified onsite during PACSCON's site visit.

Although the bald eagle is not protected under the United States Endangered Species Act, it is protected under the federal Migratory Bird Act and Bald and Golden Eagle Act. According to the Florida Fish and Wildlife Conservation Commission (FWC) eagle nest locator, the nearest bald eagle nest is approximately 3.5 miles away. Similarly, the FWS identifies the nearest active wood stork colony over eight miles away. Both of these distances from the Subject Property are well outside of regulatory buffer requirements.

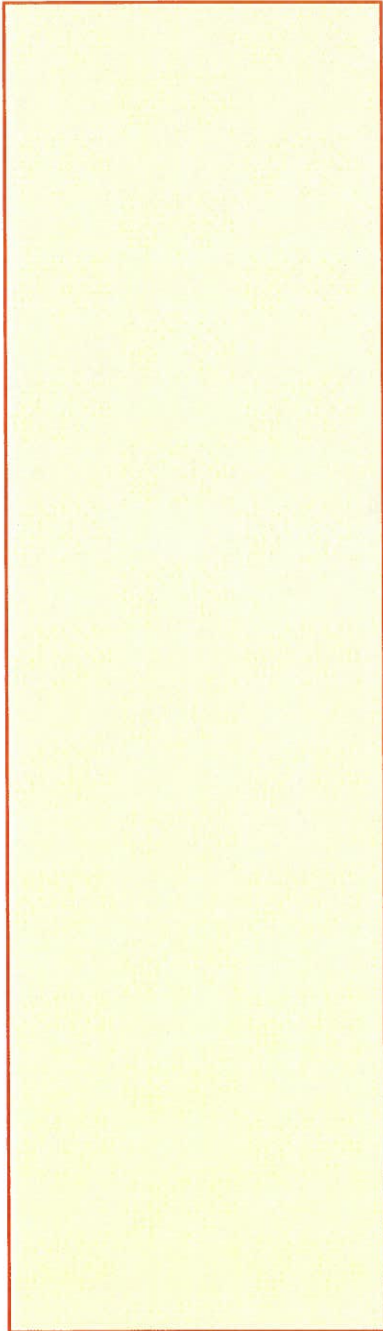
4.0 PERMITTING REQUIREMENTS

Based on the findings of this wildlife assessment, PACSCON identified one listed species onsite, which is the gopher tortoise. Only one gopher tortoise burrow was found onsite at the general location indicated on **Figure 4**. Although this survey was a general wildlife survey and did not include standard FWC methods for a 100% gopher tortoise survey, it is likely that there is only one

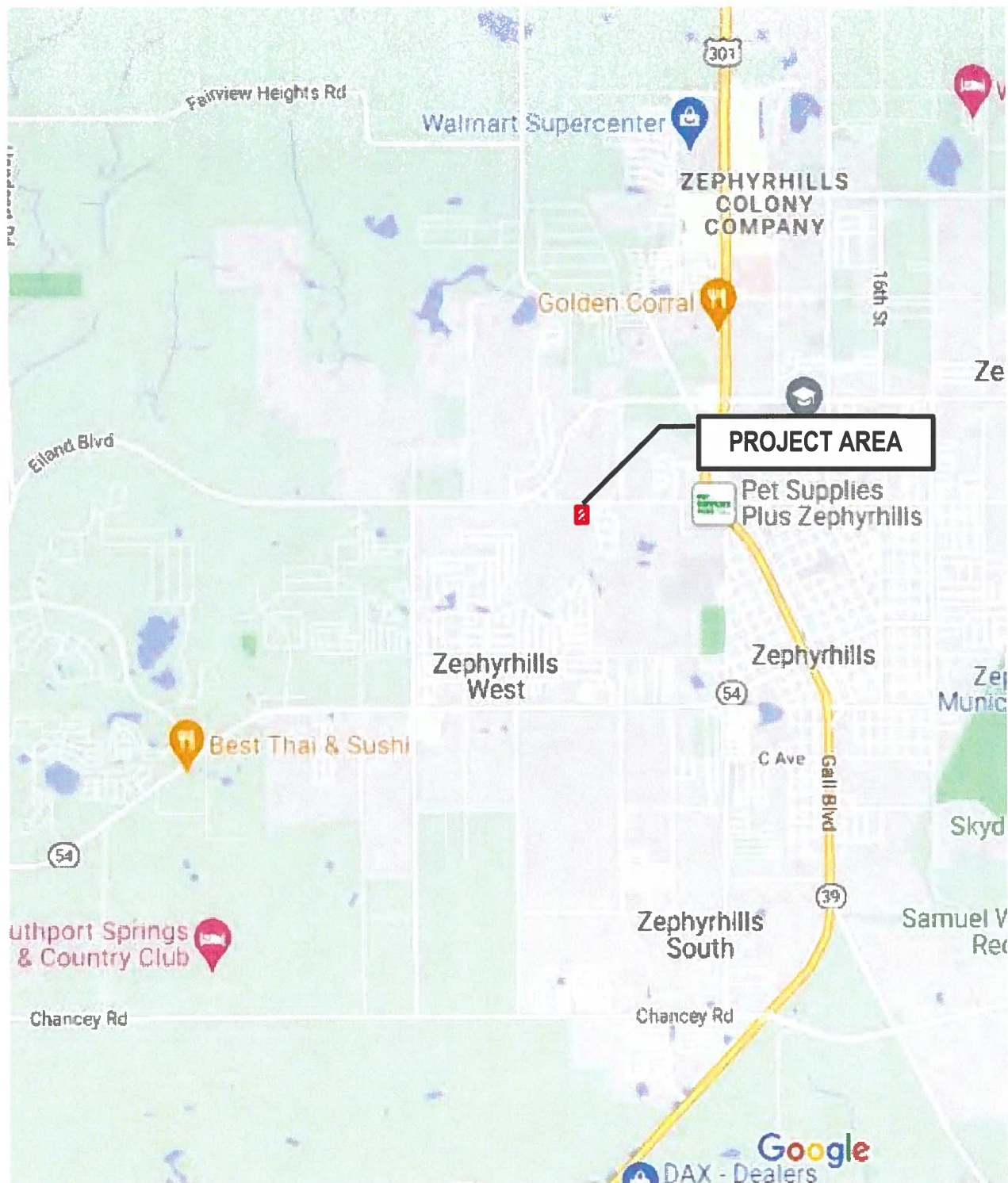
burrow onsite given the lack of desirable gopher tortoise habitat. Additionally, the majority of the Subject Property was observed during PACSCON's site visit due to adequate visibility.

The FWC requires all gopher tortoises to be relocated prior to development activities or to be avoided by 25 feet. A gopher tortoise survey covering 100% of the property must be performed by an FWC authorized gopher tortoise agent within 90 days of proposed construction activities. The 100% survey can then be utilized for gopher tortoise relocation permitting purposes.

Further, if an Eastern indigo snake is found within one of the burrows during excavation, the relocation activity must cease until the snake has moved out of the construction zone. Eastern indigo snake educational documentation must also be posted onsite during all construction activities.



FIGURES



SITE LOCATION MAP
SOURCE: Google.com/maps



37518 Geiger Road
Zephyrhills, Florida
PACSCON Project No. 2022-1708

C:\Users\Leigh\Desktop\Projects\Geiger_Rd_south_10-26-21-0000-00400-0000\FLUCCS_map.dwg (8.5 x 11) Leigh Oct 06, 2022 - 9:22pm



FLUCCS MAP 37518 GEIGER ROAD

SEC TWP RGE
03-26S-21E

JOB NUMBER

DRAWN BY
LAA

DATE
10-06-2022

SHEET

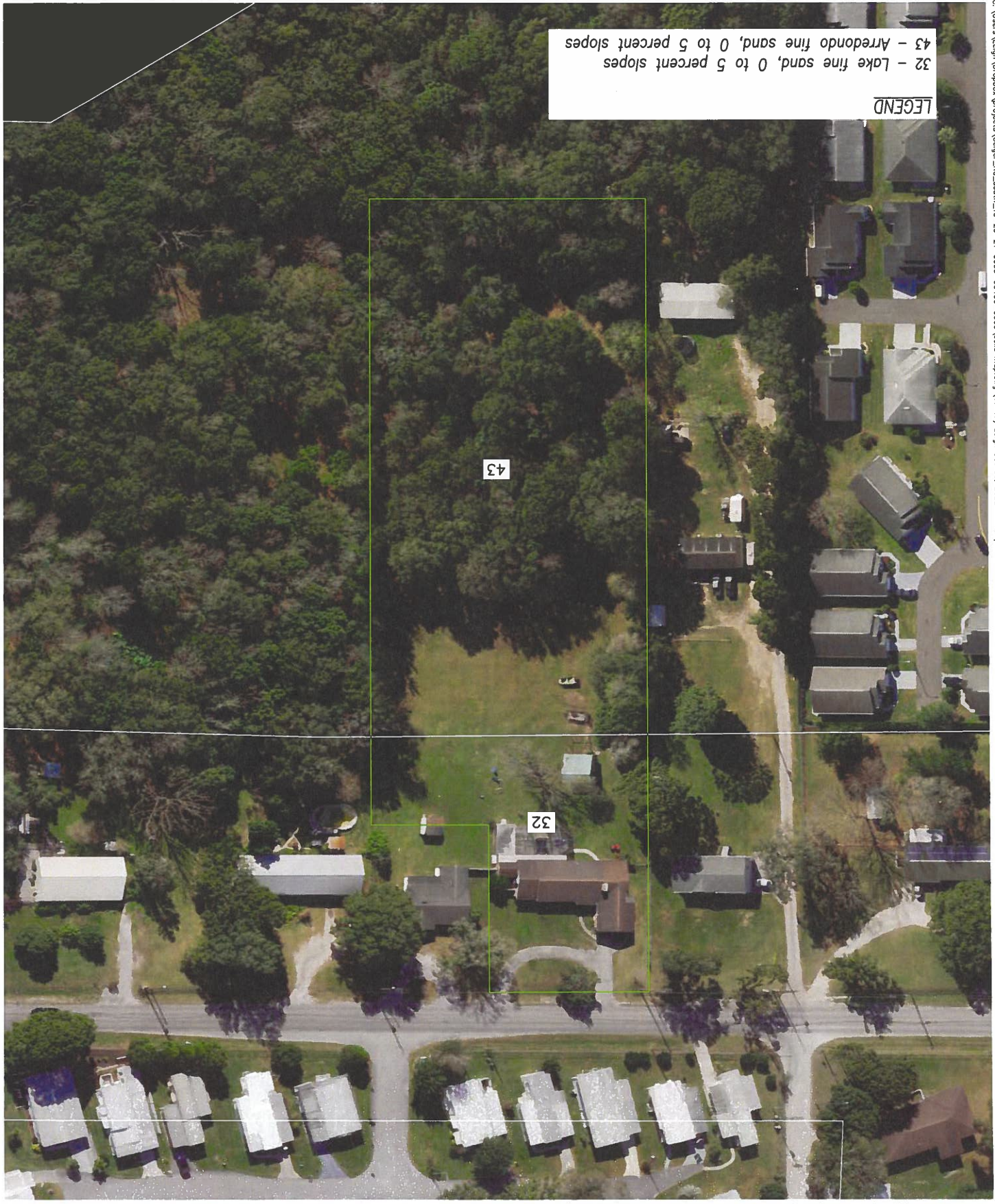


PACSCON
Smart Counts | One Environmentally Focused



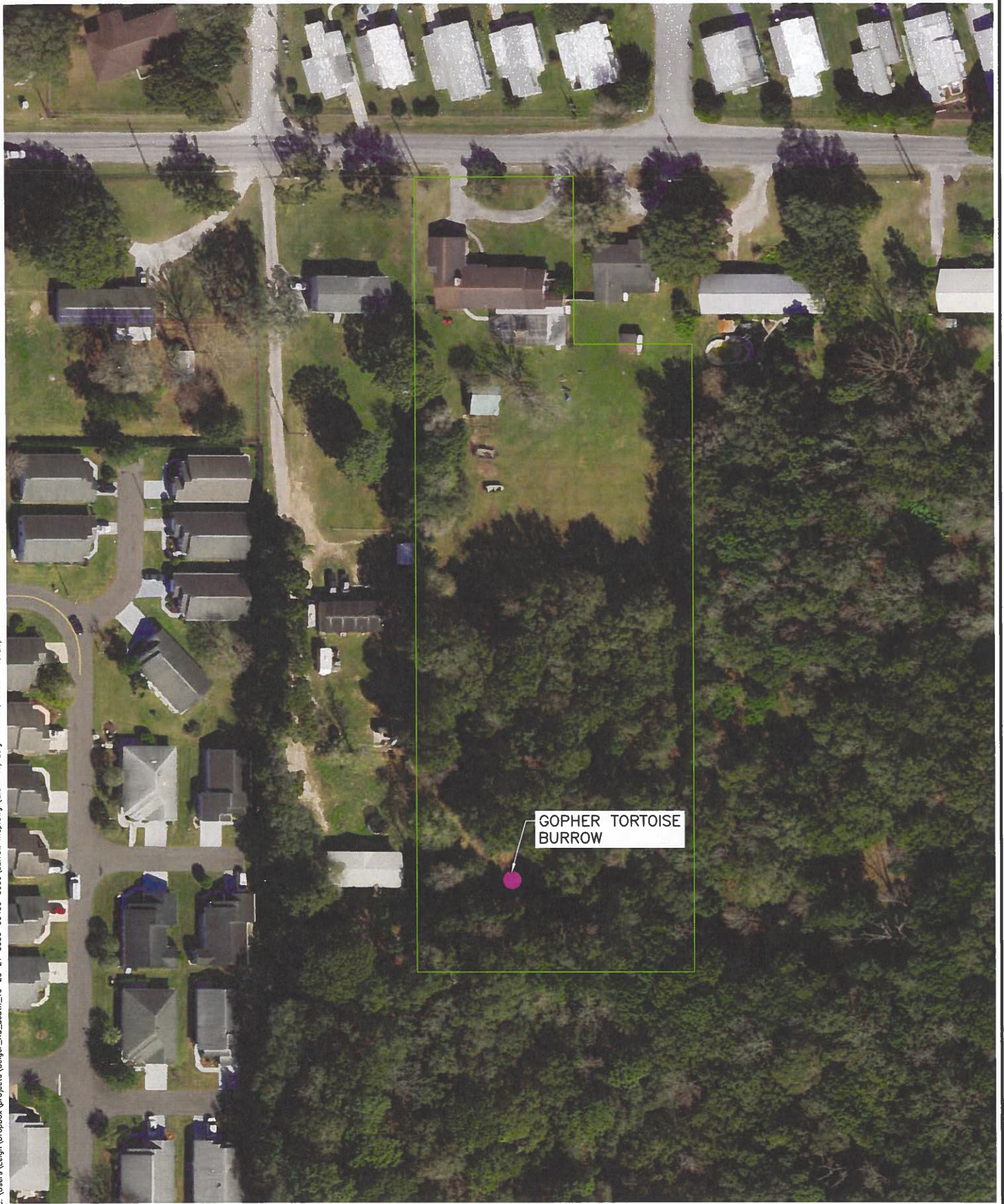
32 - Lake fine sand, 0 to 5 percent slopes
 43 - Arredondo fine sand, 0 to 5 percent slopes

LEGEND



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GOPHER TORTOISE BURROW MAP 37518 GEIGER ROAD

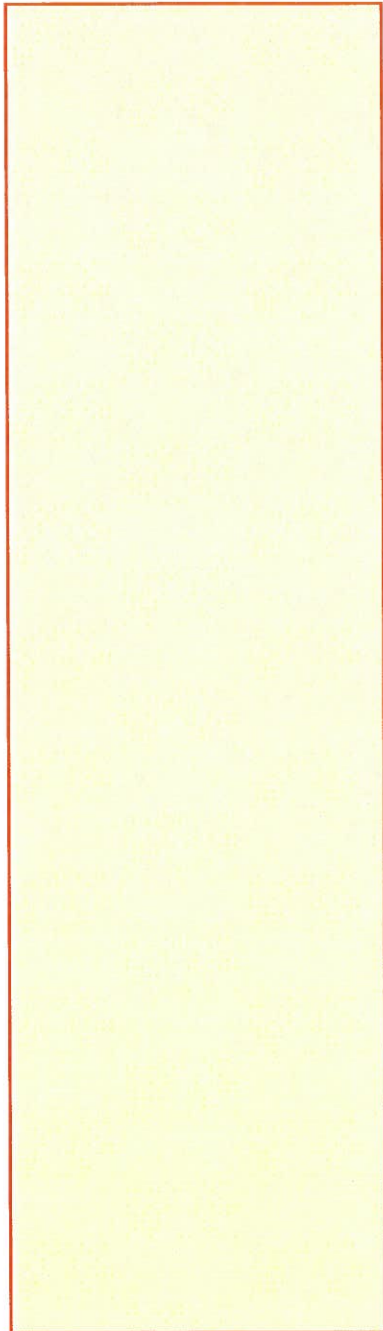
SEC TWP RGE
03-26S-21E

JOB NUMBER

DRAWN BY
LAA

DATE
10-06-2022

SHEET



APPENDIX A

SUBJECT PROPERTY PHOTOGRAPHS



1. View from street facing south.



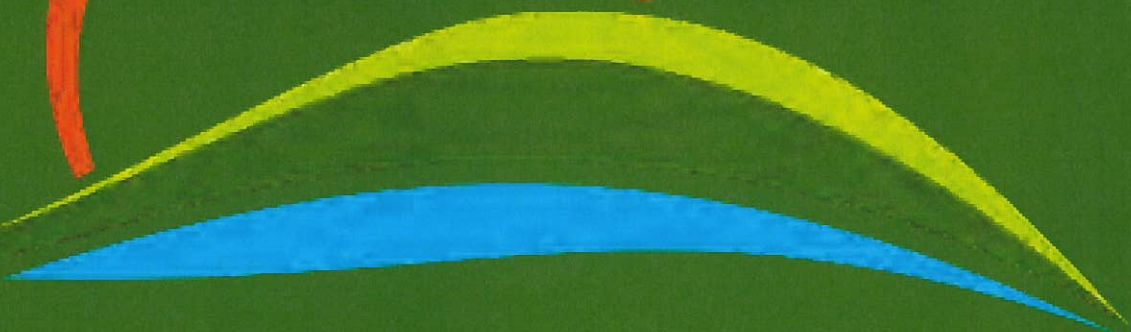
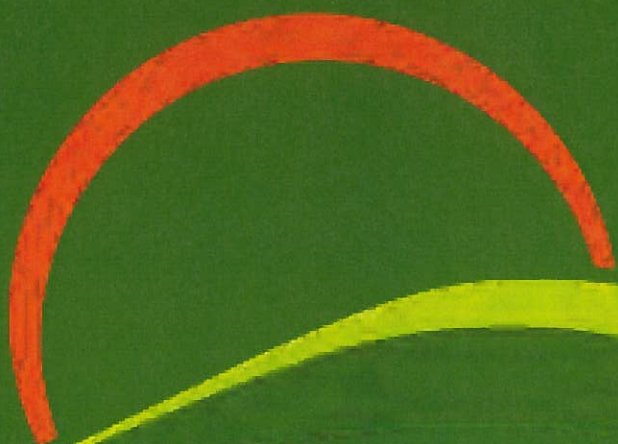
2. View of the backyard shed behind the house.



3. Gopher tortoise burrow.



4. General view of south side of site.



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JUSTIFICATION REPORT
PROVIDENCE VILLAGE, LLC

1. COMPLIANCE ANALYSIS

PROJECT DESCRIPTION

The proposed project is a 36 unit townhome development located in the western portion of the City of Zephyrhills. One parcel is included within this three-fold application process. Parcel 10-26-21-0000-00400-0000 is located within unincorporated Pasco County, and is proposed for annexation into the City of Zephyrhills (“City”).

This three-part concurrent application will provide for annexation into the City, a comprehensive plan amendment, and a rezoning.

The subject property has a single family residence on it, but is otherwise undeveloped.

PROPOSED DEVELOPMENT

The proposed development requests approval for a 36-unit, single-family townhome subdivision. The lots will be generally 20 feet wide by 60 feet deep.

As proposed, a three-part concurrent development application requires three actions by the City of Zephyrhills. The first is an annexation for Parcel 10-26-21-0000-00400-0000 along with a Comprehensive Plan amendment and a Rezoning application. A pre-application meeting with the City of Zephyrhills was held on July 27, 2022.

CONSISTENCY WITH THE COMPREHENSIVE PLAN

Implementation

Goal LU-1: To achieve an economically and diversified tax base that ensures:

- a. The residential I family character of the City of Zephyrhills is maintained and protected while recognizing the economic benefits of a diversified economic base;*

The project will complement the residential character of the City of Zephyrhills while providing an additional option for those looking for a home with less maintenance. The proposed development provides further benefit to the City of Zephyrhills by increasing the tax base.

Land Development Regulation

Objective LU-1-1: To encourage efficient development in areas which will have the capacity to contribute more to the City in revenue than it will consume in services that meet the above- mentioned goals and consistent with this adopted plan.

Policy LU-1-1-1: The City shall continue to enforce land development regulations to ensure orderly development, that at a minimum, contain provisions which:

- a. *Regulate the subdivision of land;*
- b. *Regulate signage;*
- c. *Provide for drainage and stormwater management;*
- d. *Provide requirements for the provision of open space, and safe and convenient on- site traffic flow and parking requirements;*
- e. *Coordinate future land uses with soil conditions, topography, and availability of facilities and services;*
- f. *Ensure that development orders and permits are issued only when it is documented that such development is consistent with the adopted level of service standards and that facilities and services are available concurrent with the impacts of development;*
- g. *Protect the limited amount of wetlands and other environmentally sensitive natural resources;*
- h. *Protect the potable well fields by designating appropriate activities and land uses within well head protection areas and environmentally sensitive land;*
- i. *Provision of mixed land use designations, such as recreation in residential area; and*
- j. *Discourage the proliferation of urban sprawl.*

The project will ensure each of the above items are addressed as part of the construction plans that will be submitted to all applicable government agencies. Urban sprawl will not be created by the proposed development. The proposed development is located on two parcels that are uniquely situated between two subdivisions with relatively high densities. The goal of the developer is to provide a townhome community that will meet the demands of a varied age group, ranging from young adults to senior citizens who are looking for a more maintenance free lifestyle. Open space will be provided to residents for recreational purposes and gatherings.

Residential Development

Objective LU-1-2: The integrity and quality of life will continue to be maintained in existing and future residential neighborhoods.

The project will complement the quality of life within the surrounding communities. The proposed development will not interfere with the integrity of the established neighborhoods in the area.

Policy LU-1-2-1: Residential development shall be consistent with the following residential density categories:

...b. Residential Urban- 7.5 to 14.0 units/gross acre;

The project will contain a density of twelve dwelling units per acre and falls within the high range criteria of the RU Future Land Use category requested in this application.

Policy LU-1-2-2: Existing residential areas shall be protected from incompatible activities. Other land users shall also be protected from the encroachment of incompatible residential activities.

The project is a proposed development that will provide compatibility with the existing residential areas and will serve as a transition between varying residential densities.

Policy LU-1-2-3: The location and extent of residential land uses shall be in accordance with the Future Land use Map and the descriptions of types, sizes, and densities of land uses contained in this element.

The project complies with the requirements of the Future Land Use Map, its categories, and the established development pattern of this area. The area being annexed is currently classified as RES-9 by Pasco County. The City's request via the accompanying RU category is compatible.

Policy LU-1-2-4: Land development shall take place in a manner that is compatible with the type and scale of surrounding land uses.

The project is compatible with the existing future land use categories, surrounding zoning districts and the established development pattern of the area.

CONSISTENCY WITH 171.043, F.S.

171.043 Character of the area to be annexed. A municipal governing body may propose to annex an area only if it meets the general standards of subsection (1) and the requirements of either subsection (2) or subsection (3).

Subsection 1: The total area to be annexed must be contiguous to the municipality's boundaries at the time the annexation proceeding is begun and reasonably compact, and no part of the area shall be included within the boundary of another incorporated municipality.

Parcel 10-26-21-0000-00400-0000 is contiguous to the City of Zephyrhills. The abutting parcel to the south is located within the City of Zephyrhills. No portion of the parcel will be included within the boundary of another incorporated municipality upon annexation approval.

Subsection 2: *Part or all of the area to be annexed must be developed for urban purposes. An area developed for urban purposes is defined as any area which meets any one of the following standards:*

- (a) It has a total resident population equal to at least two persons for each acre of land included within its boundaries;*
- (b) It has a total resident population equal to at least one person for each acre of land included within its boundaries and is subdivided into lots and tracts so that at least 60 percent of the total number of lots and tracts are 1 acre or less in size; or*
- (c) It is so developed that at least 60 percent of the total number of lots and tracts in the area at the time of annexation are used for urban purposes, and it is subdivided into lots and tracts so that at least 60 percent of the total acreage, not counting the acreage used at the time of annexation for nonresidential urban purposes, consists of lots and tracts 5 acres or less in size.*

The project will be developed for urban purposes by providing for a total resident population equal to at least two persons for each acre of land included within its boundaries.

Subsection 3: *In addition to the area developed for urban purposes, a municipal governing body may include in the area to be annexed any area which does not meet the requirements of subsection (2) if such area either:*

- (a) Lies between the municipal boundary and an area developed for urban purposes, so that the area developed for urban purposes is either not adjacent to the municipal boundary or cannot be served by the municipality without extending services or water or sewer lines through such sparsely developed area; or*
- (b) Is adjacent, on at least 60 percent of its external boundary, to any combination of the municipal boundary and the boundary of an area or areas developed for urban purposes as defined in subsection (2).*

The project can be serviced without the extension of water and/or sewer lines through a sparsely developed area.

CONSISTENCY WITH THE LAND DEVELOPMENT CODE AND CITY ORDINANCES

The project will be designed and permitted consistent with the City of Zephyrhills Land Development Code and applicable City Ordinances.

ANNEXATION

The accompanying annexation application includes a total of 3 acres located in unincorporated Pasco County. The applicant believes that the annexation of this parcel is reasonable and meets the legal requirements for inclusion into the City of Zephyrhills.

SURROUNDING FUTURE LAND USE

A comprehensive plan amendment is also included in this three-part application process. Upon approval, this request will assign the tract into the Residential Urban (RU) future land use category for the City of Zephyrhills. The RU classification purpose is to recognize properties that are appropriate to be developed in a suburban, high density manner. It also recognizes that such areas are well- suited for residential uses typical of suburban, non-intensive qualities. The density range in RU is 7.5 to 14.0 dwelling units per gross acre.

ZONING ANALYSIS

An application to rezone Parcel 10-26-21-0000-00400-0000 to R-4, Multi-Family Residential is the final application to run concurrently with this three-part application request. Currently, the parcel within Pasco County is zoned R3. The requested R-4, Multi-Family Residential District, permits a density range of up to 20 units per gross acre with a maximum of 75% impervious area. The increase in density provides for greater land use compatibility.

Public services provided by the City of Zephyrhills are available to service the proposed townhomes.

In summary, the proposed density for 36 townhomes is fully compatible with the established zoning area and established uses within the neighborhood. Once approved by the completed annexation, comprehensive plan amendment, and rezoning process, The project will comply with the City of Zephyrhills Land Development Code and adopted ordinances. Its development will be consistent with the surrounding area, future land use categories of the comprehensive plan, the established area zoning, and the existing development pattern of the area.

PREMATURE DEVELOPMENT ANALYSIS

The project, consisting of 36 townhomes, will not create premature development. The proposed development is located amidst a variety of developed uses that provide functional, convenient, and necessary infrastructure. There are numerous residential uses within close proximity, as well as health care, commercial retail, educational facilities, worship opportunities, and, within a short commute, governmental offices and an airport. The project

will blend with the established residential development pattern within the immediate area and will complement the existing neighborhoods with yet another option of for those desiring to live in the City of Zephyrhills.

2. Suitability Analysis.

The parcel is surrounded by a variety of residential uses. The proposed residential use with 36 townhomes will provide for a consistent density while also adding variety to potential property owners wanting to move into the area. It will utilize existing infrastructure, provide additional housing opportunities into the City of Zephyrhills, and blend with existing development in the vicinity. This development is considered appropriate for a continuation of single-family residential development already established in this area.

The subject property will be served by the City of Zephyrhills Police Department. The Pasco County Sheriff's Office actively patrols this area, as well. In the event of needed emergency support within the jurisdictions of either of these agencies, both agencies are able to respond to offer assistance.

The Zephyrhills Police Station is located at 6118 8th Street, a short distance from the subject property.

Residents in the proposed development will be served primarily by the Advent Health Zephyrhills Hospital, located at 7050 Gall Boulevard. The location of Advent Health Zephyrhills Hospital is approximately one mile from the proposed townhome community.

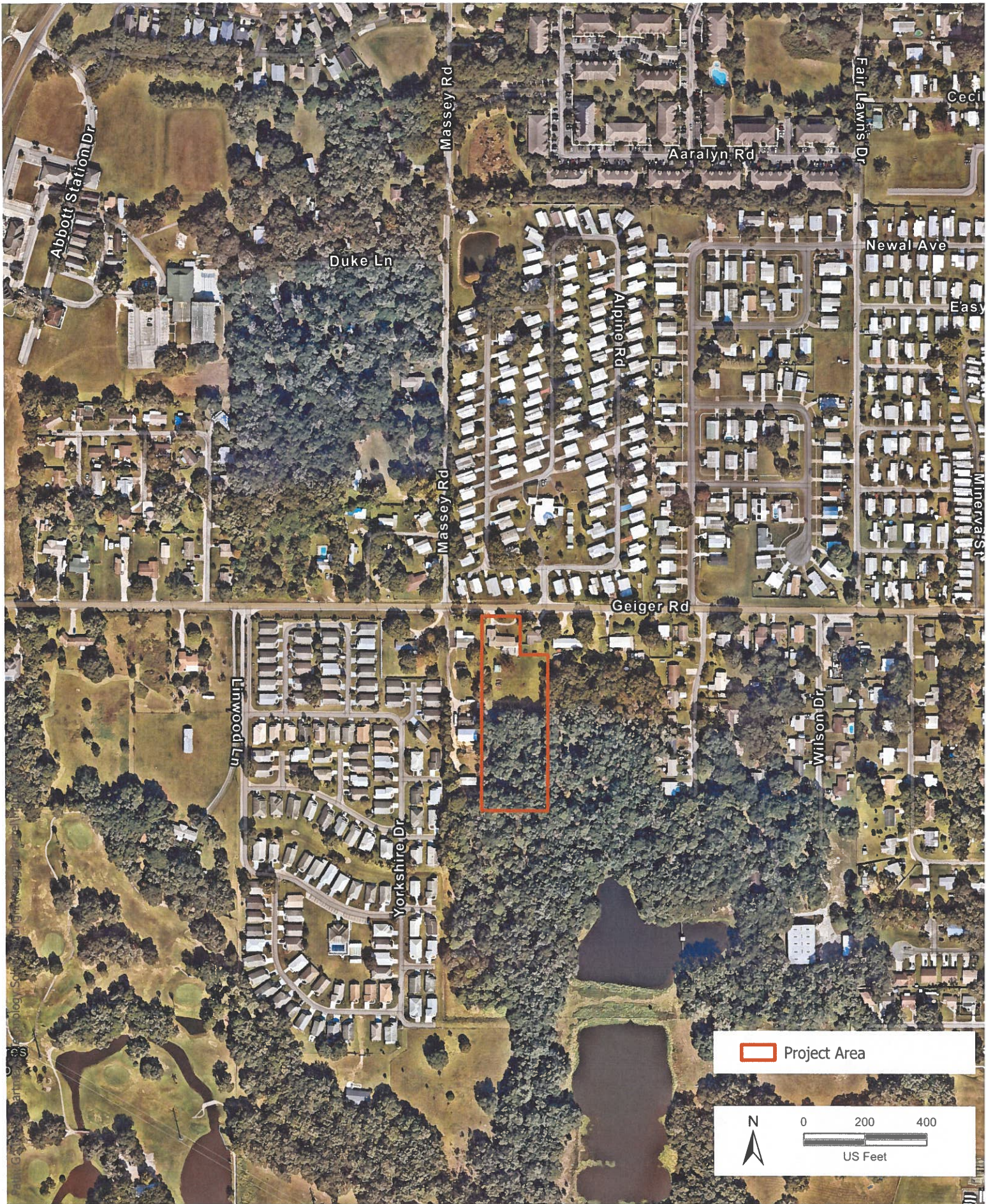
There are numerous private physician offices with specialty services in the City of Zephyrhills. Additionally, walk-in urgent care clinics are available that can serve medical needs on an as-needed basis for the convenience of area residents. Most all are within an acceptable short driving distance from the proposed development and the hospital.

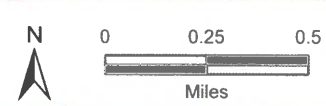
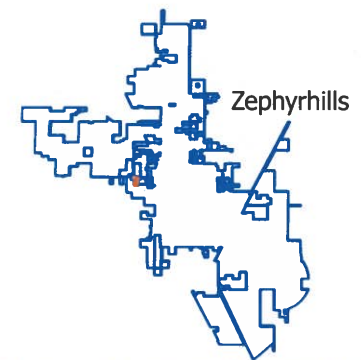
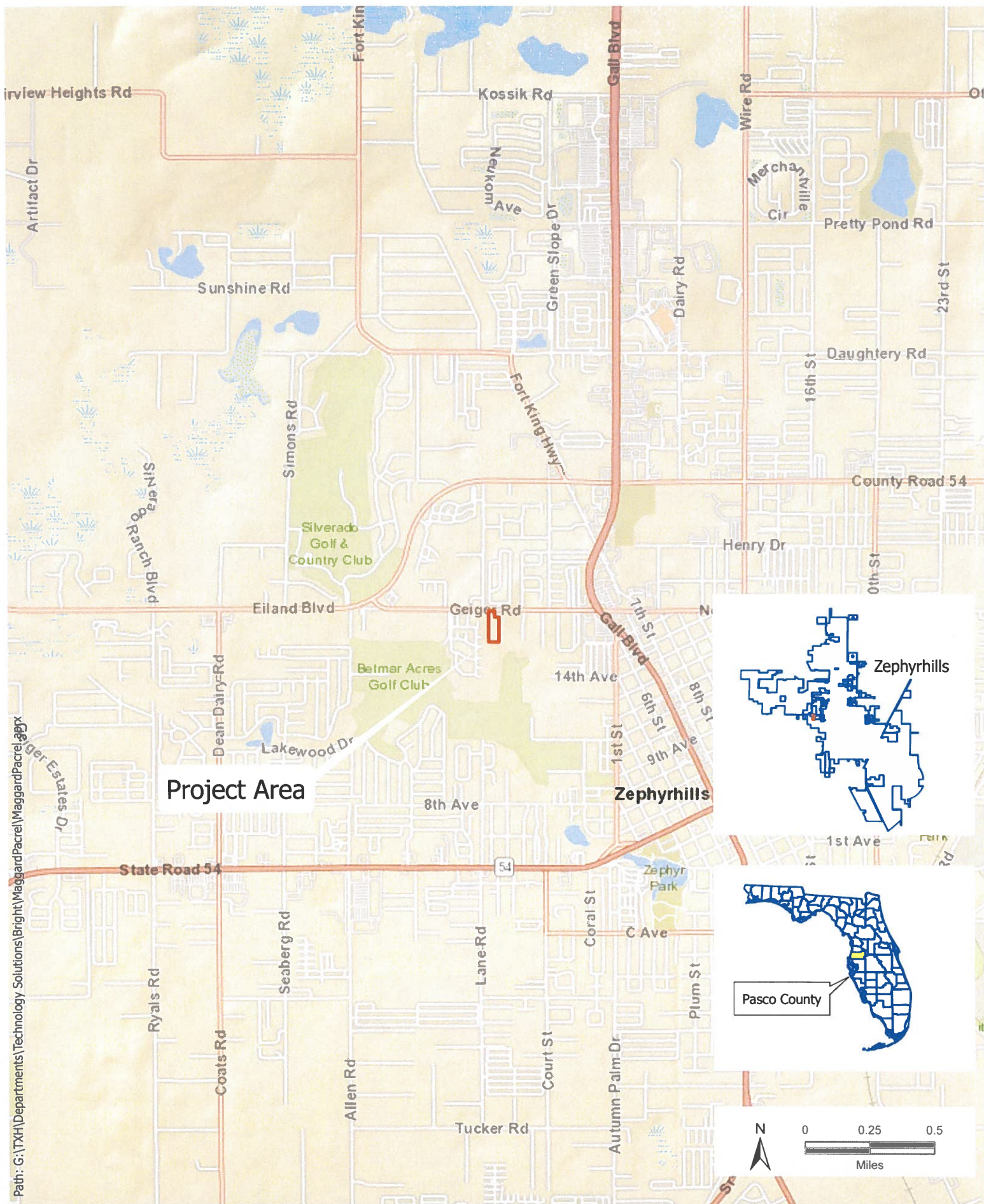
3. Residential Impact Statement. Not applicable per pre-filing meeting with City.

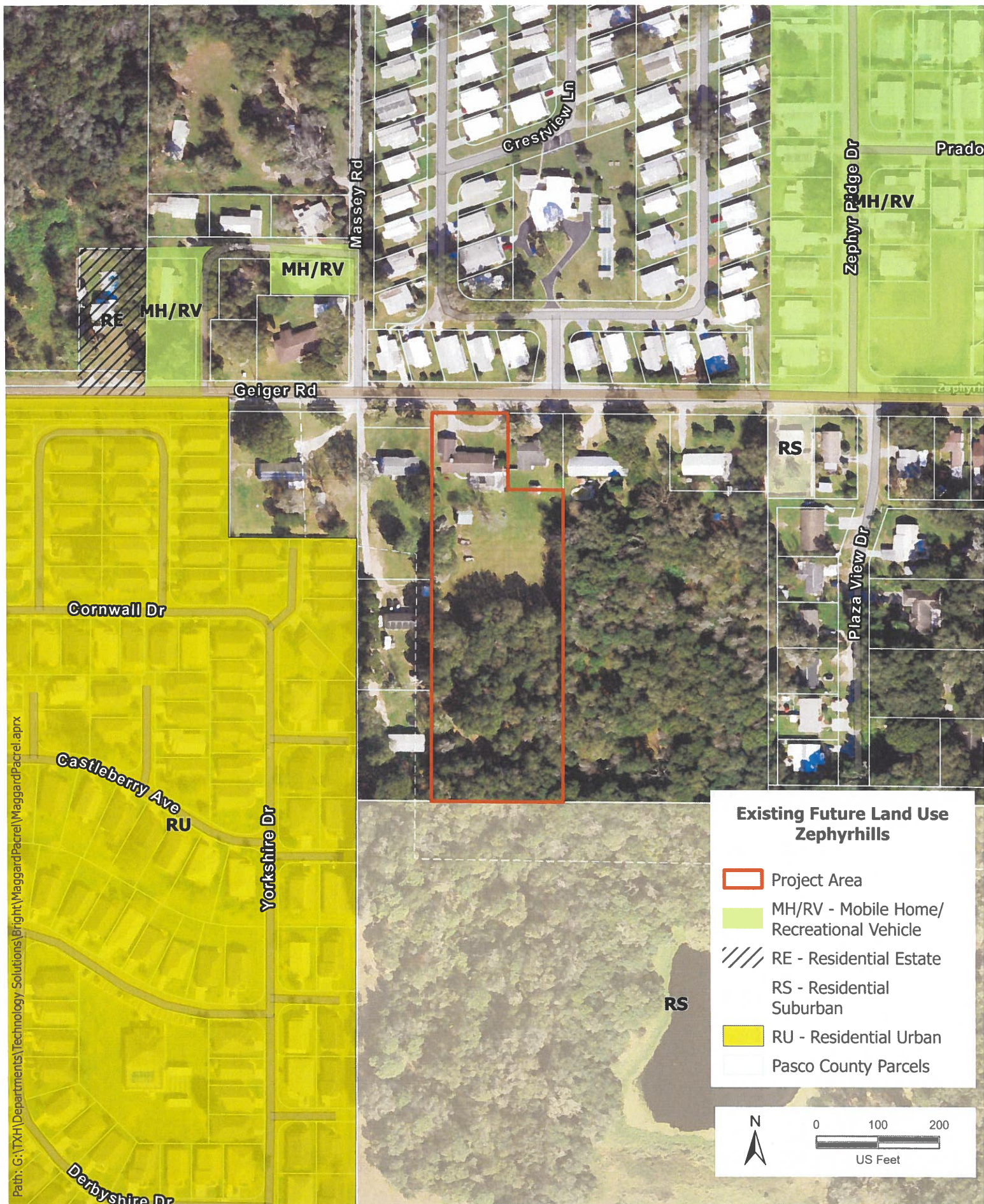
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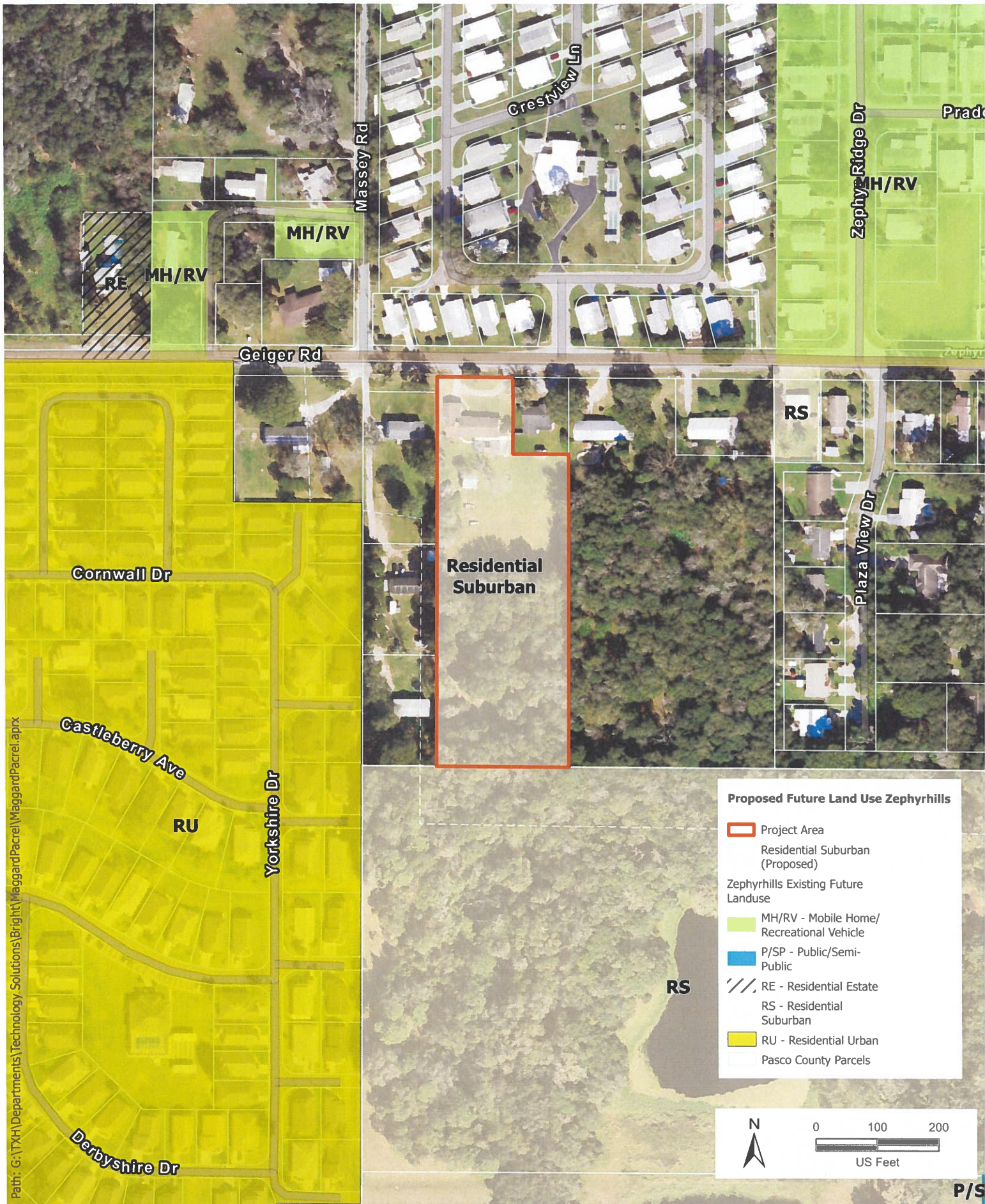
The project abuts a major road, Geiger Road, as can be seen by the Transportation Map attached hereto.



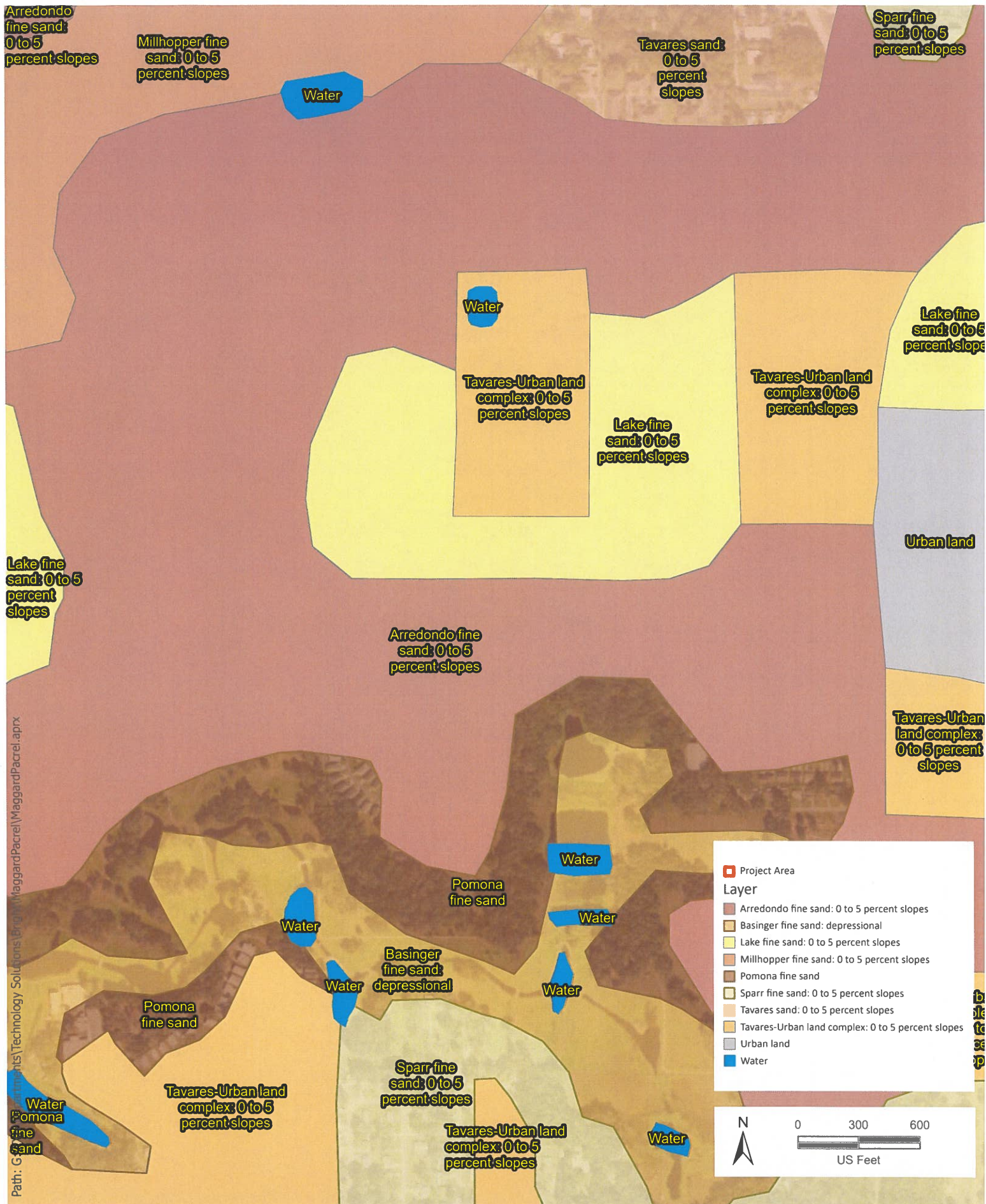




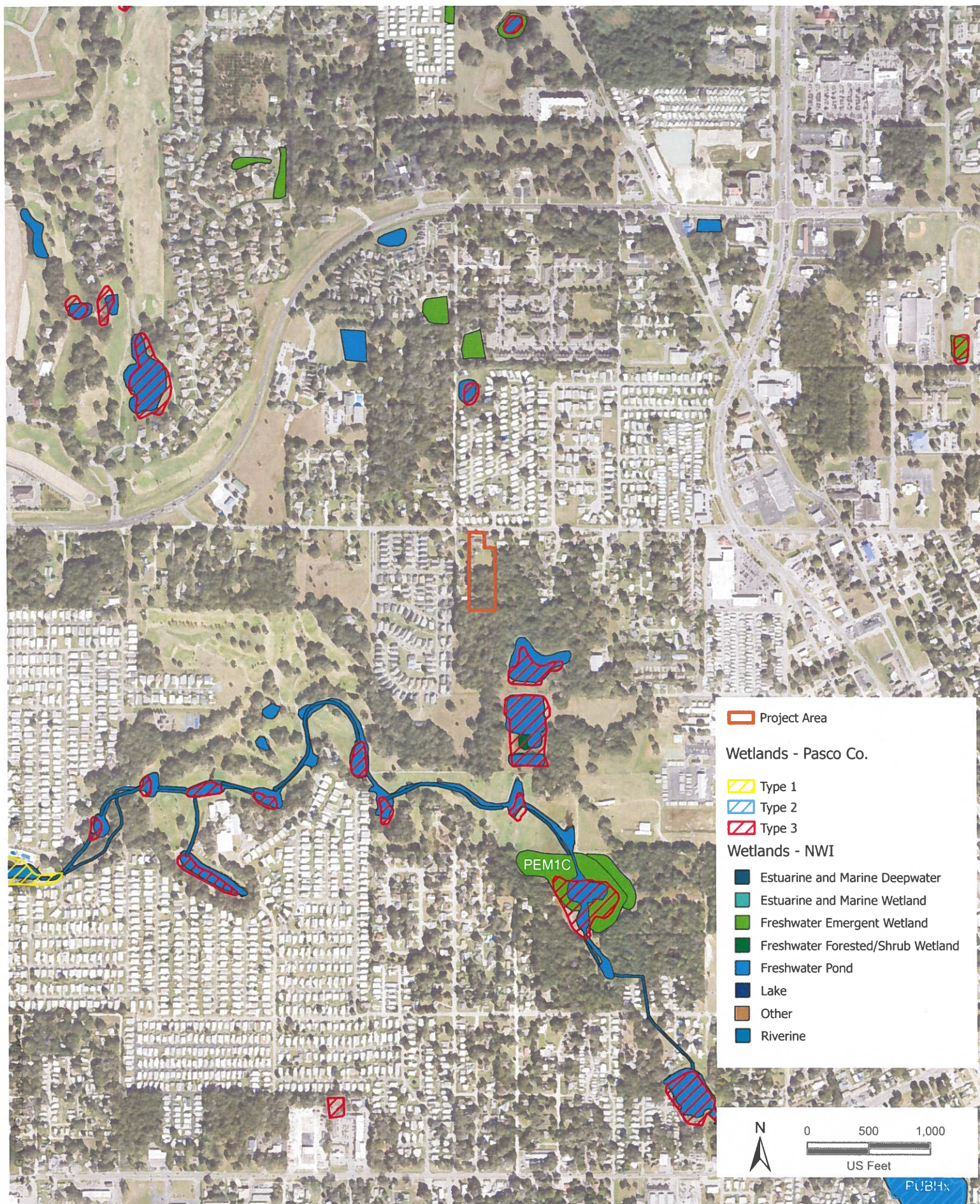










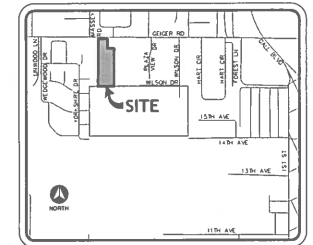


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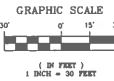




SECTION 10, TOWNSHIP 26 SOUTH, RANGE 21 EAST
PASCO COUNTY, FLORIDA



VICINITY MAP
(NOT TO SCALE)



The West 1/2 of the Northwest 1/4 of the Northwest 1/4 of the
 Northeast 1/4 of Section 10, Township 26 South, Range 21 East;
 LESS the West 120 feet thereof, the North 25 feet thereof, and the
 East 90 feet of the North 150 feet thereof.

[illegible]

I, the undersigned Professional Surveyor and Mapper, hereby certify that this Specific Purpose Survey was prepared under my direct supervision, that to the best of my knowledge, information and belief is a true and accurate representation of the land shown and described, and that it meets the Standards of Practice for Land Surveying in the State of Florida Chapter 5J-17, Florida Administrative Code.

Dennis J. Benham, PLS
Professional Surveyor and Mapper #4697
State of Florida

[illegible]

NORTH
SCALE 1" = 50'

P | (844) 772-2726
E | info@pacscon.com



4517 George Rd., Suite 220
Tampa, FL 33634

October 7, 2022

Mr. Chad Pettinato
Chief Executive Officer
Premiere Housing Solutions, LLC
38606 Foss Lane
Zephyrhills, FL 33542

Subject: Wildlife Assessment Report
Geiger Road – Bacon
Zephyrhills, Pasco County, Florida
PACSCON No. 2022-1707

Dear Mr. Pettinato:

PACSCON GeoEnvironmental, Inc. (PACSCON) has completed the authorized Wildlife Assessment for the above-referenced project. The work was performed in general accordance with PACSCON Proposal Number 2022-1707, dated July 8, 2022.

We appreciate your selection of PACSCON and the opportunity to be of service on this project. We look forward to continuing to work with you on the project. Please contact the undersigned if you have any questions, or if we may be of further assistance.

Sincerely,

PACSCON

Leigh Ann Anderson, MS, PWS, CA
Senior Ecologist | Project Manager

Christopher B. Poole, PG, CPG
President | Founding Principal

Attachment: Wildlife Assessment Report

WILDLIFE ASSESSMENT REPORT

GEIGER ROAD -BACON
ZEPHYRHILLS, PASCO COUNTY, FLORIDA



PREPARED FOR:

Mr. Chad Pettinato
Chief Executive Officer
Premiere Housing Solutions, LLC
38606 Foss Lane
Zephyrhills, FL 33542

PACSCON No.: 2022-1707

REPORT DATE: October 7, 2022

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- FIGURE 2 – FLUCCS Map
- FIGURE 3 – Soils Map
- FIGURE 4 – Gopher Tortoise Burrow Map

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1.0 INTRODUCTION & SCOPE

PACSCON GeoEnvironmental, Inc. (PACSCON) was authorized by Premiere Housing Solutions, LLC (the Client) to perform a wildlife assessment and subsequent report for property located on the north side of Geiger Road in Pasco County, Florida (the Subject Property). Specifically, the Subject Property consists of Pasco County Property Appraiser (PCPA) parcel number 03-26-21-0010-11700-0020 and reportedly contains ± 4.13 acres of vacant and vegetated land.

Figures provided as attachments to this report include:

- **Figure 1** – a site location map for the Subject Property,
- **Figure 2** – a Florida Land Use, Cover, and Forms Classification System (FLUCCS) map,
- **Figure 3** – a soils map is, and
- **Figure 4** – a Gopher Tortoise Burrow Map.

2.0 SITE CONDITIONS

To help evaluate environmental risk at the Subject Property, this report was prepared by PACSCON based on a desktop review which was performed on October 6, 2022, and a site visit and pedestrian survey performed on October 4, 2022. PACSCON personnel walked a series of meandering transects across the property to identify the potential presence of listed species and other site features. It was confirmed during the site visit that there are no wetlands located on the Subject Property.

The Subject Property is currently a vacant and vegetated residential parcel that is located within a primarily residential area and consists of one generally rectangularly-shaped parcel, which is accessed from Geiger Road along the southern property boundary. It is currently considered mixed hardwoods (FLUCCS 438). See **Figure 2** for FLUCCS codes for the Subject Property and immediately surrounding area.

Vegetation on the Subject Property primarily includes *Broussonetia papyrifera* (paper mulberry), *Quercus virginiana* (live oak), *Quercus laurifolia* (laurel oak), *Imperata cylindrica* (cogongrass), *Melia azedarach* (Chinaberry tree), and *Prunus laurocerasus* (cherry laurel).

The soils on the Subject Property have been mapped as Lake fine sand, 0 to 5 percent slopes (32) and Arredondo fine sand, 0 to 5 percent slopes (43). See **Figure 3** for a soils map of the Subject Property and immediately surrounding area.

Photographs of the Subject Property taken during our site visit are provided in **Appendix A** hereto.



3.0 FINDINGS

A desktop analysis using the U.S. Fish and Wildlife Service (FWS) Environmental Conservation Online System (IPaC) indicated four listed threatened and endangered species that could potentially be found within the project area including the *Laterallus jamaicensis* ssp. *jamaicensis* (Eastern black rail), *Drymarchon couperi* (Eastern indigo snake), *Gopherus polyphemus* (gopher tortoise), and *Mycteria americana* (woodstork). PACSCON walked several transects within the site. One gopher tortoise burrow was identified onsite. See **Figure 4** for a Gopher Tortoise Burrow Map.

A desktop review of the Florida Natural Areas Inventory (FNAI) Florida Biodiversity Matrix Map indicated an additional four threatened species, species of special concern, or species otherwise protected by the federal government and/or the state of Florida. These species include *Athene cunicularia floridana* (Florida burrowing owl), *Rostrhamus sociabilis* (snail kite), *Antigone canadensis pratensis* (Florida sandhill crane), and *Dryobates borealis* (red cockaded woodpecker).

None of the above listed species with the exception of the gopher tortoise were observed onsite. The Eastern black rail, wood stork, snail kite, and Florida sandhill crane utilize freshwater marsh habitat, which is not present on the Subject Property, nor is there longleaf pine forest habitat present onsite, which is habitat required by the red cockaded woodpecker. Additionally, no owl burrows were identified onsite during PACSCON's site visit.

Although the bald eagle is not protected under the United States Endangered Species Act, it is protected under the federal Migratory Bird Act and Bald and Golden Eagle Act. According to the Florida Fish and Wildlife Conservation Commission (FWC) eagle nest locator, the nearest bald eagle nest is approximately 3.5 miles away. Similarly, the FWS identifies the nearest active wood stork colony over eight miles away. Both of these distances from the Subject Property are well outside of regulatory buffer requirements.

4.0 PERMITTING REQUIREMENTS

Based on the findings of this wildlife assessment, PACSCON identified one listed species onsite, which is the gopher tortoise. Only one gopher tortoise burrow was found onsite at the general location indicated on **Figure 4**. Although this survey was a general wildlife survey and did not include standard FWC methods for a 100% gopher tortoise survey, it is likely that there is only one burrow onsite given the lack of desirable gopher tortoise habitat. Additionally, the majority of the Subject Property was observed during PACSCON's site visit due to adequate visibility.

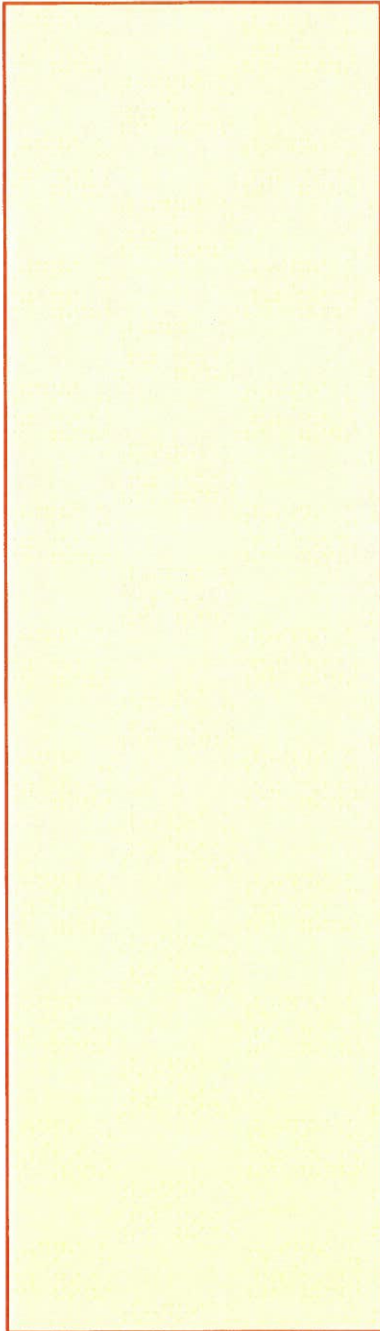
The FWC requires all gopher tortoises to be relocated prior to development activities or to be avoided by 25 feet. A gopher tortoise survey covering 100% of the property must be performed



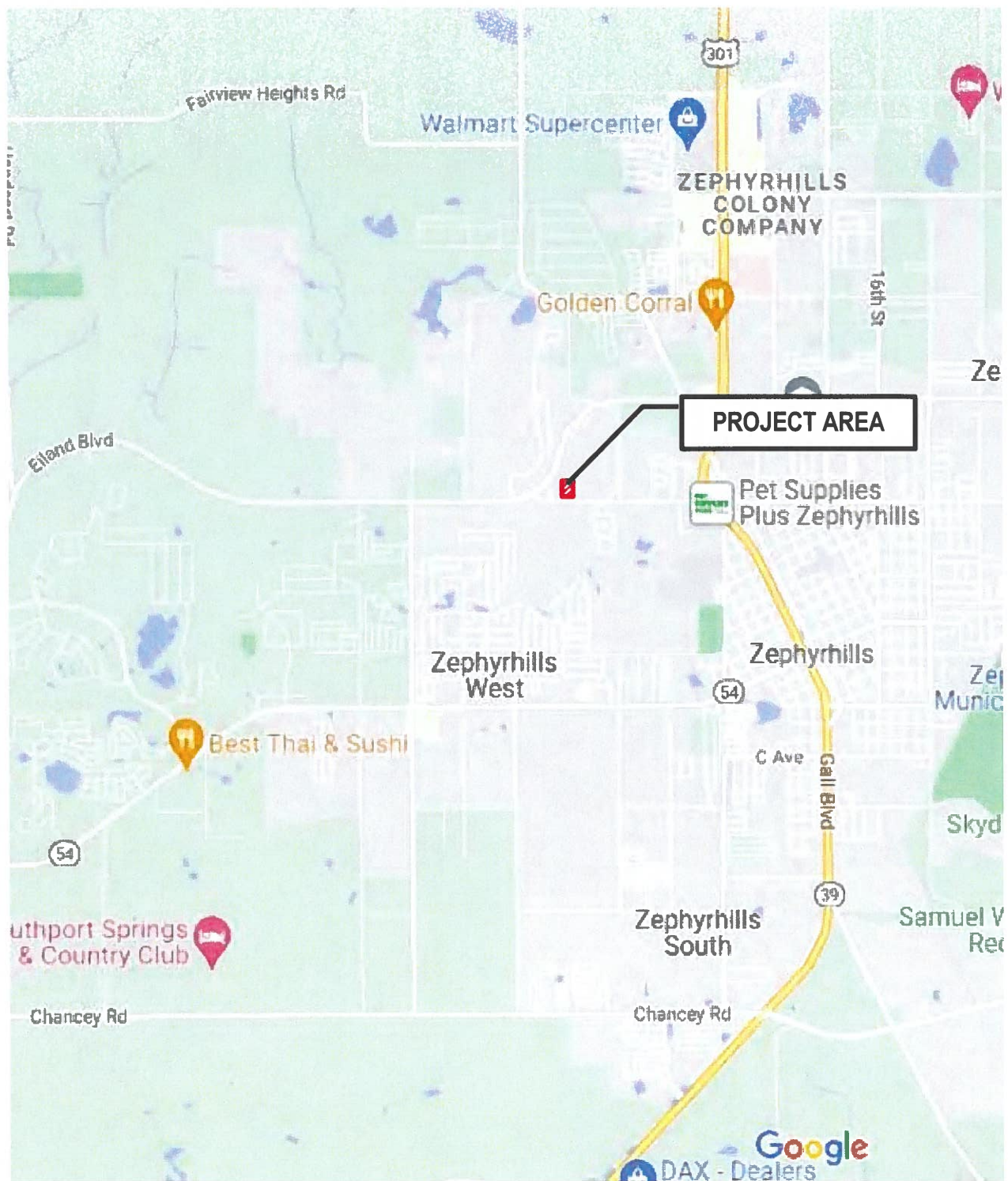
by an FWC authorized gopher tortoise agent within 90 days of proposed construction activities. The 100% survey can then be utilized for gopher tortoise relocation permitting purposes.

Further, if an Eastern indigo snake is found within one of the burrows during excavation, the relocation activity must cease until the snake has moved out of the construction zone. Eastern indigo snake educational documentation must also be posted onsite during all construction activities.





FIGURES



SITE LOCATION MAP
SOURCE: Google.com/maps



Geiger Road
Zephyrhills, Florida
PACSCON Project No. 2022-1707

C:\Users\leigh\Dropbox\projects\Geiger_Rd_north_03-26-21-0010-11700-0020\FLUCCS map.dwg (8.5 x 11) Leigh Oct 06, 2022 - 2:48pm



PACSCON
Client Centric | Geo-Environmentally Focused



FLUCCS MAP GEIGER ROAD

SEC TWP RGE
03-26S-21E

JOB NUMBER

DRAWN BY
LAA

DATE
10-06-2022

SHEET

C:\Users\leigh\Dropbox\projects\Geiger_Rd_north_03-26-21-0010-11700-0020\soils map.dwg (11-17) Leigh Oct 06, 2022 - 2:53pm



LEGEND

- 32 - Lake fine sand, 0 to 5 percent slopes
- 43 - Arredondo fine sand, 0 to 5 percent slopes



**SOILS MAP
GEIGER ROAD**

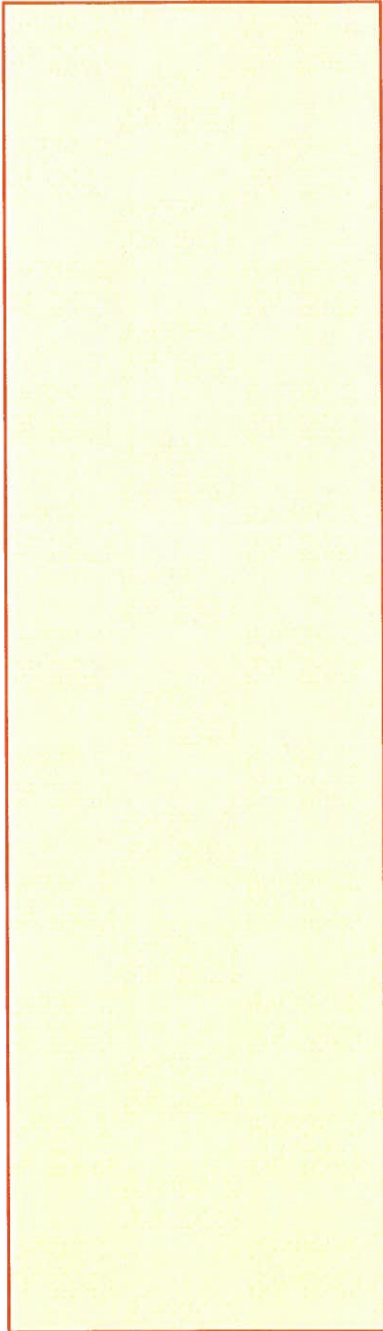
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03-26S-21E		LAA	10-06-2022	

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GOPHER TORTOISE BURROW MAP GEIGER ROAD

SEC TWP RGE 03-26S-21E	JOB NUMBER	DRAWN BY LAA	DATE 10-06-2022	SHEET
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APPENDIX A

SUBJECT PROPERTY PHOTOGRAPHS



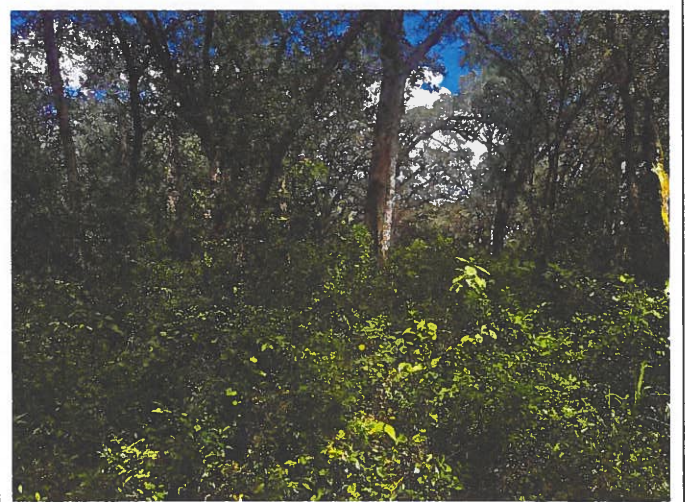
1. View from street facing north.



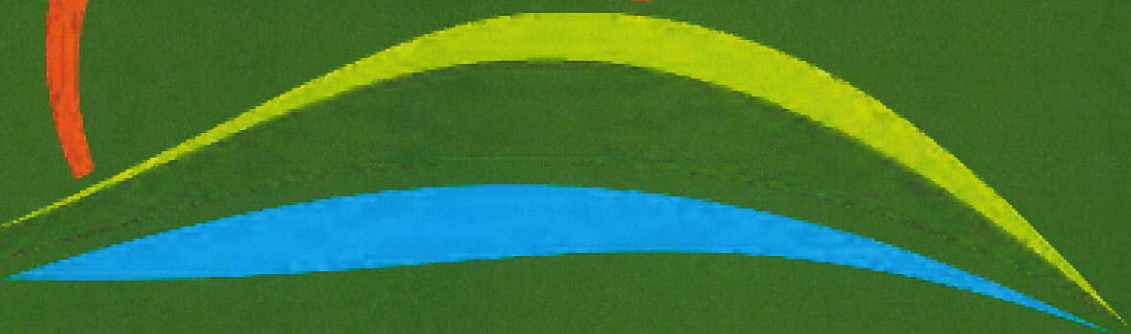
2. General view of site.



3. Gopher tortoise burrow.



4. General view of north side of site.



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JUSTIFICATION REPORT
BLACK MARLIN CAPITAL, LLC

1. COMPLIANCE ANALYSIS

PROJECT DESCRIPTION

The proposed project is a 36 unit townhome development located in the western portion of the City of Zephyrhills. One parcel is included within this three-fold application process. Parcel 03-26-21-0010-11700-0020 is located within unincorporated Pasco County, and is proposed for annexation into the City of Zephyrhills (“City”).

This three-part concurrent application will provide for annexation into the City, a comprehensive plan amendment, and a rezoning.

The subject property is undeveloped.

PROPOSED DEVELOPMENT

The proposed development requests approval for a 36-unit, single-family townhome subdivision. The lots will be generally 20 feet wide by 60 feet deep.

As proposed, a three-part concurrent development application requires three actions by the City of Zephyrhills. The first is an annexation for Parcel 03-26-21-0010-11700-0020 along with a Comprehensive Plan amendment and a Rezoning application. A pre-application meeting with the City of Zephyrhills was held on July 27, 2022.

CONSISTENCY WITH THE COMPREHENSIVE PLAN

Implementation

Goal LU-1: To achieve an economically and diversified tax base that ensures:

- a. The residential I family character of the City of Zephyrhills is maintained and protected while recognizing the economic benefits of a diversified economic base;*

The project will complement the residential character of the City of Zephyrhills while providing an additional option for those looking for a home with less maintenance. The proposed development provides further benefit to the City of Zephyrhills by increasing the tax base.

Land Development Regulation

Objective LU-1-1: To encourage efficient development in areas which will have the capacity to contribute more to the City in revenue than it will consume in services that meet the above- mentioned goals and consistent with this adopted plan.

Policy LU-1-1-1: The City shall continue to enforce land development regulations to ensure orderly development, that at a minimum, contain provisions which:

- a. *Regulate the subdivision of land;*
- b. *Regulate signage;*
- c. *Provide for drainage and stormwater management;*
- d. *Provide requirements for the provision of open space, and safe and convenient on- site traffic flow and parking requirements;*
- e. *Coordinate future land uses with soil conditions, topography, and availability of facilities and services;*
- f. *Ensure that development orders and permits are issued only when it is documented that such development is consistent with the adopted level of service standards and that facilities and services are available concurrent with the impacts of development;*
- g. *Protect the limited amount of wetlands and other environmentally sensitive natural resources;*
- h. *Protect the potable well fields by designating appropriate activities and land uses within well head protection areas and environmentally sensitive land;*
- i. *Provision of mixed land use designations, such as recreation in residential area; and*
- j. *Discourage the proliferation of urban sprawl.*

The project will ensure each of the above items are addressed as part of the construction plans that will be submitted to all applicable government agencies. Urban sprawl will not be created by the proposed development. The proposed development is located on two parcels that are uniquely situated between two subdivisions with relatively high densities. The goal of the developer is to provide a townhome community that will meet the demands of a varied age group, ranging from young adults to senior citizens who are looking for a more maintenance free lifestyle. Open space will be provided to residents for recreational purposes and gatherings.

Residential Development

Objective LU-1-2: The integrity and quality of life will continue to be maintained in existing and future residential neighborhoods.

The project will complement the quality of life within the surrounding communities. The proposed development will not interfere with the integrity of the established neighborhoods in the area.

Policy LU-1-2-1: Residential development shall be consistent with the following residential density categories:

...b. Residential Urban- 7.5 to 14.0 units/gross acre;

The project will contain a density of 8.72 dwelling units per acre and falls within the medium range criteria of the RU Future Land Use category requested in this application.

Policy LU-1-2-2: Existing residential areas shall be protected from incompatible activities. Other land users shall also be protected from the encroachment of incompatible residential activities.

The project is a proposed development that will provide compatibility with the existing residential areas and will serve as a transition between varying residential densities.

Policy LU-1-2-3: The location and extent of residential land uses shall be in accordance with the Future Land use Map and the descriptions of types, sizes, and densities of land uses contained in this element.

The project complies with the requirements of the Future Land Use Map, its categories, and the established development pattern of this area. The area being annexed is currently classified as RES-9 by Pasco County. The City's request via the accompanying RU category is compatible.

Policy LU-1-2-4: Land development shall take place in a manner that is compatible with the type and scale of surrounding land uses.

The project is compatible with the existing future land use categories, surrounding zoning districts and the established development pattern of the area.

CONSISTENCY WITH 171.043, F.S.

171.043 Character of the area to be annexed. A municipal governing body may propose to annex an area only if it meets the general standards of subsection (1) and the requirements of either subsection (2) or subsection (3).

Subsection 1: The total area to be annexed must be contiguous to the municipality's boundaries at the time the annexation proceeding is begun and reasonably compact, and no part of the area shall be included within the boundary of another incorporated municipality.

Parcel 03-26-21-0010-11700-0020 is contiguous to the City of Zephyrhills. The abutting parcel to the east is located within the City of Zephyrhills. No portion of the parcel will be included within the boundary of another incorporated municipality upon annexation approval.

Subsection 2: *Part or all of the area to be annexed must be developed for urban purposes. An area developed for urban purposes is defined as any area which meets any one of the following standards:*

- (a) It has a total resident population equal to at least two persons for each acre of land included within its boundaries;*
- (b) It has a total resident population equal to at least one person for each acre of land included within its boundaries and is subdivided into lots and tracts so that at least 60 percent of the total number of lots and tracts are 1 acre or less in size; or*
- (c) It is so developed that at least 60 percent of the total number of lots and tracts in the area at the time of annexation are used for urban purposes, and it is subdivided into lots and tracts so that at least 60 percent of the total acreage, not counting the acreage used at the time of annexation for nonresidential urban purposes, consists of lots and tracts 5 acres or less in size.*

The project will be developed for urban purposes by providing for a total resident population equal to at least two persons for each acre of land included within its boundaries.

Subsection 3: *In addition to the area developed for urban purposes, a municipal governing body may include in the area to be annexed any area which does not meet the requirements of subsection (2) if such area either:*

- (a) Lies between the municipal boundary and an area developed for urban purposes, so that the area developed for urban purposes is either not adjacent to the municipal boundary or cannot be served by the municipality without extending services or water or sewer lines through such sparsely developed area; or*
- (b) Is adjacent, on at least 60 percent of its external boundary, to any combination of the municipal boundary and the boundary of an area or areas developed for urban purposes as defined in subsection (2).*

The project can be serviced without the extension of water and/or sewer lines through a sparsely developed area.

CONSISTENCY WITH THE LAND DEVELOPMENT CODE AND CITY ORDINANCES

The project will be designed and permitted consistent with the City of Zephyrhills Land Development Code and applicable City Ordinances.

ANNEXATION

The accompanying annexation application includes a total of 4.13 acres located in unincorporated Pasco County. The applicant believes that the annexation of this parcel is reasonable and meets the legal requirements for inclusion into the City of Zephyrhills.

SURROUNDING FUTURE LAND USE

A comprehensive plan amendment is also included in this three-part application process. Upon approval, this request will assign the tract into the Residential Urban (RU) future land use category for the City of Zephyrhills. The RU classification purpose is to recognize properties that are appropriate to be developed in a suburban, high density manner. It also recognizes that such areas are well- suited for residential uses typical of suburban, non-intensive qualities. The density range in RU is 7.5 to 14.0 dwelling units per gross acre.

ZONING ANALYSIS

An application to rezone Parcel 03-26-21-0010-11700-0020 to R-4, Multi-Family Residential is the final application to run concurrently with this three-part application request. Currently, the parcel within Pasco County is zoned RMH. The requested R-4, Multi-Family Residential District, permits a density range of up to 20 units per gross acre with a maximum of 75% impervious area. The increase in density provides for greater land use compatibility.

Public services provided by the City of Zephyrhills are available to service the proposed townhomes.

In summary, the proposed density for 36 townhomes is fully compatible with the established zoning area and established uses within the neighborhood. Once approved by the completed annexation, comprehensive plan amendment, and rezoning process, The project will comply with the City of Zephyrhills Land Development Code and adopted ordinances. Its development will be consistent with the surrounding area, future land use categories of the comprehensive plan, the established area zoning, and the existing development pattern of the area.

PREMATURE DEVELOPMENT ANALYSIS

The project, consisting of 36 townhomes, will not create premature development. The proposed development is located amidst a variety of developed uses that provide functional, convenient, and necessary infrastructure. There are numerous residential uses within close proximity, as well as health care, commercial retail, educational facilities, worship opportunities, and, within a short commute, governmental offices and an airport. The project

will blend with the established residential development pattern within the immediate area and will complement the existing neighborhoods with yet another option of for those desiring to live in the City of Zephyrhills.

2. Suitability Analysis.

The parcel is surrounded by a variety of residential uses. The proposed residential use with 36 townhomes will provide for a consistent density while also adding variety to potential property owners wanting to move into the area. It will utilize existing infrastructure, provide additional housing opportunities into the City of Zephyrhills, and blend with existing development in the vicinity. This development is considered appropriate for a continuation of single-family residential development already established in this area.

The subject property will be served by the City of Zephyrhills Police Department. The Pasco County Sheriff's Office actively patrols this area, as well. In the event of needed emergency support within the jurisdictions of either of these agencies, both agencies are able to respond to offer assistance.

The Zephyrhills Police Station is located at 6118 8th Street, a short distance from the subject property.

Residents in the proposed development will be served primarily by the Advent Health Zephyrhills Hospital, located at 7050 Gall Boulevard. The location of Advent Health Zephyrhills Hospital is approximately one mile from the proposed townhome community.

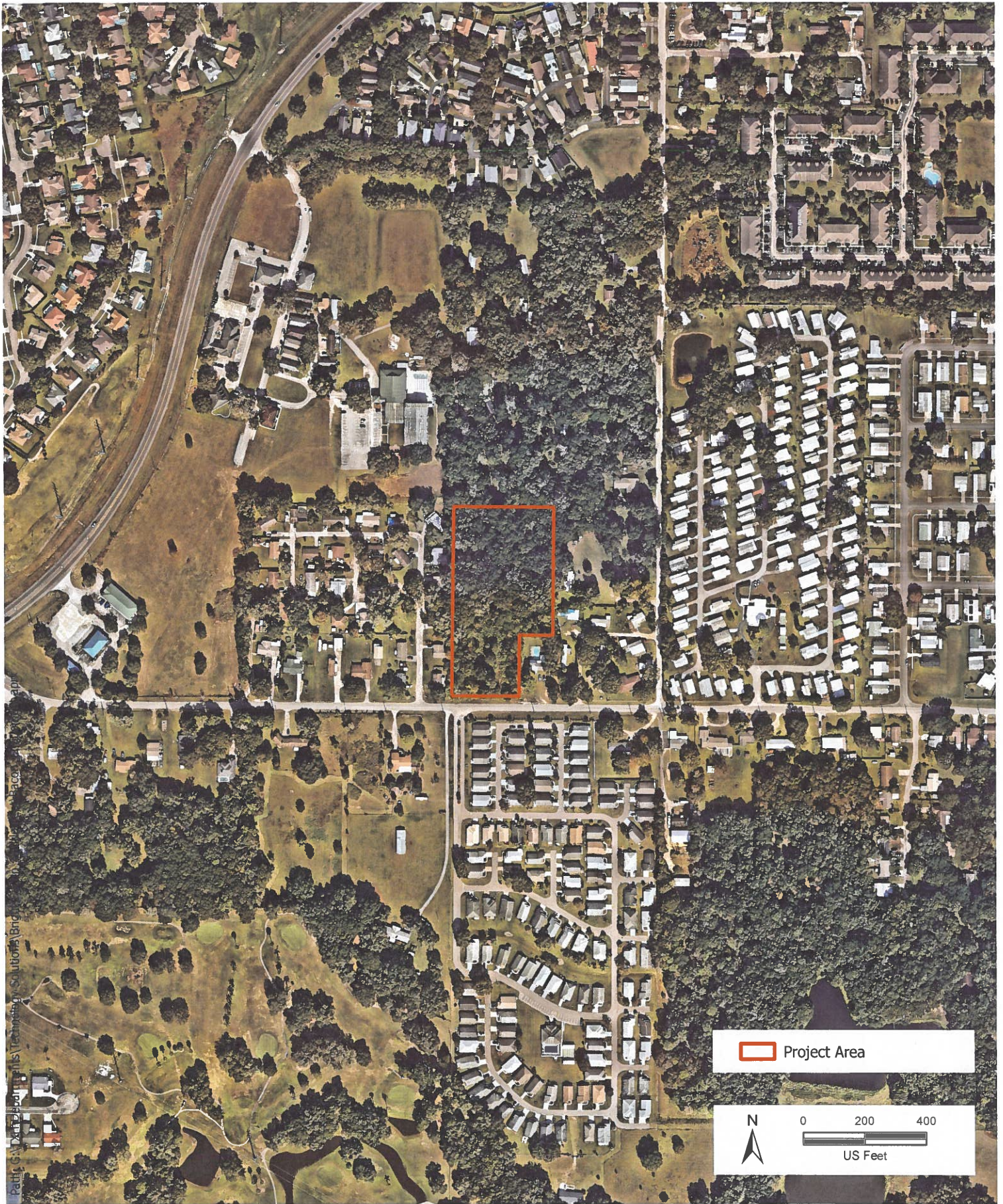
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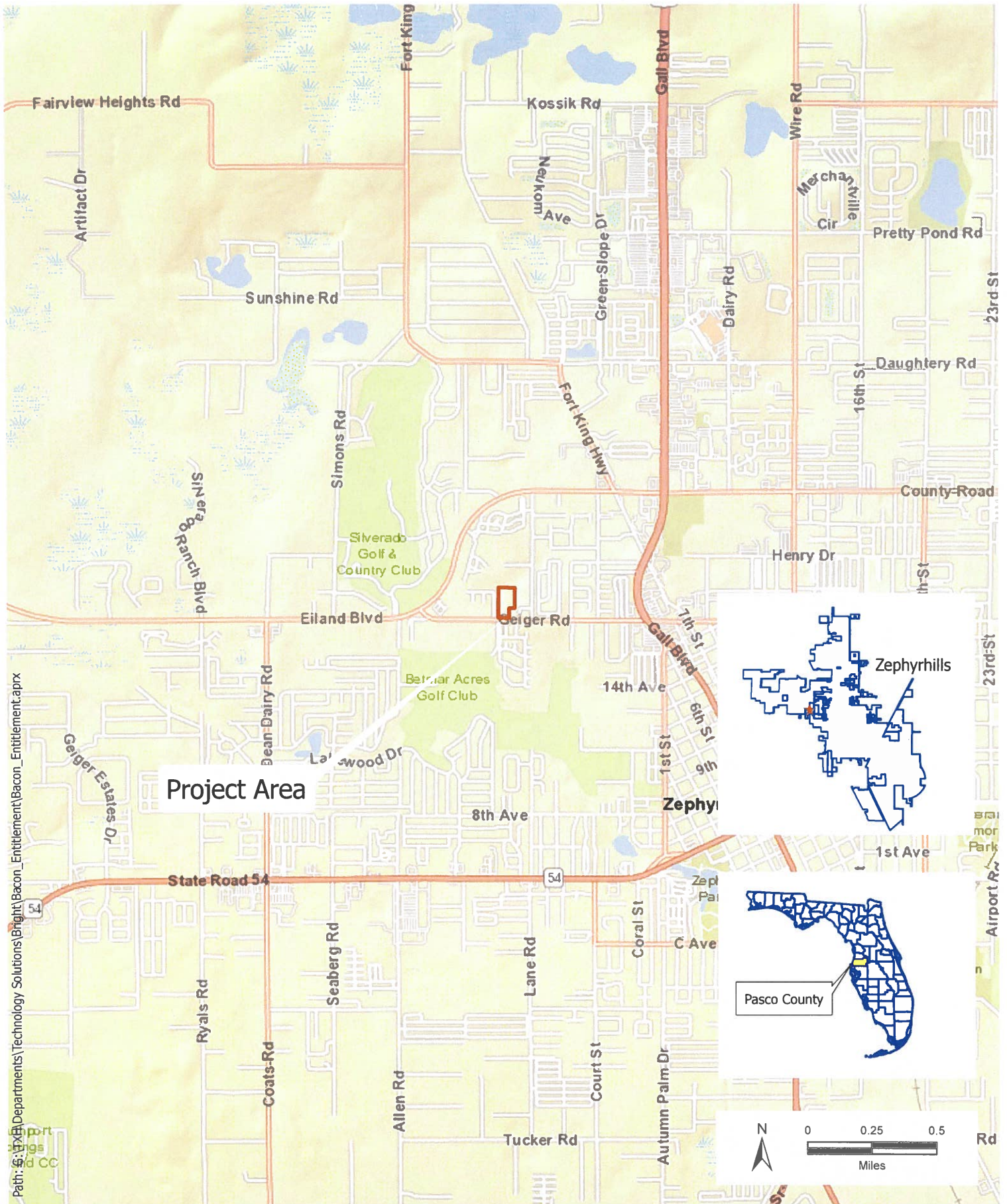
3. Residential Impact Statement. Not applicable per pre-filing meeting with City.

4. Traffic Study.

The project is initially expected to have no more than 36 townhouse units, and is considered de minimus in accordance with Section 7.03.01 of the City of Zephyrhills Land Development Code ("LDC").

The project abuts a major road, Geiger Road, as can be seen by the Transportation Map attached hereto.





Bacon Entitlement - Location Map

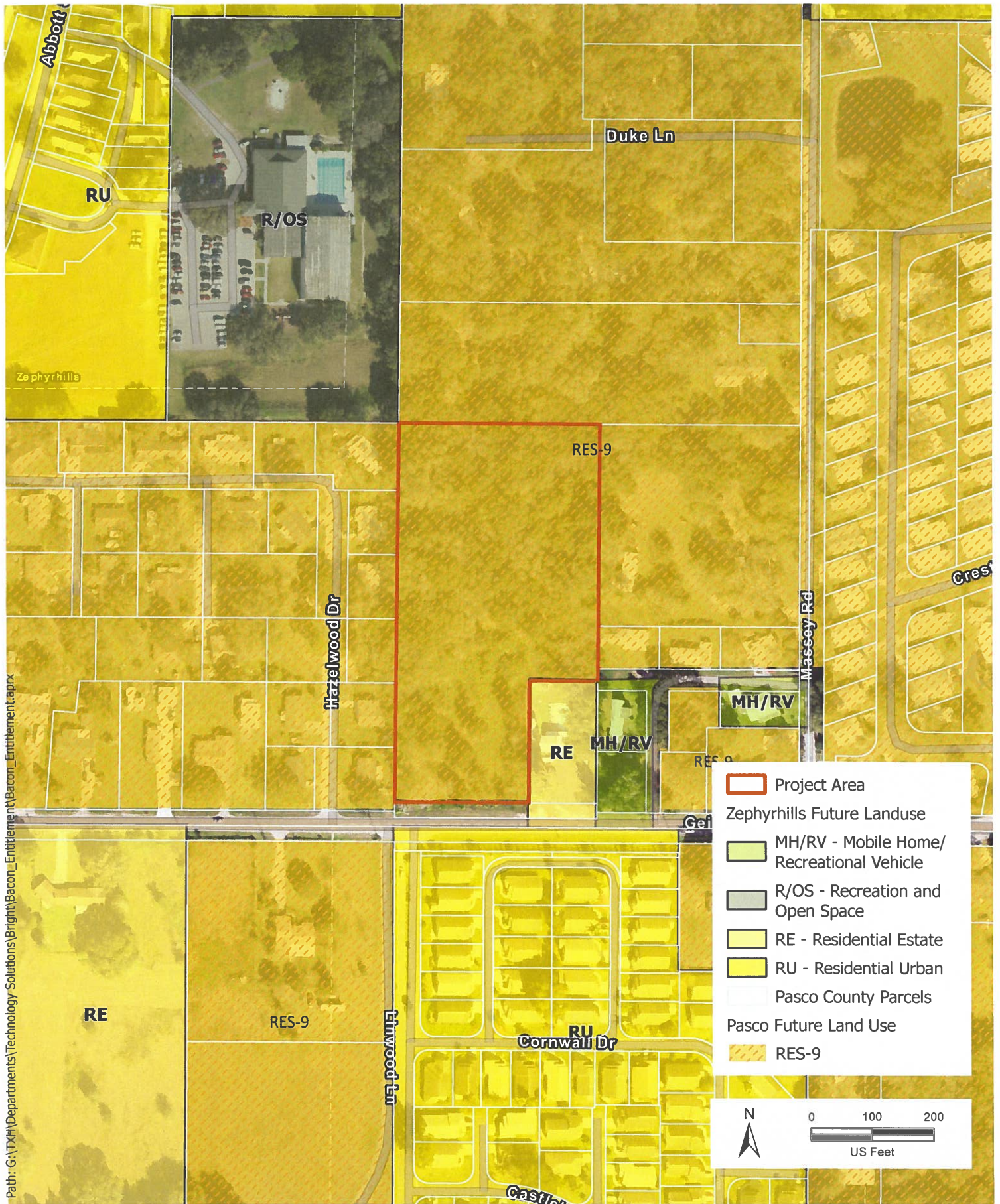
BGE, Inc.

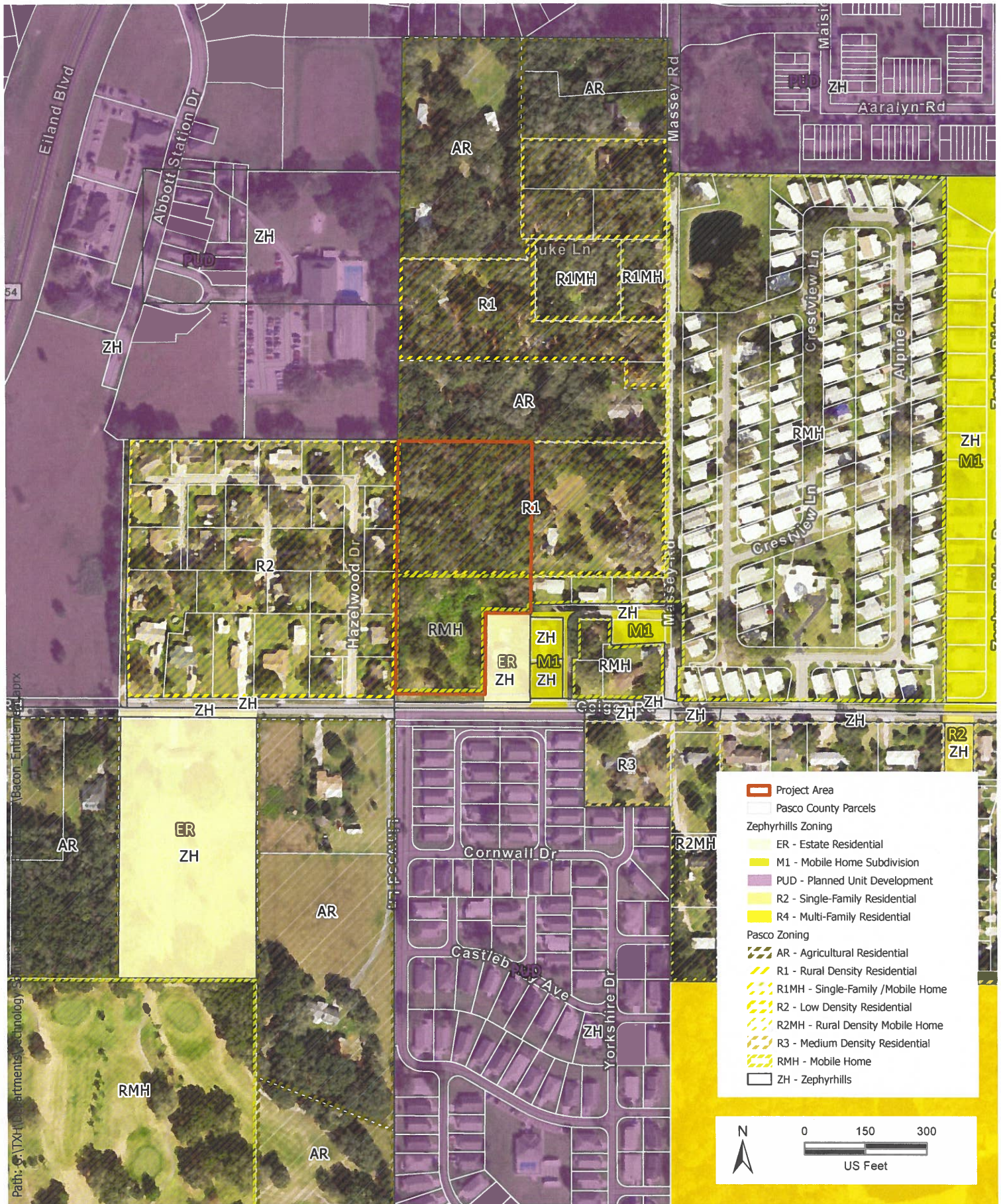
Tel: 813-848-0901
www.bgeinc.com

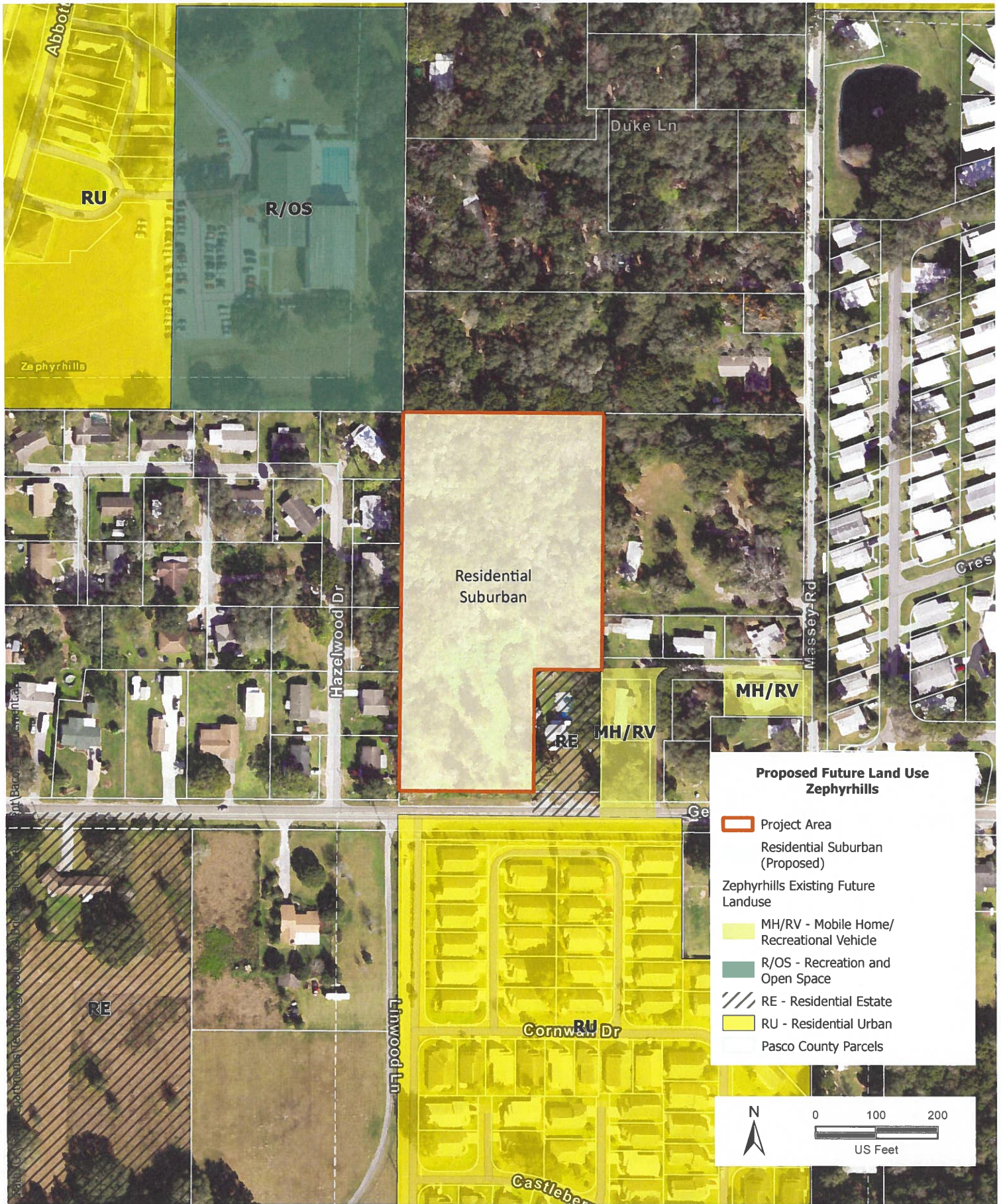
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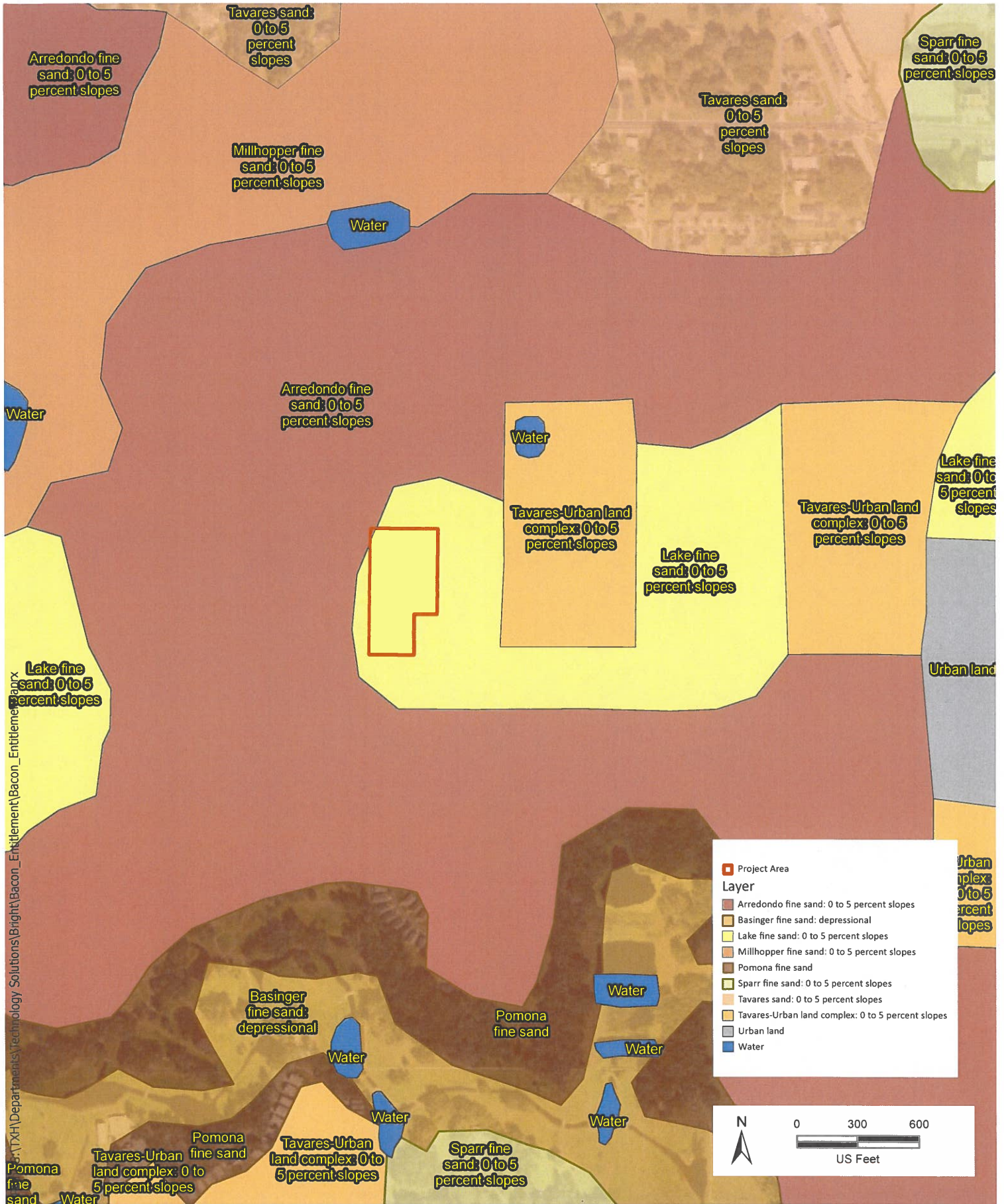
September 2022

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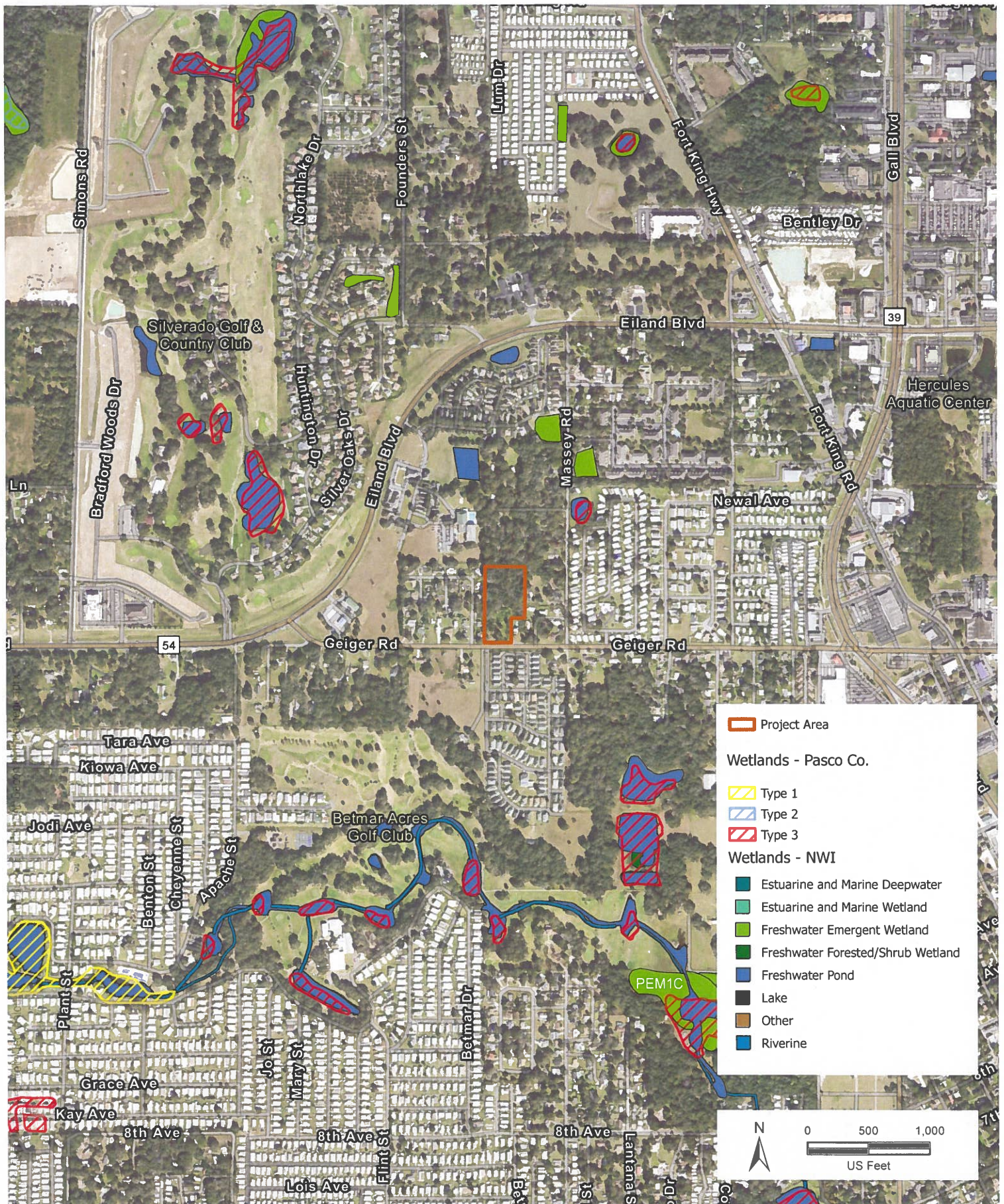




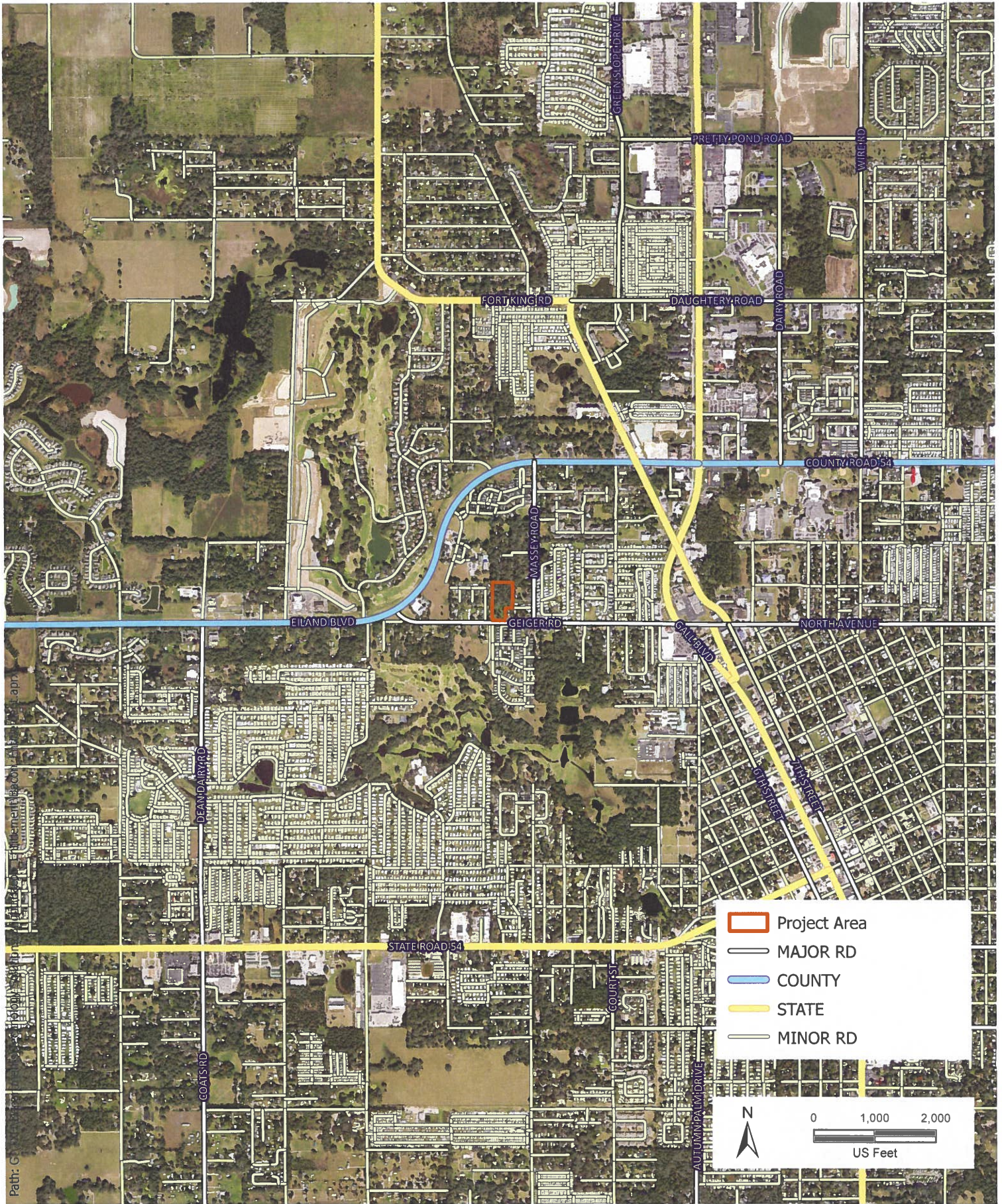












SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
01	COVER
02	ONSITE BOUNDARY & TOPGRAPHIC SURVEY
02.1	ROW TOPOGRAPHIC SURVEY
03	DEVELOPMENT INFORMATION
04	DEVELOPMENT INFORMATION
05	SWPPP PLAN
06	SWPPP DETAILS
07	GEOMETRY AND PAVING PLAN
08	STRIPING AND SIGNAGE PLAN
09	TURN LANE PLAN - PRETTY POND ROAD WEST
10	TURN LANE PLAN - PRETTY POND ROAD EAST
11	TURN LANE PLAN - WIRE ROAD SOUTH
12	TURN LANE PLAN - WIRE ROAD NORTH
13	AUTOTURN PLAN - GARBAGE TRUCK
14	AUTOTURN PLAN - FIRE TRUCK
15	OVERALL DRAINAGE PLAN
16	GRADING PLAN_1
17	GRADING PLAN_2
18	TURN LANE GRADING AND DRAINAGE - PRETTY POND RD. W
19	TURN LANE GRADING AND DRAINAGE - PRETTY POND RD. E
20	TURN LANE GRADING AND DRAINAGE - WIRE RD. S
21	TURN LANE GRADING AND DRAINAGE - WIRE RD. N
22	POND PLAN
23	CROSS SECTIONS_1
24	CROSS SECTIONS_2
25	CROSS SECTIONS_3
26	CROSS SECTIONS_4
27	RETAINING WALL PLAN_1
28	RETAINING WALL PLAN_2
29	RETAINING WALL PLAN_3
30	RETAINING WALL PLAN_4
31	RETAINING WALL PLAN SECTIONS AND DETAILS
32	OVERALL UTILITY PLAN
33	UTILITY DETAILS
34	UTILITY CONFLICT DETAILS
35	LIFT STATION DETAILS
36	PLAN AND PROFILE - DRIVE 1
37	PLAN AND PROFILE - DRIVE 2
38	PLAN AND PROFILE - DRIVE 3
39	PLAN AND PROFILE - DRIVE 4
40	PLAN AND PROFILE - DRIVE 5
41	CITY OF ZEPHYRHILLS DETAILS
42	CITY OF ZEPHYRHILLS DETAILS
43	MISCELLANEOUS DETAILS
44	FDOT DETAILS
45	FDOT DETAILS
46	FDOT DETAILS
47	FDOT DETAILS
48	FDOT DETAILS
49	PASCO COUNTY DETAILS
50	MAINTENANCE OF TRAFFIC
51	MAINTENANCE OF TRAFFIC
L1	LANDSCAPE PLAN
L2	LANDSCAPE PLAN
L3	LANDSCAPE DETAILS AND NOTES
L4	IRRIGATION PLAN
L5	IRRIGATION PLAN
L6	IRRIGATION DETAILS AND NOTES

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF PASCO, STATE OF FLORIDA, AND DESCRIBED AS FOLLOWS: THAT PORTION OF TRACTS 43, 44, 53, 54, 59 AND 60, ZEPHYRHILLS COLONY COMPANY IN SECTION 35, TOWNSHIP 25 SOUTH, RANGE 21 EAST, AS RECORDED IN PLAT BOOK 1, PAGE 55, PUBLIC RECORDS OF PASCO COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHWEST 1/4 OF SECTION 35, TOWNSHIP 25 SOUTH, RANGE 21 EAST; RUN NORTH 89 53'13" WEST, 90.80 FEET ALONG THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 35; THENCE NORTH 00 21'59" EAST, 30.0 FEET TO THE NORTH RIGHT OF WAY LINE OF PRETTY POND ROAD AT ITS INTERSECTION WITH THE WEST LINE OF WIRE ROAD, AS NOW ESTABLISHED, FOR A POINT OF BEGINNING; THENCE NORTH 89 53'13" WEST, 723.0 FEET ALONG THE NORTH RIGHT OF WAY LINE OF PRETTY POND; THENCE NORTH 00 21'59" EAST, 723.0 FEET; THENCE SOUTH 89 53'13" EAST, 723.0 FEET TO THE WEST LINE OF WIRE ROAD, AS NOW ESTABLISHED; THENCE SOUTH 00 21'59" WEST, 723.0 FEET ALONG THE SAID WEST LINE OF WIRE ROAD TO THE POINT OF BEGINNING.

THE GENERAL CONTRACTOR SHALL ENSURE THAT ANY SUBCONTRACTOR HAS A COMPLETE SET OF CONSTRUCTION DRAWINGS FOR ITS RESPECTIVE WORK. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR SUBCONTRACTORS ONLY UTILIZING INDIVIDUAL DRAWINGS FOR ITS WORK WHERE ADDITIONAL INFORMATION MAY BE CONTAINED ON OTHER DRAWINGS WITHIN THE SET. THESE DRAWINGS ARE THE PROPERTY OF NEWKIRK ENGINEERING, INC. ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING, INC. COPYRIGHT 2013 ALL RIGHTS RESERVED.

PROJECT STATEMENT

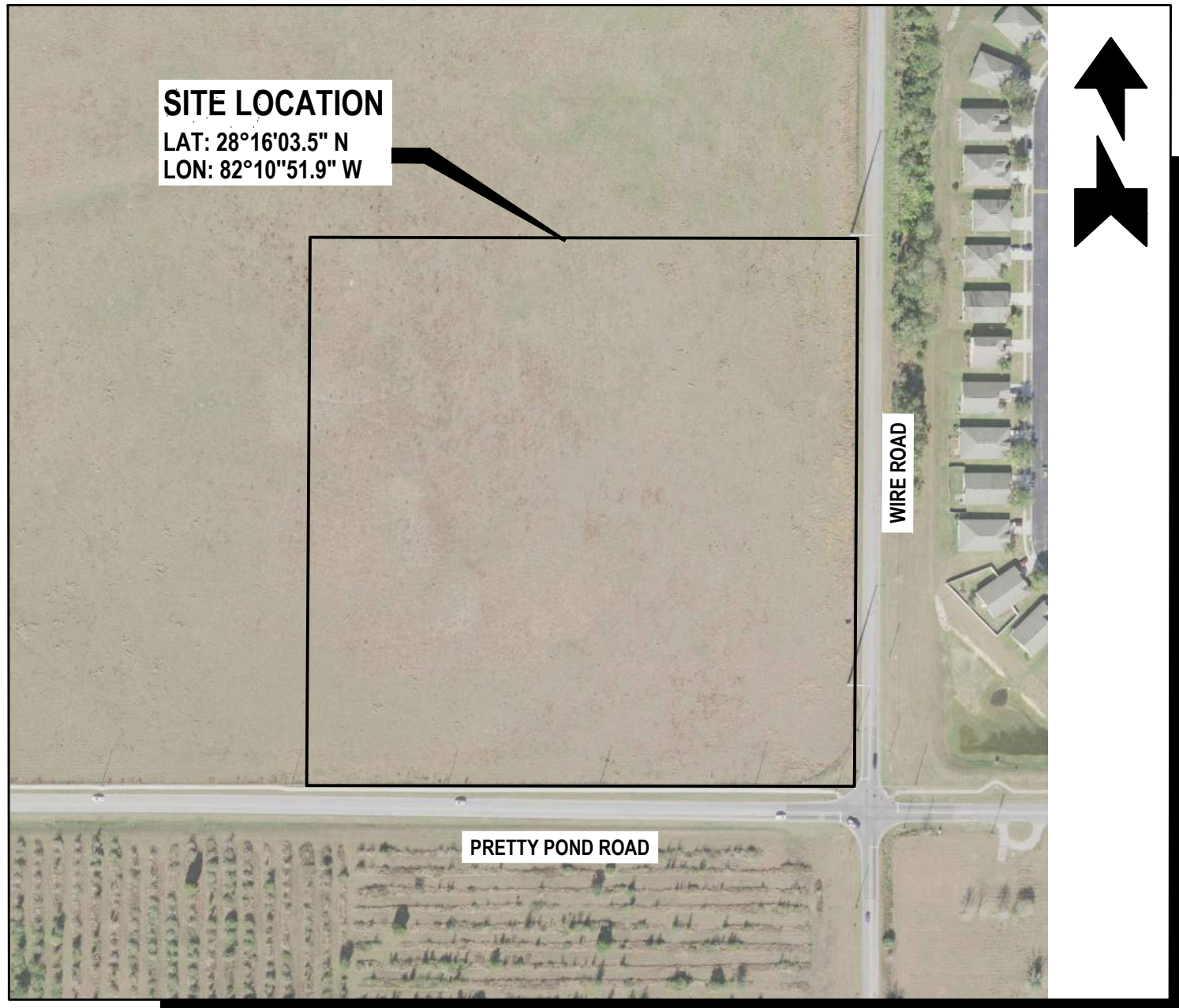
PROPOSE A 240 UNIT APARTMENT COMPLEX WITH GRADING, DRAINAGE, WATER TAP, PRIVATE LIFT STATION, RECLAIM TAP, DRY RETENTION POND, (2) LEFT TURN LANES, SIDEWALKS, LANDSCAPING AND PRIVACY FENCE, RETAINING WALL, PARKS, AMENITY CENTER, TRASH COMPACTOR, PARKING, BIKE RACKS, AND MAIL KIOSK. THE PROPOSED THE SITE IS 12.00 ± ACRES WITH 7.157 ACRES OF IMPERVIOUS AREA.

JURISDICTIONAL AGENCY

CITY OF ZEPHYRHILLS (CONDITIONAL USE)
CITY OF ZEPHYRHILLS (DEVELOPMENT ORDER)
FDEP (NPDES NOI)
SWFWMD ERP
FDEP WASTEWATER
FDEP WATER
PASCO COUNTY ROW USE

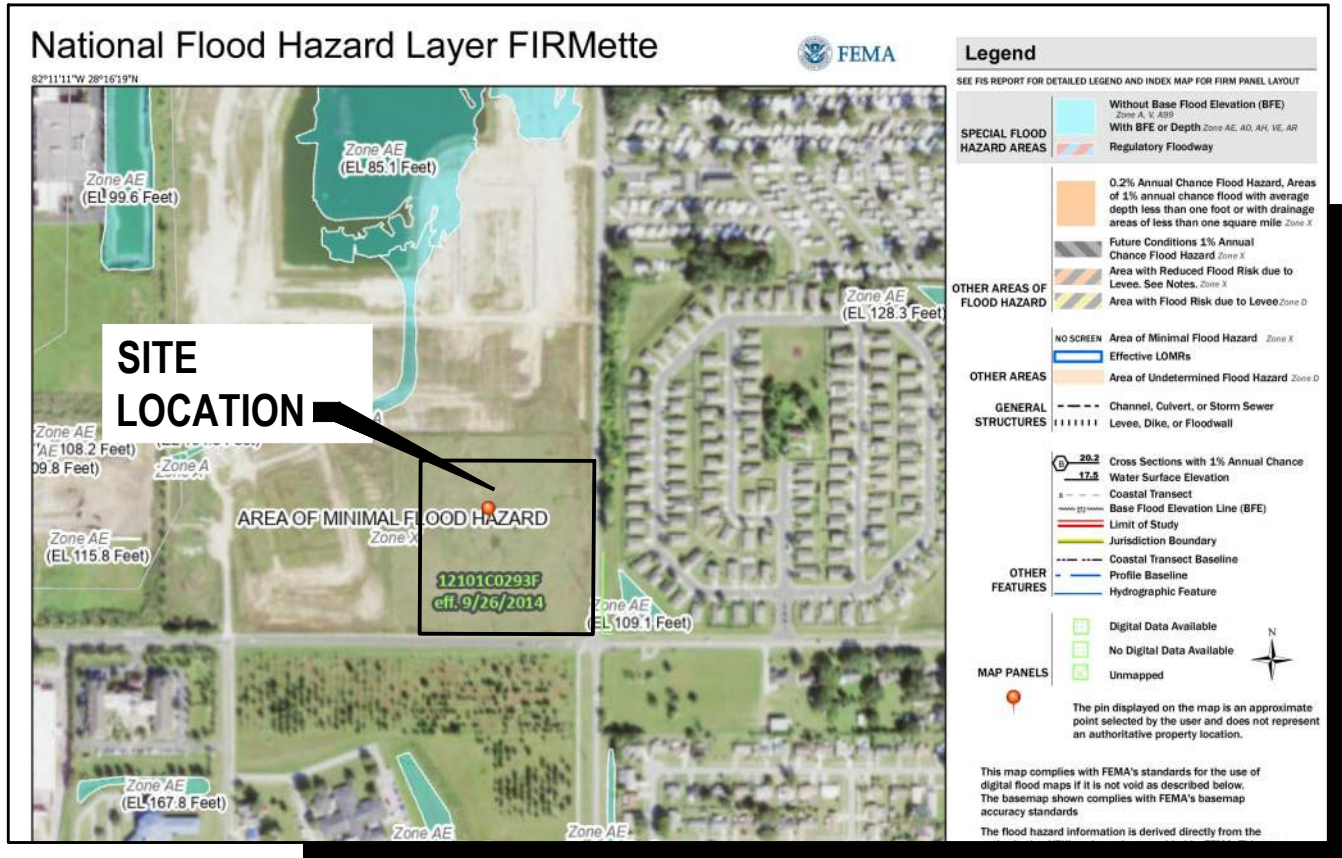
PERMIT No.

USE-0006-21 (BUILDING HEIGHT)
SPR-0053-22
ERP-853333
.
ROW-2022-00638



AERIAL MAP

SCALE: 1" = 200'



FLOOD ZONE MAP

SCALE: 1" = 800'

FLOOD ZONE "X"
PANEL No. 12101C0293F, EFF. 9/26/2014

SITE PLANS FOR

SUMMIT APARTMENTS

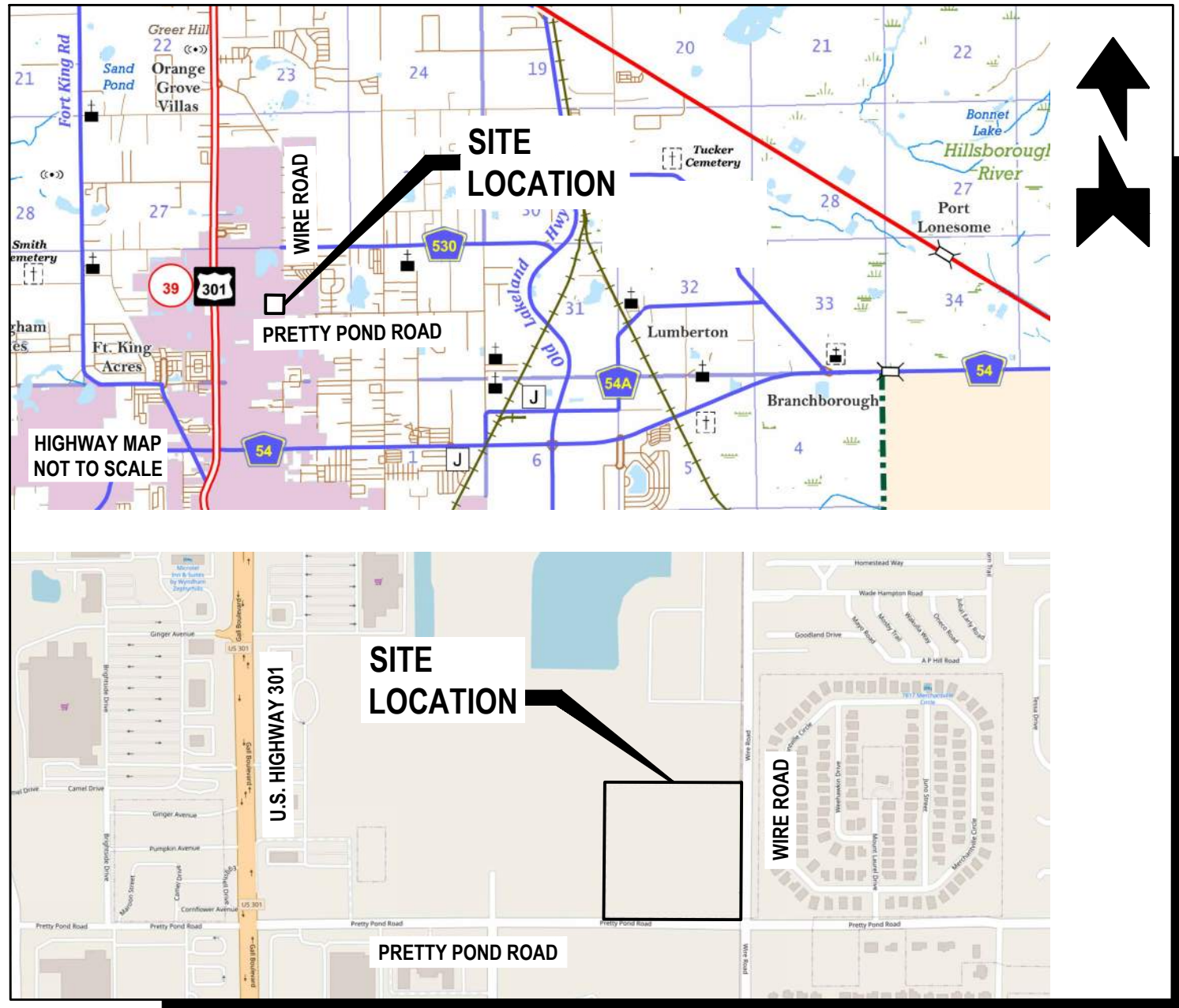
SECTION 30, TOWNSHIP 17, RANGE 31

35-25-21-0010-04400-0000

PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

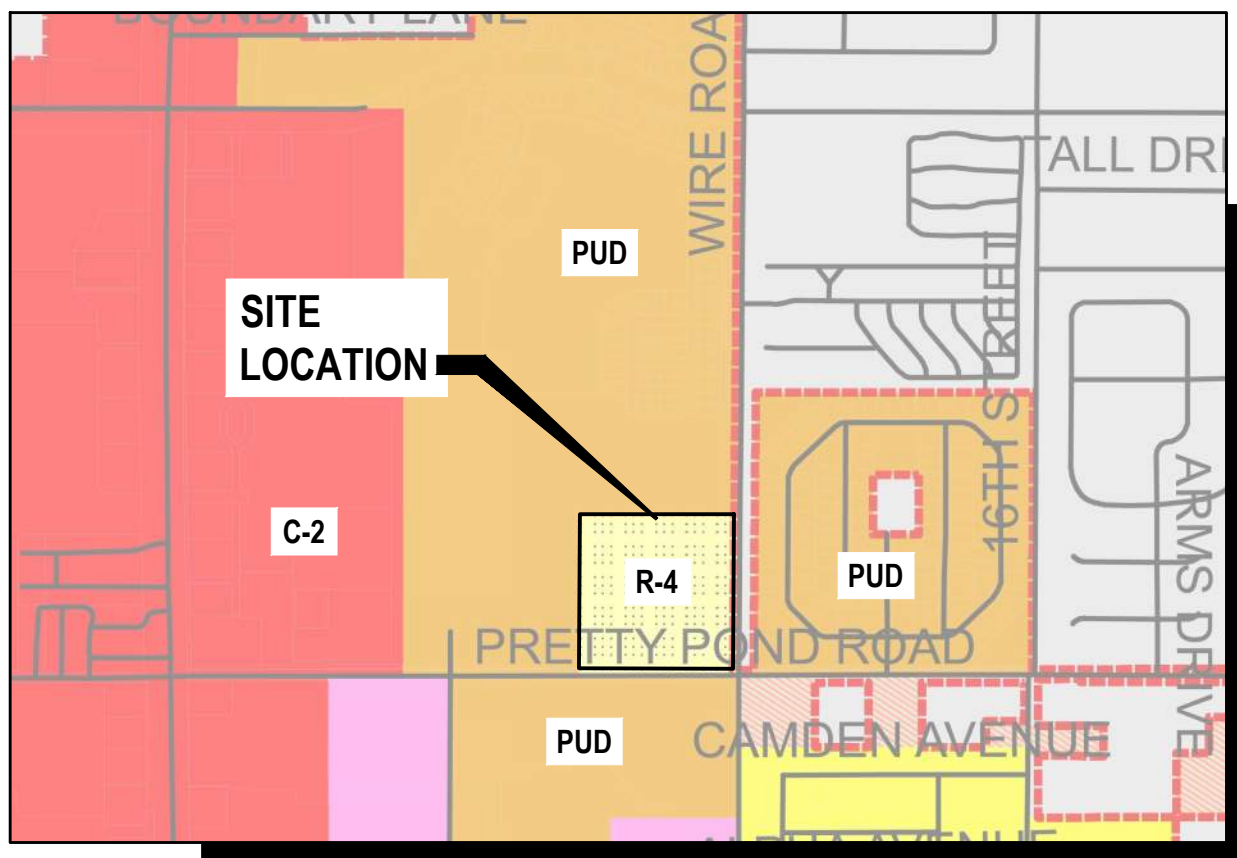
AUGUST 2022

REVISED NOVEMBER 2022



LOCATION MAP

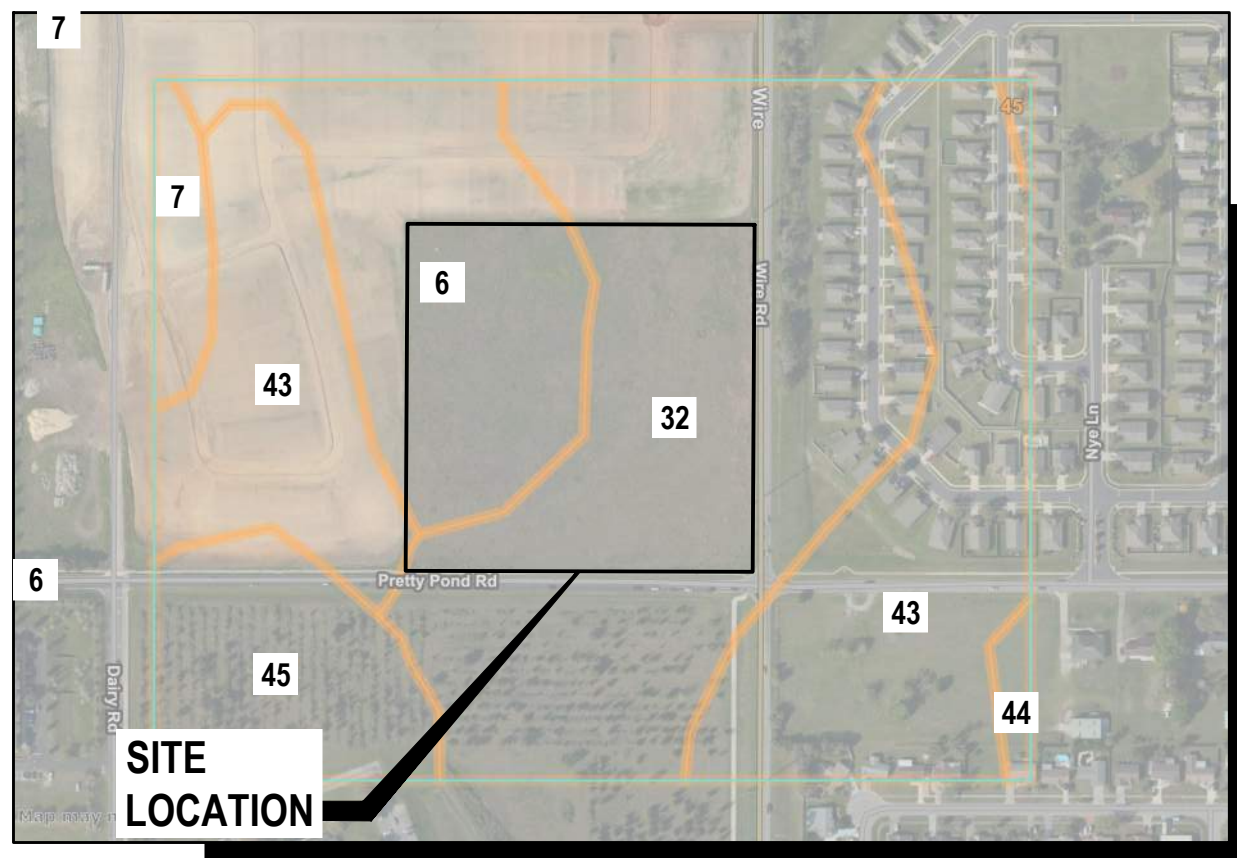
SCALE: 1" = 800'



ZONING MAP

SCALE: 1" = 900'

ZONING : R-4 (MULTI-FAMILY RESIDENTIAL)
FUTURE LAND USE (FLU) : RESIDENTIAL URBAN
CONDITIONAL USE: BUILDING HEIGHT INCREASE



SOILS MAP

SCALE: 1" = 400'

SOIL TYPES: (6) TAVARES SAND, 0 TO 5 PERCENT SLOPES
(32) LAKE FINE SAND, 0 TO 5 PERCENT SLOPES
(43) ARREDONDO FINE SAND, 0 TO 5 PERCENT SLOPES

PROJECT TEAM

PROPERTY OWNER:	PRETTY POND INVESTORS LLC PO BOX 470176 CELEBRATION, FL 34747 PHONE: (623) 203-2700 EMAIL: DW@GOCBD.COM
APPLICANT / CONTRACT PURCHASER:	REALSOURCE 2089 E FORT UNION BLVD SALT LAKE CITY, UTAH 84121 PHONE: (407) 256-9081 EMAIL: STEVE@REALSOURCE.NET
CIVIL ENGINEER / LANDSCAPE ARCHITECT / PROJECT MANAGER:	NEWKIRK ENGINEERING, INC. 1230 N US HIGHWAY 1, SUITE 3 ORMOND BEACH, FL 32174 PHONE: (386) 872-7794 EMAIL: CODY@NEWKIRK-ENGINEERING.COM
SURVEYOR:	VISIONLAND SERVICE. 941 S PENNSYLVANIA AVE WINTER PARK, FL. 32789 PHONE: (888) 399-8474 EMAIL: DOUG@VISIONLANDSOURCE.COM
GEOTECHNICAL:	AUDREYEV ENGINEERING, INC. 1170 WEST MINNEOLA AVE. CLERMONT, FL 34711 PHONE: (352) 241-0508 EMAIL: RCORNELIUS@ANDREYEVENGINEERING.COM
ENVIRONMENTAL:	STILLWATER ENVIRONMENTAL, INC. 971 SMOKERISE BLVD. PORT ORANGE, FL 32127 PHONE: (407) 489-6898 EMAIL: STILLWATERENV@GMAIL.COM

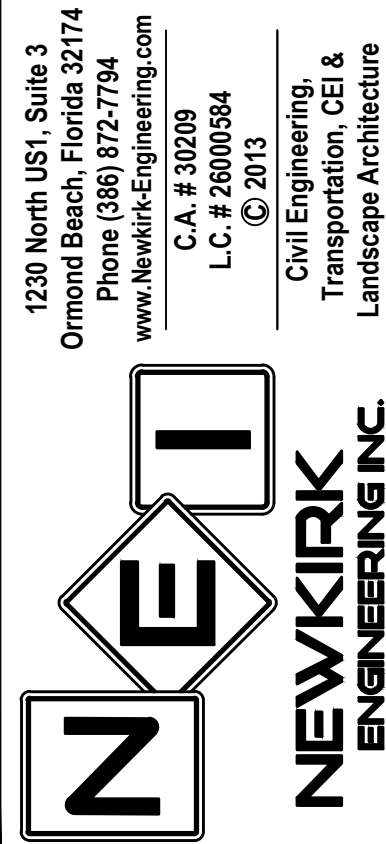
CONTACT NUMBERS

PLANNING & BUILDING - CITY OF ZEPHYRHILLS (813) 780-0020
WATER/SEWER - CITY OF ZEPHYRHILLS UTILITIES (813) 780-0015
SOLID WASTE - CITY OF ZEPHYRHILLS UTILITIES (813) 780-0022
GAS - TECO PEOPLES GAS (813) 275-3700
ELECTRIC - DUKE ENERGY (727) 443-2641
TELEPHONE/CABLE/INTERNET - SPECTRUM (813) 551-2077



WARNING !!

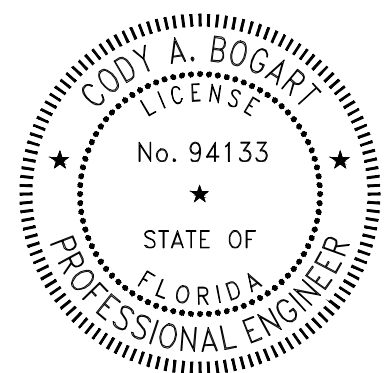
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.



THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING. ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING. COPYRIGHT 2013 ALL RIGHTS RESERVED.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY CODY A. BOGART, PE # 94133 ON

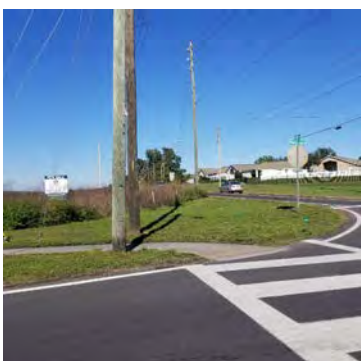
Digitally signed by Cody A. Bogart
Date: 2022.12.02 10:19:18-05'00'



PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DRAWING NUMBER

01



ADDRESS
0 Pretty Pond Road
Zephyrhills, FL 33540

Boundary and Topographic Survey

ZEPHYR LAKES SUBDIVISION PHASE 4B
PLAT BOOK 85, PAGE 126

ZEPHYR LAKES SUBDIVISION PHASE 4D
PLAT BOOK 84, PAGE 82

LEGEND

CC = Covered Concrete	Pg = Page
ID = Identification	□ = Electric Box
LB = Licensed Business	WM = Water Meter
FIP = Found Iron Pipe	□ = Light Pole
FIR = Found Iron Rod	T = Telephone Riser
C/S = Concrete Slab	TR = Transformer
D = Central Angle	P/E = Pool Equipment
L = Arc Length	C = Cable TV Riser
R = Radius	ONS = Onsite
(P) = Plot Dimension	OFF = Offsite
(C) = Calculated Dimension	□ = Power Pole
(D) = Deed Dimension	ohu = Overhead Utilities
(F) = Field Dimension	W = Well

OR Book = Official Record Book

SIR = Set $\frac{1}{2}$ " Iron Rod & Cap LB#7788
CBP = Covered Brick Pavers
FCM = Found Concrete Monument
SECC = Screen Enclosed Covered Concrete
FN&D = Found Nail & Disk
SN&D = Set Nail & Disk LB#7788
BP = Brick Pavers
CWD = Covered Wood Deck
 = Mitered End Section
NCF = No Corner Set or Found
W = Water Valve
S = $\pm$ Septic Area
C = Cleanout
 = Drainage Inlet

Legal Description (as furnished)

The land referred to herein below is situated in the County of Pasco, State of Florida, and described as follows:

That portion of Tracts 43, 44, 53, 54, 59 and 60, ZEPHYRUS COLONY COMPANY in Section 35, Township 25 South, Range 21 East, as recorded in Plat Book 1, page 55, Public Records of Pasco County, Florida, being described as follows:

Commencing at the South east corner of the Northwest 1/4 of Section 35, Township 35 South Range 2 East, run North 89° 53' 18" West, 103.00 feet along the South line of the Northwest 1/4 of said Section 35; thence North 00° 21' 59" East, 30.00 feet to the North right of way line of Pretty Pond Road at its intersection with the West line of Wire Road, as now established, for a Point of Beginning; thence North 89° 53' 18" West, 723.00 feet along the North right of way line of Pretty Pond Road; thence North 00° 21' 59" East, 723.00 feet; thence South 89° 53' 18" West, 723.00 feet to the West line of Wire Road, as now established; thence South 00° 21' 59" West, 723.00 feet along the said West line of Wire Road to the Point of Beginning.

JOB #:	VLSR21-56738 ; 56738a
CLIENT #:	2061-5632999
FIELD DATE:	11/23/21 ; 3/15/22
CREW:	3800 ; 3650
DRAFTER:	DF
APPROVED:	EWD
SCALE:	1" = 40'

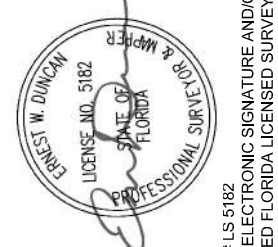
COPYRIGHT 2011

X
Borrower's Acknowledgment and Acceptance

X
Borrower's Acknowledgment and Acceptance

ADDITIONAL NOTES:

3. Additions or deletions to this survey by anyone other than the signing party or parties is prohibited without the written consent of the signing party or parties.
4. The property shown herein is subject to all easements, restrictions and reservations which may be shown or noted on the record plat and within the public records of the county the subject property is located. This survey only depicts survey related information such as easements and setbacks that are shown on a record plat or have been furnished to the Surveyor.
5. Building ties and dimensions for improvements should not be used to reconstruct boundary lines.



Ernest W. Duncan, PSM
PROFESSIONAL SURVEYOR
FLORIDA REGISTRATION
NOT VALID WITHOUT THE
RAISED SEAL OF THE LIS

[illegible]

LB 7788



VISIONLAND
I D E A S I N C

THIS SURVEY IS PREPARED FOR THE EXCLUSIVE USE AND BENEFIT OF THE PARTIES LISTED HEREON. LIABILITY TO THIRD PARTIES MAY NOT BE ASSUMED BY THE SURVEYOR.

LIST OF POSSIBLE ENCROACHMENTS:
SIDEWALK & FENCES CROSS PROPERTY LINE.
OWNERSHIP OF WALL & FENCES NOT DETERMINED.

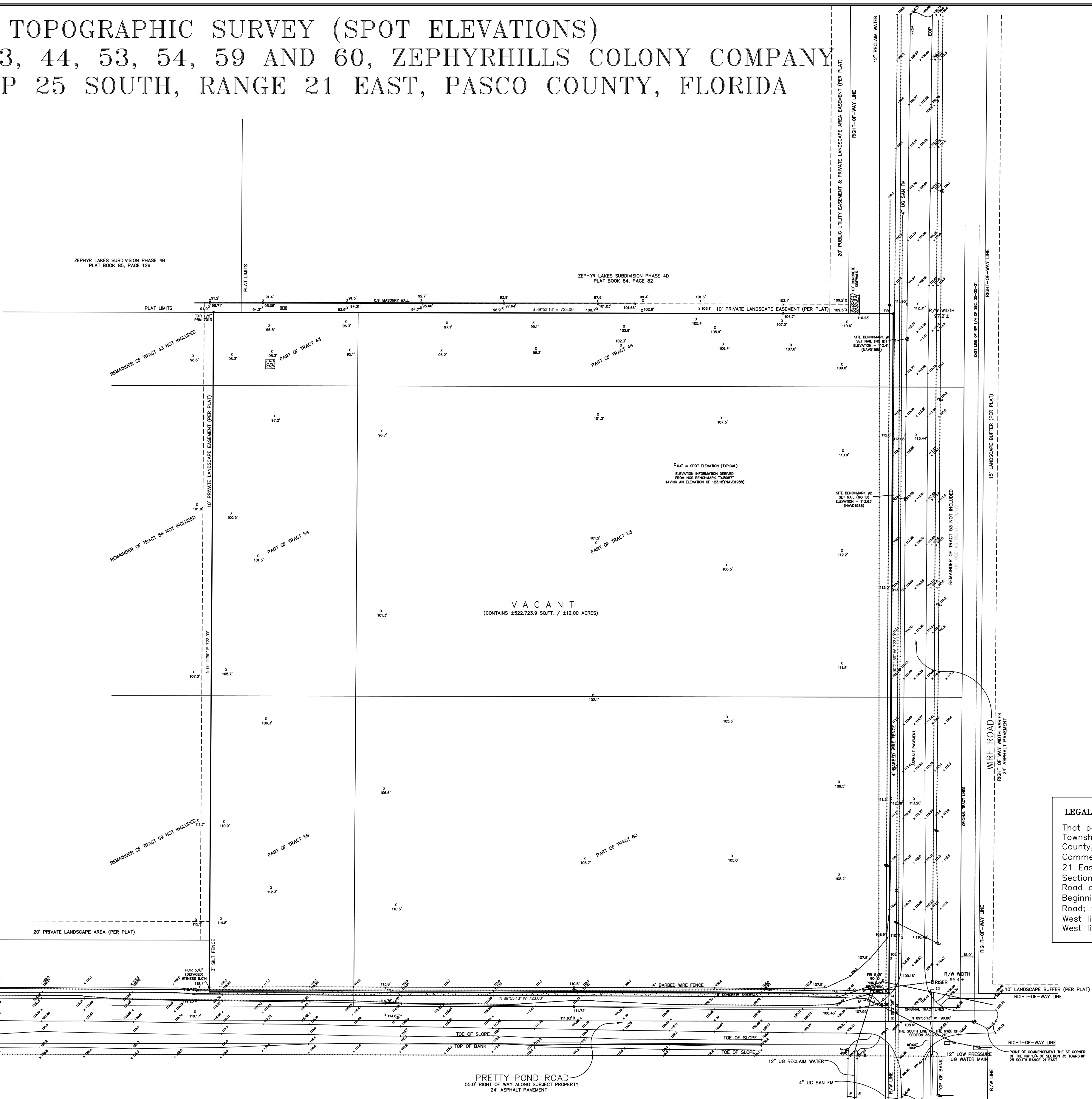
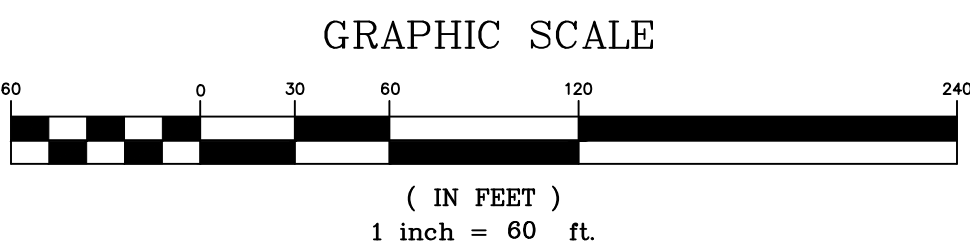
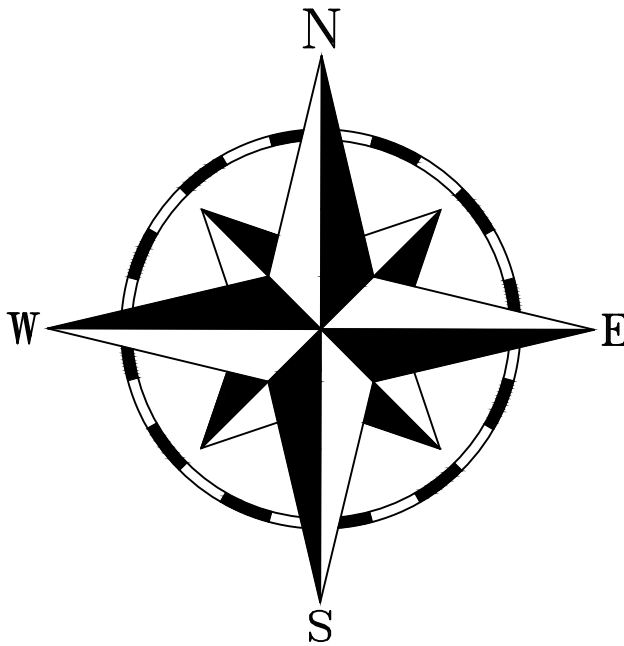
BASIS OF BEARING—
BEARINGS ARE BASED ON THE NORTH RIGHT-OF-WAY
ROAD WHICH HAS A BEARING OF N 28° 53' 13" W PER DEED.

FLOOD ZONE

SUBJECT PROPERTY SHOWN HEREIN APPEARS TO BE LOCATED IN FLOOD ZONE "X". AREAS DETERMINED TO BE OUTSIDE THE 600-YEAR FLOODPLAIN, BASED ON INFORMATION OBTAINED FROM THE NATIONAL FLOOD INSURANCE PROGRAM WEBSITE. THIS SURVEYOR MAKES NO GUARANTEES AS TO THE ACCURACY OF THE ABOVE INFORMATION. THE LOCAL F.E.M.A AGENT SHOULD BE CONTACTED FOR VERIFICATION.

CERTIFIED TO: (AS FURNISHED)
First American Title Insurance Company
Buchanan Ingersoll & Rooney, PC
Realsource Residential, LLC, a Utah limited liability company

MAP OF TOPOGRAPHIC SURVEY (SPOT ELEVATIONS)
A PORTION OF TRACTS 43, 44, 53, 54, 59 AND 60, ZEPHYRHILLS COLONY COMPANY
SECTION 35, TOWNSHIP 25 SOUTH, RANGE 21 EAST, PASCO COUNTY, FLORIDA



LEGAL DESCRIPTION:
That portion of Tracts 43, 44, 53, 54, 59 and 60, ZEPHYRHILLS COLONY COMPANY in Section 35, Township 25 South, Range 21 East, as recorded in Plat Book 1, Page 55, Public Records of Pasco County, Florida, being described as follows:
Commencing at the Southeast corner of the Northwest 1/4 of Section 35, Township 25 South, Range 21 East; run North 89°53'13" West, 90.80 feet along the South line of the Northwest 1/4 of said Section 35; thence North 00°21'59" East, 30.0 feet to the North right of way line of Pretty Pond Road at its intersection with the West line of Wire Road, as now established, for a Point of Beginning; thence North 89°53'13 West, 723.00 feet along the North right of way line of Pretty Pond Road; thence North 00°21'59" East, 723.0 feet; thence South 89°53'13" East, 723.00 feet to the West line of Wire Road, as now established; thence South 00°21'59" West, 723.0 feet along the said West line of Wire Road to the Point of Beginning.

		I hereby certify that this survey was made under my responsible charge, is true and correct, and meets the Minimum Technical Standards as set forth under the Division of Consumer Services, Agriculture division pursuant to Florida Administrative Code, 5J-17.052. Michael J. Lewis P.L.S. No. 6288 Not valid without the signature and the original raised seal of a Florida Licensed Surveyor and Mapper		SURVEYOR'S NOTES: 1. No underground installations or improvements have been located except as shown. The utilities that were marked by the utility companies were located but the surveyor is not responsible for any utilities that were not marked. 2. No Instruments of Record reflecting Easements, Rights of Way, and/or Ownership were furnished this Surveyor except as shown. 3. Unless otherwise shown hereon, no Jurisdictional Wetland Areas or other physical topographic features have been located. 4. Bearings and property lines shown hereon are per deed and were not verified by this surveyor. 5. Elevations shown hereon are based on N.A.V.D. of 1988, SITE TBM#1 EL.= 112.41' 6. This map does not determine or reflect ownership.		● SCIR Set Capped Iron Rod ○ FCIR Found Capped Iron Rod ○ FIR Found Iron Rod ● FCIP Found Capped Iron Pipe ○ FIP Found Iron Pipe ○ FPIP Found Pinched Iron Pipe ■ SCM Set Concrete Monument (4"x4") □ FCM Found Concrete Monument ● SPKN&D Set PK Nail & Disk ● FPKN&D Found PK Nail & Disk ◆ FRRS Found Railroad Spike ◆ BM Benchmark ● NCFOS No Corner Found or Set PRM Permanent Reference Monument CCR Certified Corner Record R/W Right-of-Way CONC Concrete DI Field Measured (F-C) Field Calculation (P) Plot or Plan (D) Deed TOB Top of Bank TOS Top of Slope O/HU Overhead Utilities UG Underground Utilities FE Finished Floor Elevation EL Elevation POB Point of Beginning POC Point of Commencement PB/MB Plat Book/Map Book ORB Official Records Book CATV Cable Television RCP Reinforced Concrete Pipe PG Page(s) DI Drainage Inlet WDF Wood Fence SS Sanitary Sewer ST Stormdrain Line CMP Corrugated Metal Pipe CLF Chain Link Fence WTR Water Line INV Invert Elevation Sign Traffic Signal Box Traffic Signal Pole Conduit Gas Pump Backflow Preventor Water Valve Wood Utility Pole Concrete Utility Pole Light Pole Guy Anchor Electric Box/Riser Telephone Pulbox/Riser Cable TV Box/Riser Bollard Power Transformer Clean Out Sanitary/Sewer Manhole Storm Drain Manhole Water Meter Well (size as indicated) Fire Hydrant		WIRE ROAD & PRETTY POND ROAD, ZEPHYRHILLS, FLORIDA <i>THIS IS NOT A BOUNDARY SURVEY</i> <table><tr><td>MICHAEL J. LEWIS, PSM 303 TYLER STREET LAKE WALES, FLORIDA 33859-7923 PHONE 863-409-2394 AsmLakeland@aol.com</td><td>CERTIFY TO: REALSOURCE RESIDENTIAL, LLC</td></tr></table> SCALE: 1" = 60' PROJ. NO. WIRE ROAD FILE NAME PRETTY POND ROAD 2022 SHEET NO. 1 OF 1		MICHAEL J. LEWIS, PSM 303 TYLER STREET LAKE WALES, FLORIDA 33859-7923 PHONE 863-409-2394 AsmLakeland@aol.com	CERTIFY TO: REALSOURCE RESIDENTIAL, LLC
MICHAEL J. LEWIS, PSM 303 TYLER STREET LAKE WALES, FLORIDA 33859-7923 PHONE 863-409-2394 AsmLakeland@aol.com	CERTIFY TO: REALSOURCE RESIDENTIAL, LLC										
NO. DESCRIPTION		MADE BY APPD. DATE		NO. DESCRIPTION		MADE BY APPD. DATE		DRAWN BY: NAME DATE		CHECKED BY: NAME DATE	
3				6				MUL 7/22/22		MUL 7/22/22	
2				5							
1				4							

GENERAL CONSTRUCTION NOTES

1. GOVERNING SPECIFICATIONS: CITY OF ZEPHYRHILLS LAND DEVELOPMENT CODE, CITY OF ZEPHYRHILLS STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, CURRENT EDITION. CITY OF ZEPHYRHILLS STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, CURRENT EDITION.
2. ALL CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL CONFORM TO THE 2022 / 2023 EDITION OF THE FDOT DESIGN STANDARD INDEXES, THE 2019 EDITION OF THE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND THE 2022 EDITION OF THE FDOT UTILITY ACCOMMODATIONS MANUAL.
3. ALL UTILITY MATERIAL, CONSTRUCTION AND TESTING COVERED BY THESE DRAWINGS SHALL COMPLY WITH THE CITY OF ZEPHYRHILLS STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, LATEST EDITION. ALL UTILITY WORK AND CONNECTIONS SHALL BE COORDINATED WITH THE CITY OF ZEPHYRHILLS INSPECTORS.
4. CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL REQUIRED PERMITS. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL PERMITS AVAILABLE ON THE JOB SITE AT ALL TIMES.
5. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE A RECORD COPY OF ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS ON WHICH ALL FIELD CHANGES ARE TO BE SHOWN. ALL CHANGES TO PLANS SHALL BE INCORPORATED IN THE "AS-BUILT" RECORD DRAWINGS SURVEY PROVIDED BY CONTRACTOR FOR REVIEW AND APPROVAL FROM ENGINEER OF RECORD.
6. THE CITY OF ZEPHYRHILLS WILL OWN AND MAINTAIN ALL WATER, SEWER AND RECLAIM MAINS LOCATED WITHIN THE RIGHT-OF-WAY.
7. THE CONTRACTOR SHALL PAY FOR AND OBTAIN A SITE ENGINEERING BUILDING PERMIT. THE ENGINEER WILL SCHEDULE THE PRE-CONSTRUCTION CONFERENCE BEFORE THE CONTRACTOR'S START OF WORK. THE CONTRACTOR SHALL CONTACT THE BUILDING DEPARTMENT AT (386) 673-3238 FOR INFORMATION ON ISSUANCE OF CITY PERMITS AND / OR OTHER REQUIREMENTS.
8. SEPARATE BUILDING PERMIT APPLICATIONS ARE REQUIRED FOR: NEW BUILDINGS, CLUBHOUSE, TRASH COMPACTOR, RETAINING WALL, FENCE, SWIMMING POOL, GAZEBO, PLAYGROUND, LIGHT POLES AND SIGNS. CONTACT THE ZEPHYRHILLS BUILDING DEPARTMENT AT (813) 780-0020.
9. ALL WATER SERVICE CONSTRUCTION SHALL BE IN ACCORDANCE WITH "CITY OF ZEPHYRHILLS UTILITY SPECIFICATIONS AND STANDARD UTILITY DETAILS, CURRENT EDITION.
10. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH "DESIGN AND CONSTRUCTION STANDARDS", CITY OF ZEPHYRHILLS UTILITIES DEPARTMENT, CURRENT EDITION.
11. ALL RECLAIMED WATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH "DESIGN AND CONSTRUCTION STANDARDS", CITY OF ZEPHYRHILLS UTILITIES DEPARTMENT, CURRENT EDITION.
12. ALL ROADWAY SIGNAGE AND MARKINGS SHALL BE IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
13. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
14. LAND CLEARING OF THE PROJECT IS NOT ALLOWED UNTIL THE CITY ENGINEER AND/OR PLANNING DEPARTMENT ISSUES A LAND CLEARING PERMIT.
15. SHOP DRAWINGS AND CERTIFICATIONS FOR ALL MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL REVIEW AND SIGN ALL SHOP DRAWINGS. THE CONTRACTOR TO SUBMIT REVIEWED SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.
16. THE LOCATION OF EXISTING UTILITIES HAS BEEN OBTAINED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THIS INFORMATION IS NOT GUARANTEED AND IT SHALL BE EACH CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT NATURE OF ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION AND TO NOTIFY NEWKIRK ENGINEERING, INC. AS TO DISCREPANCIES, IF ANY EXIST.
17. ALL SURVEY AND TOPOGRAPHICAL INFORMATION BASED ON SURVEY INFORMATION PROVIDED BY VISIONLAND SERVICE.; CONTRACTOR TO COORDINATE WITH SURVEYOR FOR ALL CONSTRUCTION BENCHMARK INFORMATION.
18. ALL SURVEY AND TOPOGRAPHICAL INFORMATION IS BASED ON THE NAVD 1988 DATUM. ALL PROPOSED CONSTRUCTION ELEVATIONS ARE BASED ON THE NAVD 1988 DATUM. ALL PROPOSED ELEVATIONS REFER TO FINISH GRADES.
19. THESE DRAWINGS AND THE PROJECT MANUAL ARE COMPLEMENTARY, AND ANY REQUIREMENT OF ONE SHALL BE A REQUIREMENT OF THE OTHER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS AND TO COMPARE THE REQUIREMENTS OF EACH DIVISION AND ENSURE THAT EACH TRADE OR SUBCONTRACTOR IS MAKING THE ALLOWANCES NECESSARY TO PROVIDE THE OWNER A COMPLETE FACILITY, OPERATIONAL IN ALL RESPECTS, UNLESS OTHERWISE SPECIFICALLY STATED IN THE DRAWINGS.
20. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR INSTRUCTING THE CONTRACTOR IN THE METHODS OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE METHOD TO CONSTRUCT THE IMPROVEMENTS AS SHOWN ON THE PLANS.
21. ANY CHANGES TO THE APPROVED PLANS REQUIRE COMPLETION OF THE CHANGE ORDER PROCESS.
22. LITTER CONTROL MEASURES TO PREVENT WIND-DRIVEN DEBRIS SHALL BE IMPLEMENTED THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEBRIS SHALL BE REMOVED AND THE PROJECT SITE CLEANED WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION.
23. AT NO TIME SHALL EXCAVATIONS BE LEFT UNCOVERED AFTER WORKING HOURS. CONTRACTOR SHALL SECURE THE WORK AREA AT THE END OF EACH DAY'S WORK.
24. AT ALL TIMES, THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT UNDERGROUND UTILITIES, STRUCTURES AND OTHER ASSOCIATED FACILITIES FROM DAMAGE DURING CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEASURES OF PROTECTION. ANY DAMAGED FACILITIES SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE CITY OR ENGINEER AT THE CONTRACTORS EXPENSE.
25. THERE SHALL BE NO DEVIATIONS FROM THESE PLANS UNLESS APPROVED IN WRITING BY THE ENGINEER AND THE OWNER.
26. ALL DISTURBED AREAS SHALL BE FULLY SODDED.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF THE RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER, TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS, STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, WATER MAIN TESTING, SANITARY SEWER TESTING, RECLAIM MAIN TESTING, ETC.
28. A MINIMUM OF 13'-6" OF VERTICAL CLEARANCE IS TO BE PROVIDED AND MAINTAINED FOR ALL ROADWAYS.
29. ALL ROADWAYS MUST HAVE A MINIMUM 25-FEET INSIDE AND 50-FEET OUTSIDE TURNING RADIUS.
30. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
31. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
32. IF ANY MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
33. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY (98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180).
34. ROAD CLOSURES ARE SEPARATE FROM THE PERMIT AND REQUIRE PLAN REVIEW AND APPROVAL WITH 7 DAY ADVANCE NOTICE FROM THE OWNER OF THE AFFECTED RIGHT-OF-WAY PRIOR TO ANY ROAD CLOSURES. A MAINTENANCE OF TRAFFIC PLAN IS REQUIRED FOR ALL SITE CONSTRUCTION JOBS.
35. DURING CONSTRUCTION, AN H-20 LOAD RATED ALL WEATHER ACCESSIBLE ROADWAY SHALL BE MAINTAINED AT ALL TIMES FOR FIRE ACCESS AND EMERGENCY SERVICES.
36. ALL REQUIRED FIRE MAINS AND HYDRANTS SHALL BE INSTALLED AND OPERATIONAL PRIOR TO THE START OF VERTICAL BUILDING CONSTRUCTION.
37. NO BURYING OF ANY ORGANIC MATERIALS ALLOWED.
38. THERE WILL BE NO PROPOSED OVERHEAD UTILITY AND SERVICE LINES ASSOCIATED WITH THIS PROJECT. ALL UTILITY LINES AND SERVICES WILL BE INSTALLED UNDERGROUND.

SITE CLEARING AND GRADING CONSTRUCTION NOTES:

THE FOLLOWING MEASURES REPRESENT MINIMUM STANDARDS TO BE ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF A PROJECT. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO BE EMPLOYED WHEN WARRANTED BY EXTREME CONDITIONS AND/OR THE FAILURE OF THE CONTRACTOR TO EMPLOY THE APPROPRIATE EROSION CONTROL BEST MANAGEMENT PRACTICES. FAILURE TO COMPLY WITH THESE PROVISIONS SHALL RESULT IN THE ISSUANCE OF A "STOP WORK ORDER".

1. HOURS OF OUTSIDE CONSTRUCTION SHALL BE FROM 7 AM TO 7 PM MONDAY TO SATURDAY WITH NO OUTSIDE CONSTRUCTION ALLOWED ON SUNDAY.
2. 6-FEET TALL SCREENED CONSTRUCTION FENCING TO BE INSTALLED ALONG NORTH TYMBER CREEK ROAD PRIOR TO SITE CLEARING.
3. NO DISTURBANCE OF PROPOSED CONSERVATION EASEMENTS, NATURAL BUFFERS, OR WATER BODIES IS PERMITTED. THE CONTRACTOR SHALL LOCATE THESE AREAS ON SITE AND BARRICADE THEM TO AVOID ANY UNAUTHORIZED CLEARING. BARRICADES AND OTHER PROTECTIVE FENCING ARE TO BE LOCATED AT THE DRIP LINE OF EXISTING NATIVE TREES OR AT THE EDGE OF THE NATIVE UNDER- STORY HABITAT, WHICHEVER IS NEAREST TO THE CONSTRUCTION ACTIVITY.
4. SPECIMEN AND HISTORIC TREES, CONSERVATION EASEMENTS, NATURAL VEGETATION BUFFERS, AND SIMILAR AREAS MUST BE PROTECTED BY BARRICADES OR FENCING PRIOR TO CLEARING. BARRICADES ARE TO BE SET AT THE DRIP LINE OF THE TREES AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. BARBED WIRE IS NOT PERMITTED AS A PROTECTIVE BARRIER.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES AND EROSION CONTROL STRUCTURES AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, SYNTHETIC JUTE BALES, SILT FENCES, FLOATING TURBIDITY BARRIERS AND OTHER APPROVED BEST MANAGEMENT PRACTICES (BMP'S). FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.
6. PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS.
7. WHERE FILL MATERIAL IS INTENDED TO BE INSTALLED ADJACENT TO EXISTING VEGETATION WHICH IS INTENDED TO REMAIN NATURAL. THE CONTRACTOR MAY INSTALL SILT FENCING AS A TREE PROTECTION MEASURE, IN LIEU OF INSTALLING EITHER WOOD BRACING OR ORANGE MESH FENCING. THIS PRACTICE IS ENCOURAGED BY THE CITY. IF THE SILT FENCE FAILS TO PROVIDE ADEQUATE PROTECTION FROM IMPACT DUE TO CONSTRUCTION, THEN ADDITIONAL CONSTRUCTION FENCING OR WOOD BRACING SHALL BE REQUIRED.
8. AT A MINIMUM, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. SUFFICIENT GRASS COVERAGE IS TO BE ESTABLISHED WITHIN TWO WEEKS.
9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGH SCHEDULING, TO MINIMIZE THE DISTURBANCE OF SITE AREAS THAT HAVE BEEN BROUGHT TO THEIR PROPOSED FINAL GRADE. WITHIN SEVEN (7) DAYS OF BRINGING A SUBJECT AREA TO ITS FINAL GRADE OR INACTIVITY IN CONSTRUCTION, THE CONTRACTOR SHALL INSTALL SEED AND MULCH OR SOD, AS REQUIRED.
10. ONCE AN AREA IS SEEDED OR SODDED, IT MUST BE MAINTAINED BY THE CONTRACTOR TO ALLOW THE GRASS TO BECOME ESTABLISHED. IF THE GRASS IS NOT ESTABLISHED WITHIN TWO WEEKS THE CITY MAY REQUIRE THE CONTRACTOR TO RE-SEED OR A NON-VEGETATIVE OPTION MAY BE EMPLOYED.
11. ABSOLUTELY NO BURYING OF CLEARED MATERIALS IS PERMITTED.
12. THE REMOVAL OF ALL VEGETATION AND TOPSOIL ON THE FUTURE ROADWAY, PARKING AND BUILDING LOT AREAS IS REQUIRED TO BE COMPLETED PRIOR TO THE PLACEMENT OF FILL ON THOSE AREAS. THE TOPSOIL MAY BE TEMPORARILY STOCKPILED AND USED AS TOPSOIL OVER OVER PROPOSED GREEN AREAS SUCH AS PLANT BEDS, SODDED AREAS, AND WHERE TREES ARE TO BE INSTALLED OR RELOCATED.
13. A SIGNED, DATED, AND SEALED LETTER FROM A SOILS ENGINEER OR THE ENGINEER OF RECORD CERTIFYING THAT THE AREAS TO BE FILLED HAVE BEEN STRIPPED OF ORGANIC MATERIALS, MUST BE SUBMITTED TO THE CITY PRIOR TO FILLING.
14. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY 98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180).
15. IF ANY MUCK MATERIAL IS DISCOVERED, IT SHALL BE REQUIRED TO BE REMOVED AND REPLACED WITH A SUITABLE MATERIAL THAT IS PROPERLY BACKFILLED, COMPACTED AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
16. STOCKPIILING IS NOT GENERALLY PERMITTED BY THE CITY. WHEN ALLOWED, STOCKPILES SHALL NOT EXCEED SIX FEET IN HEIGHT MEASURED FROM THE ORIGINAL GRADE. AT A MINIMUM, STOCK PILES THAT WILL REMAIN IN PLACE IN EXCESS OF TWENTY DAYS SHOULD BE SEEDED AND MULCHED IMMEDIATELY UPON PLACEMENT OF THE FINAL LIFT.
17. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES. ADEQUATE WATERING METHODS SHOULD BE EMPLOYED TO ALLOW DAILY COVERAGE OF THE ENTIRE LIMITS OF ALL AREAS THAT DO NOT HAVE AN ESTABLISHED VEGETATIVE COVER. METHODS TO BE EMPLOYED INCLUDE, BUT ARE NOT LIMITED TO, WATER TRUCKS, PERMANENT IRRIGATION SYSTEMS, TEMPORARY SPRINKLER SYSTEMS OPERATED BY PUMPING UNITS CONNECTED TO WET RETENTION PONDS, WATER CANNONS, TEMPORARY IRRIGATION SYSTEMS MOUNTED ATOP STOCKPILE AREAS, AND OTHER METHODS AS DEEMED NECESSARY BY THE CITY.
18. ALL FILL MATERIALS LOCATED BENEATH STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.
19. FILL TO BE PLACED IN LANDSCAPED AREAS SHALL HAVE A Ph RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, OR MATCH NATIVE EXISTING SOILS.
20. A 6' TALL CONSTRUCTION FENCING WITH FABRIC SCREEN TO BE INSTALLED ALONG MAJOR ROADWAYS (PRETTY POND AND WIRE ROADS). THE CONSTRUCTION FENCING NEEDS TO BE INSTALLED PRIOR TO SITE CLEARING.

SITE GEOTECHNICAL CONSIDERATIONS

SEE GEOTECHNICAL REPORT AUDREYEV ENGINEERING, INC. (REPORT #CPGT-22-180, DATED JULY 5, 2022) FOR ALL SUBSURFACE CONDITIONS, GROUNDWATER, SITE PREPARATION FOR PAVEMENT AND ALL EARTHWORK REQUIREMENTS.

SITE AND GENERAL INFORMATION

1. THE PROPERTY AREA BOUNDARY CONSISTS OF 522,729 SF OR 12.00 ACRES ±. FOR BOUNDARY AND TOPOGRAPHIC SURVEY REFER TO THE SURVEY PERFORMED BY VISIONLAND SERVICE, JOB No. 2021-035 (SEE SHEET No. 2 OF THESE PLANS). ADDITIONAL RIGHT-OF-WAY TOPOGRAPHIC SURVEYING WAS PERFORMED BYMICHAEL J LEWIS, PSM.
2. THE EXISTING ZONING IS R-4 (MULTI-FAMILY RESIDENTIAL).
3. THE TAX PARCEL NUMBER IS: 35-25-21-0010-04400-0000.
6. THE EXISTING SITE CONDITION IS UNDEVELOPED. THE FLUCFCS LAND USE IS (211) IMPROVED PASTURE.
7. PER THE USDA NATURAL RESOURCES CONSERVATION SERVICE FOR PASCO COUNTY, THE SCS SOILS MAP INDICATES THE SITE CONSISTS OF (6) TAVARES SAND, 0 TO 5 PERCENT SLOPES, (32) LAKE FINE SAND, 0 TO 5 PERCENT SLOPES, (43) ARREDONDO FINE SAND, 0 TO 5 PERCENT SLOPES.
8. THE SITE IS LOCATED WITHIN ZONE "X" PER FEMA MAP PANEL No. 12101C0293F, DATED SEPTEMBER 26, 2014.
9. ELECTRICAL UTILITY SERVICE WILL BE PROVIDED BY DUKE ENERGY. NATURAL GAS WILL BE PROVIDED BY GAS PLUMBING SERVICES INC. TELEPHONE, CABLE AND INTERNET SERVICE WILL BE PROVIDED BY SPECTRUM.
10. SOLID WASTE WILL BE COLLECTED AND DISPOSED OF BY PASCO COUNTY TRANSFER STATION.
11. THE SITE IS NOT LOCATED WITHIN THE LIMITS OF A WELLHEAD PROTECTION ZONE AND THERE IS NO ORDINARY HIGH WATER (OHW) LINE WITHIN THE SITE.
12. STORMWATER TREATMENT WILL BE PROVIDED BY DRY-RETENTION POND.
13. WASTEWATER UTILITIES PROVIDED BY PRIVATE LIFT STATION WITH TIE IN TO THE 6" FORCE MAIN ALONG PRETTY POND ROAD.
14. POTABLE WATER WILL BE PROVIDED BY CITY OF ZEPHYRHILLS BY TAPPING INTO THE 12" WATER MAIN ALONG PRETTY POND ROAD.
15. IRRIGATION SERVICE WILL BE PROVIDED BY TAPPING INTO THE 12" RECLAIM MAIN ALONG WIRE ROAD.
16. ALL ON-SITE WATER AND SEWER FACILITIES ARE OWNED AND MAINTAINED BY THE PROPERTY OWNER.

SITE DEVELOPMENT USAGE

1.	PROPERTY INFORMATION	
	FUTURE LAND USE (FLU)	RESIDENTIAL
	ZONING (w/ OVERLAY)	R-4 (MULTI-FAMILY RESIDENTIAL)
	FLOODZONE	X
	BUILDING USES	APARTMENT w/ AMENITY

2.	REQUIRED LOT SETBACKS			
		BUILDING		BUFFER
	PRETTY POND (FRONT)	30'	FEET	10'
	WIRE (FRONT)	30'	FEET	10'
	NORTH (SIDE)	10'	FEET	10'
	WEST (SIDE)	10'	FEET	10'
	PROVIDED LOT SETBACKS			
		BUILDING		BUFFER
	PRETTY POND RD (SOUTH)	91'	FEET	15' B
	WIRE (EAST)	69'	FEET	15' B
	NORTH (SIDE)	142'	FEET	15' B
	WEST (SIDE)	65'	FEET	10' A

3.	DIMENSIONAL REQUIREMENTS		
		REQ.	PROV.
	MAX. BUILDING HEIGHT	35'	50' *
	MAX. UNITS PER ACRE	20	20
	MAX. LOT IMPERVIOUS	75%	60%
	MIN. LOT OPEN SPACE	25%	40%
	MIN. LOT WIDTH	N/A	N/A
	MIN. FLOOR AREA	N/A	N/A
	* APPROVED WITH CONDITIONAL USE	#USE-0006-21	
	TOTAL AMOUNT OF LOTS ALLOWABLE	240	

4.	PROPOSED SITE COVERAGE			
	AREA TYPE	SF	ACRE	% OF SITE
	BUILDING AREA IMP. *	100,762	2.313	19.3%
	ASPHALT	172,065	3.950	32.9%
	CONCRETE	38,930	0.894	7.4%
	WET POND	0	0.000	
	GREEN SPACE	210,972	4.843	40.4%
	TOTAL SITE	522,729	12.000	100.0%
	TOTAL IMPERVIOUS	311,757	7.157	59.6%
	TOTAL OPEN SPACE	210,972	4.843	40.4%

EXISTING SITE COVERAGE			
AREA TYPE	SF	ACRE	% OF SITE
BUILDING AREA IMP.	0	0.000	
DRIVEWAYS/ROADS	0	0.000	
WETLANDS	0	0.000	
WET POND	0	10.480	87.3%
GREEN SPACE	522,729	12.000	100.0%
TOTAL SITE	522,729	12.000	100.0%
TOTAL IMPERVIOUS*	0	0.000	
TOTAL OPEN SPACE	522,729	12.000	100.0%

5	PARKING REQUIREMENTS				
	BUILDING USE	A. SF/UNITS	B. SPACES	C. PER SF	D. REQ. SPACES
	RESIDENTIAL	240	2	1	480
TOTAL REQUIRED SPACES					480

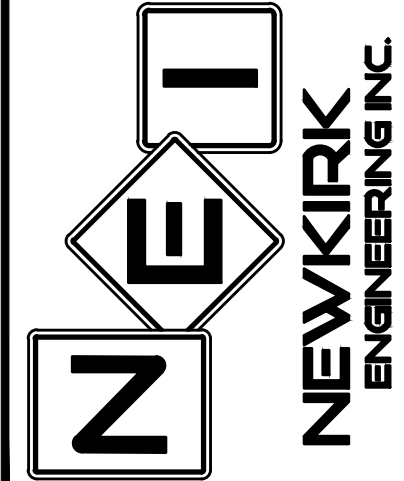
SPECIALTY PARKING REQUIREMENTS	
	REQ. SPACES
ADA SPACES	9
BICYCLE SPACES	48

PROVIDED PARKING		
	%	PROV. SPACES
STANDARD SPACES	83.0%	445
GARAGE SPACES	6.0%	32
ADA SPACES	2.1%	11
BYCYCLE SPACES	9.0%	48
TOTAL PROVIDED SPACES		536

REVISIONS

DATE	DESCRIPTION
11/26/22	CITY COMMENTS

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Civil Engineering,
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Landscape Architecture



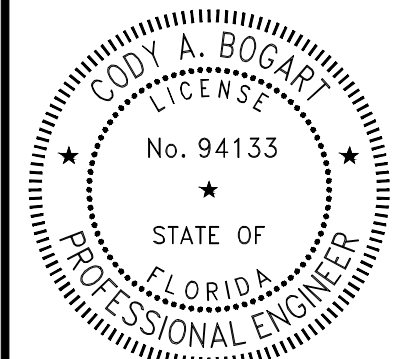
DEVELOPMENT INFORMATION

SUMMIT APARTMENTS

PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
CODY A. BOGART, PE #94133 ON



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PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HHN
SCALE:	
DRAWING NUMBER	

03

FDEP WASTEWATER NOTES

1. APPROPRIATE DEFLECTION TEST ARE SPECIFIED FOR ALL FLEXIBLE PIPE. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY: 1) NO PIPE SHALL EXCEED A DEFLECTION OF 5%; 2) USING RIGID BALL OR MANDREL FOR THE DEFLECTION TEST WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATIONS, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURE; AND 3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.
2. LEAKAGE TEST ARE SPECIFIED REQUIRING THAT: 1) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM; 2) EXFILTRATION OR INFILTRATION TEST BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET; AND 3) AIR TEST, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C 924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND OTHER MATERIAL APPROPRIATE TEST PROCEDURES.
3. MANHOLE INSPECTION AND TESTING FOR WATERTIGHTNESS OR DAMAGE PRIOR TO PLACING INTO SERVICE ARE REQUIRED. AIR TESTING SPECIFIED FOR CONCRETE SEWER MANHOLES, SHALL CONFORM TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.
4. SUITABLE COUPLINGS COMPLYING WITH ASTM SPECIFICATIONS ARE REQUIRED FOR JOINING DISSIMILAR MATERIALS.
5. CONCRETE MANHOLES SHALL HAVE THE FOLLOWING: 1) MANHOLE LIFT HOLES AND GRADE ADJUSTMENT RINGS SEALED WITH NON-SHRINK MORTAR OR OTHER APPROPRIATE MATERIAL; 2) INLET AND OUTLET PIPES BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE WATERTIGHT CONNECTION OR ANOTHER WATERTIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL; 3) WATERTIGHT MANHOLE COVERS BE USED WHEREVER THE TOPS MAY BE FLOODED BY STREET RUNOFF OR HIGH WATER.

FDEP WATER NOTES

1. ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT WILL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS.
2. ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL CONFORM TO NSF INTERNATIONAL STANDARD 61.
3. ALL PROPOSED WATER MAINS SHALL BE FLUSHED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-651 AND THE FDEP PROTECTION REQUIREMENTS.
4. POTABLE WATER PIPES SHALL BE HYDROSTATICALLY TESTED FOR PRESSURE AND LEAKAGE IN ACCORDANCE WITH AWWA STANDARD C600 FOR DUCTILE IRON PIPES AND C605 FOR PVC PIPES, RESPECTIVELY.
5. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE LEAD FREE, AND ANY SOLDER OR FLUX USED IN THIS PROJECT WILL CONTAIN NO MORE THAN 0.2% LEAD.
6. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(B)3, F.A.C., USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.)
7. POTABLE WATER PIPES MUST BE MANUFACTURED IN ACCORDANCE WITH THE FOLLOWING AWWA SPECIFICATIONS:
- A. DUCTILE IRON PIPE (3 INCHES TO 54 INCHES) - AWWA C150 AND AWWA C151;
- B. PVC PIPE
- (1) AWWA C900/ASTM 1784 (1 INCH TO 12 INCHES) WITH CL200 MINIMUM;
- (2) AWWA C905 (14 INCHES TO 48 INCHES);
8. ALL FIRE HYDRANTS THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL HAVE UNPLUGGED, UNDERGROUND DRAINS WILL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER OR VACUUM TYPE SANITARY SEWER; AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-10, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM."
9. NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE INSTALLED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS OR IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDED PROCEDURES.
10. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT; BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT.
11. ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS INSTALLED UNDER THIS PROJECT WILL BE PROVIDED WITH THRUST BLOCKS OR RESTRAINED JOINTS TO PREVENT MOVEMENT.
12. NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL BE CONSTRUCTED OF ASBESTOS-CEMENT OR POLYVINYL CHLORIDE PIPE WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C603 OR C605, RESPECTIVELY, AND ALL OTHER NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600.
13. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM TYPE SANITARY SEWER, STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER (OR A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER IF THE BOTTOM OF THE WATER MAIN WILL BE LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER); A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM."
14. NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE; AND NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE.
15. AT THE UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE OR THE PIPES WILL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
16. IF CONNECTION OF THE PROPOSED ACTIVITY TO THE WATER MAIN WILL RESULT IN A DEPRESSURIZATION OF THE EXISTING SYSTEM BELOW 20 POUNDS PER SQUARE INCH, ONE OF THE FOLLOWING MUST OCCUR;
- A. PRECAUTIONARY BOIL WATER NOTICES MUST BE ISSUED IN CASES OF PLANNED DISTRIBUTION INTERRUPTIONS, WHICH ARE DEEMED AN IMMINENT PUBLIC HEALTH THREAT BY THE FDEP CENTRAL DISTRICT OR WILL AFFECT THE BACTERIOLOGICAL QUALITY OF THE DRINKING WATER UNLESS THE PUBLIC WATER SYSTEM CAN DEMONSTRATE, BY SOUND ENGINEERING JUDGMENT, THAT THE INTEGRITY OF THE WATER SYSTEM HAS BEEN MAINTAINED; OR
- B. IN CASE OF BRIEF INTERRUPTION IN SERVICE, ADVISORIES (NOT BOIL WATER NOTICES) SHOULD BE ISSUED IF TEMPORARY CHANGES IN WATER QUALITY ARE EXPECTED TO OCCUR AND NOT DEEMED AN IMMINENT PUBLIC HEALTH RISK.

LEGEND

#3	BENCHMARK ID	■	4" BY 4" CONCRETE MONUMENT
B24	BORING ID	----	EXISTING EASEMENT
TV	EXISTING CABLE TV PEDESTAL	-----FOC-----	EXISTING UNDERGROUND FIBER OPTIC CABLE
⊕	EXISTING CAP OR PLUG	-----#FM-----	EXISTING FORCE MAIN (# INDICATES SIZE)
⊖	EXISTING CLEAN OUT	-----GAS-----	EXISTING GAS MAIN
⊗	EXISTING CONDUIT RISER/ MARKER	-----OHE-----	EXISTING OVERHEAD ELECTRIC CABLES
⊠	EXISTING ELECTRIC METER	-----OHT-----	EXISTING OVERHEAD TRAFFIC SIGNAL CABLE
+	EXISTING ELEVATION (SOFT)	-----#RAW-----	EXISTING RAW WATER MAIN (# INDICATES SIZE)
⊕ 16.0	PROPOSED ELEVATION (SOFT)	-----#REC-----	EXISTING RECLAIM WATER MAIN (# INDICATES SIZE)
⊕ 16.00	EXISTING ELEVATION (HARD)	-----#SAN-----	PROPOSED SANITARY SEWER (# INDICATES SIZE)
⊕ 16.00	PROPOSED ELEVATION (HARD)	-----#WM-----	PROPOSED WATER MAIN (# INDICATES SIZE)
⊕	EXISTING FIRE HYDRANT	-----12-----	EXISTING CONTOUR
⊕	PROPOSED FIRE HYDRANT	-----101-----	PROPOSED CONTOUR (SOFT)
↖	EXISTING FLOW DIRECTION	-----102-----	PROPOSED CONTOUR (HARD)
↖	PROPOSED FLOW DIRECTION	-----UTEL-----	EXISTING UNDERGROUND TELEPHONE CABLE
⊗	EXISTING GAS METER	-----UTV-----	EXISTING UNDERGROUND TELEVISION CABLE
⊗	EXISTING GAS VALVE	-----UGE-----	EXISTING UNDERGROUND ELECTRICAL POWER CABLE
⊕	EXISTING GUY WIRE & ANCHOR PIN	-----J-----	JURISDICTIONAL WETLAND LINE
⊠	EXISTING MAIL BOX	-----#SAN-----	EXISTING SANITARY SEWER (# INDICATES SIZE)
○	EXISTING MANHOLE (UNKNOWN)	-----#WM-----	EXISTING WATER MAIN (# INDICATES SIZE)
⊕	PROPOSED MANHOLE	=====	EXISTING PIPE OR CONDUIT (TYPE SPECIFIED)
⊕	EXISTING SANITARY SEWER CLEANOUT	-----...-----	EXISTING SWALE OR CENTER OF DITCH
⊕	EXISTING SANITARY SEWER MANHOLE	-----...-----	PROPOSED SWALE OR CENTER OF DITCH
⊕	EXISTING ROAD SIGNS AND POSTS	-----...-----	EXISTING TOP OF DITCH BANK
⊕	PROPOSED SIGN AND POST	-----...-----	EXISTING BOTTOM OF DITCH BANK
⊕	EXISTING TEE	-----//-----	EXISTING WOOD FENCE
⊕	EXISTING UTILITY POLE	-----x-----	EXISTING WIRE OR CHAIN LINK FENCE
⊕	EXISTING VALVE IRRIGATION	-----x-----	PROPOSED WIRE OR CHAIN LINK FENCE
⊕	EXISTING VALVE WATER	-----□-----	PROPOSED SILT/SEDIMENT FENCE
⊕	PROPOSED WATER VALVE	-----~-----	PROPOSED COIR ROLL OR WATTLE
⊕	EXISTING WATER METER	-----○-----	PROPOSED FLOATING TURBIDITY BARRIER
⊕	EXISTING STORM SEWER WITH INLET	-----TP-----	PROPOSED TREE PROTECTION
⊕	PROPOSED STORM SEWER WITH INLET		
⊗	1/2" IRON ROD (NO I.D.)		

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS - 2022 / 2023 AND QUALIFIED PRODUCTS LIST

INDEX NO.	DESCRIPTION	INDEX NO.	DESCRIPTION
102	TEMPORARY EROSION AND SEDIMENT CONTROL	102-600	GENERAL INFORMATION FOR TRAFFIC CONTROL
425-010	STRUCTURE BOTTOMS - TYPES J AND P		THROUGH WORK ZONES
205	PIPE BACKFILL	102-602	TWO-LANE, TWO-WAY, WORK ON SHOULDER
425-024	CURB INLET TOP TYPE 9	102-603	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY
520-001	CURB & CURB AND GUTTER	515-062	ALUMINUM PEDESTRIAN / BICYCLE PICKET RAILING
522-002	PUBLIC SIDEWALK CURB RAMPS	700-101	TYPICAL SECTIONS FOR PLACEMENT OF SINGLE & MULTIPLE-COLUMN SIGNS
350-001	CONCRETE PAVEMENT JOINTS		SPECIAL MARKING AREAS
522-001	CONCRETE SIDEWALK	711-001	
514	OPTIONAL BASE GROUP AND STRUCTURAL NUMBERS		

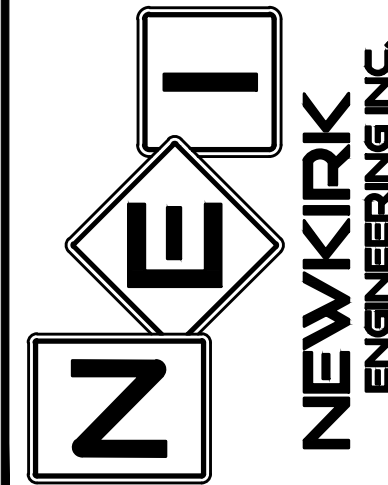
ABBREVIATIONS

AWWA	AMERICAN WATER WORKS ASSOCIATION	GW	GROUND WATER	R	RADIUS
CMP	CORRUGATED METAL PIPE	H/C	HANDICAP	RCP	REINFORCED CONCRETE PIPE
CPP	CORRUGATED PLASTIC PIPE	HDPE	HIGH DENSITY POLYETHYLENE	RPM	REFLECTIVE PAVEMENT MARKER
CTV	CABLE TELEVISION	INV	INVERT	R/W	RIGHT-OF-WAY
DIP	DUCTILE IRON PIPE	K _u	HORIZONTAL PERMEABILITY	SAN	SANITARY
ESMT	EASEMENT	K _v	VERTICAL PERMEABILITY	SH	SEASONAL HIGH
EXIST	EXISTING	KO	KNOCK OUT	SMH	SANITARY MANHOLE
FAC	FLORIDA ADMINISTRATIVE CODE	LF	LINEAL FEET	SJRWMD	ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	MB	MAP BOOK	SS	SANITARY SEWER
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	MES	MITERED END SECTION	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
FH	FIRE HYDRANT	MJ	MECHANICAL JOINT	TSB	TEMPORARY SEDIMENT BASIN
FOC	FIBER OPTIC CABLE	N/A	NOT APPLICABLE	TYP	TYPICAL
FF EL	FINISH FLOOR ELEVATION	NGVD	NATIONAL GEODETIC	UGE	UNDERGROUND ELECTRIC
FP&L	FLORIDA POWER & LIGHT	OHE	OVERHEAD ELECTRIC	UGT	UNDERGROUND TELEPHONE
FM	FORCE MAIN	OR	OFFICIAL RECORD	USACOE	UNITED STATES ARMY CORP OF ENGINEERS
FPD	FEET PER DAY	PG	PAGE	W	WATER (POTABLE)
G	GAS	PSI	POUNDS PER SQUARE INCH		
		PVC	POLYVINYL CHLORIDE		
		PVMT	PAVEMENT		

REVISIONS

DATE	DESCRIPTION

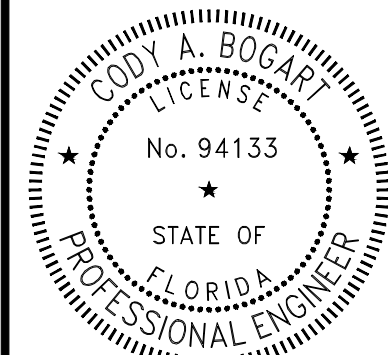
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DEVELOPMENT INFORMATION
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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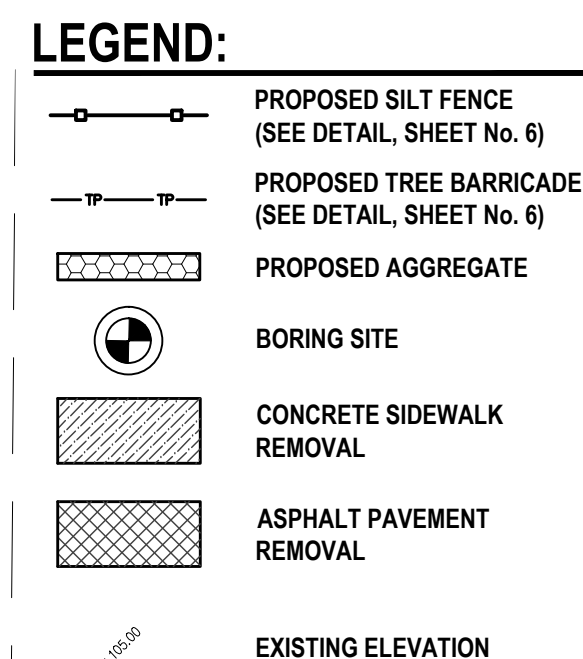
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CHECKED BY:	HHN
SCALE:	
DRAWING NUMBER	

04



EROSION CONTROL NOTES:

1. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE SWPPP DURING CONSTRUCTION OPERATIONS.
2. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL DEVICES HAVE BEEN INSTALLED.
3. THE CONTRACTOR SHALL POST "NO TRESPASSING" SIGNAGE AT ALL SITE ENTRANCES PRIOR TO CONSTRUCTION.
4. MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.
5. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
6. GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
7. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
8. NO TURBID WATER SHALL BE DISCHARGED OFF-SITE FROM THE DEWATERING OPERATION. CONTRACTOR SHALL TAKE MEASURES TO CONTROL TURBIDITY.
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OF NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
11. PROVIDE DUST CONTROL FOR ALL EARTHWORK OPERATIONS. COVER AREA WITH LIGHT COATING OF WATER OR OTHER APPROVED METHOD.

SWPPP INSPECTIONS AND RECORD KEEPING:

INSPECTIONS ARE REQUIRED AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL EVENT OF ONE-HALF (1/2) OF AN INCH OF RAINFALL OR GREATER AND SHALL CONTINUE UNTIL THE SITE COMPLIES WITH FINAL STABILIZATION (NOTICE OF TERMINATION). INSPECTIONS MUST BE CONDUCTED BY A "QUALIFIED" INSPECTOR. "QUALIFIED" IS DEFINED AS A PERSON THAT A). HAS SUCCESSFULLY COMPLETED AND MET ALL REQUIREMENTS NECESSARY TO BE FULLY CERTIFIED THROUGH THE FDEP STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM; B). HAS SUCCESSFULLY COMPLETED AN EQUIVALENT FORMAL TRAINING PROGRAM; OR C). THAT IS QUALIFIED BY OTHER TRAINING OR PRACTICAL EXPERIENCE IN THE FIELD OF STORMWATER POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL. EACH INSPECTION MUST BE FOLLOWED UP BY A REPORT DOCUMENTING THE INSPECTOR'S FINDINGS AND REQUEST THE REQUIRED MAINTENANCE AND/OR REPAIR FOR THE EROSION AND SEDIMENTATION CONTROL MEASURES. THESE RECORDS ARE USED TO PROVE THAT THE REQUIRED INSPECTION AND MAINTENANCE WERE PERFORMED AND SHALL BE PLACED IN THE SWPPP LEDGER. IN ADDITION TO INSPECTION AND MAINTENANCE REPORTS, RECORDS SHOULD BE KEPT OF CONSTRUCTION ACTIVITIES THAT OCCUR ON THE SITE. THE CONTRACTOR SHALL RETAIN COPIES OF THE SWPPP, ALL REPORTS AND DATA FOR A MINIMUM OF FIVE (5) YEARS AFTER THE PROJECT IS COMPLETE IN PAPER AND CD FORMAT.

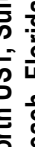
#1  BENCHMARK #1 SET NAIL
ELEVATION = 112.41

#2  BENCHMARK #2 SET NAIL
ELEVATION = 113.63

VERTICAL DATA
ELEVATIONS REFER TO (NAVD 88) NORTH AMERICA VERTICAL DATUM 1988. BENCHMARK, FOR DESIGNATION REFER TO THE SURVEY PERFORMED BY VISIONLAND SERVICE, INC., JOB No. VLSR21-56738 ; 56738a

WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING
CONSTRUCTION TO AVOID CONTACT WITH EXISTING
UNDERGROUND UTILITIES, GAS MAINS AND OVERHEAD
ELECTRIC IN THE RIGHT-OF-WAY.

NEWKIRK
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DEMOLITION AND SWPPP PLAN

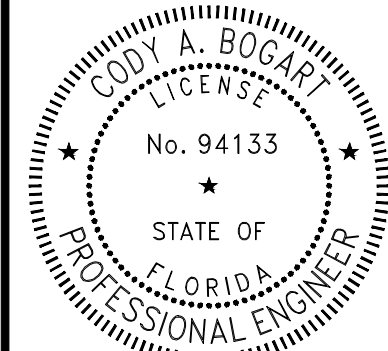
SUMMIT APARTMENTS

PRETTY POND ROAD

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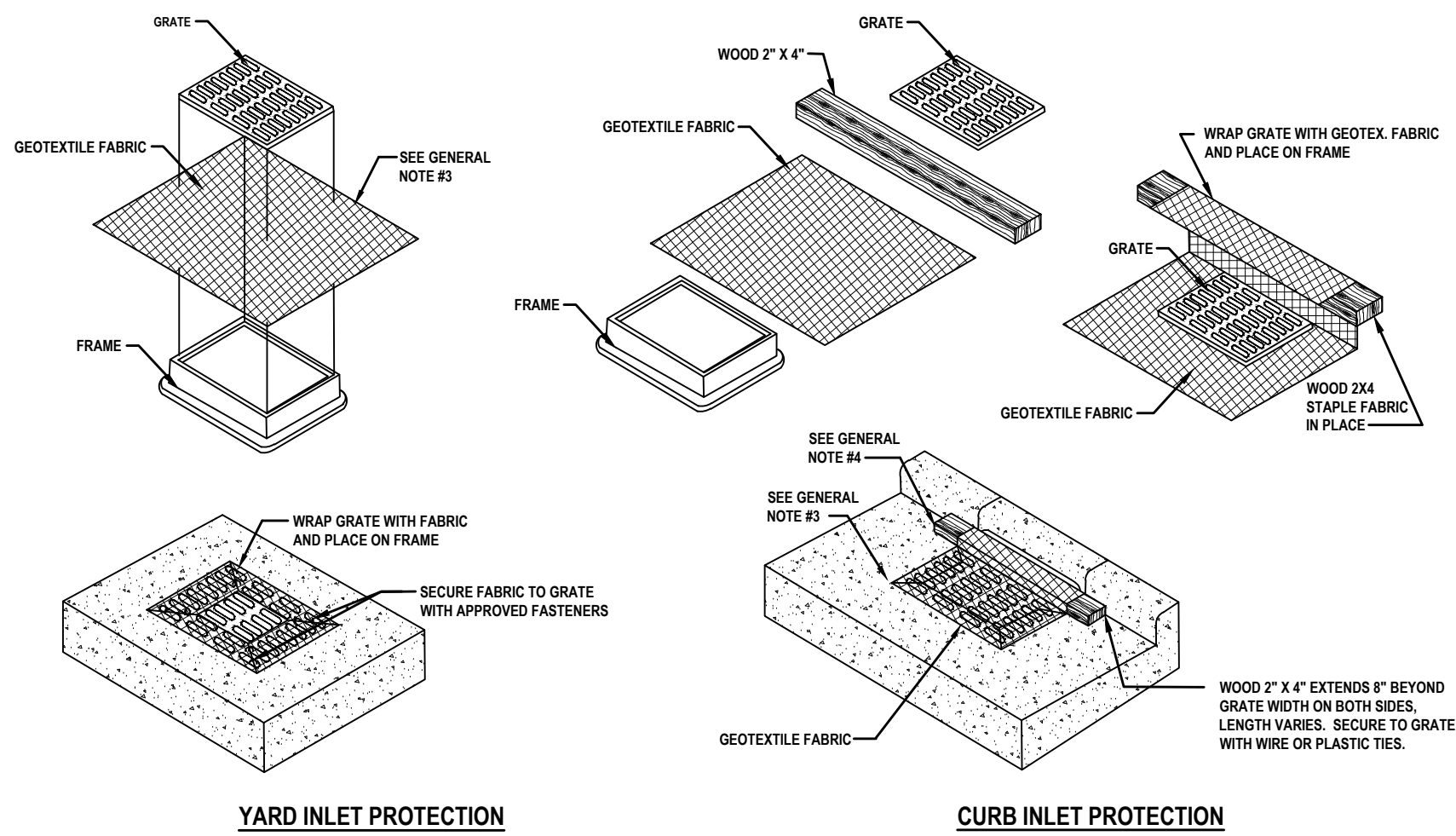
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DATE:	AUG 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	1"=40'
DRAWING NUMBER	

05

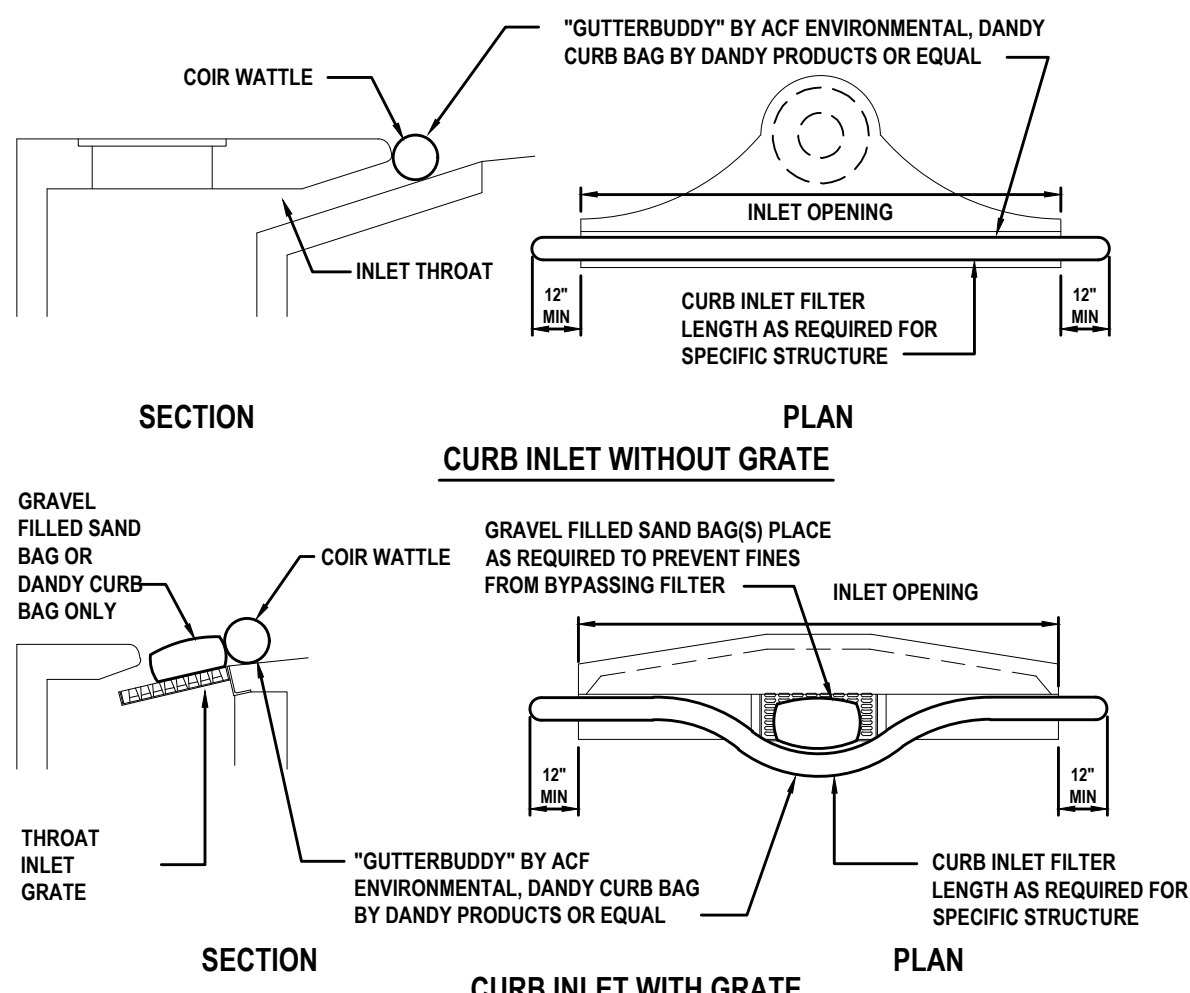


GENERAL NOTES:

- GEOTEXTILE TO BE MIRAFI FILTERWEAVE 402 OR GEOTEX 111F. ALTERNATIVES INCLUDE APPROVED EQUAL ASTM D4491 OR 100 TO 150 GALLON PER MINUTE PER SQUARE FOOT.
- WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
- FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- FOR CURB INLET PROTECTION AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
- THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS, OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

GEOTEXTILE FABRIC INLET PROTECTION

NOT TO SCALE

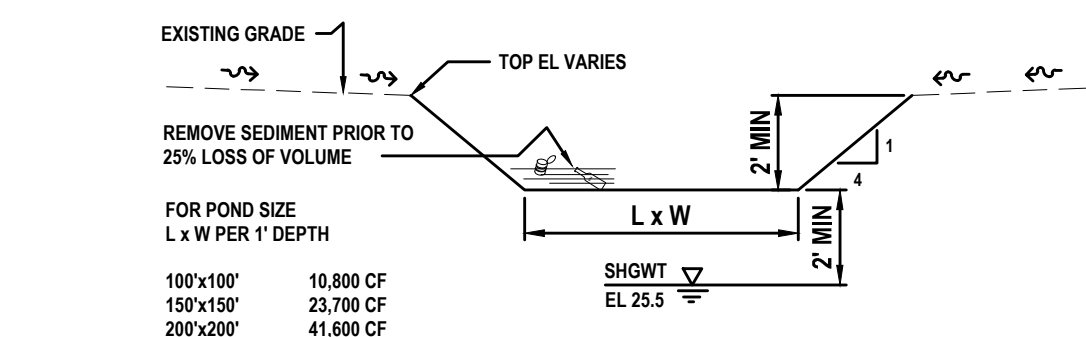


NOTES:

- INSTALL FILTER PRIOR TO BEGINNING CONSTRUCTION.
- INSPECT ONCE EACH WEEK AND AFTER ANY RAIN EVENT. REMOVE ANY FINES AND DEBRIS THAT MAY HAVE ACCUMULATED AND DISPOSE OF PROPERLY.

CURB INLET SEDIMENT PREVENTION DETAIL

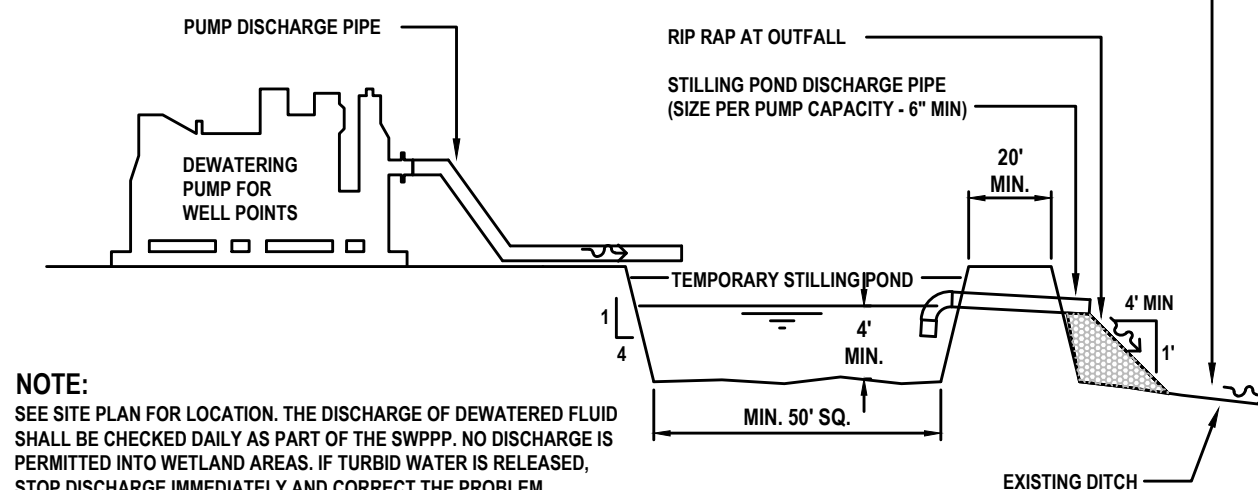
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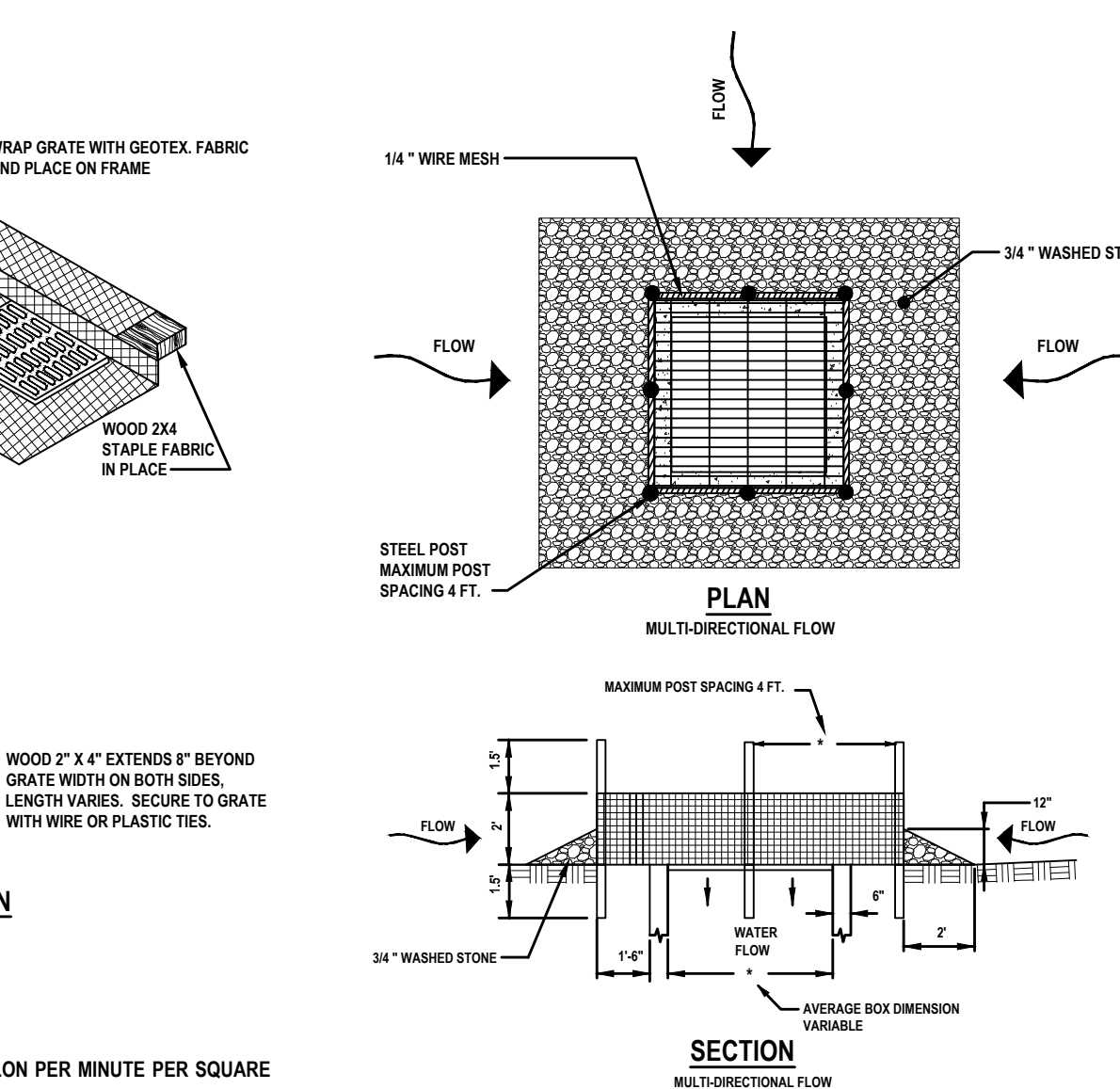
NOTE:
SEE SITE PLAN FOR LOCATION. THE DISCHARGE OF DEWATERING FLUID SHALL BE CHECKED DAILY AS PART OF THE SWPPP. NO DISCHARGE IS PERMITTED INTO WETLAND AREAS. IF TURBID WATER IS RELEASED, STOP DISCHARGE IMMEDIATELY AND CORRECT THE PROBLEM.

TYPICAL DEWATERING DISCHARGE DETAIL

NOT TO SCALE



NOT TO SCALE

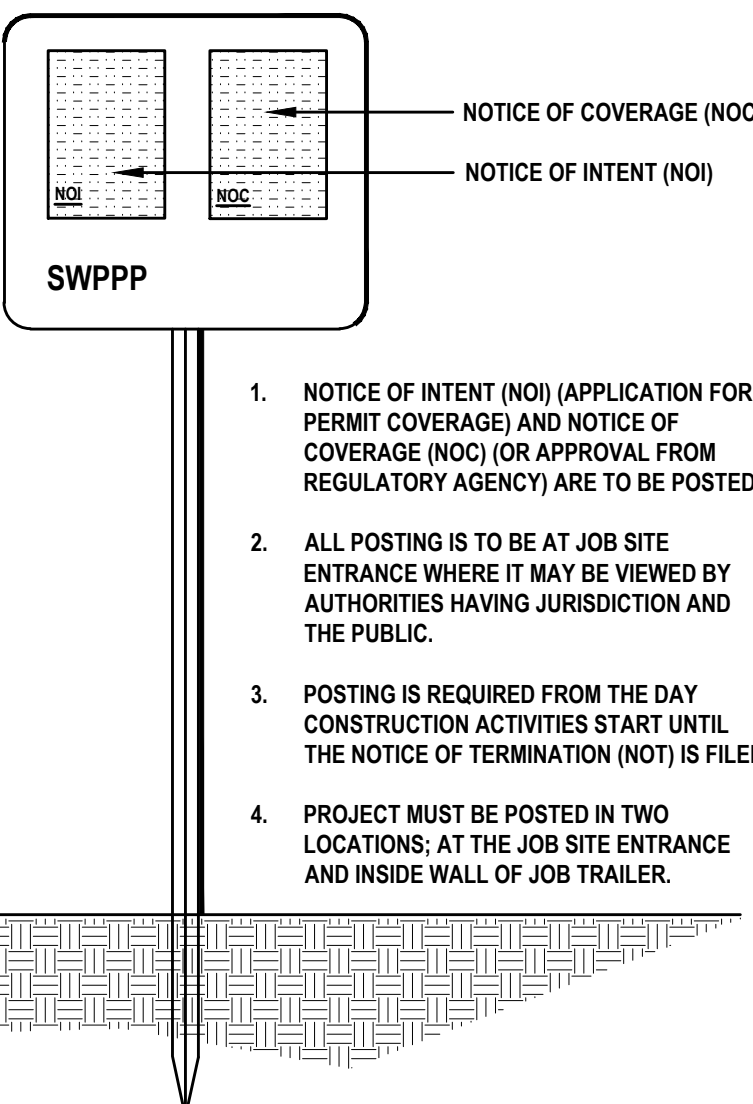


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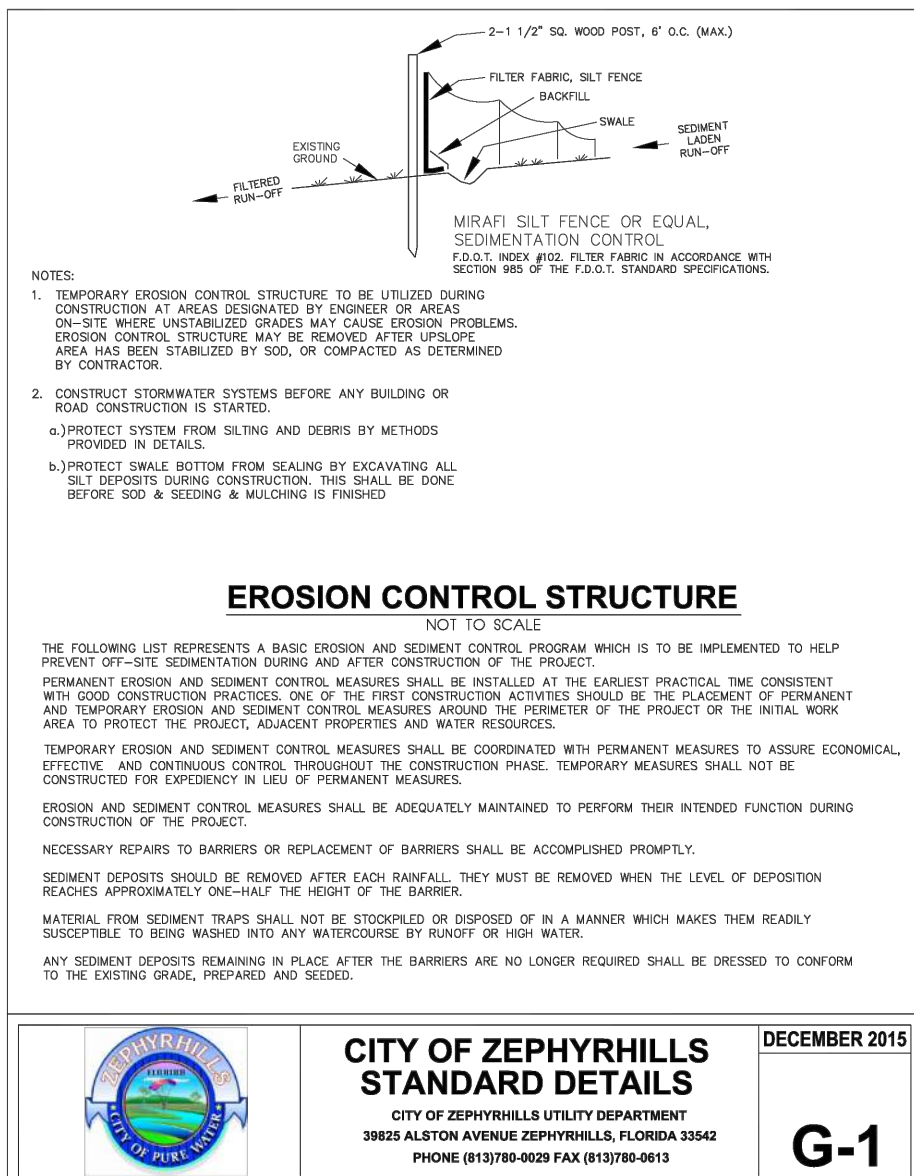
- SEDIMENT CONTROL STONE SHALL BE 3/4" WASHED STONE.
- WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4" INCH MESH.
- TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
- STEEL POST SHALL BE 5 FT. IN LENGTH, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
- WOOD POST SHALL BE 5 FT. IN HEIGHT, BE INSTALLED TO 1.5 FT. DEEP MINIMUM, AND BE 3 INCHES IN DIAMETER.
- POST SPACING SHALL BE A MAXIMUM OF 4 FT.

HARDWARE CLOTH INLET PROTECTION

NOT TO SCALE

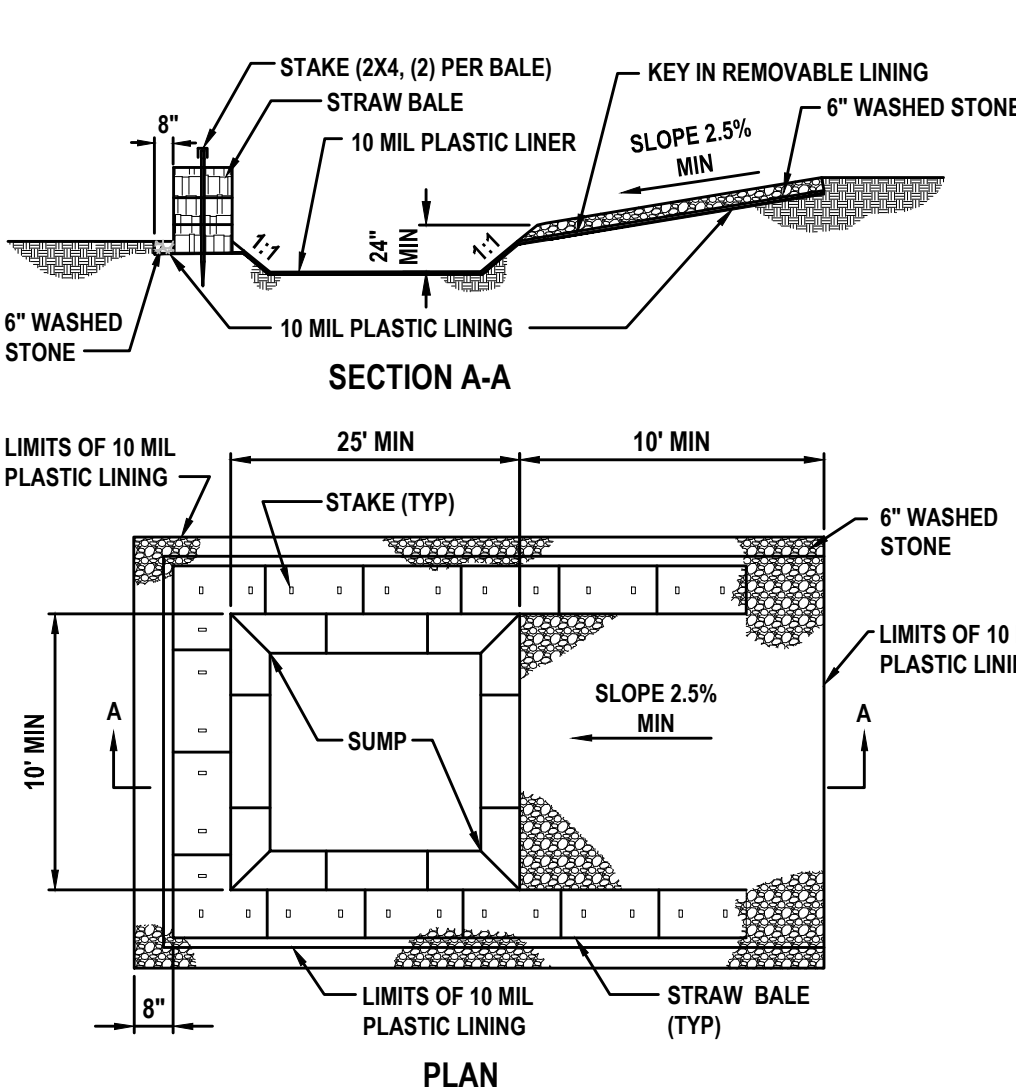


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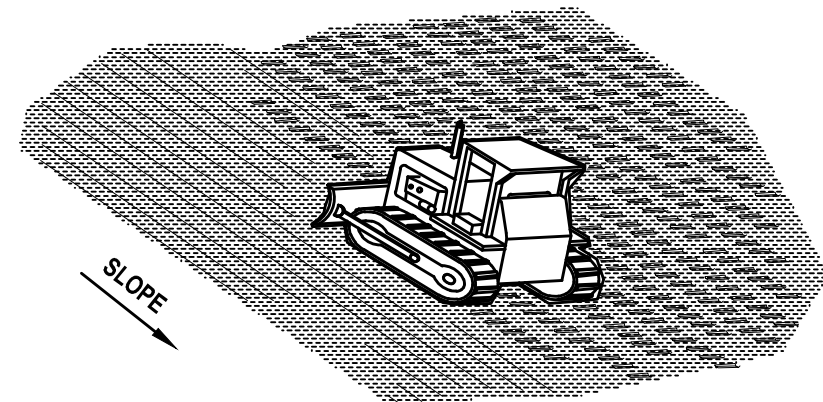
EROSION CONTROL STRUCTURE

NOT TO SCALE



CONCRETE WASHOUT AREA

NOT TO SCALE



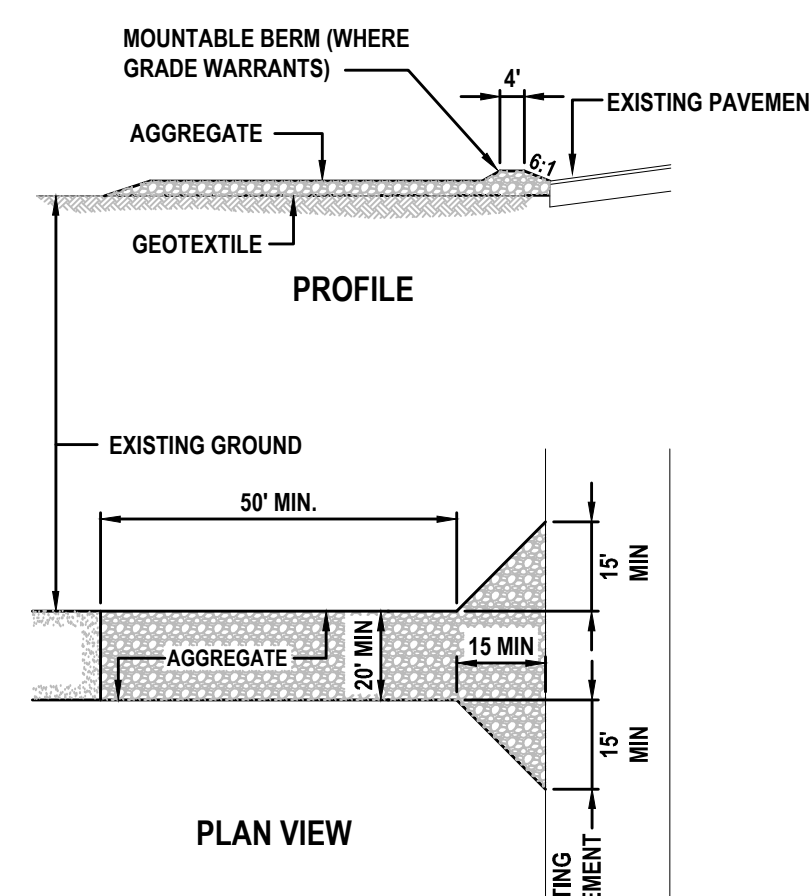
NOT TO SCALE

NOTES:

- USE DOZER TRACKS TO CREATE GROOVES PERPENDICULAR TO THE SLOPE. GROOVES WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE SEDIMENT IN RUNOFF.

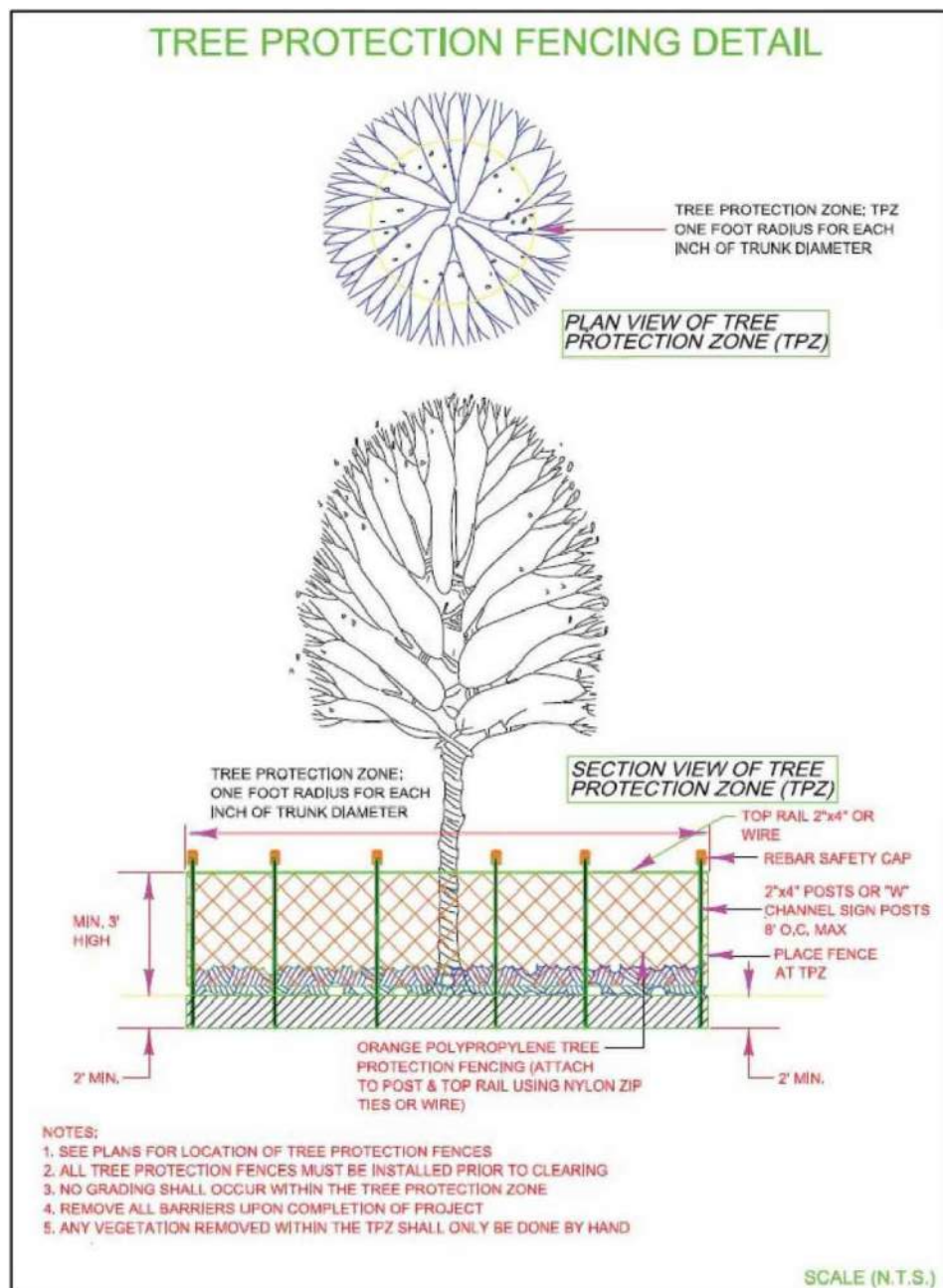
TRACKING DETAIL

NOT TO SCALE



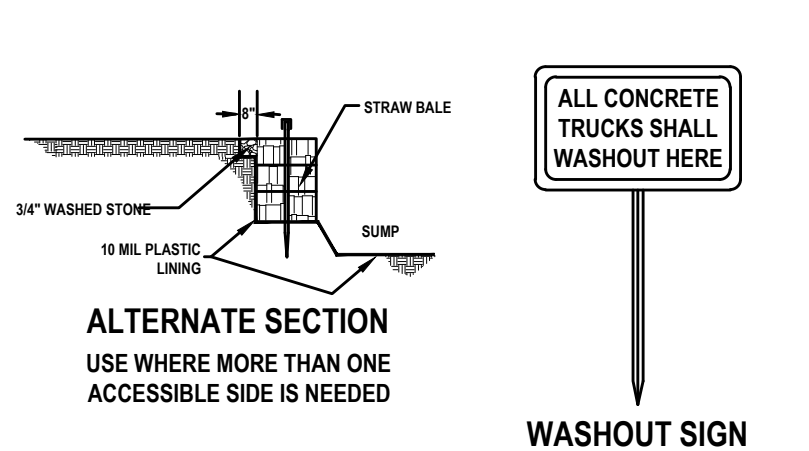
CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



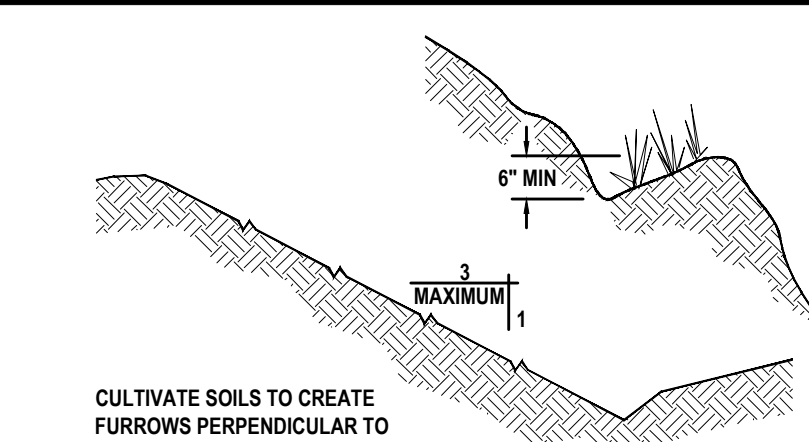
TREE PROTECTION DETAIL

NOT TO SCALE



NOTES:

- PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
- WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
- FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12".
- FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
- SAW CUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT & GRINDING TO BE DISPOSED OF IN THE PIT.
- CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, & SURFACE WATERS.
- MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.



SURFACE ROUGHENING

(NOT TO SCALE)

DEMOLITION AND SWPPP NOTES:

- ALL EROSION CONTROL DEVICES AND VISIBLE BARRICADES SHALL BE INSTALLED AND APPROVED BY THE ENGINEER PRIOR TO THE START OF CLEARING AND GRUBBING.
- THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE CITY AS SPECIFIED PRIOR TO START OF CONSTRUCTION.
- THE SITE SHALL BE CLEARED AND GRUBBED OF ALL VEGETATION AND DEBRIS WITHIN THE APPROXIMATE LIMITS OF CLEARING AS INDICATED ON THE DRAWING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY OF PALM COAST UTILITY DEPARTMENT, FLORIDA SUNSHINE AND EMERGENCY SERVICES FOR RESPECTIVE UTILITY LOCATIONS AND "NOTICE" OF CONSTRUCTION ACTIVITY.
- ALL REMOVED MATERIAL SHALL BE HAULED OFF-SITE TO AN APPROVED LANDFILL. TREES MAY BE LOGGED OR MULCHED FOR OFF-SITE DISPOSAL AT THE CONTRACTOR'S DISCRETION.
- ALL EROSION CONTROL DEVICES SHALL BE PLACED PRIOR TO THE START OF WORK AND REMAIN IN PLACE UNTIL ALL WORK IS COMPLETE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PERIODIC INSPECTION AND REMOVAL OF DEBRIS AND SILT BEHIND EROSION CONTROL DEVICES.
- ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY INLET PROTECTION MEASURES TO PREVENT SILTATION IN THE DRAINAGE SYSTEM (SEE DETAILS THIS DRAWING). THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEARED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
- ALL OFF-SITE AREAS DISTURBED DURING CONSTRUCTION ACTIVITY SHALL BE IMMEDIATELY RESTORED TO PRIOR CONDITION UPON COMPLETION OF WORK.
- SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION, BLOWING SAND AND THE IMPACT TO NEIGHBORING PROPERTIES.
- THE CONTRACTOR SHALL PROVIDE THE ENGINEER, CITY A NOT PLAN AT PRECONSTRUCTION MEETING. TRAFFIC SHALL BE ALLOWED TO CONTINUE DURING WORK. PROVIDE MEASURES TO DETOUR TRAFFIC AROUND OPEN EXCAVATION WITH ADEQUATE BARRICADES, SIGNAGE AND FLAGPERSON TO DIRECT TRAFFIC. EMERGENCY SERVICES SHALL BE NOTIFIED 48 HOUR IN ADVANCE.
- EXISTING DRIVEWAYS SHOWN ADJACENT TO OR OUTSIDE LIMITS OF CONSTRUCTION SHALL REMAIN IN-SERVICE. EXISTING UTILITIES AND DRIVEWAYS SHALL NOT BE REMOVED UNLESS OTHERWISE NOTED.
- IF ANY DEWATERING IS TO OCCUR DURING ANY PHASE OF CONSTRUCTION THEN DEWATERING ACTIVITY SHALL ADHERE TO CHAPTER 40C-22 FAC MORE SPECIFICALLY AS FOLLOWS. PER 40C-22.03(3) A "NOTICED GENERAL SHORT-TERM DEWATERING PERMIT" IS REQUIRED "ONLY IF" DEWATERING EXCEEDS 4 MILLION GALLONS PER DAY, EXCEPT DURING THE FIRST 120 HOURS OF DEWATERING WHEN THE DAILY AND INSTANTANEOUS PUMPAGE RATES SHALL NOT EXCEED 6 MILLION GALLONS PER DAY. AVERAGE DAILY WITHDRAWAL SHALL NOT EXCEED 2 MILLION GALLONS PER DAY FOR THE FIRST 60 DAYS OF THE DEWATERING ACTIVITY AND SHALL NOT EXCEED ONE MILLION GALLONS PER DAY OF A 180 DAY DURATION. EACH SPECIFIC DEWATERING PROJECT SHALL NOT EXCEED 180 DAYS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ANY DEWATERING ACTIVITY IS BELOW THE SPECIFIED THRESHOLD. OTHERWISE A PERMIT WILL BE REQUIRED AT THE EXPENSE OF THE CONTRACTOR. THE CONTRACTOR SHALL FAMILIARIZE ITSELF WITH CHAPTER 40C-22 FAC AND BE SOLELY RESPONSIBLE FOR OBTAINING AND SUBMITTING FORM RDS-50 TO SJRWMD A MINIMUM OF 10 DAYS PRIOR TO ANY DEWATERING ACTIVITY. SUBMITTAL OF FORM RDS-50 IS NOT REQUIRED IF DEWATERING IS 300,000 GALLONS PER DAY OR LESS AND WILL NOT EXCEED 30 DAYS IN DURATION.

EROSION CONTROL NOTES:

- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE SWPPP DURING CONSTRUCTION OPERATIONS.
- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL DEVICES HAVE BEEN INSTALLED.
- THE CONTRACTOR SHALL POST "NO TRESPASSING" SIGNAGE AT ALL SITE ENTRANCES PRIOR TO CONSTRUCTION.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
- GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
- NO TURBID WATER SHALL BE DISCHARGED OFF-SITE FROM THE DEWATERING OPERATION. CONTRACTOR SHALL TAKE MEASURES TO CONTROL TURBIDITY.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OF NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- PROVIDE DUST CONTROL FOR ALL EARTHWORK OPERATIONS. COVER AREA WITH LIGHT COATING OF WATER OR OTHER APPROVED METHOD.
- CONTRACTOR SHALL PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO OBTAIN COVERAGE UNDER THE NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP). PRIOR TO SUBMITTING THE NOI THE SITE OPERATOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL. A COPY OF THE SWPPP SHALL BE MAINTAINED ON SITE DURING CONSTRUCTION AND AVAILABLE FOR REVIEW BY COPC INSPECTORS UPON REQUEST.

LAND ALTERATION / TREE PRESERVATION NOTES:

- ALL TREES TO REMAIN MUST BE PROTECTED BY TREE PRESERVATION BARRICADES MEETING THE MINIMUM STANDARDS. PROTECTIVE BARRICADES SHALL REMAIN IN PLACE UNTIL LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED.
- ALL TRIMMING SHALL BE UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 PRUNING STANDARDS.
- OAK TREES LARGER THAN 36-INCHES AND ABOVE (HISTORIC) PRUNING SHALL BE PERFORMED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE OR A REGISTERED CONSULTING ARBORIST WITH THE AMERICAN SOCIETY OF CONSULTING ARBORISTS. THE ARBORIST SHALL UNDERSTAND THAT THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 PRUNING STANDARDS IS A STANDARD OF DIVISION 4.0.
- ALL TREE ROOTS EXISTING WITHIN APPROVED IMPROVEMENT AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA WHERE INDICATED ON THIS PLAN.

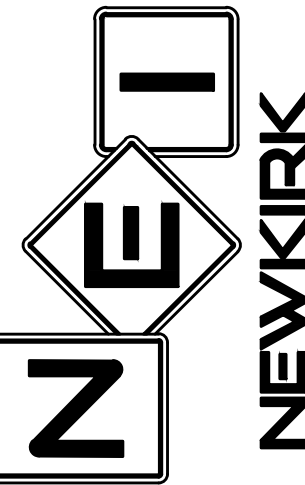
SWPPP INSPECTIONS AND RECORD KEEPING:

INSPECTIONS ARE REQUIRED AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL EVENT OF ONE-HALF (1/2) OF AN INCH OF RAINFALL OR GREATER AND SHALL CONTINUE UNTIL THE SITE COMPLETES WITH FINAL STABILIZATION (NOTICE OF TERMINATION). INSPECTIONS MUST BE CONDUCTED BY A "QUALIFIED" INSPECTOR. "QUALIFIED" IS DEFINED AS A PERSON THAT A). HAS SUCCESSFULLY COMPLETED AND MET ALL REQUIREMENTS NECESSARY TO BE FULLY CERTIFIED THROUGH THE FDP STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM; B). HAS SUCCESSFULLY COMPLETED AN EQUIVALENT FORMAL TRAINING PROGRAM; OR C). THAT IS QUALIFIED BY OTHER TRAINING OR PRACTICAL EXPERIENCE IN THE FIELD OF STORMWATER POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL. EACH INSPECTION MUST BE FOLLOWED UP BY A REPORT DOCUMENTING THE INSPECTOR'S FINDINGS AND REQUEST THE REQUIRED MAINTENANCE AND/OR REPAIR FOR THE EROSION AND SEDIMENTATION CONTROL MEASURES. THESE RECORDS ARE USED TO PROVE THAT THE REQUIRED INSPECTION AND MAINTENANCE WERE PERFORMED AND SHALL BE PLACED IN THE SWPPP LEDGER. IN ADDITION TO INSPECTION AND MAINTENANCE REPORTS, RECORDS SHOULD BE KEPT OF CONSTRUCTION ACTIVITIES THAT OCCUR ON THE SITE. THE CONTRACTOR SHALL RETAIN COPIES OF THE SWPPP, ALL REPORTS AND DATA FOR A MINIMUM OF FIVE (5) YEARS AFTER THE PROJECT IS COMPLETE IN PAPER AND CD FORMAT.

REVISIONS

DATE	DESCRIPTION

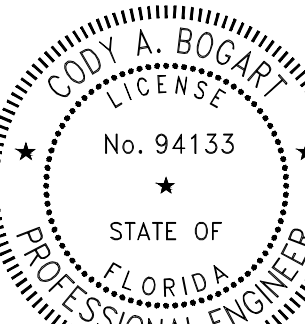
1230 North US1, Suite 3
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www.NewKirk-Engineering.com
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SWPPP DETAILS AND NOTES
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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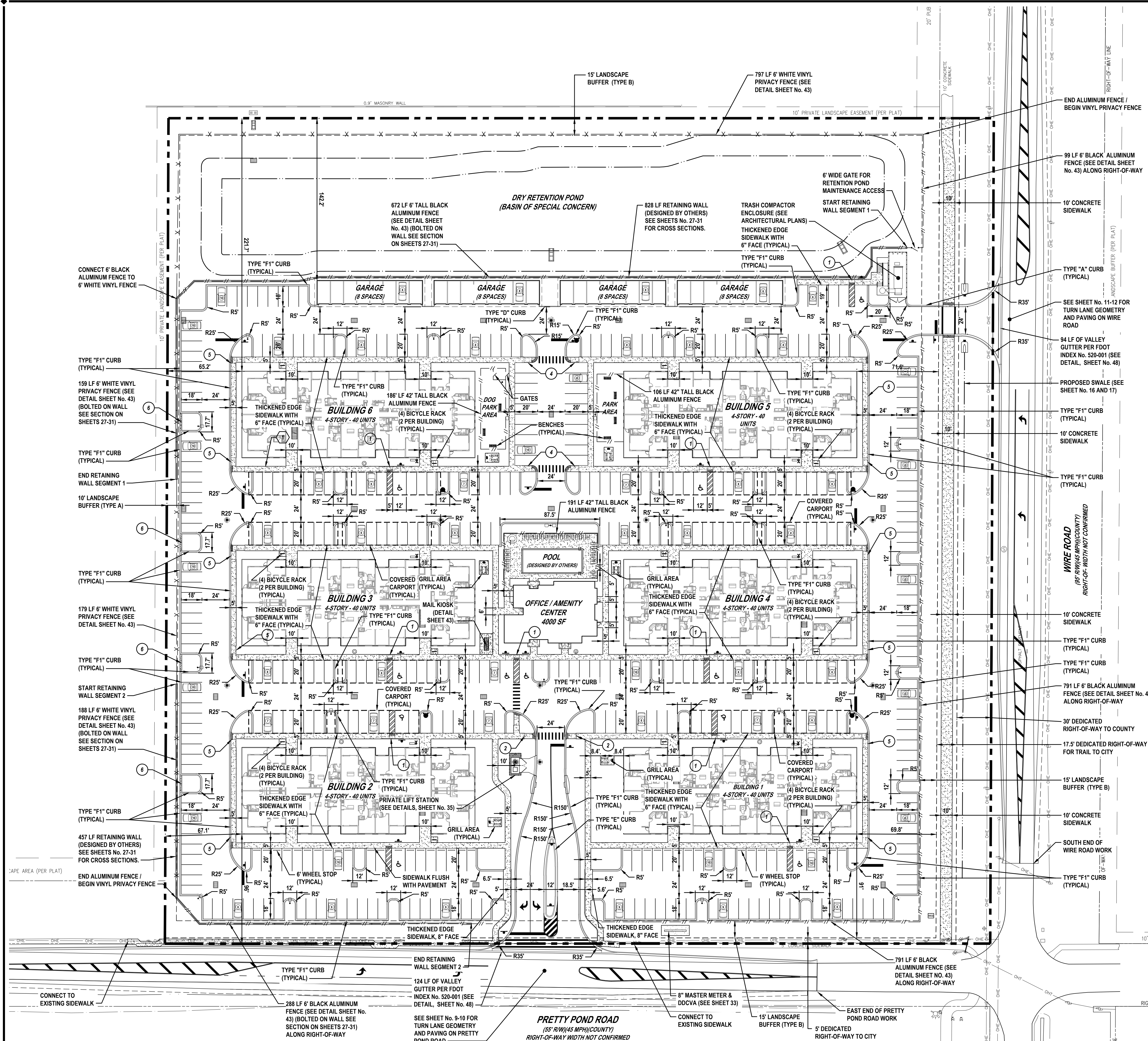
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DATE:	AUG 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HNN
SCALE:	AS SHOWN
DRAWING NUMBER	

06



PAVING LEGEND

ASPHALT PAVEMENT	2" SP-12.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS 6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS) 12" STABILIZED SUBBASE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (TYPE B STABILIZATION)
CONCRETE PAVEMENT	* ALTERNATE 12" STABILIZED SUBBASE: 6.5" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS) (TYPE B STABILIZATION) *ALTERNATE PAVEMENT TO ASPHALT IS CONCRETE PAVEMENT
CONCRETE SIDEWALK	6" CONCRETE (4,000 P.S.I. @ 28 DAYS) 12" STABILIZED SUBGRADE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D1557, AASHTO T-180 (6" LIFTS) (TYPE B STABILIZATION)
CONCRETE SIDEWALK	4" THICK CLASS I CONCRETE (3,000 P.S.I. @ 28 DAYS) PER FDOT INDEX 522-001 (SEE DETAIL, SHEET No. 48)

LEGEND

TYPE "F" CURB (PER SHEET No. 48)	TYPE "F" CURB (PER SHEET No. 48)
TYPE "F1" CURB (PER SHEET No. 48)	TYPE "F1" CURB (PER SHEET No. 48)
VALLEY GUTTER (PER SHEET No. 48)	VALLEY GUTTER (PER SHEET No. 48)
TYPE "D" CURB (PER SHEET No. 48)	TYPE "D" CURB (PER SHEET No. 48)
TYPE "A" CURB (PER SHEET No. 48)	TYPE "A" CURB (PER SHEET No. 48)
TRANSITION FROM TYPE "F1" CURB TO TYPE FLAT	TRANSITION FROM TYPE "F1" CURB TO TYPE FLAT
24" DETECTABLE WARNING MAT (DETAIL SHEET No. 46-47)	24" DETECTABLE WARNING MAT (DETAIL SHEET No. 46-47)
SITE LIGHTING SEE SITE LIGHTING PLAN FOR COMPLETE SPECIFICATIONS (SITE LIGHTING SHALL NOT EMIT MORE THAN 0.5 FOOT-CANDLES AT THE PROPERTY LINE. ADD GLARE GUARDS IF REQUIRED.)	SITE LIGHTING SEE SITE LIGHTING PLAN FOR COMPLETE SPECIFICATIONS (SITE LIGHTING SHALL NOT EMIT MORE THAN 0.5 FOOT-CANDLES AT THE PROPERTY LINE. ADD GLARE GUARDS IF REQUIRED.)
ELECTRIC TRANSFORMER PAD	ELECTRIC TRANSFORMER PAD
CONCRETE WHEEL STOPS (SEE DETAIL, SHEET No. 43)	CONCRETE WHEEL STOPS (SEE DETAIL, SHEET No. 43)
4 SPACE BICYCLE RACK (SEE DETAILS, SHEET No. 43)	4 SPACE BICYCLE RACK (SEE DETAILS, SHEET No. 43)
6" TALL VINYL PRIVACY FENCE (SEE DETAIL, SHEET No. 43)	6" TALL VINYL PRIVACY FENCE (SEE DETAIL, SHEET No. 43)
42" ALUMINUM RAIL FENCE (SEE DETAILS, SHEET No. 43)	42" ALUMINUM RAIL FENCE (SEE DETAILS, SHEET No. 43)

KEYNOTES:

- 1 HANDICAP PARKING SPACE RAMP (SEE DETAIL, SHEET No. 46-47)
- 2 SIDEWALK CURB RAMP CR-E (SEE DETAIL, SHEET No. 46-47)
- 3 SIDEWALK CURB RAMP CR-F (SEE DETAIL, SHEET No. 46-47)
- 4 SIDEWALK CURB RAMP CR-G (SEE DETAIL, SHEET No. 46-47)
- 5 SIDEWALK CURB RAMP CR-H (SEE DETAIL, SHEET No. 46-47)
- 6 18" GUTTER BYPASS (SEE DETAIL, SHEET No. 46-47)

NOTE:
EQUIPMENT AND OTHER
AMENITIES IN PARKS NOT
SPECIFIED AND ARE TO BE
DESIGNED BY OTHERS

1. PROPERTY INFORMATION	
FUTURE LAND USE (FLU)	RESIDENTIAL
ZONING (w/ OVERLAY)	R-4 (MULTI-FAMILY RESIDENTIAL)
FLOODZONE	X
BUILDING USES	APARTMENT w/ AMENITY

2.	REQUIRED LOT SETBACKS			
	BUILDING	BUFFER		
PRETTY POND (FRONT)	30'	FEET	10'	
WIRE (FRONT)	30'	FEET	10'	
NORTH (SIDE)	10'	FEET	10'	
WEST (SIDE)	10'	FEET	10'	
PROVIDED LOT SETBACKS				
	BUILDING	BUFFER		
PRETTY POND RD (SOUTH)	91'	FEET	15' B	
WIRE (EAST)	69'	FEET	15' B	
NORTH (SIDE)	142'	FEET	15' B	
WEST (SIDE)	65'	FEET	10' A	

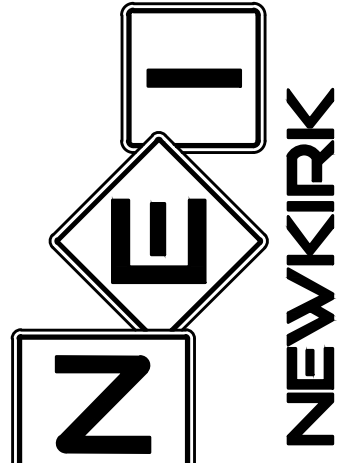
3.	DIMENSIONAL REQUIREMENTS		
		REQ.	PROV.
	MAX. BUILDING HEIGHT	35'	50' *
	MAX. UNITS PER ACRE	20	20
	MAX. LOT IMPERVIOUS	75%	60%
	MIN. LOT OPEN SPACE	25%	40%
	MIN. LOT WIDTH	N/A	N/A
	MIN. FLOOR AREA	N/A	N/A
	* APPROVED WITH CONDITIONAL USE		#USE-0006-21
TOTAL AMOUNT OF LOTS ALLOWABLE		240	

4.	PROPOSED SITE COVERAGE			
	AREA TYPE	SF	ACRE	% OF SITE
	BUILDING AREA IMP. *	100,762	2.313	19.3%
	ASPHALT	172,065	3.950	32.9%
	CONCRETE	38,930	0.894	7.4%
	WET POND	0	0.000	
	GREEN SPACE	210,972	4.843	40.4%
	TOTAL SITE	522,729	12.000	100.0%
	TOTAL IMPERVIOUS	311,757	7.157	59.6%
	TOTAL OPEN SPACE	210,972	4.843	40.4%

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

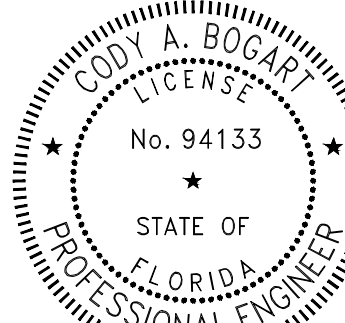
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GEOMETRY AND
PAVEMENT PLAN
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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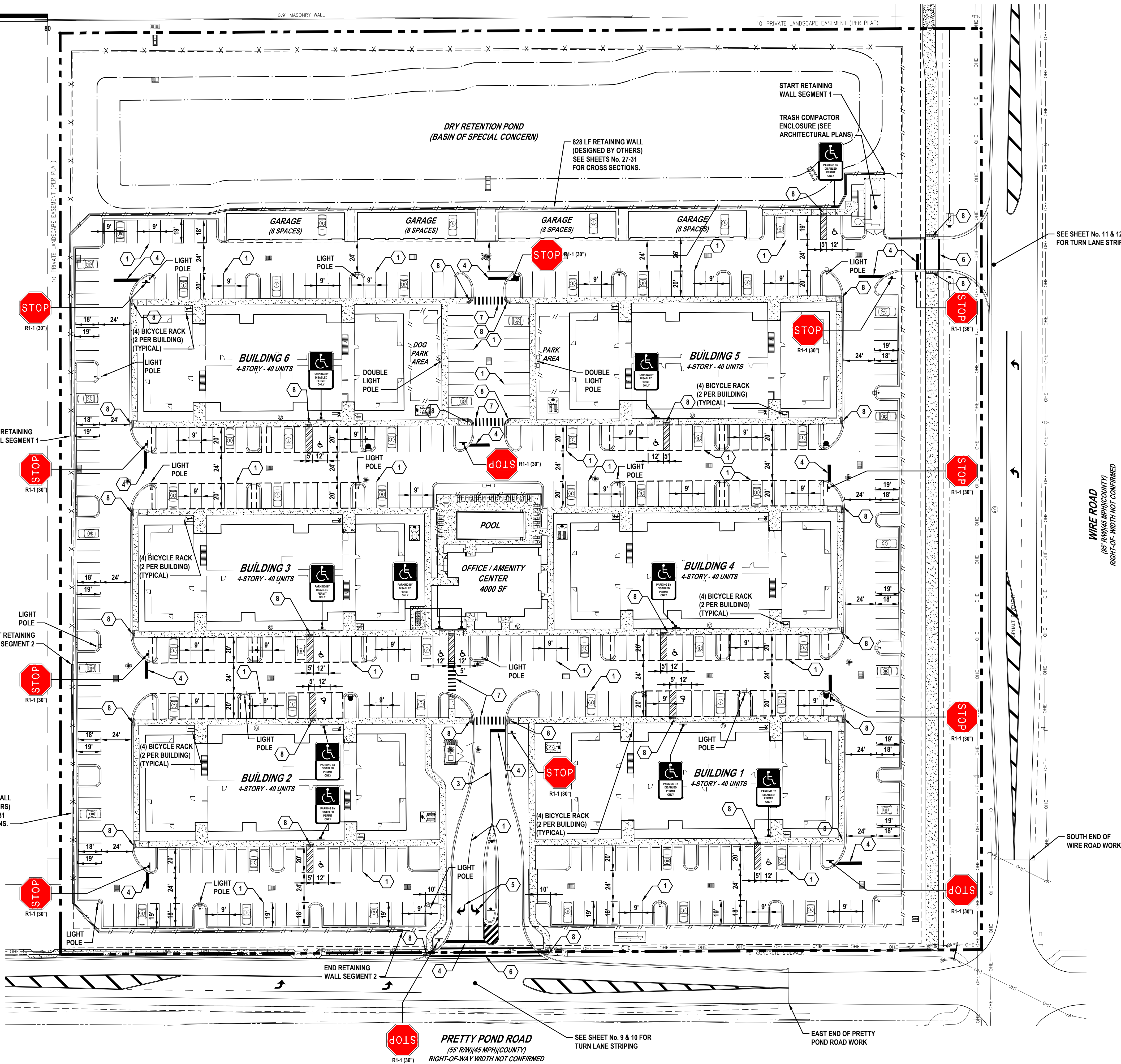
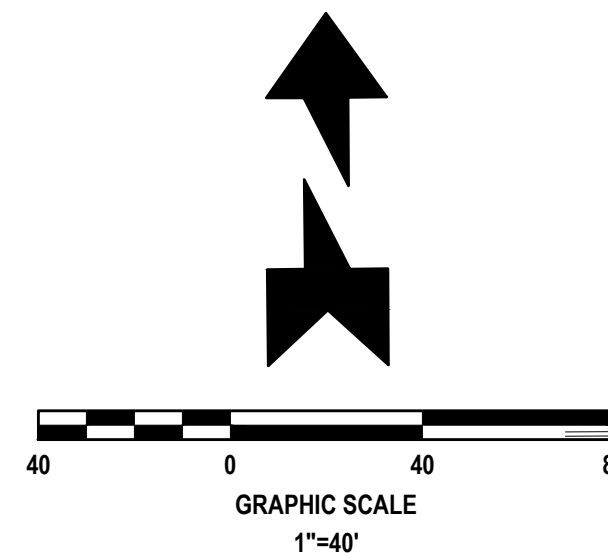
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DATE: AUGUST 2022
DESIGN BY: CAB
DRAWN BY: CRA
CHECKED BY: HHN
SCALE: 1" = 40'
DRAWING NUMBER

07



STRIPING KEYNOTES: (PER FDOT INDEX No. 711-001, ONLY THERMOPLASTIC IN R/W)

- | | |
|-------------------------------|---|
| 1 6" SOLID WHITE LINE | 9 6" WHITE SKIP LINE (10' - 30') |
| 2 6" SOLID YELLOW LINE | 10 6" WHITE DOTTED LANE DROP LINE (3' - 9') |
| 3 6" SOLID DOUBLE YELLOW LINE | 11 18" YELLOW LINE @ 45° SPACED 5' ON CENTER |
| 4 24" WHITE STOP BAR | 12 18" WHITE LINE @ 45° SPACED 10' ON CENTER |
| 5 WHITE DIRECTIONAL ARROW | 13 18" YELLOW LINE @ 45° SPACED 10' ON CENTER |
| 6 STANDARD CROSSWALK | 14 6" WHITE SKIP LINE (2' - 4') |
| 7 SPECIAL EMPHASIS CROSSWALK | 15 HANDICAP STRIPING (SEE DETAIL, SHEET No. 43) |
| 8 24" DETECTABLE WARNING MAT | 16 WHITE DIRECTIONAL ARROW
WHITE HELMETED BICYCLIST
SYMBOL PER FDOT INDEX No. 711-002 |

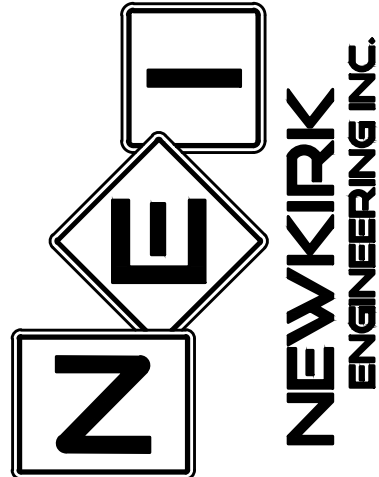
PARKING CALCULATIONS

1. PARKING REQUIREMENTS
RESIDENTIAL - 2 SPACES PER DWELLING UNIT
240 DWELLING UNITS x 2 = 480
- TOTAL REQUIRED PARKING = 480 SPACES
2. PARKING PROVIDED
- | | | |
|------------------------|-----|-------|
| STANDARD | 445 | % |
| GARAGE | 32 | 6.5 |
| HANDICAP | 11 | 2.3 |
| TOTAL PARKING PROVIDED | 488 | 100.0 |
3. BICYCLE PARKING REQUIRED
1 SPACE PER 5 DWELLING UNITS
240 DWELLING UNITS / 5 = 48
48 BICYCLE SPACES REQUIRED
4. BICYCLE PARKING PROVIDED
48 BICYCLE SPACES PROVIDED

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

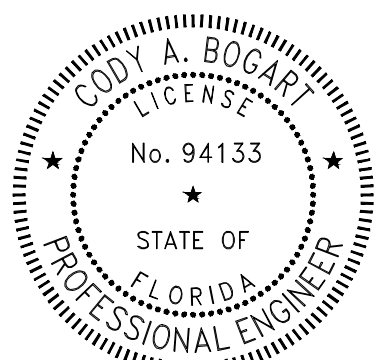
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STRIPING AND SIGNAGE PLAN
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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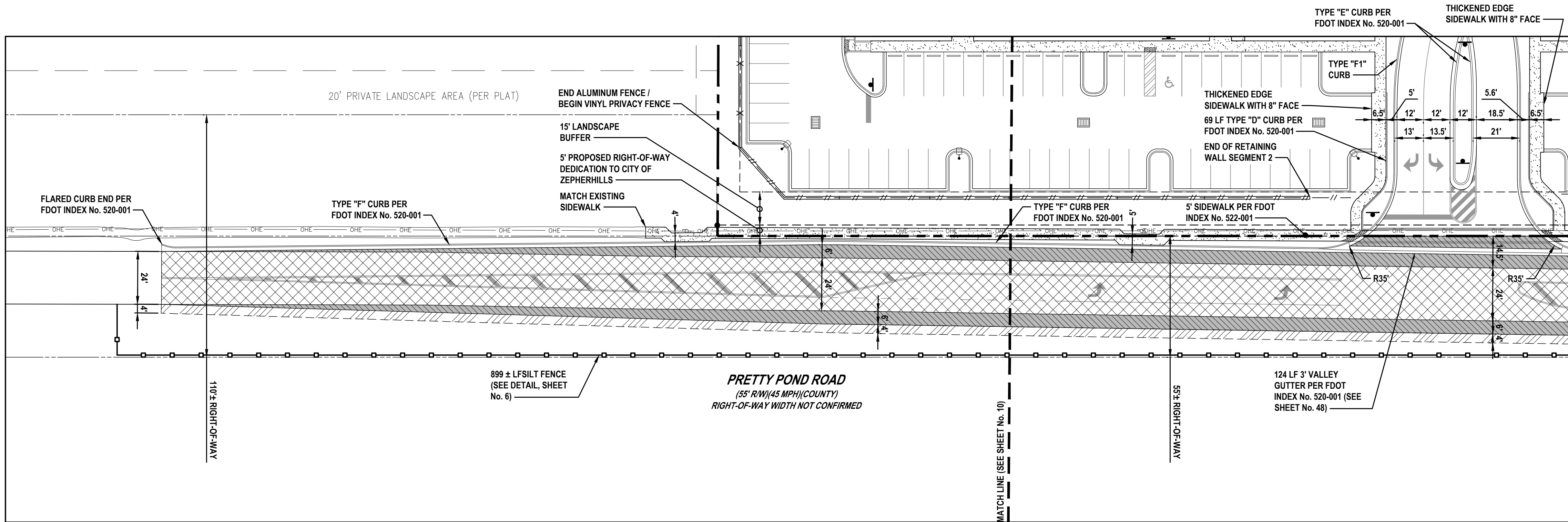
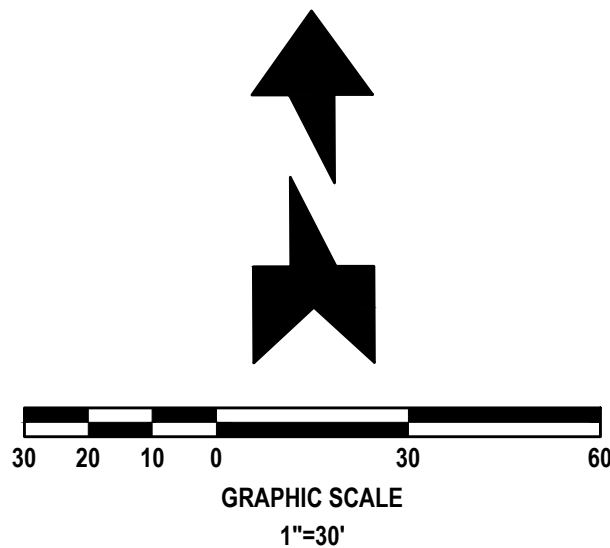


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DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HHN
SCALE:	1" = 40'

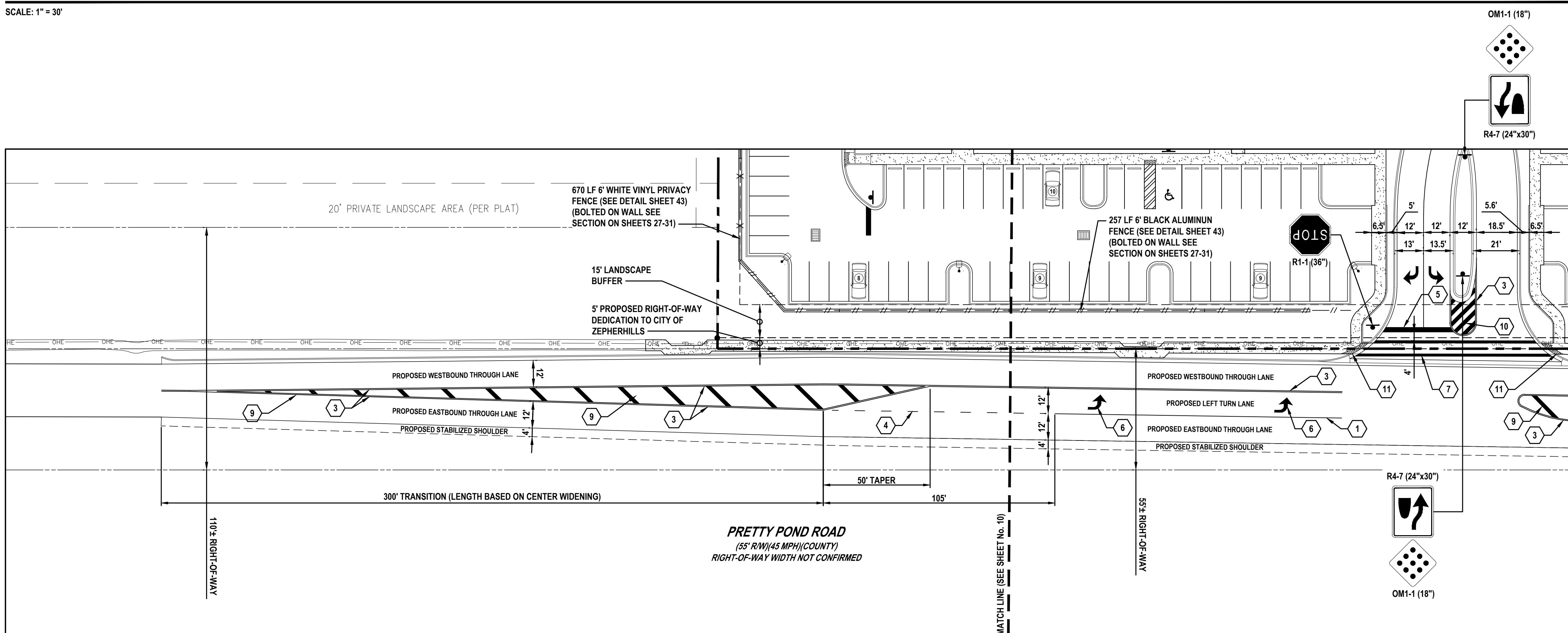
DRAWING NUMBER

08



PRETTY POND ROAD TURN LANE LAYOUT AND PAVEMENT PLAN

SCALE: 1" = 30'



PRETTY POND ROAD TURN LANE STRIPING AND SIGNAGE PLAN

SCALE: 1" = 30'

GENERAL NOTES:

- CITY OF ZEPHYRHILLS BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, SCREEN WALLS AND MONUMENT SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, SHOP DRAWINGS, ETC.).
- ALL DIMENSIONS AND TIES ARE TO THE EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING.
- ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION OR GPS. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR'S RISK.
- THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJACENT BUSINESSES TO ENSURE THERE IS NO DISRUPTION TO THEIR RESPECTIVE OPERATIONS.
- THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.
- SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA SOD.
- SIGHT TRIANGLES PROVIDED PER FDOT DESIGN MANUAL.

PAVEMENT MARKING NOTES:

- PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
- APPLY PAINTED PAVEMENT MARKINGS AT LAST STAGE OF CONSTRUCTION AFTER LANDSCAPE PLANTINGS ARE INSTALLED.
- PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS.
- ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX No. 706-001.
- ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX No. 700-010 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
- FOR ADDITIONAL DETAILS SEE INDEX No. 700-101, 700-101 AND 711-001.
- ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS. ALL 36"x48" SIGNS SHALL BE .100 GA MINIMUM AND SHALL BE INSTALLED USING 3"x12" ROUND ALUMINUM POST. ALL STOP SIGNS SHALL BE 36" OCTAGON INSTALLED ON 12.3 LBS/FT "U" CHANNEL POST RAIL STEEL ONLY OR 3"x12" ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR SIGNS SMALLER THAN 36"x36". ALL SPEED LIMIT SIGNS SHALL BE 24"x30".

STRIPING KEYNOTES: (PER FDOT INDEX No. 711-001, ONLY THERMOPLASTIC IN R/W)

- | | |
|--------------------------------|--|
| 1 6" SOLID WHITE LINE | 7 STANDARD CROSSWALK |
| 2 6" SOLID YELLOW LINE | 8 SPECIAL EMPHASIS CROSSWALK |
| 3 6" SOLID DOUBLE YELLOW LINE | 9 18" YELLOW LINE @ 45° SPACED 20' ON CENTER |
| 4 6" WHITE LINE, 6' - 10' SKIP | 10 18" YELLOW LINE @ 45° SPACED 5' ON CENTER |
| 5 24" WHITE STOP BAR | 11 24" DETECTABLE WARNING MAT |
| 6 WHITE DIRECTIONAL ARROW | |

SEE SHEET No. 48 FOR FDOT INDEX No. 711-001

PAVING LEGEND

- | | |
|-----------------------------|--|
| HEAVY DUTY ASPHALT PAVEMENT | 2" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS (2 LIFTS)
8" CRUSHED CONCRETE (LBR=100) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS)
12" STABILIZED SUBBASE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D 1557 (TYPE B STABILIZATION) (STRUCTURAL NUMBER = 3.28) |
| ASPHALT OVERLAY | MILL 1" AVERAGE DEPTH AND RESURFACE WITH 1" FC-9.5 TL-C @ MAX. 20% RECYCLED MATERIALS ** |
| STABILIZED SHOULDER | 12" STABILIZED SUB-GRADE TO A 75 FBV/LBR 40, COMPACTED TO A 98% MAXIMUM DRY DENSITY PER AASHTO T-180, CONSTRUCTED IN ONE LIFT |

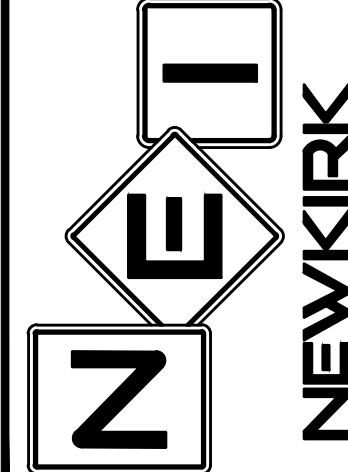
LEGEND

- | |
|---|
| TYPE 'F1' CURB |
| TYPE 'F' CATCH CURB |
| TYPE 'F1' SPILLOUT CURB |
| TYPE 'F' SPILLOUT CURB |
| TYPE 'D' CURB |
| TYPE 'VALLEY GUTTER' CURB |
| TRANSITION LOCATION FROM TYPE 'F' CATCH CURB TO DROP CURB |
| TYPE 'F' CURB TO F1 CURB |
| 24" DETECTABLE WARNING SURFACE |

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

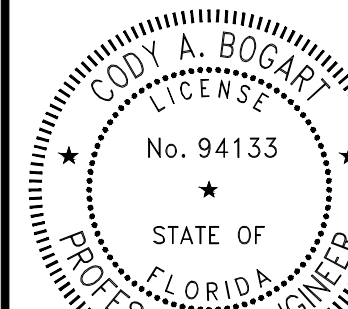
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TURN LANE PLAN
PRETTY POND ROAD WEST
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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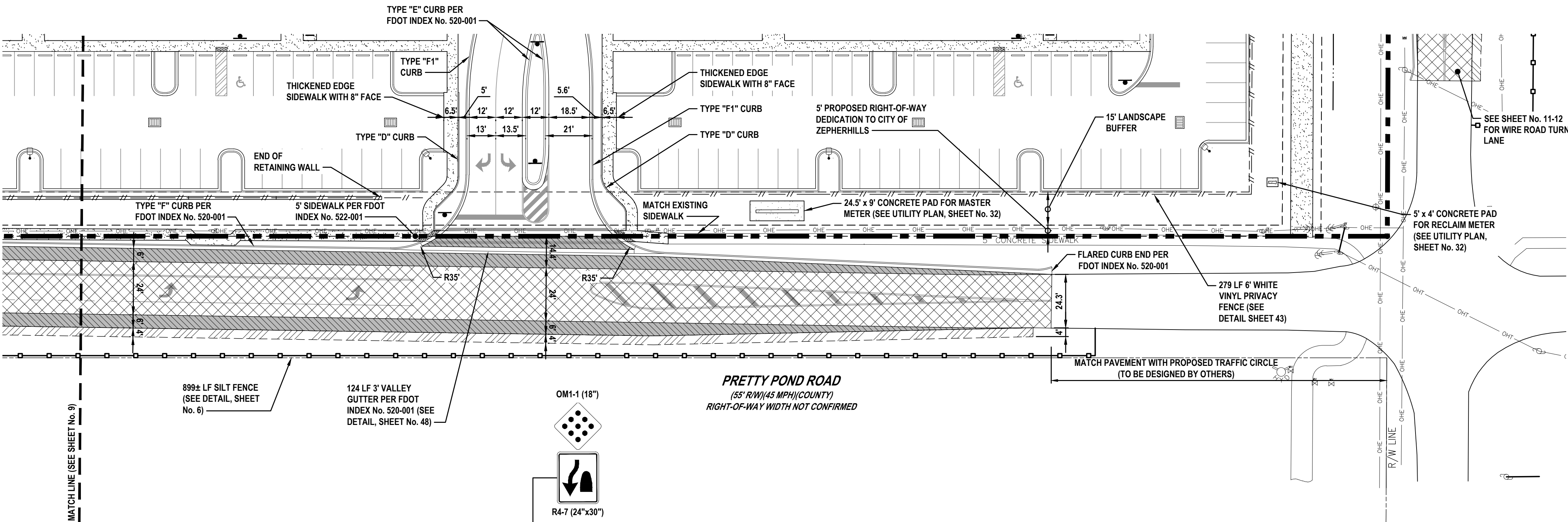
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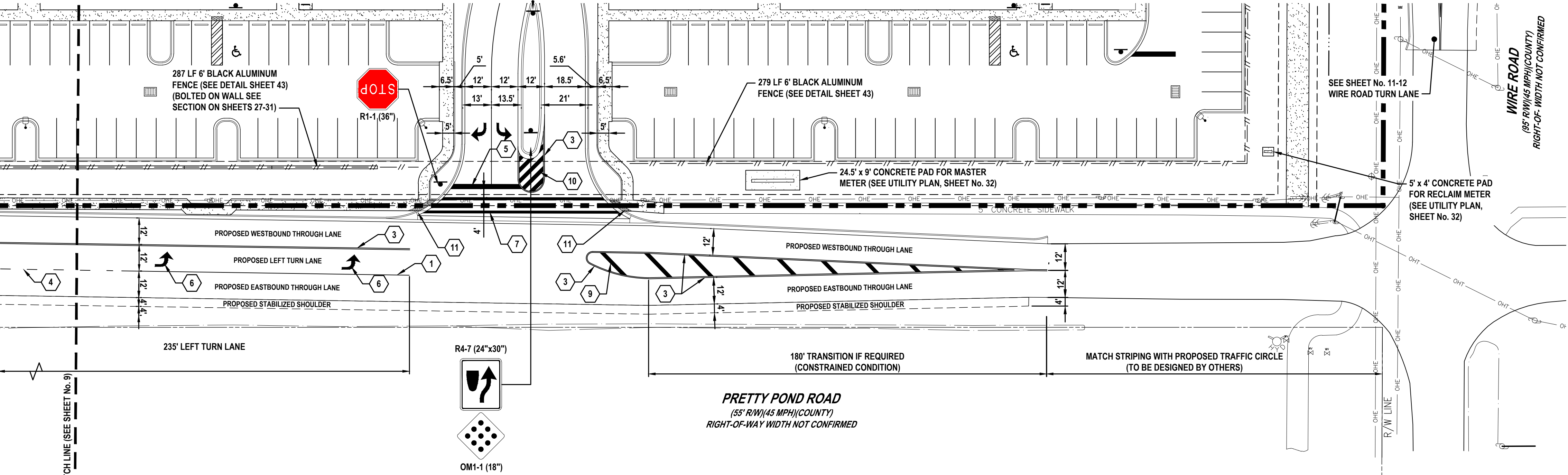
PROJECT No: 2021-346
DATE: AUGUST 2022
DESIGN BY: CAB
DRAWN BY: CRA
CHECKED BY: HHN
SCALE: 1" = 30'
DRAWING NUMBER

09



PRETTY POND ROAD TURN LANE LAYOUT AND PAVEMENT PLAN

SCALE: 1" = 30'



PRETTY POND ROAD TURN LANE STRIPING AND SIGNAGE PLAN

SCALE: 1" = 30'

GENERAL NOTES:

- CITY OF ZEPHYRHILLS BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, SCREEN WALLS AND MONUMENT SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, SHOP DRAWINGS, ETC.).
- ALL DIMENSIONS AND TIES ARE TO THE EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING.
- ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION OR GPS. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR'S RISK.
- THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJACENT BUSINESSES TO ENSURE THERE IS NO DISRUPTION TO THEIR RESPECTIVE OPERATIONS.
- THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.
- SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA SOD.
- SIGHT TRIANGLES PROVIDED PER FDOT DESIGN MANUAL.

PAVEMENT MARKING NOTES:

- PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
- APPLY PAINTED PAVEMENT MARKINGS AT LAST STAGE OF CONSTRUCTION AFTER LANDSCAPE PLANTINGS ARE INSTALLED.
- PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS.
- ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX No. 706-001.
- ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX No. 700-010 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
- FOR ADDITIONAL DETAILS SEE INDEX No. 700-101, 700-101 AND 711-001.

STRIPING KEYNOTES: (PER FDOT INDEX No. 711-001, ONLY THERMOPLASTIC IN R/W)

- | | |
|--------------------------------|--|
| 1 6" SOLID WHITE LINE | 7 STANDARD CROSSWALK |
| 2 6" SOLID YELLOW LINE | 8 SPECIAL EMPHASIS CROSSWALK |
| 3 6" SOLID DOUBLE YELLOW LINE | 9 18" YELLOW LINE @ 45° SPACED 20' ON CENTER |
| 4 6" WHITE LINE, 6' - 10' SKIP | 10 18" YELLOW LINE @ 45° SPACED 5' ON CENTER |
| 5 24" WHITE STOP BAR | 11 24" DETECTABLE WARNING MAT |
| 6 WHITE DIRECTIONAL ARROW | |

SEE SHEET No. 48 FOR FDOT INDEX No. 711-001

PAVING LEGEND

- | | |
|-----------------------------|---|
| HEAVY DUTY ASPHALT PAVEMENT | 2" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS (2 LIFTS) |
| | 8" CRUSHED CONCRETE (LBR=100) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS) |
| | 12" STABILIZED SUBBASE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D 1557 (TYPE B STABILIZATION) (STRUCTURAL NUMBER = 3.28) |
| ASPHALT OVERLAY | MILL 1" AVERAGE DEPTH AND RESURFACE WITH 1" FC-9.5 TL-C @ MAX. 20% RECYCLED MATERIALS ** |
| STABILIZED SHOULDER | 12" STABILIZED SUB-GRADE TO A 75 FBVILBR 40, COMPACTED TO A 98% MAXIMUM DRY DENSITY PER AASHTO T-180, CONSTRUCTED IN ONE LIFT |

LEGEND

- | |
|---|
| TYPE 'F1' CURB |
| TYPE 'F' CATCH CURB |
| TYPE 'F1' SPILLOUT CURB |
| TYPE 'F' SPILLOUT CURB |
| TYPE 'D' CURB |
| TYPE 'VALLEY GUTTER' CURB |
| TRANSITION LOCATION FROM TYPE 'F' CATCH CURB TO DROP CURB |
| TYPE 'F' CURB TO F1 CURB |
| 24" DETECTABLE WARNING SURFACE |

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

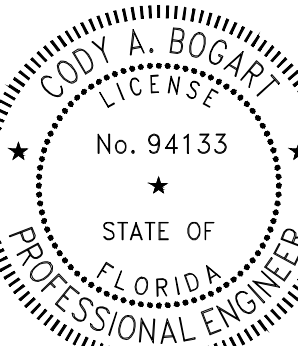
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Ormond Beach, Florida 32174
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TURN LANE PLAN
PRETTY POND ROAD EAST
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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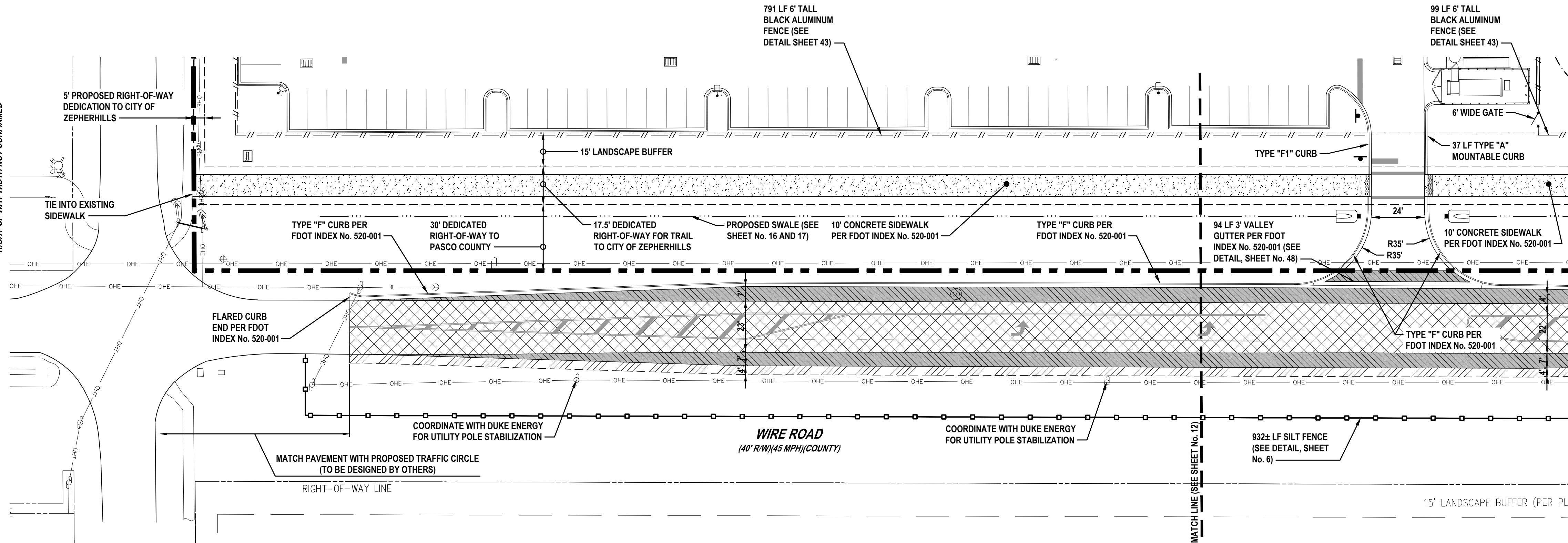
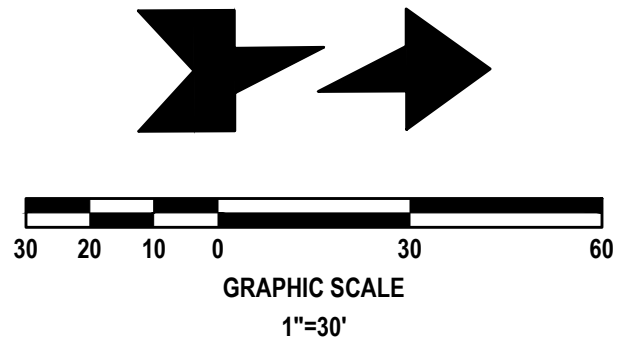
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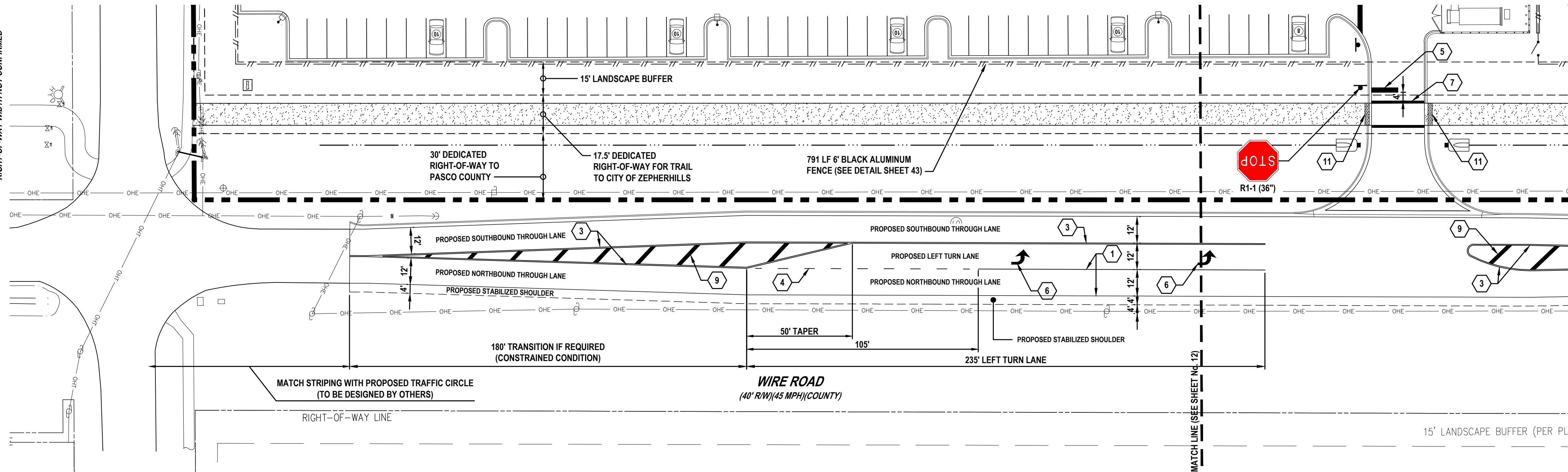
PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HHN
SCALE:	1" = 30'
DRAWING NUMBER	

10



WIRE ROAD TURN LANE LAYOUT AND PAVEMENT PLAN

SCALE: 1" = 30'



WIRE ROAD TURN LANE STRIPING AND SIGNAGE PLAN

SCALE: 1" = 30'

GENERAL NOTES:

- CITY OF ZEPHYRHILLS BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, SCREEN WALLS AND MONUMENT SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, SHOP DRAWINGS, ETC.).
- ALL DIMENSIONS AND TIES ARE TO THE EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING.
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- SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA SOD.
- SIGHT TRIANGLES PROVIDED PER FDOT DESIGN MANUAL.

PAVEMENT MARKING NOTES:

- PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
- APPLY PAINTED PAVEMENT MARKINGS AT LAST STAGE OF CONSTRUCTION AFTER LANDSCAPE PLANTINGS ARE INSTALLED.
- PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS.
- ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX No. 706-001.
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- LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
- FOR ADDITIONAL DETAILS SEE INDEX No. 700-101, 700-101 AND 711-001.
- ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS. ALL 36"x48" SIGNS SHALL BE .100 GA MINIMUM AND SHALL BE INSTALLED USING 3"x12" ROUND ALUMINUM POST. ALL STOP SIGNS SHALL BE 36" OCTAGON INSTALLED ON 12.3 LBS/FT "U" CHANNEL POST RAIL STEEL ONLY OR 3"x12" ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR SIGNS SMALLER THAN 36"x36". ALL SPEED LIMIT SIGNS SHALL BE 24"x30".

STRIPING KEYNOTES: (PER FDOT INDEX No. 711-001, ONLY THERMOPLASTIC IN R/W)

- | | |
|--------------------------------|--|
| 1 6" SOLID WHITE LINE | 7 STANDARD CROSSWALK |
| 2 6" SOLID YELLOW LINE | 8 SPECIAL EMPHASIS CROSSWALK |
| 3 6" SOLID DOUBLE YELLOW LINE | 9 18" YELLOW LINE @ 45° SPACED 20' ON CENTER |
| 4 6" WHITE LINE, 6' - 10' SKIP | 10 18" YELLOW LINE @ 45° SPACED 5' ON CENTER |
| 5 24" WHITE STOP BAR | 11 24" DETECTABLE WARNING MAT |
| 6 WHITE DIRECTIONAL ARROW | |

SEE SHEET No. 48 FOR FDOT INDEX No. 711-001

PAVING LEGEND

- | | |
|-----------------------------|--|
| HEAVY DUTY ASPHALT PAVEMENT | 2" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS (2 LIFTS)
8" CRUSHED CONCRETE (LBR=100) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS)
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| ASPHALT OVERLAY | MILL 1" AVERAGE DEPTH AND RESURFACE WITH 1" FC-9.5 TL-C @ MAX. 20% RECYCLED MATERIALS ** |
| STABILIZED SHOULDER | 12" STABILIZED SUB-GRADE TO A 75 FBVILBR 40, COMPACTED TO A 98% MAXIMUM DRY DENSITY PER AASHTO T-180, CONSTRUCTED IN ONE LIFT |

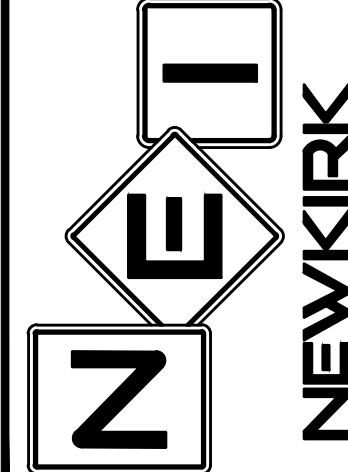
LEGEND

- | |
|---|
| TYPE 'F1' CURB |
| TYPE 'F' CATCH CURB |
| TYPE 'F1' SPILLOUT CURB |
| TYPE 'F' SPILLOUT CURB |
| TYPE 'D' CURB |
| TYPE 'VALLEY GUTTER' CURB |
| TRANSITION LOCATION FROM TYPE 'F' CATCH CURB TO DROP CURB |
| TYPE 'F' CURB TO F1 CURB |
| 24" DETECTABLE WARNING SURFACE |

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

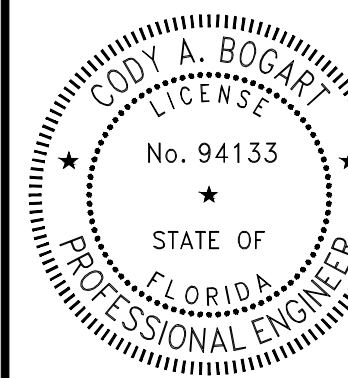
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TURN LANE PLAN
WIRE ROAD SOUTH
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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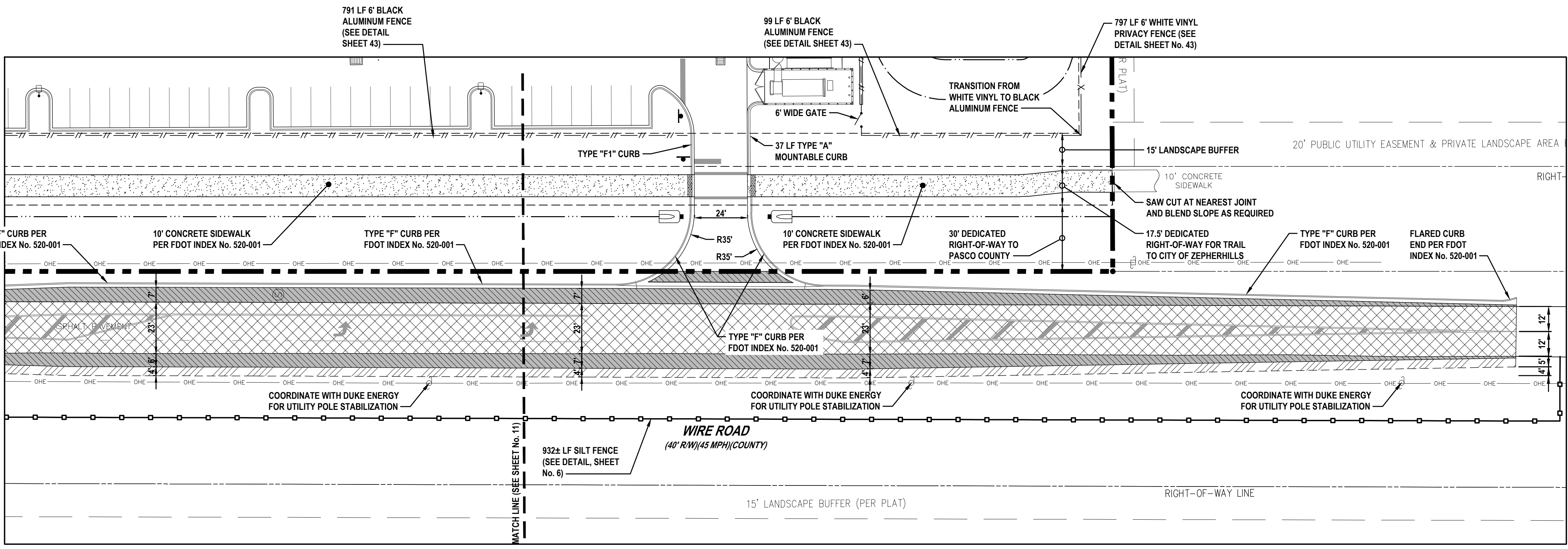
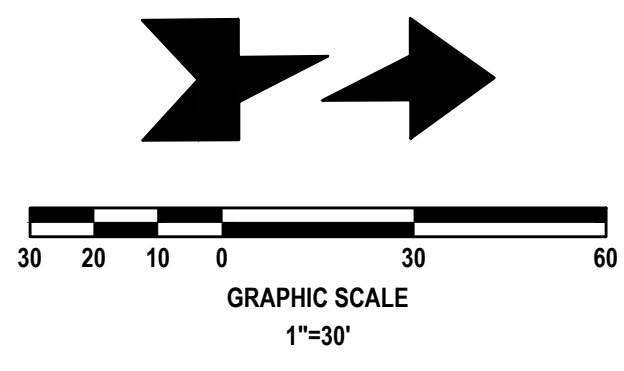


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PROJECT No: 2021-346
DATE: AUGUST 2022
DESIGN BY: CAB
DRAWN BY: CRA
CHECKED BY: HHN
SCALE: 1" = 30'

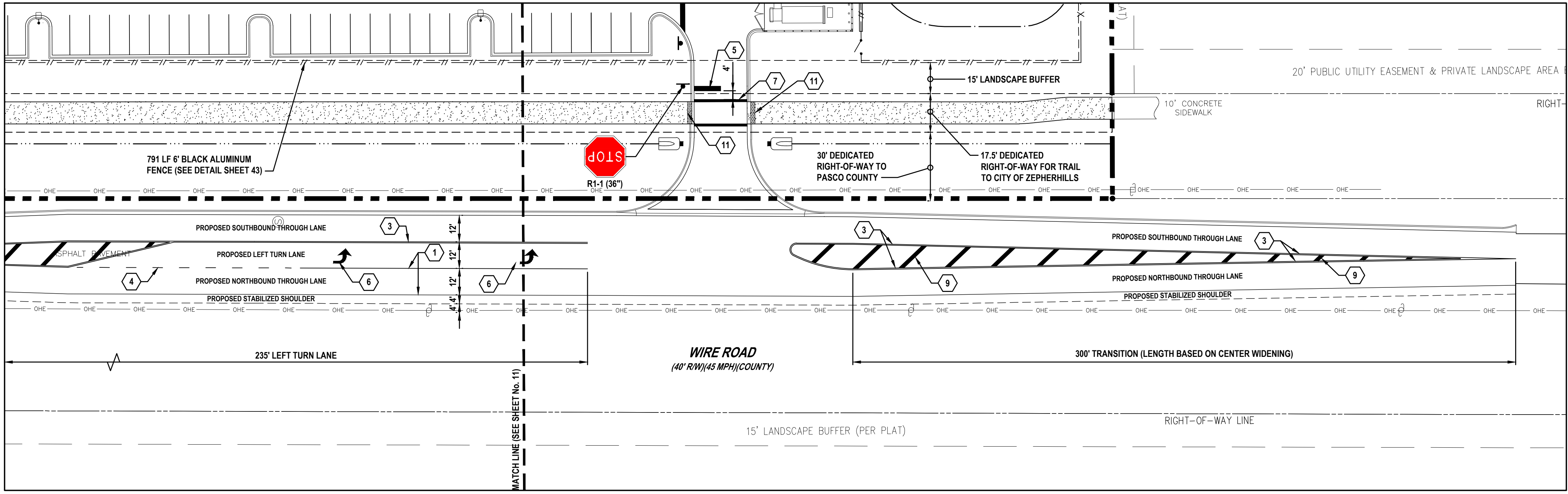
DRAWING NUMBER

11



WIRE ROAD TURN LANE LAYOUT AND PAVEMENT PLAN

SCALE: 1" = 30'



WIRE ROAD TURN LANE STRIPING AND SIGNAGE PLAN

SCALE: 1" = 30'

GENERAL NOTES:

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STRIPING KEYNOTES: (PER FDOT INDEX No. 711-001, ONLY THERMOPLASTIC IN R/W)

- | | |
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| 4 6" WHITE LINE, 6' - 10' SKIP | 10 18" YELLOW LINE @ 45° SPACED 5' ON CENTER |
| 5 24" WHITE STOP BAR | 11 24" DETECTABLE WARNING MAT |
| 6 WHITE DIRECTIONAL ARROW | |
- SEE SHEET No. 48 FOR FDOT INDEX No. 711-001

PAVING LEGEND

- | | |
|-----------------------------|---|
| HEAVY DUTY ASPHALT PAVEMENT | 2" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS (2 LIFTS) |
| | 8" CRUSHED CONCRETE (LBR=100) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS) |
| | 12" STABILIZED SUBBASE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D 1557 (TYPE B STABILIZATION) (STRUCTURAL NUMBER = 3.28) |
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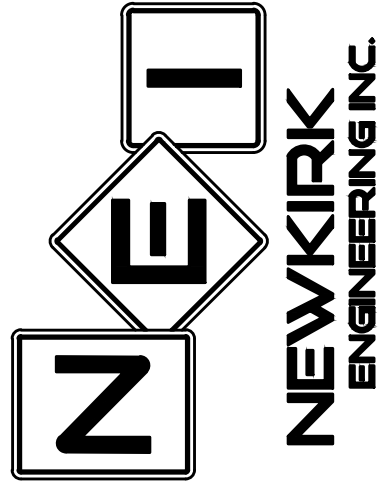
LEGEND

- | |
|---|
| TYPE 'F1' CURB |
| TYPE 'F' CATCH CURB |
| TYPE 'F1' SPILLOUT CURB |
| TYPE 'F' SPILLOUT CURB |
| TYPE 'D' CURB |
| TYPE 'VALLEY GUTTER' CURB |
| TRANSITION LOCATION FROM TYPE 'F' CATCH CURB TO DROP CURB |
| TYPE 'F' CURB TO F1 CURB |
| 24" DETECTABLE WARNING SURFACE |

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

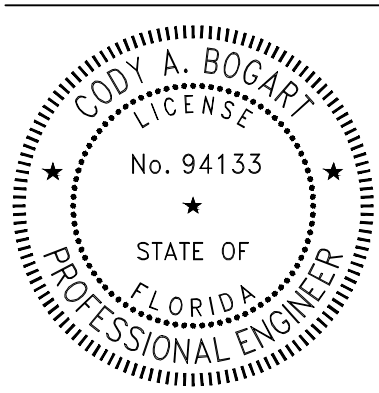
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TURN LANE PLAN
WIRE ROAD NORTH
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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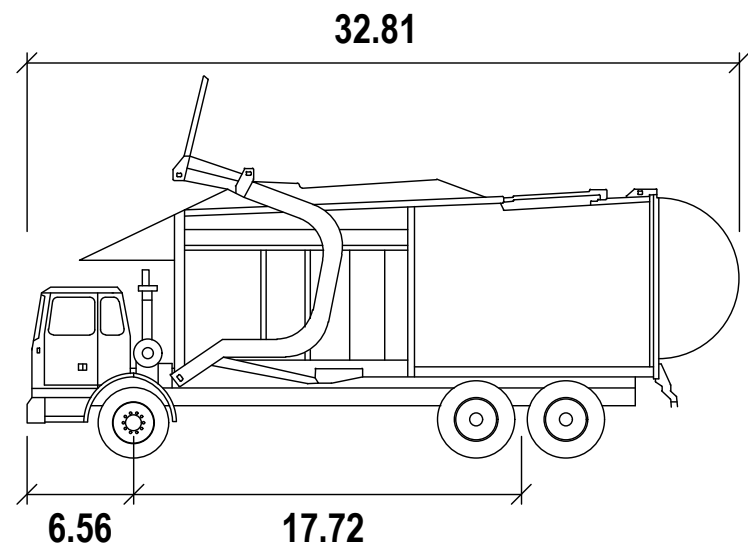
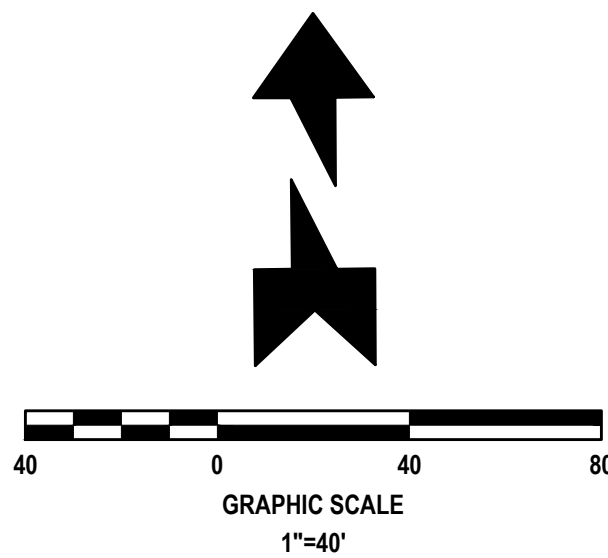
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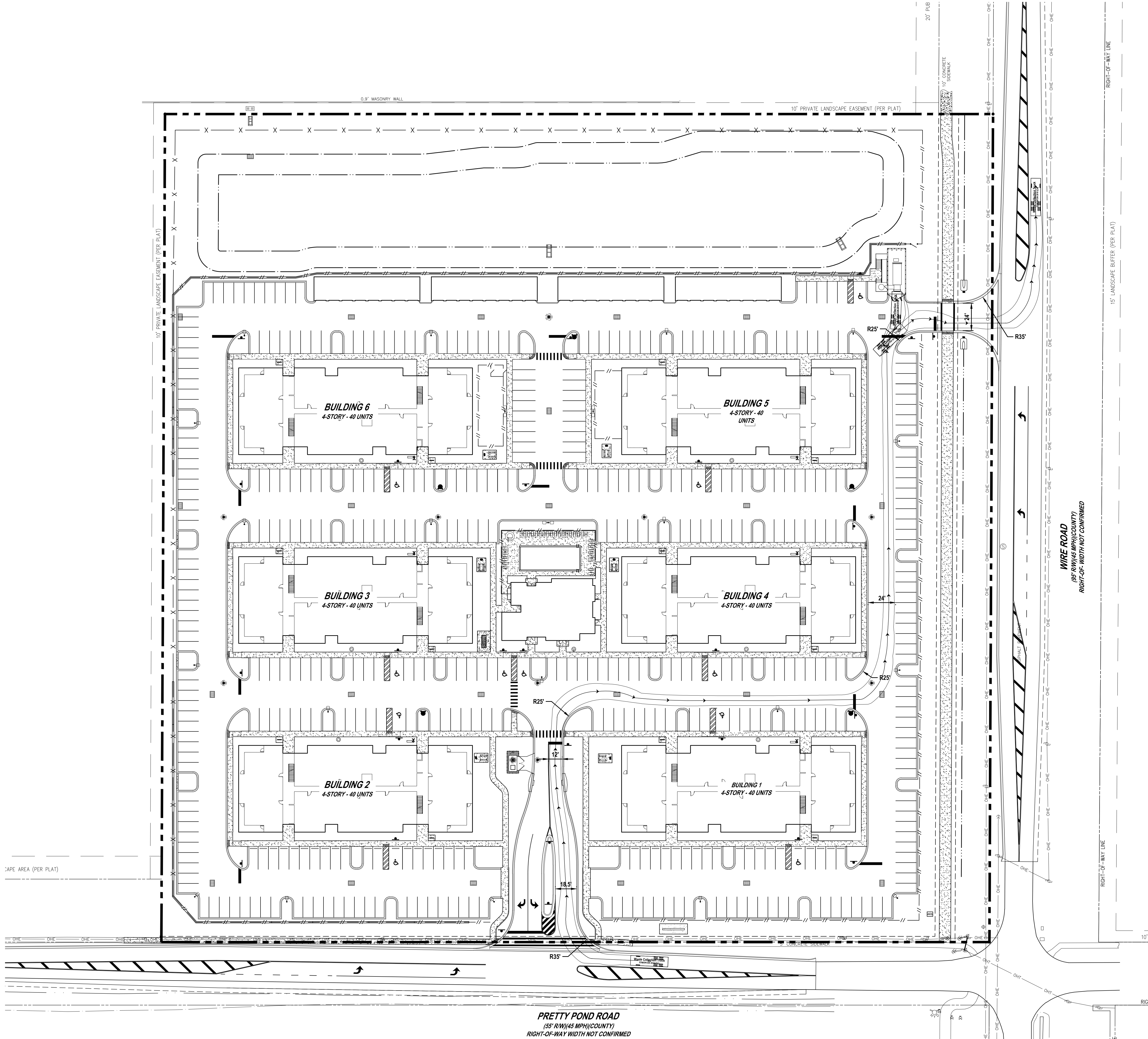
PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HHN
SCALE:	1" = 30'
DRAWING NUMBER	

12



Waste Collection Truck

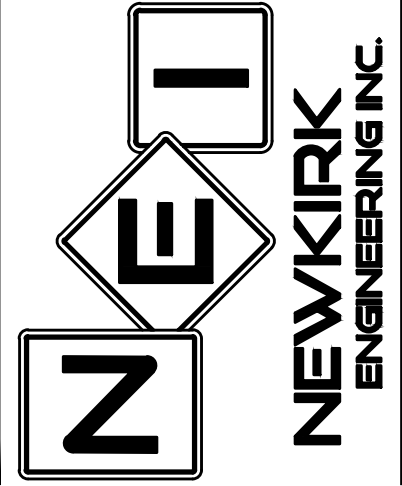
	feet
Width	: 8.53
Track	: 8.53
Lock to Lock Time	: 6.0
Steering Angle	: 27.7



REVISIONS

DATE	DESCRIPTION

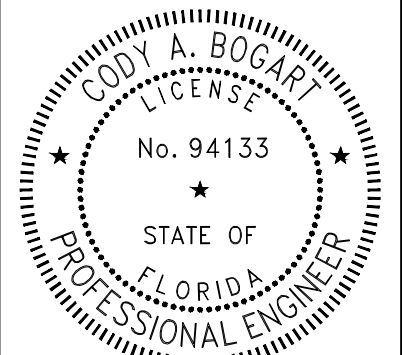
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AUTOTURN PLAN
GARBAGE TRUCK
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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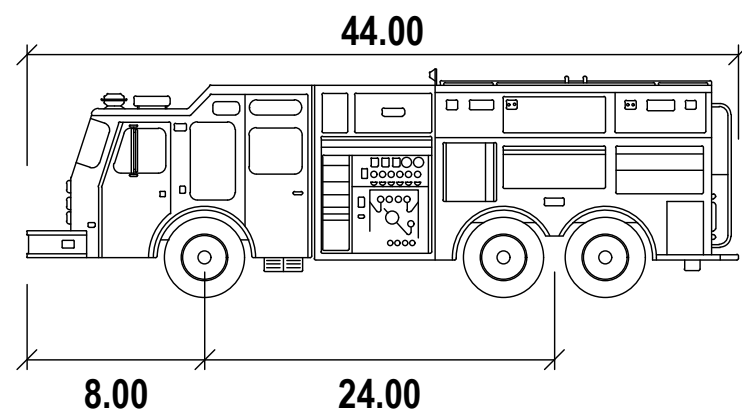
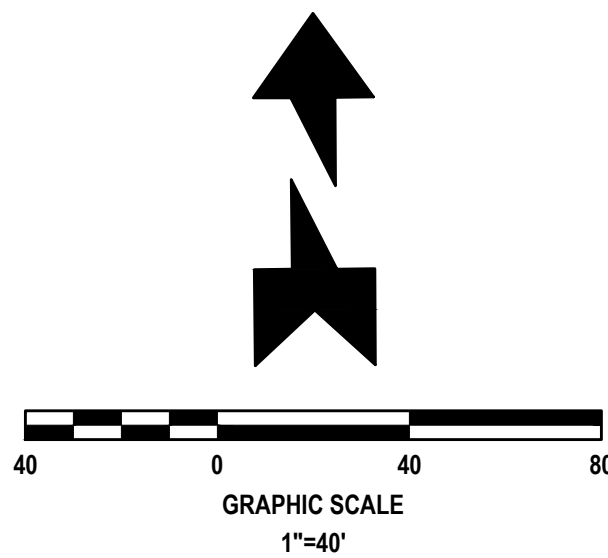


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PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HHN
SCALE:	1" = 40'

DRAWING NUMBER

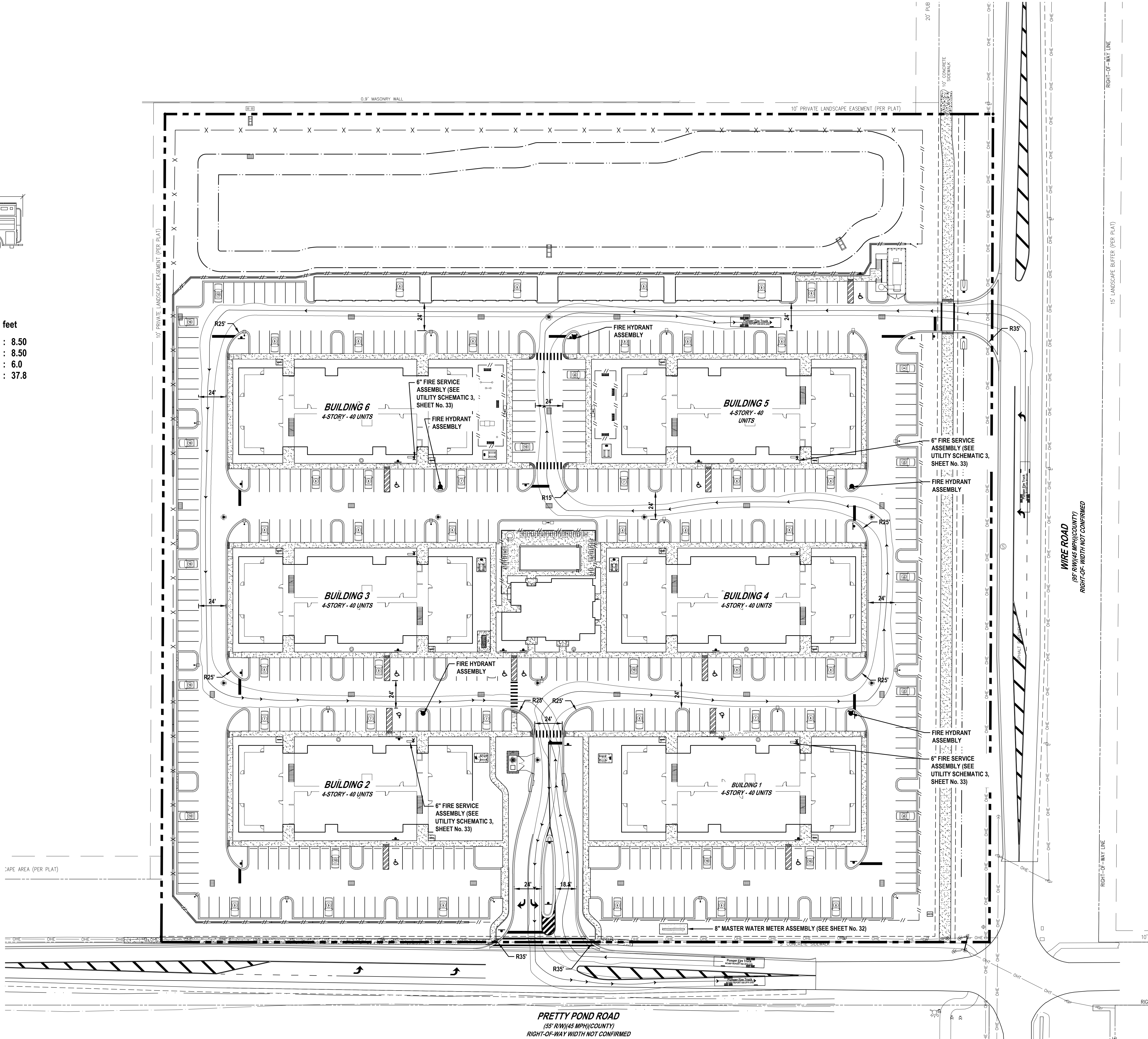
13



Pumper Fire Truck

Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8

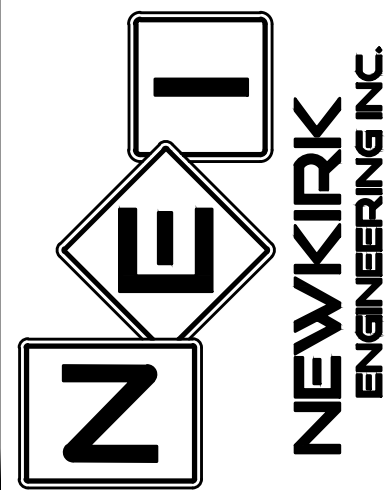
feet



REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

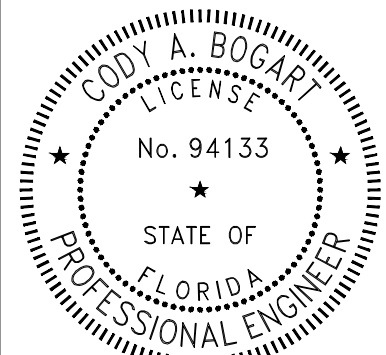
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AUTOTURN PLAN
FIRE TRUCK
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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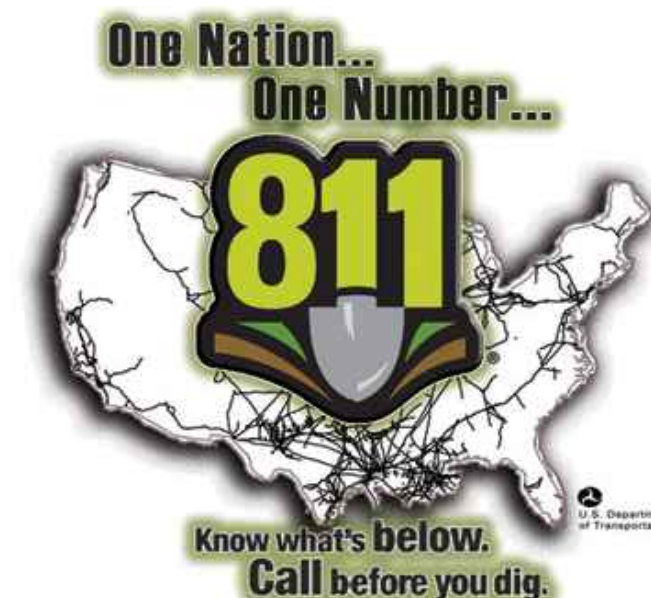
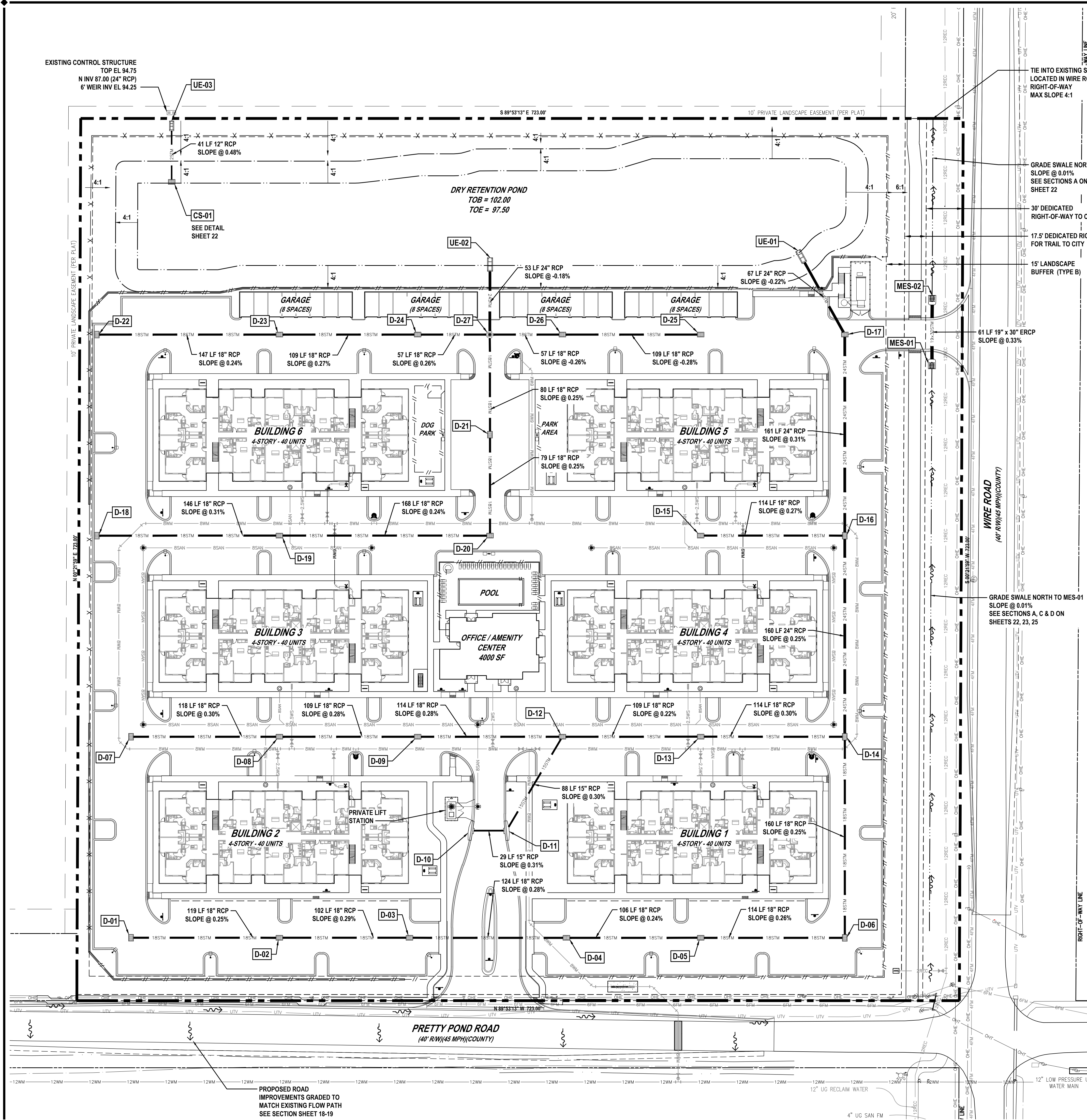


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PROJECT No:	2021-346
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DESIGN BY:	CAB
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CHECKED BY:	HHN
SCALE:	1" = 40'

DRAWING NUMBER

14



WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

SUMMARY OF DRAINAGE:

THE MINIMUM WATER QUALITY TREATMENT VOLUME REQUIRED FOR AN ON-LINE RETENTION TREATMENT SYSTEM SHALL TREAT THE RUNOFF FROM THE FIRST (1) ONE-INCH OF RAINFALL [SWFWM] MANUAL PART IV, SECTION 4.1.C. TOTAL TREATMENT VOLUME SHALL AGAIN BE AVAILABLE WITHIN 72 HOURS, HOWEVER, ONLY THAT VOLUME WHICH CAN AGAIN BE AVAILABLE WITHIN 36 HOURS MAY BE COUNTED AS PART OF THE VOLUME REQUIRED FOR WATER QUANTITY STORAGE UNDER PART III OF THIS VOLUME II.

GENERAL DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO DRAINAGE SYSTEM AND SHALL RESTORE ANY DAMAGED STRUCTURES.
2. ALL PIPE FROM THE BUILDING DRAINS SHALL BE SMOOTH INTERIOR CORRUGATED EXTERIOR (SICE) HDPE OR PVC SCH 40.
3. ALL STORM PIPE SHALL BE CONSTRUCTED OF REINFORCED CONCRETE CLASS III WITH BUTYL MASTIC SEALANT WITH CERTIFIED WATERTIGHT JOINTS BY THE MANUFACTURER OR HDPE PIPE WITH CERTIFIED WATERTIGHT JOINTS BY THE MANUFACTURER. RCP JOINTS SHALL BE WRAPPED WHERE APPLICABLE PER FOOT SPECIFICATIONS. ACCEPTABLE HDPE PIPE SHALL BE HANCOR SUR-LOK WT, ADS SERIES 35, ADS N-12 WITH WT JOINT OR EQUAL.
4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL MATERIAL AND STRUCTURES TO THE ENGINEER (NEWKIRK ENGINEERING, INC.) FOR APPROVAL.
5. CONTRACTOR TO PLACE FILTER FABRIC BETWEEN DRAINAGE STRUCTURES AND TOPS TO PREVENT SOIL INTRUSION. THE FABRIC SHALL BE PERIODICALLY CLEANED OF SAND & DEBRIS FABRIC SHALL REMAIN IN PLACE UNTIL PAVING AND BUILDING CONSTRUCTION ARE COMPLETE.
6. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN. FENCING TREES, & ETC., WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFFSITE.

DRY RETENTION POND CONSTRUCTION NOTES:

1. INITIALLY CONSTRUCT THE RETENTION BASIN TO ROUGH GRADE BY UNDER-EXCAVATING THE BASIN BOTTOM AND SIDES BY APPROXIMATELY 12-INCHES.
2. AFTER THE DRAINAGE AREA CONTRIBUTING TO THE BASIN HAS BEEN FULLY STABILIZED, THE INTERIOR SIDE SLOPES AND BASIN BOTTOM SHOULD BE EXCAVATED TO FINAL DESIGN SPECIFICATIONS. THE EXCESS SOIL AND UNDESIRABLE MATERIAL SHOULD BE CAREFULLY EXCAVATED AND REMOVED FROM THE POND SO THAT ALL ACCUMULATED SILTS, CLAY, ORGANICS AND OTHER FINE SEDIMENT MATERIAL HAS BEEN REMOVED FROM THE POND AREA. THE EXCAVATED MATERIAL SHOULD BE DISPOSED OF BEYOND THE LIMITS OF THE DRAINAGE AREA OF THE BASIN.
3. ONCE THE BASIN HAS BEEN EXCAVATED TO FINAL GRADE, THE ENTIRE BASIN BOTTOM SHOULD BE DEEP RAKED AND LOOSENEED FOR OPTIMAL INFILTRATION.
4. FINALLY, THE BASIN SHOULD BE STABILIZED WITH "SAND GROWN" BAHIA.

DRAINAGE STRUCTURE SCHEDULE				
I.D.	STRUCTURE TYPE	TOP EL	SUMP EL	CONNECTIONS
CS-01	TYPE "E" INLET SEE DETAIL SHEET 22	102.00	94.10	12" - N INV 95.20
D-01	TYPE "E" INLET	108.10	101.30	18" - E INV 101.30
D-02	TYPE "E" INLET	107.94	101.00	18" - E INV 101.00 18" - W INV 101.00
D-03	TYPE "E" INLET	109.55	100.70	18" - W INV 100.70 18" - E INV 100.70
D-04	TYPE "E" INLET	108.07	100.35	18" - E INV 100.35 18" - W INV 100.35
D-05	TYPE "E" INLET	107.66	100.10	18" - W INV 100.10 18" - E INV 100.10
D-06	TYPE "E" INLET	108.71	99.80	18" - W INV 99.80 18" - N INV 99.80
D-07	TYPE "E" INLET	106.50	103.80	18" - E INV 103.80
D-08	TYPE "E" INLET	106.50	97.00	18" - W INV 103.45 18" - E INV 103.45
D-09	TYPE "E" INLET	106.50	97.00	18" - W INV 103.15 18" - E INV 103.15
D-10	TYPE 6 CURB INLET	106.50	102.28	15" - E INV 102.38
D-11	TYPE 6 CURB INLET	106.50	102.19	15" - NE INV 102.29 15" - W INV 102.29
D-12	TYPE "E" INLET	106.50	97.00	18" - W INV 102.83 18" - E INV 102.03 15" - SW INV 102.03
D-13	TYPE "E" INLET	106.50	97.00	18" - W INV 101.79 18" - E INV 101.79
D-14	TYPE "E" INLET	106.50	97.00	18" - W INV 101.45 18" - S INV 99.40 24" - N INV 99.40
D-15	TYPE "E" INLET	106.50	97.00	18" - E INV 99.30
D-16	TYPE "E" INLET	106.50	97.00	24" - S INV 99.00 18" - W INV 99.00 24" - N INV 99.00
D-17	TYPE "E" INLET	106.50	97.00	24" - S INV 98.50 24" - NW INV 97.70
D-18	TYPE "E" INLET	105.54	98.90	18" - E INV 98.90
D-19	TYPE "E" INLET	106.50	97.00	18" - W INV 98.45 18" - E INV 98.45
D-20	TYPE "E" INLET	105.90	98.10	18" - N INV 98.05 18" - W INV 98.05
D-21	TYPE "E" INLET	105.50	97.90	18" - S INV 97.85 18" - N INV 97.85
D-22	TYPE "E" INLET	104.84	98.50	18" - E INV 98.50
D-23	TYPE "E" INLET	106.50	97.00	18" - W INV 98.15 18" - E INV 98.15
D-24	TYPE "E" INLET	106.50	97.00	18" - W INV 97.85 18" - E INV 97.85
D-25	TYPE "E" INLET	106.50	97.00	18" - W INV 98.15 18" - E INV 97.85
D-26	TYPE "E" INLET	106.50	97.00	18" - W INV 97.70 18" - E INV 97.70 18" - S INV 97.65 24" - N INV 97.65
D-27	4" DIA STORM MANHOLE TYPE J BOTTOM	107.10	97.70	

OUTFALL STRUCTURE SCHEDULE		
I.D.	STRUCTURE TYPE	CONNECTIONS
MES-01	19"x30" MES (4:1)	19"x30" ERCP - N INV 107.50
MES-02	19"x30" MES (4:1)	19"x30" ERCP - S INV 107.30
UE-01	24" U-ENDWALL(4:1) W/ BAFFLES	24" RCP - S INV 97.55
UE-02	24" U-ENDWALL(4:1) W/ BAFFLES	24" RCP - S INV 97.56
UE-03	15" U-ENDWALL (4:1) W/ BAFFLES	12" RCP - S INV 95.00

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.newkirk-engineering.com
C.A. # 30209
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NEWKIRK
ENGINEERING INC.

OVERALL DRAINAGE PLAN
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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CODY A. BOGART, PE #94133 ON

CODY A. BOGART
No. 94133
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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PROJECT No: 2021-346
DATE: AUGUST 2022
DESIGN BY: CAB
DRAWN BY: DAB
CHECKED BY: HHN
SCALE: 1" = 40'
DRAWING NUMBER

15

Page 103 of 200

GENERAL GRADING NOTES:

- CROSS SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL NOT EXCEED 1:48 IN ACCORDANCE WITH SECTION 902.4 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
- ALL SIDEWALKS SHALL HAVE A 1.0% CROSS SLOPE (2.0% MAXIMUM).
- ALL CURB RAMP SHALL COMPLY WITH SECTION 406 OF FACBC.
- ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEY OR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR.

GENERAL EARTHWORK NOTES:

- REMOVE ALL ORGANIC OR UNSUITABLE MATERIALS. IF ANY MUCK OR MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
- ALL FILLING IS TO BE PERFORMED IN ONE-FOOT LIFTS. THE COMPACTION REQUIREMENT IS 98% FOR PAVED AREAS AND 95% FOR UNPAVED AREAS PER AASHTO T-180 MODIFIED PROCTOR TEST.
- TEMPORARY FILL STOCKPILING IS NOT PERMITTED IN LIFTS GREATER THAN SIX FEET.
- SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES.
- ONCE AN AREA IS SEEDED OR SODDED, IT MUST BE MAINTAINED TO ALLOW THE GRASS TO GROW.
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DRY RETENTION POND CONSTRUCTION NOTES:

- INITIALLY CONSTRUCT THE RETENTION BASIN TO ROUGH GRADE BY UNDER-EXCAVATING THE BASIN BOTTOM AND SIDES BY APPROXIMATELY 12-INCHES.
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BENCHMARK INFORMATION:

- #1 BENCHMARK #1 SET NAIL (NO ID)
ELEVATION = 112.41
- #2 BENCHMARK #2 SET NAIL
ELEVATION = 113.63

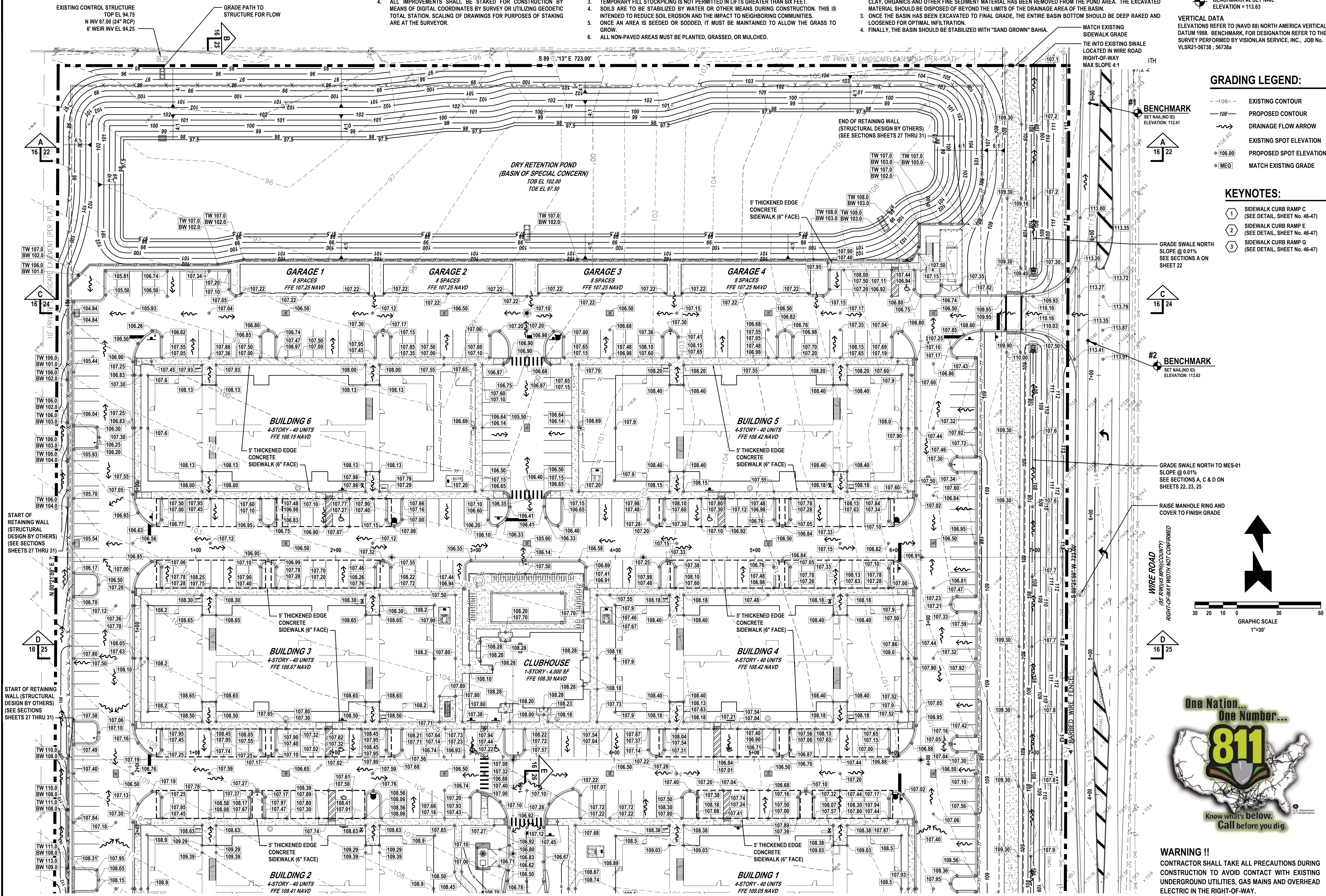
VERTICAL DATA
ELEVATIONS REFER TO (NAVD 88) NORTH AMERICA VERTICAL DATUM 1988. BENCHMARK, FOR DESIGNATION REFER TO THE SURVEY PERFORMED BY VISIONLAN SERVICE, INC., JOB NO. VLSR21-56738 / 56738a

GRADING LEGEND:

- 106- EXISTING CONTOUR
- 106- PROPOSED CONTOUR
- 106- DRAINAGE FLOW ARROW
- +106.60 EXISTING SPOT ELEVATION
- +106.00 PROPOSED SPOT ELEVATION
- +MEG MATCH EXISTING GRADE

KEYNOTES:

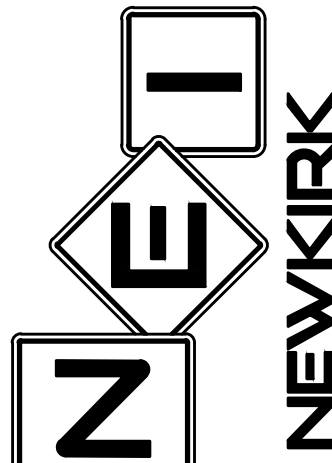
- SIDEWALK CURB RAMP C (SEE DETAIL, SHEET NO. 46-47)
- SIDEWALK CURB RAMP E (SEE DETAIL, SHEET NO. 46-47)
- SIDEWALK CURB RAMP G (SEE DETAIL, SHEET NO. 46-47)



REVISIONS

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11/29/22	CITY COMMENTS

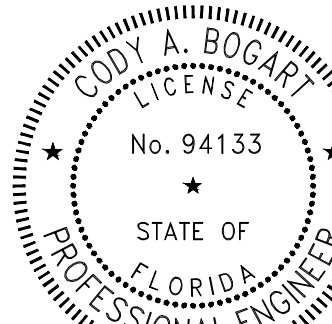
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GRADING PLAN
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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DRAWN BY: DAB
CHECKED BY: HHN
SCALE: 1" = 30'
DRAWING NUMBER

16



WARNING !!
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ELEVATION = 112.41
- #2** BENCHMARK #2 SET NAIL
ELEVATION = 113.63

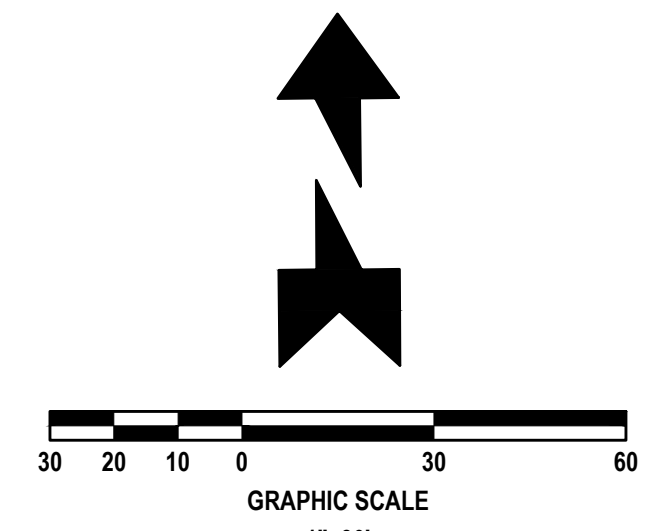
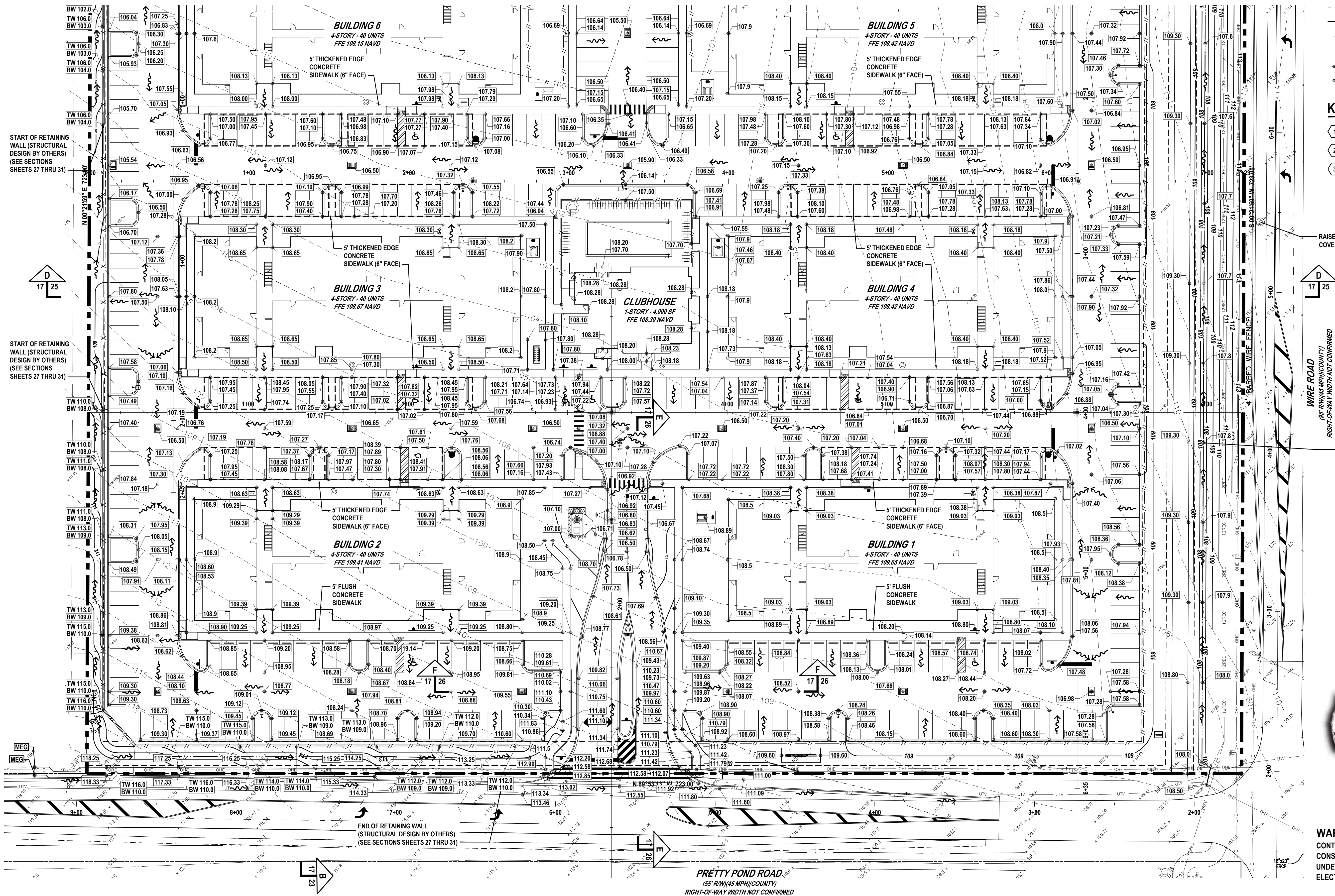
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GRADING LEGEND:

- 106--- EXISTING CONTOUR
---106--- PROPOSED CONTOUR
---106.60--- DRAINAGE FLOW ARROW
+106.60 EXISTING SPOT ELEVATION
+106.00 PROPOSED SPOT ELEVATION
+MEG MATCH EXISTING GRADE

KEYNOTES:

- ① SIDEWALK CURB RAMP C
(SEE DETAIL, SHEET No. 46-47)
- ② SIDEWALK CURB RAMP E
(SEE DETAIL, SHEET No. 46-47)
- ③ SIDEWALK CURB RAMP G
(SEE DETAIL, SHEET No. 46-47)

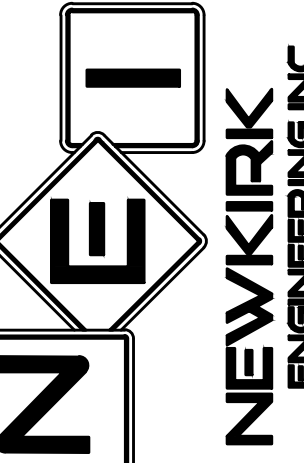


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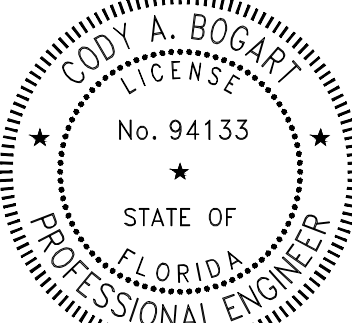
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GRADING PLAN
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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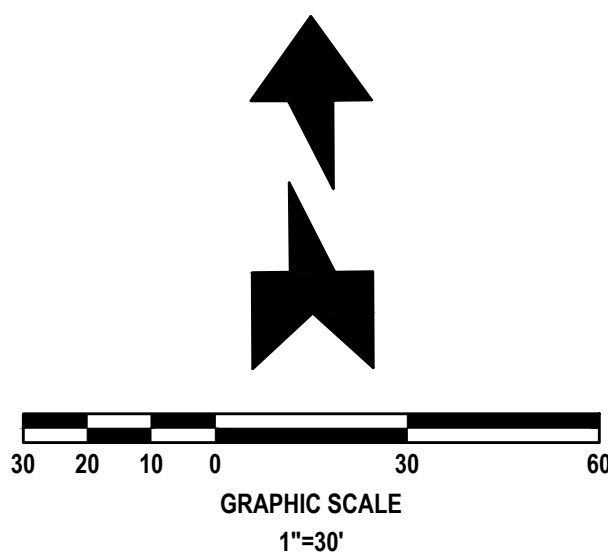
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CHECKED BY: HHN
SCALE: 1" = 30'
DRAWING NUMBER

17

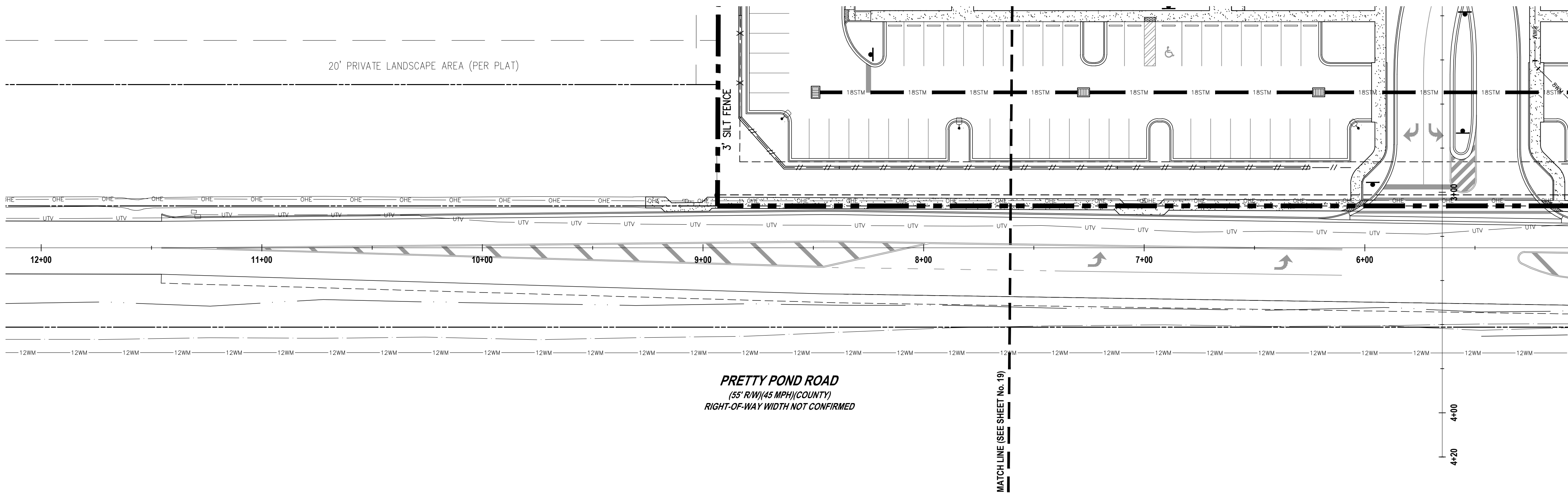
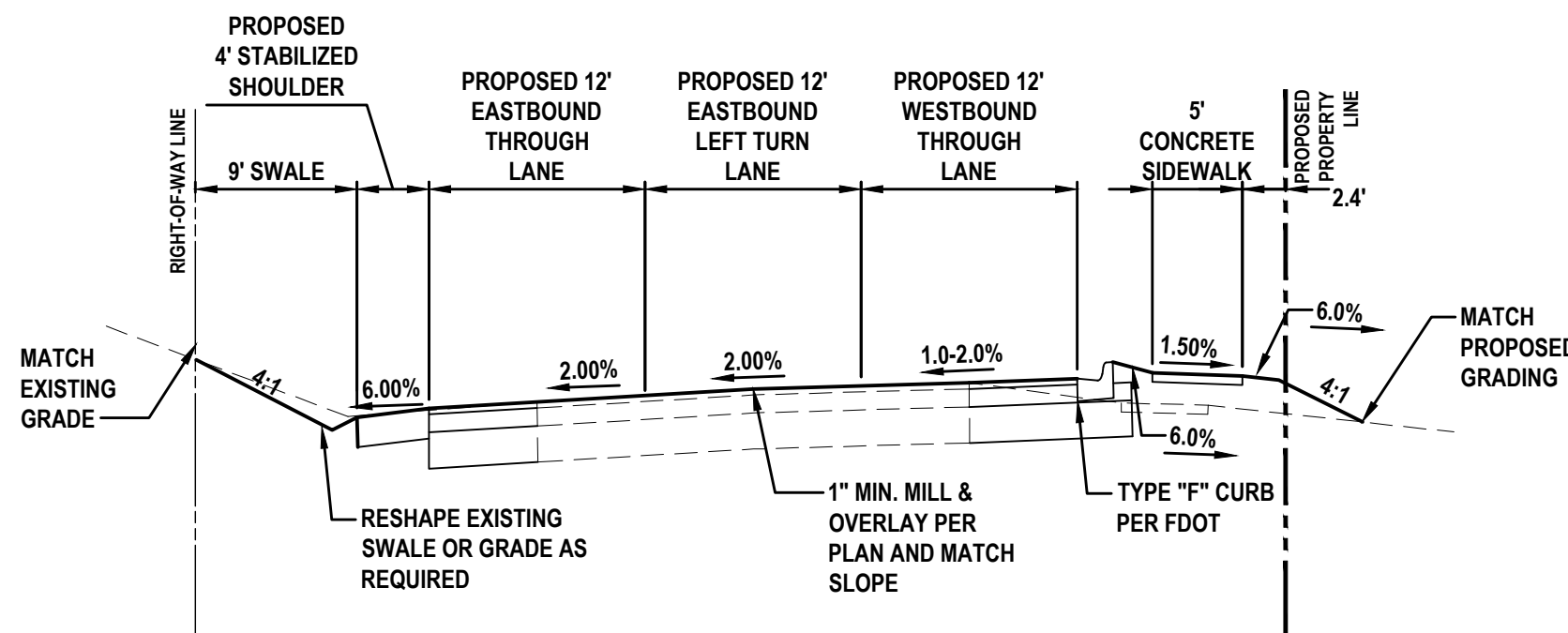


GENERAL GRADING NOTES:

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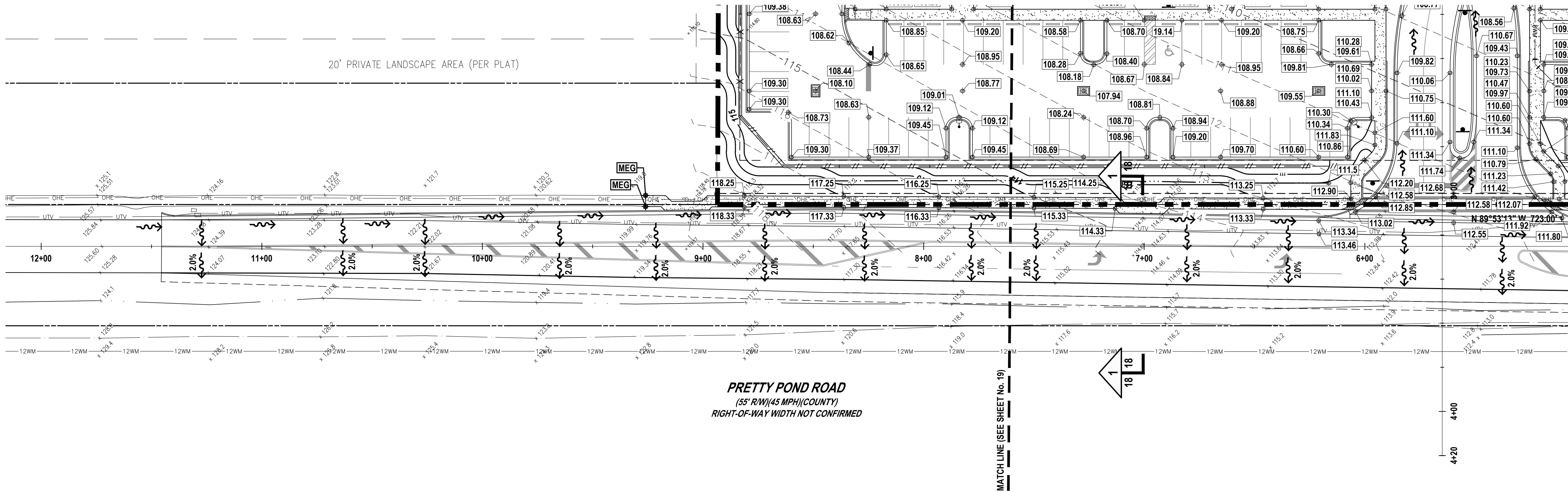
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PRETTY POND ROAD TURN LANE DRAINAGE PLAN

SCALE: 1" = 30'



PRETTY POND ROAD TURN LANE GRADING PLAN

SCALE: 1" = 30'

*NOT SHOWN ON THIS SHEET VIEW.

BENCHMARK INFORMATION:

- #1 BENCHMARK #1 SET NAIL (NO ID) ELEVATION = 112.41
- #2 BENCHMARK #2 SET NAIL ELEVATION = 113.63

VERTICAL DATA
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GRADING LEGEND:

- 106--- EXISTING CONTOUR
- 106--- PROPOSED CONTOUR
- 106--- DRAINAGE FLOW ARROW
- 106--- EXISTING SPOT ELEVATION
- 106--- PROPOSED SPOT ELEVATION
- 106--- MATCH EXISTING GRADE

KEYNOTES:

- 1 SIDEWALK CURB RAMP C (SEE DETAIL, SHEET No. 46-47)
- 2 SIDEWALK CURB RAMP E (SEE DETAIL, SHEET No. 46-47)
- 3 SIDEWALK CURB RAMP G (SEE DETAIL, SHEET No. 46-47)

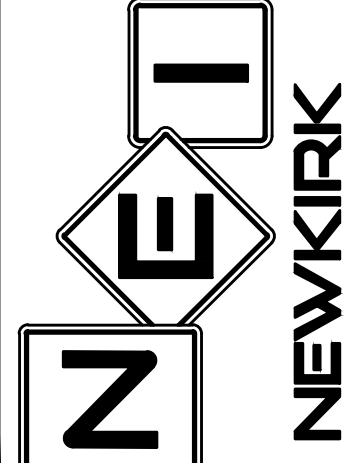


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REVISIONS

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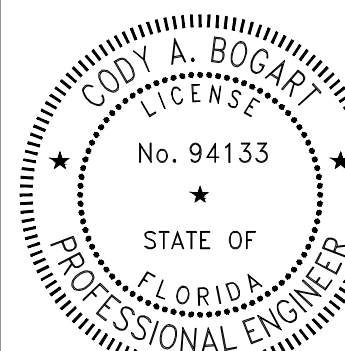
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TURN LANE GRADING AND
DRAINAGE- PRETTY POND RD W
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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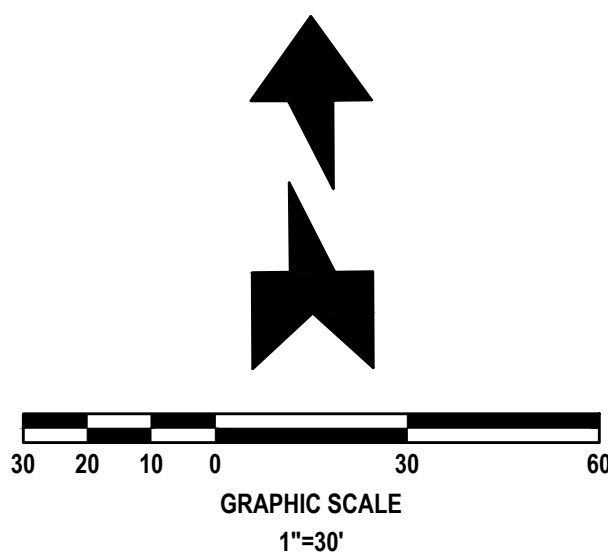


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DRAWN BY: DAB
CHECKED BY: HHN
SCALE: 1" = 30'

DRAWING NUMBER

18

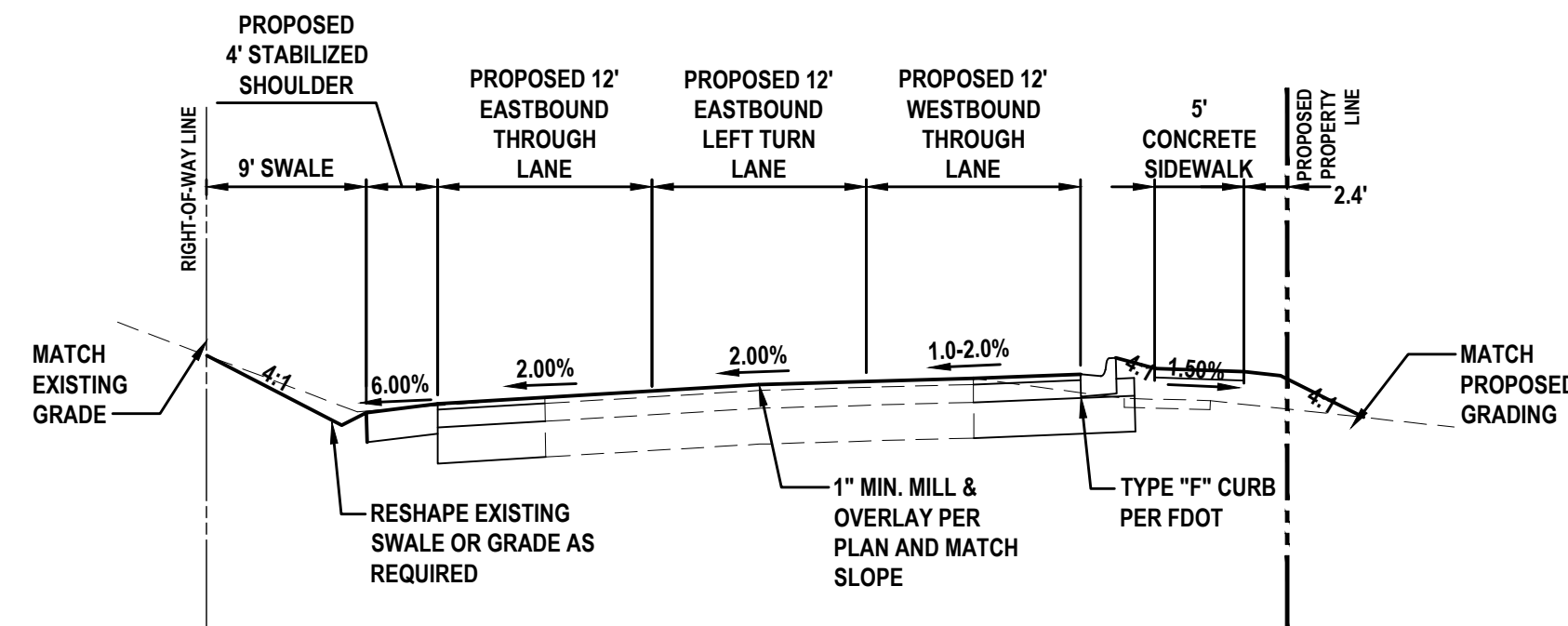


GENERAL GRADING NOTES:

1. CROSS SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL NOT EXCEED 1:48 IN ACCORDANCE WITH SECTION 502.4 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
2. ALL SIDEWALKS SHALL HAVE A 1.0% CROSS SLOPE (2.0% MAXIMUM).
3. ALL CURB RAMPS SHALL COMPLY WITH SECTION 406 OF FACBC.
4. ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEY OR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR.

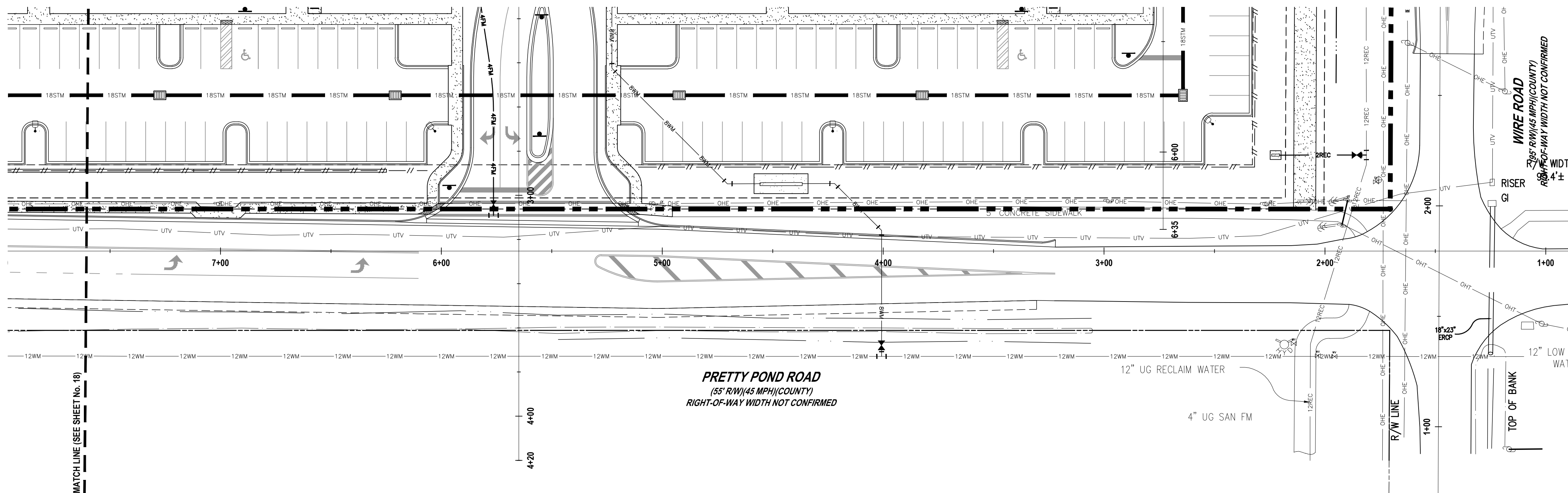
GENERAL EARTHWORK NOTES:

1. REMOVE ALL ORGANIC OR UNSUITABLE MATERIALS. IF ANY MUCK OR MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
2. ALL FILLING IS TO BE PERFORMED IN ONE-FOOT LIFTS. THE COMPACTION REQUIREMENT IS 98% FOR PAVED AREAS AND 95% FOR UNPAVED AREAS PER AASHTO T-180 MODIFIED PROCTOR TEST.
3. TEMPORARY FILL STOCKPILING IS NOT PERMITTED IN LIFTS GREATER THAN SIX FEET.
4. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES.
5. ONCE AN AREA IS SEEDED OR SODDED, IT MUST BE MAINTAINED TO ALLOW THE GRASS TO GROW.
6. ALL NON-PAVED AREAS MUST BE PLANTED, GRASSED, OR MULCHED.



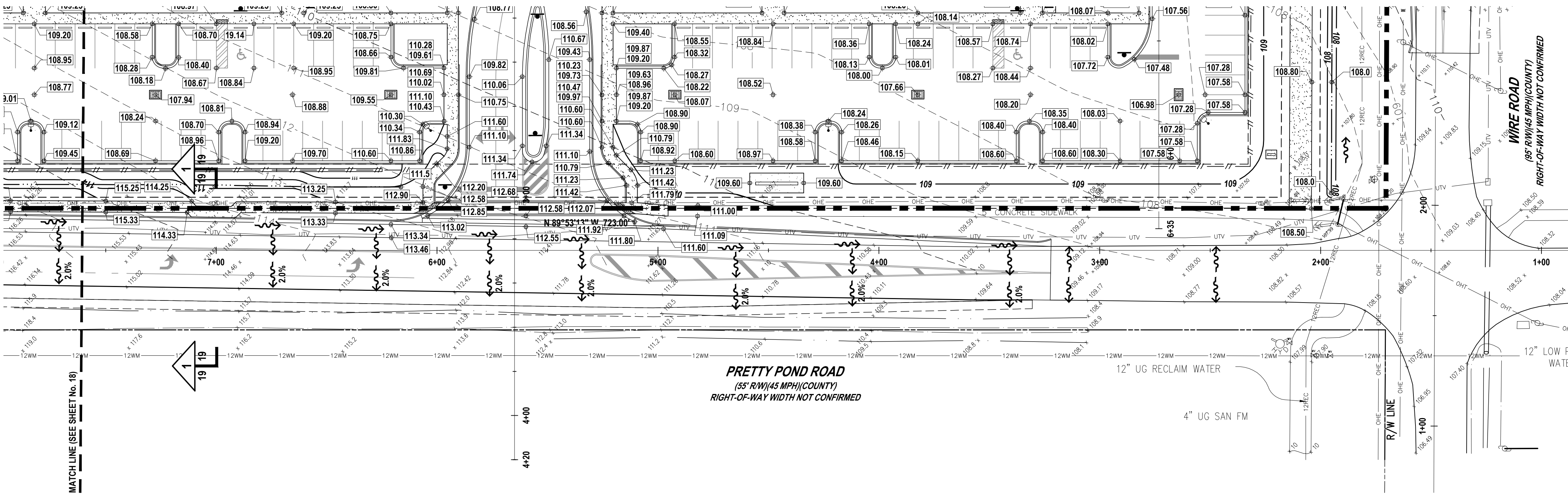
TYPICAL SECTION 1 - STA. 7+00

NOT TO SCALE



PRETTY POND ROAD TURN LANE DRAINAGE PLAN

SCALE: 1" = 30'



PRETTY POND ROAD TURN LANE GRADING PLAN

SCALE: 1" = 30'

*NOT SHOWN ON THIS SHEET VIEW.

BENCHMARK INFORMATION:

- #1 BENCHMARK #1 SET NAIL (NO ID)
ELEVATION = 112.41
- #2 BENCHMARK #2 SET NAIL
ELEVATION = 113.63

VERTICAL DATA
ELEVATIONS REFER TO (NAVD 88) NORTH AMERICA VERTICAL DATUM 1988. BENCHMARK, FOR DESIGNATION REFER TO THE SURVEY PERFORMED BY VISIONLAN SERVICE, INC., JOB No. VLSR21-56738 ; 56738a

GRADING LEGEND:

- 106--- EXISTING CONTOUR
- 106--- PROPOSED CONTOUR
- 106--- DRAINAGE FLOW ARROW
- 106.00 EXISTING SPOT ELEVATION
- 106.00 PROPOSED SPOT ELEVATION
- 106.00 MATCH EXISTING GRADE

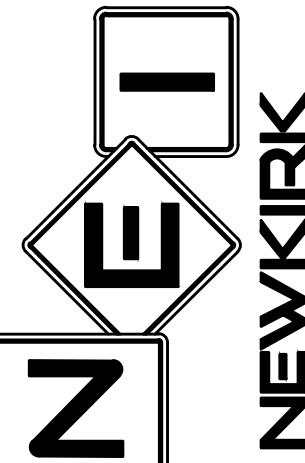
KEYNOTES:

- 1 SIDEWALK CURB RAMP C
(SEE DETAIL, SHEET No. 46-47)
- 2 SIDEWALK CURB RAMP E
(SEE DETAIL, SHEET No. 46-47)
- 3 SIDEWALK CURB RAMP G
(SEE DETAIL, SHEET No. 46-47)

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

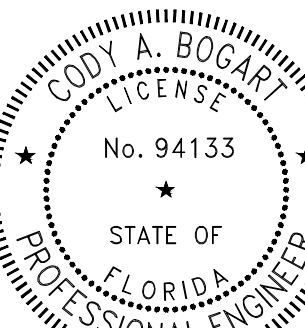
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TURN LANE GRADING AND
DRAINAGE - PRETTY POND RD
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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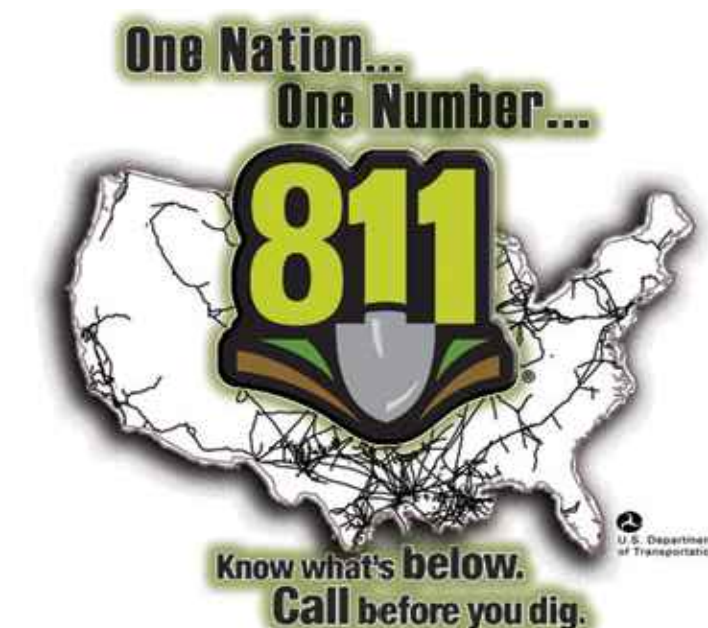
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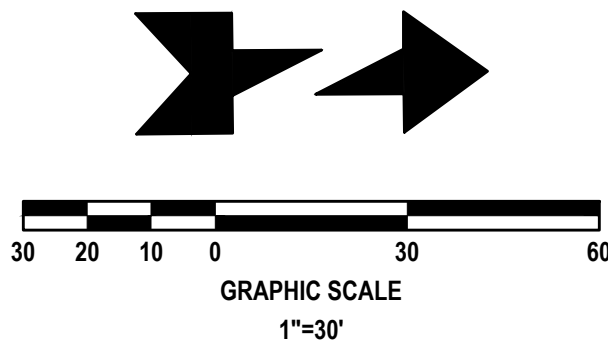
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PROJECT No: 2021-346
DATE: AUGUST 2022
DESIGN BY: CAB
DRAWN BY: DAB
CHECKED BY: HHN
SCALE: 1"=30'
DRAWING NUMBER

19



WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

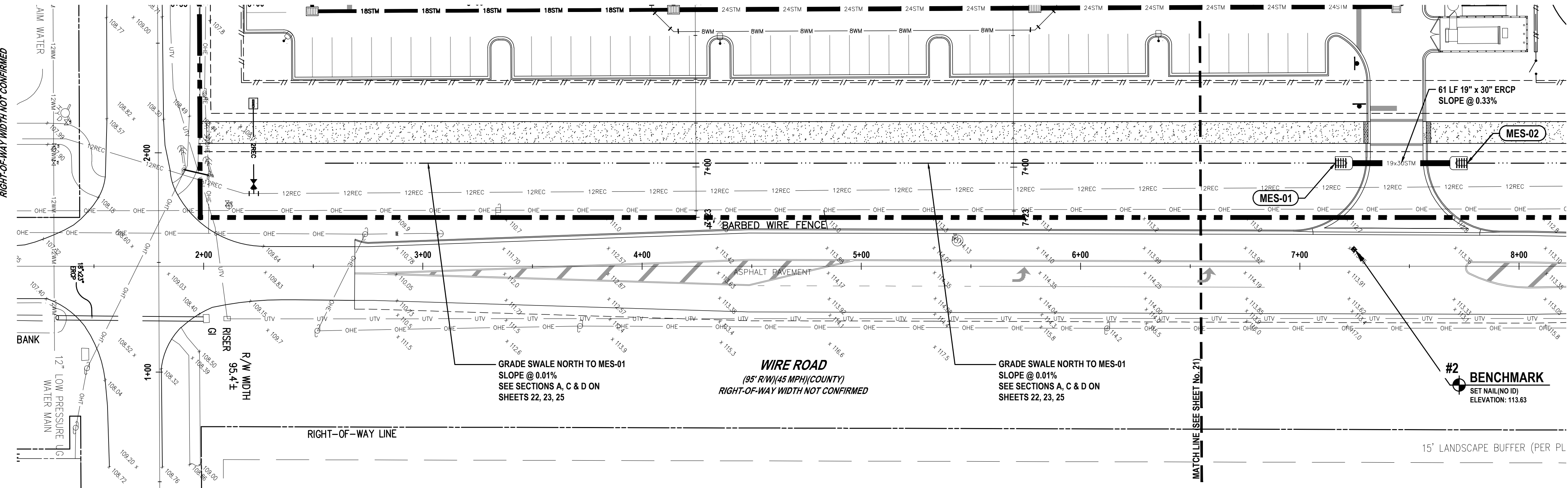
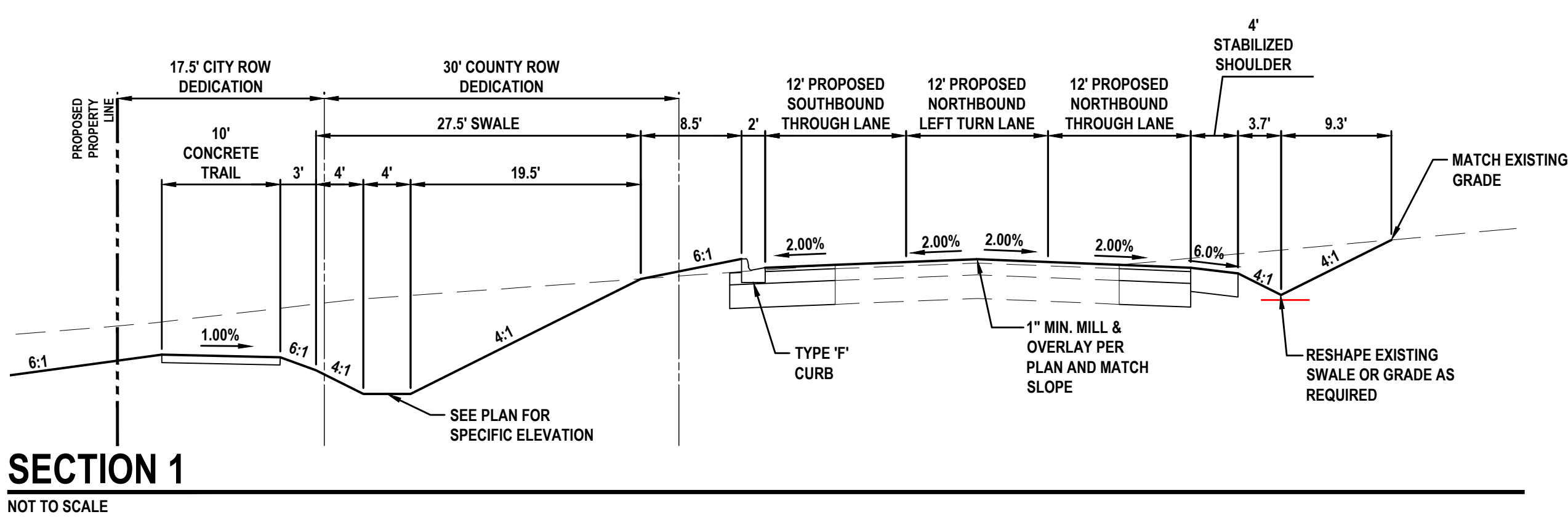


GENERAL GRADING NOTES:

1. CROSS SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL NOT EXCEED 1:48 IN ACCORDANCE WITH SECTION 502.4 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
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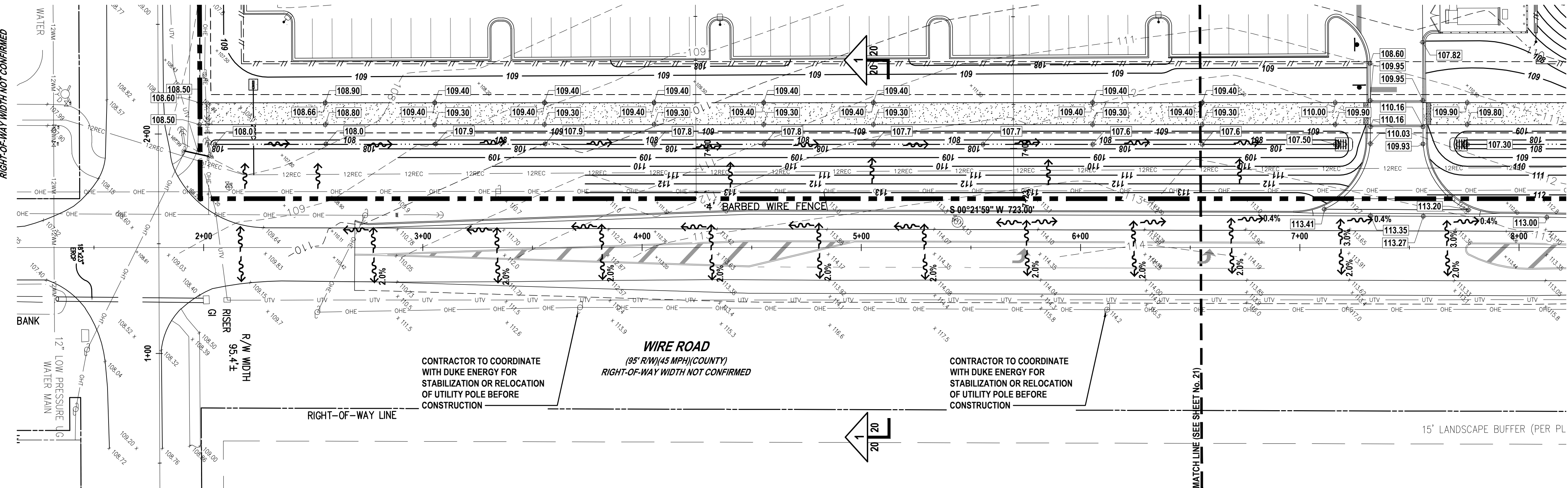
GENERAL EARTHWORK NOTES:

1. REMOVE ALL ORGANIC OR UNSUITABLE MATERIALS. IF ANY MUCK OR MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
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WIRE ROAD TURN LANE LAYOUT AND PAVEMENT PLAN

SCALE: 1" = 30'



WIRE ROAD TURN LANE STRIPING AND SIGNAGE PLAN

SCALE: 1" = 30'

BENCHMARK INFORMATION:

- #1** BENCHMARK #1 SET NAIL (NO ID)
ELEVATION = 112.41
- #2** BENCHMARK #2 SET NAIL
ELEVATION = 113.63

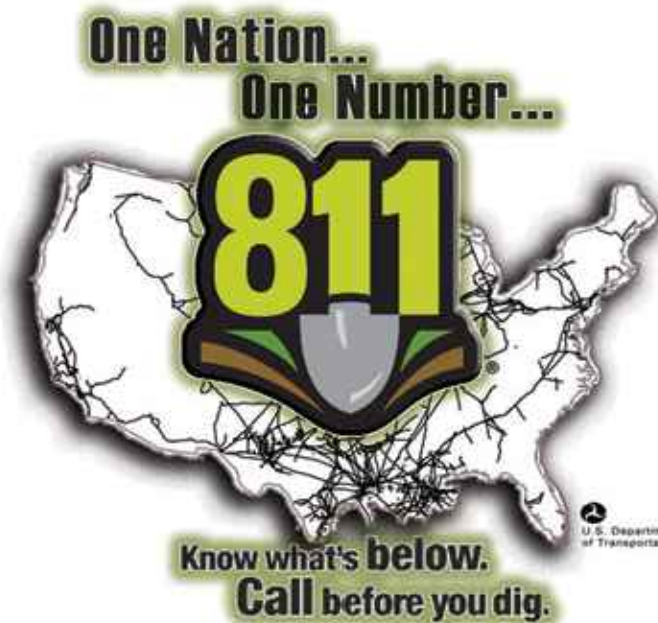
VERTICAL DATA
ELEVATIONS REFER TO (NAVD 88) NORTH AMERICA VERTICAL DATUM 1988. BENCHMARK, FOR DESIGNATION REFER TO THE SURVEY PERFORMED BY VISIONLAN SERVICE, INC., JOB No. VLSR21-56738 ; 56738a

GRADING LEGEND:

- 106--- EXISTING CONTOUR
- 106--- PROPOSED CONTOUR
- 106--- DRAINAGE FLOW ARROW
- 106.00--- EXISTING SPOT ELEVATION
- 106.00--- PROPOSED SPOT ELEVATION
- 106.00--- MATCH EXISTING GRADE

KEYNOTES:

1. SIDEWALK CURB RAMP C (SEE DETAIL, SHEET No. 46-47)
2. SIDEWALK CURB RAMP E (SEE DETAIL, SHEET No. 46-47)
3. SIDEWALK CURB RAMP G (SEE DETAIL, SHEET No. 46-47)

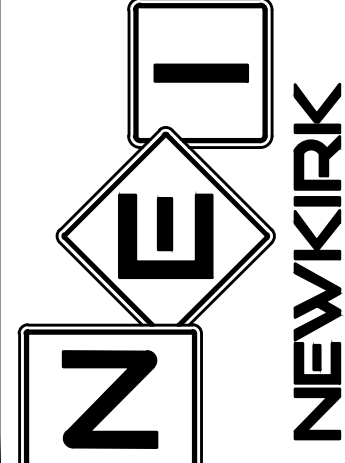


WARNING !!
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REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

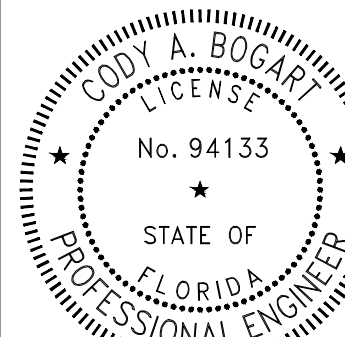
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TURN LANE GRADING AND
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ZEPHYRHILLS, FL 33540

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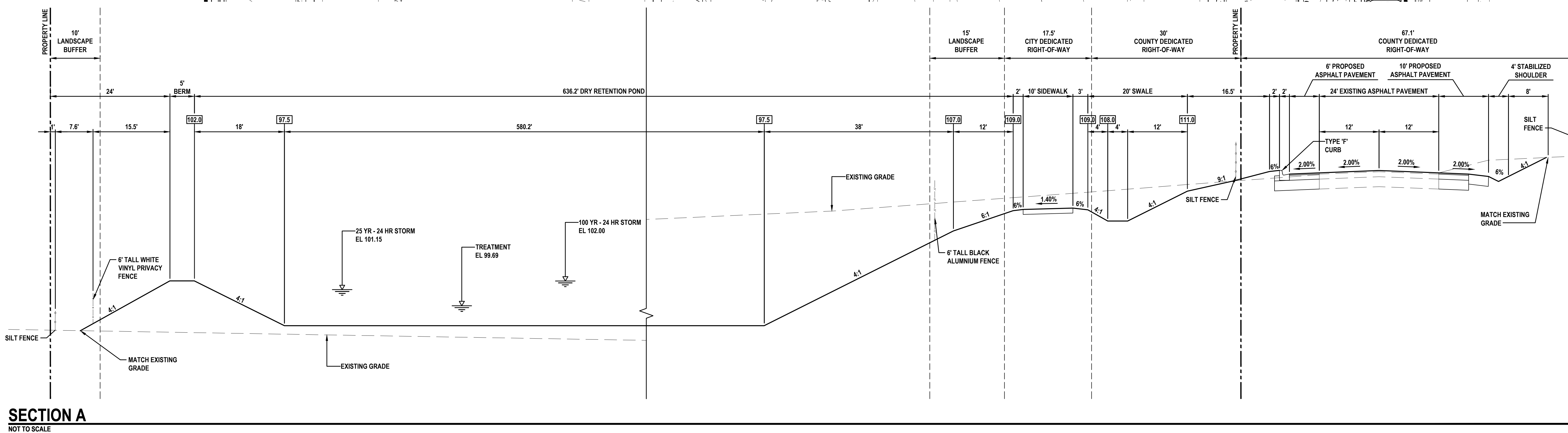
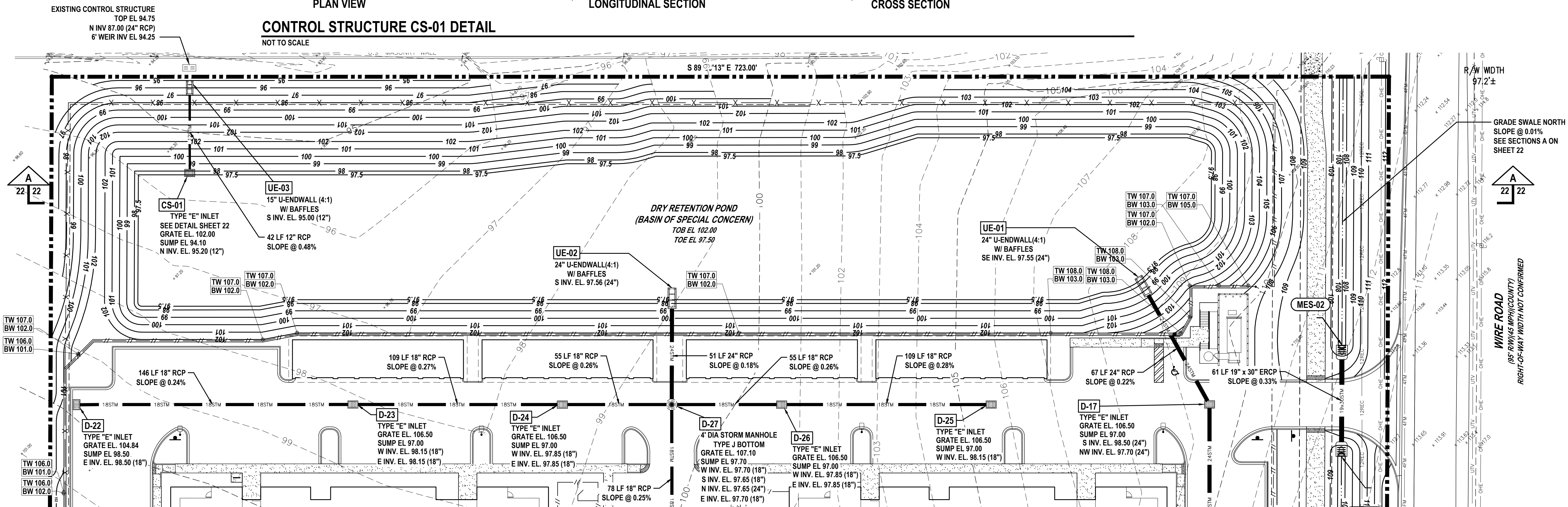
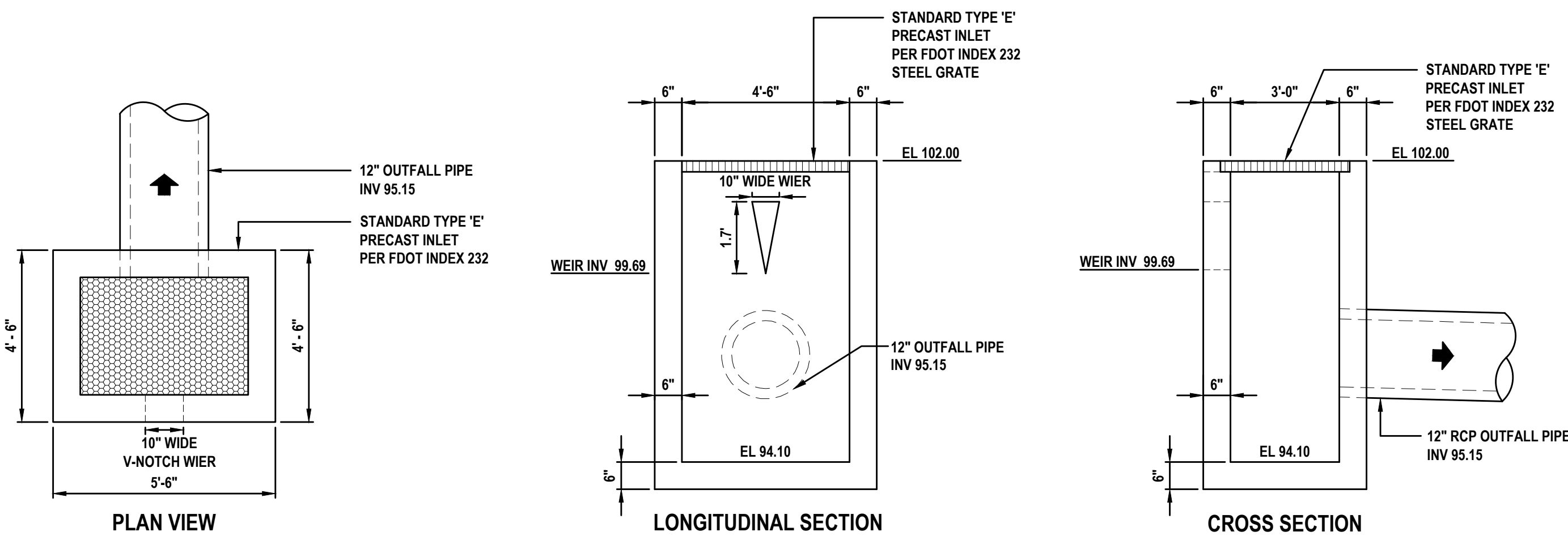
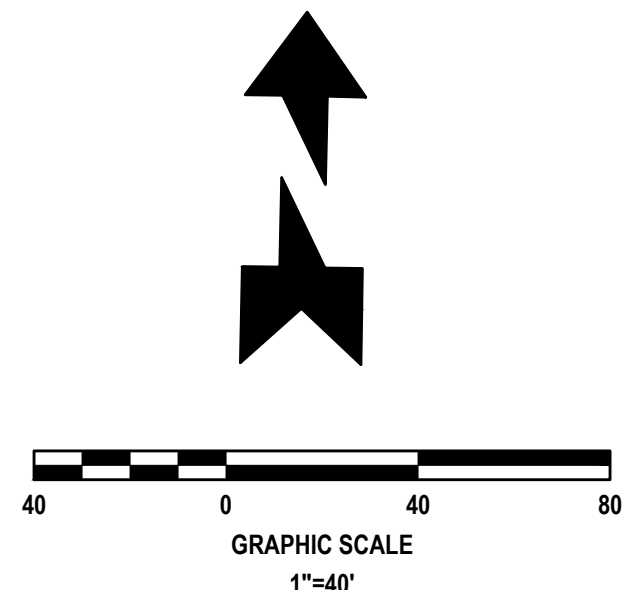
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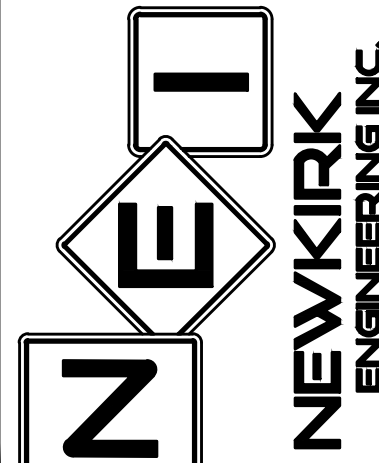
PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HNN
SCALE:	1"=30'
DRAWING NUMBER	

20



REVISIONS	
DATE	DESCRIPTION
11/29/22	CITY COMMENTS

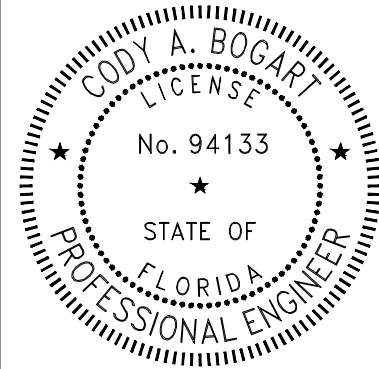
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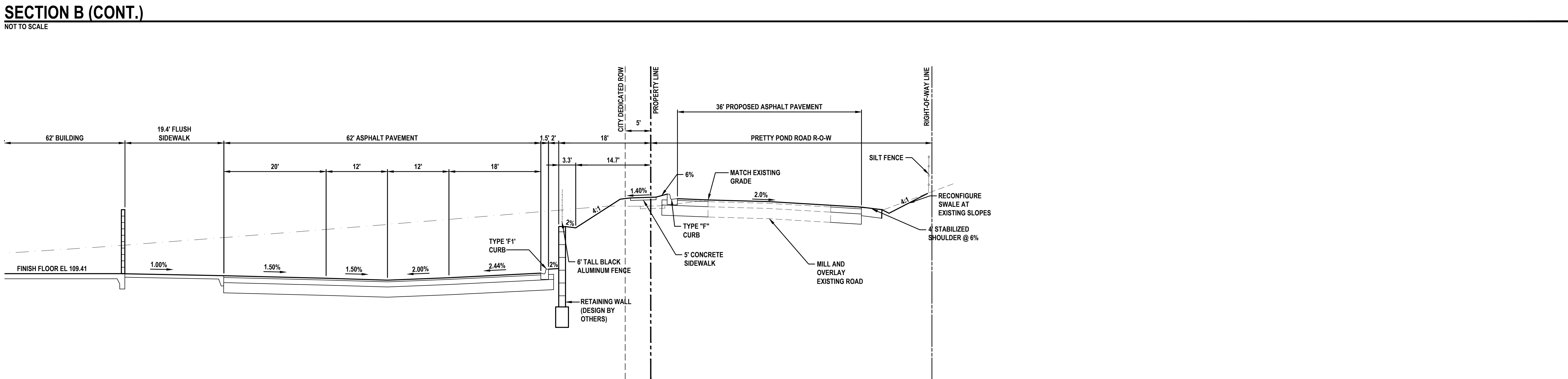
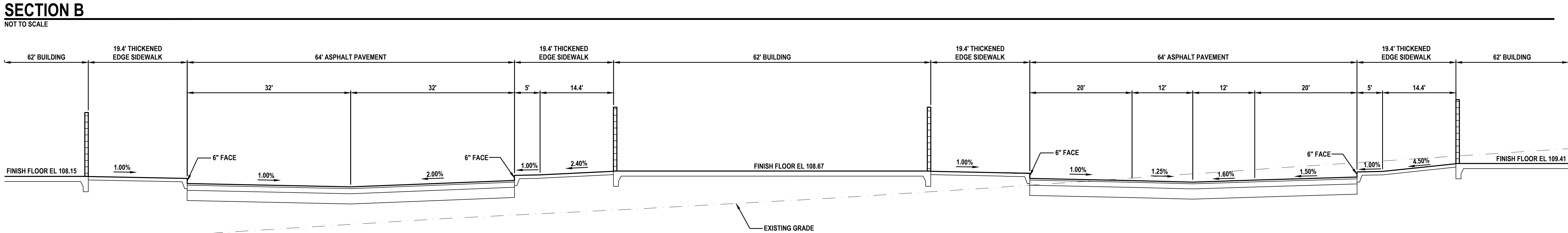
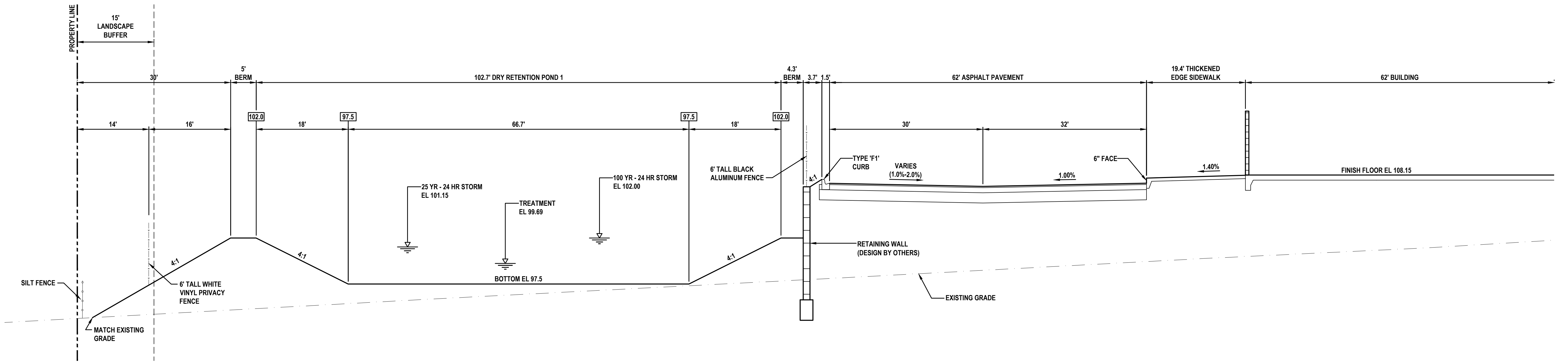
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PROJECT No:	2021-346
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DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	1"=40'
DRAWING NUMBER	

22

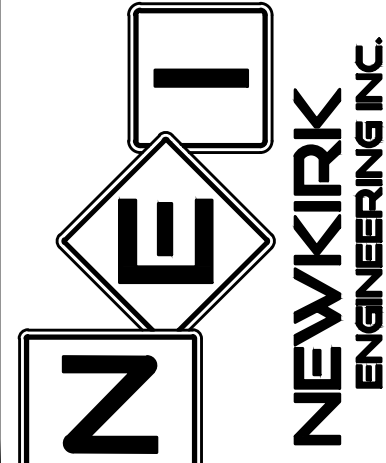


SECTION B (CONT.)
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REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

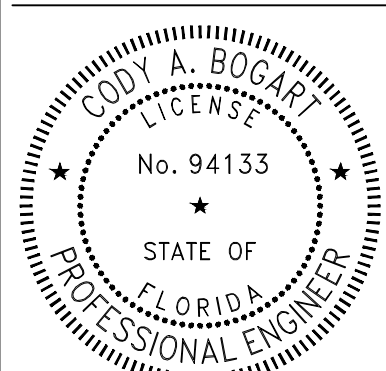
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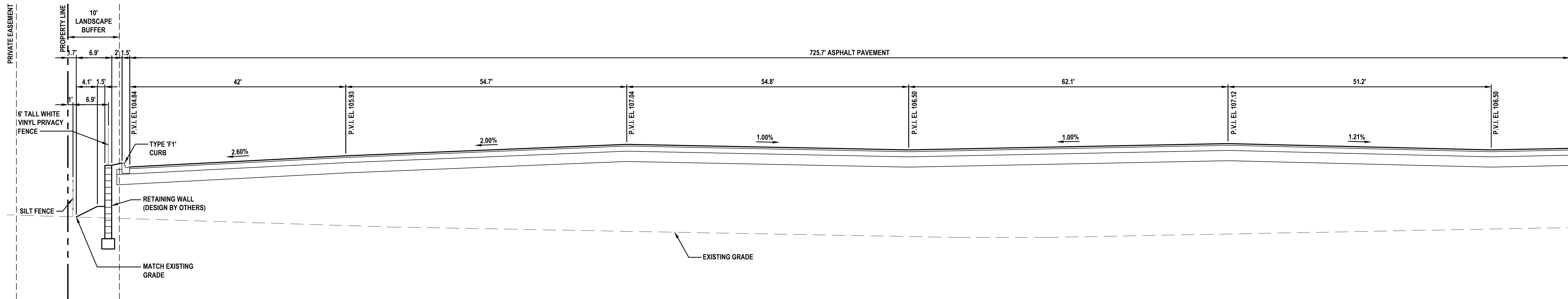
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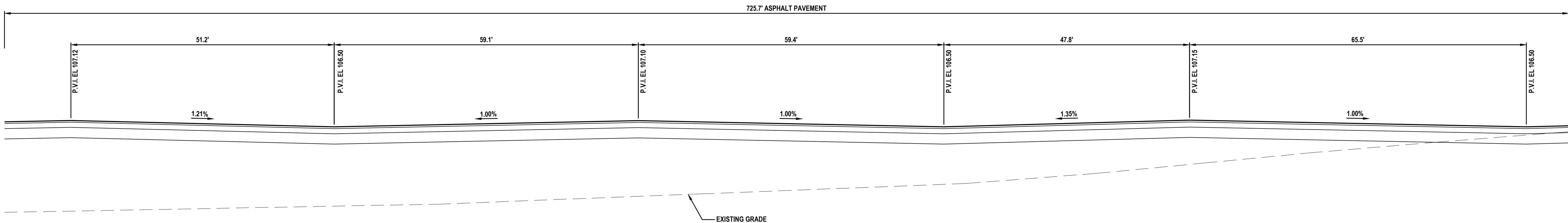
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PROJECT No:	2021-346
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DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	AS SHOWN
DRAWING NUMBER	

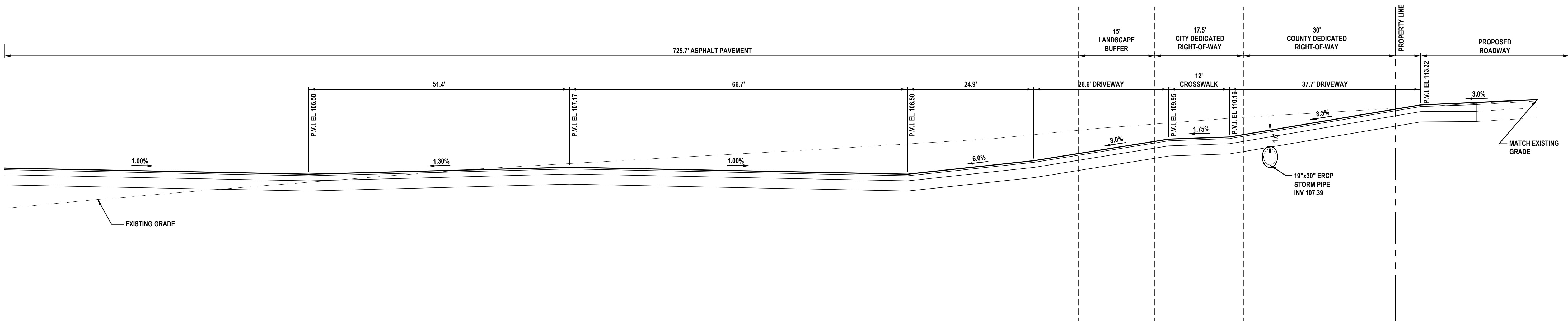
23



SECTION C
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SECTION C (CONT.)
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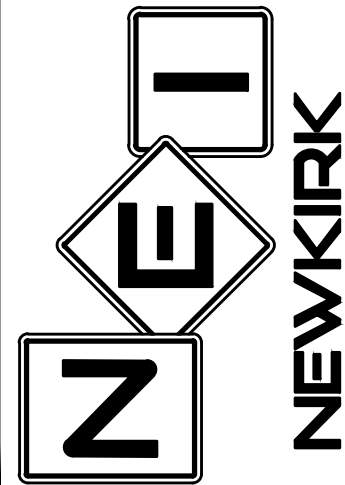


SECTION C (CONT.)
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REVISIONS

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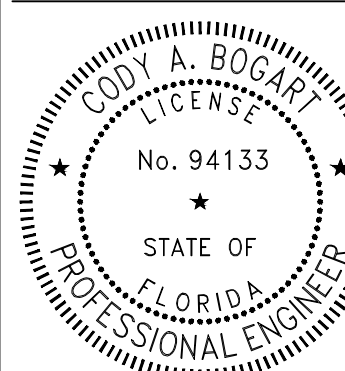
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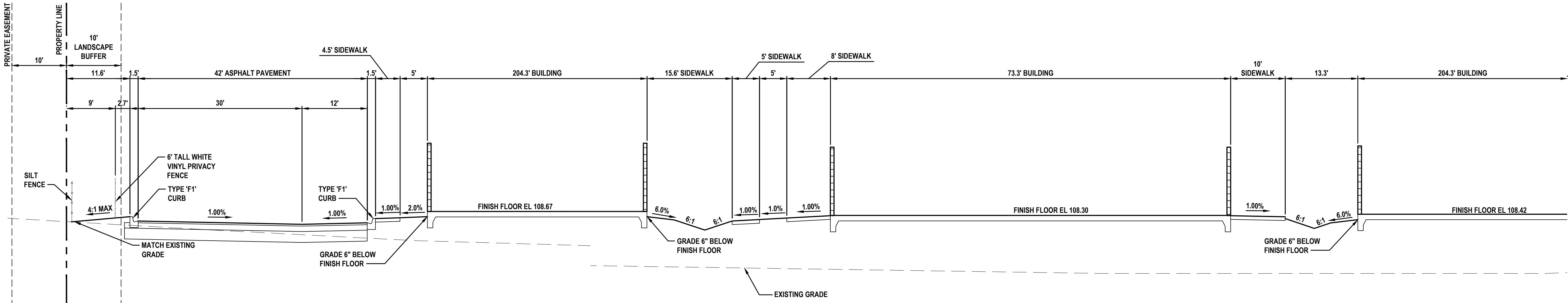


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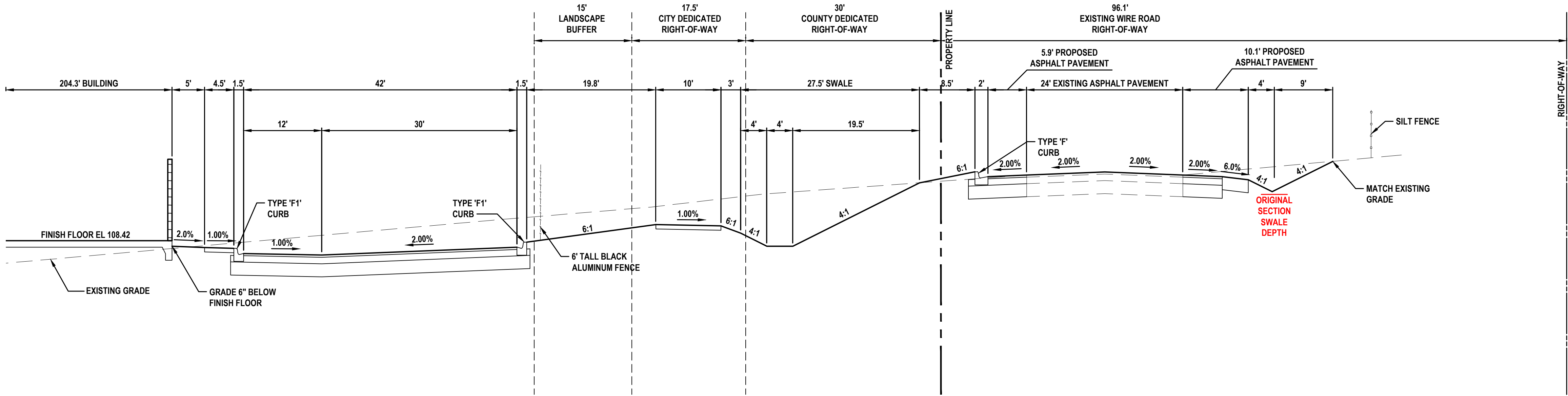
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DATE:	AUGUST 2022
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DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	AS SHOWN

DRAWING NUMBER

24



SECTION D
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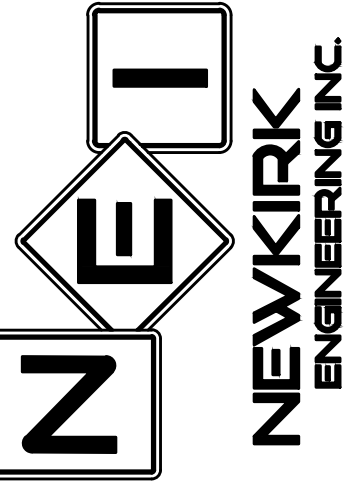


SECTION D (CONT.)
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REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

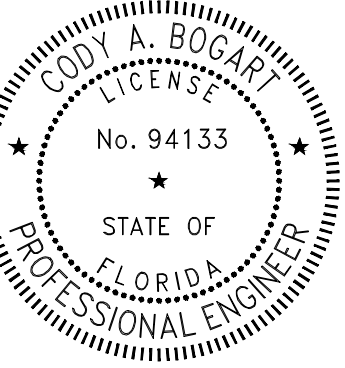
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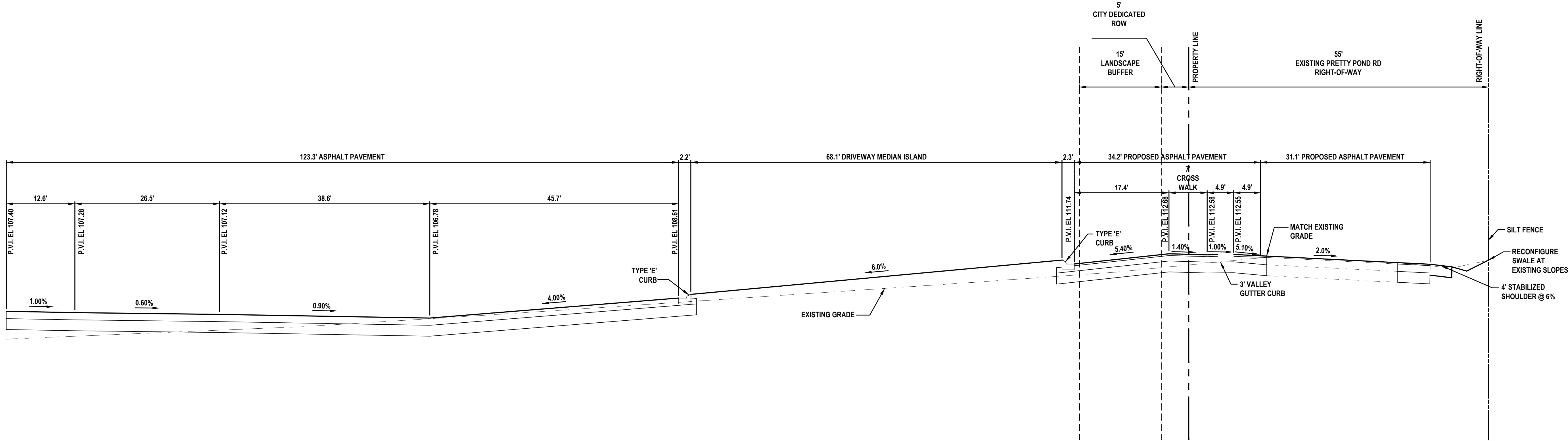


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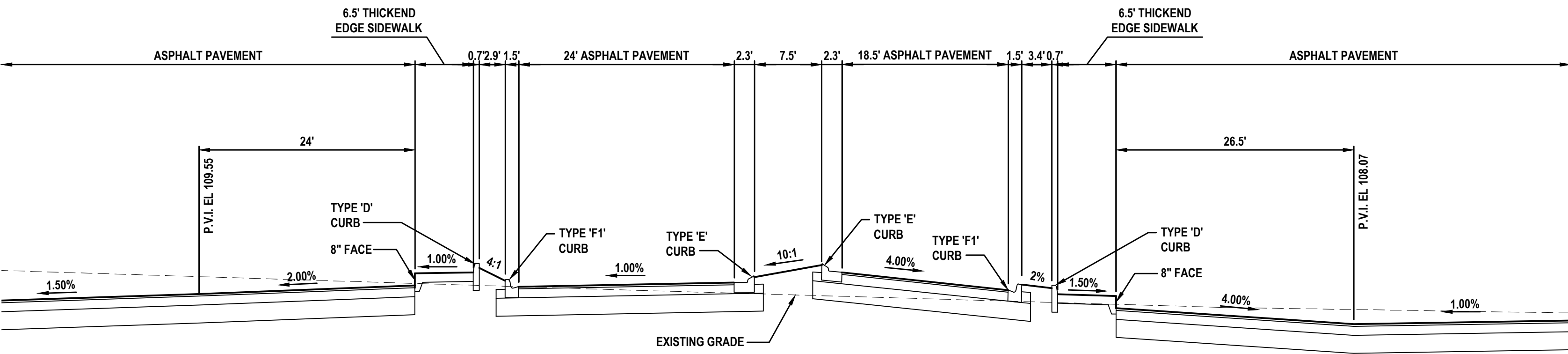
PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	AS SHOWN

DRAWING NUMBER

25



SECTION E
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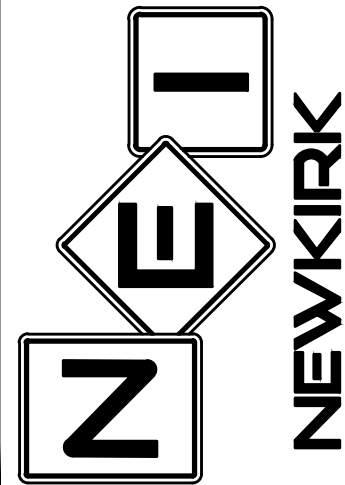


SECTION F
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REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

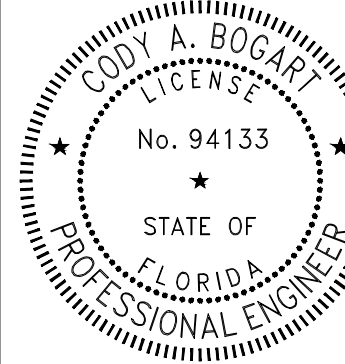
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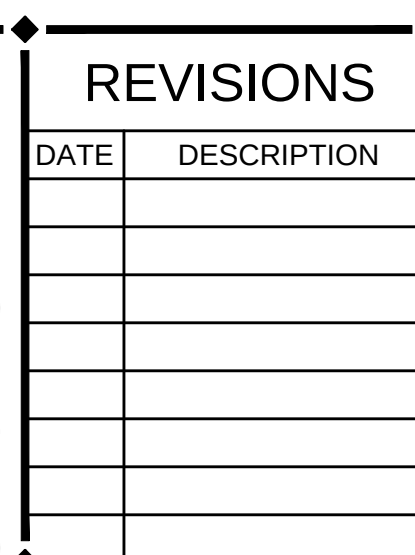


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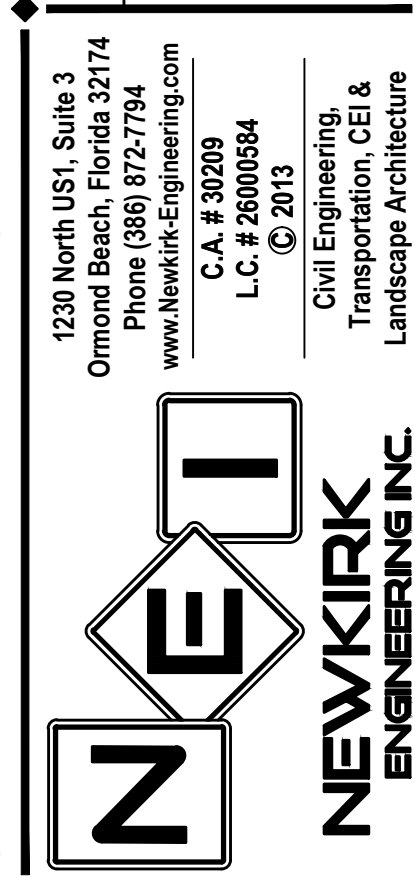
PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	AS SHOWN

DRAWING NUMBER

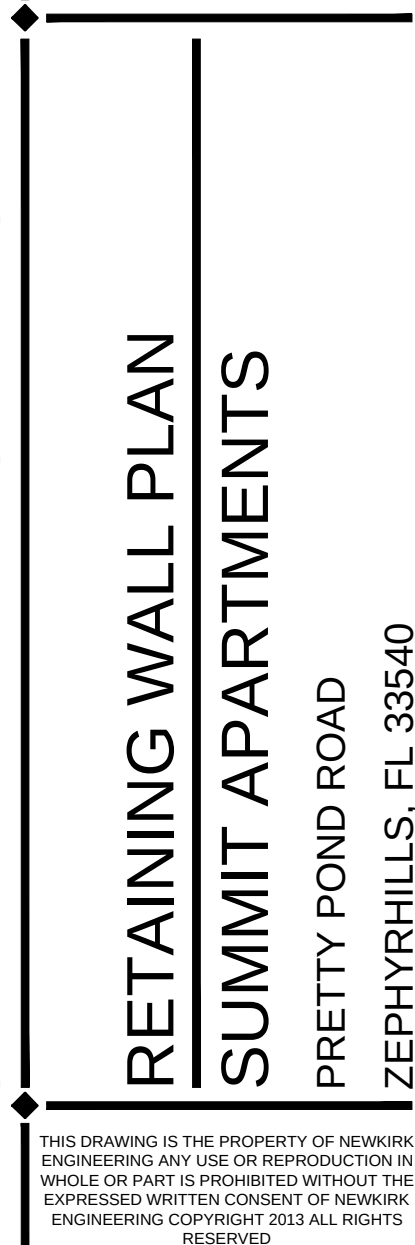
26



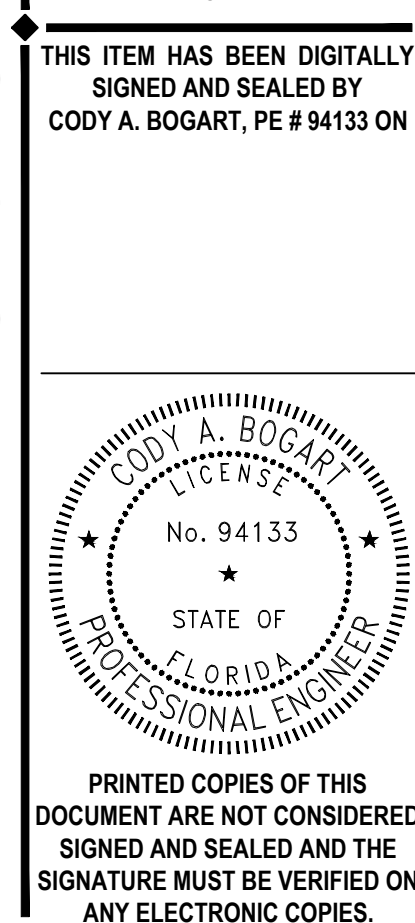
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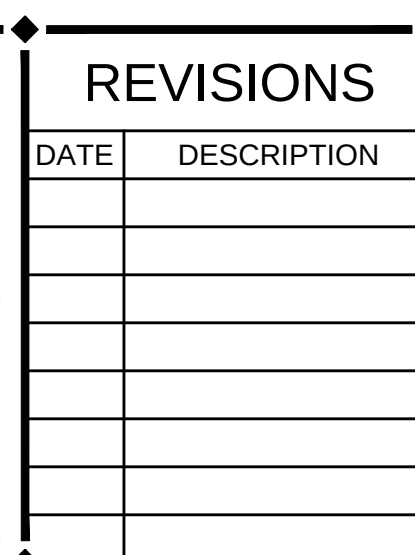
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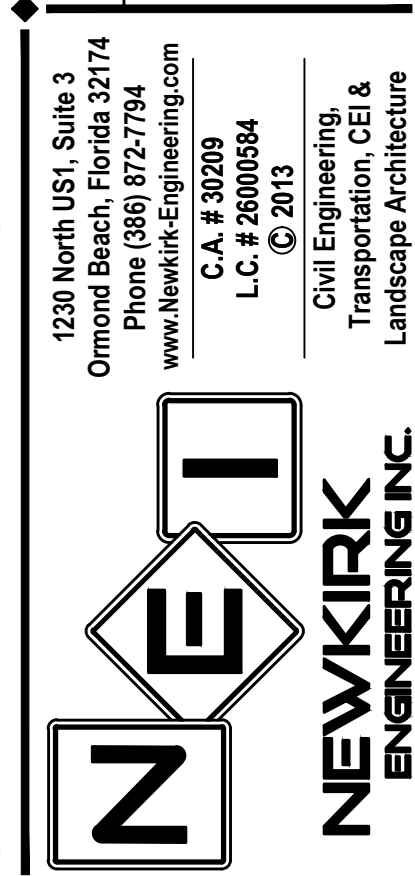
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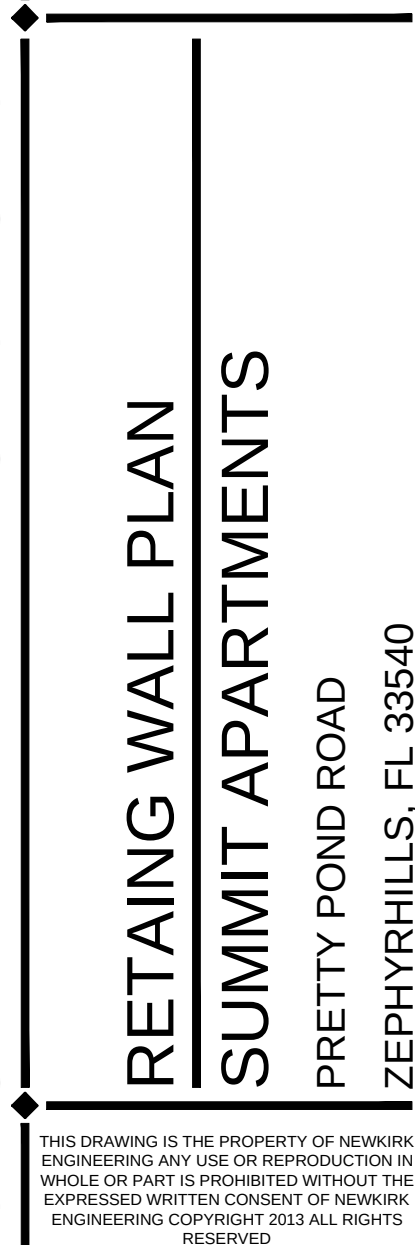
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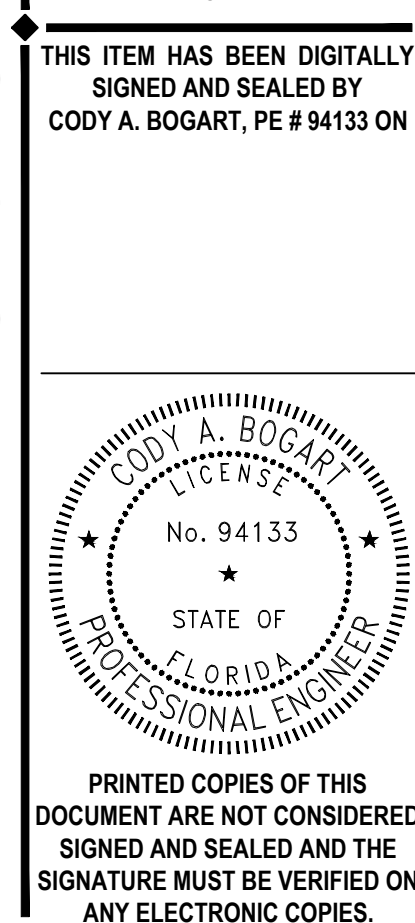
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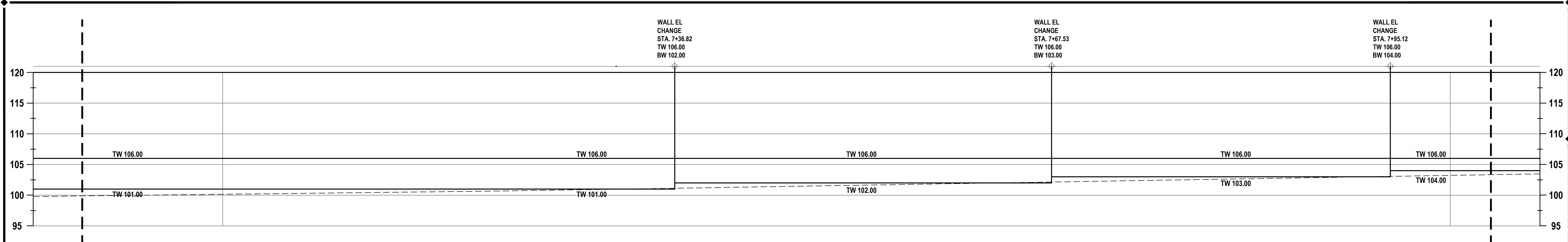
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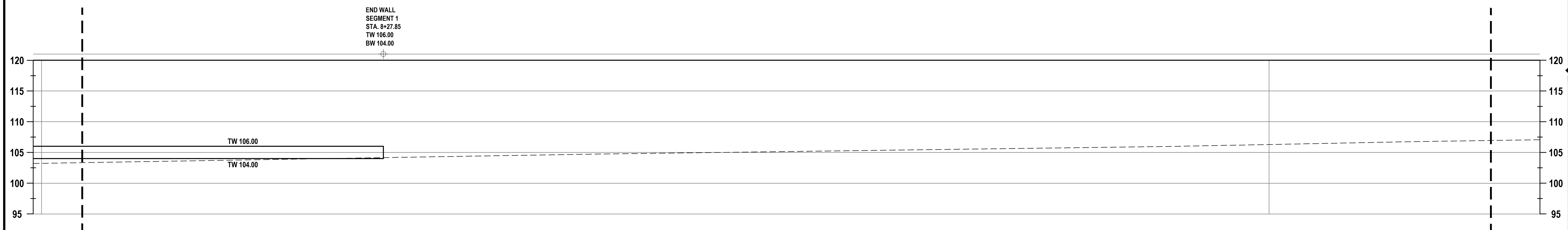
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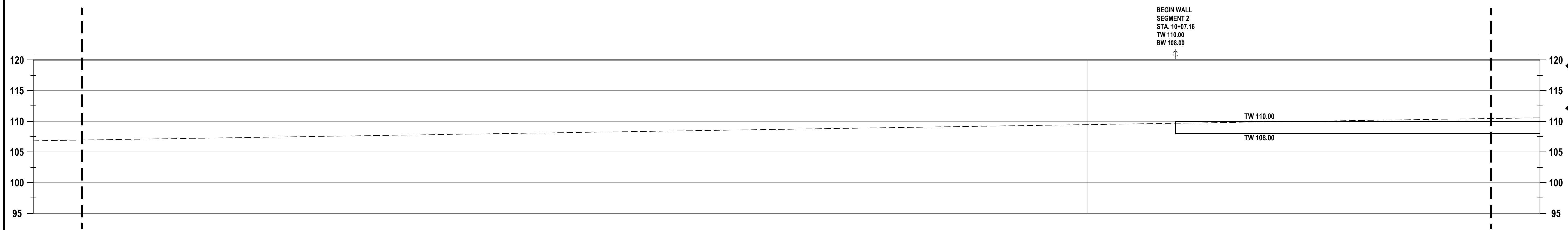
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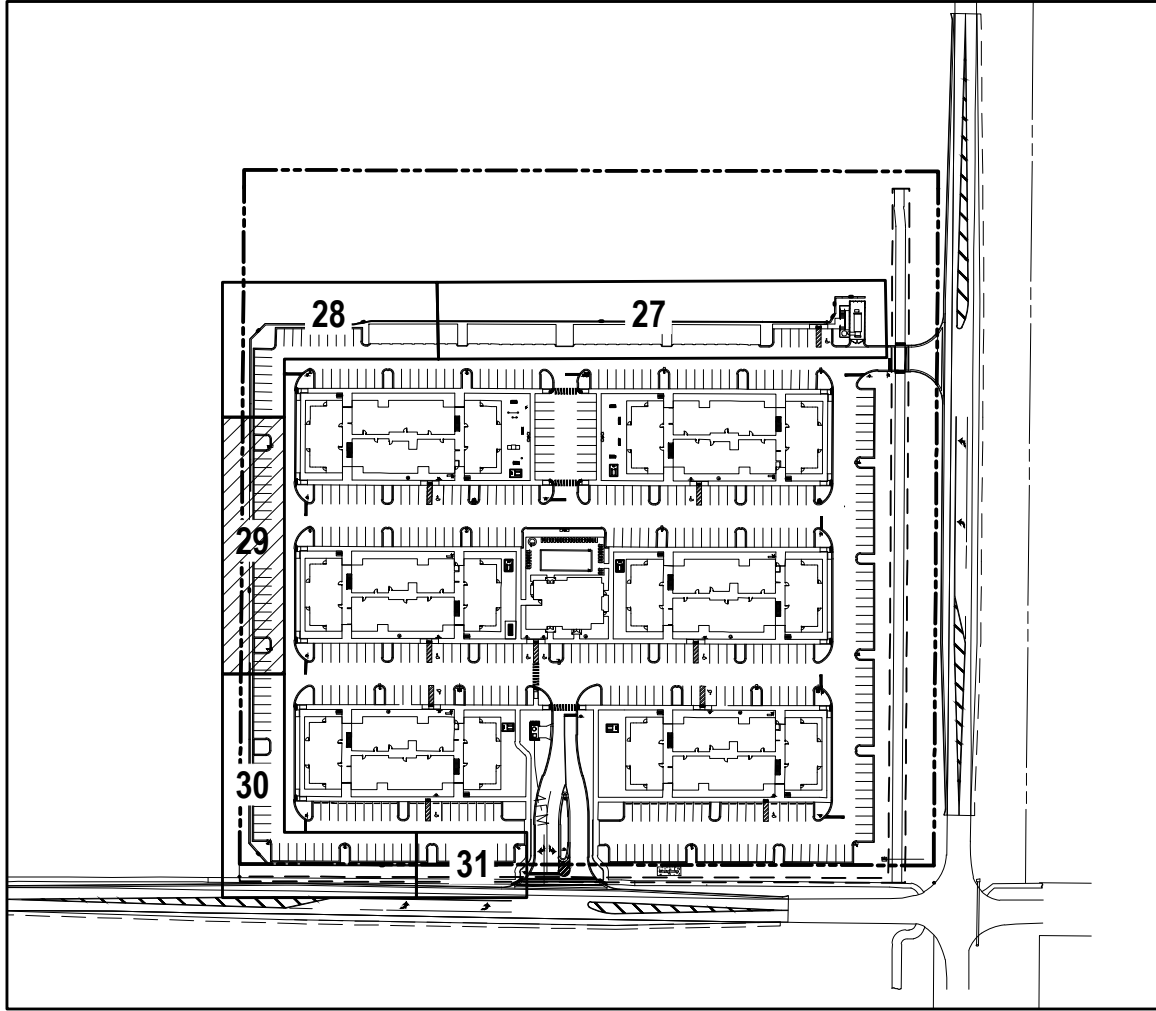
TYPICAL RETAINING WALL ELEVATION
NOT TO SCALE



TYPICAL RETAINING WALL ELEVATION
NOT TO SCALE



TYPICAL RETAINING WALL ELEVATION
NOT TO SCALE



KEY MAP
NOT TO SCALE

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RETAINING WALL PLAN
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DATE: AUGUST 2022

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DRAWN BY: DAB

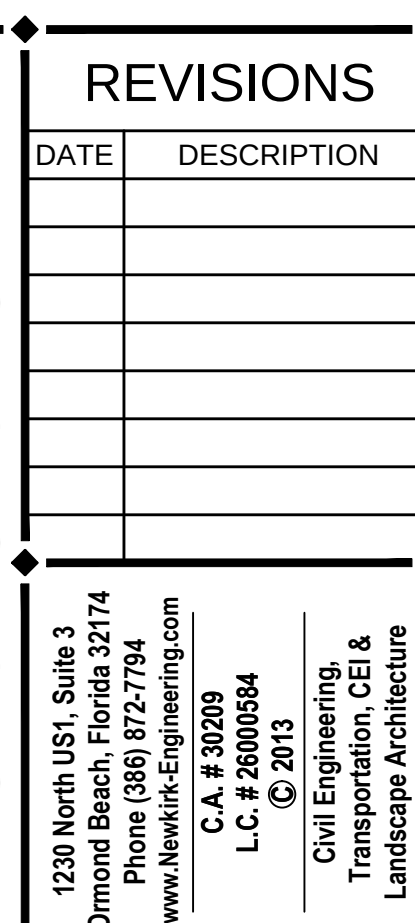
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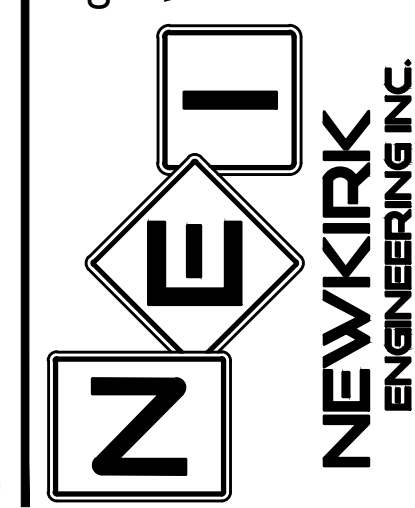
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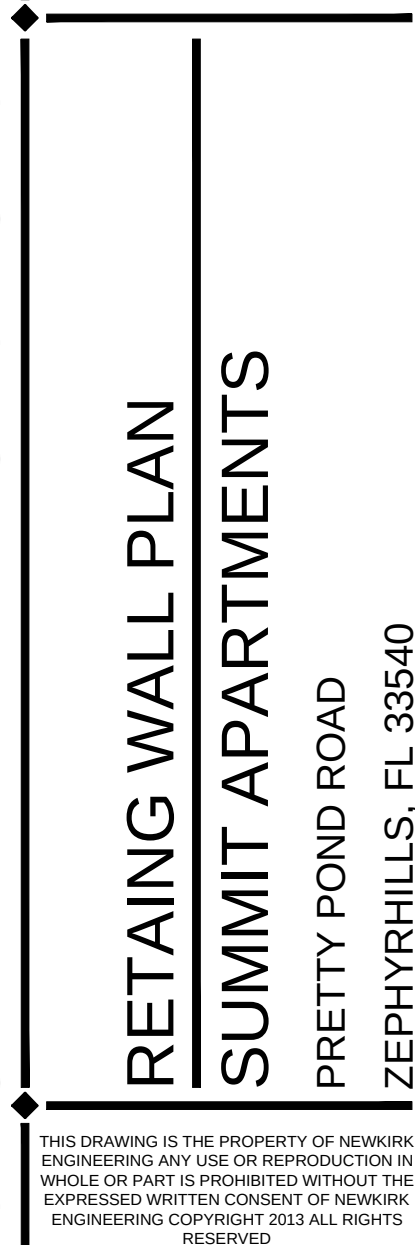
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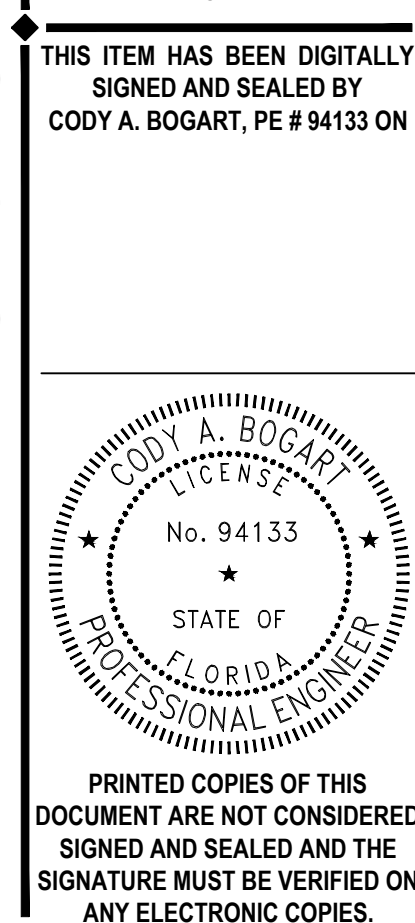
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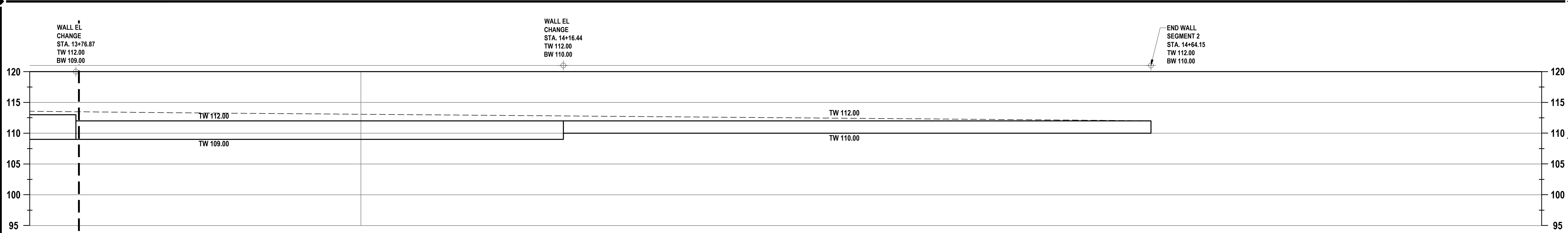
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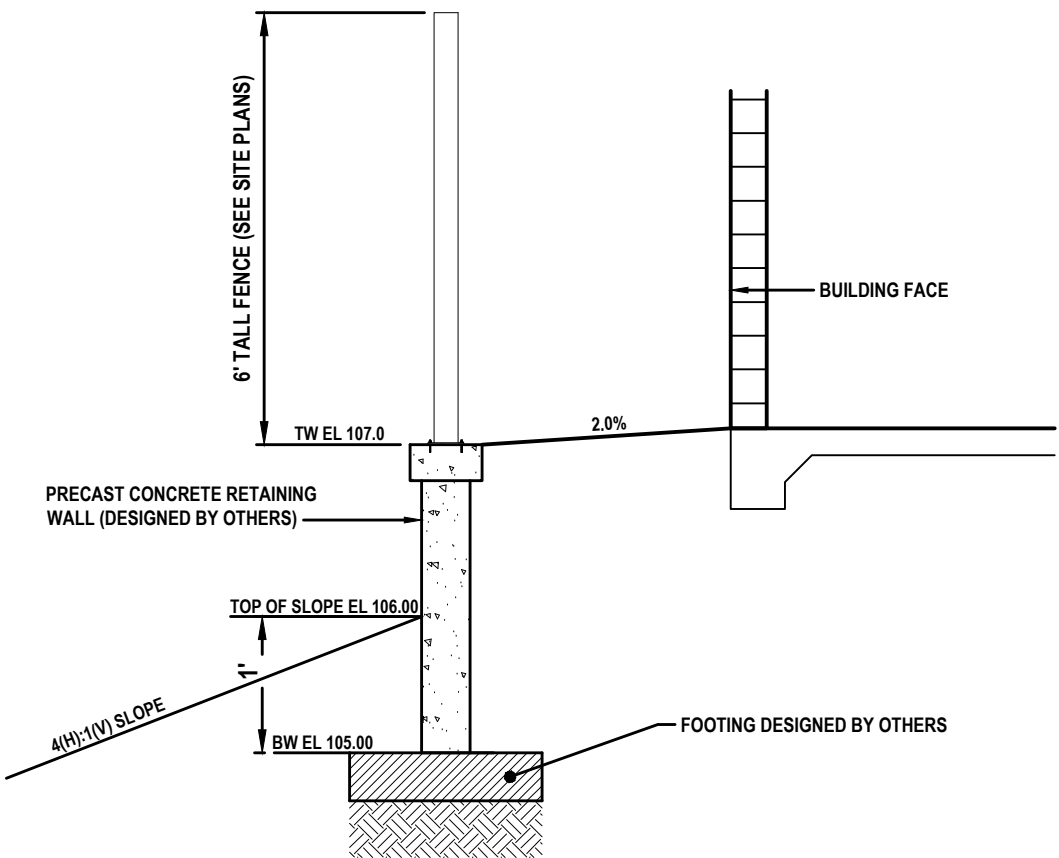


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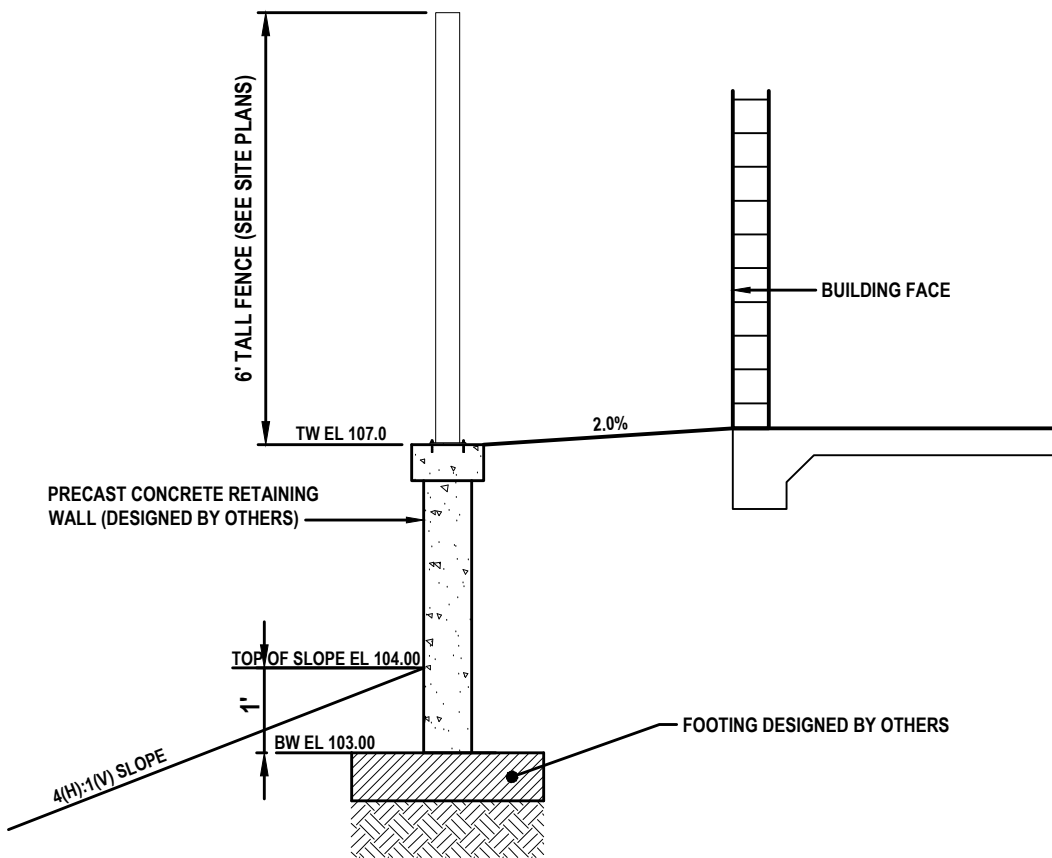
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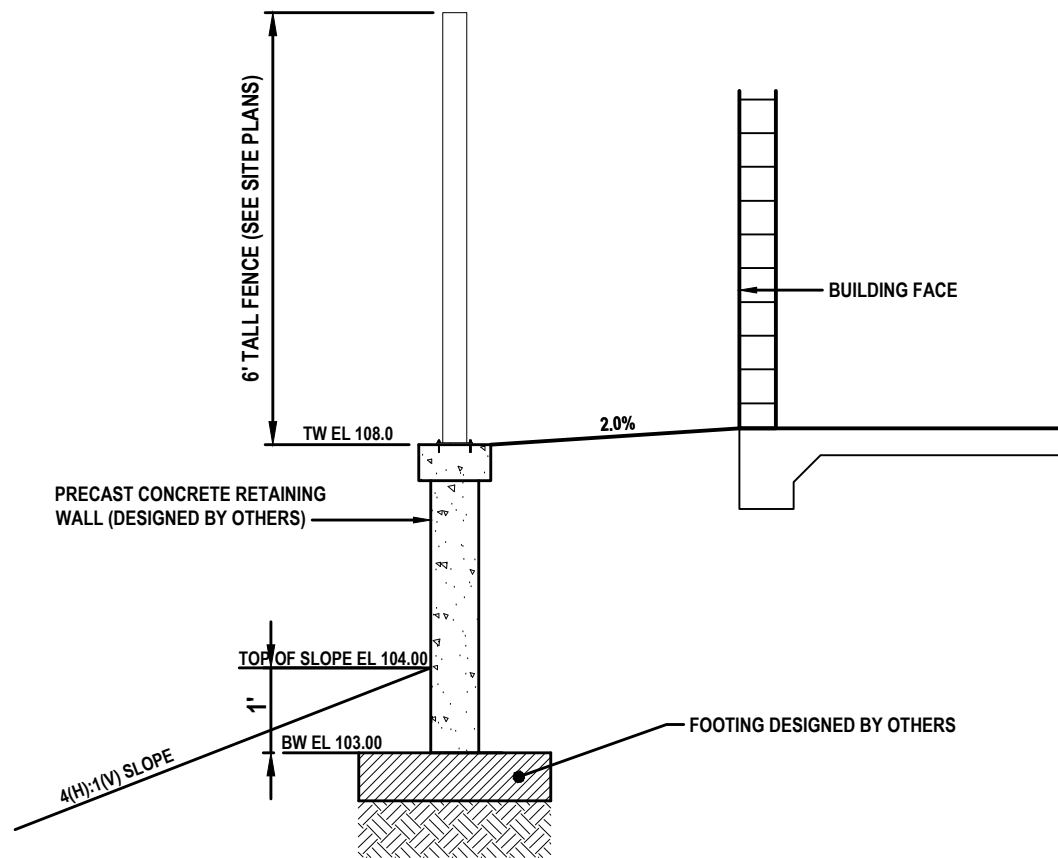
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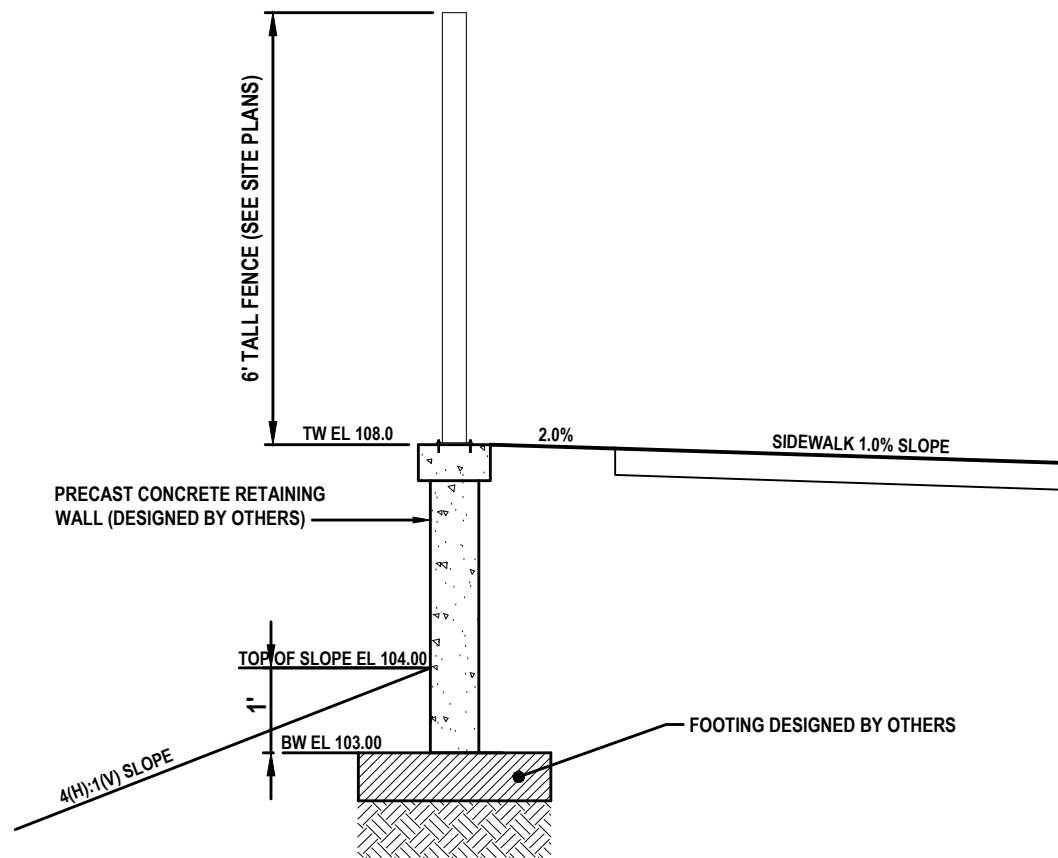
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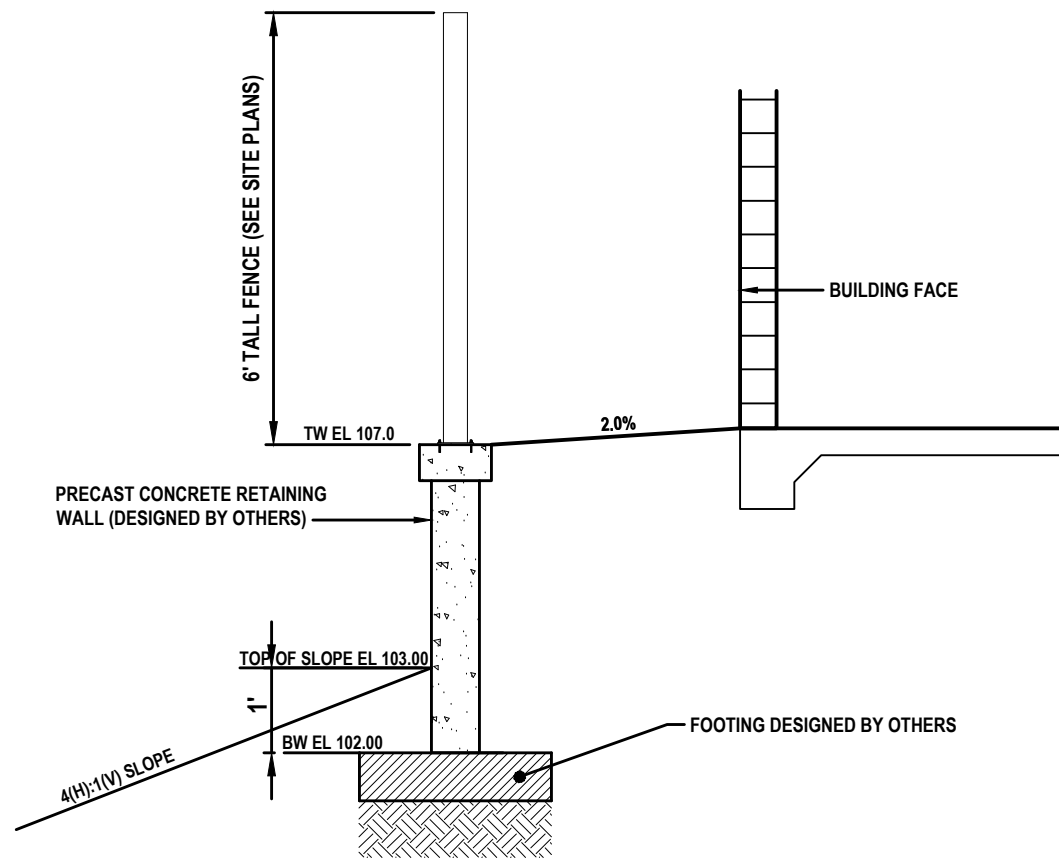
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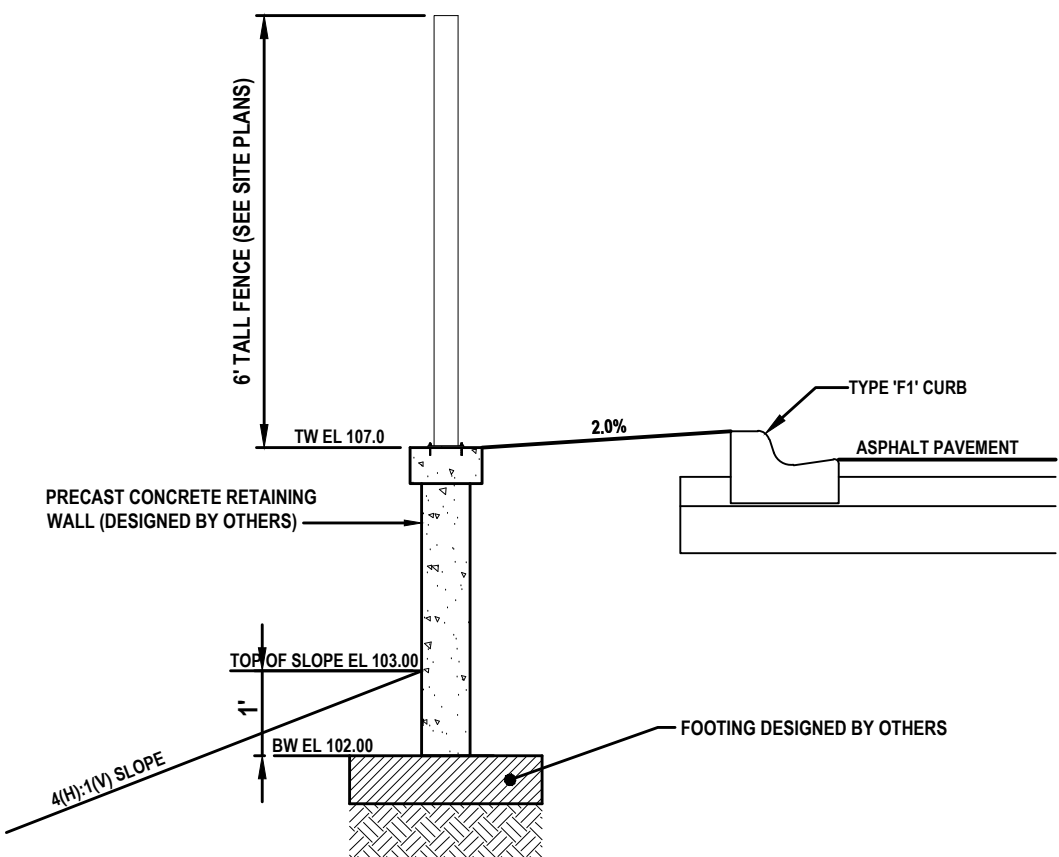
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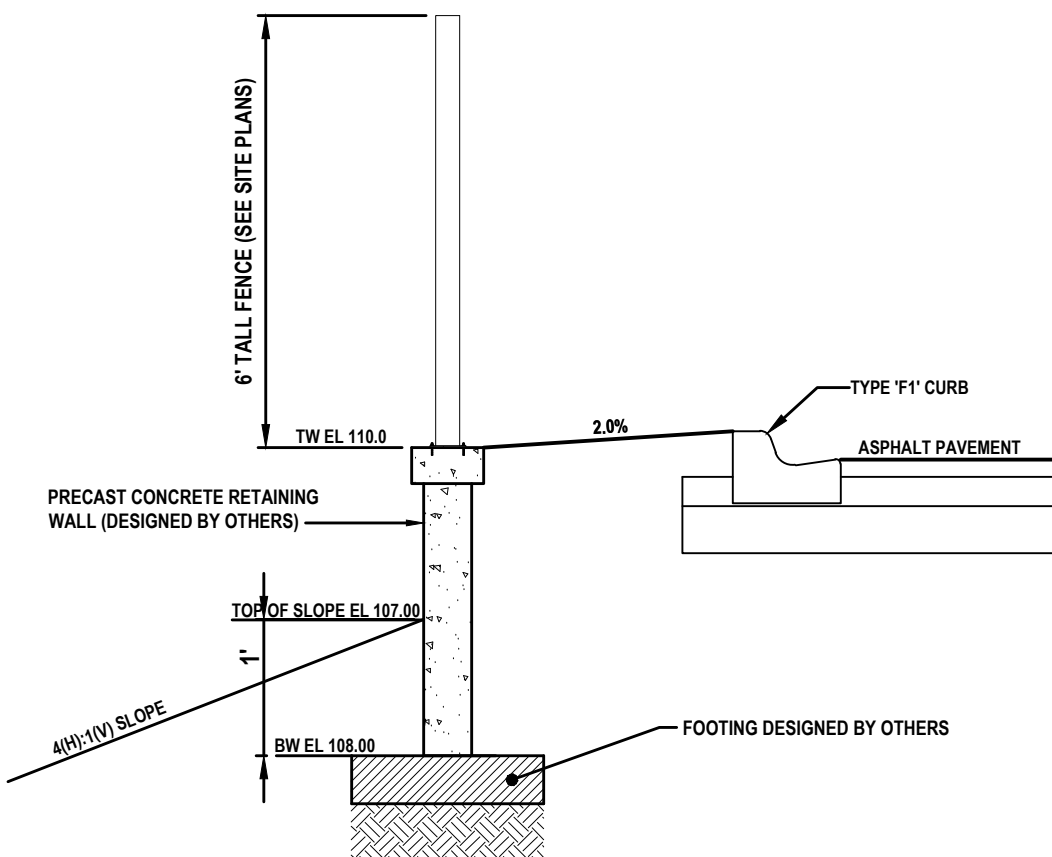
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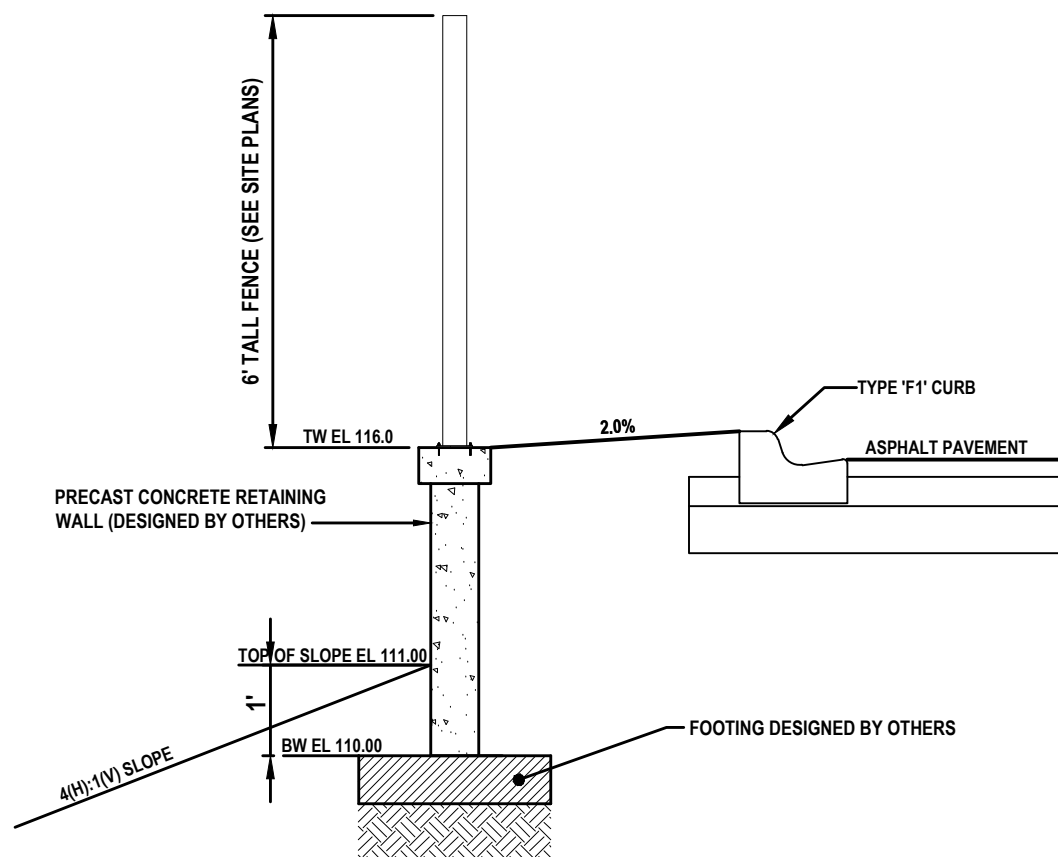
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NOT TO SCALE



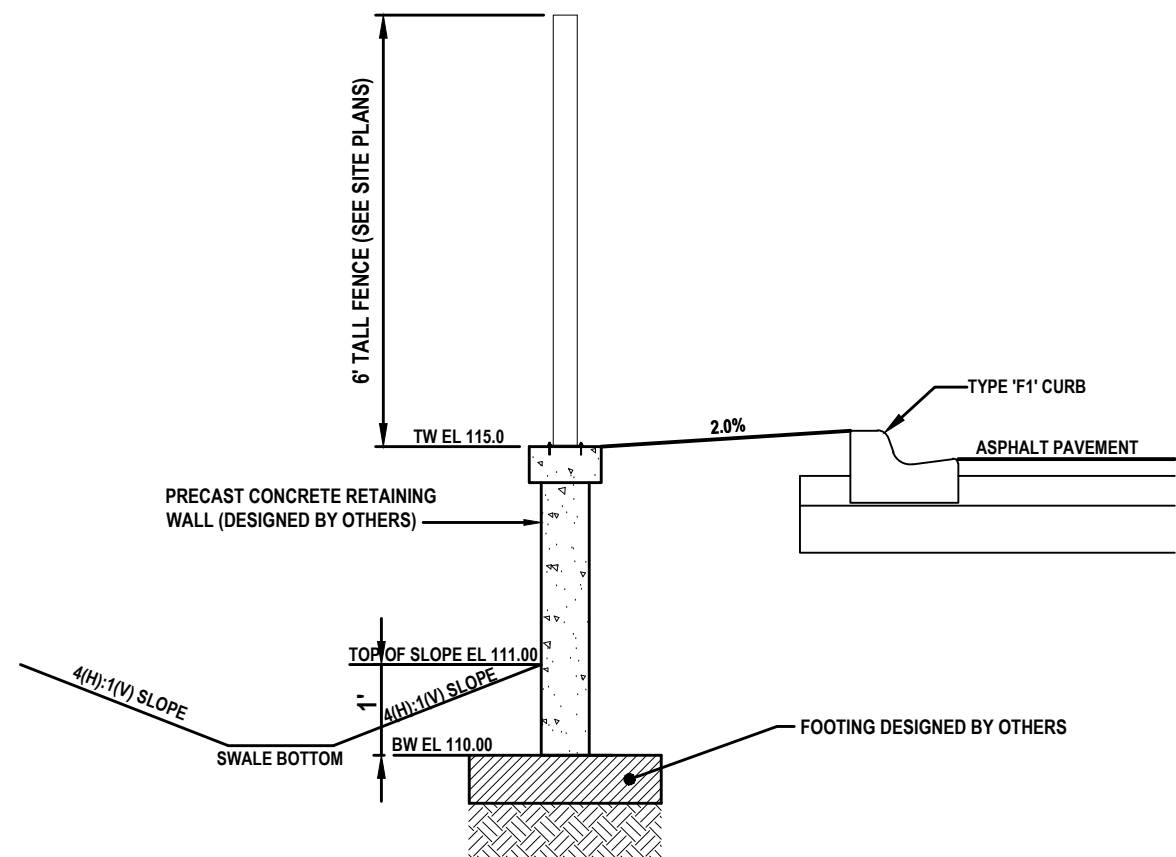
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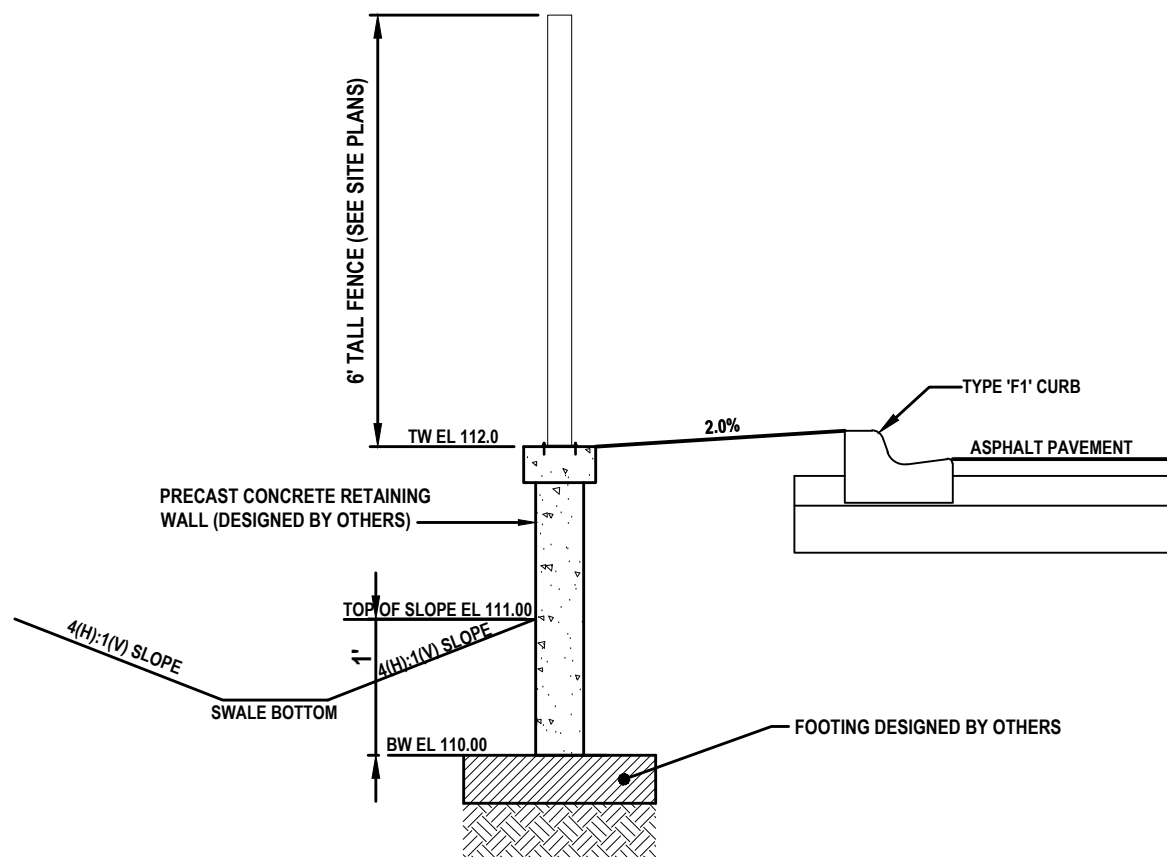
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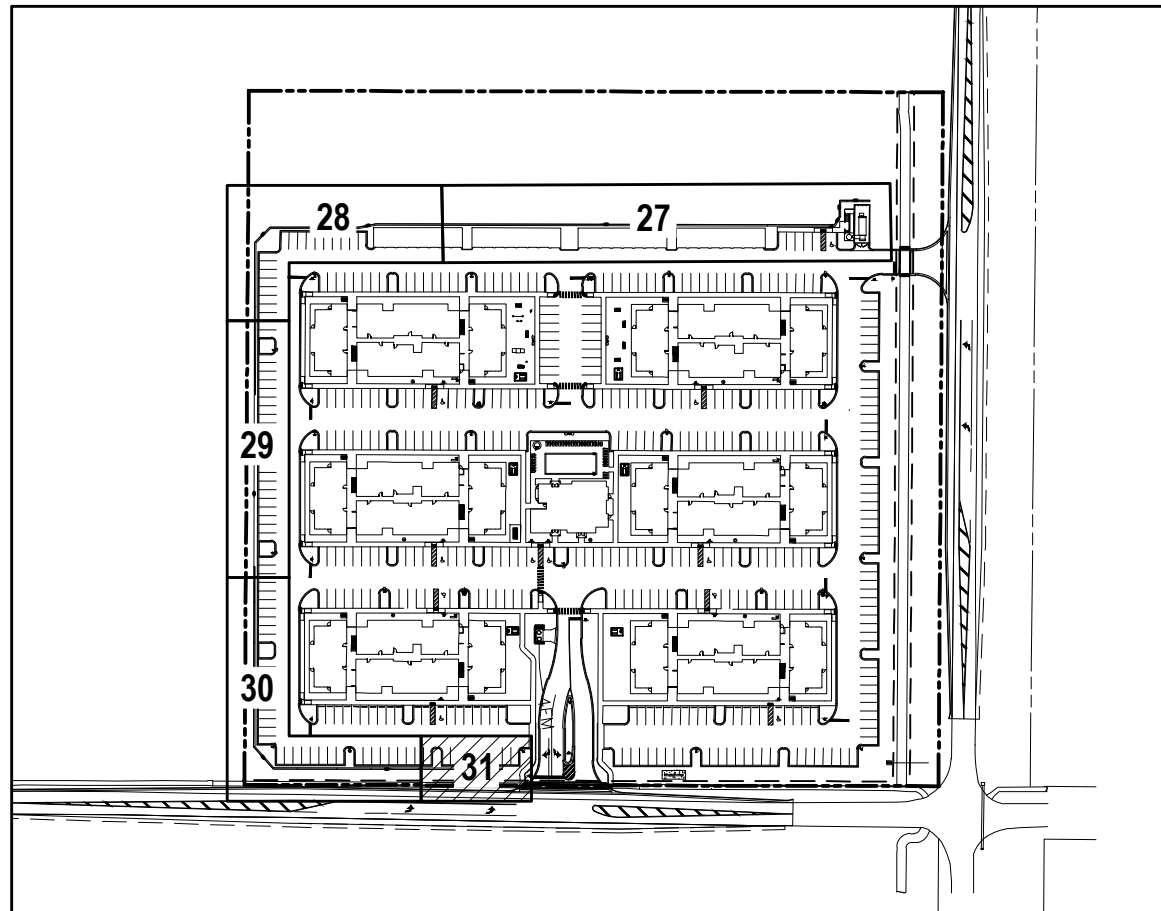
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NOT TO SCALE



RETAINING WALL TYPICAL CROSS SECTION

NOT TO SCALE



KEY MAP

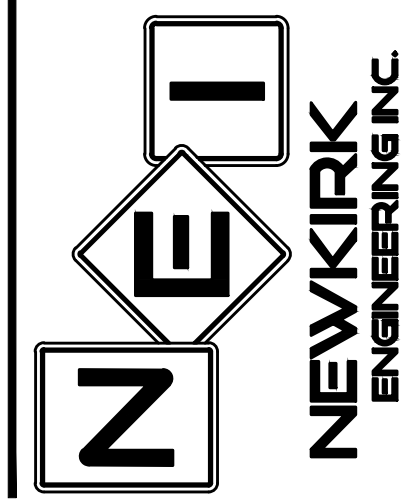
NOT TO SCALE

RETAINING WALL SUMMARY	
TYPE	LF
2' HEIGHT	125.8
3' HEIGHT	109.05
4' HEIGHT	193.25
5' HEIGHT	796.81
6' HEIGHT	55.93
TOTAL LF OF WALL	1280.84
# of EL CHANGES	17
# OF DIR CHANGES	9

REVISIONS

DATE	DESCRIPTION

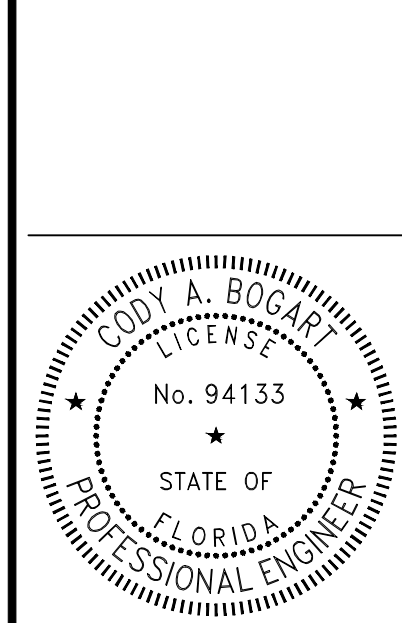
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RETAING WALL PLAN,
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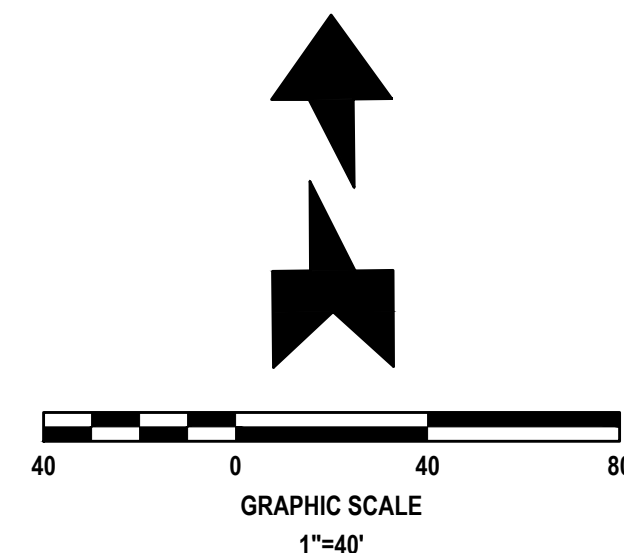
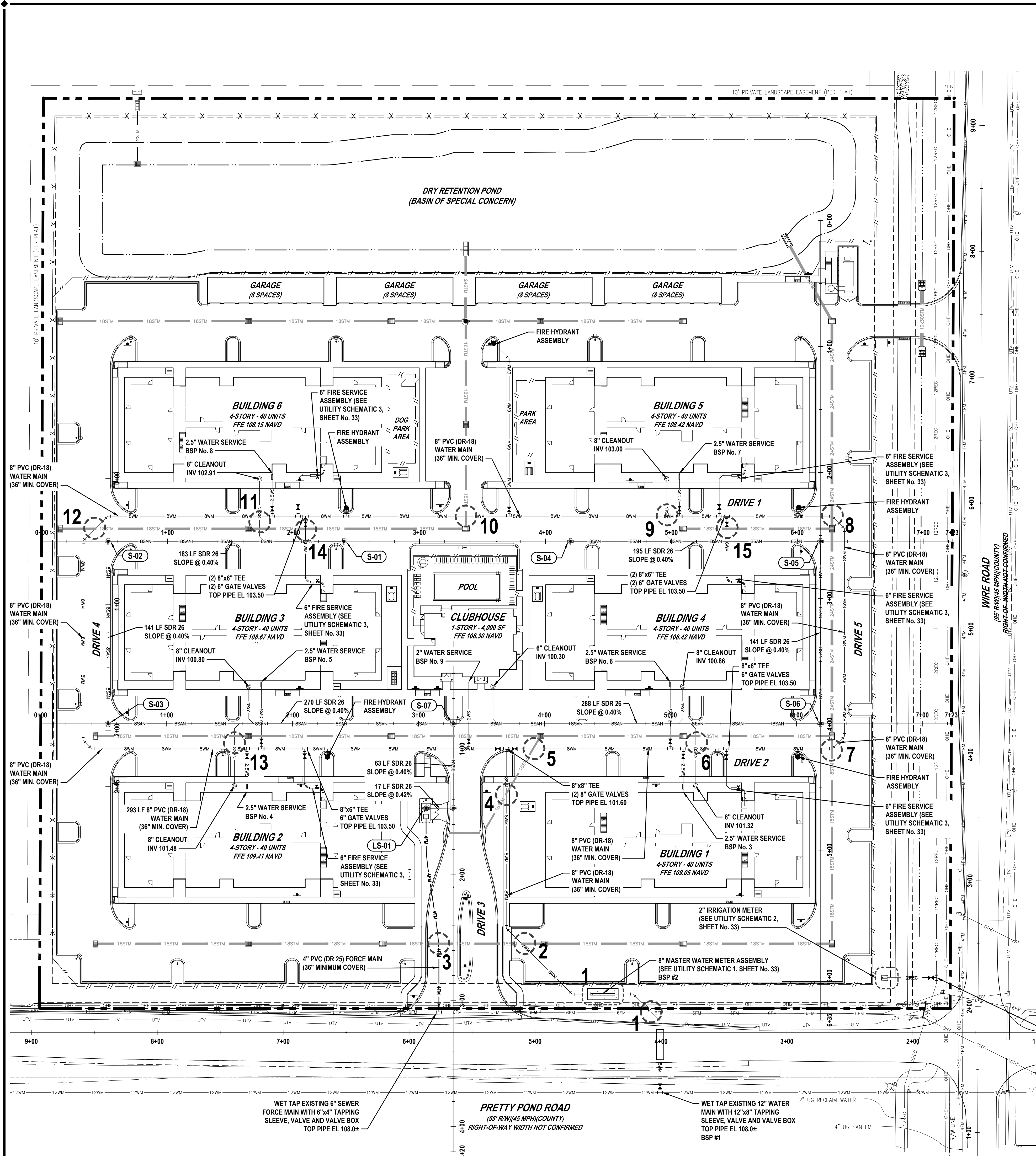
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DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	AS SHOWN
DRAWING NUMBER	

31



UTILITY LEGEND

- PROPOSED 11.25° BEND
- PROPOSED 22.5° BEND
- PROPOSED 45° BEND
- PROPOSED 90° BEND
- PROPOSED TEE
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED 8"x6" TEE, 6" GATE VALVE, 6" PVC DR-14, 6" DOUBLE DETECTOR CHECK VALVE ASSEMBLY (DDCVA) (PER CITY DETAIL W-12, SHEET No. 42) WITH ATTACHED FIRE DEPARTMENT CONNECTION WITH (2 - 2.5" WYE) STANDARD FDC THREADS (NO LOCKING CAPS) DETAIL SHEET No. 33
- PROPOSED 8"x2.5" SERVICE SADDLE, 2" CORPORATION STOP, 2.5" PE (SDR 9), 2.5" WATER METER AND 2.5" RPZ. SEE CITY DETAILS SHEET 42.
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED 10" PVC CLASS 150 (DR-18) WATER MAIN (36" MIN. COVER)
- PROPOSED 8" PVC CLASS 150 (DR-18) WATER MAIN (36" MIN. COVER)
- PROPOSED 6" PVC CLASS 150 (DR-18) WATER MAIN (36" MIN. COVER)
- PROPOSED 4" PVC CLASS 150 (DR-18) WATER MAIN (36" MIN. COVER)
- PROPOSED 2.5" PE 4710 (SDR 9) WATER SERVICE (30" MINIMUM COVER)
- PROPOSED 2" PE 4710 (SDR 9) WATER SERVICE (30" MINIMUM COVER)
- PROPOSED 6" PVC CLASS 200 (DR-14) FIRE SERVICE (36" MIN. COVER)
- PROPOSED 2" PE 4710 (SDR 9) RECLAIM MAIN (36" MIN. COVER)
- PROPOSED 10" PVC SDR 26 SANITARY MAIN SLOPE @ 0.40% MIN.
- PROPOSED 8" PVC SDR 26 SANITARY MAIN SLOPE @ 0.40% MIN.
- PROPOSED 8" PVC SDR 26 SANITARY SERVICE WITH 1.0% MIN. SLOPE
- PROPOSED 6" PVC SDR 26 SANITARY SERVICE WITH 2.0% MIN. SLOPE
- PROPOSED 4" PVC DR 25 FORCE MAIN (36" MIN. COVER)
- UTILITY CONFLICT (SEE DETAILS, SHEET No. 34)

REQUIRED FIRE FLOW:

"SITE DESIGNED IN ACCORDANCE TO THE NEW FIRE PREVENTION CODE AND NFPA EFFECTIVE JANUARY 1, 2015.

FLORIDA BUILDING CODE CONSTRUCTION TYPE: VA - PROTECTED

FIRE AREA: 59,560 SF

REQUIRED FIRE FLOW: 4,500 GPM @ 4 HOURS

FIRE SPRINKLER SYSTEM REDUCTION (75%): 3,375 GPM

REQUIRED FIRE FLOW (4,500 - 3,375): 1,125 GPM @ 4 HOURS

USE 1,250 GPM @ 3 HOURS

BASED ON NFPA 18.4.5.2.1, REDUCTION IN REQUIRED FIRE FLOW OF 75% SHALL BE PERMITTED WHEN THE BUILDING IS PROTECTED THROUGHOUT BY AN APPROVED SPRINKLER SYSTEM. THE RESULTING FIRE FLOW SHALL NOT BE LESS THAN 1,000 GPM.

SEWER STRUCTURE SCHEDULE

I.D.	STRUCTURE TYPE	TOP EL.	CONNECTIONS
LS-01	7" DIA WETWELL SEE DETAIL SHEET 35	107.50	10" PVC PIPE - E INV 98.00
S-01	48" DIA MANHOLE TYPE "J" BOT	107.41	8" PVC PIPE - W INV 101.18
S-02	48" DIA MANHOLE TYPE "J" BOT	106.11	8" PVC PIPE - E INV 100.43 8" PVC PIPE - S INV 100.33
S-03	48" DIA MANHOLE TYPE "J" BOT	106.80	8" PVC PIPE - E INV 99.65 8" PVC PIPE - N INV 99.75
S-04	48" DIA MANHOLE TYPE "J" BOT	107.17	8" PVC PIPE - E INV 101.30
S-05	48" DIA MANHOLE TYPE "J" BOT	106.70	8" PVC PIPE - W INV 100.51 8" PVC PIPE - S INV 100.41
S-06	48" DIA MANHOLE TYPE "J" BOT	106.70	8" PVC PIPE - W INV 99.73 8" PVC PIPE - N INV 99.83
S-07	48" DIA MANHOLE TYPE "J" BOT	107.30	8" PVC PIPE - S INV 98.46 8" PVC PIPE - E INV 98.56 8" PVC PIPE - W INV 98.56
S-08	48" DIA MANHOLE TYPE "J" BOT	106.73	8" PVC PIPE - N INV 98.19 10" PVC PIPE - W INV 98.09

WET TAP EXISTING 12" RECLAIM MAIN WITH 12"x2" DOUBLE STRAP TAPPING SADDLE (STAINLESS STEEL) 2" CORPORATION STOP TOP PIPE EL 104.0±

WET TAP EXISTING 6" SEWER FORCE MAIN WITH 6"x4" TAPPING SLEEVE, VALVE AND VALVE BOX TOP PIPE EL 108.0±

PRETTY POND ROAD
(55' RW/45 MPH/COUNTY)
RIGHT-OF-WAY WIDTH NOT CONFIRMED

WET TAP EXISTING 12" WATER MAIN WITH 12"x8" TAPPING SLEEVE, VALVE AND VALVE BOX TOP PIPE EL 108.0± BSP #1

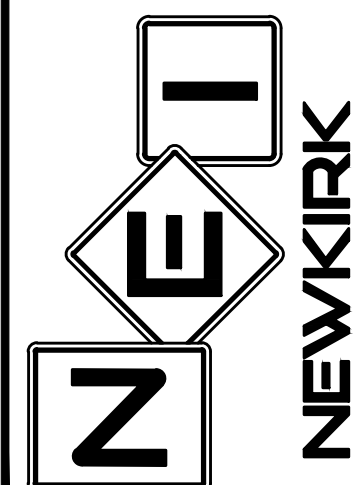
2" UG RECLAIM WATER

4" UG SAN FM

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11/29/22	CITY COMMENTS

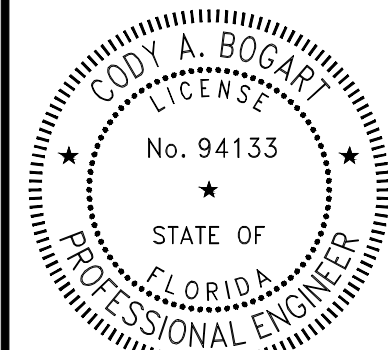
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OVERALL UTILITY PLAN SUMMIT APARTMENTS PRETTY POND ROAD ZEPHYRHILLS, FL 33540

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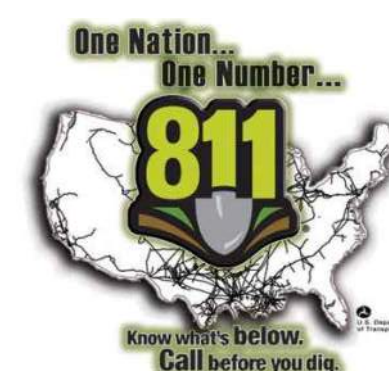
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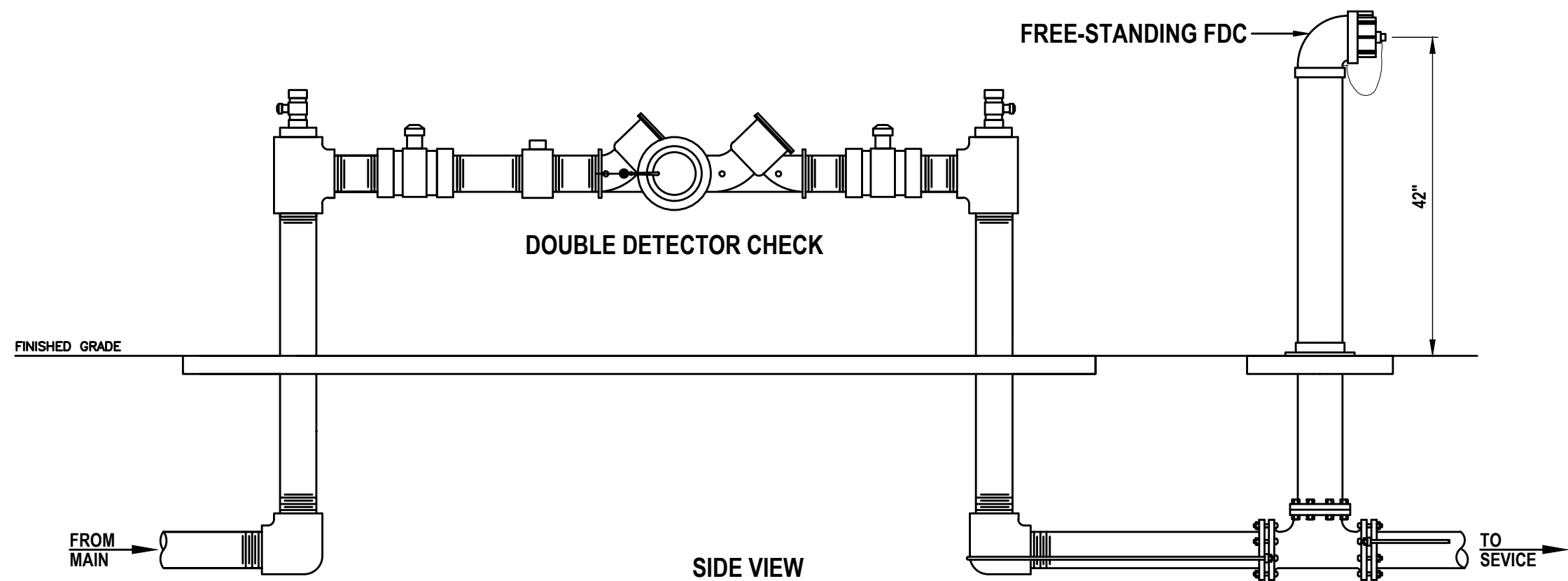
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DRAWING NUMBER

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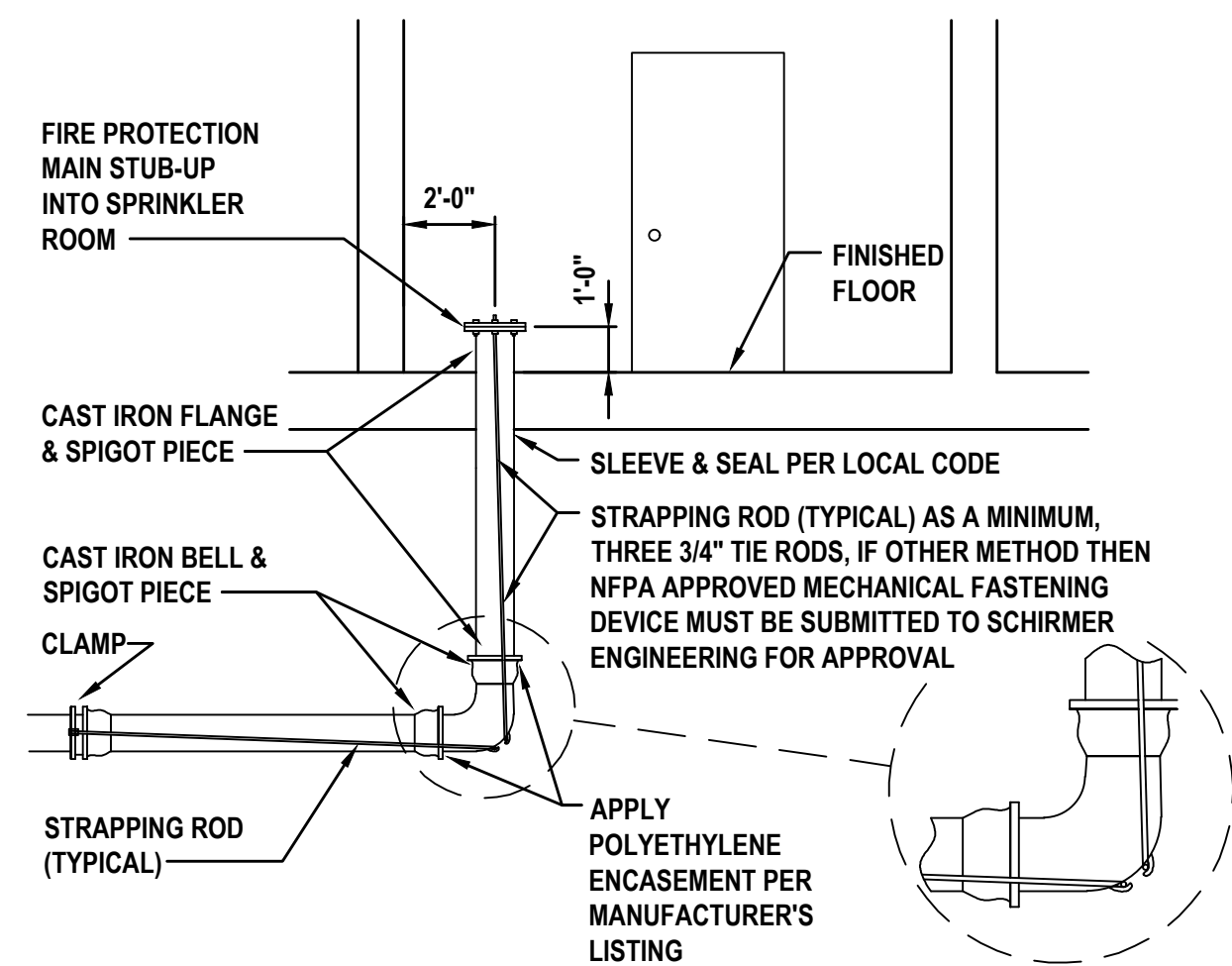


WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.



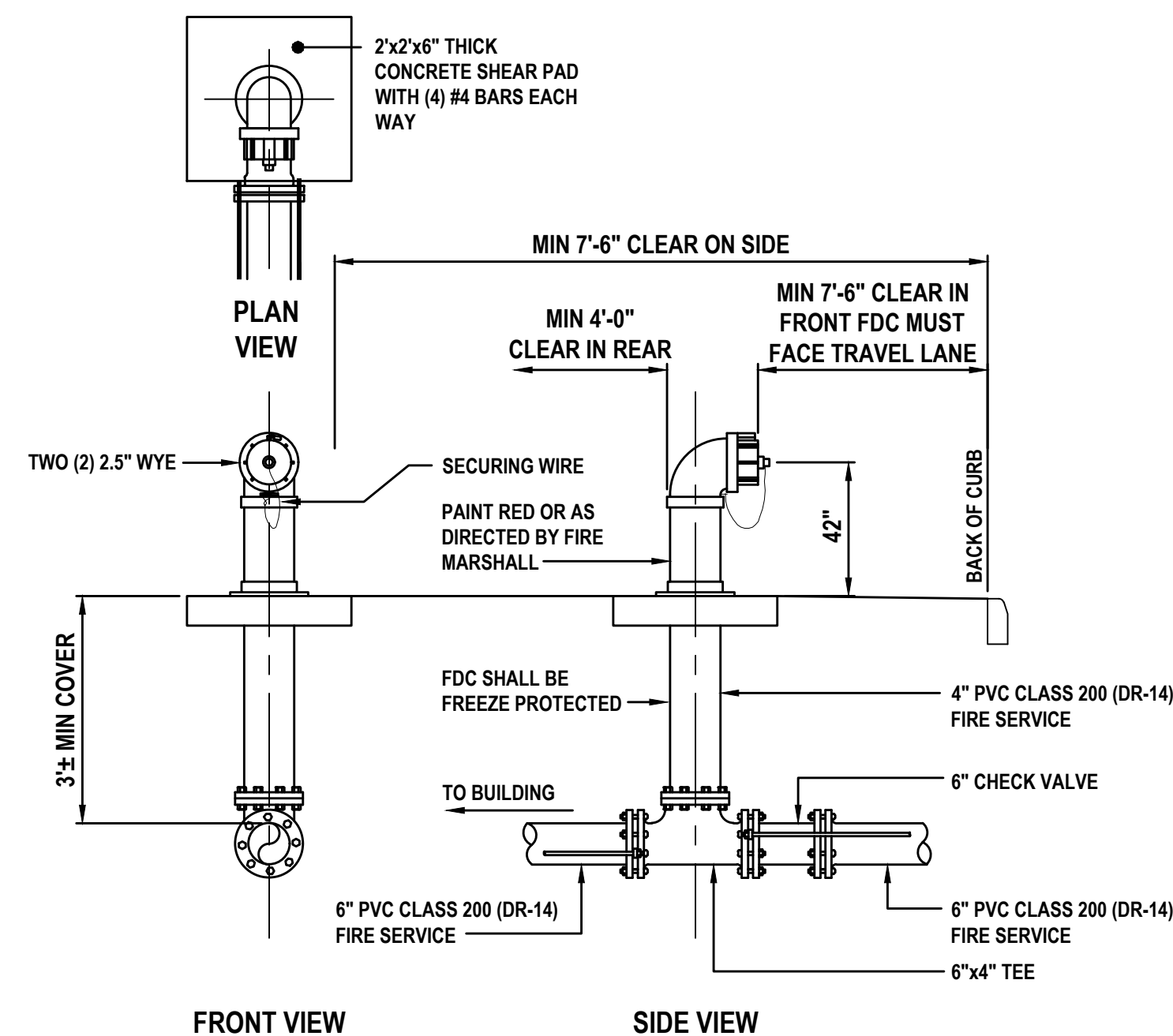
DDC TO FDC DETAIL

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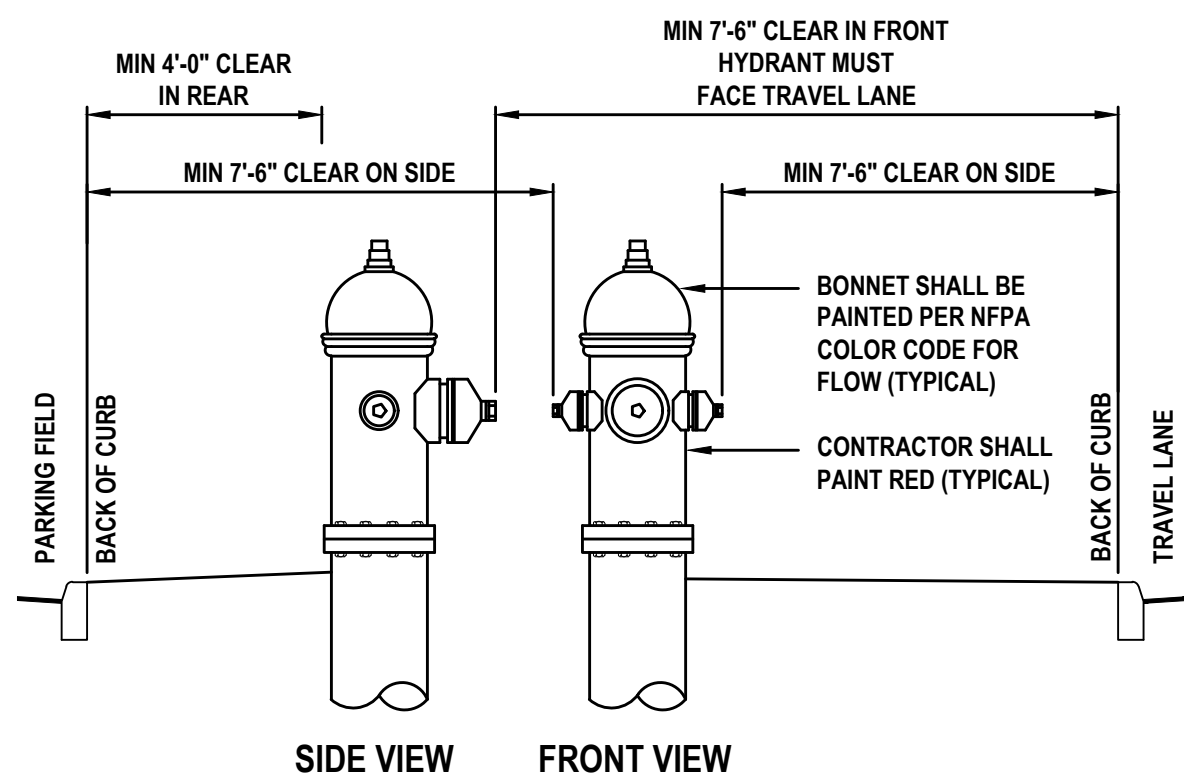
UNDERGROUND RESTRAINT DETAIL

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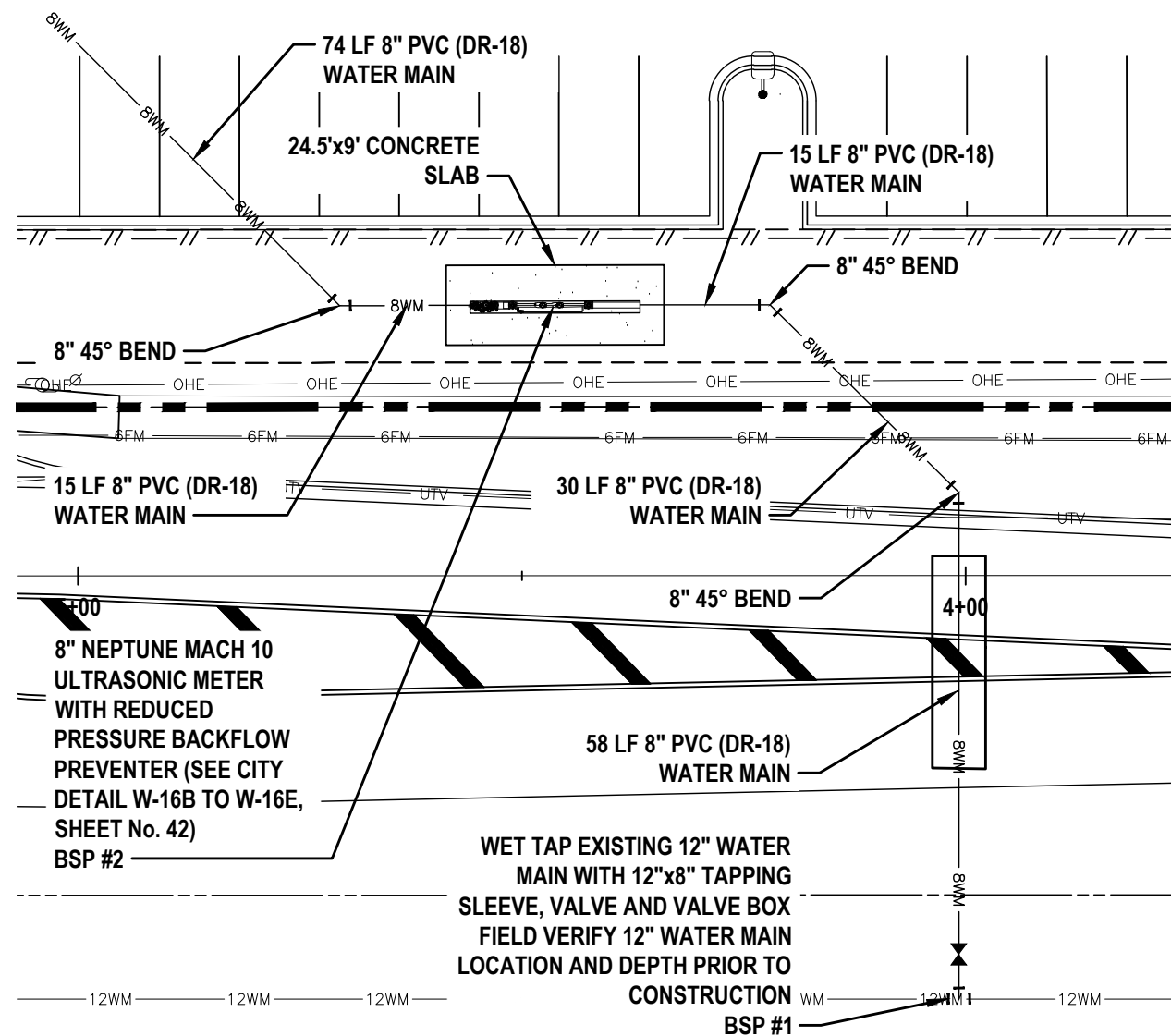
FDC (FREE STANDING) DETAIL

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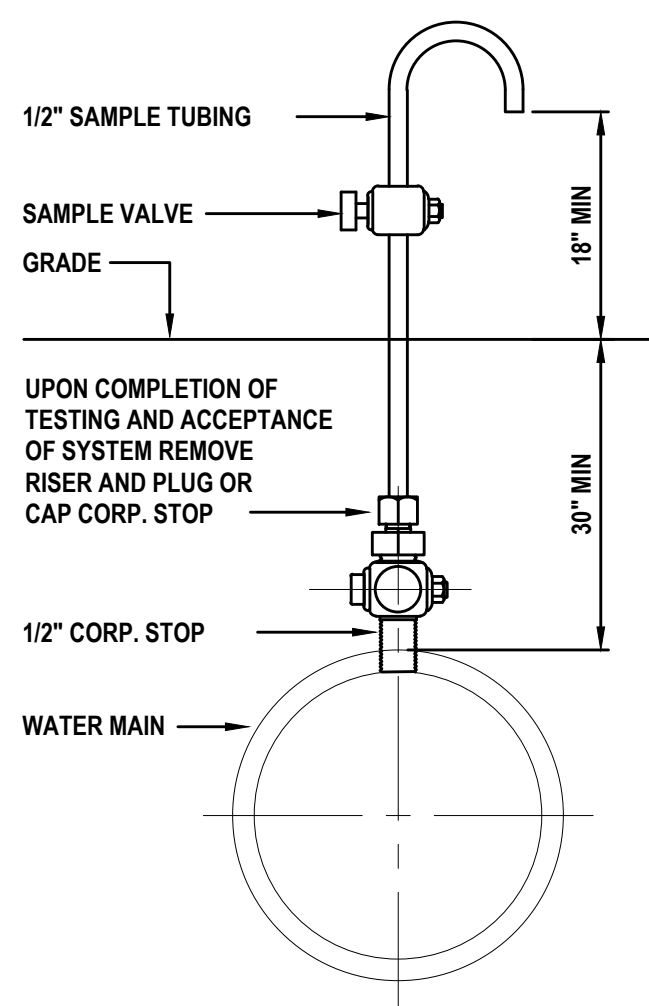
TYPICAL FIRE HYDRANT CLEARANCE REQUIREMENT

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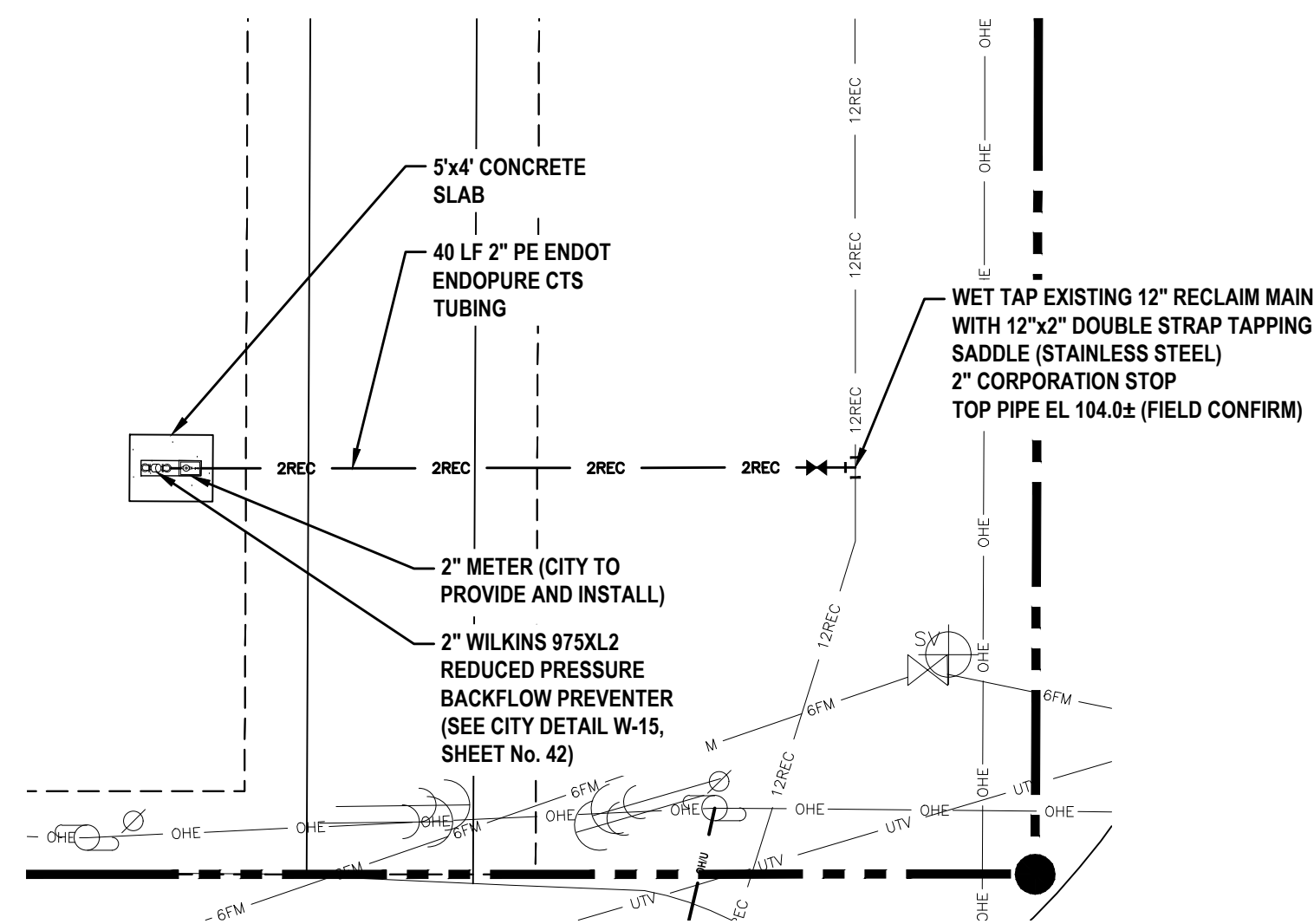
UTILITY SCHEMATIC DETAIL 1

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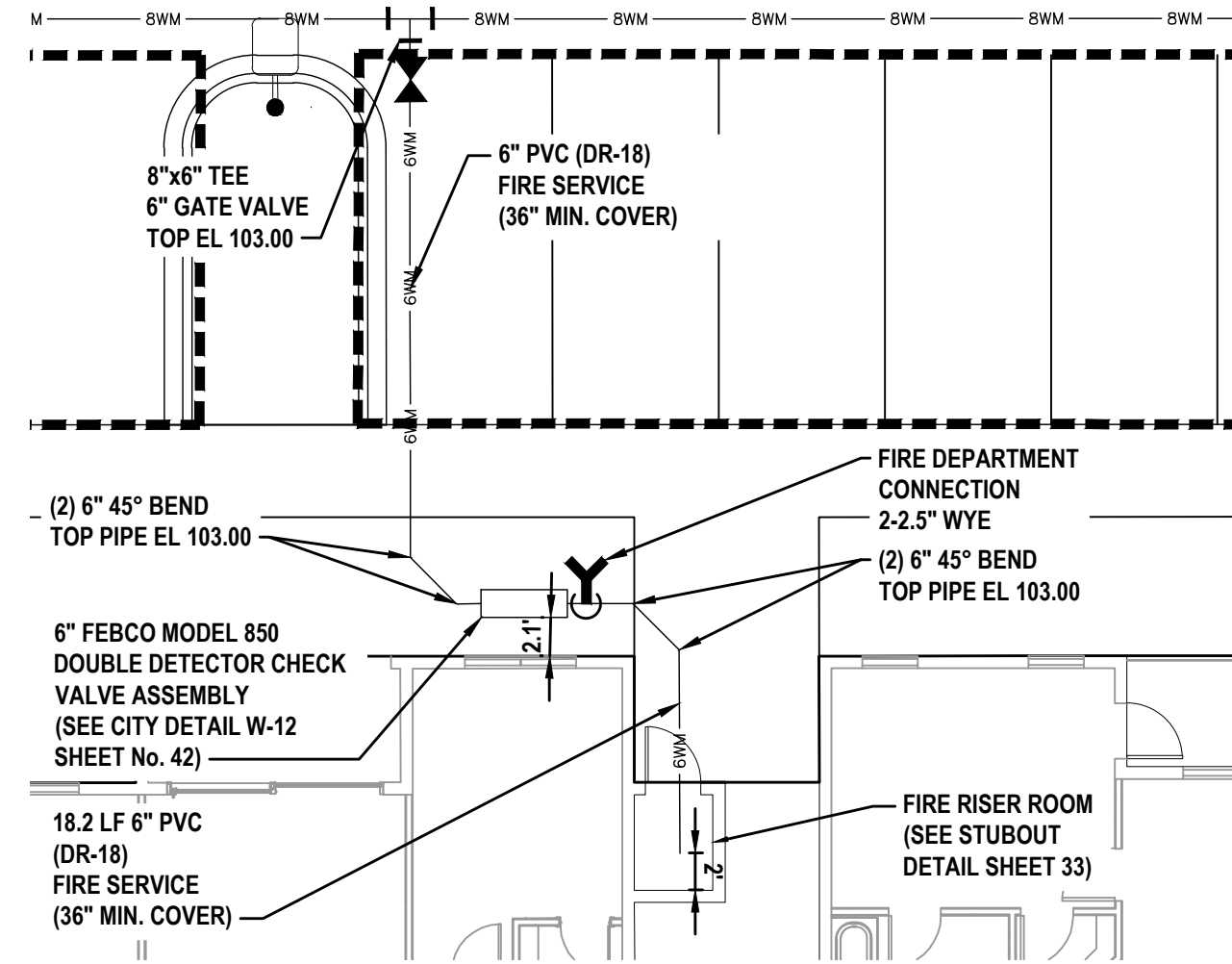
BACTERIOLOGICAL SAMPLE POINT DETAIL

NOT TO SCALE



UTILITY SCHEMATIC DETAIL 2

NOT TO SCALE



UTILITY SCHEMATIC DETAIL 3 - FIRE SERVICE LINES

NOT TO SCALE

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING AT CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)			
VACUUM SANITARY SEWER			
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER (4)			
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM			

- (1) WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
- (2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- (3) 3 FT FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
- (4) RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

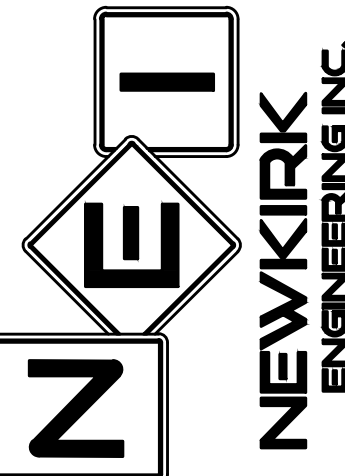
TABLE 1: CLASSES OF EMBEDMENT AND BACKFILL MATERIALS

ASTM D 2321 MATERIAL CLASS	ASTM D 2487 USCS SOIL GROUP	MATERIAL TYPE	% PASSING			ATTERBERG LIMITS	
			1 1/2 IN.	NO. 4	NO. 200	LL	PI
IA	NONE	MANUFACTURED OPEN GRADED AGGREGATES	100%	≤10%	<5%	NON PLASTIC	
IB	NONE	MANUFACTURED DENSE GRADED AGGREGATES	100%	≤50%	<5%	NON PLASTIC	
II	GW	COARSE-GRAINED SOILS, CLEAN	100%	<50% OF "COARSE FRACTION"	<5%	NON PLASTIC	
	GP						
	SW						
	SP						
III	GM	COARSE-GRAINED SOILS W/ FINES	100%	<50% OF "COARSE FRACTION"	12% TO 50%		
	GC						
	SM						
	SC						
IV-A	ML	FINE-GRAINED SOILS	100%	100%	>50%	<50	<4 OR <"A" LINE
	CL						>4 OR >"A" LINE

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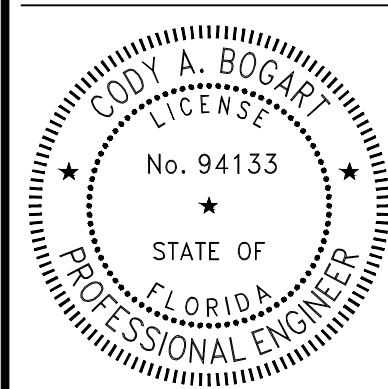
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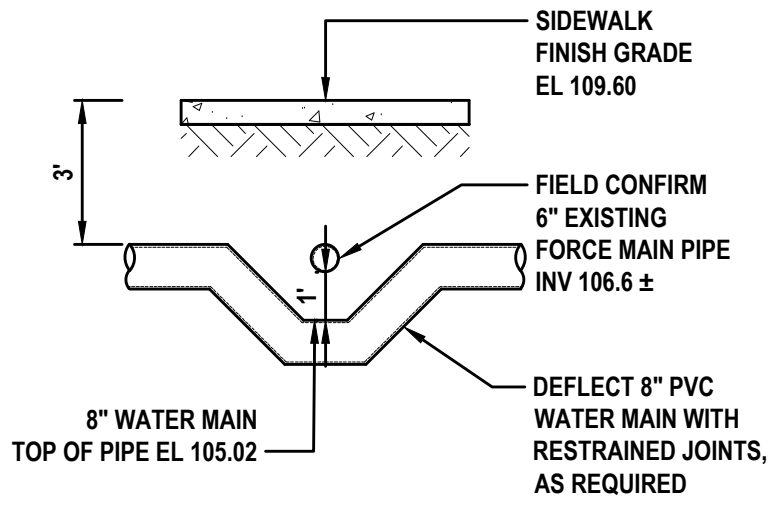
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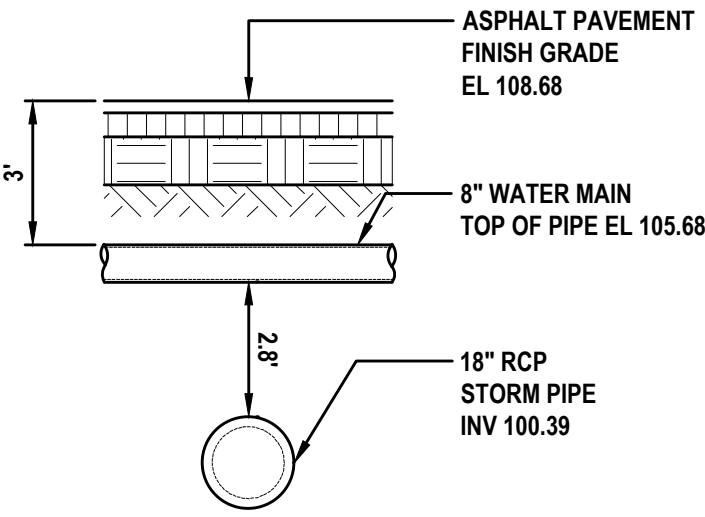
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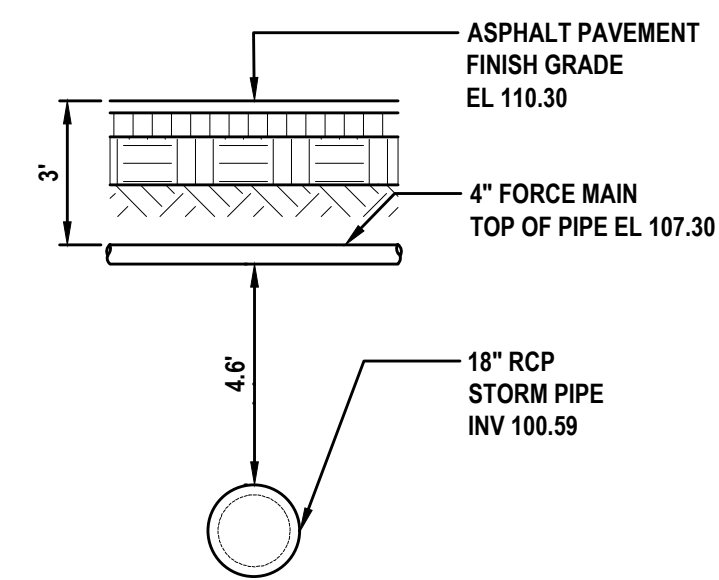
33



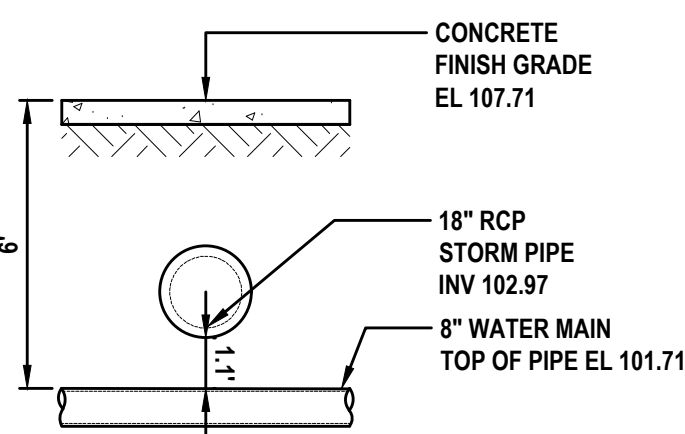
CONFLICT POINT 1



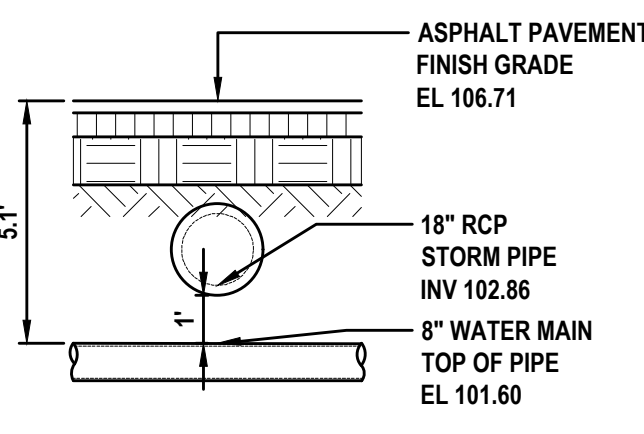
CONFLICT POINT 2



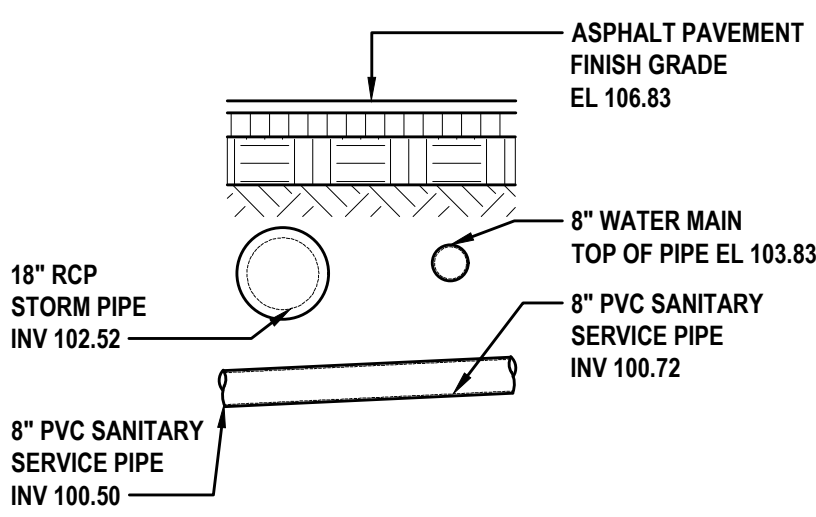
CONFLICT POINT 3



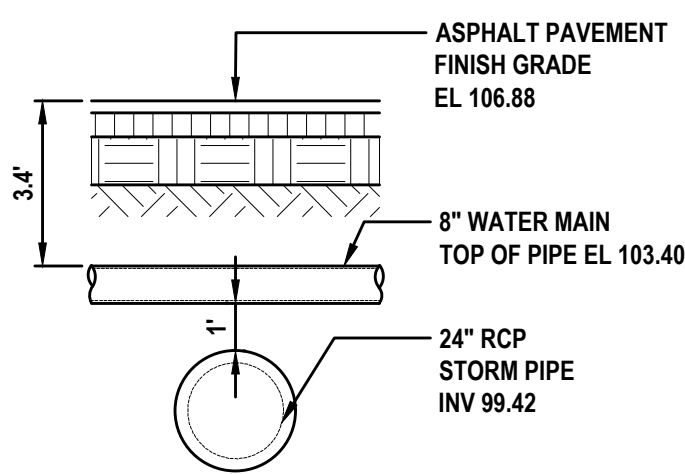
CONFLICT POINT 4



CONFLICT POINT 5

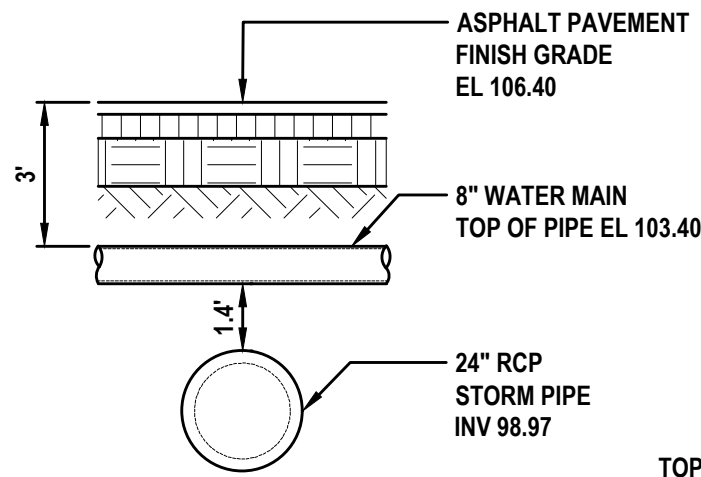


CONFLICT POINT 6

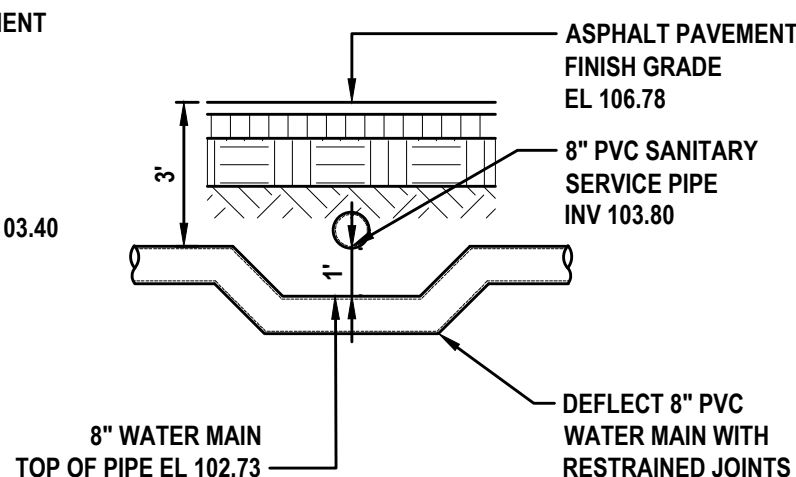


CONFLICT POINT 7

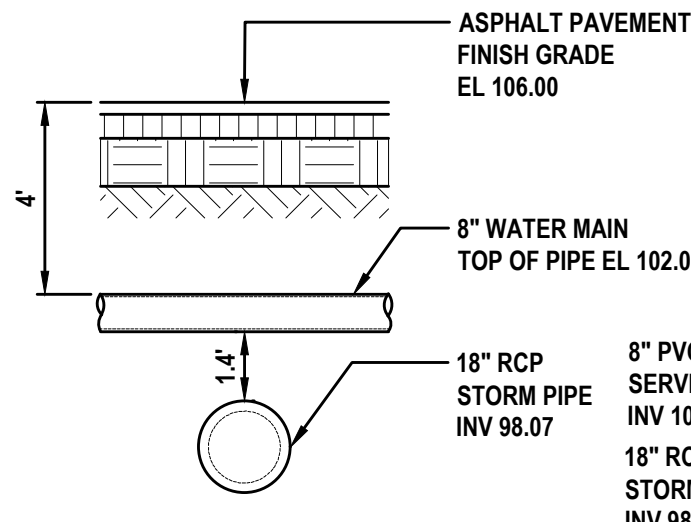
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NOT TO SCALE



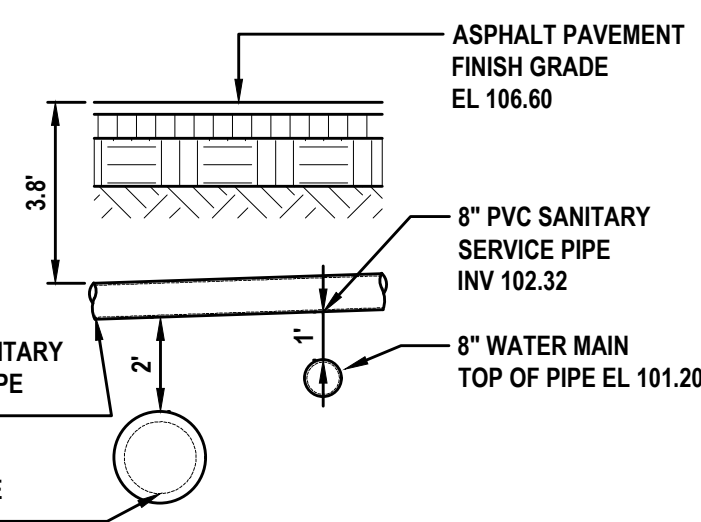
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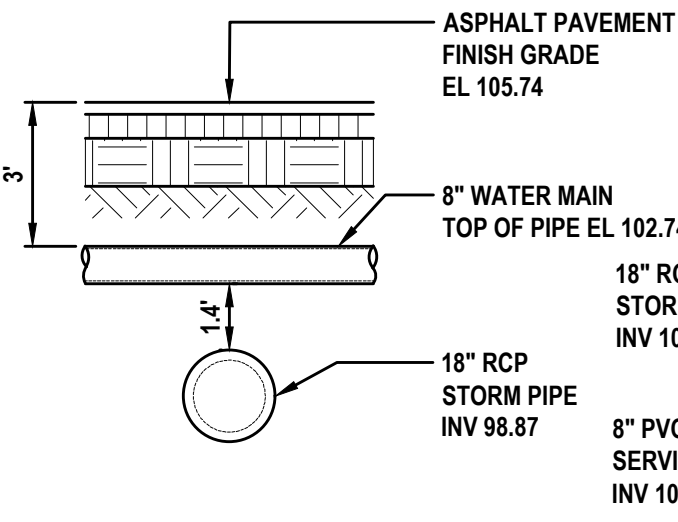
CONFLICT POINT 9



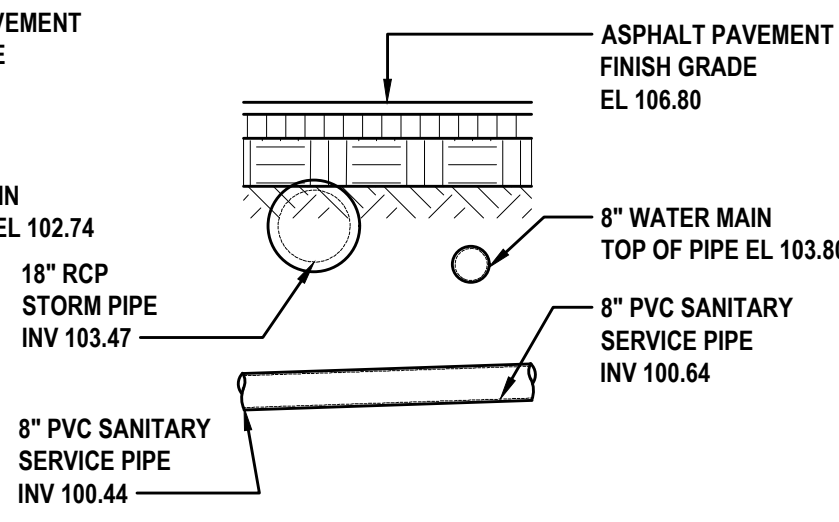
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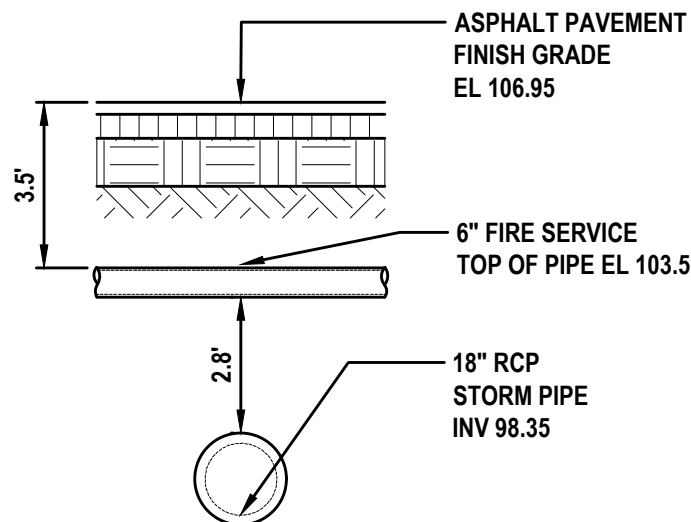
CONFLICT POINT 11



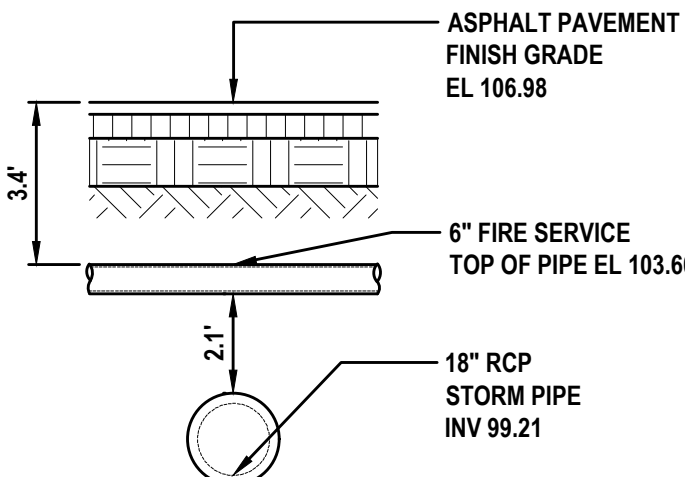
CONFLICT POINT 12



CONFLICT POINT 13



CONFLICT POINT 14



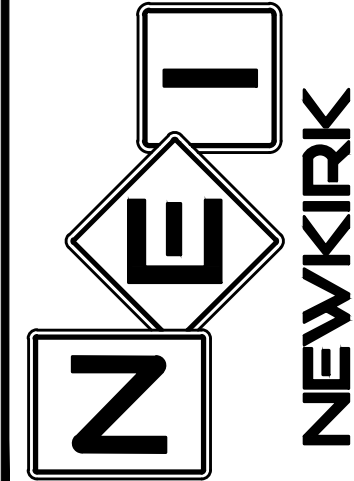
CONFLICT POINT 15

UTILITY CONFLICT DETAIL
NOT TO SCALE

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

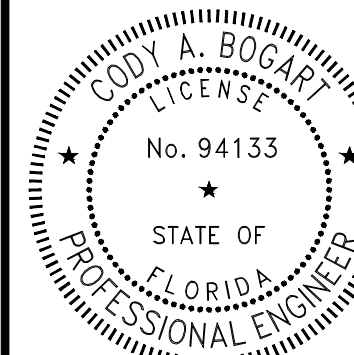
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UTILITY CONFLICT DETAILS
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HHN
SCALE:	AS SHOWN

DRAWING NUMBER

34

RILEY & Company, Inc. (ECONO - GP)

SCOPE: Supply one complete ECONO-GP Pre-Fab Lift Station, per design.

Pumps shall be capable of grinding and pumping domestic & commercial sewage.

Complete system shall be supplied by:

RILEY & Company, Inc.
Sanford, FL 32773 (Ph. 407-265-9963)

NO SUBSTITUTIONS - NO ALTERNATES

PUMPS: Submersible grinder pumps shall be HOMA Model GRP. The pumps shall be installed in the ECONO-GP FRP wetwell utilizing a dual slide rail system. The grinder unit shall be capable of macerating materials normally found in domestic and commercial sewage into a fine slurry which will pass through the pump and the Sch.80 PVC discharge piping.

Oil filled motors are not considered equal to air filled motors and therefore will not be considered an equal to the HOMA PUMPS.

Stator winding shall be open type with Class F insulation and shall be heat-shrink fitted into the stator housing. The use of pins, bolts, or other fastening devices is not acceptable.

A heat sensor thermostat shall be attached to the top end of the motor winding and shall be connected in series with the magnetic contactor coil in the control panel to stop motor if winding temperature exceeds 140 C., but shall automatically reset when the winding temperature returns to normal. Two heat sensor thermostats shall be used on three phase motors.

The pump motor grinder shaft shall be AISI 430F SS threaded to take the pump impeller and the grinder impeller. Upper & lower mechanical seals shall be Silicon Carbide vs Silicon Carbide.

DUPLEX CONTROL PANEL:

Control panel shall be assembled and built by a TUV (UL508A CERTIFIED) manufacturing facility.

The Enclosure shall be NEMA 4X, Fiberglass, minimum 18" high x 16" wide x 6" deep with padlockable draw latches.

The enclosure shall have external mounting feet to allow for wall mounting. All hardware shall be stainless steel.

The following components shall be mounted through the enclosure:

- 1- ea. Red Alarm Beacon (Light)
- 1- ea. Alarm Horn
- 1- ea. Generator Receptacle w/ weatherproof cover
- 1- ea. Alarm Silence Pushbutton

The backpanel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.

The following components shall be mounted to backpanel:

- 2- ea. Motor Contactors
- 1- ea. Silence Relay
- 1- ea. Duplex Alternator
- 20- ea. Terminals For Field Connections
- 6- ea. Terminals For Motor Connections (Single Phase Only)
- 3- ea. Grounding Lugs

The following components shall be included:

- 1- ea. Main Circuit Breaker
- 1- ea. Emergency Circuit Breaker
- 1- ea. Mechanical Interlock For Emergency And Main Breakers
- 2- ea. Short Circuit Protectors
- 1- ea. Control Circuit Breaker
- 1- ea. Hand-Off-Auto Selector Switches
- 2- ea. Pump Run Pilot Lights

FASTNERS & APPURTANCES: All fasternes, lifting cables, float cable bracket, hinges, and appurtances shall be made of AISI 304SS.

A 304SS slide/latch assembly shall be provided tor holding the doors open on the wetwell and valve box.

Slide rails shall be made of SCH.40 AISI 304SS pipe.

Pump lifting cables shall be made of AISI 304 SS.

Pump lifting bales shall be made of AISI 304 SS.

EXECUTION:

Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the drawing.

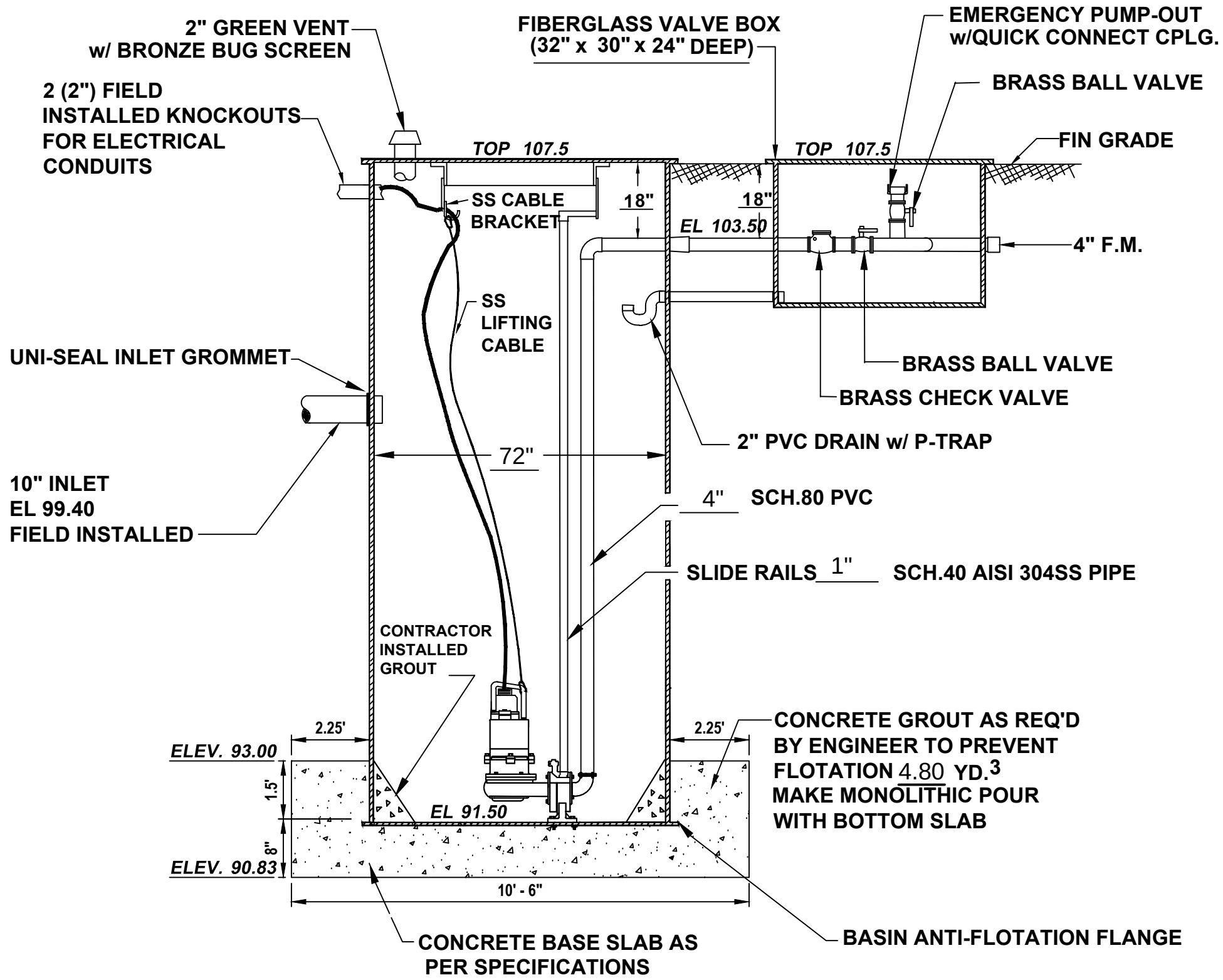
INSPECTION & TESTING: A factory representative shall be provide for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of complete system.

Megger the motors. The pump motors shall be megged out prior to the start-up to ensure that the insulation of the pump motor/cable is intact.

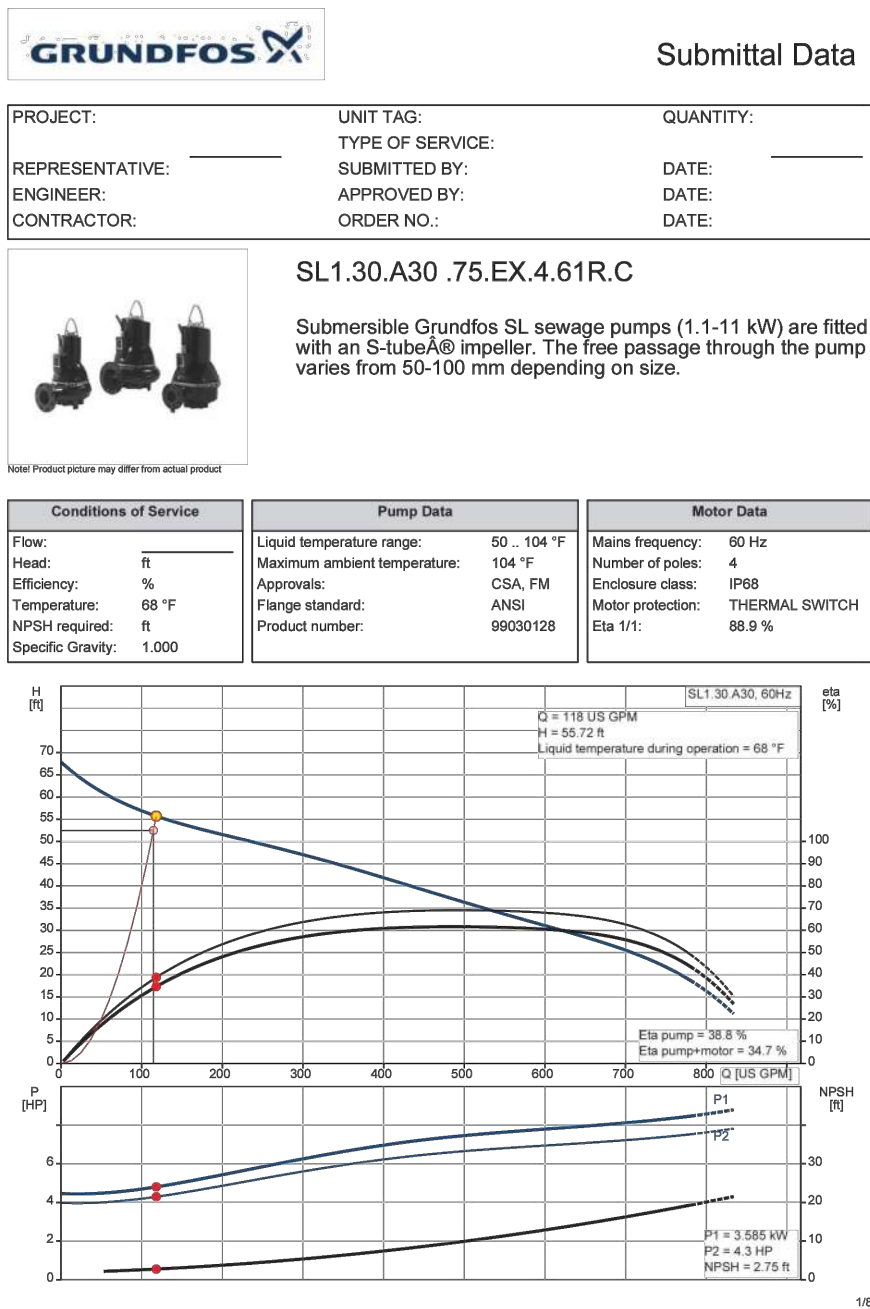
The pump controls and pumps shall be checked for mechanical reliability and proper operation.

PUMP DATA		ELEVATIONS	
PRIMARY PUMP CAPACITY	118 GPM	TOP OF WETWELL	107.50
PRIMARY TDH	52.5 'TDH	INLET INVERT	99.40
PUMP MANUFACTURER	GRUNDFOS	HIGH LEVEL ALARM	98.90
PUMP MODEL #	SL1.30.A30.75. EX.4.61R.C	2nd PUMP ON	95.50
R.P.M.	1750	1st PUMP ON	94.50
HORSEPOWER	7.5	PUMPS OFF	93.00
ELECTRICAL/ VOLTS / PHASE	460/3	BOTTOM OF WETWELL	91.50
PUMP DISCHARGE SIZE	4"	WETWELL DIAMETER	84"

LIFT STATION PLAN



LIFT STATION SECTION



COMPONENT SPECIFICATIONS:

All circuit breakers shall be molded thermal magnetic. The mechanical interlock shall prevent the normal and emergency main breakers being energized at the same time.

An emergency generator receptacle shall be supplied in accordance with DEP standards. The generator receptacle shall be adequately sized to meet the equipment operating conditions.

All motor short circuit protection devices must provide for undervoltage release and class 10 overload protection on all three phases. Visible trip indication, test, and reset capability must be provided without opening inner door.

Open frame, across the line, contactors shall be rated per IEC standards and properly sized per the motor requirements. Contactors shall provide for safe touch power and control terminals.

Lightning Arrestor shall meet or exceed the requirements of ANSI/IEEE Std. C62.21-1984 section 8.6.1. and 8.7.3 shall be supplied by electrician and mounted on the bottom side of the switch disconnect ahead of the pump control panel.

A green pilot light shall be supplied for each motor. The pilot light shall illuminate each time the motor is called to run.

A Red pilot light shall be supplied for control power. The pilot light shall illuminate when the control power is available inside the control panel.

Relays shall be ice-cube plug in type. Relay contacts shall be rated 10 amp minimum, DPDT.

Twenty (20) terminals shall be supplied for field connections.

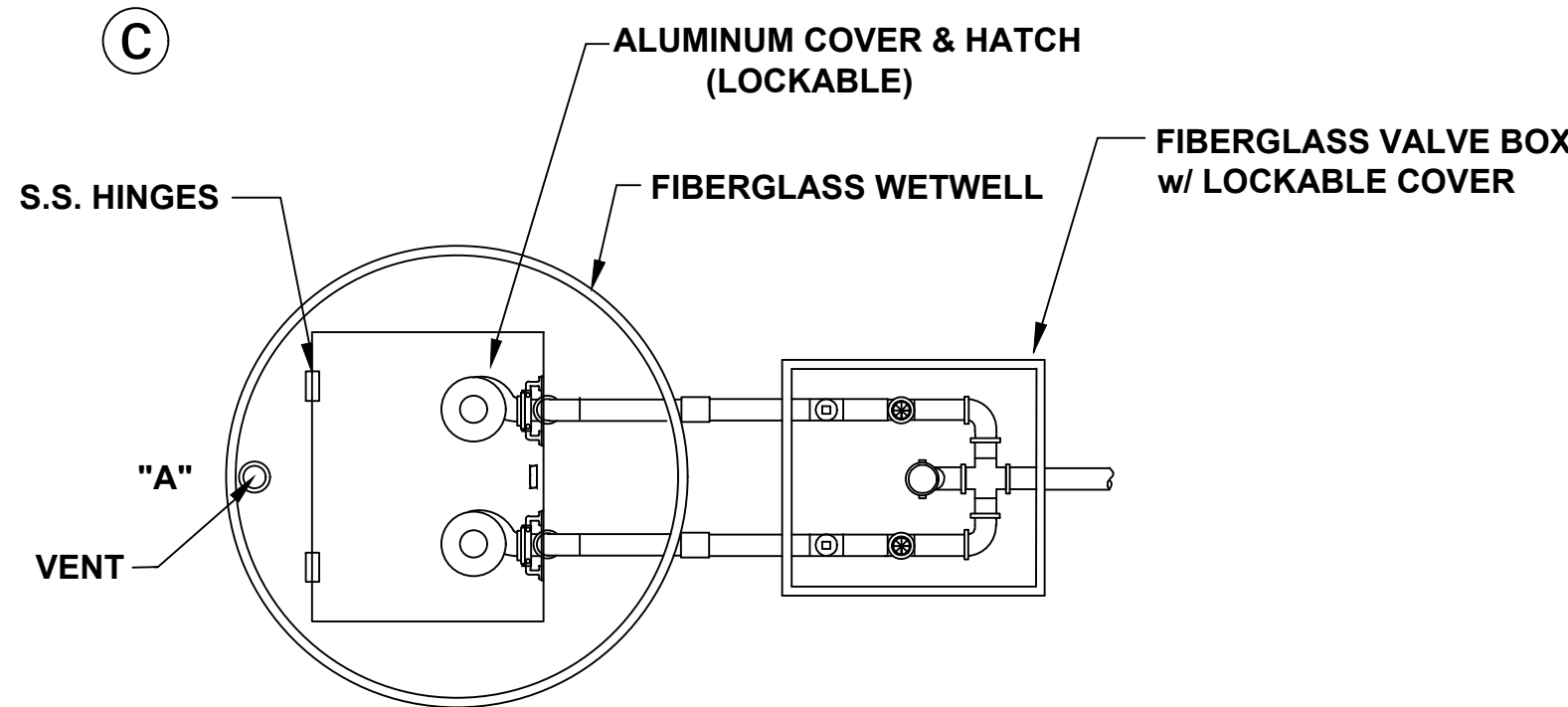
The terminals shall be rated 25 amps minimum.

Each motors over-temperature contact shall be connected to the terminal strip and shall open a contact to de-energize the appropriate motor upon a high temperature within the motor.

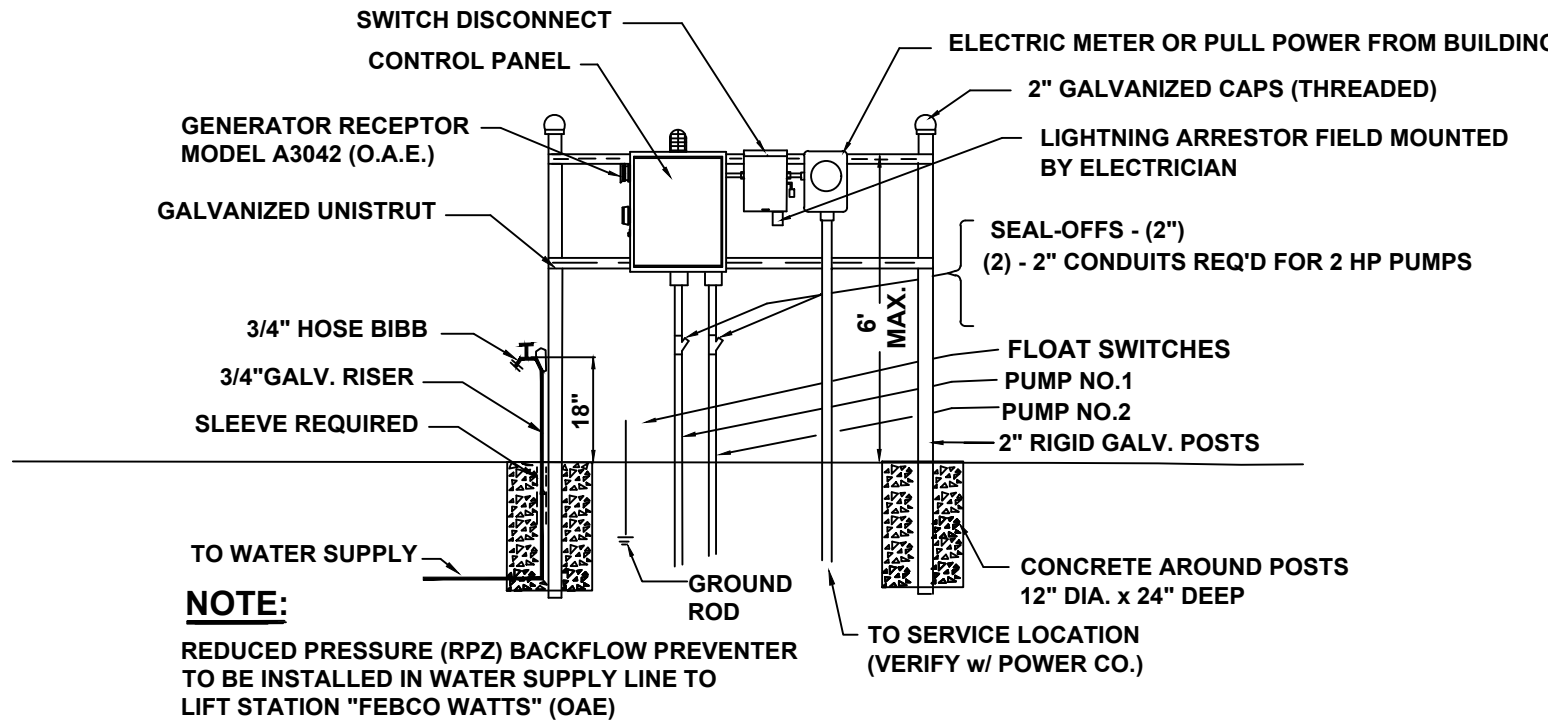
Ground lugs shall be supplied and appropriately sized for each motor and for service entrance.

MISCELLANEOUS:

The control panel shall be assembled by a TUV (UL508A Certified) manufacturing facility.



NOTE: PUMP CONTROL PANEL SHALL BE LOCATED 3 FEET FROM WETWELL PERIMETER AT POINT "A"

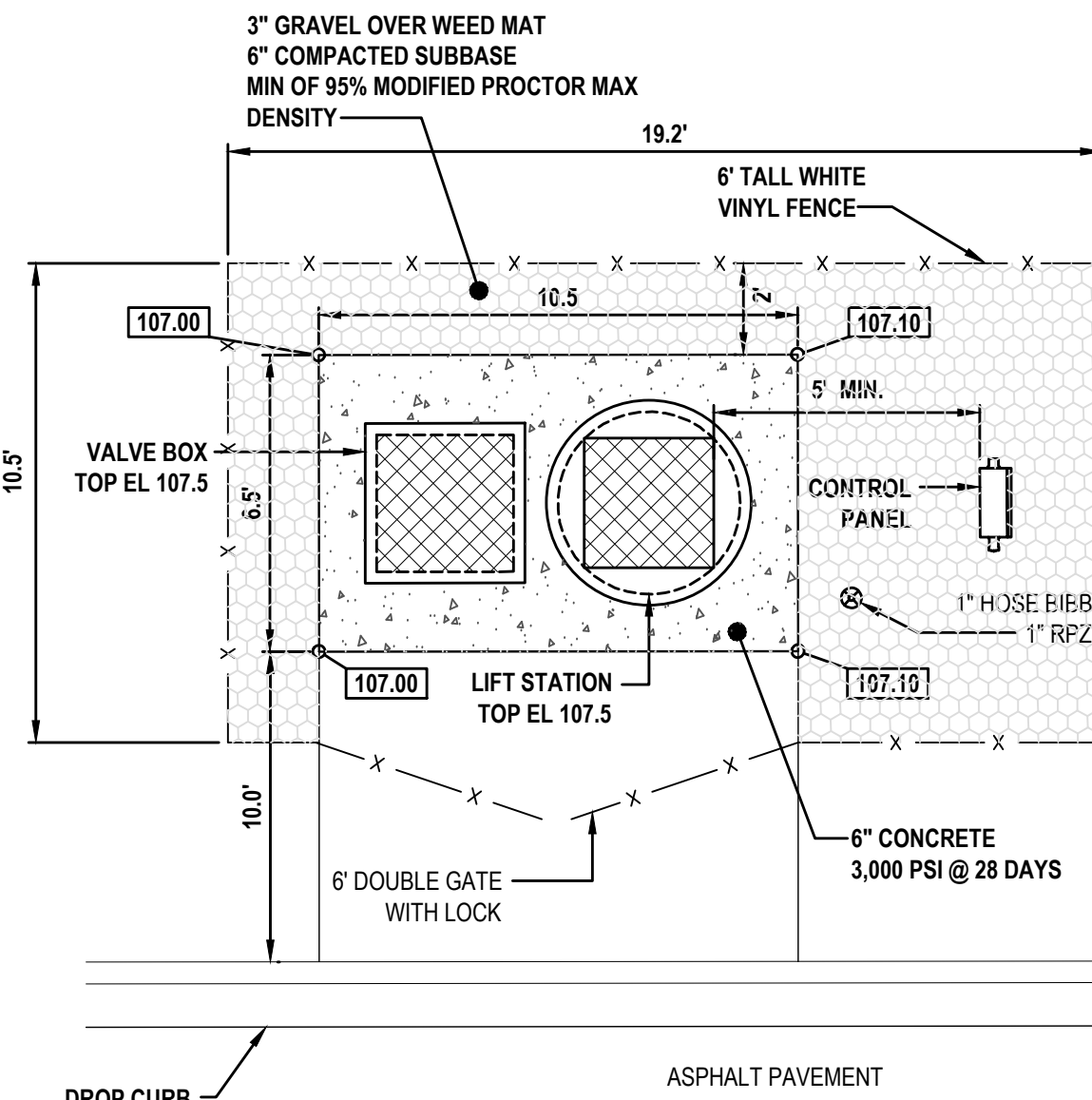


ELECTRICAL RISER FOR ILLUSTRATION ONLY

* ELECTRICIAN NOTES:

1. DRAWING NOT TO SCALE
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
3. ELECTRICIAN SHALL SEAL OFF CONDUIT RUNS
4. ELECTRICIAN TO MOUNT LIGHTNING ARRESTOR AT SWITCH DISCONNECT
5. CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT

RILEY & CO. / ECONO - GP 11-12-10



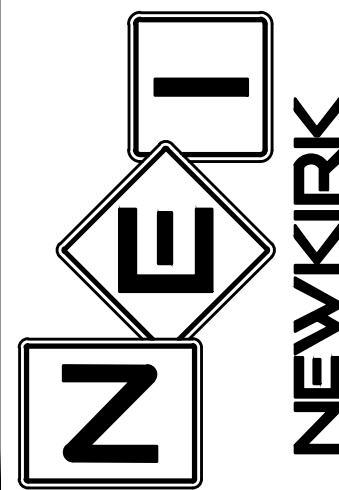
LIFT STATION SITE PLAN

NOT TO SCALE

REVISIONS

DATE	DESCRIPTION

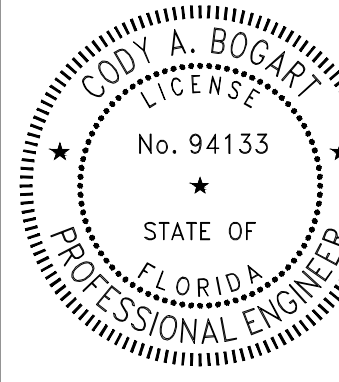
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LIFT STATION DETAILS
SUMMIT APARTMENTS
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PROJECT No: 2021-346

DATE: AUGUST 2022

DESIGN BY: CAB

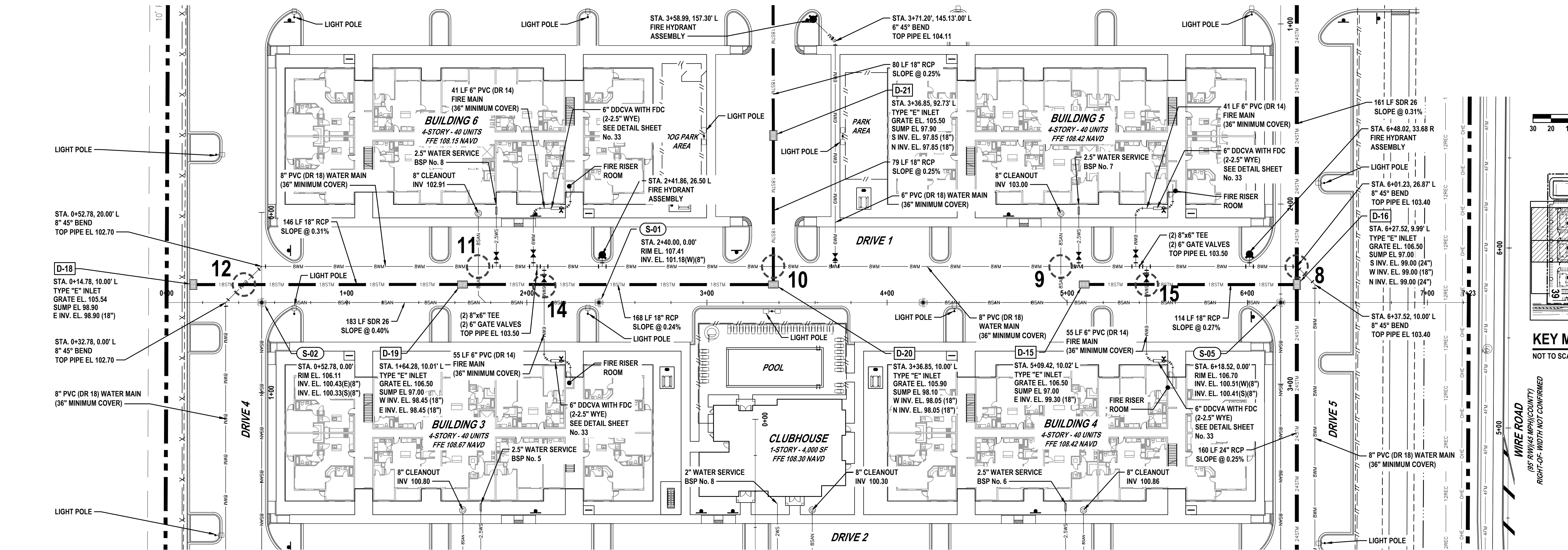
DRAWN BY: CRA

CHECKED BY: HHN

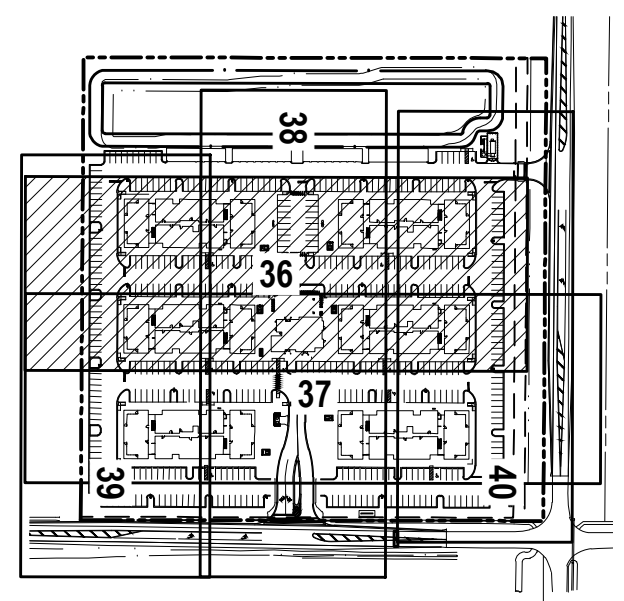
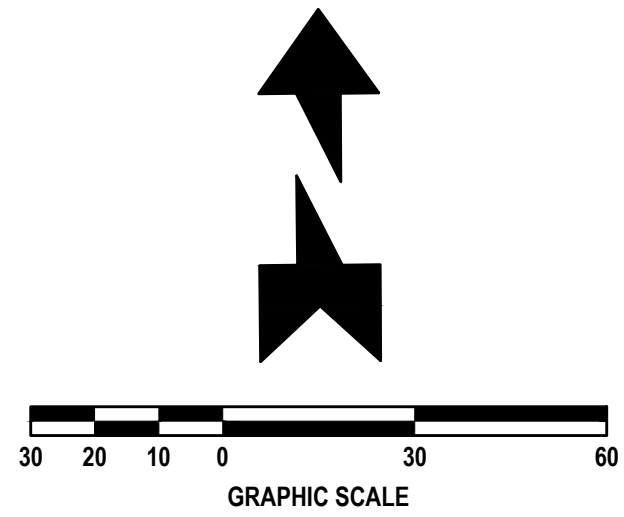
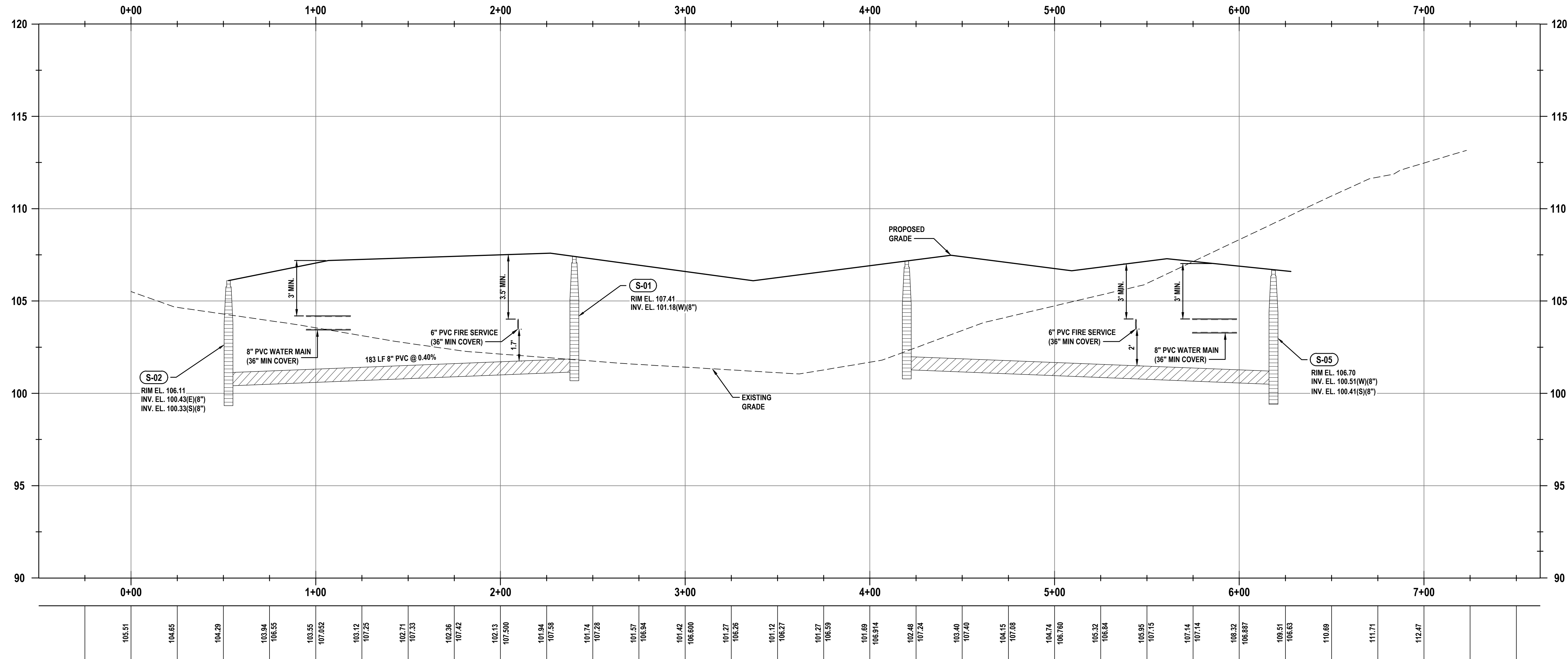
SCALE: AS SHOWN

DRAWING NUMBER

35



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



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DATE	DESCRIPTION
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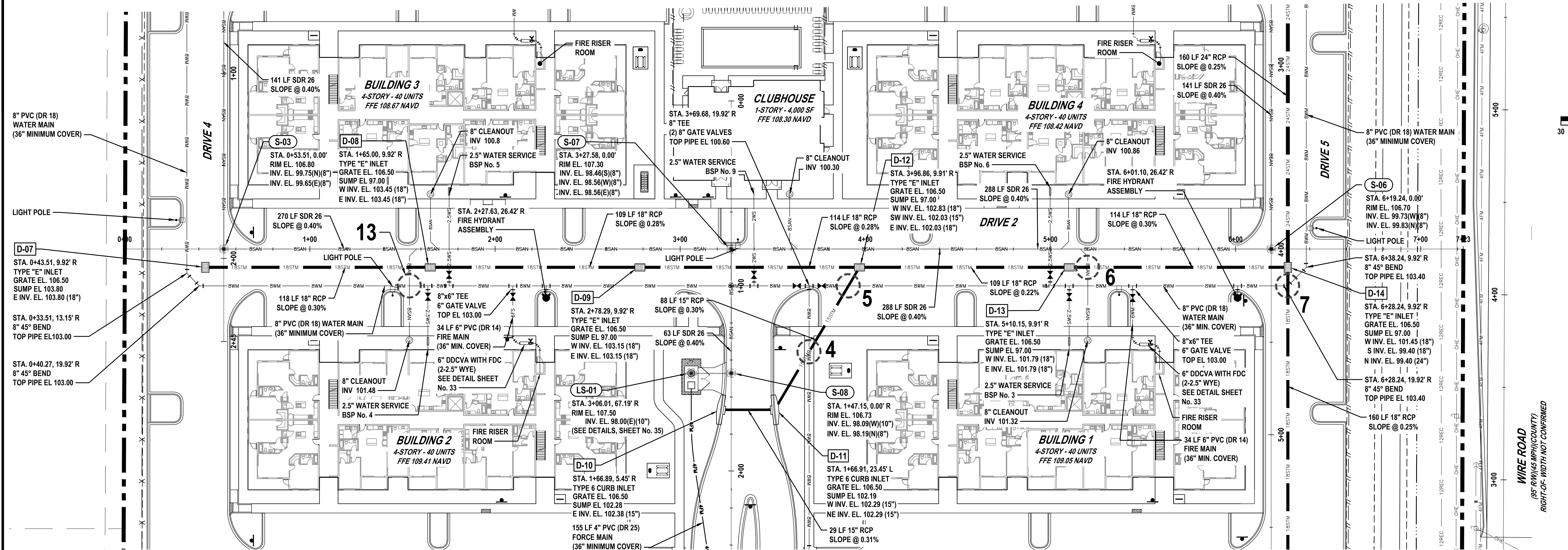
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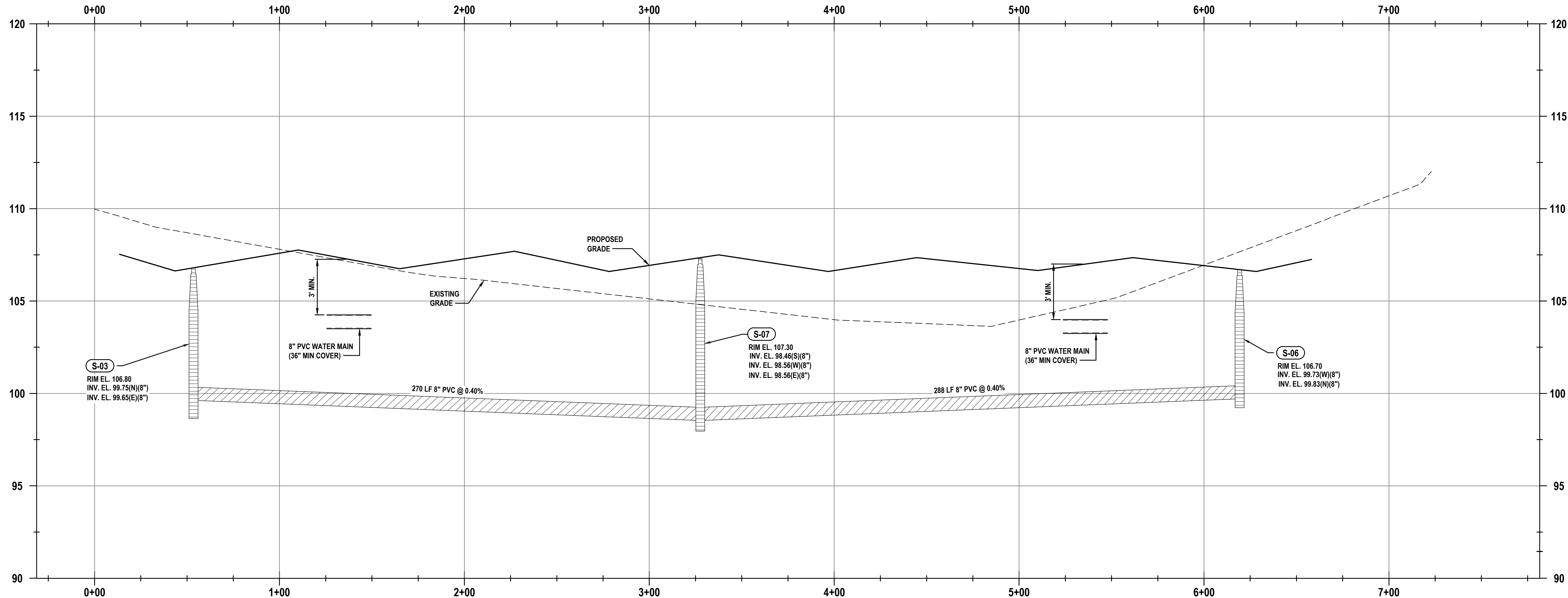
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FLORIDA
PROFESSIONAL ENGINEER

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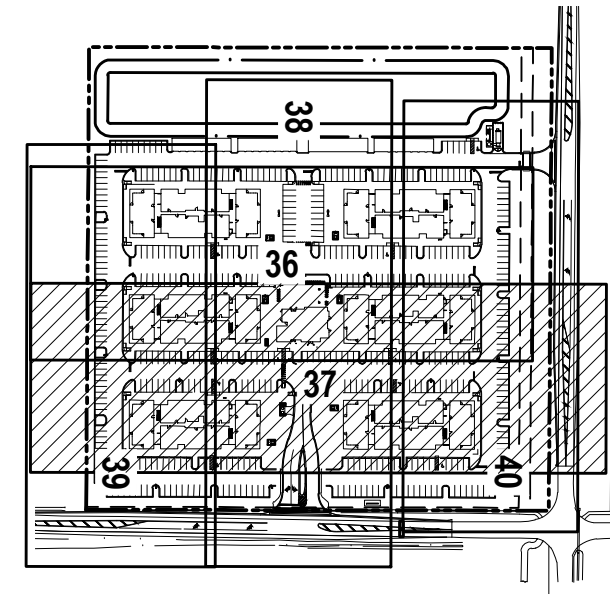
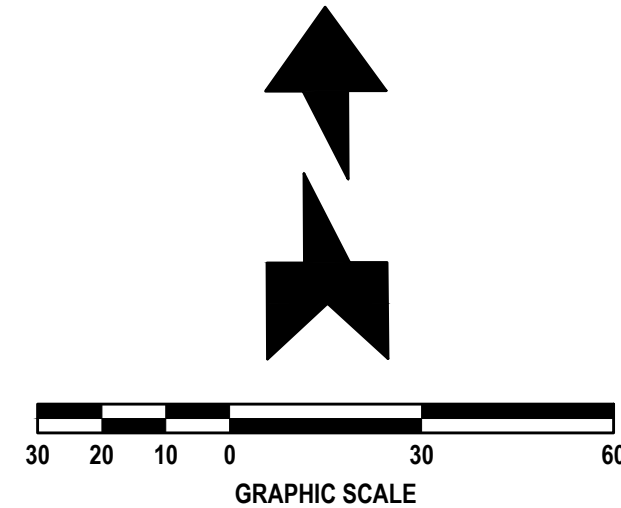
PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HNN
SCALE:	1" = 30'
DRAWING NUMBER	36



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



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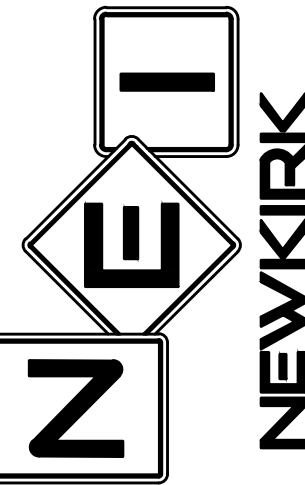


KEY MAP
NOT TO SCALE

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

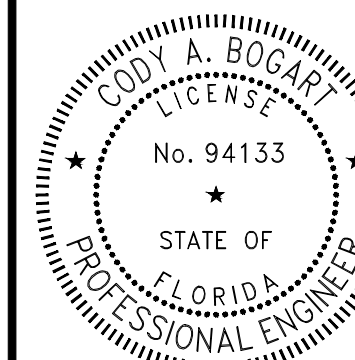
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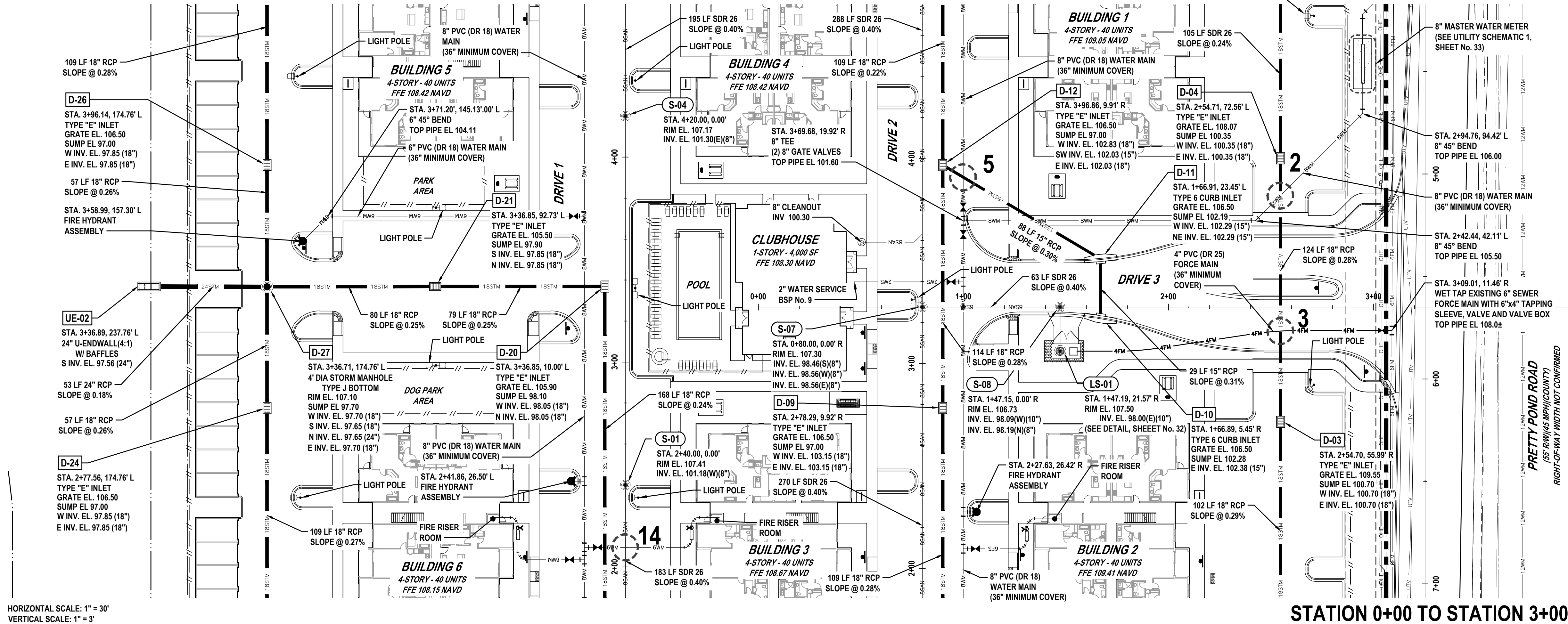


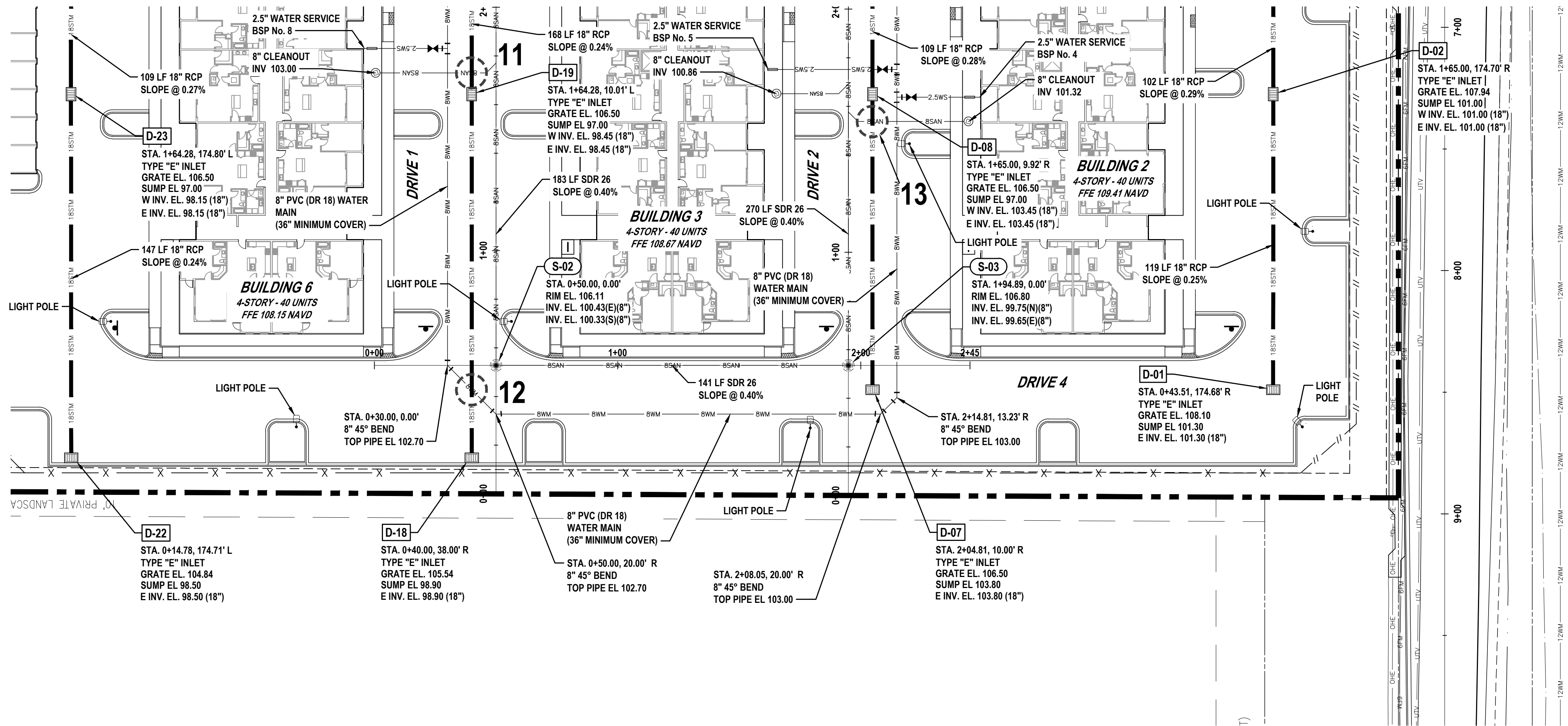
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PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HHN
SCALE:	1" = 30'

DRAWING NUMBER

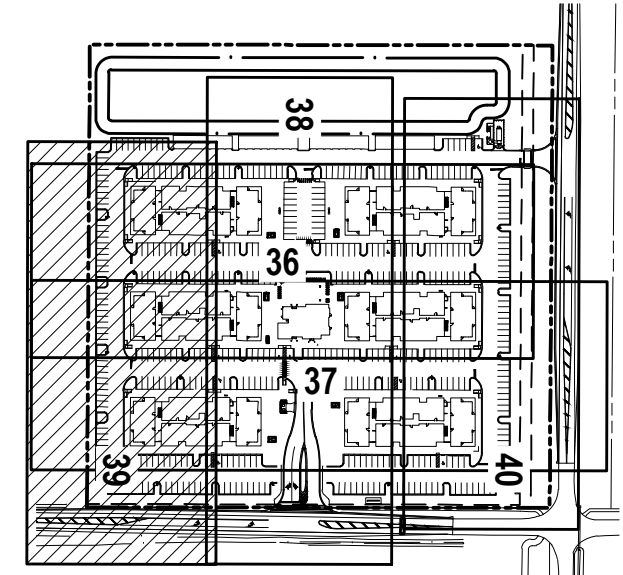
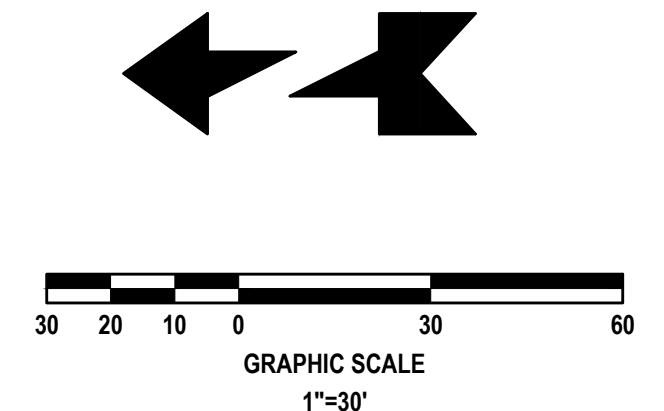
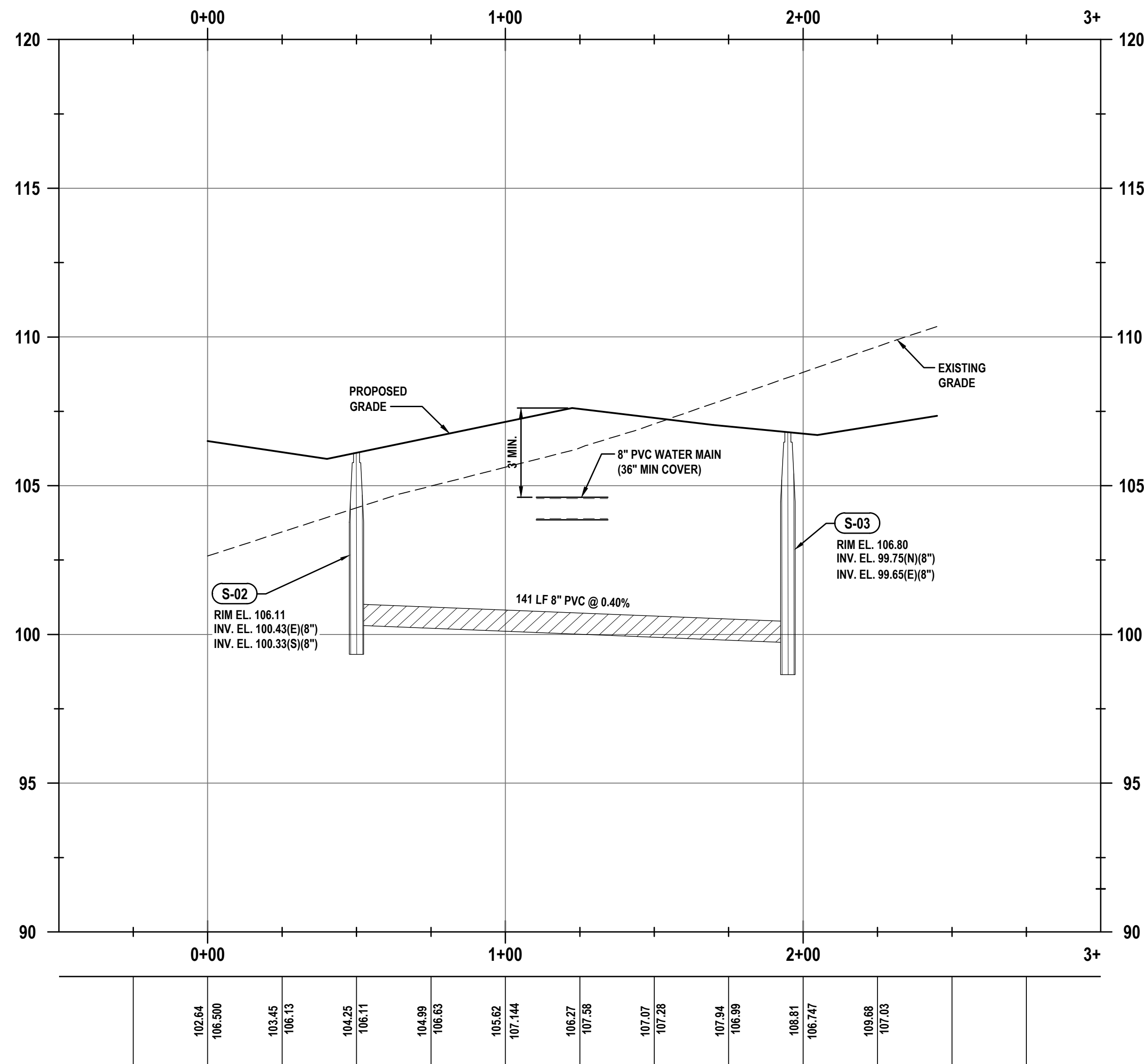
37





HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

STATION 0+00 TO STATION 2+45



KEY MAP
NOT TO SCALE

REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

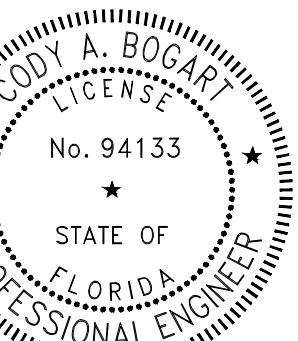
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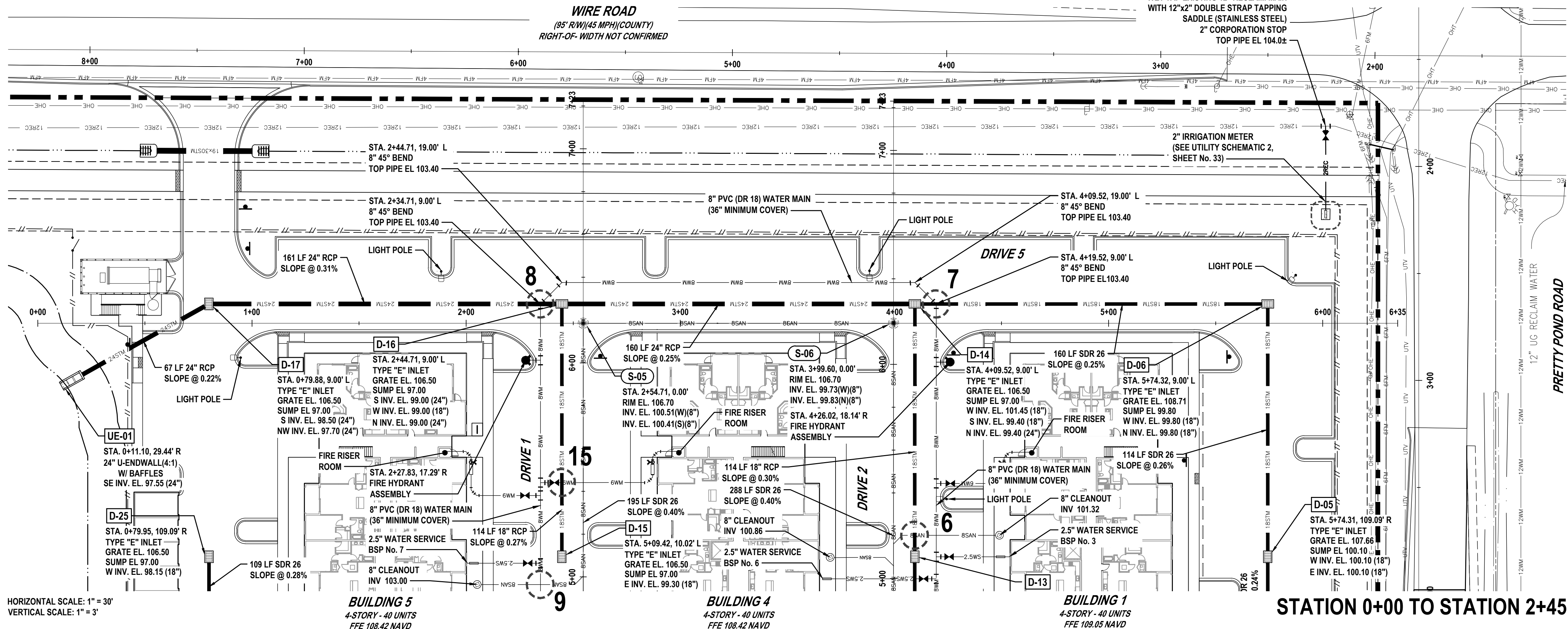
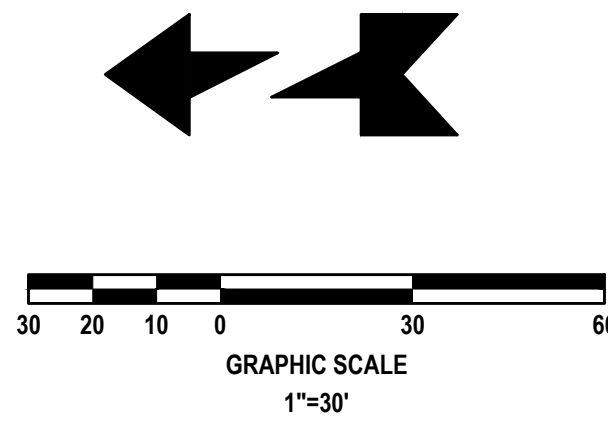


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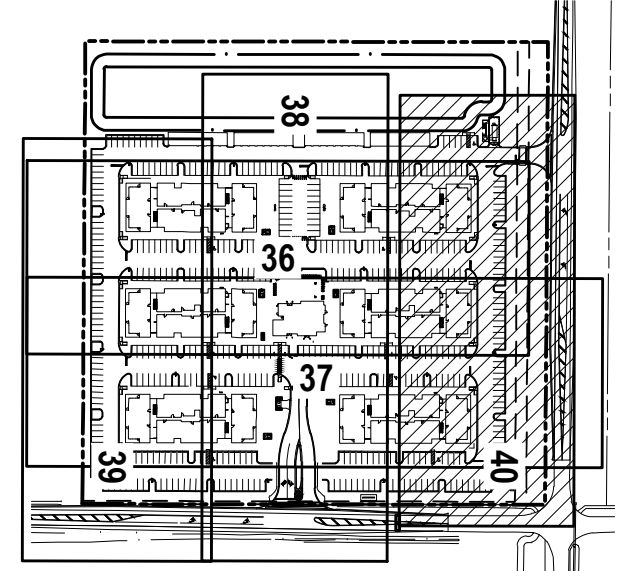
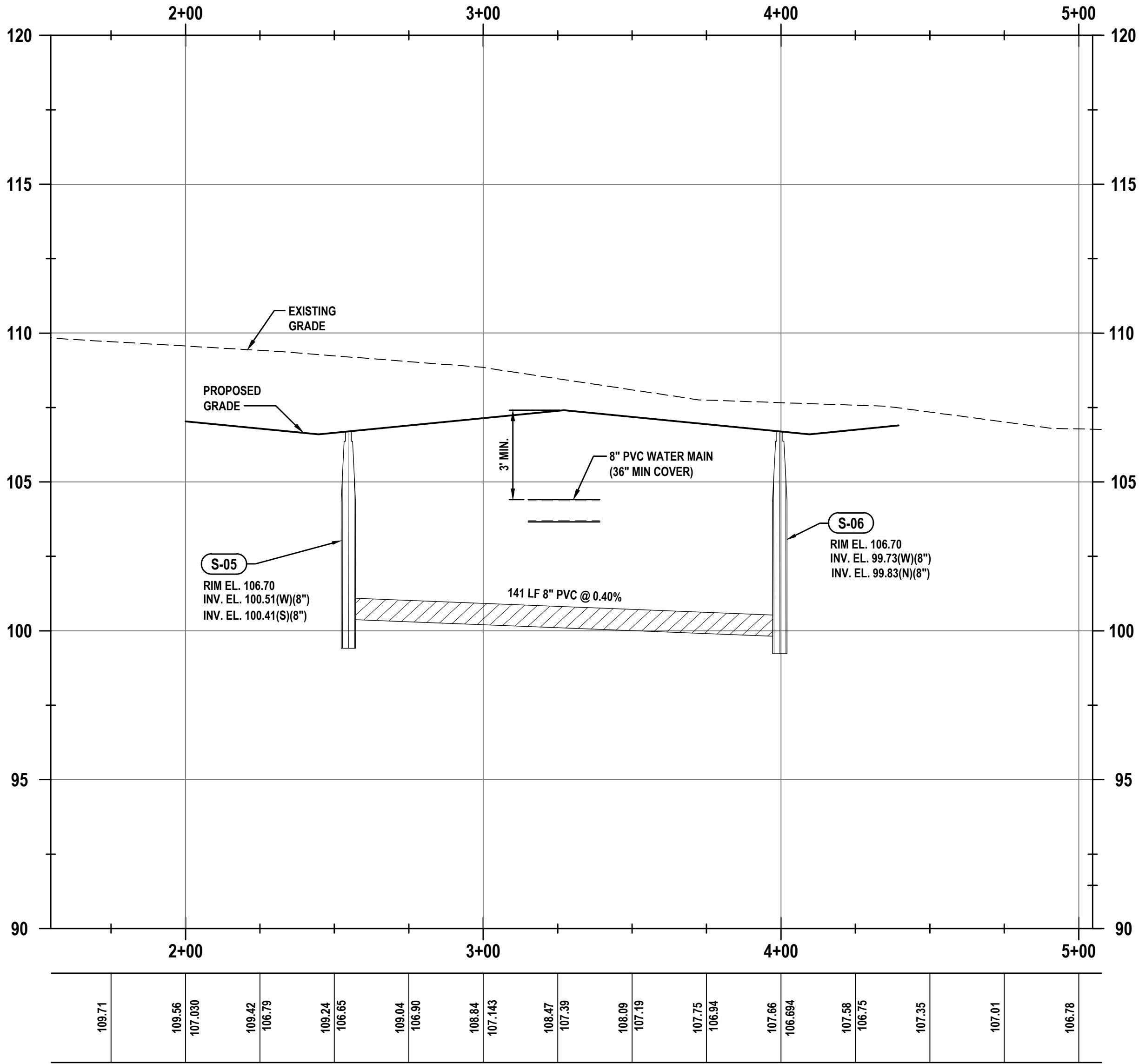
PROJECT No: 2021-346
DATE: AUGUST 2022
DESIGN BY: CAB
DRAWN BY: CRA
CHECKED BY: HHN
SCALE: 1" = 30'

DRAWING NUMBER

39



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

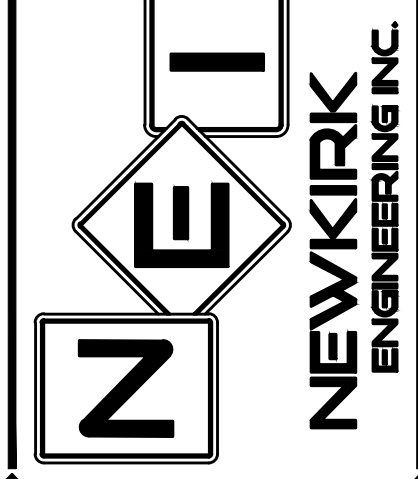


KEY MAP
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REVISIONS

DATE	DESCRIPTION
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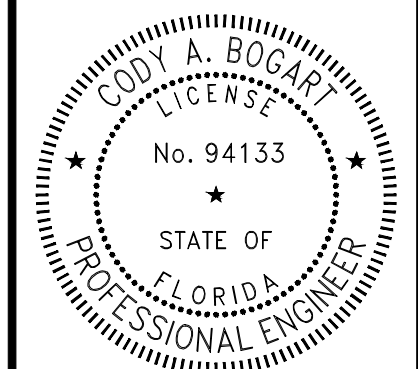
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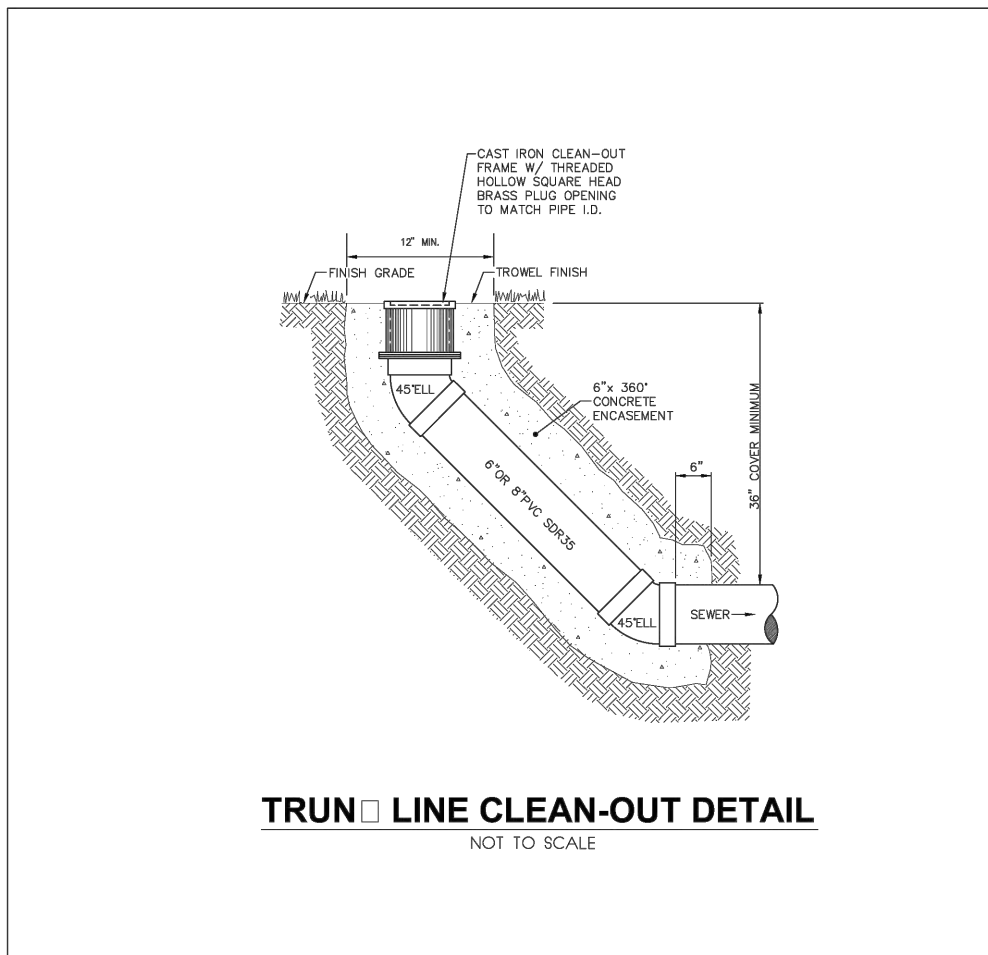


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DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HHN
SCALE:	1" = 30'

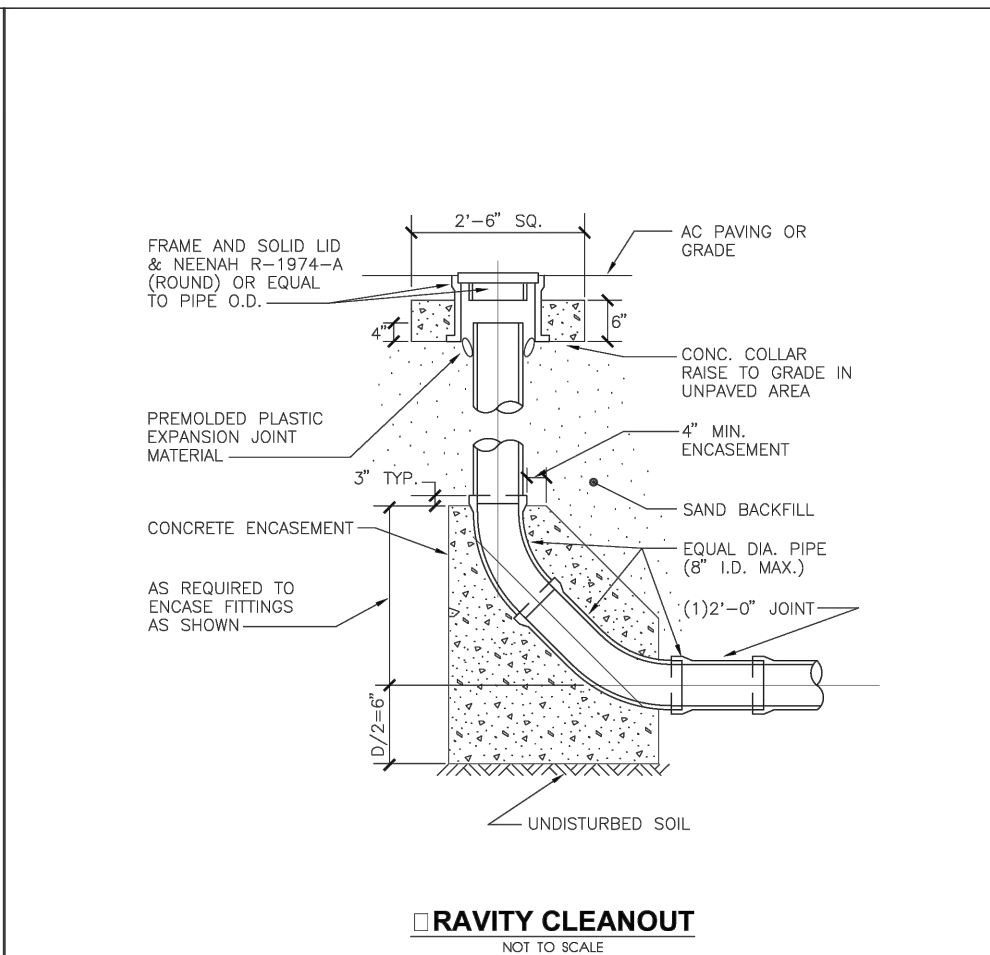
DRAWING NUMBER

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CITY OF ZEPHYRHILLS
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 CITY OF ZEPHYRHILLS UTILITY DEPARTMENT
 38025 ALSTON AVENUE ZEPHYRHILLS, FLORIDA 33642
 PHONE (813)780-0029 FAX (813)780-0613

DECEMBER 2015
S-8



CITY OF ZEPHYRHILLS
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NOVEMBER 2018
S-9



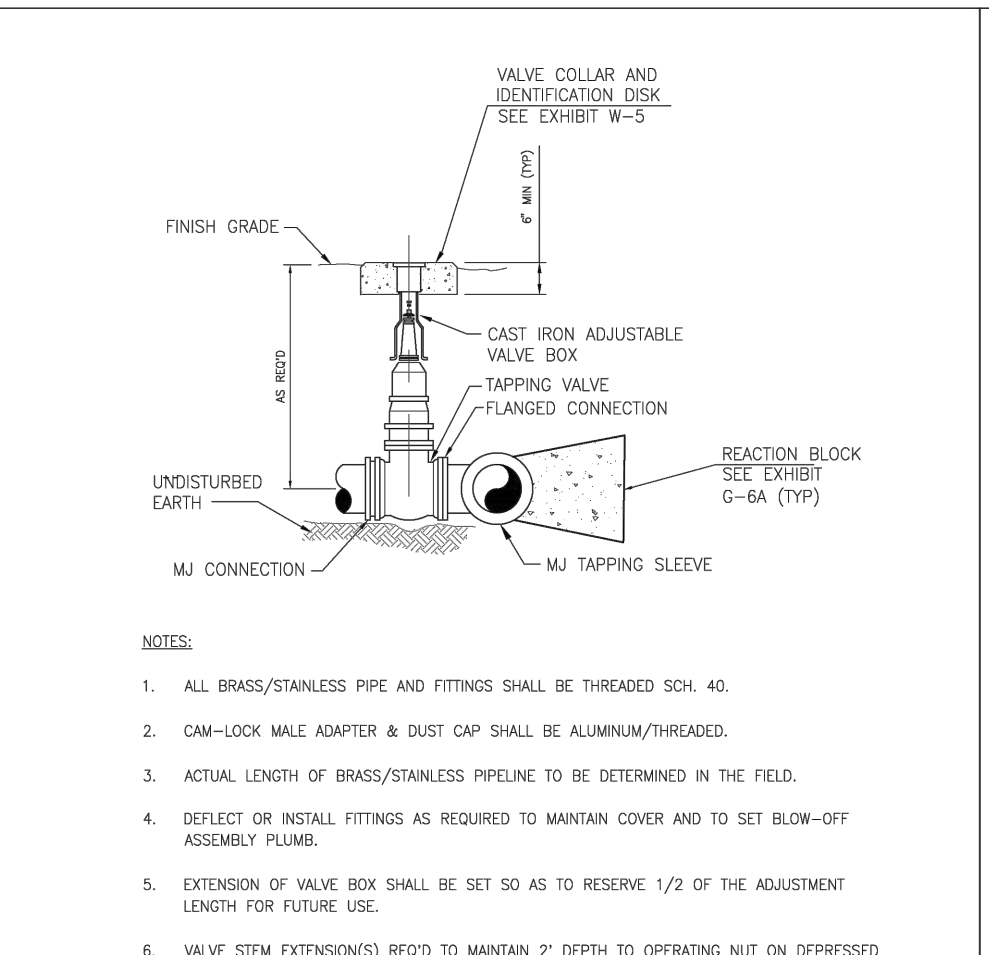
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W-9G



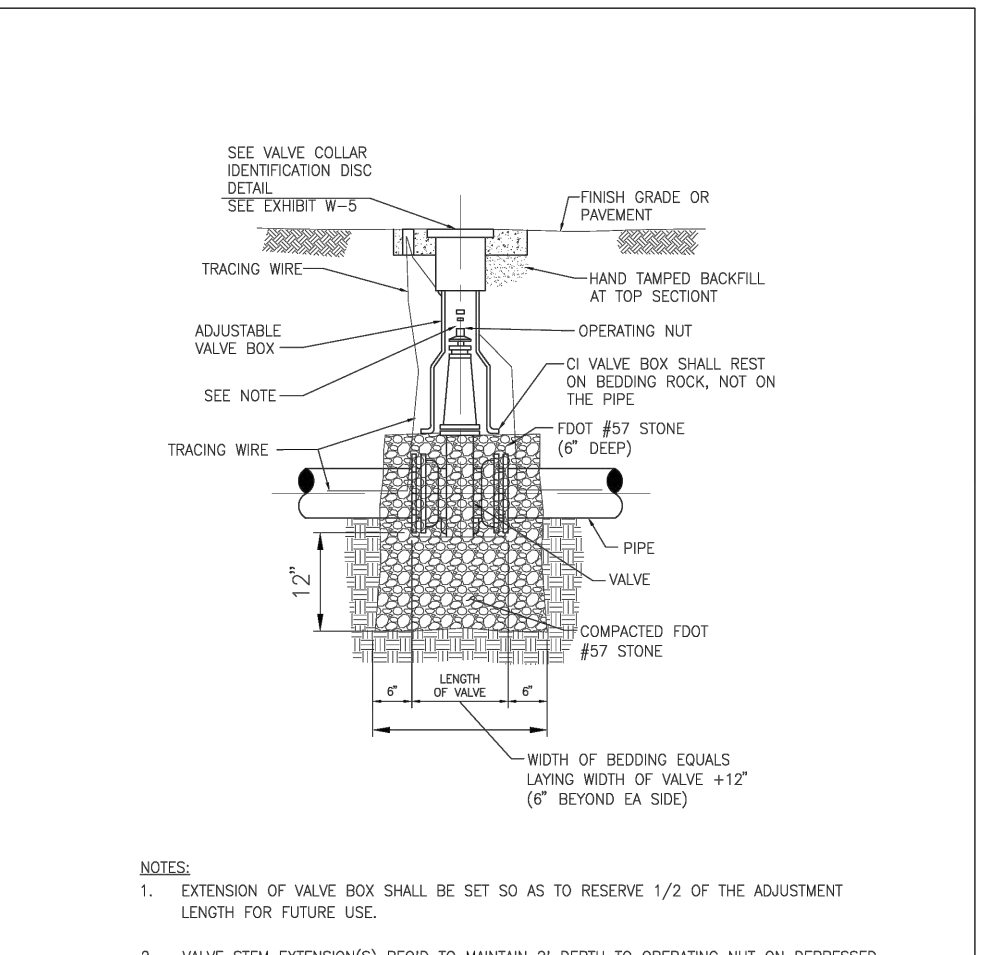
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W-1



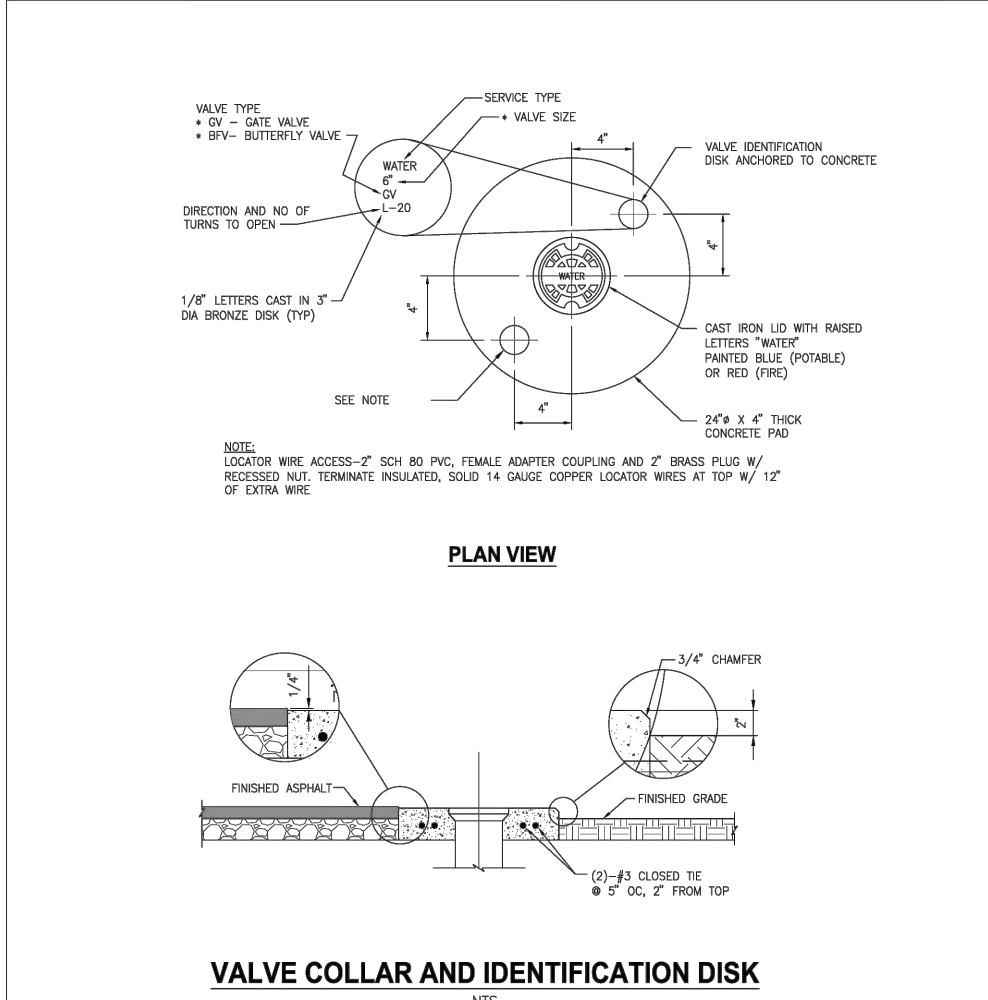
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W-2



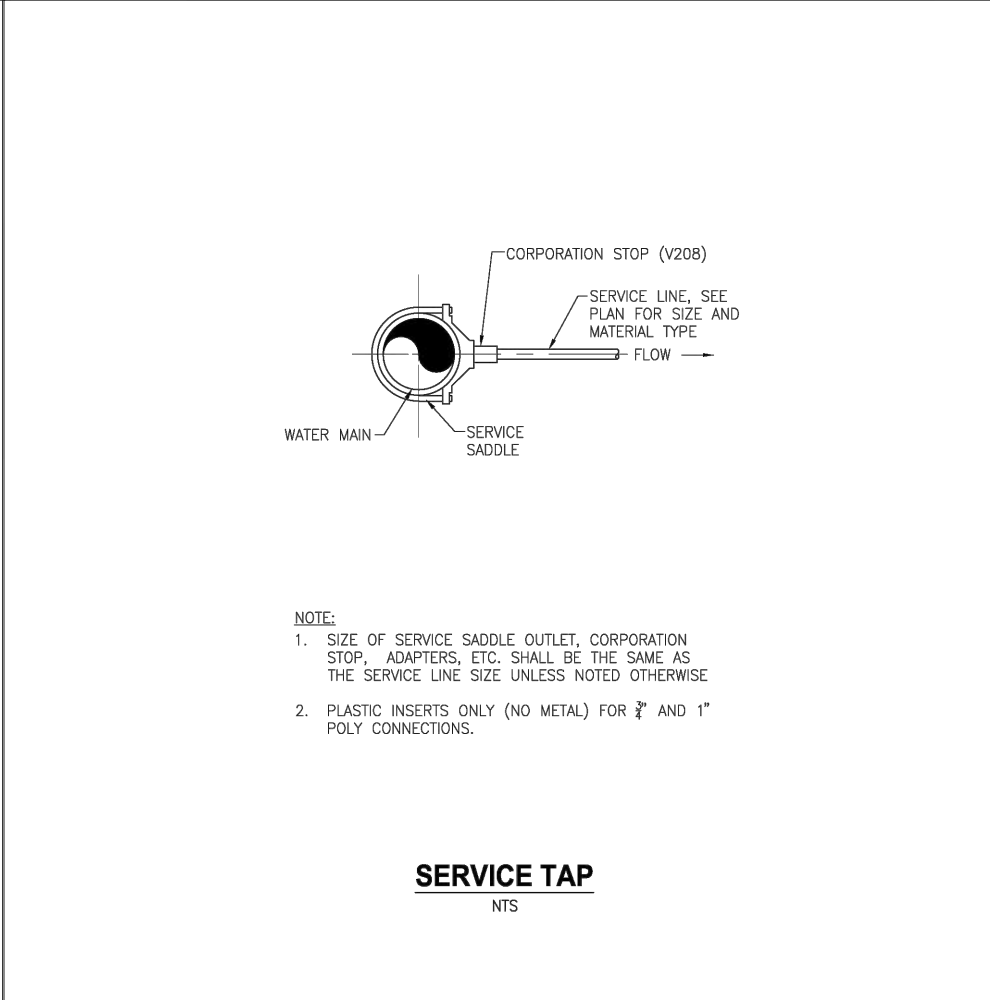
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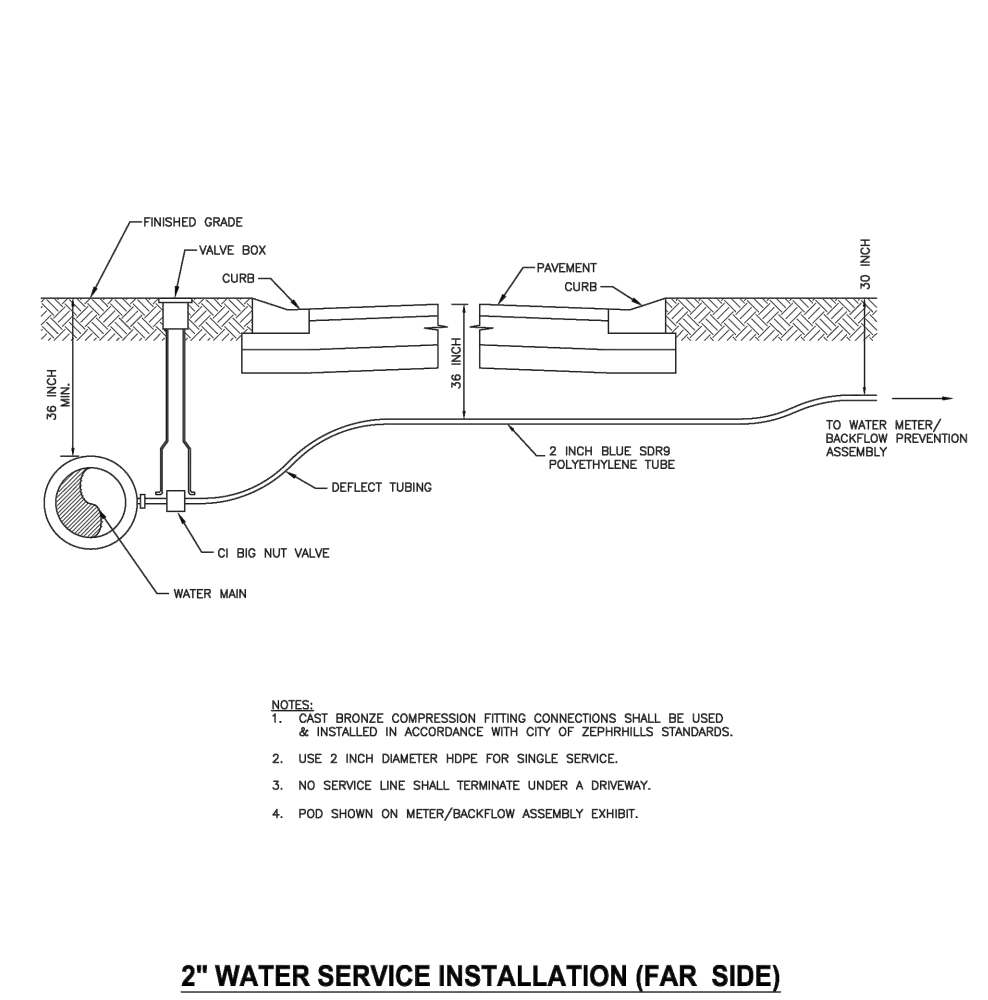
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W-5



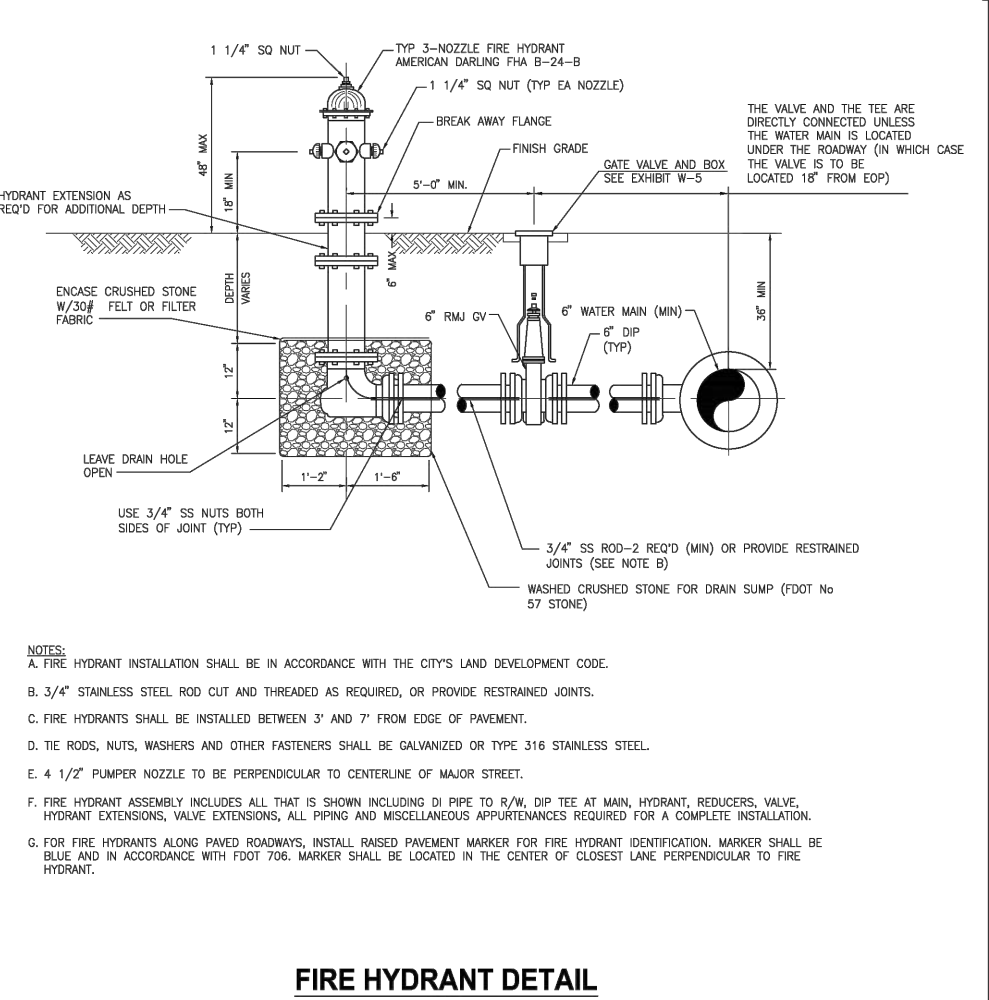
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W-9



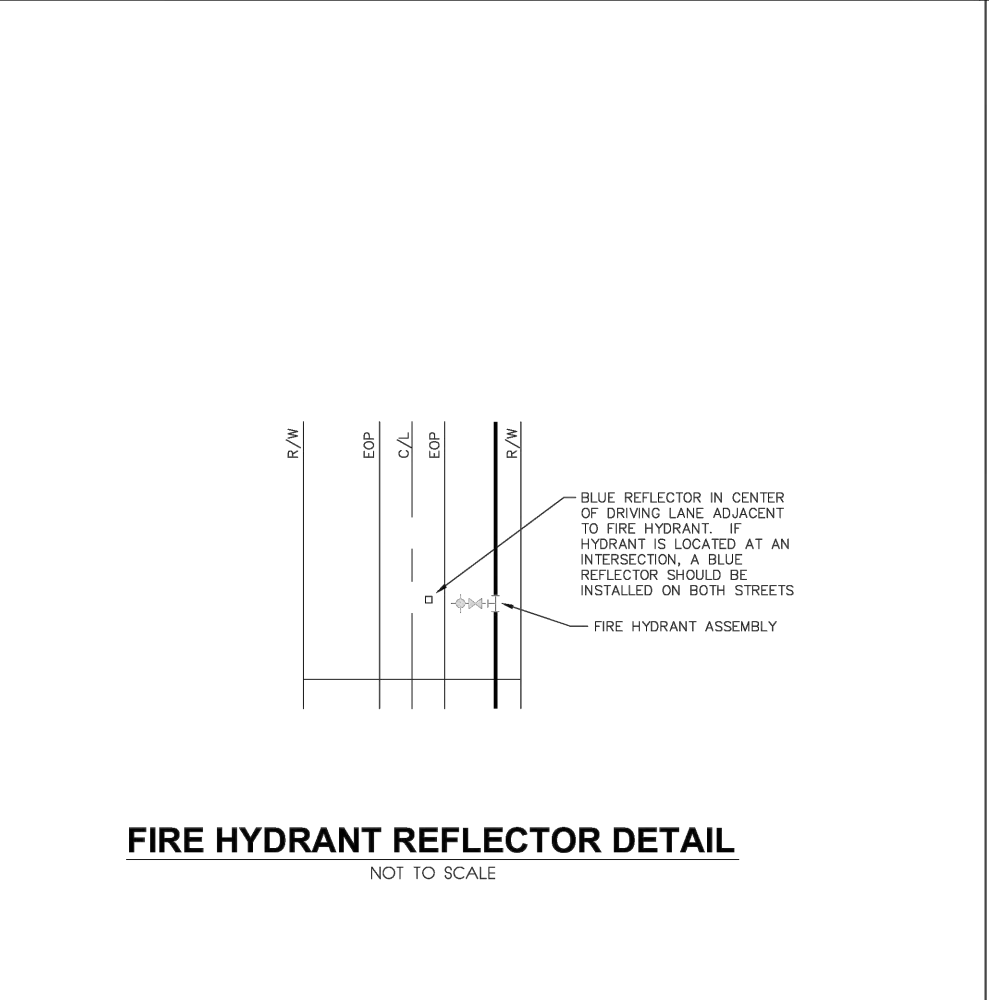
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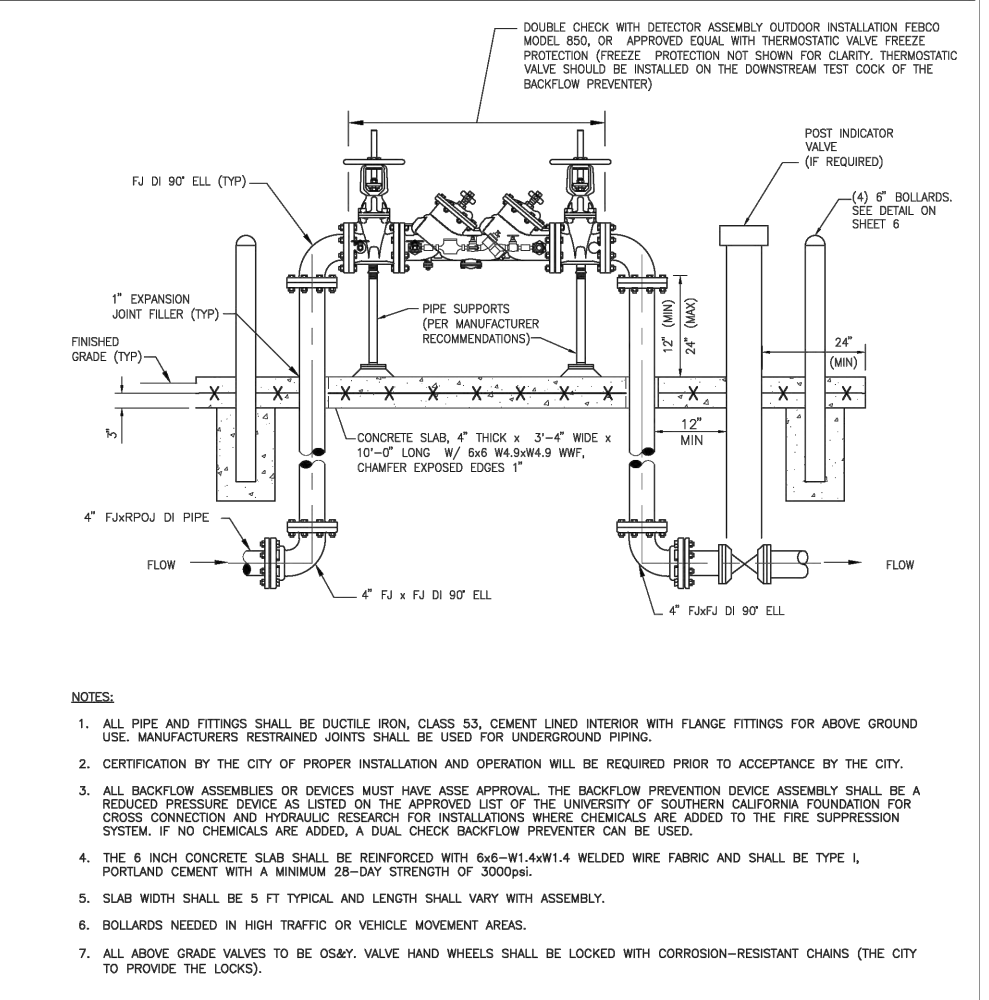
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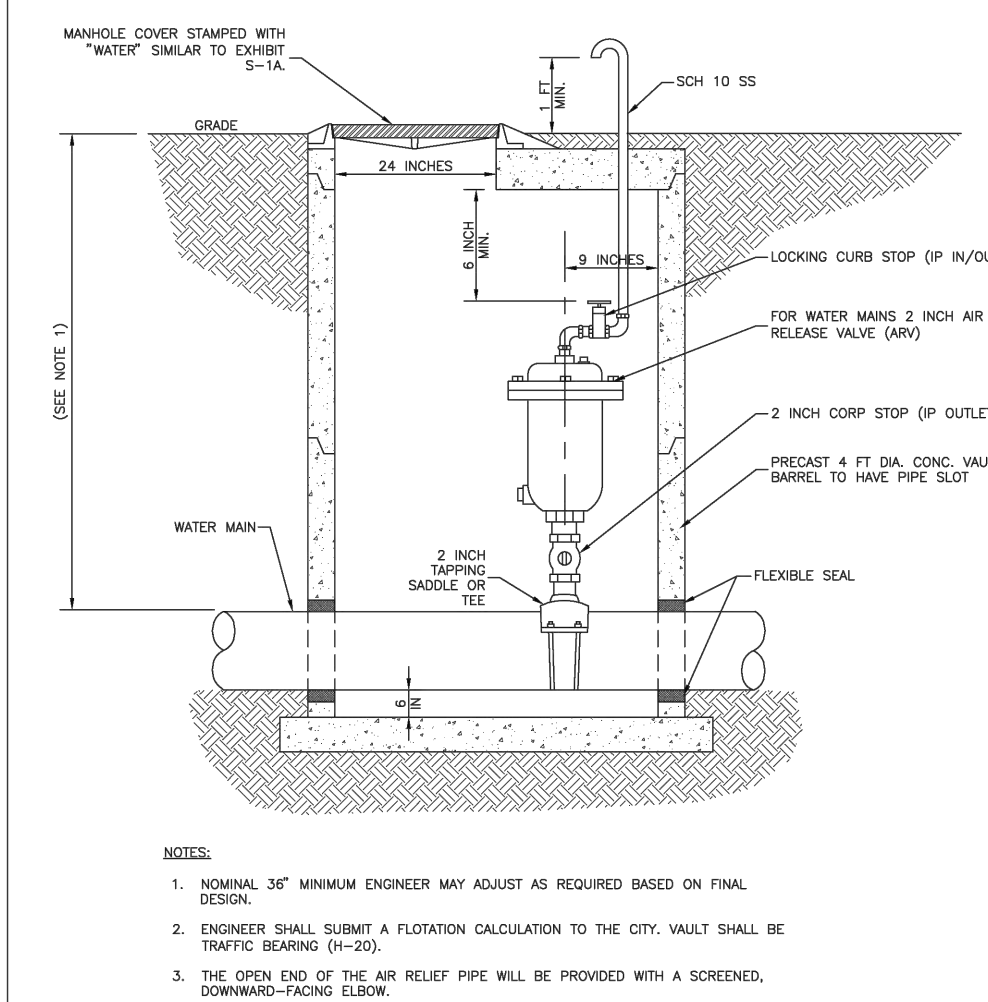
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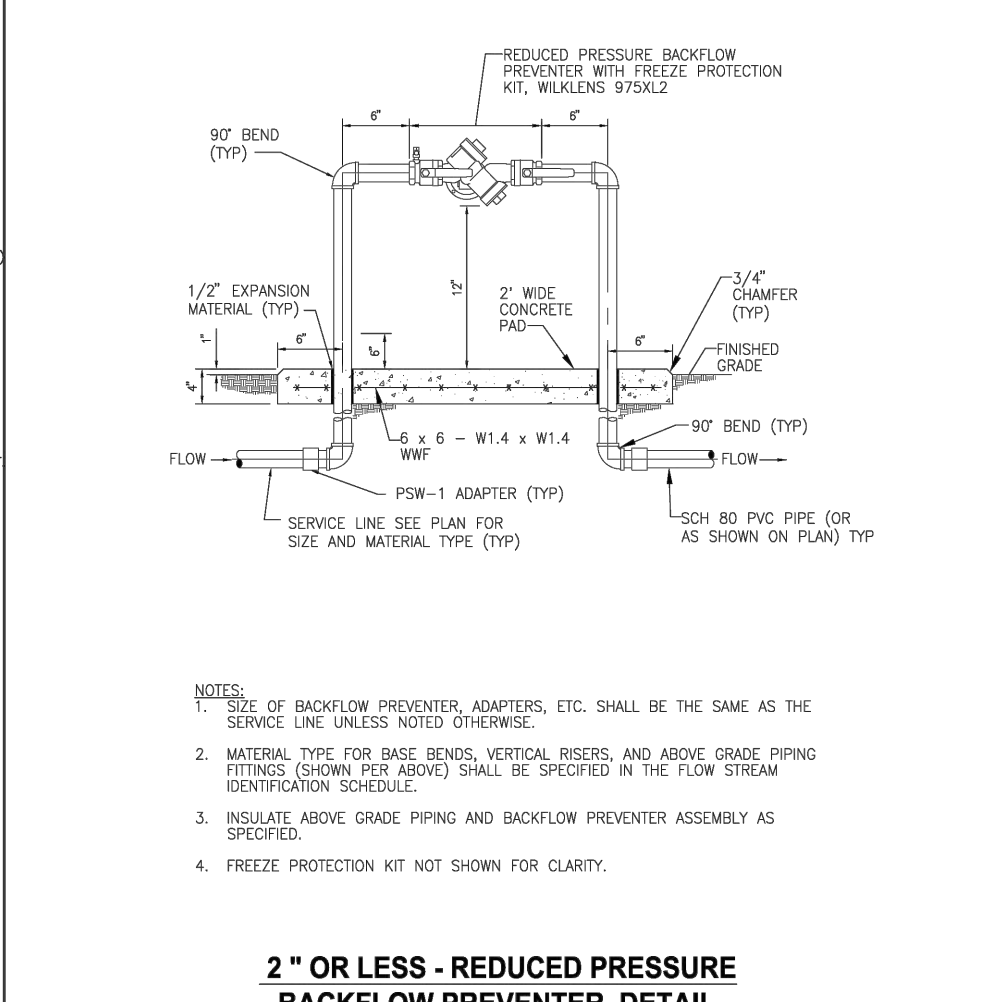
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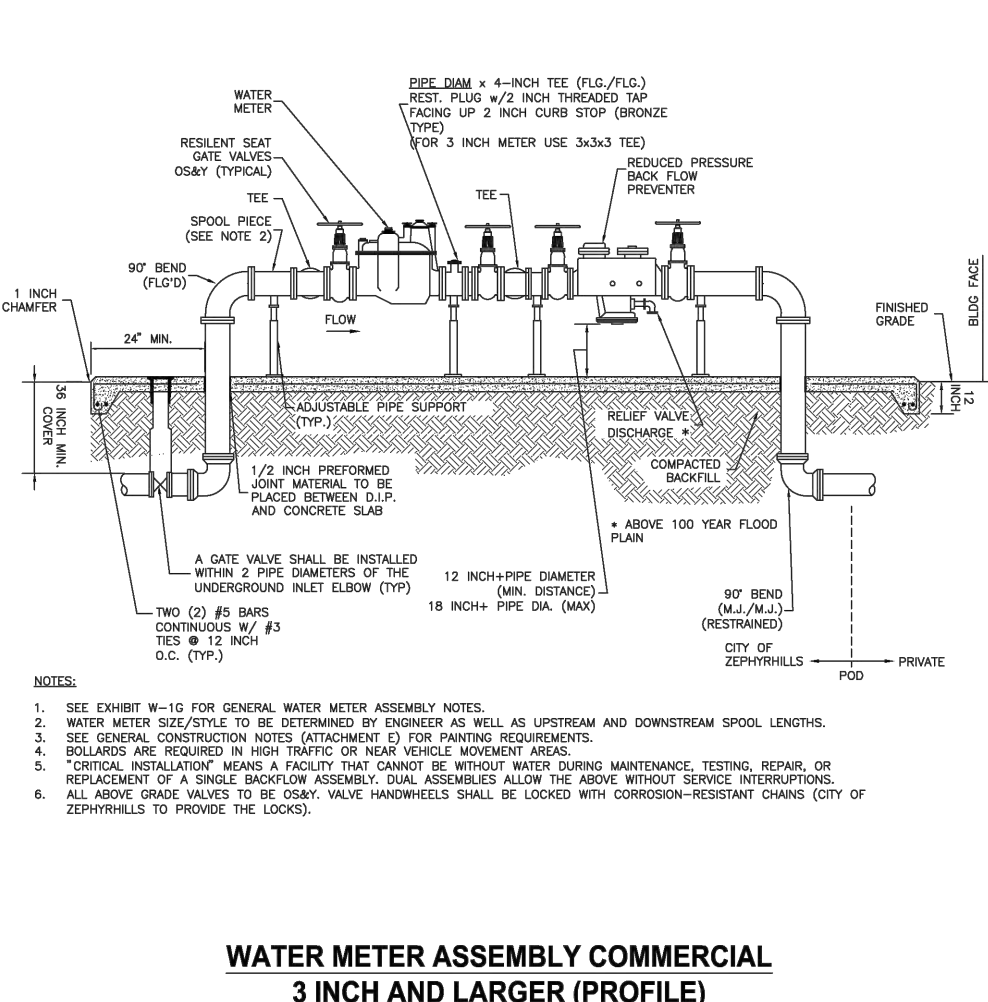
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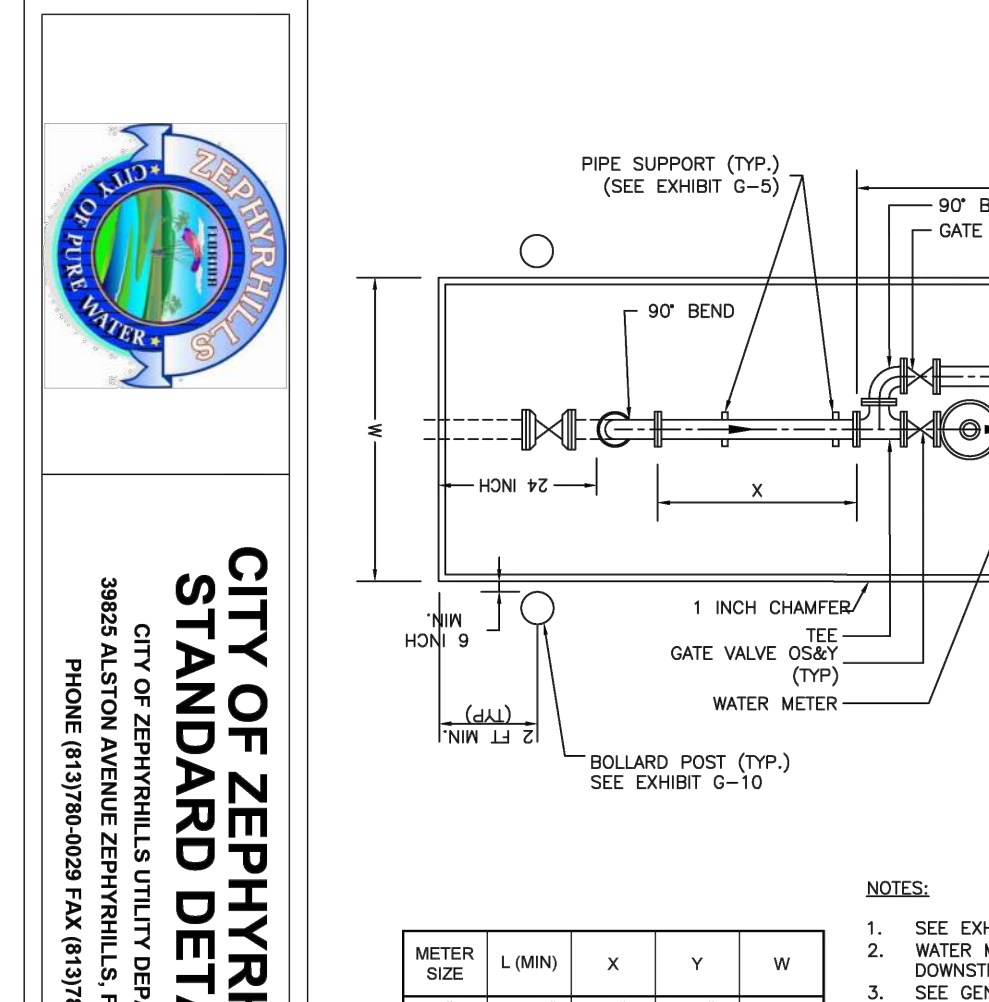
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W-15



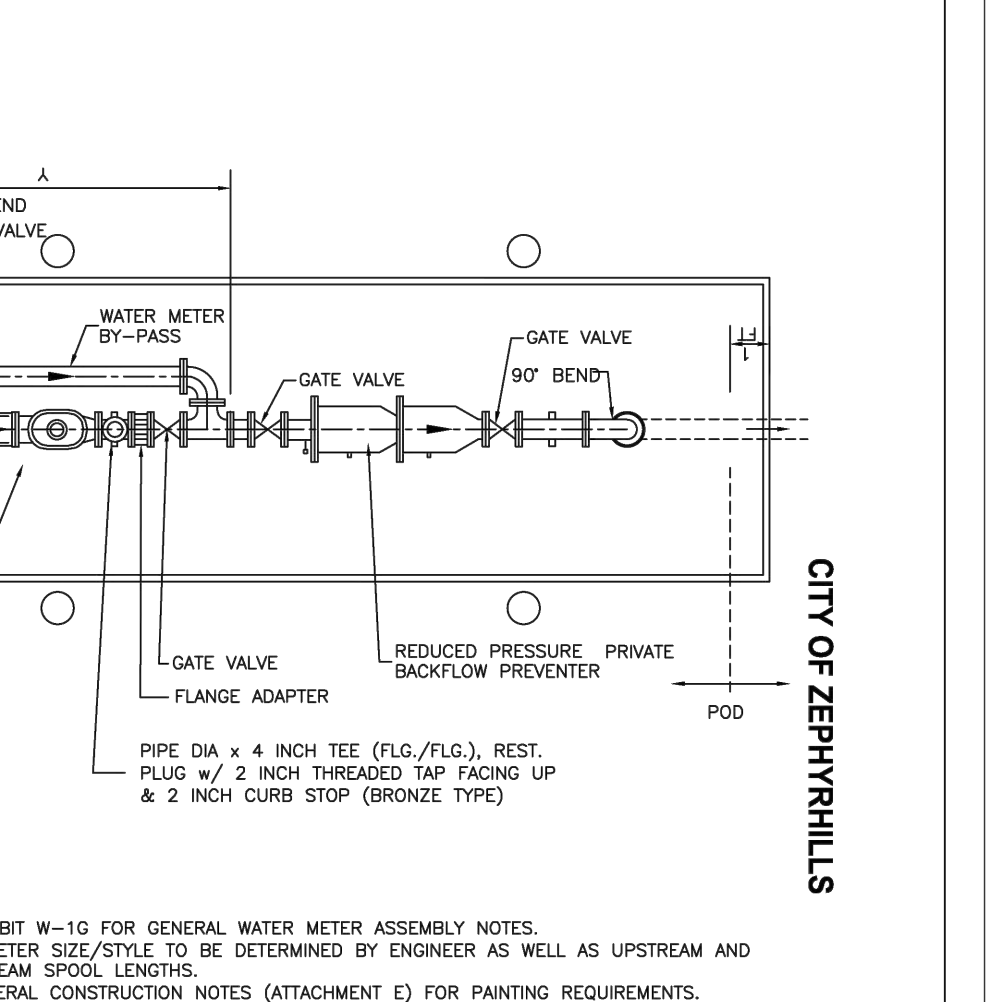
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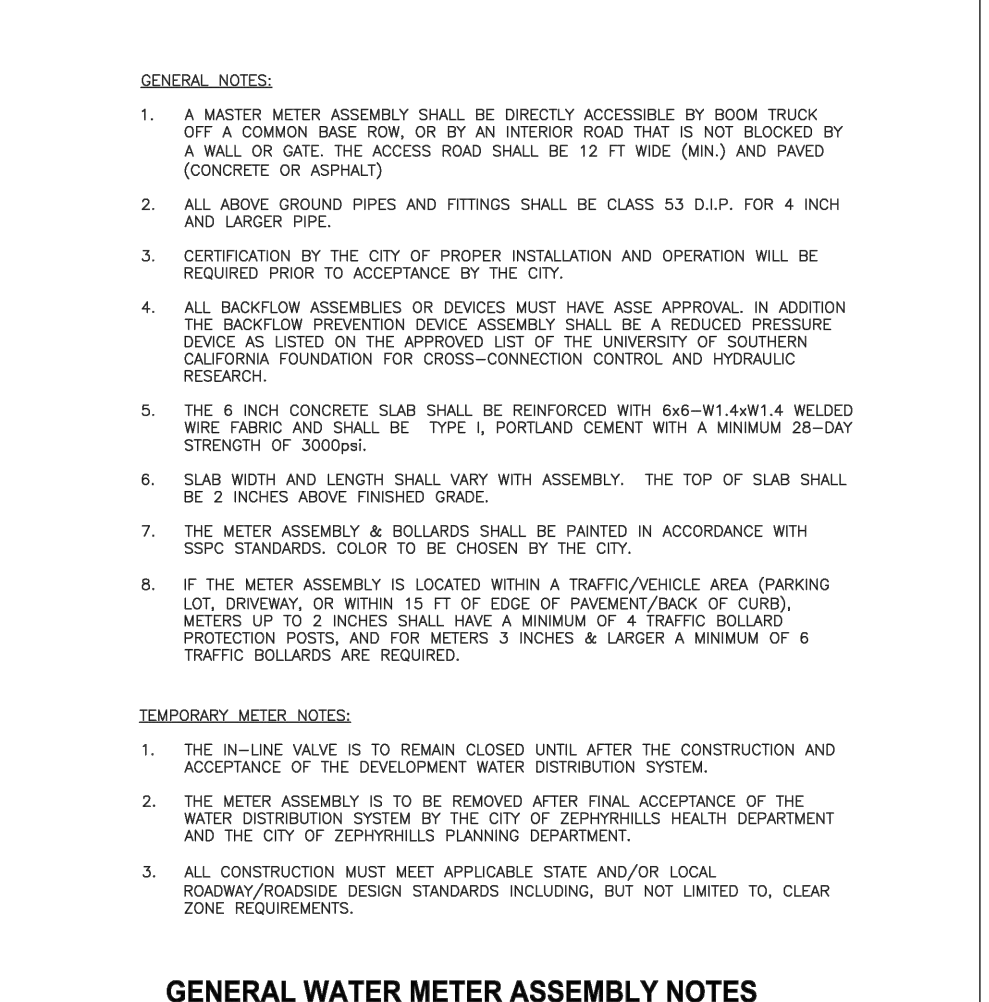
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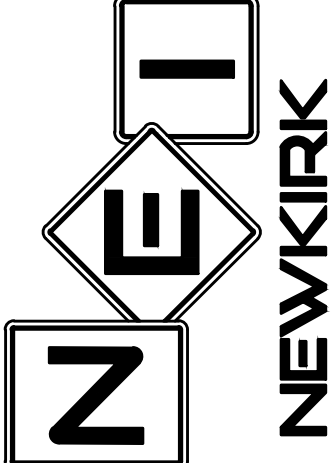
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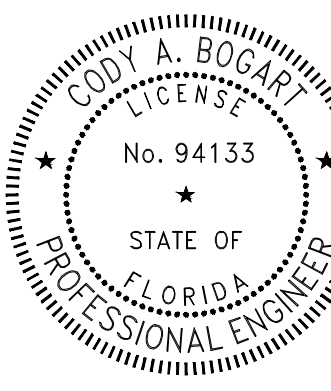
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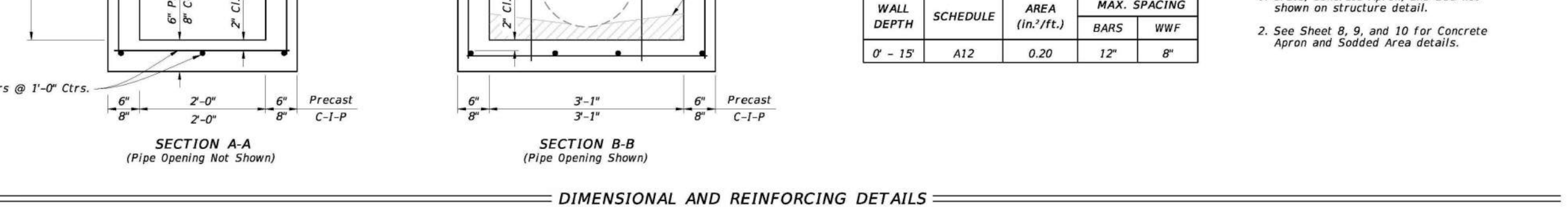
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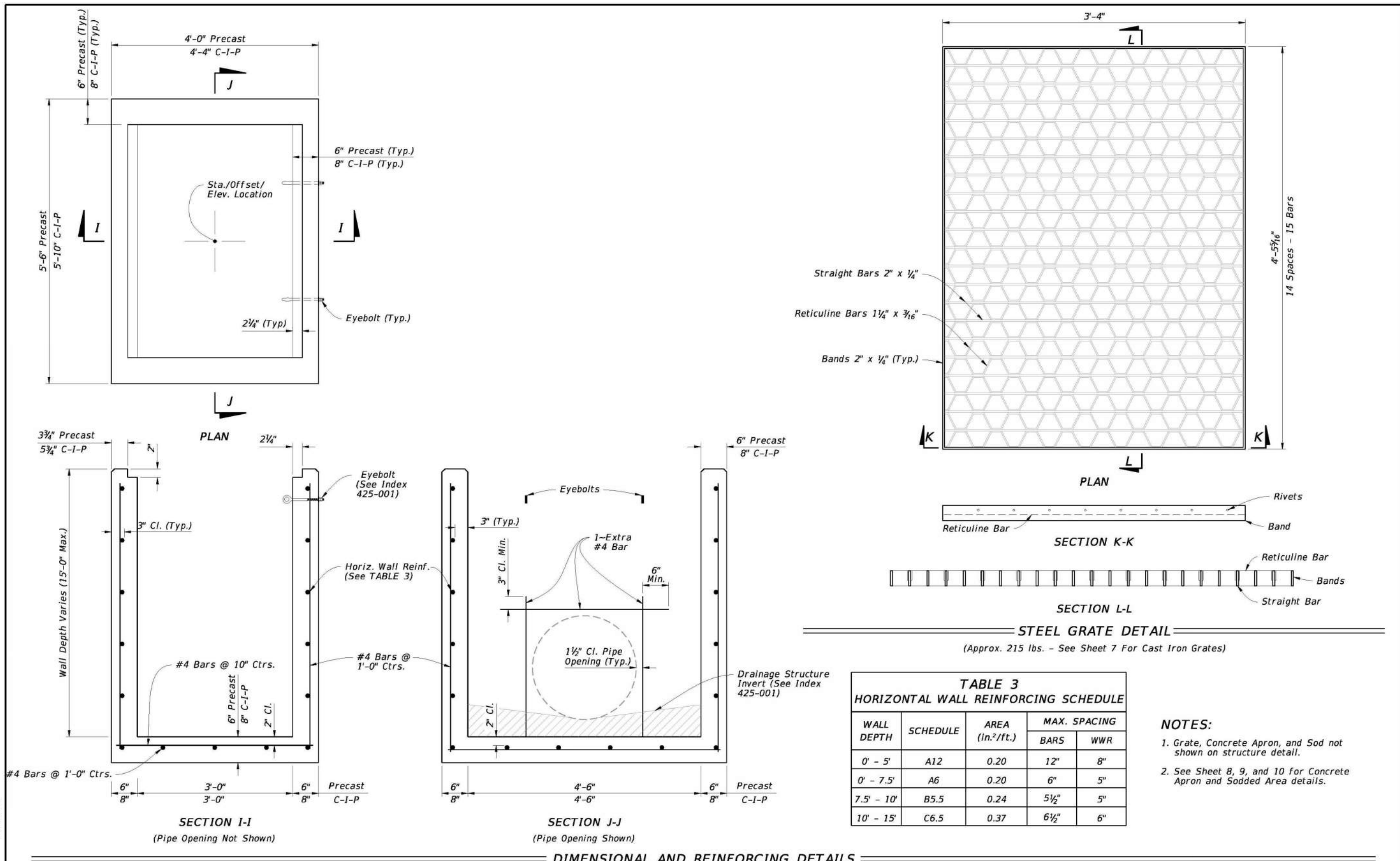
9/29/2021

t_y and t_z - Wall Thickness.
 A_v - Vertical and horizontal areas of reinforcement.
 **Provide 0.20 eq. in./ft. at each face, 12" max. bar spacing.
 **Modified minimum wall thickness.
 ***Min. total circumferential reinforcement for continuous steel hoops:
 $A_2 = 0.40$ sq. in. for riser section height equal or less than 2'-0" (2 hoop min.)
 $A_2 = 0.60$ sq. in. for riser section height more than 2'-0" up to 4'-0" (3 hoop min.)
 Areas of reinforcement for precast items are based on Grade 60 reinforcing.
 No reduction in the area of reinforcement is allowed for welded wire fabric in Table I.
 Area of vertical reinforcing may be reduced in accordance with ASTM C478.

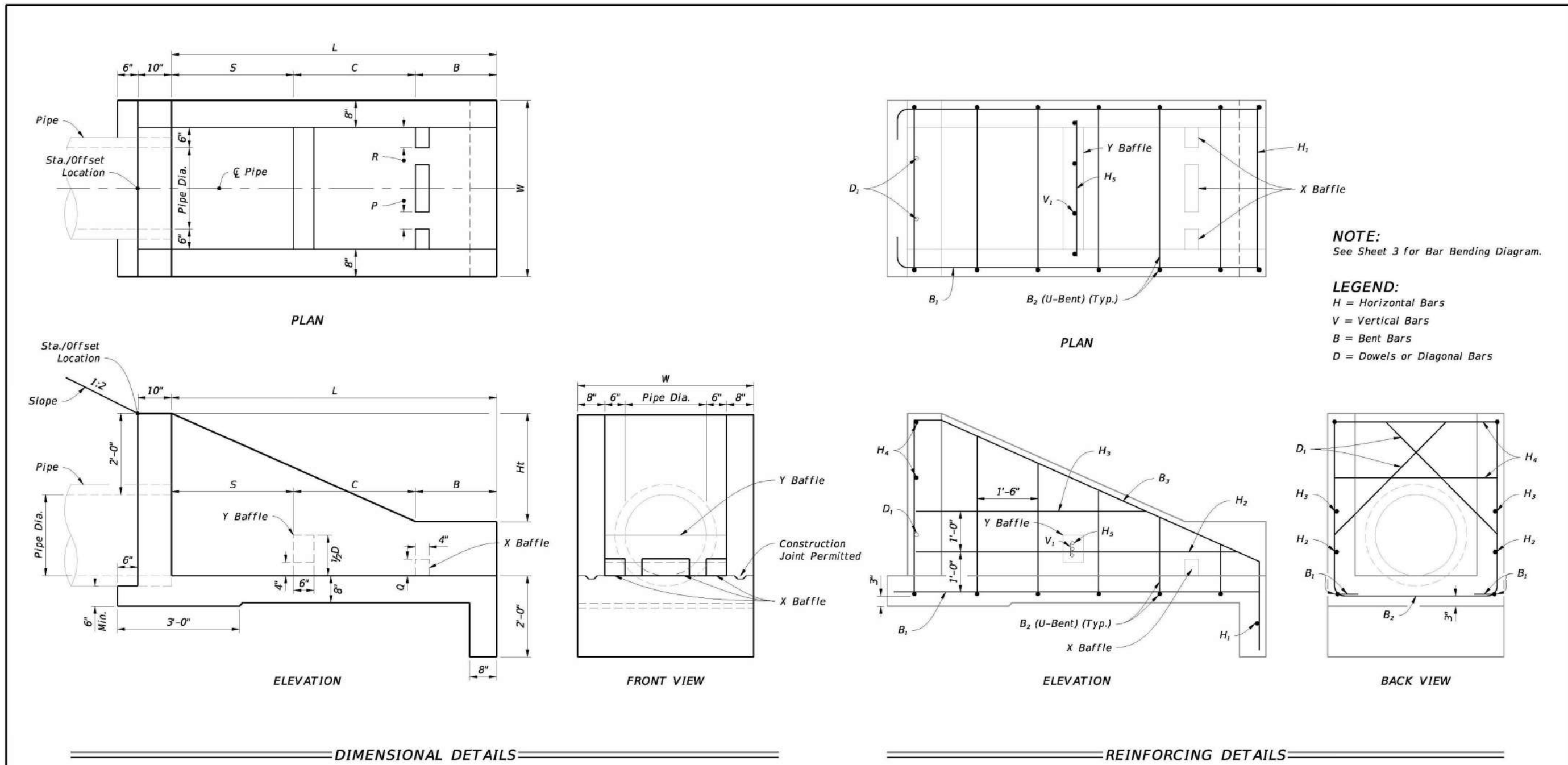
See Table 4 for Reinforcing Schedule.

26" - 40"	D7		26" - 40"	F5		5"	8"
SIZE: 10" - 0"							
Inside/Outside				Inside/Outside			
≥ 17" - 10"	B10	B10	≥ 17" - 10"	D7	F7	8"	8"
10" - 20"	B6.5	C6.5	10" - 17"	E5	E5	8"	8"
20" - 26"	C6.5	C6.5	26" - 40"	F5	F5	10"	10"

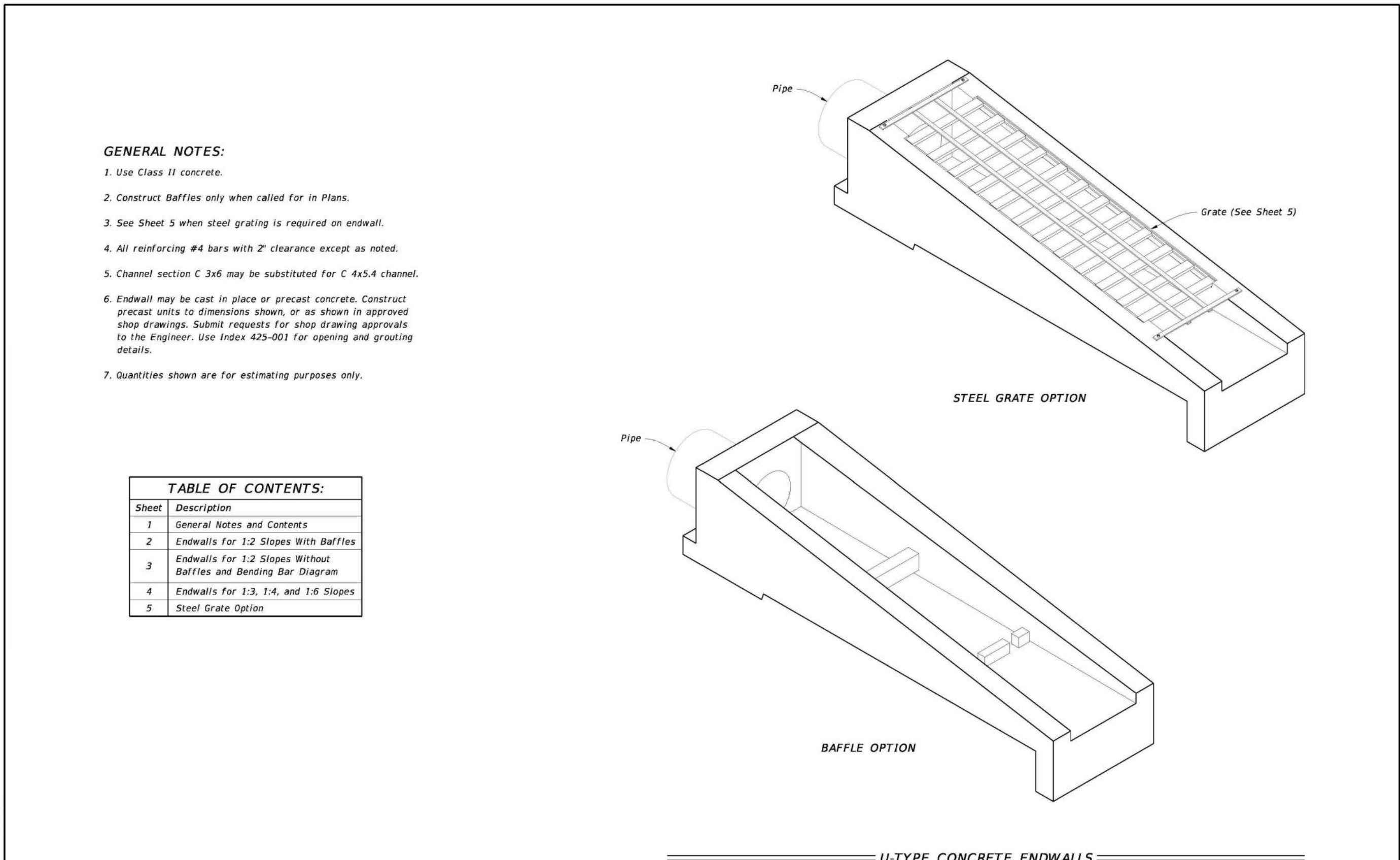
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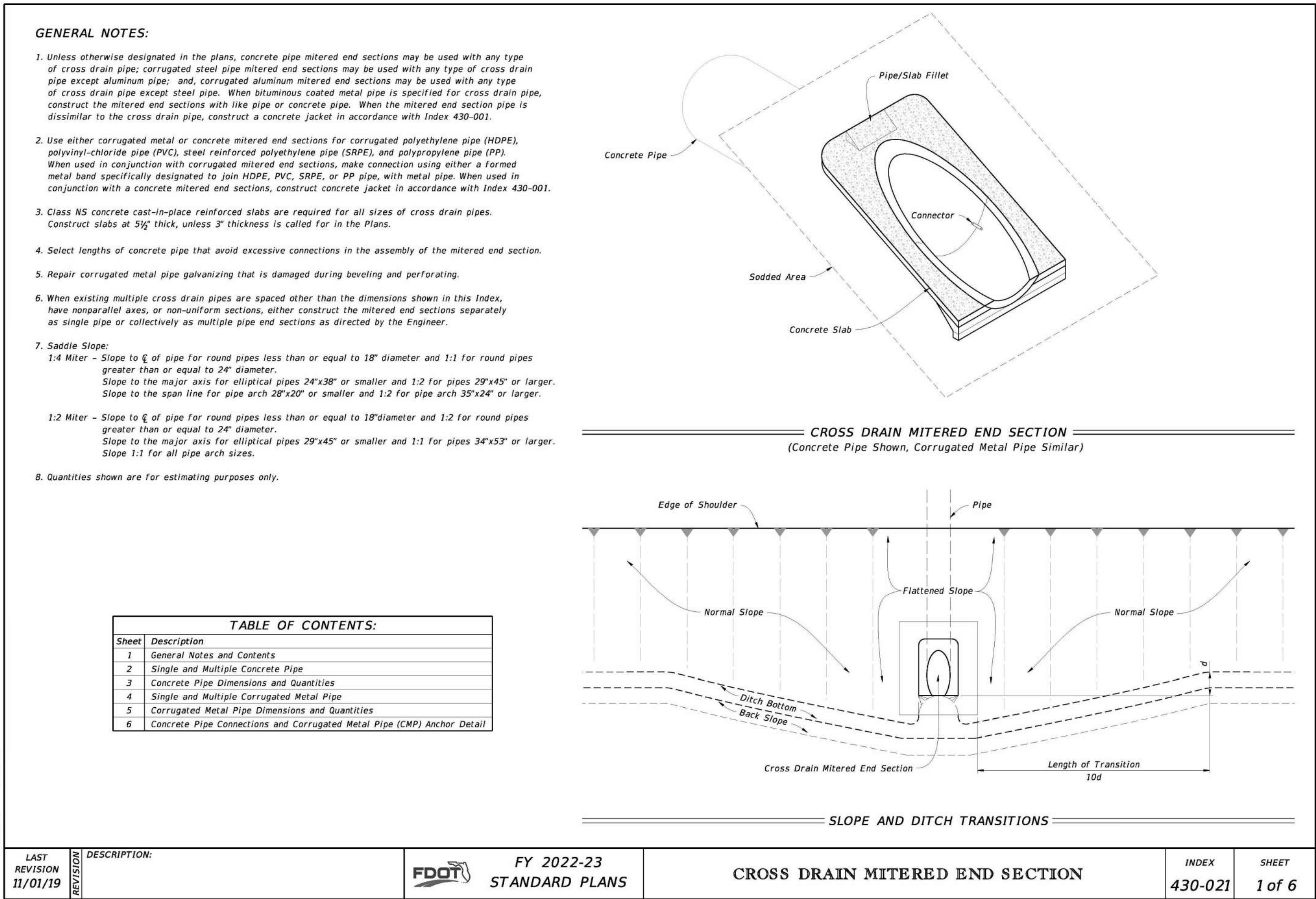
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11/01/20				425-052	4 of 14



LAST REVISION	DESCRIPTION:	FY 2022-23 STANDARD PLANS	U-TYPE CONCRETE ENDWALLS BAFFLES & GRATE OPTIONAL 15" TO 30" PIPE	INDEX	SHEET
11/01/21				430-011	2 of 5



LAST REVISION	DESCRIPTION:	FY 2022-23 STANDARD PLANS	U-TYPE CONCRETE ENDWALLS BAFFLES & GRATE OPTIONAL 15" TO 30" PIPE	INDEX	SHEET
11/01/21				430-011	1 of 5

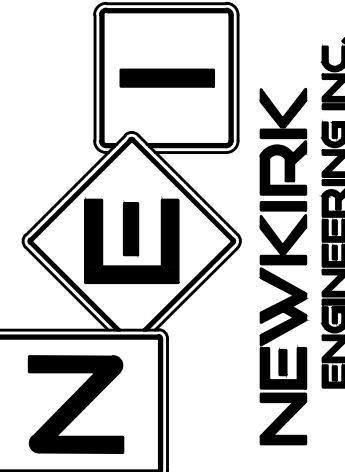


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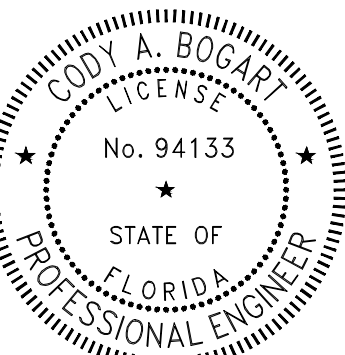
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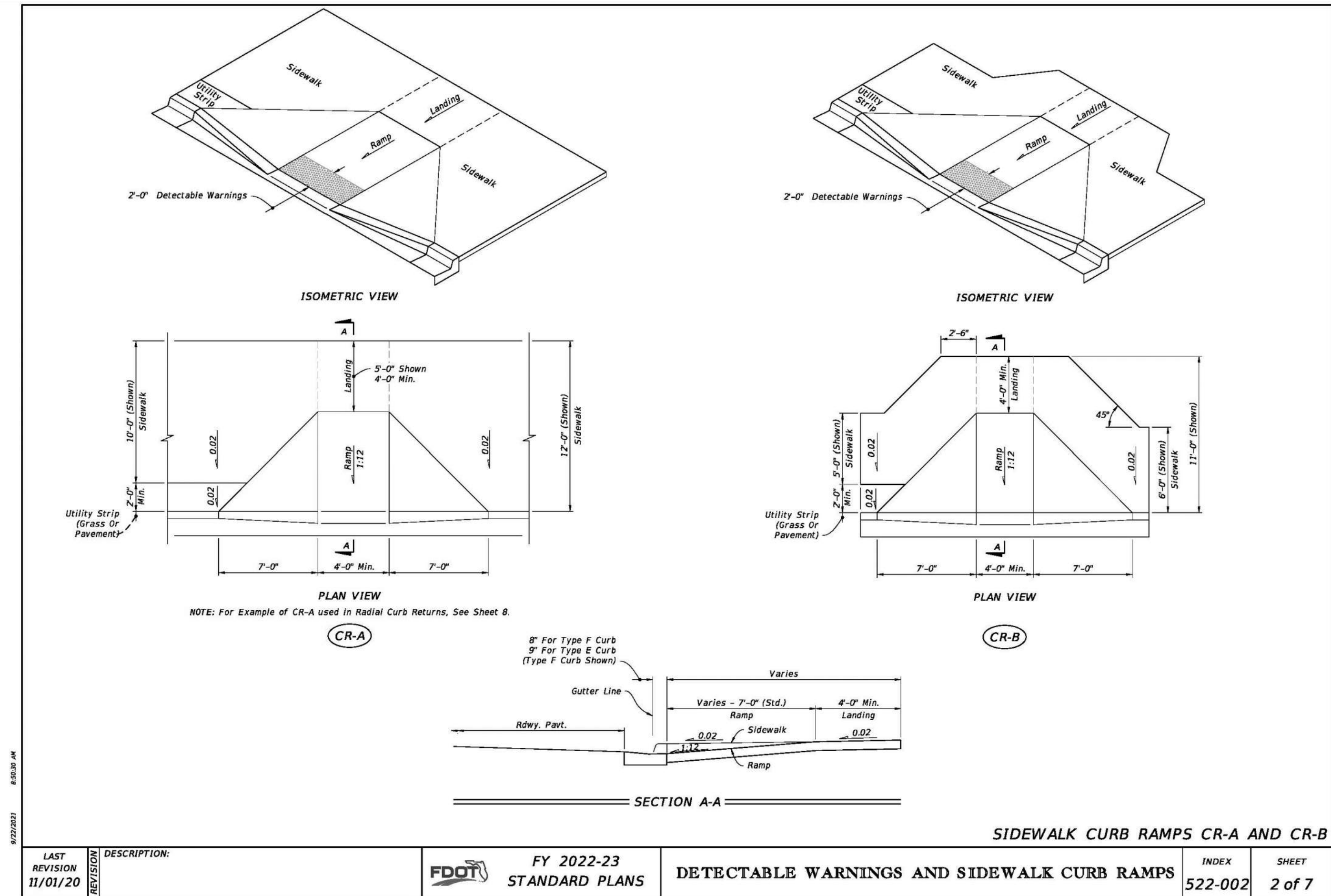
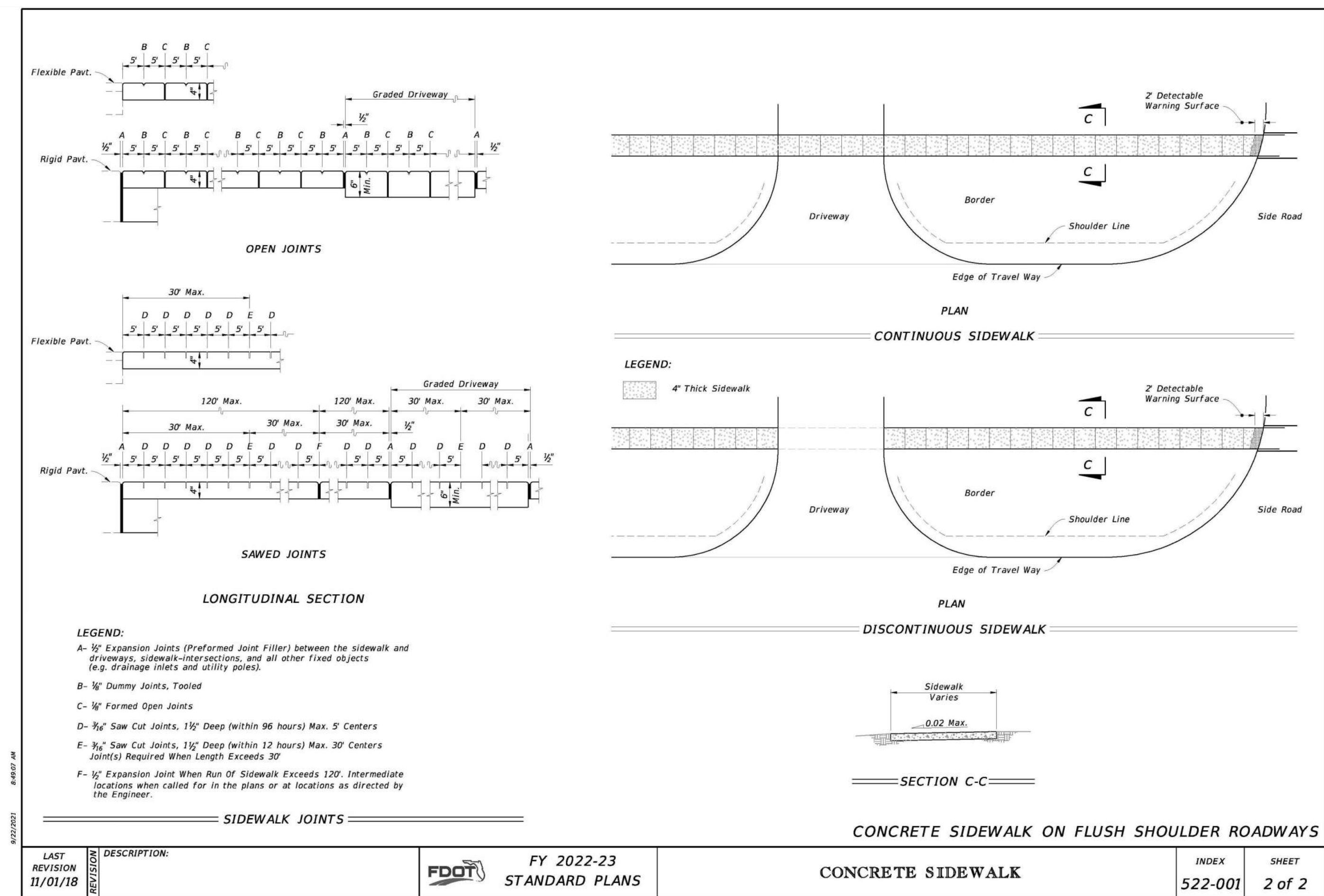
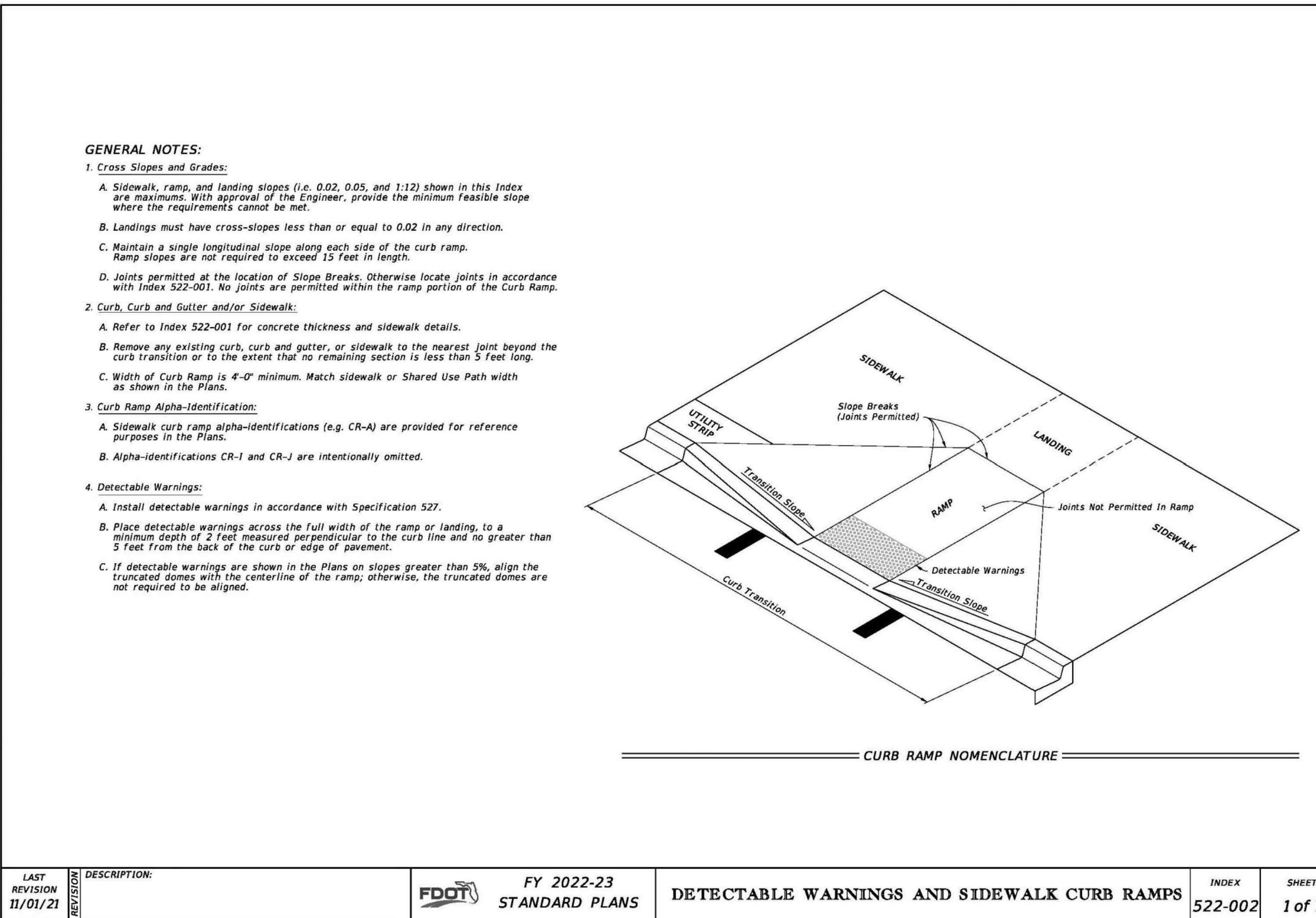
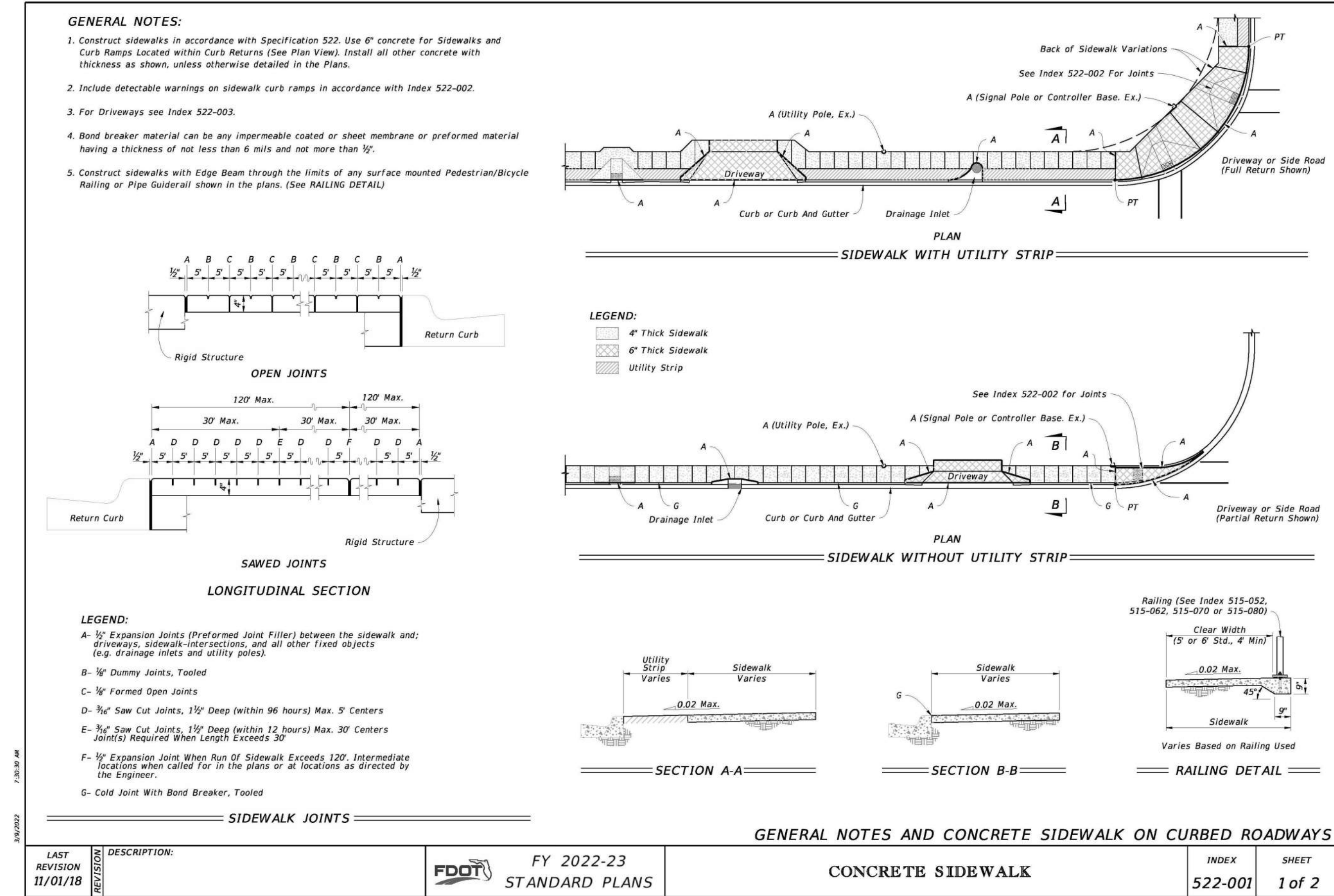
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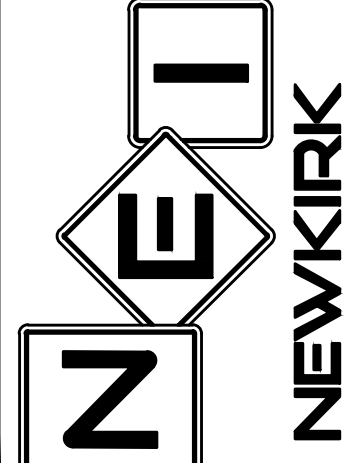
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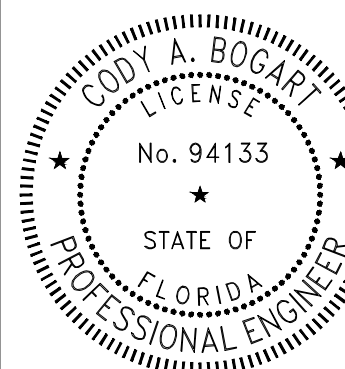
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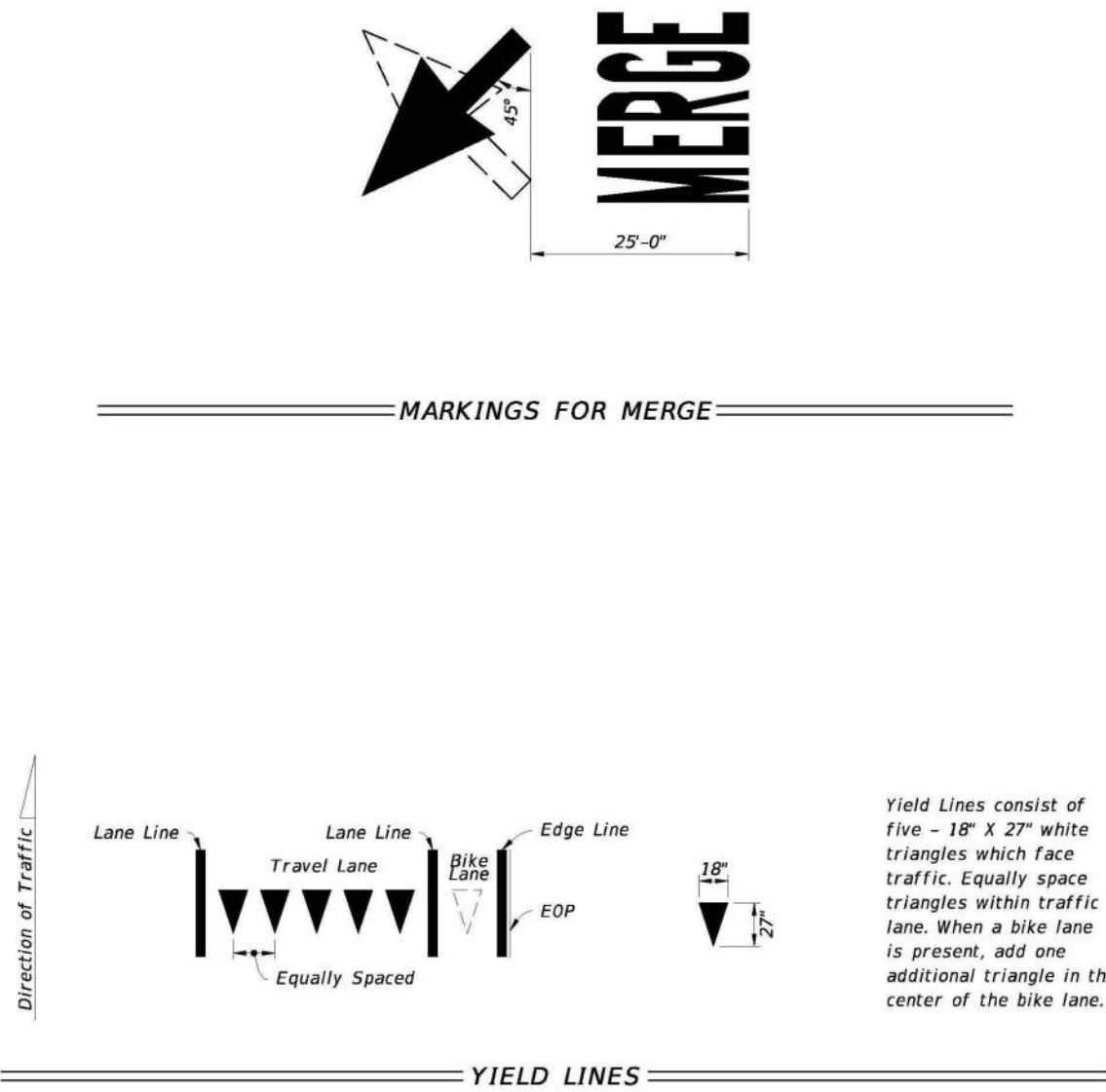
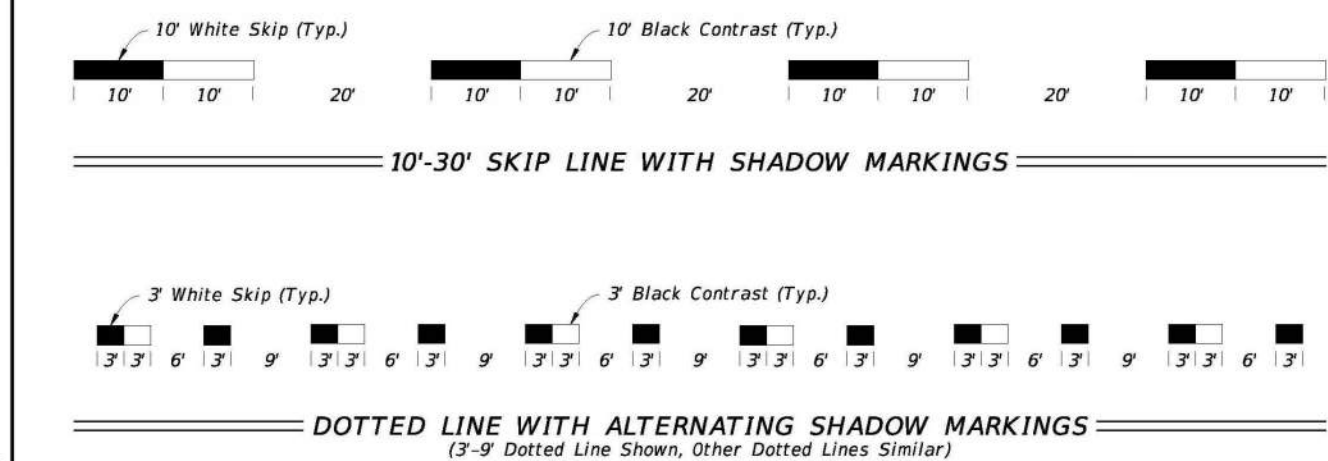
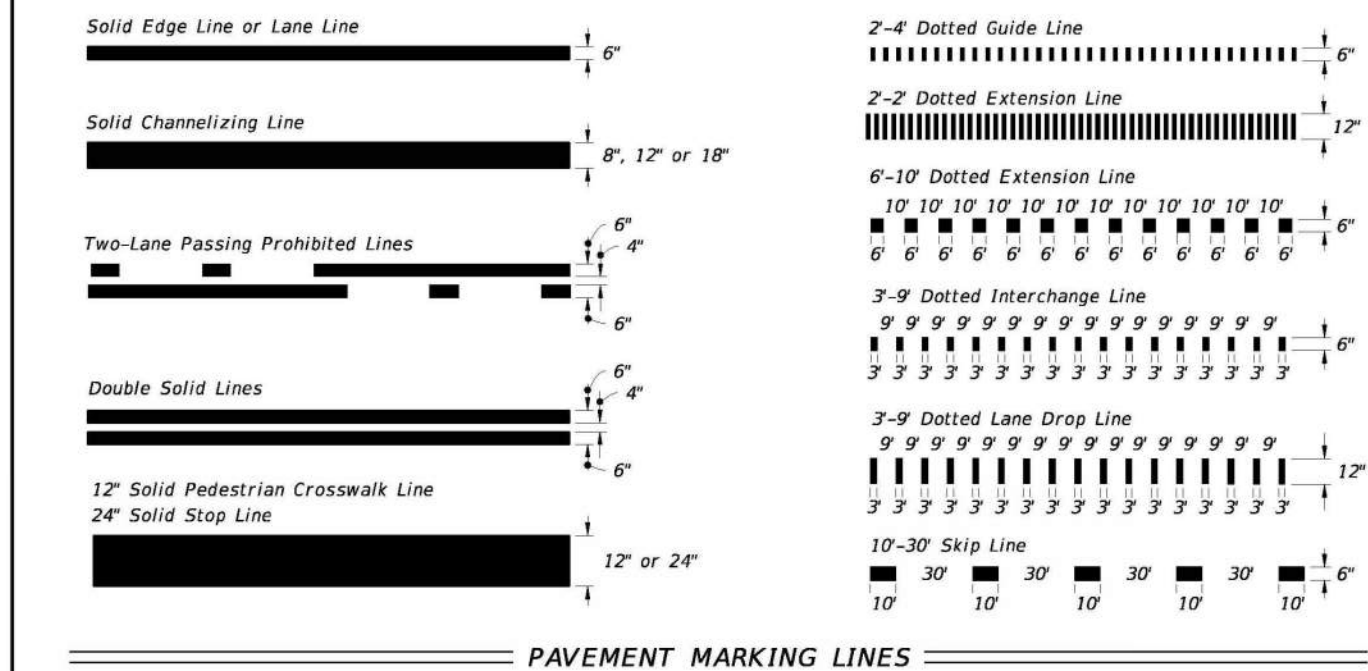
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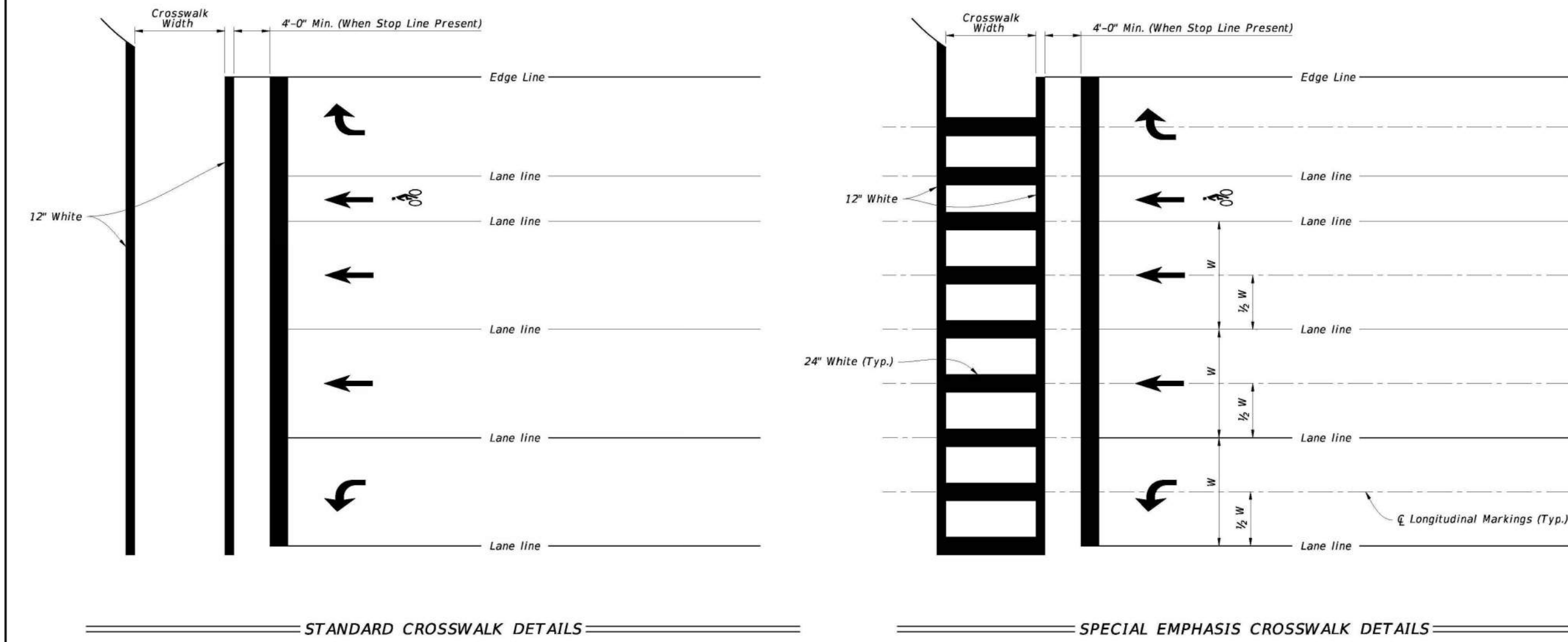
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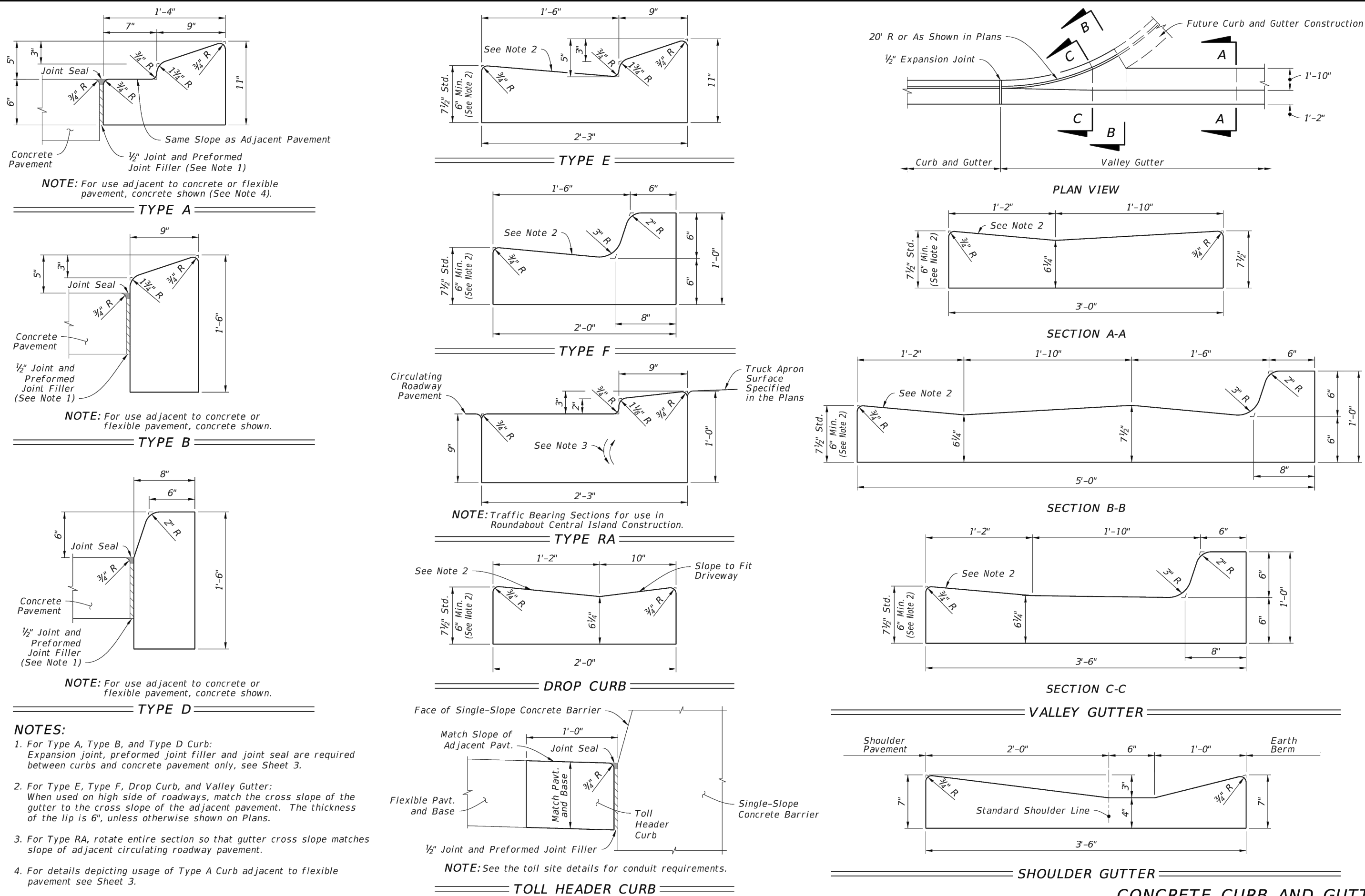


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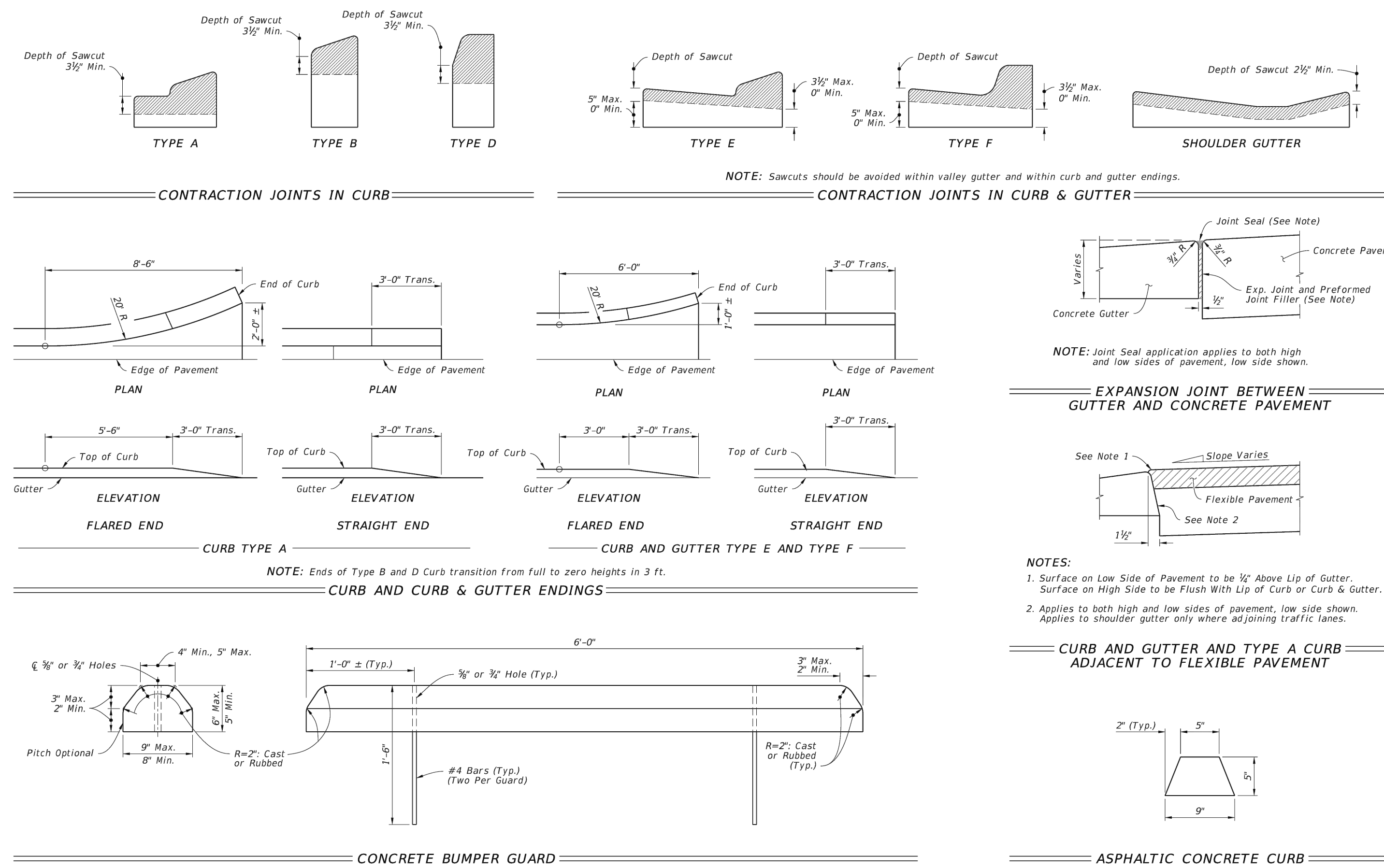


NOTES:
 1. For crosswalk width, exceed width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for midblock crosswalks. Measure width from the inside of the transverse crosswalk markings.
 2. When the Special Emphasis Crosswalk is not perpendicular to the lane lines, make the longitudinal markings parallel to the lane lines.
 3. Refer to Index 522-002 when Curb Ramps are present.

LAST REVISION	DESCRIPTION:	INDEX	SHEET
11/01/21		711-001	9 of 13



LAST REVISION	DESCRIPTION:	INDEX	SHEET
11/01/21		520-001	2 of 3

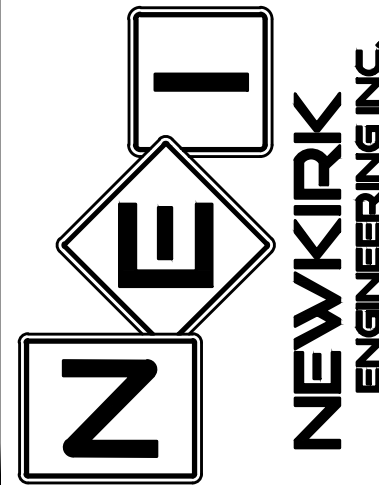


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REVISIONS

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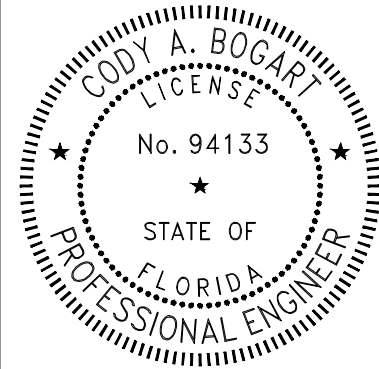
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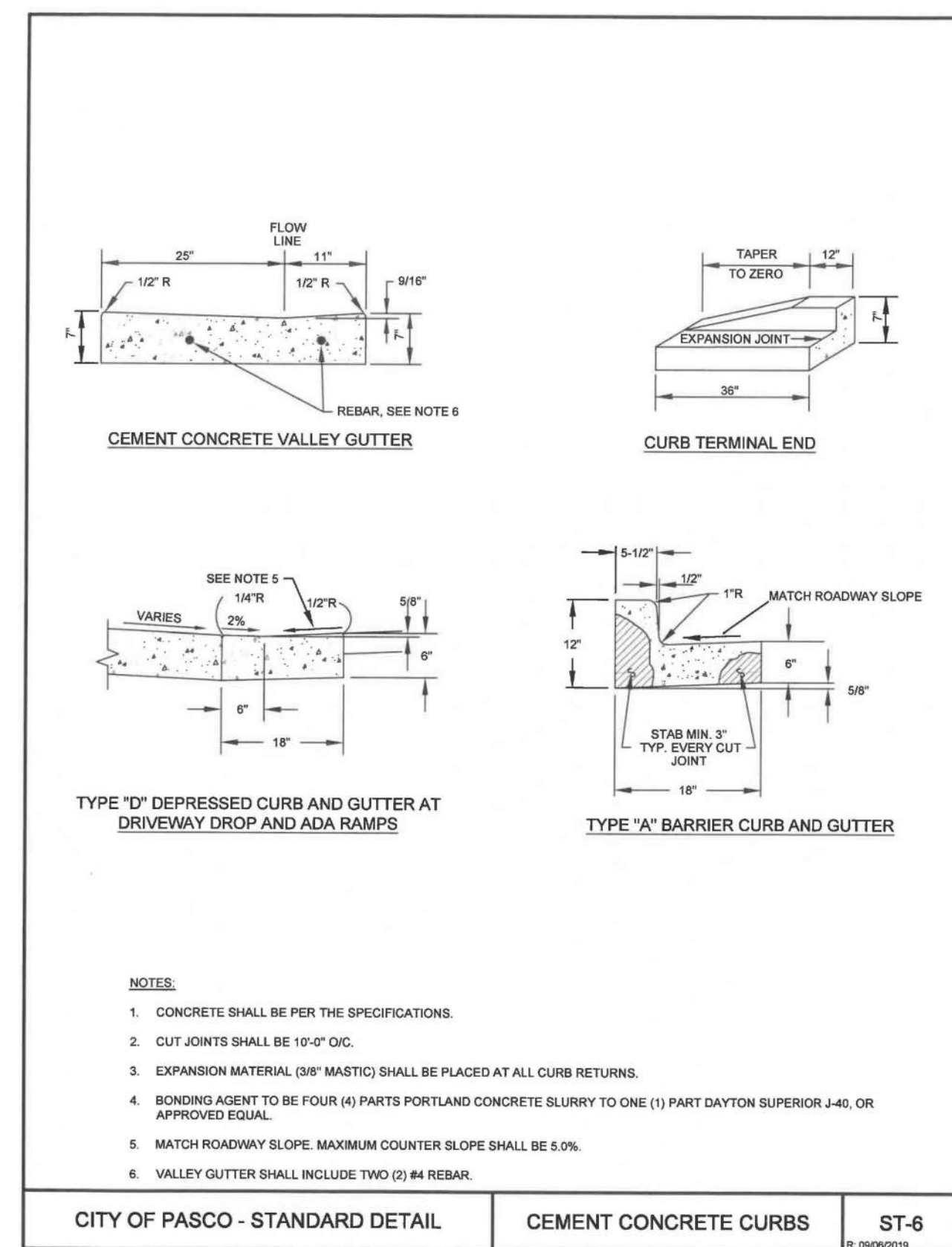
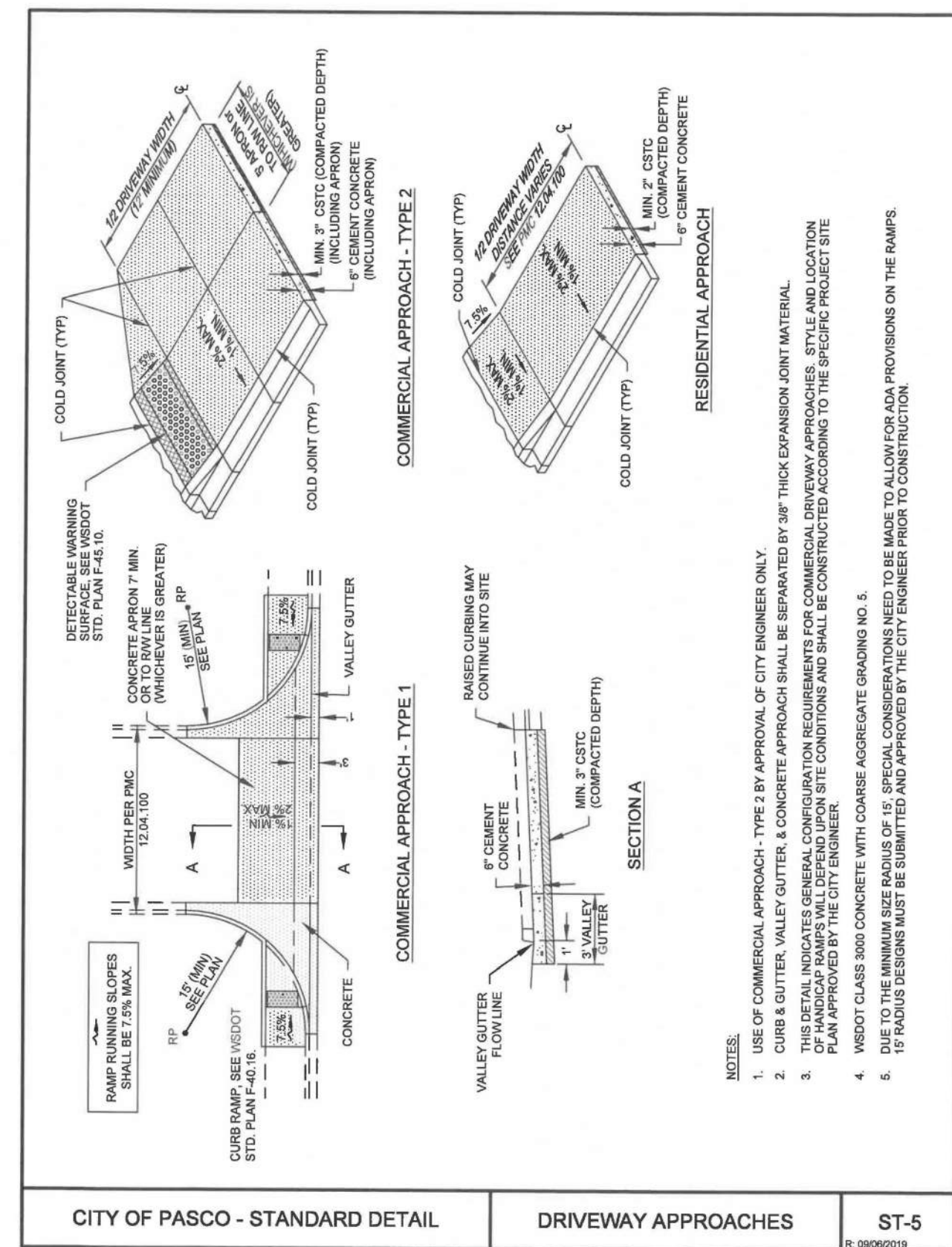
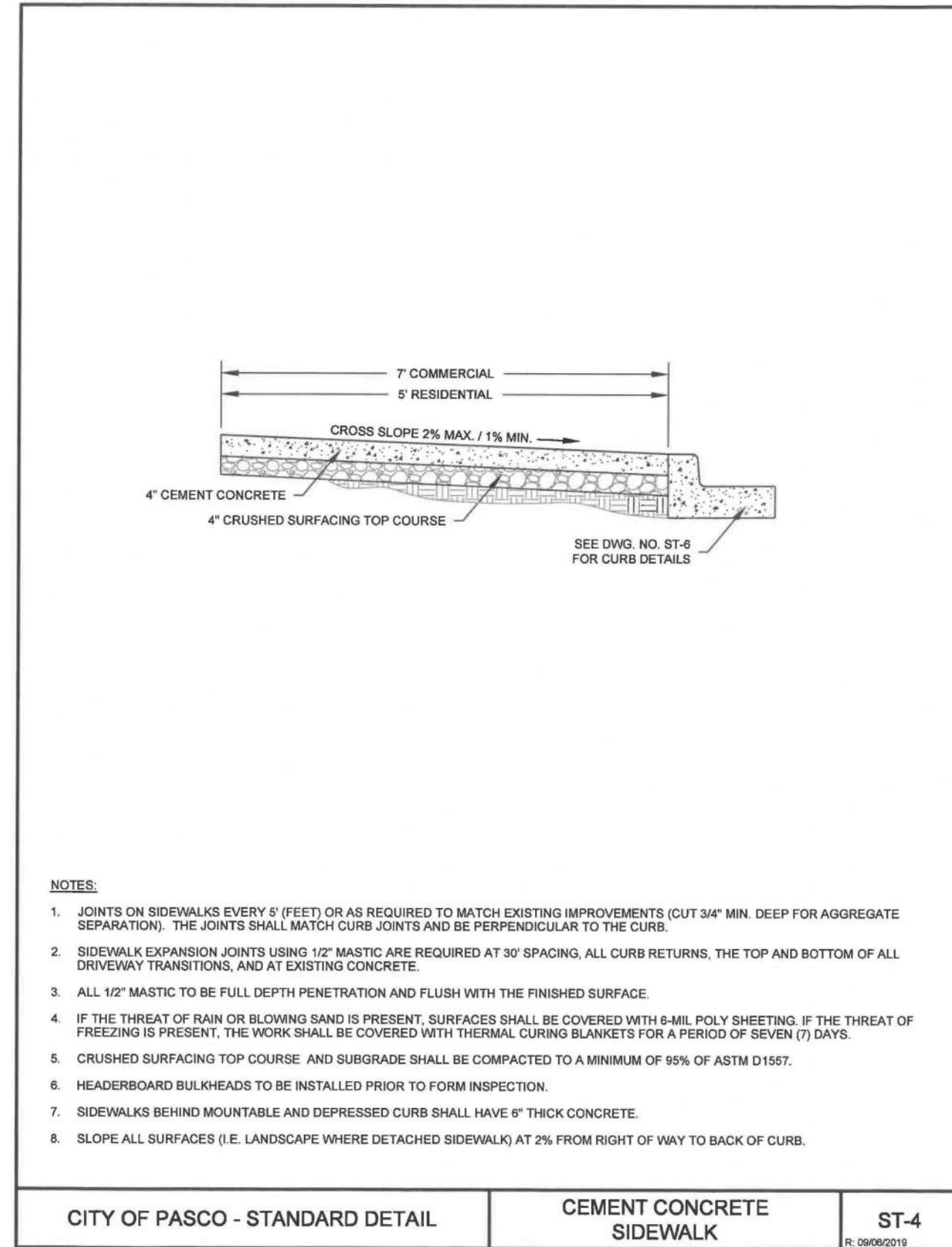
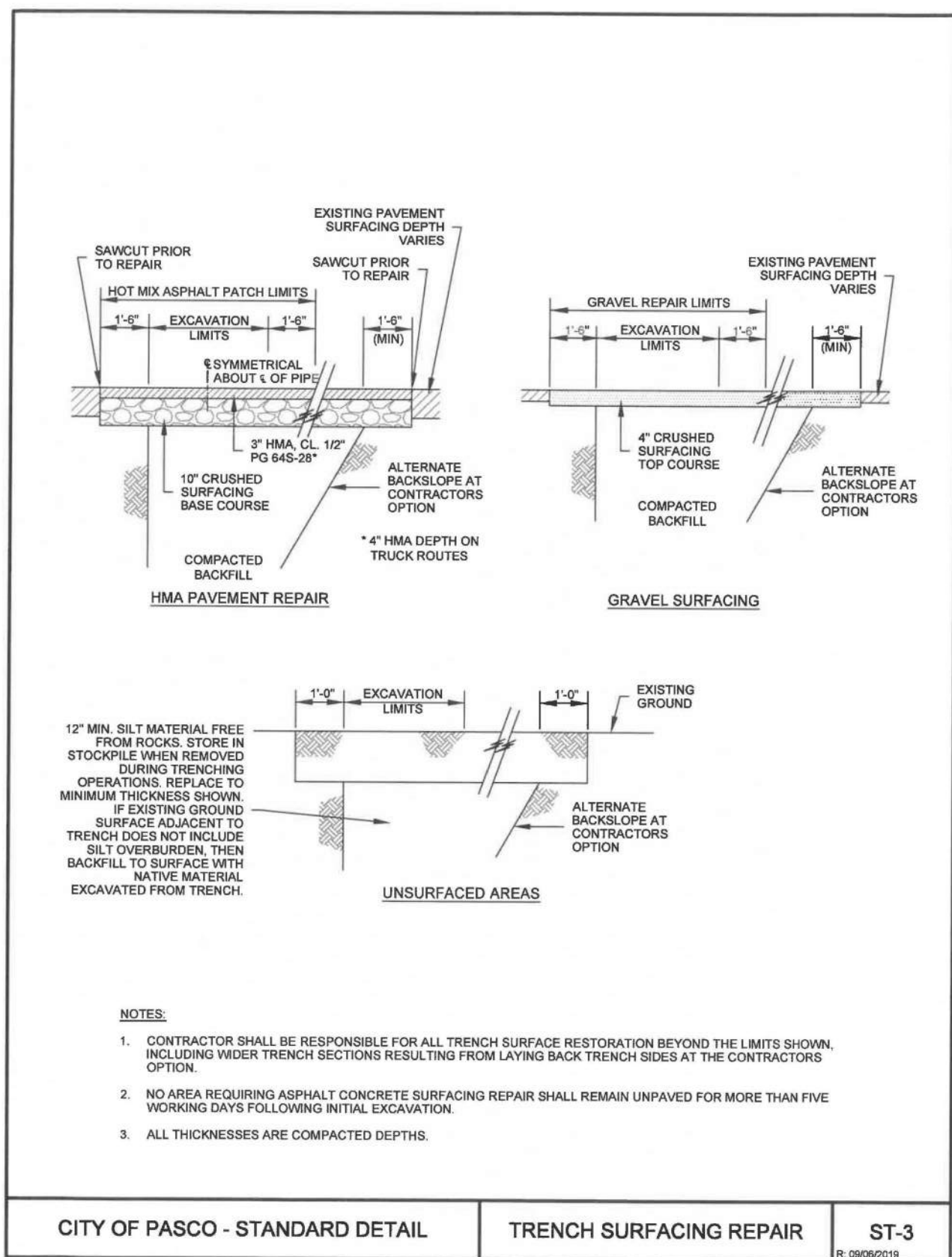
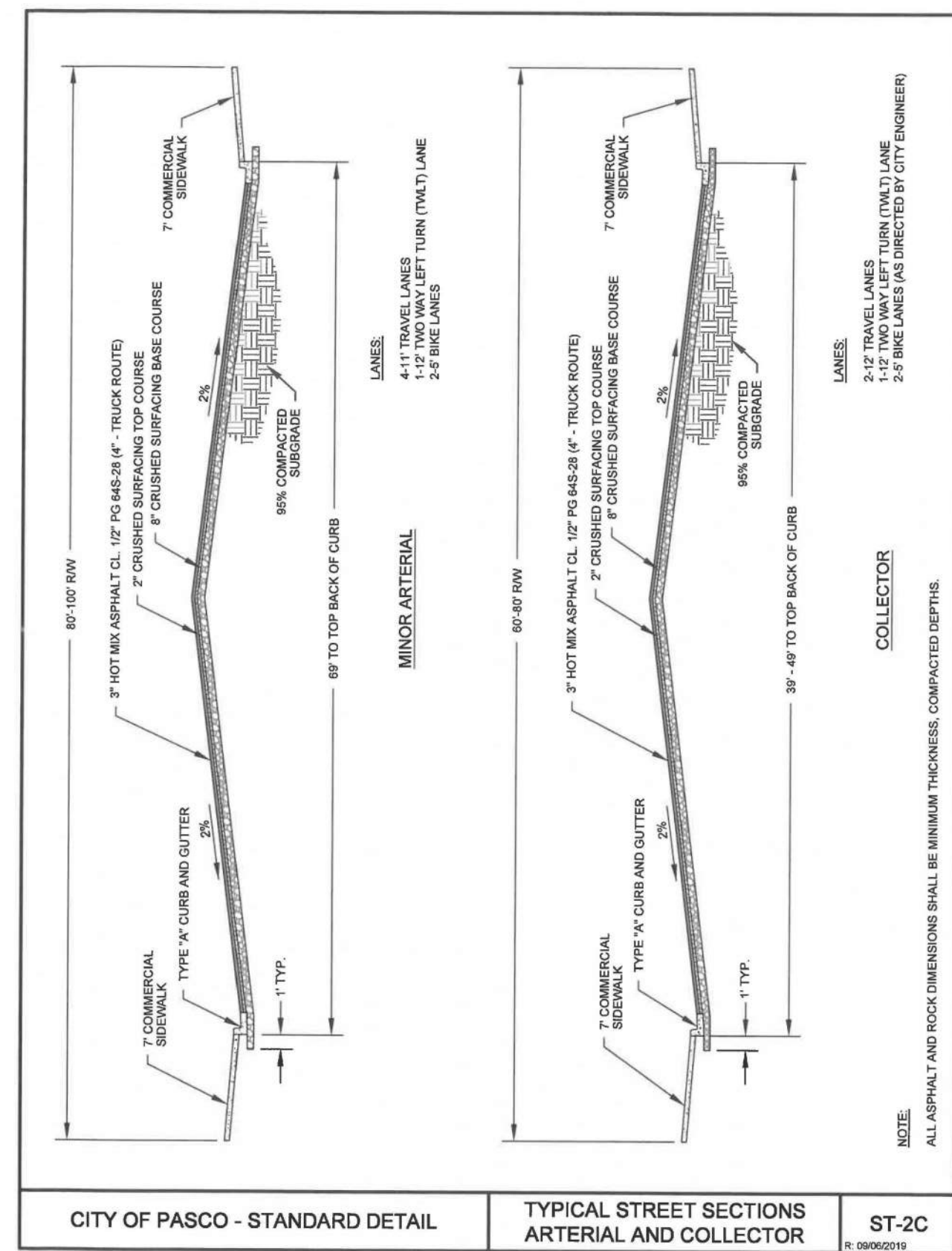
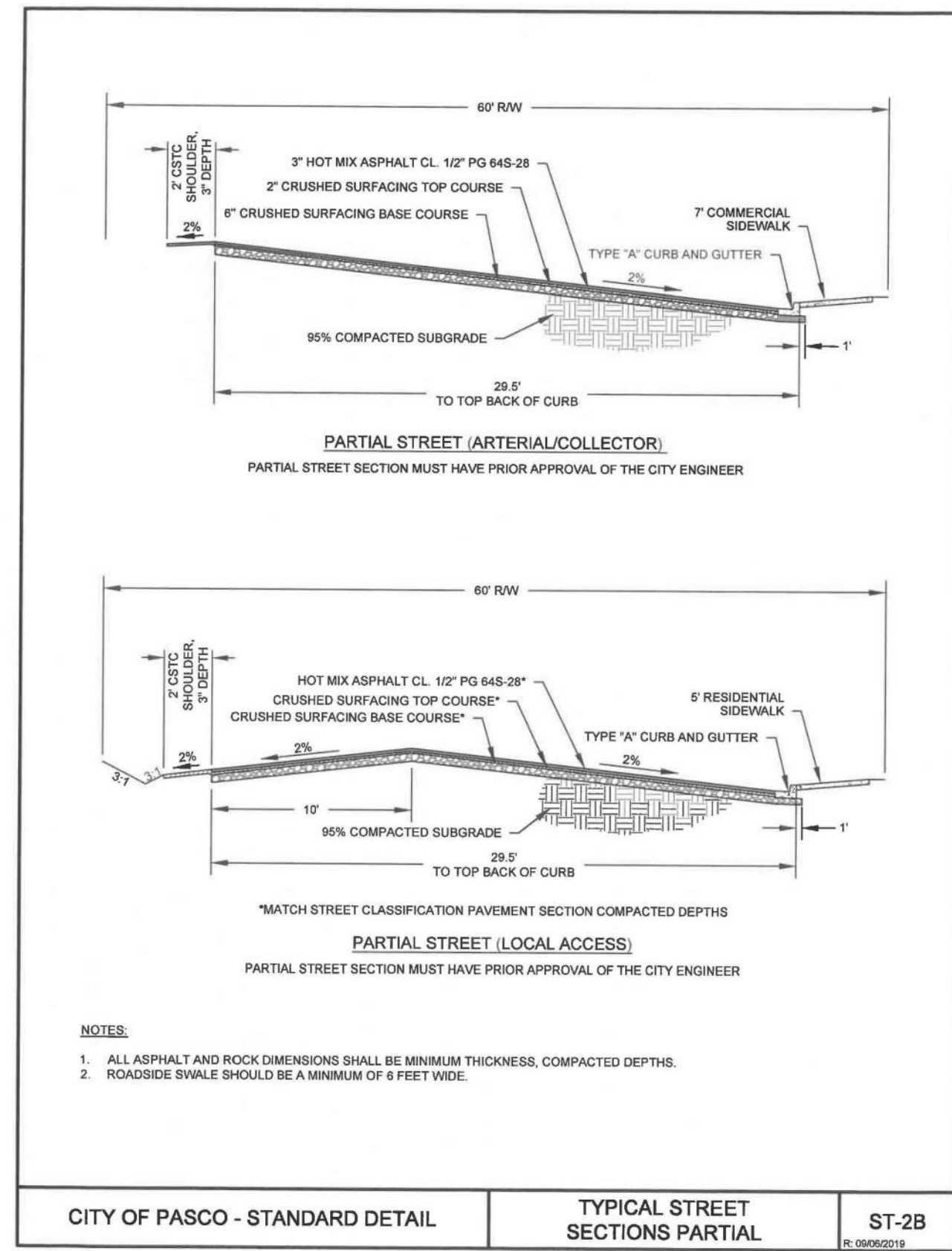
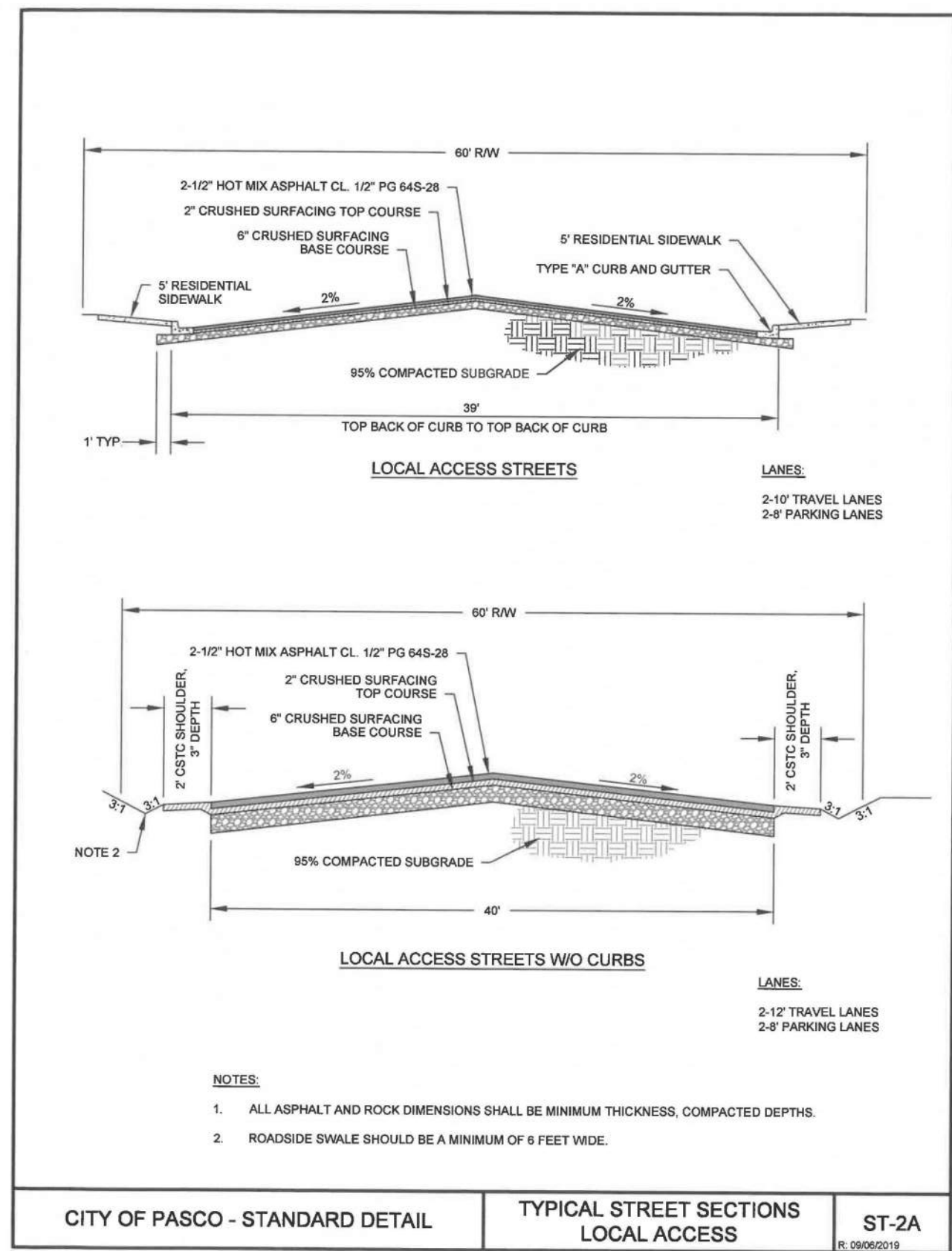
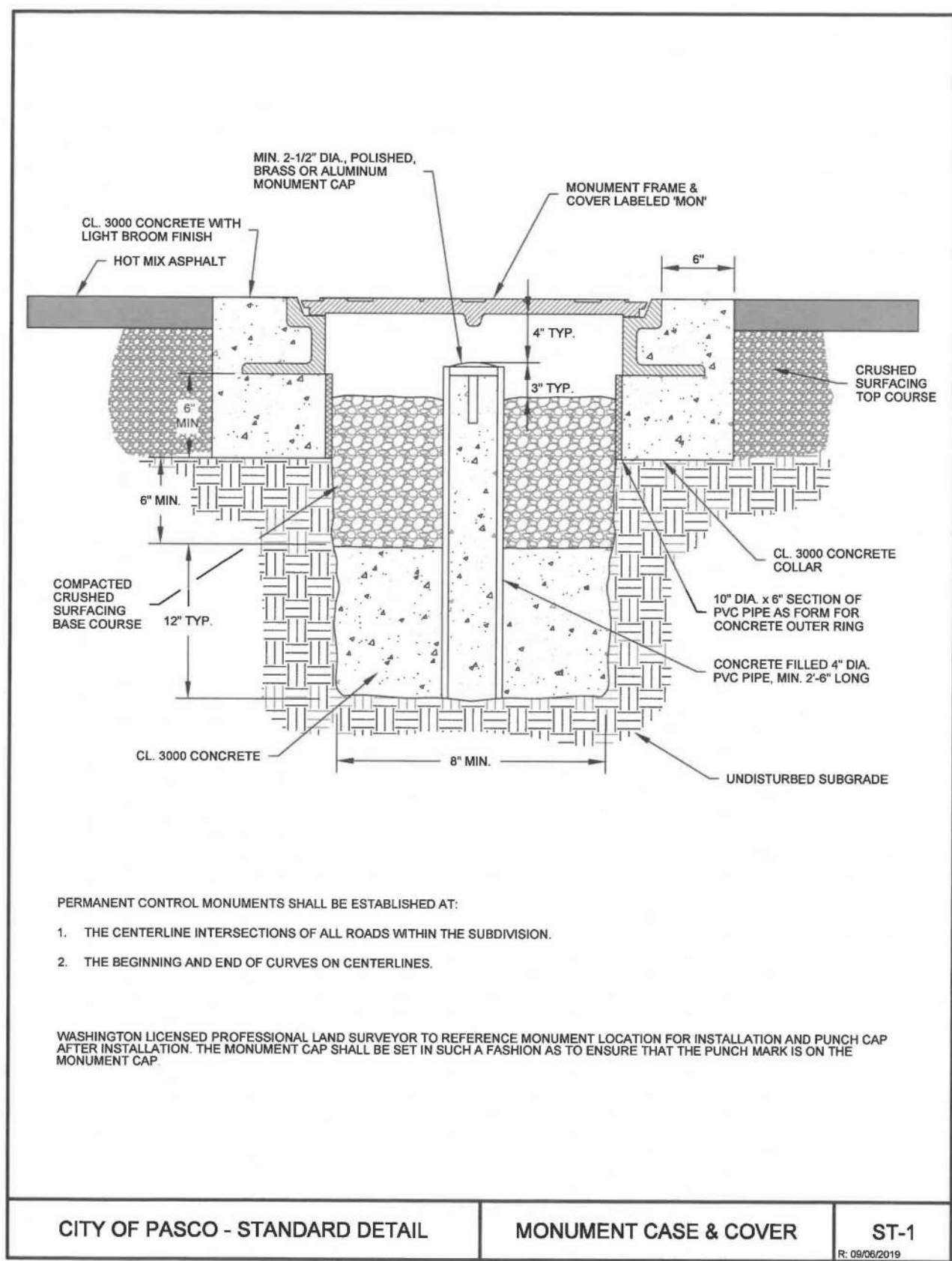
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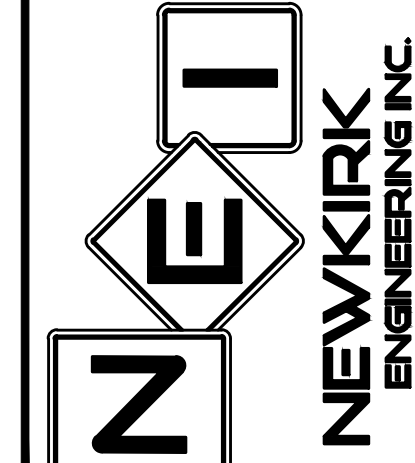
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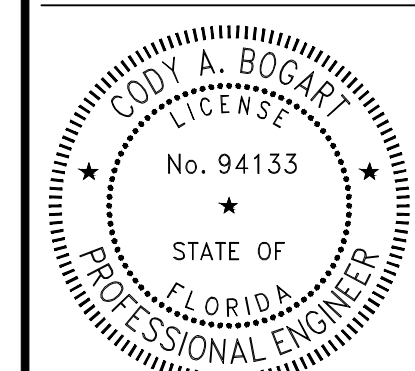
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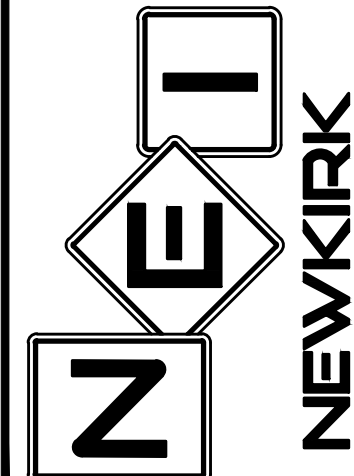
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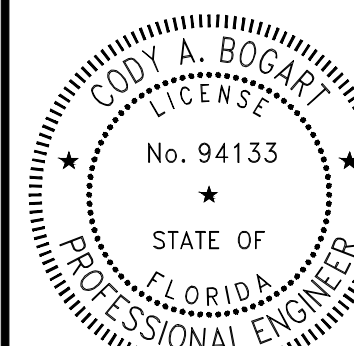
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PROJECT No: 2021-346
DATE: AUGUST 2022
DESIGN BY: CAB
DRAWN BY: CRA
CHECKED BY: HHN
SCALE:
DRAWING NUMBER

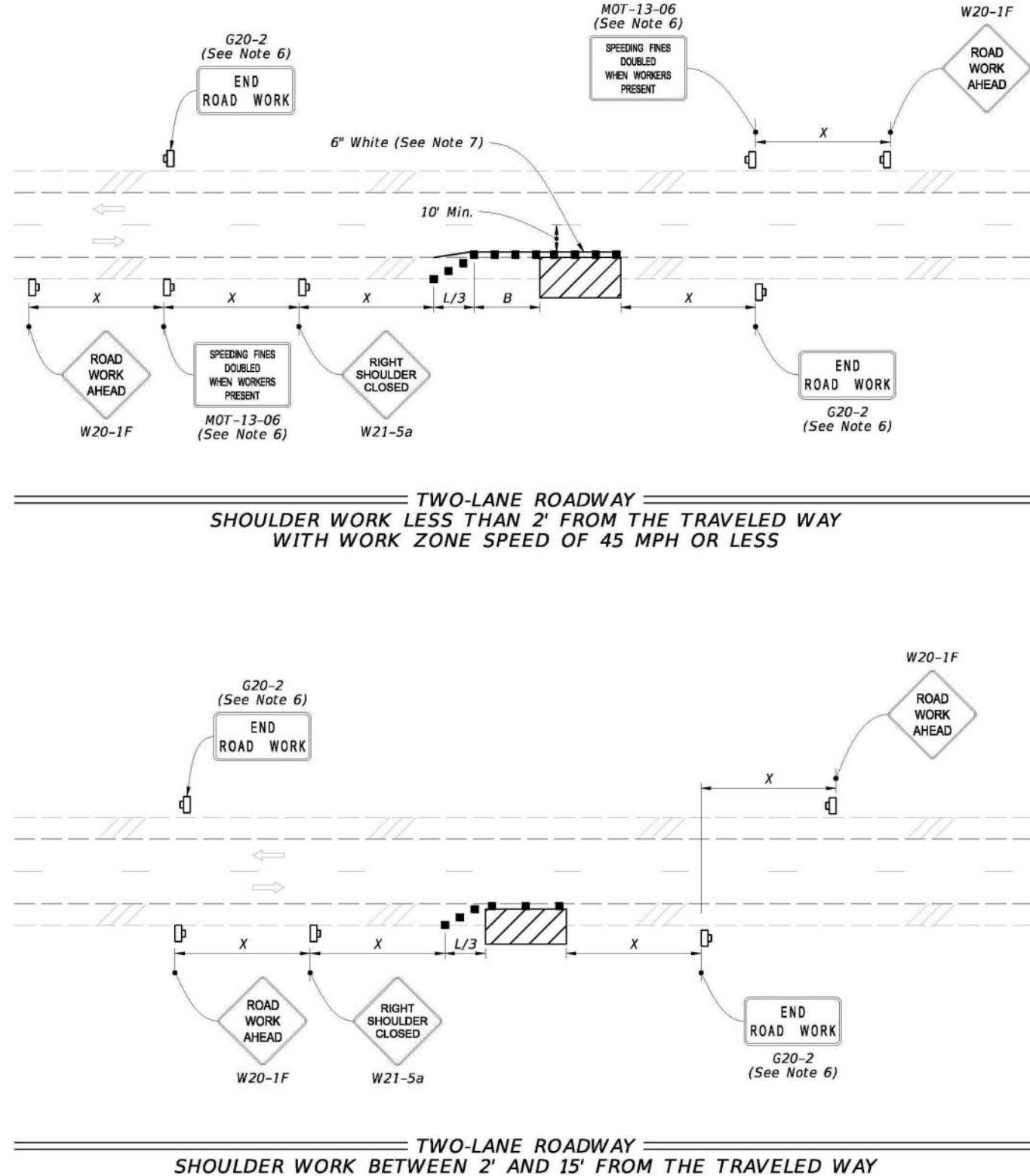
50

NOTE:

- This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work on the shoulder.
- L = Taper Length
B = Buffer Length
See Index 102-600 for "L", "B", and channelizing device spacing values.
- Where work activities are between 2' and 15' from the edge of traveled way, the Engineer may omit signs and channelizing devices for work operations 60 minutes or less.
- When four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and egress.
- For work less than 2' from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.
- The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" Signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the work operation is in place for 24 hours or less.
- Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.
- Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.
- When there is no paved shoulder, the "Worker" sign (W21-1) may be used instead of the "Shoulder Closed" sign (W21-5a).

SYMBOLS:

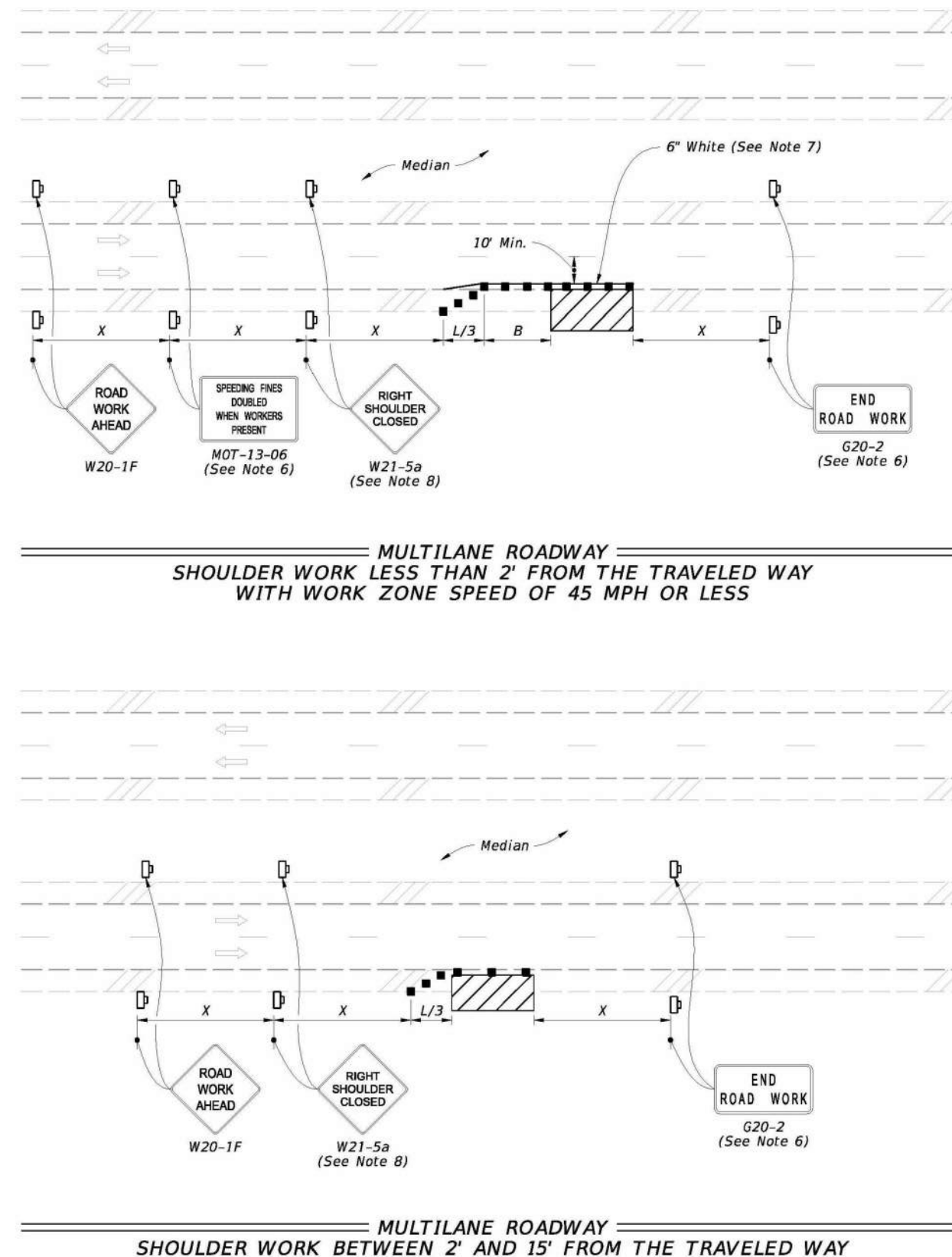
- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic



LAST REVISION	DESCRIPTION:	FY 2022-23 STANDARD PLANS	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX	SHEET
11/01/21				102-602	1 of 2

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic



LAST REVISION	DESCRIPTION:	FY 2022-23 STANDARD PLANS	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX	SHEET
11/01/20				102-602	2 of 2

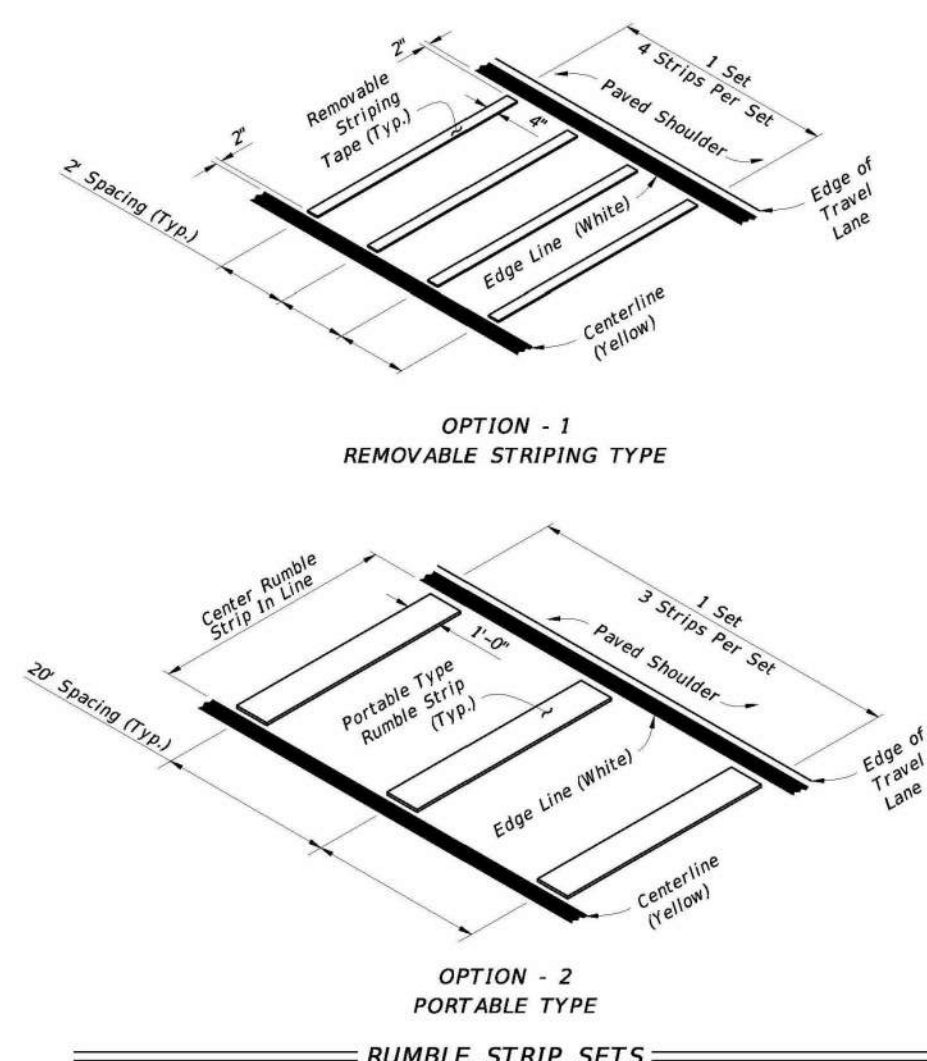
NOTES:

- This Index applies to Two-Lane, Two-Way Roadways with work within the traveled way.
- L = Taper Length
B = Buffer Length
X = Work Zone Sign Spacing
See Index 102-600 for "L", "B", "X" and channelizing device spacing values.
- Optionally, use "Flagger Ahead" sign with symbol (W20-7) instead of "Flagger Ahead" sign with text (W20-7A).
- Use temporary raised rumble strips when the existing posted speed is 55 mph or greater and the work duration is greater than 60 minutes. If temporary raised rumble strips are not used, omit "Rumble Strips Ahead" signs (MOT-18-10) and associated work zone sign spacing.
- Additional one-way control may be provided by the following means:
a. Flag-carrying vehicle
b. Official vehicle
c. Pilot vehicles
d. Traffic signals
- The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign spacing, may be omitted when the work operation will be in place for 24 hours or less.
- Automated Flagger Assistance Devices (AFADs) may be used in accordance with Specification Sections 102, 990 and the APL vendor drawings.
- Railroad Crossings:
a. If an active railroad crossing is located closer to the Work Area than the queue length plus 300 Feet, extend the Buffer Space as shown on Sheet 2.
b. If the queuing of vehicles across an active railroad crossing cannot be avoided, provide a uniformed traffic control officer or flagger at the highway-rail grade crossing to prevent vehicles from stopping within the highway-rail grade crossing, even if automatic train warning devices are in place.

SYMBOLS:

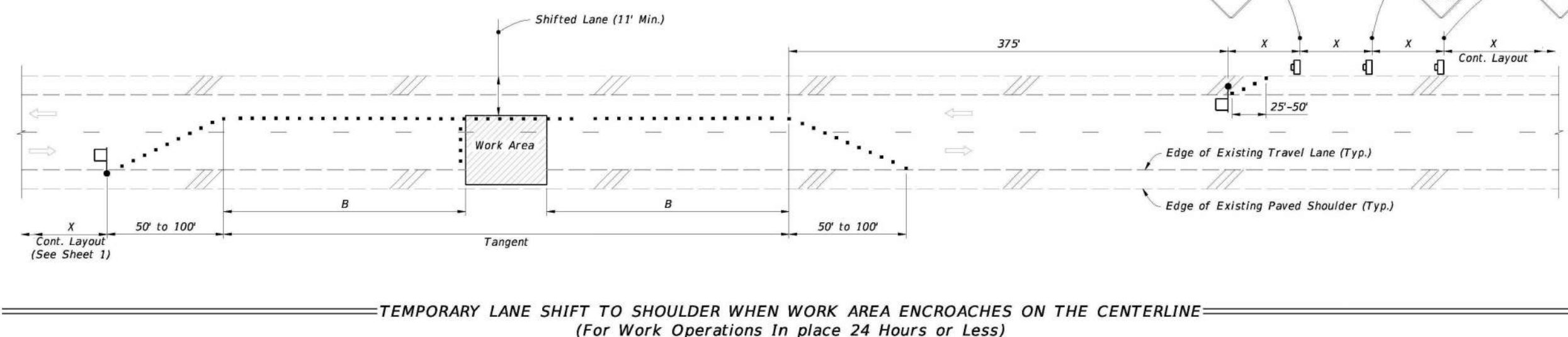
- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Flagger
- Lane Identification and Direction of Traffic

LAST REVISION	DESCRIPTION:	FY 2022-23 STANDARD PLANS	TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY	INDEX	SHEET
11/01/21				102-603	1 of 2



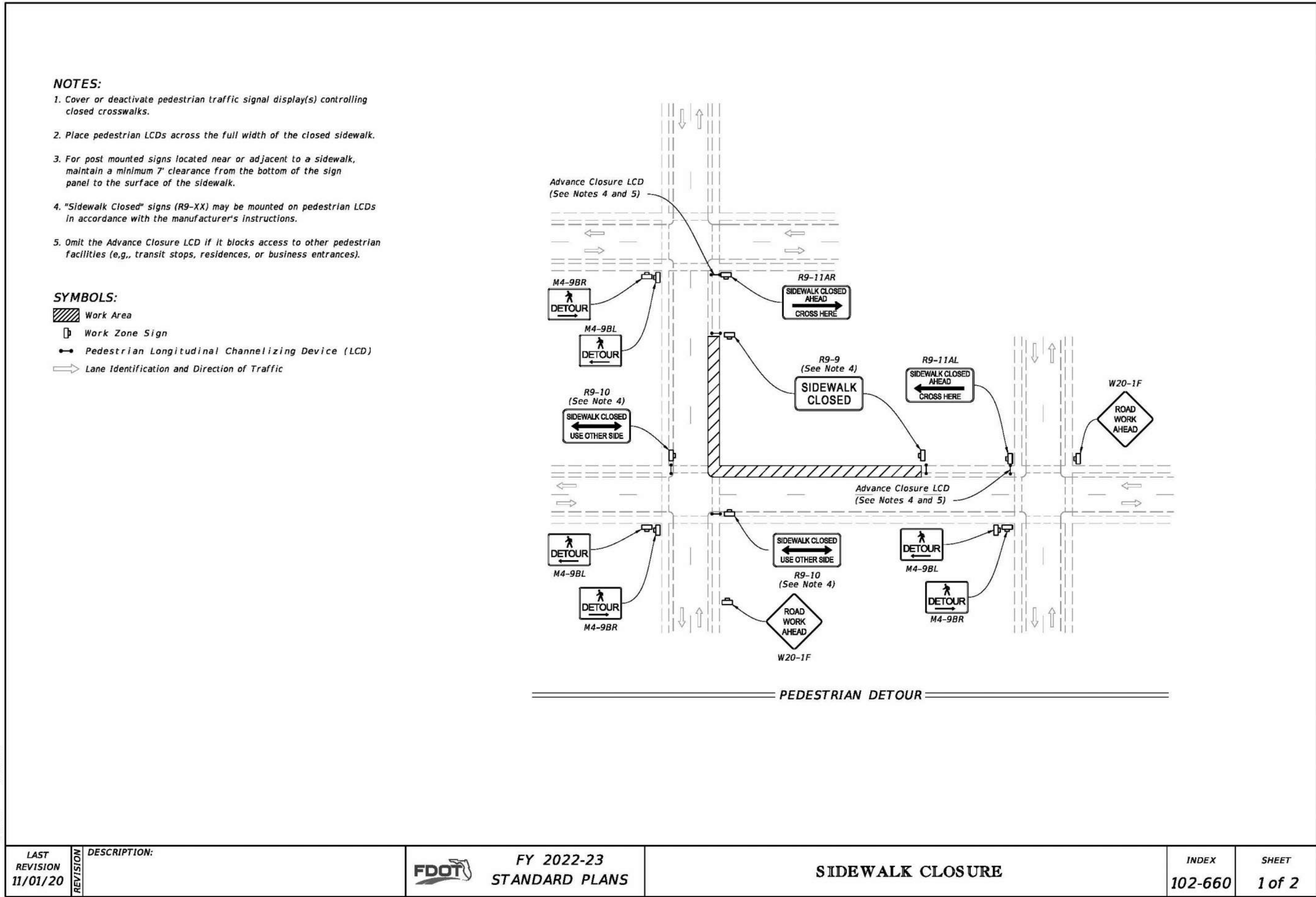
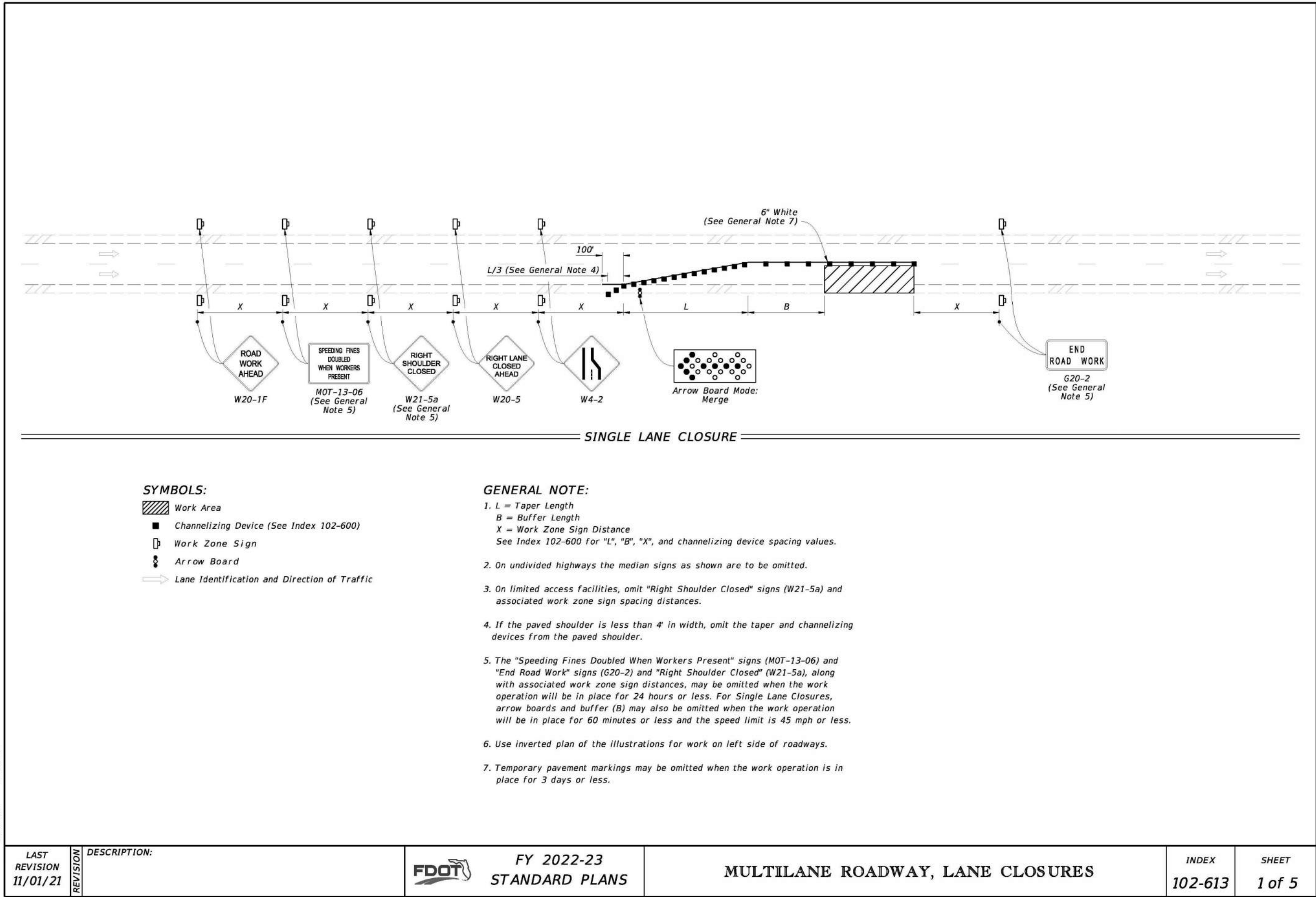
SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Flagger
- Lane Identification and Direction of Traffic



LAST REVISION	DESCRIPTION:	FY 2022-23 STANDARD PLANS	TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY	INDEX	SHEET
11/01/21				102-603	2 of 2

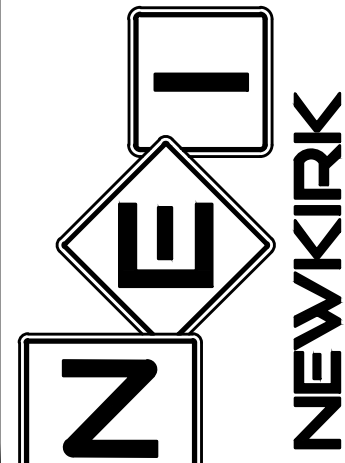
SPECIAL CONDITIONS



REVISIONS

DATE	DESCRIPTION

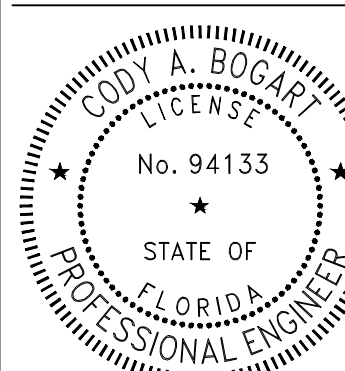
1230 North US1, Suite 3
Ormond Beach, Florida 32174
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www.Newkirk-Engineering.com
C.A. # 30209
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MAINTENANCE OF TRAFFIC
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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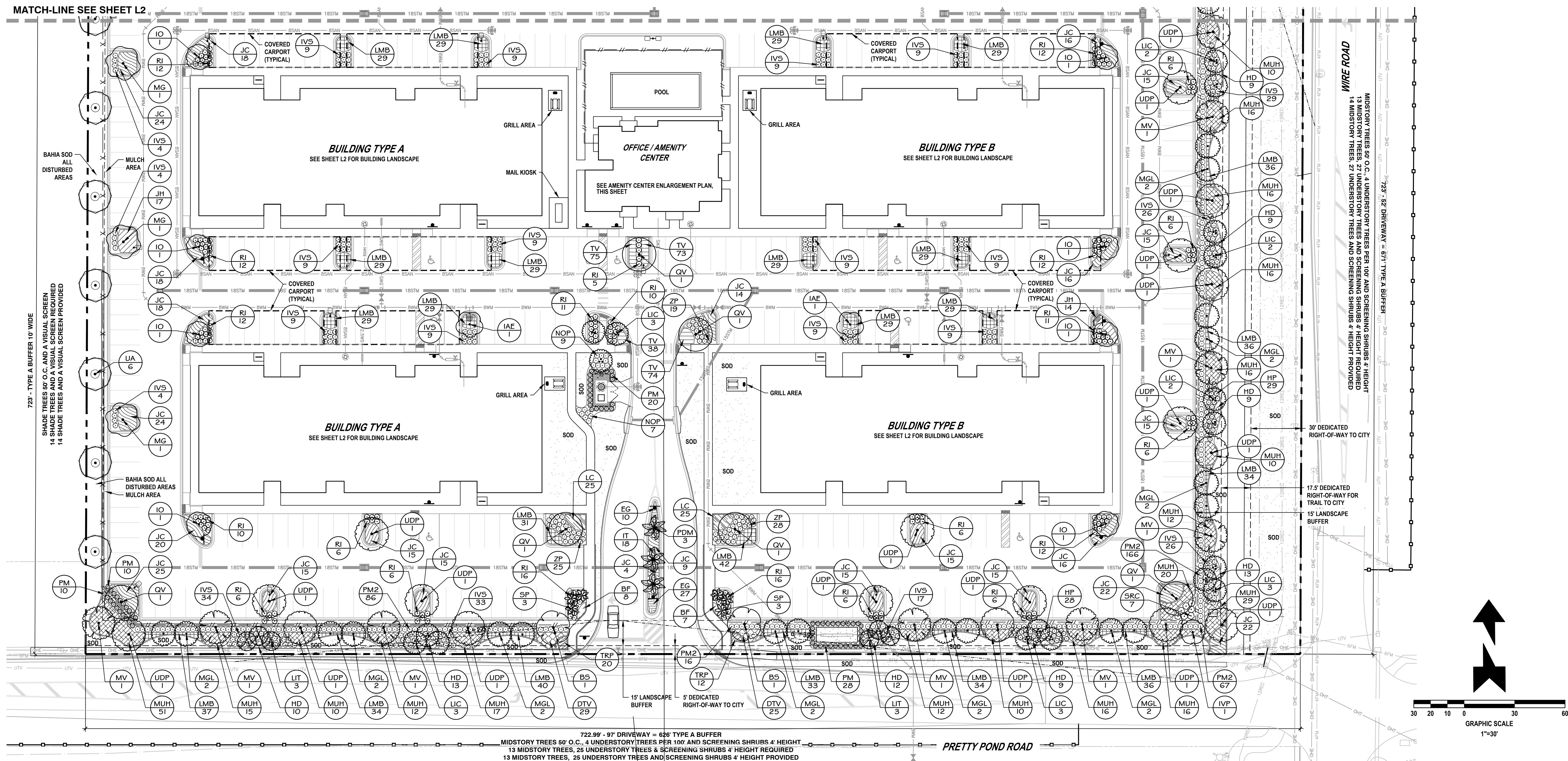
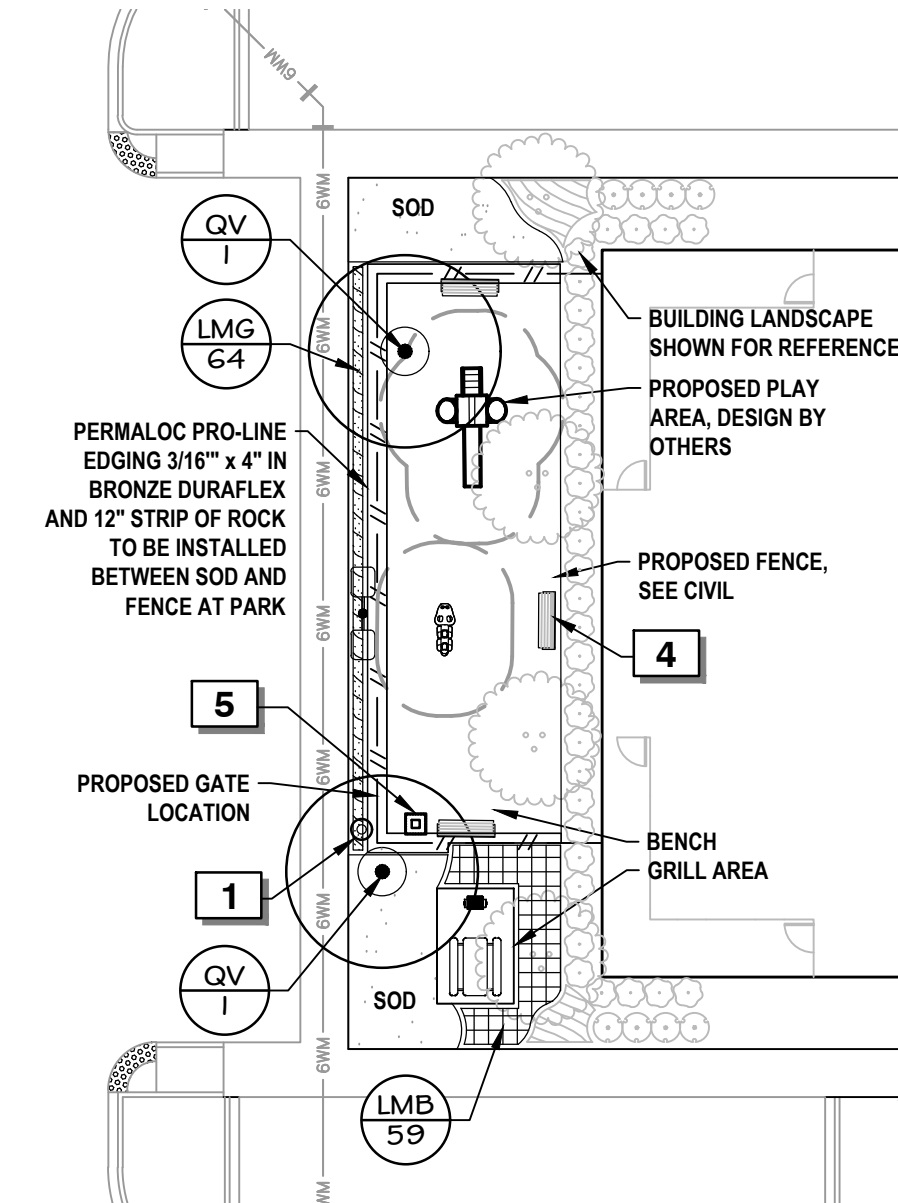
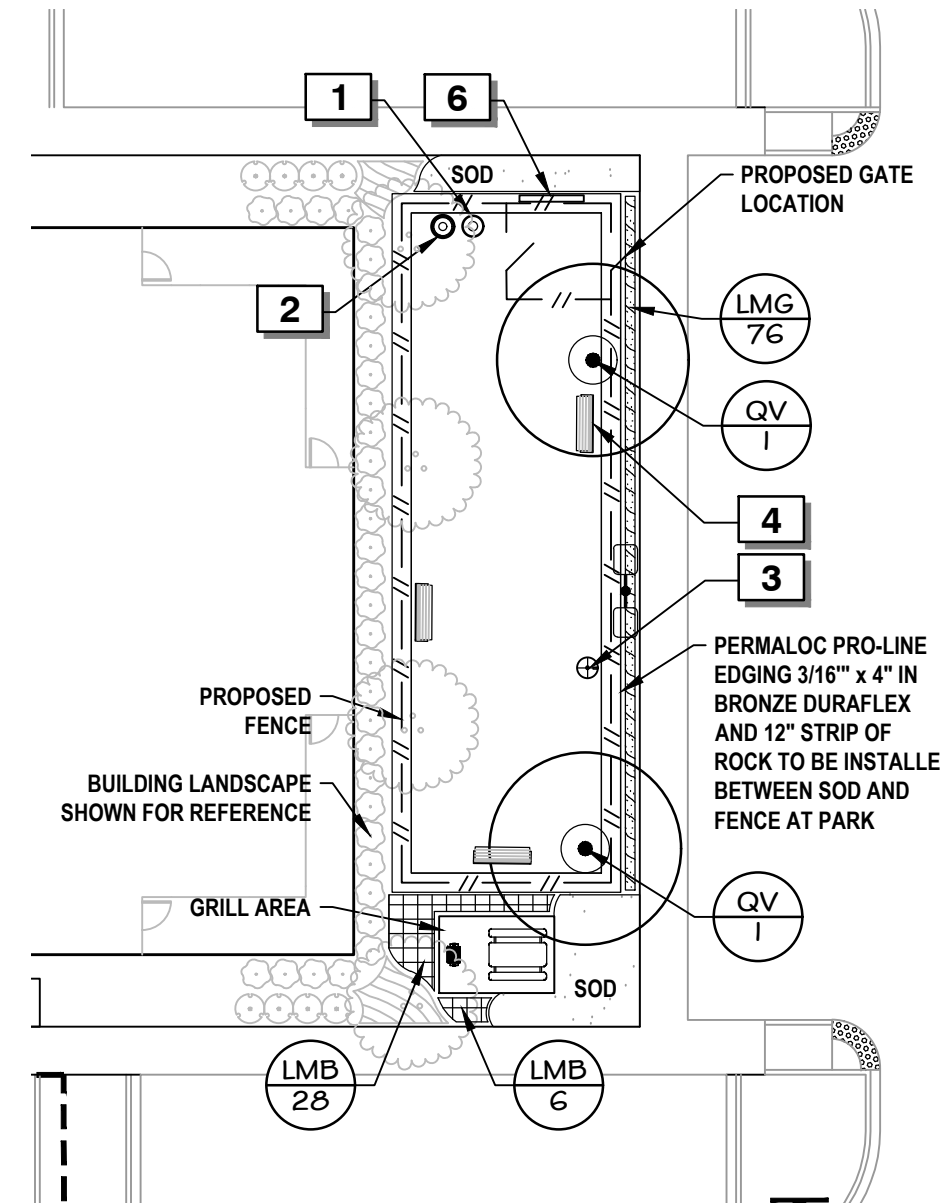
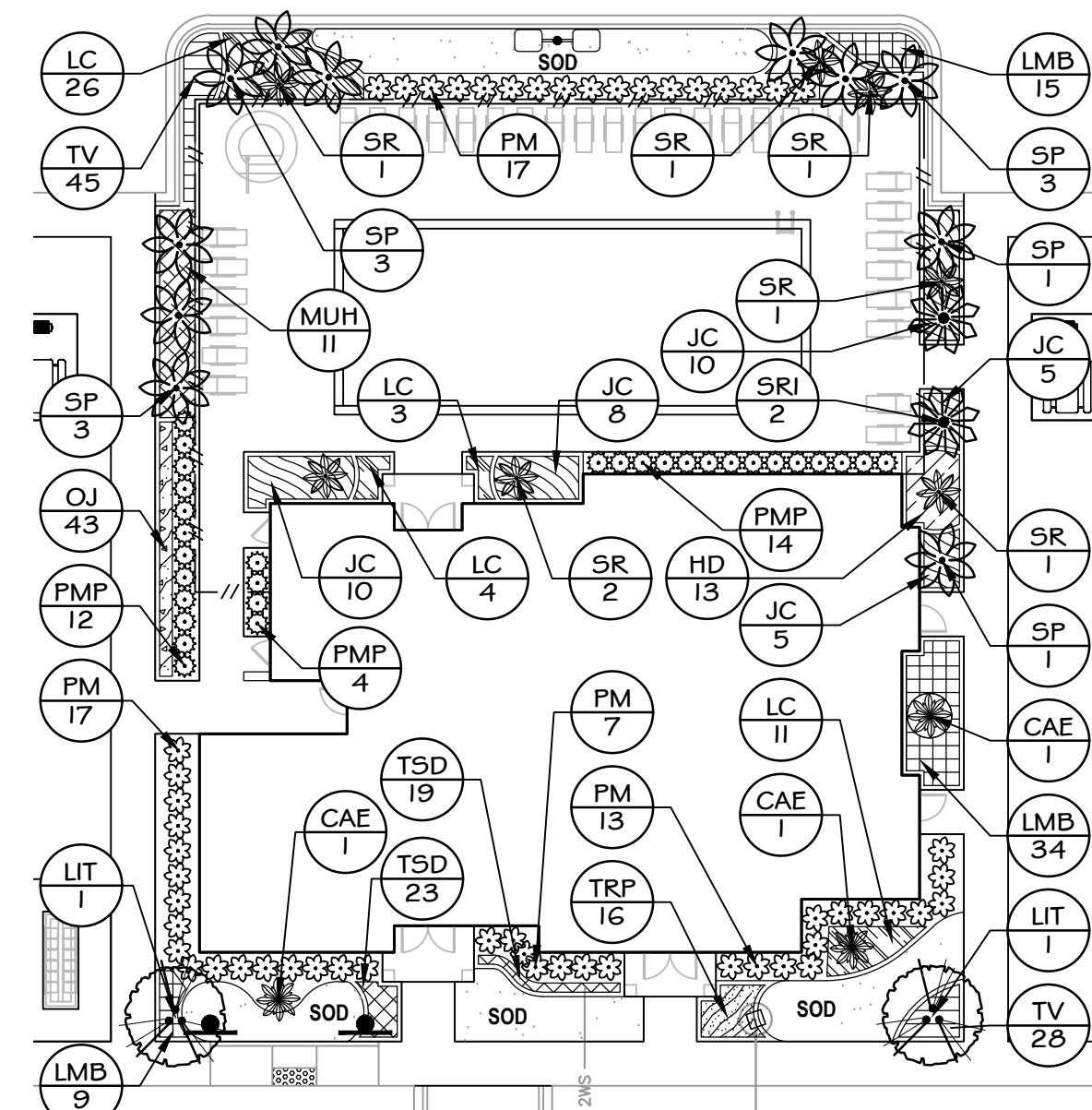
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PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	CRA
CHECKED BY:	HHN
SCALE:	DRAWING NUMBER

51

[illegible]

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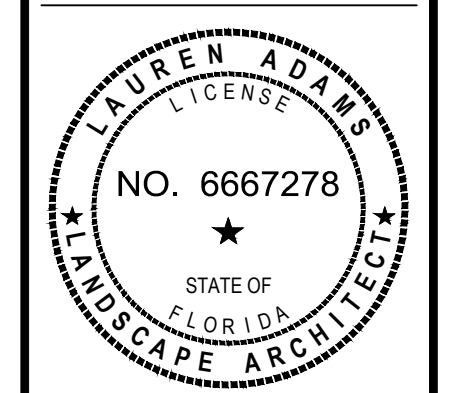
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LANDSCAPE PLAN
SUMMIT APARTMENTS
PRETTY POND ROAD
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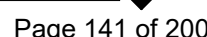


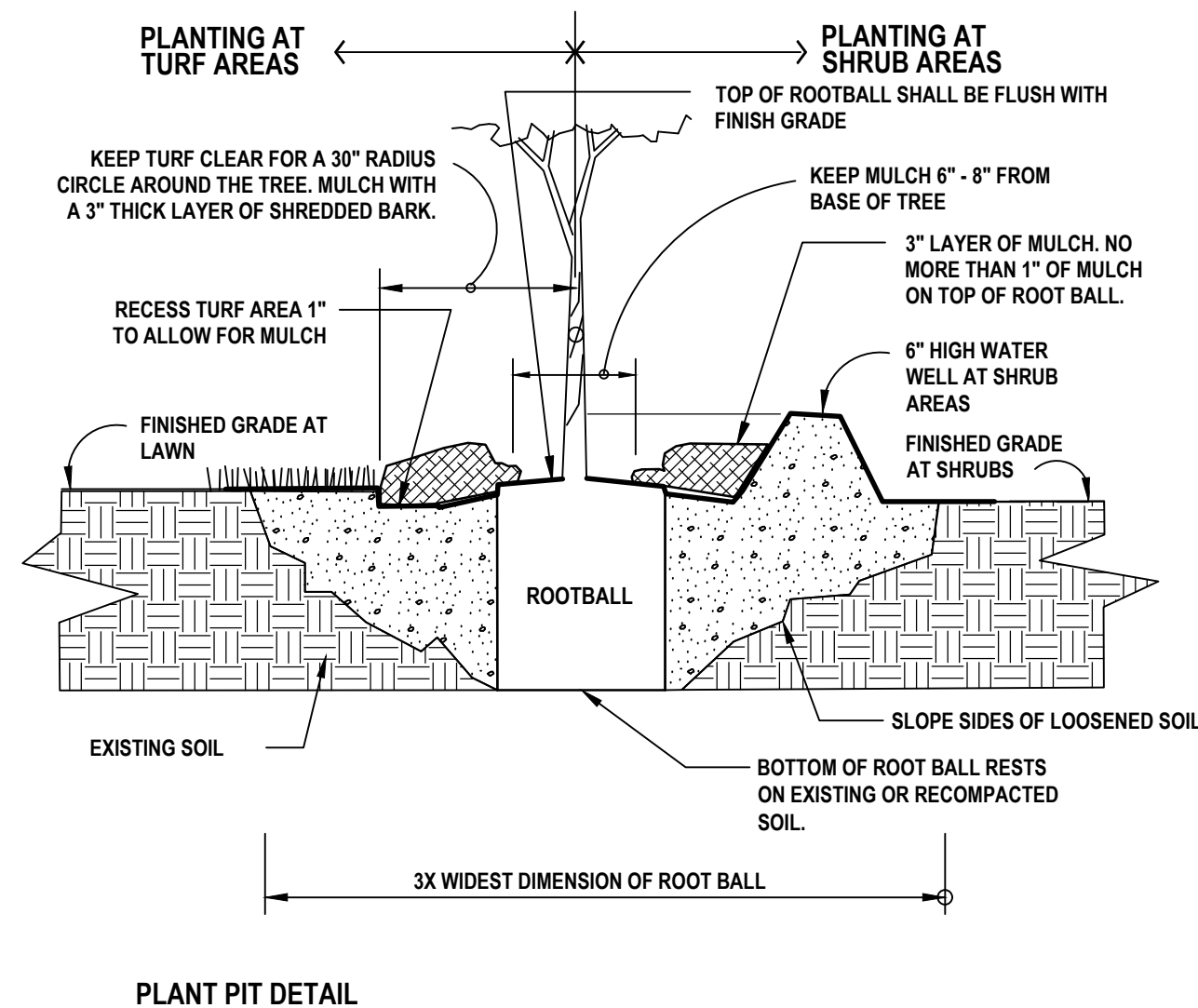
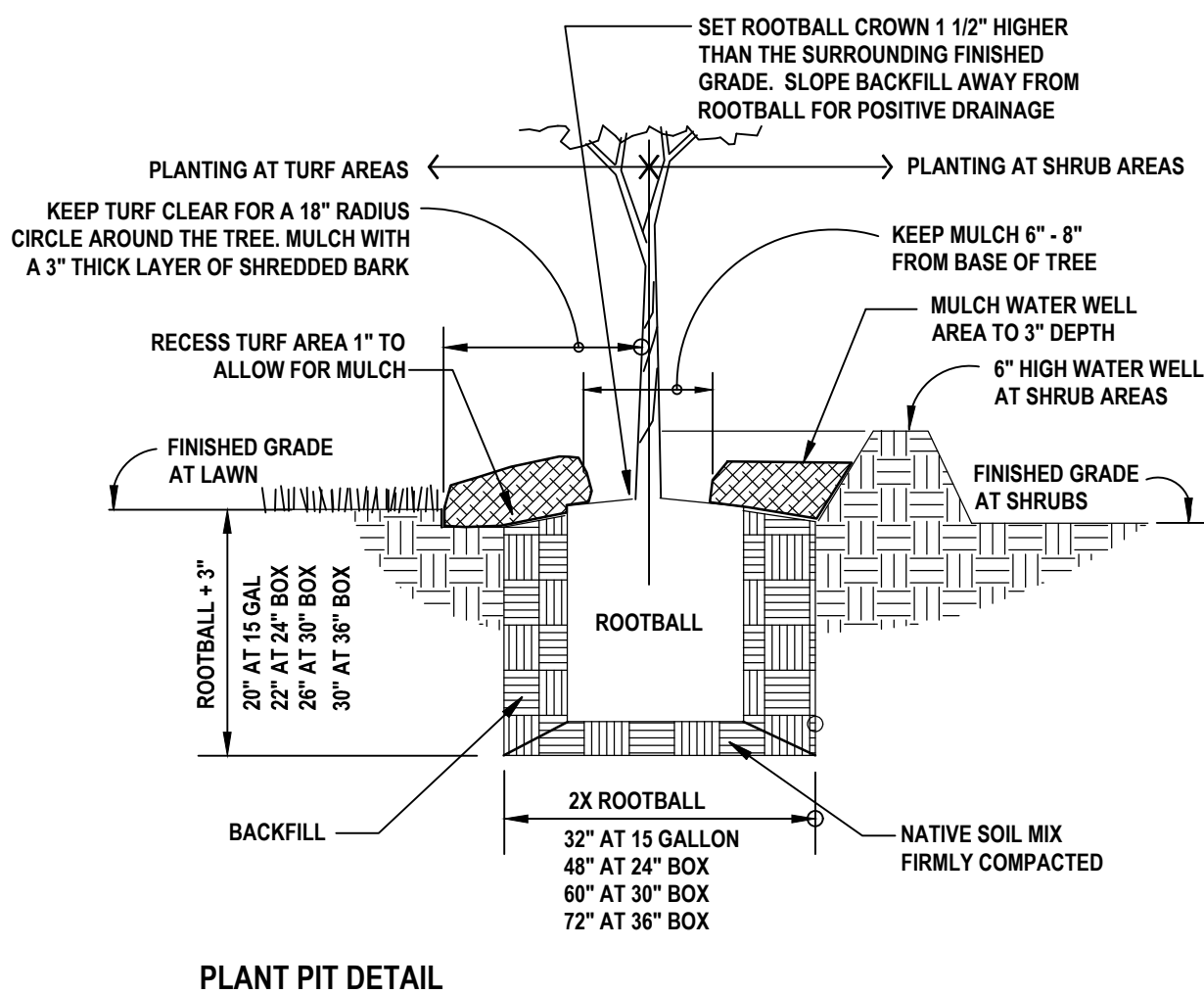
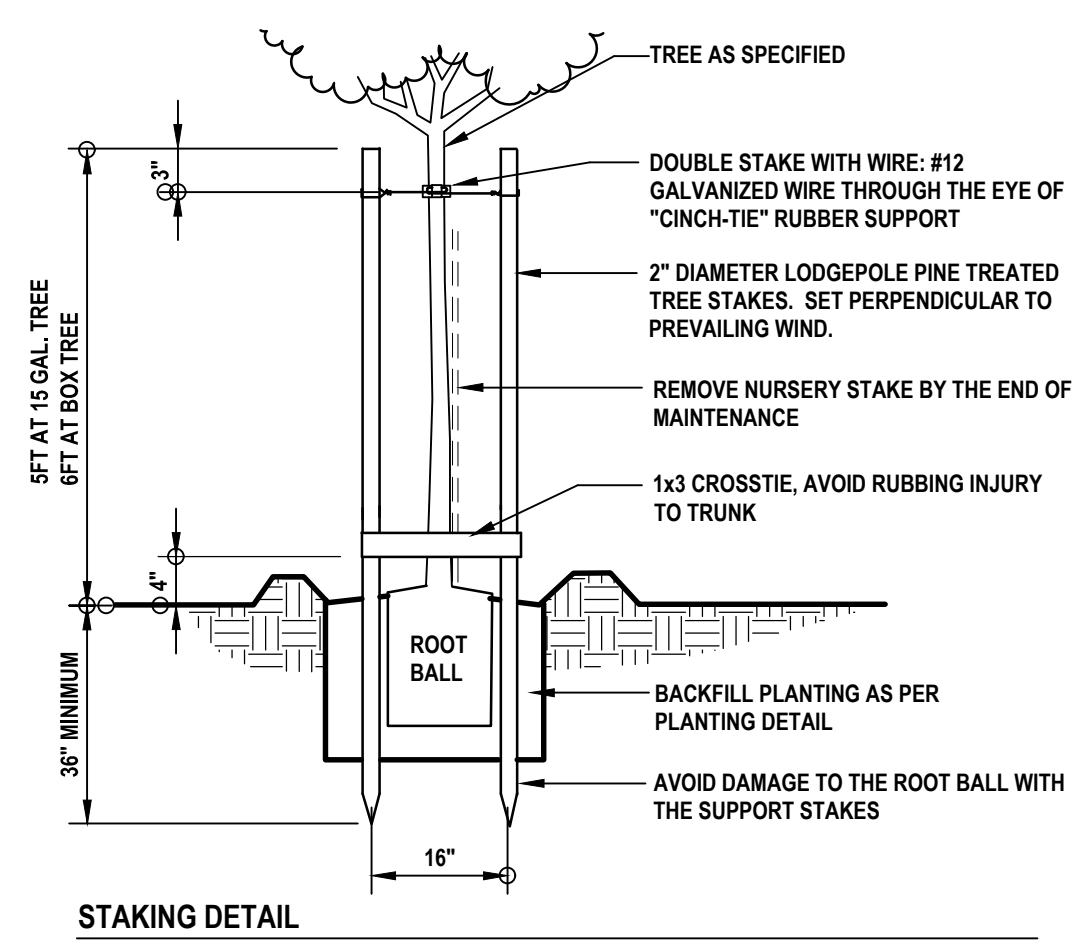
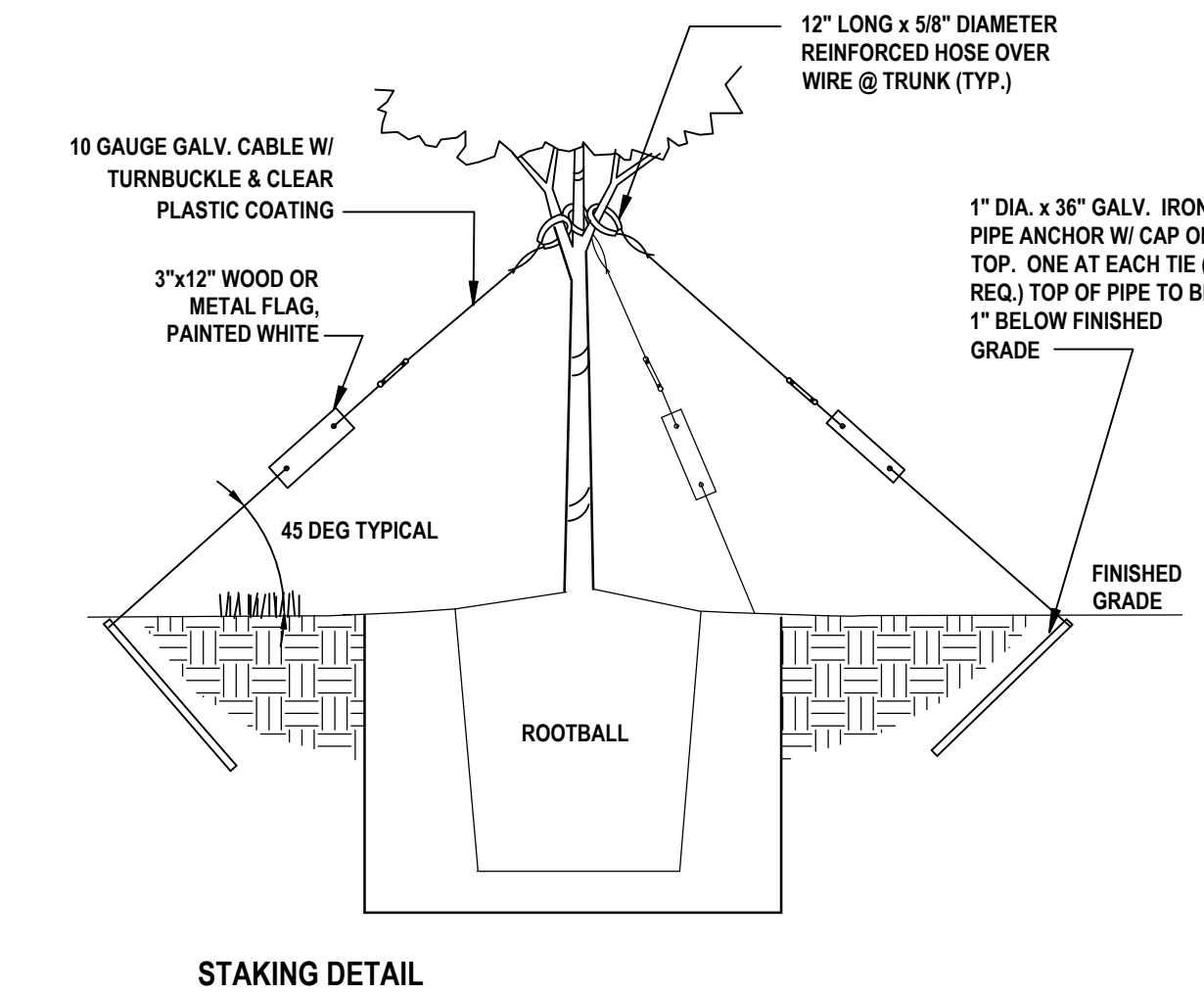
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PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'

DRAWING NUMBER

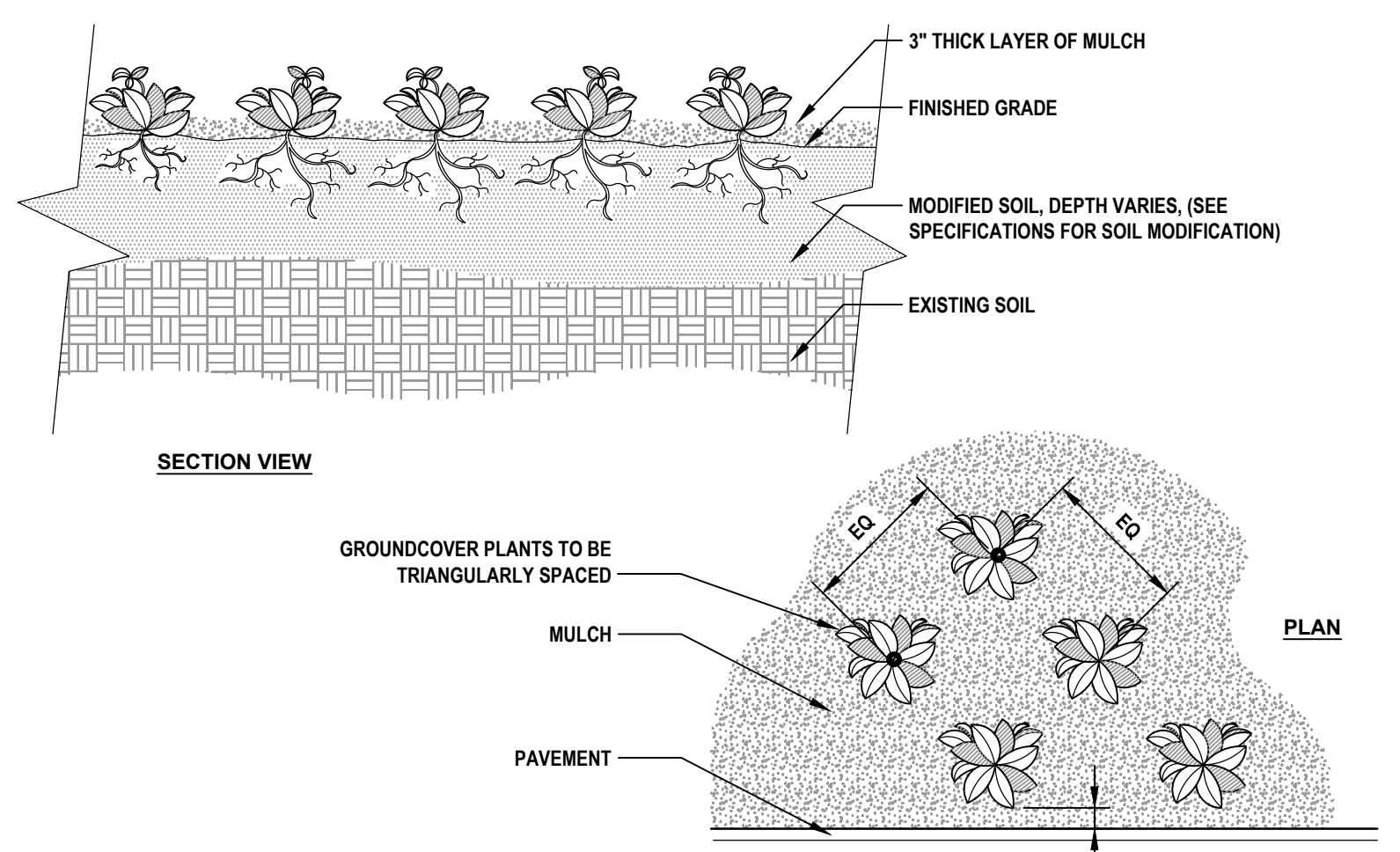
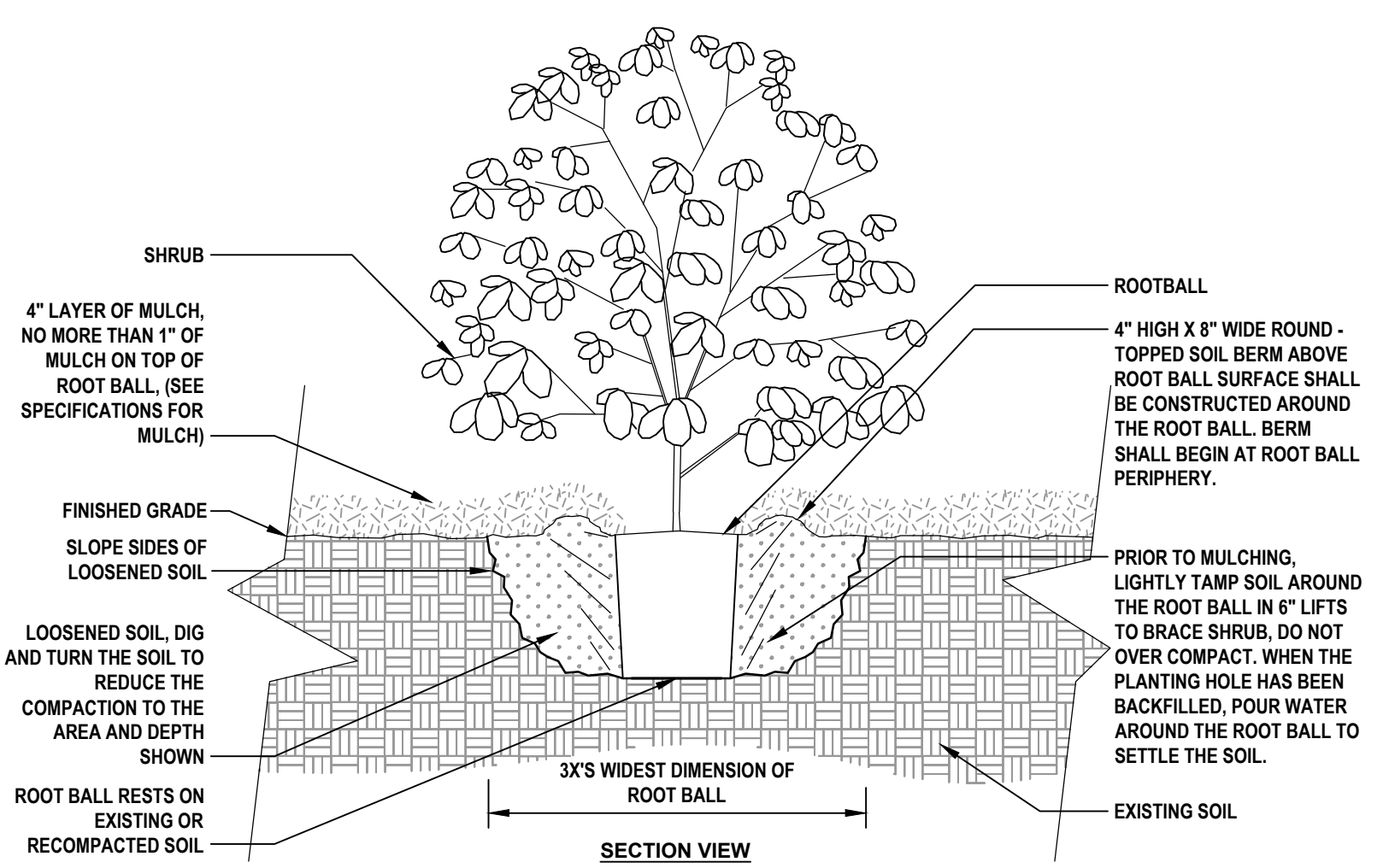
L1

P-CO-2021-346-12



1 TREE PLANTING DETAIL
1" = 1'-0"
NEI-PL-01

2 SMALL TREE PLANTING DETAIL
1" = 1'-0"
NEI-PL-03



- NOTES:
- SHRUBS SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS.
 - SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

- NOTES:
- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
 - SMALL ROOTS (1/2" OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOVED AT THE TIME OF PLANTING. (SEE ROOT BALL SHAVING CONTAINER DETAIL).
 - SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

3 SHRUB PLANTING DETAIL
NTS
URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE
NEI-PL-04

4 GROUNDCOVER LAYOUT
1/16" = 1'-0"
NEI-PL-02

OVERALL PLANT SCHEDULE

MIDSTORY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
MV	11	MAGNOLIA VIRGINIANA	SWEET BAY MAGNOLIA	3" CAL., 9' HT.	
UDP	26	ULMUS PARVIFOLIA 'DRAKE'	DRAKE CHINESE ELM	3" CAL., 8' HT	
PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
BS	2	BISMARCKIA NOBILIS 'SILVER'	SILVER BISMARCK PALM	12' C.T.	FLORIDA FANCY
PDM	3	PHOENIX DACTYLIFERA 'MEDJOO'	DATE PALM	12' C.T.	CERTIFIED, FLORIDA FANCY
SP	19	SABAL PALMETTO	CABBAGE PALMETTO	10', 14', 18' HT.	STAGGERED HEIGHTS
SR1	2	SYAGRUS ROMANZOFFIANA	QUEEN PALM	12" CAL., 22' HT.	MATCHED HEIGHTS, STRAIGHT TRUNK, FLORIDA FANCY
SHADE TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
MG	4	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	3" CAL., 10' HT.	
QV	11	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 10' HT.	
QV2	18	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	4" CAL., 10' HT.	
UA	10	ULMUS AMERICANA	AMERICAN ELM	4" CAL., 10' HT.	
UNDERSTORY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
IC	1	ILEX CASSINE	DAHOON HOLLY	2.5" CAL., 8' HT	
IO	17	ILEX OPACA	AMERICAN HOLLY	1.5" CAL., 8' HT.	
IVP	1	ILEX VOMITORIA 'PENDULA'	WEeping YAUPON HOLLY	2.5" CAL., 8' HT.	
IAE	2	ILEX X ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	2.5" CAL., 8' HT	
LIC	22	LAGERSTROEMIA INDICA 'CATAWBA'	CATAWBA CRAPE MYRTLE MULTI-TRUNK	3" CAL., 8' HT	3 TRUNKS MIN., 1" CAL. EACH
LIT	8	LAGERSTROEMIA INDICA X FAURIEI 'TONTO'	TONTO CRAPE MYRTLE	3" CAL., 8' HT	3 TRUNKS MIN., 1" CAL. EACH
MGL	26	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	DWARF SOUTHERN MAGNOLIA	3" CAL., 8' HT	
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
CAE	3	CRINUM AUGUSTUM 'QUEEN EMMA'	QUEEN EMMA CRINUM LILY	15 GAL., 48" HT, X 18" SPRD.	FLORIDA FANCY
HP	83	HAMELIA PATENS	FIREBUSH	3 GAL., 24" HT, X 12" SPRD	36" O.C.
IVS	369	ILEX VOMITORIA 'STOKES DWARF'	STOKES DWARF YAUPON HOLLY	3 GAL., 12" HT, X 18" SPRD.	36" O.C.
IT	18	IXORA TAIWANEENSIS	DWARF RED IXORA	3 GAL., 18" HT X 12" SPRD.	36" O.C.
MC	16	MYRICA CERIFERA	WAX MYRTLE	3 GAL., 24" HT, X 18" SPRD.	48" O.C.
NOP	16	NERIUM OLEANDER 'PETITE PINK'	PETITE PINK OLEANDER	3 GAL., 24" HT, X 18" SPRD.	36" O.C.
PM	150	PODOCARPUS MACROPHYLLUS	YEW PINE	7 GAL., 36" HT, X 18" SPRD	36" O.C.
PM2	389	PODOCARPUS MACROPHYLLUS	YEW PINE	7 GAL., 48" HT, X 12" SPRD.	36" O.C.
PMP	30	PODOCARPUS MACROPHYLLUS 'PRINGLES'	DWARF PODOCARPUS	3 GAL., 18" HT, X 9" SPRD.	30" O.C.
RI	355	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	3 GAL., 15" HT, X 15" SPRD.	36" O.C.
SRC	16	SERENOA REPENS 'CINEREA'	SILVER SAW PALMETTO	7 GAL.	48" O.C.
SR	7	STRELITZIA REGINAE	BIRD OF PARADISE	7 GAL.	48" HT.
ZP	119	ZAMIA PUMILA	COONTIE CYCAD	3 GAL.	36" O.C.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
BF	15	BULBINE FRUTESCENS 'HALLMARK'	HALLMARK STALKED BULBINE	1 GAL.	24" O.C.
DTV	54	DIANELLA TASMANICA 'VARIEGATA'	VARIEGATED FLAX LILY	1 GAL.	24" O.C.
EG	54	EVOLVULUS GLOMERATUS 'BLUE DAZE'	BRAZILIAN DWARF MORNING GLORY	1 GAL.	18" O.C.
HD	137	HELIANTHUS DEBILIS	DUNE SUNFLOWER	1 GAL.	24" O.C.
JC	616	JUNIPERUS CONFERTA	SHORE JUNIPER	1 GAL.	30" O.C.
JH	91	JUNIPERUS HORIZONTALIS 'BLUE RUG'	BLUE RUG JUNIPER	3 GAL.	36" O.C.
LC	94	LANTANA CAMARA	YELLOW LANTANA	1 GAL.	24" O.C.
LMB	1,241	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	1 GAL.	18" O.C.
LMG	140	LIRIOPE MUSCARI 'EVERGREEN GIANT'	EVERGREEN GIANT LILYTURF	1 GAL.	12" O.C.
MUH	389	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	3 GAL.	36" O.C.
CJ	43	OPHIOPOGON JAPONICUS	MONDO GRASS	1 GAL.	12" O.C.
TRP	46	TRADESCANTIA PALLIDA 'PURPLE HEART'	PURPLE QUEEN SPIDERWORT	1 GAL.	18" O.C.
TSO	42	TRADESCANTIA SPATHACEA 'DWARF'	DWARF OYSTER PLANT	1 GAL.	12" O.C.
TF	15	TRIPSACUM FLORIDANUM	FLORIDA GAMAGRASS	1 GAL.	24" O.C.
TV	522	TULBAGHIA VIOLACEA	SOCIETY GARLIC	1 GAL.	12" O.C.

LANDSCAPE NOTES

- ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS FOR FLORIDA #1 OR BETTER AS DESCRIBED IN THE CURRENT "GRADES AND STANDARDS FOR NURSERY PLANTS", STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, OR THEIR EQUAL AS DETERMINED BY THE LANDSCAPE ARCHITECT. PLANT MATERIAL SHALL BE CLEARLY IDENTIFIED AS FLORIDA #1 OR BETTER ON EITHER LABELS OR INVOICES.
- ALL PLANT SPECIFICATIONS MUST BE MET OR EXCEEDED. SIZES IN PLANT SCHEDULE ARE MINIMUMS AND EACH MUST BE MET. CONTAINERS MAY NEED TO BE UPSIZED TO MEET ALL SPECIFICATIONS.
- ALL MULCH SHALL BE PINE BARK AND INSTALLED 3" DEEP. TREES IN SOD TO BE IN A 5' MINIMUM-MULCHED RING. ALL PALMS TO BE IN A 3' MULCH RING. MULCH TO BE INSTALLED 6" FROM TRUNK.
- SOD SHALL BE ST. AUGUSTINE "FLORITAM" UNLESS OTHERWISE NOTED ON THE PLAN AND SHALL BE 95% WEED-FREE. WHERE SPECIFIED, BAHIA SOD SHALL BE 85% WEED-FREE. ALL SOD SHALL BE INSTALLED WITH TIGHT JOINTS, ROLLED AND FERTILIZED.
- ALL DIMENSIONS SHALL BE FIELD-CHECKED BY THE LANDSCAPE CONTRACTOR PRIOR TO CONSTRUCTION, WITH ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT.
- THE PLANT MATERIALS SCHEDULE IS PROVIDED FOR THE CONVENIENCE OF THE LANDSCAPE CONTRACTOR; SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN WILL PREVAIL.
- ALL MATERIALS MUST BE AS SPECIFIED ON THE LANDSCAPE PLAN. IF MATERIALS OR LABOR DO NOT ADHERE TO THE SPECIFICATIONS, THEY WILL BE REJECTED AT NO ADDITIONAL COST TO THE OWNER.
- PLANTING BEDS MAY BE TREATED WITH CHEMICAL HERBICIDE AS NEEDED. USE AS DIRECTED BY MANUFACTURERS.
- NO SUBSTITUTIONS OR CHANGES OF ANY KIND WILL BE ALLOWED AT THE TIME OF BIDDING SO AS TO PROVIDE FOR FAIR COMPARISON.
- THE CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND CONDITIONS PRIOR TO HIS COMMENCEMENT OF THE ANY WORK.
- ALL BUILDING MATERIALS AND LABOR SHALL CONFORM TO THE FLORIDA BUILDING CODE AND ALSO TO ALL LOCAL CODES THAT HAVE JURISDICTION.
- ALL PERMIT AND VARIANCE APPLICATIONS SHALL BE MADE BY THE CONTRACTOR.
- PRIOR TO CONSTRUCTION OF PLANTING BEDS, ALL AREAS ARE TO HAVE SOIL TESTS CONDUCTED TO DETERMINE pH AND SOIL FERTILITY. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO AMEND THE SOIL TO MEET ADEQUATE FERTILITY AND pH FOR CORRESPONDING PLANT MATERIAL. ALL TEST RESULTS SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT.
- WHERE AZALEAS, ROSES OR LOROPETALUMS ARE TO BE PLANTED, THE SOIL SHALL BE AMENDED BY REMOVING SOME OF THE NATIVE SOIL AND REPLACING WITH SOIL WITH A PH RANGE OF BETWEEN 5.5 - 6.5.
- EQUIPMENT SHALL BE OPERATED IN A MANNER AS NOT TO INJURE OR DESTROY ANY TREES SHOWN TO REMAIN. CONTRACTOR SHALL NOT CAUSE OR ALLOW THE CLEANING OF EQUIPMENT OR MATERIAL WITHIN THE DRIP LINE OF ANY TREE OR GROUPS OF TREES TO BE RETAINED OR THOSE PROPOSED. NOR SHALL THE CONTRACTOR ALLOW THE DISPOSAL OF WASTE MATERIAL, SUCH AS PAINT, OIL SOLVENTS, ASPHALT, CONCRETE, MORTAR OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY TREE OR GROUP OF TREES. NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS, OR PERMITS MAY BE FASTENED TO A TREE.
- ANY EXISTING TREES CREDITED TOWARDS REQUIRED BUFFERS OR LANDSCAPE REQUIREMENTS REMOVED FOR ANY REASON SHALL BE REPLACED WITH TREES MEETING CITY APPROVAL WITH REGARDS TO SPECIES AND SIZE.
- ALL QUESTIONS CONCERNING THE PLAN AND/OR SPECIFICATIONS SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT (386) 872-7794.
- ALL TREES AND PALMS MUST BE STAKED USING THE DETAILS PROVIDED OR ARBORGY STAKING SYSTEMS. ANY STAKING SYSTEM NOT INCLUDED MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.
- ALL UNIMPROVED AREA NOT OTHERWISE PLANTED OR MULCH SHALL BE SODDED WITH BAHIA UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLAN.
- THE CONTRACTOR SHALL GUARANTEE ALL INSTALLED PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR AFTER ACCEPTANCE IN WRITING BY OWNER OR OWNER'S REPRESENTATIVE. ALL PLANT MATERIAL SHALL BE WATERED REGULARLY AS NEEDED UNTIL ESTABLISHED. FOR TREES, UP TO ONE YEAR AND FOR SHRUBS/GROUNDCOVER, GENERALLY 2-3 MONTHS.
- REMOVAL OF ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASS, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS SHALL BE REMOVED.
- ALL EXISTING TREES AND PALMS WILL BE PROPERLY PRUNED AND CLEANED OF DEADWOOD, BROKEN BRANCHES, DEAD FROND AND VINES AS NEEDED. ALL STRUCTURAL PRUNING OF HARDWOOD TREES SHALL BE PERFORMED UNDER THE DIRECTION OF A CERTIFIED ARBORIST.
- ALL NOXIOUS OR EXOTIC VEGETATION THAT DETRACTS FROM THE APPEARANCE OF THE EXISTING OR PLANTED VEGETATION WITHIN THE TREE PROTECTION AREA OR BUFFERS SHALL BE REMOVED. THE EDGE OF THE AREAS TO REMAIN NATURAL SHALL BE MULCHED 5' IN AND A CURVILINEAR BED LINE SHALL BE CREATED ADJACENT TO SODDED AREAS.

LANDSCAPE SOIL SPECIFICATIONS

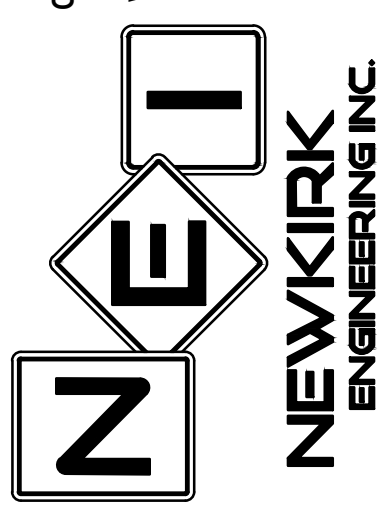
- CONTRACTOR WILL BE RESPONSIBLE FOR ANY REQUIRED EXCAVATION AND FOR RAKING AND SMOOTHING OF GRADE. IT IS RECOMMENDED THAT LANDSCAPE CONTRACTOR COORDINATE WITH GRADING CONTRACTOR TO ESTABLISH SUBGRADES FOR PLANTING AREAS AS REQUIRED BELOW.
- LANDSCAPE SOIL REFERS TO STOCKPILED TOPSOIL OR THE PLANTING MIXTURE AS SPECIFIED BELOW. STRUCTURAL SOIL OR FILL DIRT SHALL NOT BE USED IN PLANT AREAS.
- TOPSOIL SHALL BE STOCKPILED IF THE SITE CONSISTS OF NATIVE PLANT COMMUNITIES. IF NOXIOUS AND/OR INVASIVE PLANT SPECIES ARE PRESENT, TOPSOIL SHALL NOT BE STOCKPILED AND THE PLANTING MIXTURE BELOW SHALL BE USED.
- IF STOCKPILED, THE TOPSOIL SHALL BE SALVAGED TO A DEPTH OF 4 TO 6 INCHES AND STOCKPILED NO HIGHER THAN 3 FEET IN HEIGHT.
- TOPSOIL SHALL BE STORED FOR AS SHORT A DURATION AS POSSIBLE TO ENSURE SURVIVAL OF SEEDS AND SOIL ORGANISMS.
- IF TOPSOIL HAS NOT BEEN STOCKPILED, PLANTING MIXTURE FOR TREES AND SHRUBS SHALL CONSIST OF 1/3 "COMPOST", 1/3 COARSE SAND, AND 1/3 EXISTING SOIL, THOROUGHLY MIXED. IF THE EXISTING SOIL IS NOT NATIVE AND FREE OF INVASIVES, THEN TOPSOIL SHALL BE IMPORTED FOR THIS COMPONENT.
- MIXTURE FOR PALMS SHALL BE 50 PERCENT COARSE SAND AND 50 PERCENT EXISTING SOIL. MIX THOROUGHLY WITH EXISTING SOIL.
- LANDSCAPE SOIL SHALL BE USED IN ALL PLANT BEDS CONSISTING OF SHRUBS AND GROUNDCOVER TO A DEPTH OF 6" AND MULCH TO A DEPTH OF 3".
- LANDSCAPE SOIL SHALL BE FREE OF DEBRIS, WEEDS, PARTICLES LARGER THAN 0.50 INCHES AND RINSATE CONTAINING LIME OR TOXIC MATERIALS.
- EXISTING SOIL SHOULD NOT BE CONTINUOUSLY EXCAVATED BENEATH THE DRIP LINE OF EXISTING TREES. IN THIS CASE, IF SHRUBS OR GROUNDCOVER ARE PROPOSED, THEY SHOULD BE PLANTED IN NATIVE SOIL WITHOUT AMENDMENT.

REFER TO LANDSCAPE DETAILS FOR MINIMUM PLANTING PIT DIMENSIONS.

REVISIONS

DATE	DESCRIPTION
11/26/22	CITY COMMENTS

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L.C. # 2600584
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LANDSCAPE DETAILS
AND NOTES
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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PROJECT No: 2021-346
DATE: AUGUST 2022
DESIGN BY: LAA
DRAWN BY: BWV
CHECKED BY: LAA
SCALE: AS SHOWN
DRAWING NUMBER

L3

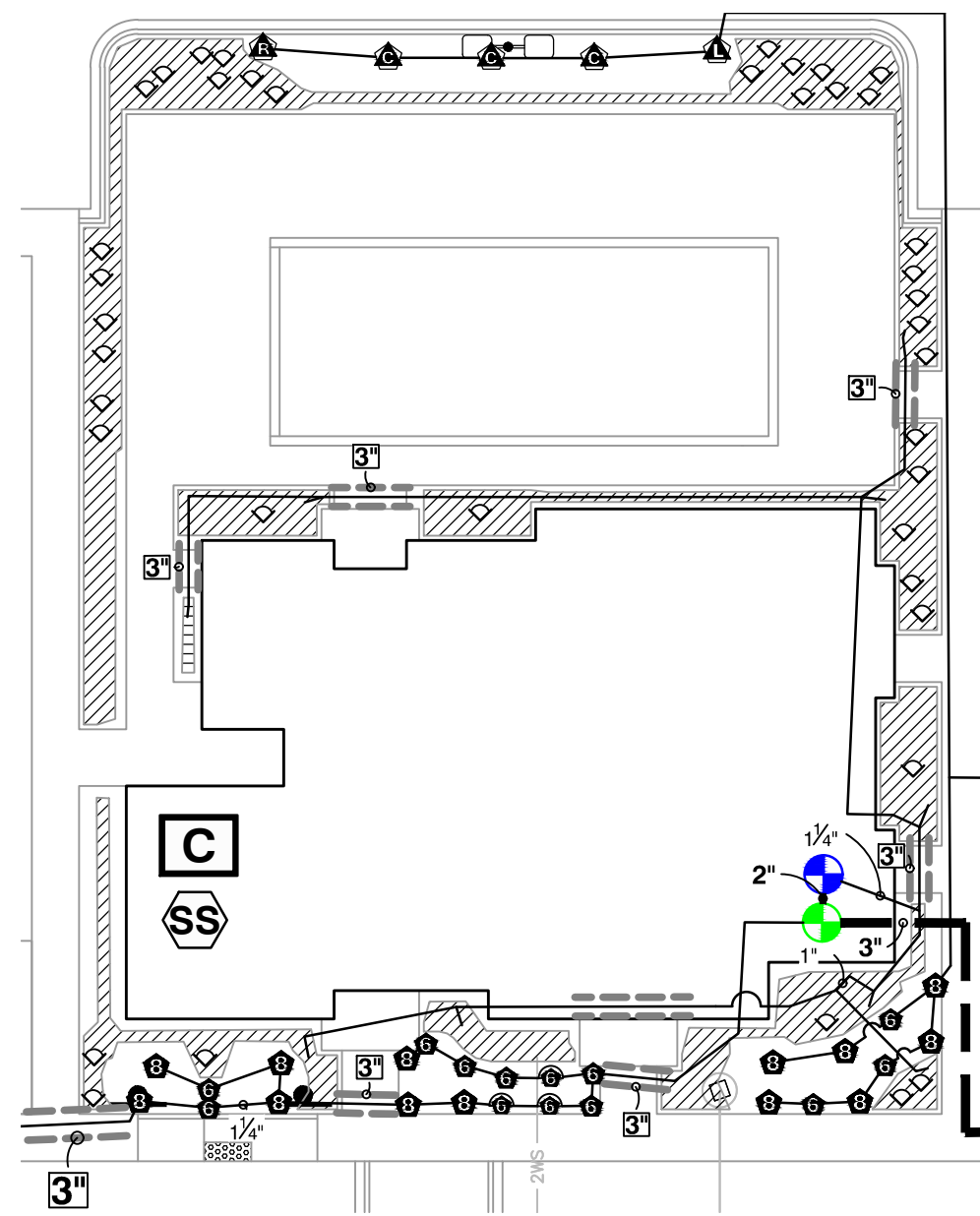
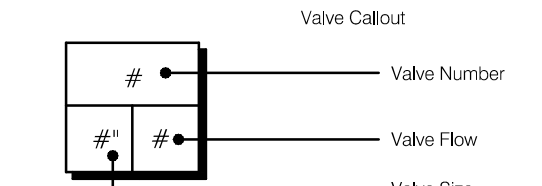


WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	PSI
20 2H 4Q 4H 6Q 6H	HUNTER PROS-06-PRS30-CV-F-R SHORT RADIUS NOZZLES	7	30
ES LCS RCS CS SS	HUNTER PROS-06-PRS30-CV-F-R 5' STRIP SPRAY	37	30
Q T H F	HUNTER PROS-06-PRS30-CV-F-R 8' RADIUS	7	30
EST CST SST	HUNTER PROS-06-PRS30-CV-F-R 9' SIDE STRIP SPRAY	3	30
Q T H F	HUNTER PROS-06-PRS30-CV-F-R 10' RADIUS	18	30
Q T H F	HUNTER PROS-06-PRS30-CV-F-R 12' RADIUS	34	30
Q T H F	HUNTER PROS-06-PRS30-CV-F-R 15' RADIUS	5	30
Q T H F	HUNTER PROS-06-PRS30-CV-F-R 17' RADIUS	5	30
☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆	HUNTER PROS-06-PRS30-CV-F-R ADJUSTABLE ARC	375	30
ES LCS RCS CS SS	HUNTER PROS-00-PRS30-CV-R 5' STRIP SPRAY	324	30
Q T H F	HUNTER PROS-00-PRS30-CV-R 8' RADIUS	22	30
Q T H F	HUNTER PROS-00-PRS30-CV-R 10' RADIUS	68	30
Q T H F	HUNTER PROS-00-PRS30-CV-R 12' RADIUS	11	30
☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆	HUNTER PROS-00-PRS30-CV-R ADJUSTABLE ARC	570	30
25 50 10 20	HUNTER PCB-R 10	302	30
SYMBOL	MANUFACTURER/MODEL	QTY	PSI
2.5	HUNTER PGP-04-PRB 2.5	8	35
3.0	HUNTER PGP-04-PRB 3.0	34	35

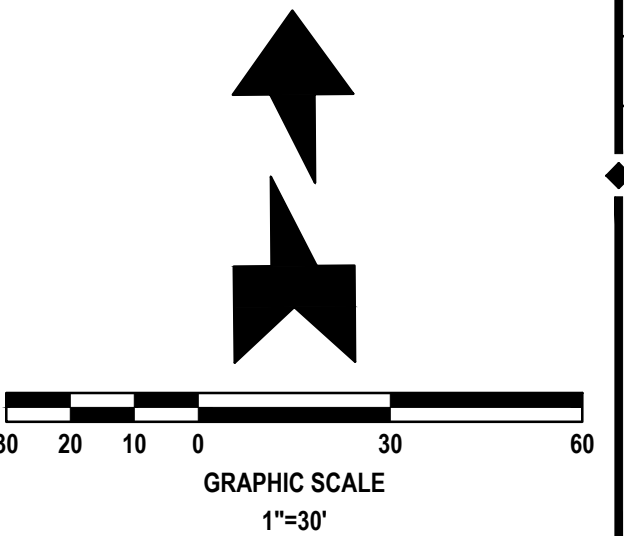
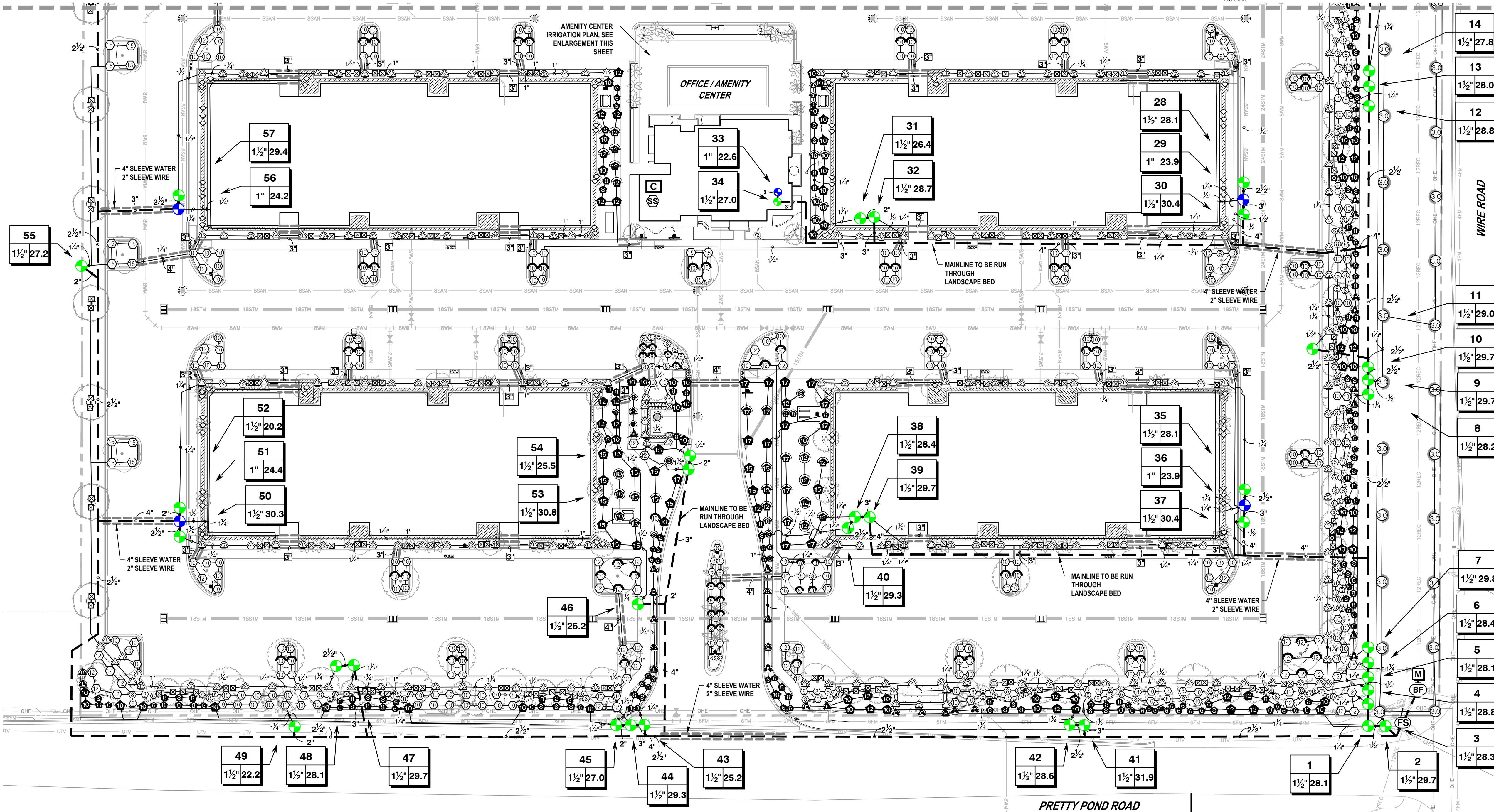
SYMBOL	MANUFACTURER/MODEL	QTY	PSI
4.0	HUNTER PGP-04-PRB 4.0	2	35
SYMBOL	MANUFACTURER/MODEL	QTY	PSI
0.5 1.0 2.0 4.0 6.0	HUNTER HE-B 10HE-B	164	
	AREA TO RECEIVE DRIPLINE	17,195 L.F.	
	HUNTER HDL-06-12-R		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	HUNTER ICV-G-FS-R 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE. WITH FILTER SENTRY FACTORY INSTALLED OPTION, AND RECLAIMED WATER ID, PURPLE HANDLE.	63	
BF	ZURN 350XL 1-1/2" DOUBLE CHECK VALVE ASSEMBLY W/ EZSWAP INSERT.	1	
C	HUNTER A2C-75D-P 75-STATION DECODER CONTROLLER IN AN OUTDOOR PLASTIC WALL MOUNT ENCLOSURE.	1	
SS	HUNTER SOLAR-SYNC SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE, CONNECTS TO HUNTER PCC, PRO-C, AND I-CORE CONTROLLERS. INSTALL AS NOTED, INCLUDES 10 YEAR LITHIUM BATTERY AND RUBBER MODULE COVER, AND GUTTER MOUNT BRACKET. WIRED.	1	
FS	HUNTER HFS-400 FLOW SENSOR FOR USE WITH ACC CONTROLLER, 4IN. SCHEDULE 40 SENSOR BODY, 24 VAC, 2 AMP.	1	
M	WATER METER 1-1/2" 1.5" RECLAIM METER	1	
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26	22,203 L.F.	
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21	4,486 L.F.	
	PIPE SLEEVE: PVC SCHEDULE 40	1,466 L.F.	



AMENITY CENTER IRRIGATION

SCALE: 1" = 20'

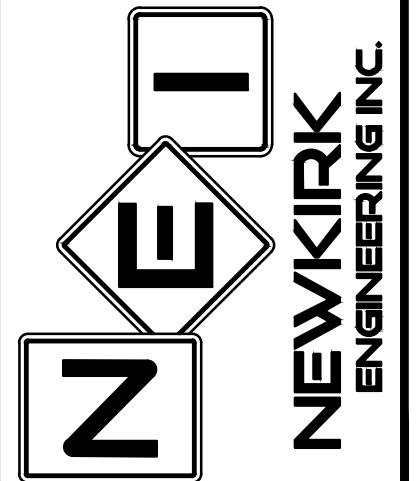
MATCH-LINE SEE SHEET L5



REVISIONS

DATE	DESCRIPTION
11/29/22	CITY COMMENTS

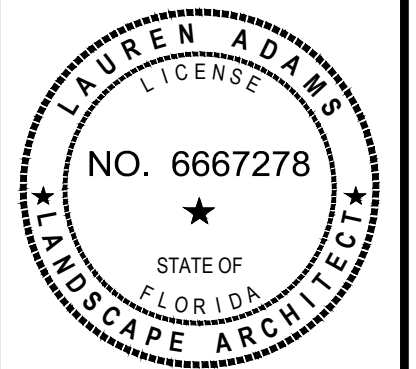
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IRRIGATION PLAN
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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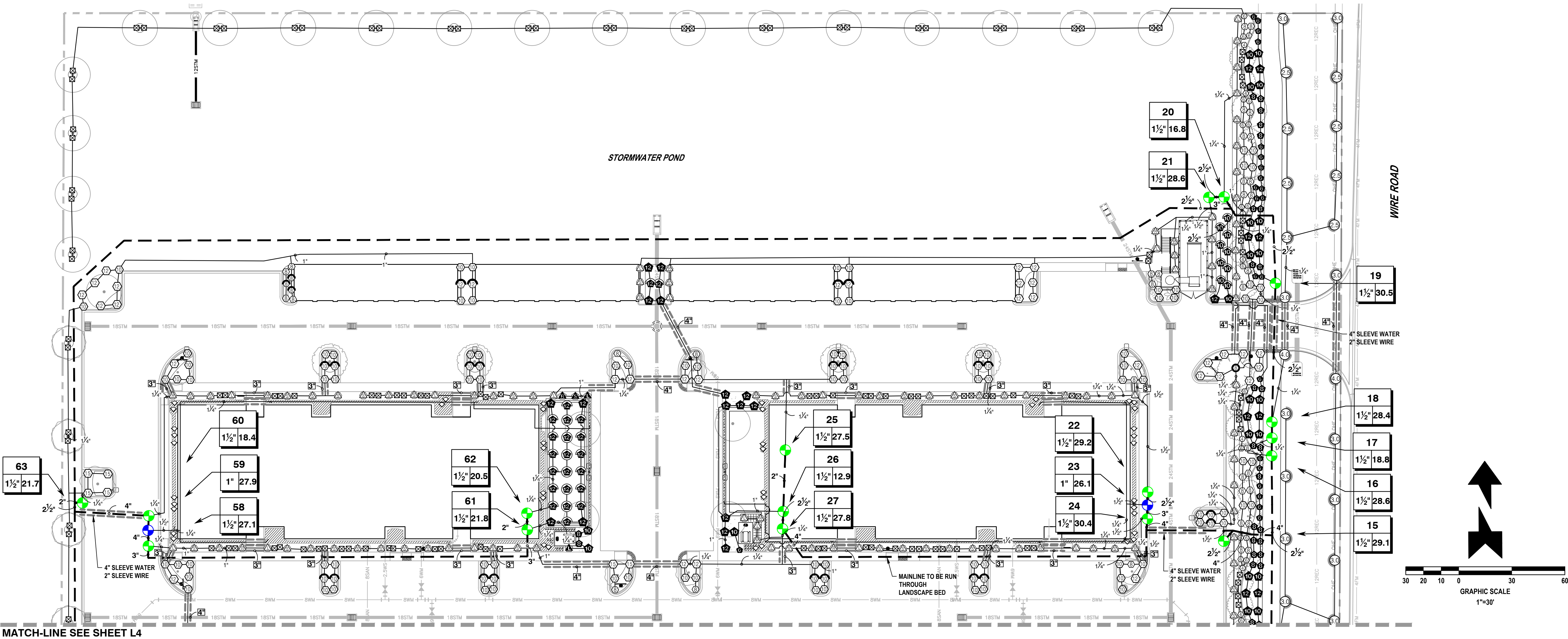
PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'
DRAWING NUMBER	

L4

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	SUN	MON	TUE	WED	THU	FRI	SAT	IN/WEEK	MIN/WEEK	GAL/WEEK	GAL/DAY
1	HUNTER ICV-G-FS-R	TURF SPRAY	2.24 in/h	21 min			21 min				1.5	41	1,152	576
2	HUNTER ICV-G-FS-R	TURF ROTOR	0.52 in/h	88 min			88 min				1.5	175	5,198	2,599
3	HUNTER ICV-G-FS-R	SHRUB SPRAY	2.0 in/h	12 min			12 min				0.75	23	650	325
4	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.76 in/h	13 min			13 min				0.75	26	748	374
5	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.81 in/h	14 min			14 min				0.75	28	786	393
6	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.99 in/h	12 min			12 min				0.75	23	654	327
7	HUNTER ICV-G-FS-R	TURF SPRAY	2.25 in/h	20 min			20 min				1.5	40	1,193	597
8	HUNTER ICV-G-FS-R	SHRUB SPRAY	2.06 in/h	11 min			11 min				0.75	22	620	310
9	HUNTER ICV-G-FS-R	TURF ROTOR	0.43 in/h	104 min			104 min				1.5	208	6,178	3,089
10	HUNTER ICV-G-FS-R	TURF SPRAY	2.02 in/h	23 min			23 min				1.5	45	1,335	667
11	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.67 in/h	14 min			14 min				0.75	27	784	392
12	HUNTER ICV-G-FS-R	SHRUB SPRAY	2.18 in/h	11 min			11 min				0.75	21	604	302
13	HUNTER ICV-G-FS-R	TURF SPRAY	2.11 in/h	22 min			22 min				1.5	43	1,206	603
14	HUNTER ICV-G-FS-R	TURF ROTOR	0.5 in/h	91 min			91 min				1.5	182	5,060	2,530
15	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.49 in/h	16 min			16 min				0.75	31	901	451
16	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.86 in/h	13 min			13 min				0.75	25	715	357
17	HUNTER ICV-G-FS-R	TURF SPRAY	1.72 in/h	27 min			27 min				1.5	53	994	497
18	HUNTER ICV-G-FS-R	TURF ROTOR	0.53 in/h	86 min			86 min				1.5	172	4,885	2,442
19	HUNTER ICV-G-FS-R	TURF SPRAY	2.18 in/h	21 min			21 min				1.5	42	1,279	639
20	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.2 in/h	19 min			19 min				0.75	38	638	319
21	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.82 in/h	13 min			13 min				0.75	25	715	358
22	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.86 in/h	13 min			13 min				0.75	25	731	366
23	HUNTER ICV-G-FS-R	AREA FOR DRIPLINE	1.86 in/h	13 min			13 min				0.75	25	604	302
24	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.94 in/h	12 min			12 min				0.75	24	729	365
25	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.82 in/h	13 min			13 min				0.75	25	688	344
26	HUNTER ICV-G-FS-R	TURF SPRAY	1.97 in/h	23 min			23 min				1.5	46	1,063	532
27	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.83 in/h	13 min			13 min				0.75	25	746	373
28	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.91 in/h	12 min			12 min				0.75	24	673	337
29	HUNTER ICV-G-FS-R	AREA FOR DRIPLINE	1.83 in/h	13 min			13 min				0.75	25	599	299
30	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.86 in/h	13 min			13 min				0.75	25	759	380
31	HUNTER ICV-G-FS-R	TURF SPRAY	2.01 in/h	23 min			23 min				1.5	45	1,187	594
32	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.79 in/h	13 min			13 min				0.75	26	745	373

NUMBER	MODEL	TYPE	PRECIP	SUN	MON	TUE	WED	THU	FRI	SAT	IN/WEEK	MIN/WEEK	GAL/WEEK	GAL/DAY
33	HUNTER ICV-G-FS-R	AREA FOR DRIPLINE	1.8 in/h	13 min			13 min				0.75	25	565	283
34	HUNTER ICV-G-FS-R	TURF SPRAY	2.37 in/h	20 min			20 min				1.5	39	1,054	527
35	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.91 in/h	12 min			12 min				0.75	24	673	337
36	HUNTER ICV-G-FS-R	AREA FOR DRIPLINE	1.83 in/h	13 min			13 min				0.75	25	599	299
37	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.85 in/h	13 min			13 min				0.75	25	760	380
38	HUNTER ICV-G-FS-R	TURF SPRAY	1.58 in/h	29 min			29 min				1.5	57	1,617	809
39	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.7 in/h	14 min			14 min				0.75	27	801	401
40	HUNTER ICV-G-FS-R	TURF SPRAY	1.45 in/h	32 min			32 min				1.5	63	1,846	923
41	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.9 in/h	12 min			12 min				0.75	24	765	383
42	HUNTER ICV-G-FS-R	TURF SPRAY	1.69 in/h	27 min			27 min				1.5	54	1,546	773
43	HUNTER ICV-G-FS-R	TURF SPRAY	1.79 in/h	26 min			26 min				1.5	51	1,285	643
44	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.96 in/h	12 min			12 min				0.75	23	675	337
45	HUNTER ICV-G-FS-R	TURF SPRAY	2.36 in/h	20 min			20 min				1.5	39	1,052	526
46	HUNTER ICV-G-FS-R	TURF SPRAY	1.69 in/h	27 min			27 min				1.5	54	1,361	680
47	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.66 in/h	14 min			14 min				0.75	28	832	416
48	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.53 in/h	15 min			15 min				0.75	30	844	422
49	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.78 in/h	13 min			13 min				0.75	26	576	288
50	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.89 in/h	12 min			12 min				0.75	24	727	363
51	HUNTER ICV-G-FS-R	AREA FOR DRIPLINE	1.81 in/h	13 min			13 min				0.75	25	611	305
52	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.78 in/h	13 min			13 min				0.75	26	526	263
53	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.81 in/h	13 min			13 min				0.75	25	770	385
54	HUNTER ICV-G-FS-R	TURF SPRAY	1.42 in/h	32 min			32 min				1.5	64	1,630	815
55	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.61 in/h	14 min			14 min				0.75	28	763	381
56	HUNTER ICV-G-FS-R	AREA FOR DRIPLINE	1.82 in/h	13 min			13 min				0.75	25	604	302
57	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.96 in/h	12 min			12 min				0.75	23	675	338
58	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.72 in/h	14 min			14 min				0.75	27	607	304
59	HUNTER ICV-G-FS-R	AREA FOR DRIPLINE	1.83 in/h	13 min			13 min				0.75	25	614	307
60	HUNTER ICV-G-FS-R	SHRUB SPRAY	1.73 in/h	13 min			13 min				0.75	26	479	239
61	HUNTER ICV-G-FS-R	TURF SPRAY	1.85 in/h	25 min			25 min				1.5	49	1,326	663
62	HUNTER ICV-G-FS-R	TURF SPRAY	1.75 in/h	26 min			26 min				1.5	52	1,448	724
63	HUNTER ICV-G-FS-R	BUBBLER	1.44 in/h	16 min			16 min				0.75	32	693	346
TOTALS:				1,353			1,353					2,670	73,141	36,570

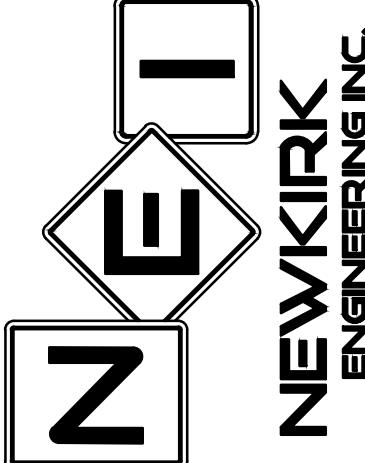


MATCH-LINE SEE SHEET L4

REVISIONS

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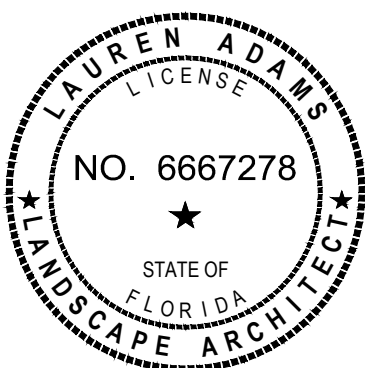
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IRRIGATION PLAN
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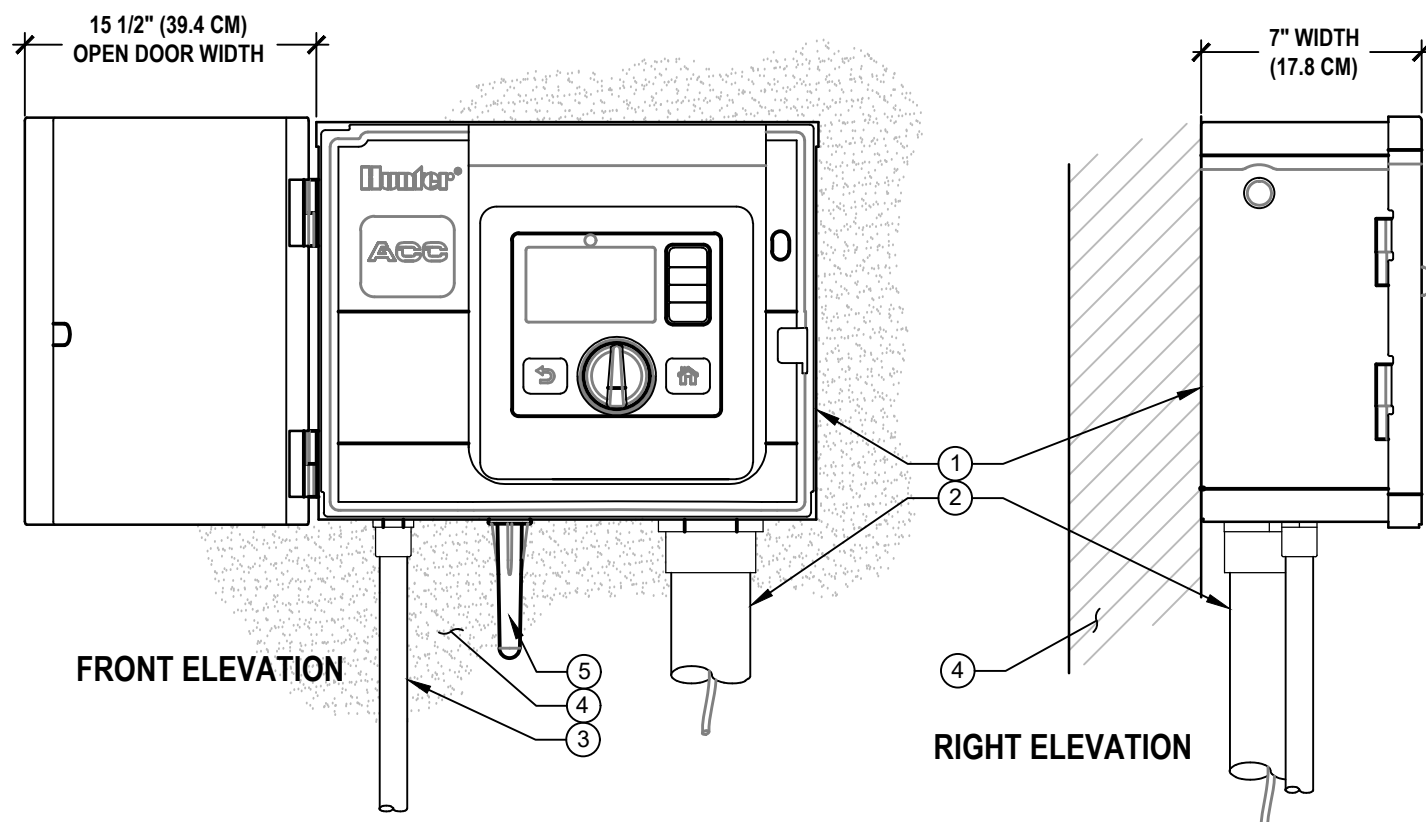
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PROJECT No: 2021-346
DATE: AUGUST 2022
DESIGN BY: LAA
DRAWN BY: BWV
CHECKED BY: LAA
SCALE: 1" = 30'
DRAWING NUMBER

L5

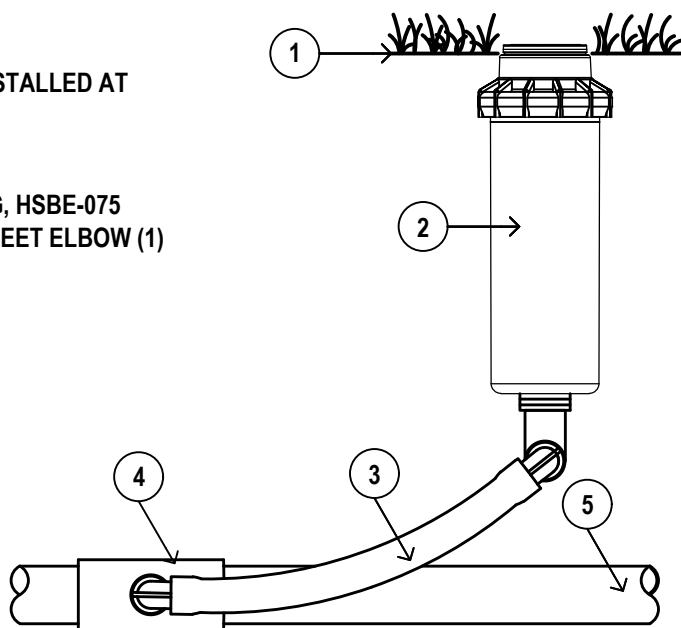


- LEGEND**
- 1 IRRIGATION CONTROLLER (A2C-M) PER PLAN
 - 2 IRRIGATION CONTROL WIRE IN CONDUIT SIZE AND TYPE PER LOCAL CODES
 - 3 ELECTRICAL SUPPLY CONDUIT CONNECT TO POWER SOURCE, J-BOX INSIDE CONTROLLER
 - 4 ADJACENT SURFACE TO MOUNT CONTROLLER PER PLAN
 - 5 ANTENNA

NOTE:
MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL, CONTROLLER SHALL BE HARD-WIRED TO GROUND
110 VAC POWER SOURCE

C.A2C.01

- LEGEND**
- 1 FINISH GRADE
 - 2 SPRAY OR ROTOR HEAD INSTALLED AT FINISH GRADE
 - 3 SWING JOINT:
HUNTER 'PRO-FLEX' TUBING, HSBE-075 ELBOWS (2), & MARLEX STREET ELBOW (1)
 - 4 LATERAL TEE OR ELL
 - 5 LATERAL PIPE



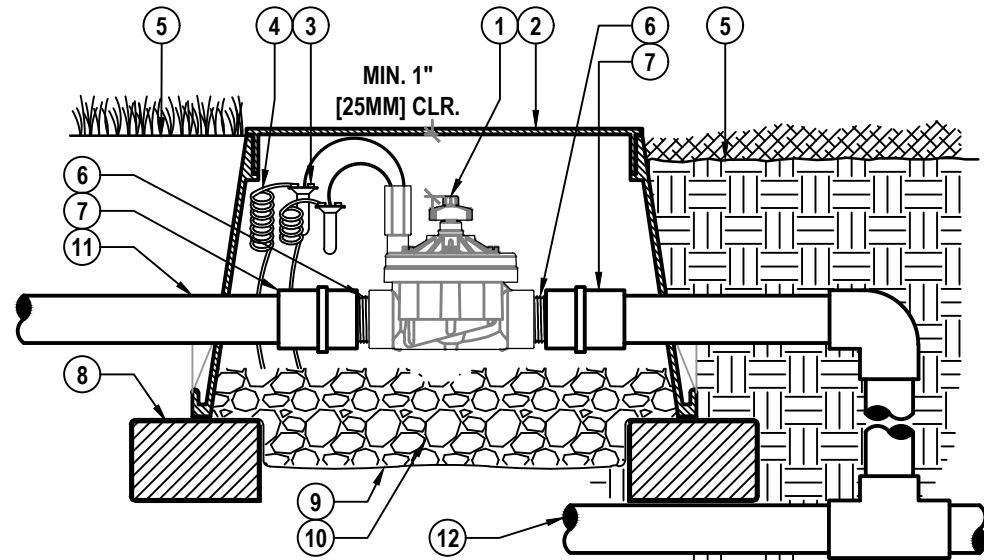
SPRAY HEAD AND ROTOR DETAIL

1/4" = 1'-0"

P-CO-2021-346-17

LEGEND

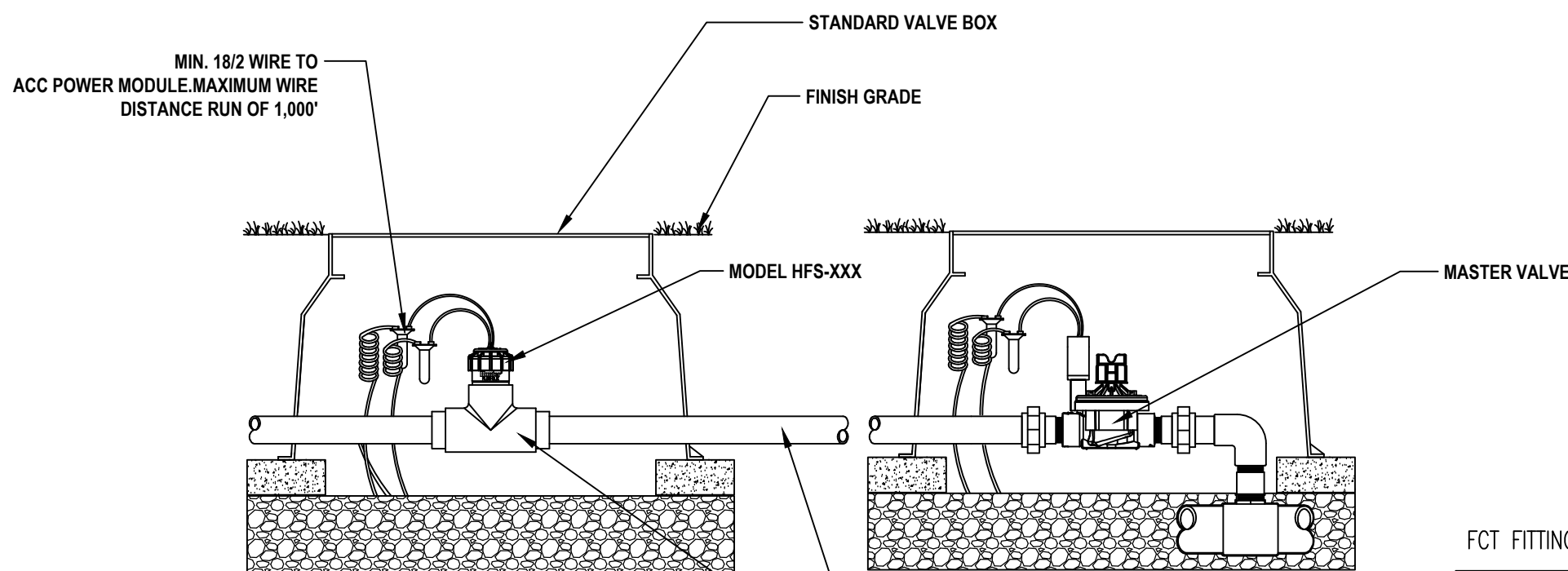
- 1 HUNTER REMOTE CONTROL VALVE (ICV) WITH FLOW CONTROL
- 2 IRRIGATION VALVE BOX: HEAT STAMP LID WITH 'RCV' IN 2" LETTERS
- 3 WATERPROOF CONNECTORS (2)
- 4 18"-24" COILED WIRE TO CONTROLLER
- 5 FINISH GRADE AT ADJACENT SURFACE (TURF OR MULCH)
- 6 SCH. 80 CLOSE NIPPLE, SIZE PER RCV
- 7 PVC SLIP X FPT ADAPTOR
- 8 BRICK SUPPORTS (4)
- 9 FILTER FABRIC - WRAP TWICE AROUND BRICK SUPPORTS
- 10 3/4" WASHED GRAVEL - 4" MIN. DEPTH
- 11 IRRIGATION LATERAL
- 12 MAINLINE AND FITTINGS



HUNTER REMOTE CONTROL VALVE (ICV)

1 1/2" = 1'-0"

P-CO-2021-346-20



NOTE:
INLET PIPE LENGTH OF SENSOR MUST BE MIN. 10X PIPE DIA. STRAIGHT, CLEAN RUN OF PIPE, NOT FITTINGS OR TURNS. OUTLET PIPE LENGTH OF SENSOR MUST BE MIN. 5X PIPE DIA. OF STRAIGHT CLEAN RUN OF PIPE, NO FITTINGS OR TURNS.

FCT FITTING SELECTION

FCT100	1 INCH	SCH. 40
FCT150	1.5 INCH	SCH. 40
FCT158	1.5 INCH	SCH. 80
FCT200	2 INCH	SCH. 40
FCT208	2 INCH	SCH. 80
FCT300	3 INCH	SCH. 40
FCT308	3 INCH	SCH. 80
FCT400	4 INCH	SCH. 40

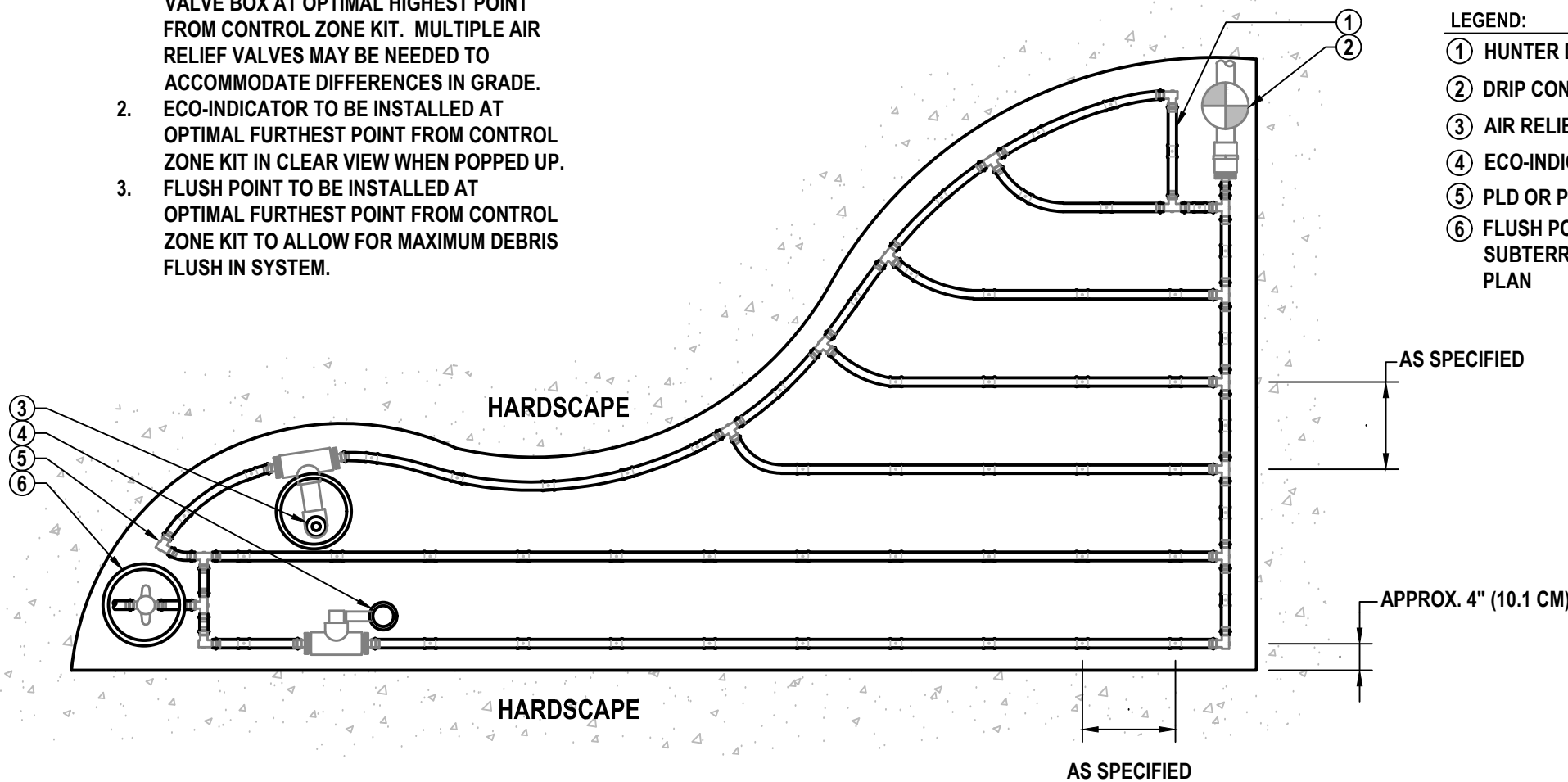
HFS FLOW SENSOR

1 1/2" = 1'-0"

P-CO-2021-346-06

NOTES:

1. AIR RELIEF VALVE (PLD-AVR) INSTALLED IN VALVE BOX AT OPTIMAL HIGHEST POINT FROM CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMMODATE DIFFERENCES IN GRADE.
2. ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP.
3. FLUSH POINT TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.

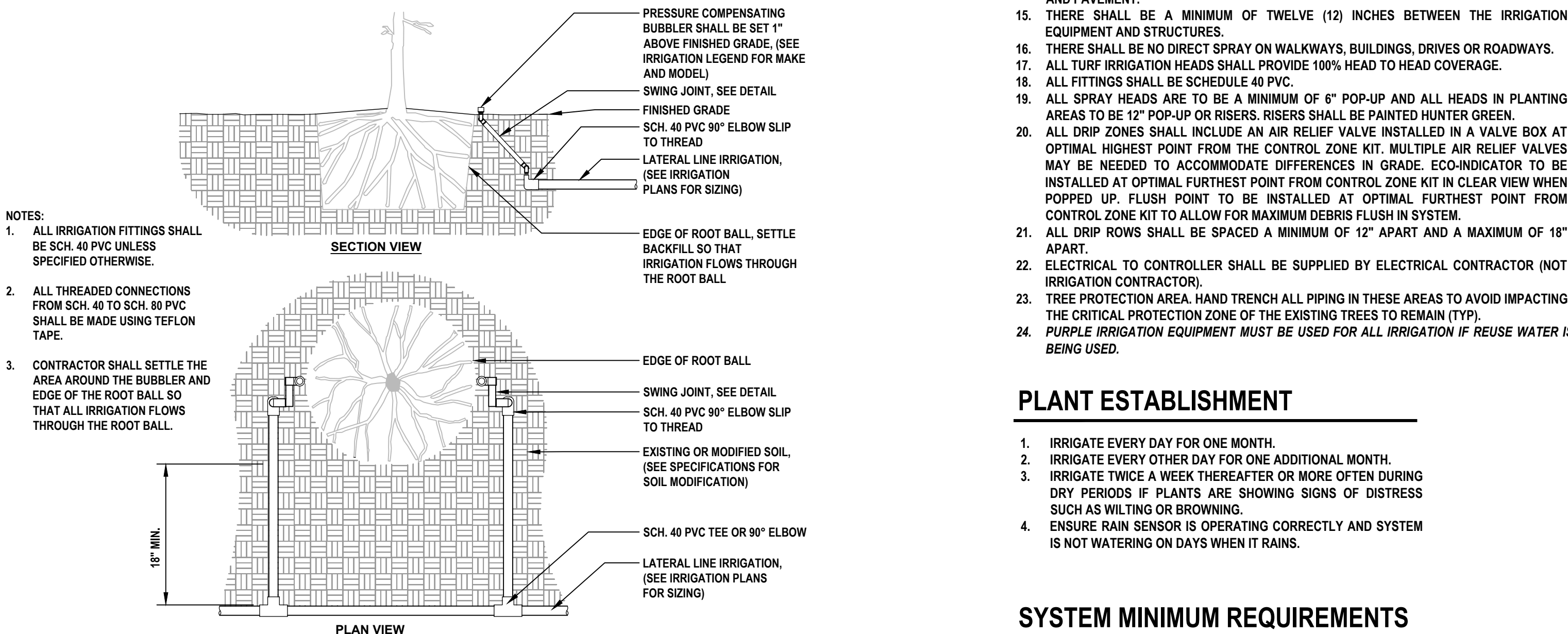


- LEGEND:**
- 1 HUNTER DRIPLINE PER PLAN
 - 2 DRIP CONTROL ZONE KIT PER PLAN
 - 3 AIR RELIEF VALVE IN VALVE BOX
 - 4 ECO-INDICATOR ON SWING ARM
 - 5 PLD OR PLD-LOCK FITTING (TYP.)
 - 6 FLUSH POINT (PLD-BV) IN SUBTERRANEAN BOX PER PLAN

DRIPLINE FOR IRREGULAR BED

1 1/2" = 1'-0"

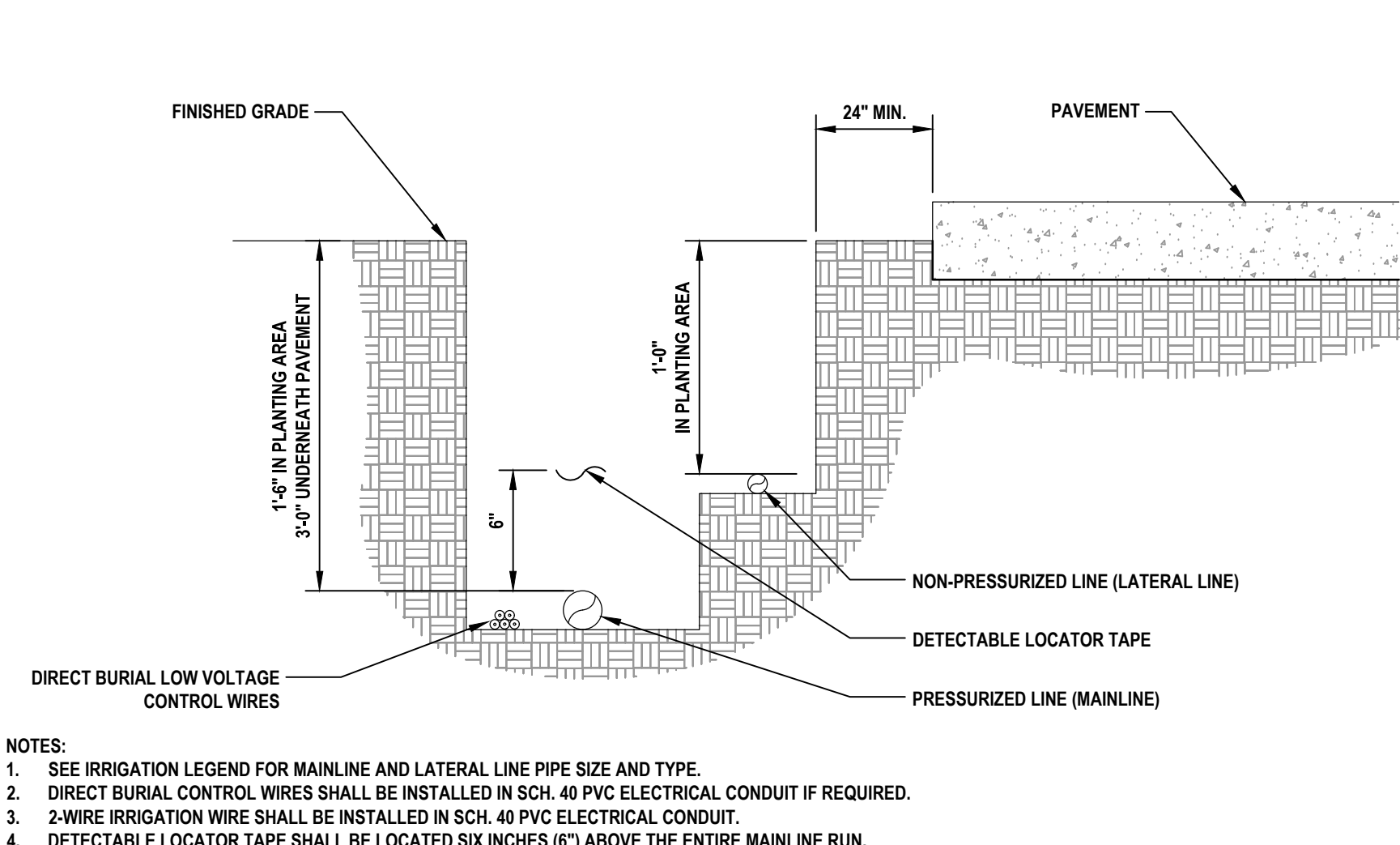
P-CO-2021-346-11



IRRIGATION BUBBLER (2) W/ LAYOUT

3/4" = 1'-0"

P-CO-2021-346-02



NOTES:

1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

IRRIGATION TRENCHING

1 1/2" = 1'-0"

P-CO-2021-346-15

IRRIGATION NOTES

1. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES AND CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
2. **CHECK PRESSURE AND GPM OF WATER SUPPLY BEFORE BEGINNING JOB AND REPORT FINDING TO LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT WILL MAKE ANY ADJUSTMENT NECESSARY TO MAKE SYSTEM WORK AT ITS BEST.**
3. THE PLAN IS SCHEMATIC ONLY. THE CONTRACTOR SHALL INSTALL PIPING IN A MINIMUM NUMBER OF TRENCHES AND SHALL INSTALL PIPE IN A MINIMUM LENGTH.
4. IRRIGATION LINES ARE SHOWN DIAGMATICALLY AND ARE INTENDED TO SHOW DISTRIBUTION ZONES ONLY. LINES LOCATED UNDER PAVEMENT SHALL BE KEPT TO A MINIMUM AND ALL PIPING UNDER PAVED AREAS SHALL BE SLEEVED.
5. WHEN INSTALLING IRRIGATION PIPING IN ISLAND AND OTHER NARROW PLANTING AREAS RUN PIPING CLOSE TO CURB AND NOT DOWN THE MIDDLE OF THE PLANTING AREA. (BEFORE DOING IRRIGATION GET A COPY OF THE LANDSCAPE PLAN AND KEEP IRRIGATION LINES OUT OF PLANTING AREAS WHERE POSSIBLE.)
6. QUANTITIES FOR IRRIGATION MATERIALS MAY BE ESTIMATES. CONTRACTOR SHALL DO THEIR OWN TAKEOFF.
7. INSTALL SLEEVE PIPING WHERE SHOWN ON THE DRAWINGS AT THE PROPER DEPTH. ALL SLEEVE PIPE SHALL BE SCHEDULE 40 PVC PIPE INSTALLED A MINIMUM OF 20" BELOW FINISHED PAVING GRADES. ALL SLEEVES WHEN PLACED IN FIELD ARE TO BE LOCATED BY A METAL PIPE AT EACH END AND LOCATED FROM TWO STATIONARY POINTS BY TAPE MEASUREMENTS.
8. ALL LATERAL PIPE SHALL BE INSTALLED A MINIMUM OF 12" BELOW GRADE.
9. ALL TRENCHING SHALL BE KEPT OUT OF THE DRIP LINE AREA OF ALL EXISTING TREES. USE RADIAL LINES OR TUNNELING WHEN NECESSARY TO ENCR OACH INTO THE DRIP LINE AREA OF TREES.
10. LOCATE ALL VALVES AND OTHER IRRIGATION EQUIPMENT IN PLANT BED AREAS WITHIN THE PROJECT LIMITS FOR CONCEALMENT PURPOSES.
11. RISERS ARE TO BE HIDDEN COMPLETELY IN SHRUBBERY OR PAINTED BLACK AND IN NO CASE BE HIGHER THAN THE SHRUBBERY INSTALLED.
12. ALL VALVES SHALL BE INSTALLED IN VALVE BOXES. PROVIDE A 6" GRAVEL SUMP AT THE BOTTOM OF ALL VALVE BOXES AND INSTALL 1/2" TO 1" DIAMETER GRAVEL AT THE BOTTOM OF THE VALVE PIT.
13. IRRIGATION SHALL MEET ALL APPLICABLE CURRENT MUNICIPAL, COUNTY, STATE OR FEDERAL CODES, ORDINANCES AND REGULATIONS THAT HAVE JURISDICTION.
14. THERE SHALL BE A MINIMUM OF FOUR (4) INCHES BETWEEN THE IRRIGATION EQUIPMENT AND PAVEMENT.
15. THERE SHALL BE A MINIMUM OF TWELVE (12) INCHES BETWEEN THE IRRIGATION EQUIPMENT AND STRUCTURES.
16. THERE SHALL BE NO DIRECT SPRAY ON WALKWAYS, BUILDINGS, DRIVES OR ROADWAYS.
17. ALL TURF IRRIGATION HEADS SHALL PROVIDE 100% HEAD TO HEAD COVERAGE.
18. ALL FITTINGS SHALL BE SCHEDULE 40 PVC.
19. ALL SPRAY HEADS ARE TO BE A MINIMUM OF 6" POP-UP AND ALL HEADS IN PLANTING AREAS TO BE 12" POP-UP OR RISERS. RISERS SHALL BE PAINTED HUNTER GREEN.
20. ALL DRIP ZONES SHALL INCLUDE AN AIR RELIEF VALVE INSTALLED IN A VALVE BOX AT OPTIMAL HIGHEST POINT FROM THE CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMMODATE DIFFERENCES IN GRADE. ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP. FLUSH POINT TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.
21. ALL DRIP ROWS SHALL BE SPACED A MINIMUM OF 12" APART AND A MAXIMUM OF 18" APART.
22. ELECTRICAL TO CONTROLLER SHALL BE SUPPLIED BY ELECTRICAL CONTRACTOR (NOT IRRIGATION CONTRACTOR).
23. TREE PROTECTION AREA. HAND TRENCH ALL PIPING IN THESE AREAS TO AVOID IMPACTING THE CRITICAL PROTECTION ZONE OF THE EXISTING TREES TO REMAIN (TYP).
24. **PURPLE IRRIGATION EQUIPMENT MUST BE USED FOR ALL IRRIGATION IF REUSE WATER IS BEING USED.**

PLANT ESTABLISHMENT

1. IRRIGATE EVERY DAY FOR ONE MONTH.
2. IRRIGATE EVERY OTHER DAY FOR ONE ADDITIONAL MONTH.
3. IRRIGATE TWICE A WEEK THEREAFTER OR MORE OFTEN DURING DRY PERIODS IF PLANTS ARE SHOWING SIGNS OF DISTRESS SUCH AS WILTING OR BROWNING.
4. ENSURE RAIN SENSOR IS OPERATING CORRECTLY AND SYSTEM IS NOT WATERING ON DAYS WHEN IT RAINS.

SYSTEM MINIMUM REQUIREMENTS

1. THIS SYSTEM ASSUMES A MINIMUM PRESSURE OF 75 PSI.
2. IF THE WATER SUPPLY DOES NOT MEET THE MINIMUM PRESSURE, A BOOSTER PUMP MAY BE REQUIRED FOR PROPER SYSTEM FUNCTION.

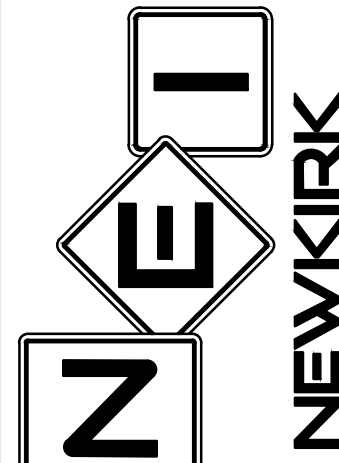
PASCO COUNTY IRRIGATION SCHEDULE

1. MIXED OR NO ADDRESS IS ALLOWED TO WATER ON WEDNESDAY AND SUNDAY.
2. WATERING IS ALLOWED TWO DAYS PER WEEK AND ONE TIME PER DAY.
3. WATERING HOURS ARE BETWEEN 6:00 PM AND 8:00 AM.

REVISIONS

DATE	DESCRIPTION
11/26/22	CITY COMMENTS

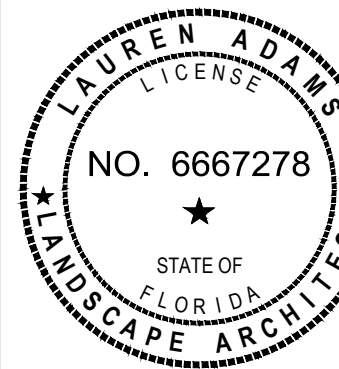
1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
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IRRIGATION DETAILS
AND NOTES
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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DATE:	AUGUST 2022
DESIGN BY:	LAA
DRAWN BY:	BVV
CHECKED BY:	LAA
SCALE:	AS SHOWN
DRAWING NUMBER	

L6

STORMWATER REPORT

SUMMIT APARTMENTS

PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

AUGUST 2022
REVISED NOVEMBER 2022



Civil Engineering—Transportation—CEI
1230 North US Highway 1, Suite 3
Ormond Beach, FL 32174
(386) 872-7794
www.Newkirk-Engineering.com

PROFESSIONAL ENGINEER CERTIFICATE

I hereby certify that I am a registered professional engineer in the State of Florida practicing with Newkirk Engineering Inc., a corporation authorized as an engineering business, Certificate of Authorization No. 30209, by the State of Florida, Department of Professional Regulation and Board of Professional Engineers. I have reviewed or approved the evaluation, findings, opinions, and conclusions as reported for:

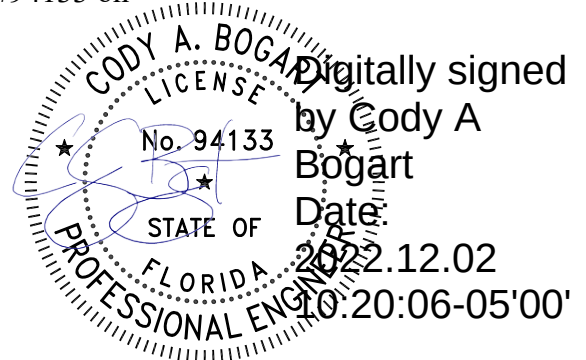
Project: "SUMMIT APARTMENTS"

Location: PRETTY POND ROAD,
ZEPHYRHILLS, FL 33540

Client: REALSOURCE

I acknowledge that the procedures and references used to develop the results are standard to the professional practice of civil engineering as applied through design standards and criteria set forth by the federal, state and local regulatory agencies as well as professional judgment and experience.

This report has been digitally signed
and sealed by Cody A. Bogart, PE
#94133 on



Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Name: Cody A. Bogart,
PE License No: 94133
Address: 1230 North US Highway 1
Suite 3
Ormond Beach, FL 32174

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3	Existing Conditions
4	Proposed Project
4	Positive Outfall
4	Stormwater Management
4	Pre-Development Flood Routing Model
5	Post-Development Flood Routing Model
5	Tailwater Considerations
5	Erosion and Sediment Control
5	Assumptions and References Used
6	Conclusion
Appendix A	Maps
	- Aerial Location Map - Site Location Map - Soils Map - FIRM Map
Appendix B	Pre-Development Calculations
Appendix C	Post-Development Calculations
Appendix D	Stormwater Recovery
Appendix E	Pipe Sizing Calculations

INTRODUCTION

The project proposes the development of a multi-family apartment complex development with improvements consisting of paving, grading, utilities, and a stormwater management facility. The proposed apartment complex site is located on a 12.00-acre parcel in Zephyrhills, Florida, Section 30, Township 17 S, Range 31 E. The project is located at the North-West corner of the Pretty Pond & Wire Road intersection on a vacant, cleared parcel. See **Appendix A** for site location and aerial map.

Stormwater management is provided by a proposed dry retention pond routed to the northwest property line, matching existing flow off the parcel. Stormwater calculations are designed for a drainage basin of 12.00 acres with 7.257 acres of impervious surface.

EXISTING CONDITIONS

Land Coverage

The existing site is an undeveloped, (211) Improved Pasture, grass parcel with a zoning classification of R-4 (Multi-Family Residential), See Aerial Location map in **Appendix A**.

Topography

Elevations undulate between EL 118.0 and EL 95.0 across the site. Site runoff drains to the northwest property line by sheet flow from existing topography. See **Appendix B**, Pre-Development Basin Map.

Flood Zone

The property is located within Zone “X”, per FEMA Map Panel No. 12101C0293 F dated September 26, 2014. See FEMA FIRM map in **Appendix A**.

Soils

To the best of my knowledge, the soils on site will drain/percolate according to the assumptions made in the drainage calculations. Assumptions are based on normal season conditions for the site. According to the Pasco County Soil Survey, the soils consist of the following:

- (6) Tavares Sand, 0-5% slopes, Hydrologic Group = A
- (32) Lake Fine Sand, 0-5% slopes, Hydrologic Group = A
- Assume Type A soils for calculations

See **Appendix A** for Soils map.

Geotechnical Report provided by Andreyev Engineering, Inc., Report No. CPGT-22-180.

PROPOSED PROJECT

The subject site is a 12.00-acre multi-family apartment complex with paving, grading, drainage and utility improvements. The stormwater system provides water quality (treatment volume) for a 12.00-acre drainage basin with 7.257 acres of impervious surface. The required treatment volume is 1.50 Ac-Ft, and 2.491 Ac-Ft is provided. All stormwater runoff is to sheet flow to a series of inlets by conveyance of pavement grades. Stormwater will be transferred to the retention area through a pipe system. When stormwater levels in the pond reaches EL 99.69, the runoff will discharge via the v-notch weir in the Type 'E' Control Structure (CS-01) to the northwest property line which has positive outfall to a control structure connected to the Zephyr Lakes master stormwater system. The system will recover the required treatment volume through soil percolation in 49 hours. (See **Appendix C, D, & E**)

POSITIVE OUTFALL

Discharge from the stormwater treatment system flows offsite to the Type H inlet beyond the northwest boundary of the site as referenced in ERP 28765.011. The stormwater is then captured by a Type H inlet and discharged to Pond 20 within the Zephyr Lakes development which provides attenuation for the project site. The overall drainage basin for the project site has eventual outfall to the Hillsborough River which then discharges to Tampa Bay. Post development design decreases the amount of rate and volume of discharge to this area.

STORMWATER MANAGEMENT

A. SWFWMD

An Environmental Resource Permit will be obtained for this project since the project area is over 10-acres.

For dry retention, the design treatment volume is the greater of one 1.0-inch of runoff from the drainage area or 1.0-inch of runoff from the impervious area. Water Quality volume recovery in the dry retention pond is attained by recovering the provided treatment volume in 72 hours.

The design storms are the Mean Annual, 10-year 24-hour, 25-year 24-hour, and 100-year 24-hour storm events utilizing SCSIII-24 FLMOD rainfall distribution. During the design storms the post-development peak discharge rate cannot exceed the pre-development peak discharge rate. The system shall be designed to provide for the appropriate treatment volume of stormwater runoff within 72 hours following a storm event assuming average antecedent moisture conditions with a safety factor of 2.

The system is designed to meet the requirements of SWFWMD and the City of Zephyrhills Basin of Special Concern.

PRE-DEVELOPMENT FLOOD ROUTING MODEL

The site pre-development condition consists of a single drainage basin with a pervious CN of 39.00. The PRE basin is modeled as a hydrograph and discharge to the node “OFF” via sheet and overland flows. Basin (PRE) is 12.00 acres with a time of concentration of 26.5 minutes and drains to the northwest where it discharges offsite at Node (OFF). Unit Hydrograph 256 was used for both pre and post conditions.

POST-DEVELOPMENT FLOOD ROUTING MODEL

The site post development drainage Basin (POST) represents the contributing area for the stormwater system and includes all site improvements. POST is 12.00 acres with 52.0% of DCIA, 60.5% of impervious area, and a pervious CN of 39.00 and a time of concentration of 15 minutes.

POST drains to Node (POND) via inlet catchment and pipe conveyance. At EL 99.69 runoff will overtop the v-notch weir in the Control Structure (CS-01) and discharge offsite to Node (OFF).

TAILWATER CONSIDERATIONS

Tailwater for the pre-development basin is set at surface grade elevation for the discharge point. Tailwater for the post-development basin set as the weir elevation of the offsite control structure, EL 94.25.

EROSION AND SEDIMENT CONTROL PLANS

All pervious surfaces will be planted with trees, shrubs and sodded solid to prevent erosion. All inlets will have a 1-foot sump to trap sediments/fines. All pond slopes and other pervious areas of the property will be sodded solid or seeded and mulched to prevent erosion. A temporary gravel construction entrance will be provided to prevent fines and sands from leaving the site and contaminating adjacent roadways. Silt fence will be installed around the entire site and around inlets during construction to retain sediment on-site and assure that any discharges from the site do not cause or contribute to a violation of state water quality standards.

ASSUMPTIONS AND REFERENCES USED

- A. S.C.S. Unit Hydrograph Method
- B. FLMOD Rainfall Distribution
- C. ICPR 4.07.08 Analysis Software
- D. Andreyev Engineering, Inc. Geotechnical Report
- E. Stillwater Environmental, Inc. Environmental Report
- F. Other references and assumptions listed in the drainage calculations.

CONCLUSION

Calculations indicate that the proposed stormwater treatment system meets the requirements for pollution abatement volume per Southwest Florida Water Management District, Florida Department of Environmental Protection, and the City of Zephyrhills Land Development Code and Basin of Special Concern. All stormwater runoff is directed into the stormwater treatment system by the conveyance of pavement grades to a series of inlets. The dry retention system is designed to recover the provided treatment volume in 72 hours per SJRWMD minimum design standards. Rainfall intensities were compared with surrounding permit and design standards from recent projects.

PERMITTED RUNOFF			NODE: OFF	
Design Storm		Rainfall (inches)	Inflow Rate (cfs)	Inflow Volume (ft ³)
Mean Annual, 24-Hour	PRE	4.10	0.07	2,321
10 Year, 24-Hour	PRE	7.00	2.33	32,607
25 Year, 24-Hour	PRE	9.00	6.36	68,349
100 Year, 24-Hour	PRE	12.00	14.87	137,399

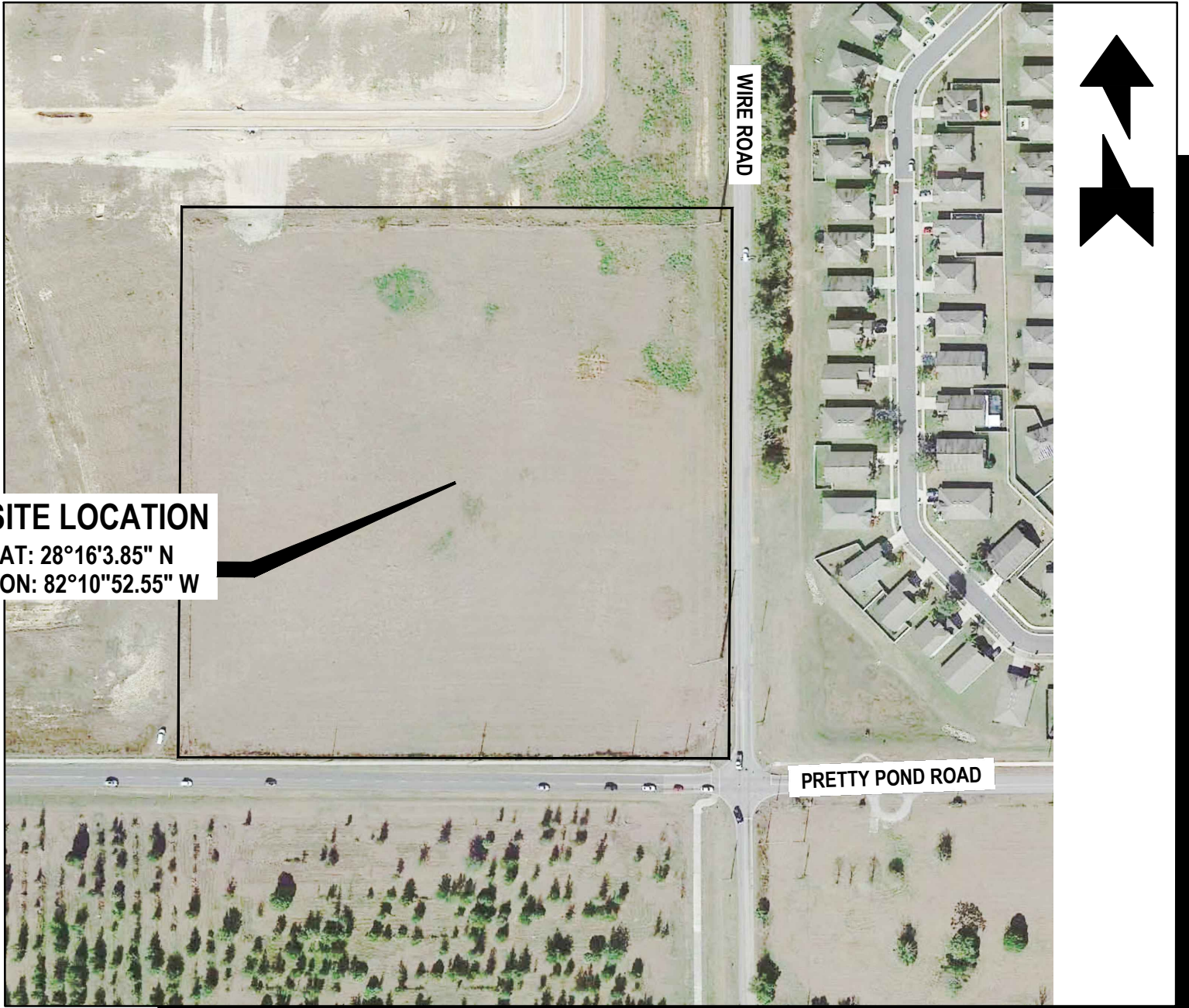
PROPOSED - DISCHARGE			NODE: OFF		STAGE
Design Storm		Rainfall (inches)	Inflow Rate (cfs)	Inflow Volume (ft ³)	RET
Mean Annual, 24-Hour	POST	4.10	0.00	0	99.47
10 Year, 24-Hour	POST	7.00	0.61	15,826	100.68
25 Year, 24-Hour	POST	9.00	1.62	57,879	101.15
100 Year, 24-Hour	POST	12.00	3.68	137,040	102.00

RECOVERY		
	UNITS	DRY POND
TREATMENT VOL.	CF	108,516
TREATMENT EL	FT	99.69
RECOVERY TIME	HRS	49

See Appendix B – D for further calculations and modeling

APPENDIX A

MAPS

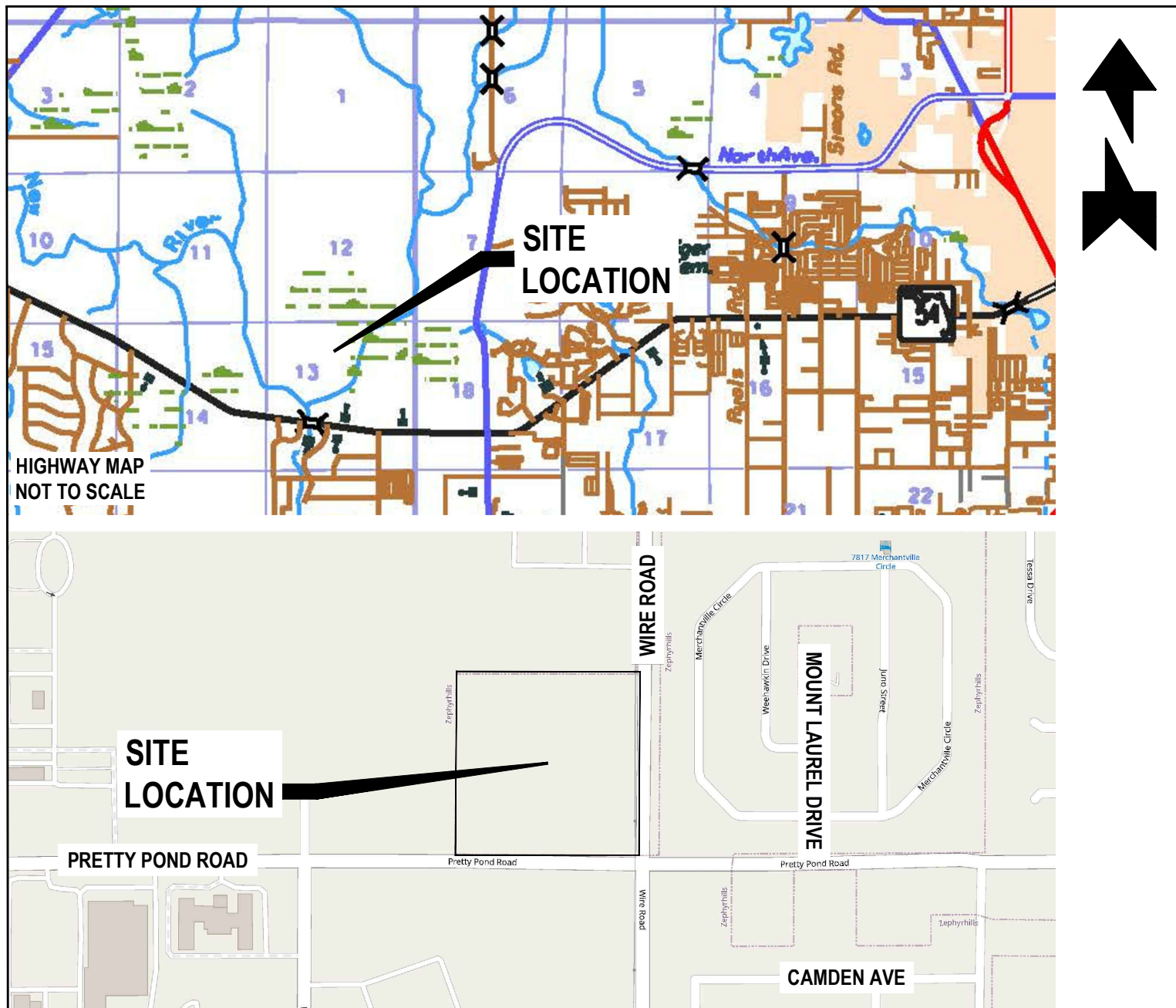


SITE LOCATION

LAT: 28°16'3.85" N
LON: 82°10'52.55" W

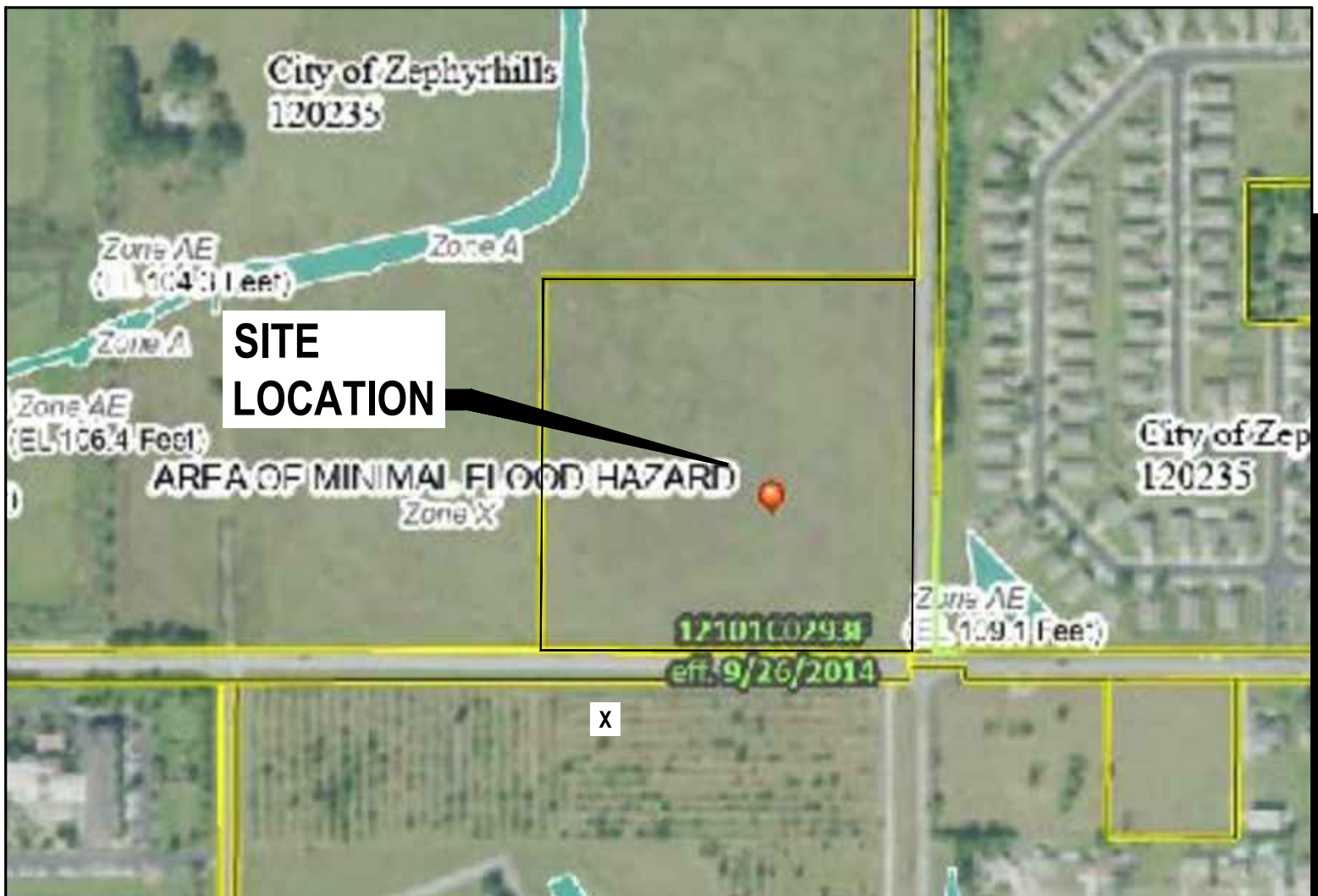
AERIAL MAP

SCALE: 1" = 200'



LOCATION MAP

SCALE: 1" = 600'



FLOOD ZONE MAP

FLOOD ZONE "X"

SCALE: 1" = 400'

PANEL No. 12127C0293 K, EFF. 9/26/2014



SOILS MAP

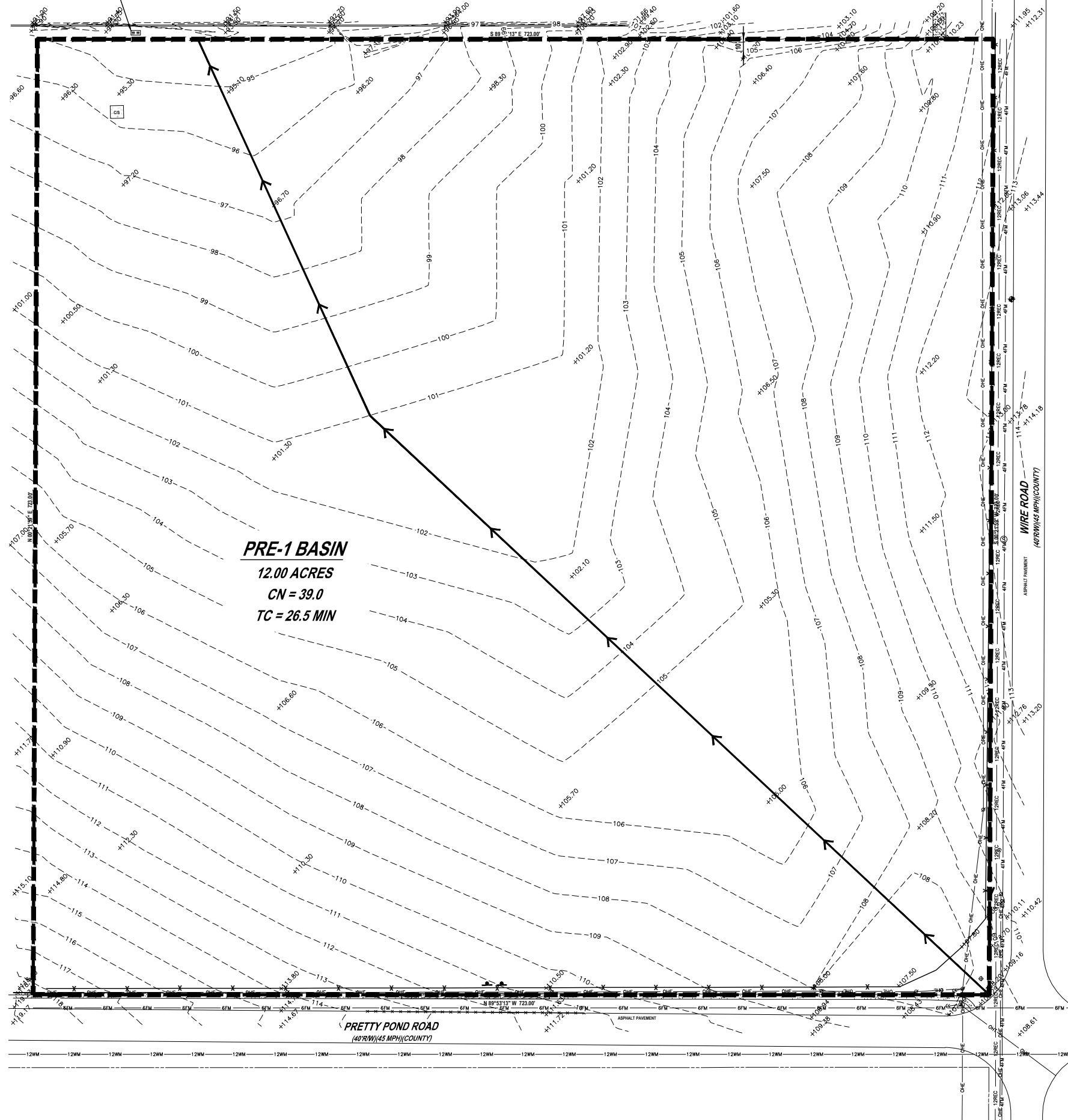
SCALE: 1" = 300'

SOIL TYPES: (6) TAVARES SAND, 0 TO 5 PERCENT SLOPES
 (32) LAKE FINE SAND, 0 TO 5 PERCENT SLOPES
 (43) ARREDONDO FINE SAND, 0 TO 5 PERCENT SLOPES

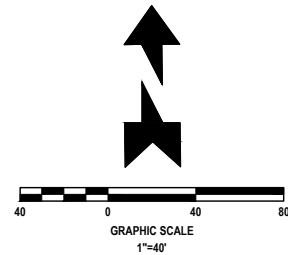
APPENDIX B

PRE-DEVELOPMENT CALCULATIONS

EXISTING CONTROL STRUCTURE
TOP EL 94.75
N INV 87.00 (24" RCP)
6' WEIR INV EL 94.25



PRE-1 BASIN
12.00 ACRES
CN = 39.0
TC = 26.5 MIN

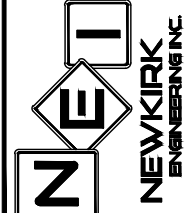


LEGEND

- BASIN LINE
- PARCEL LINE
- TOC

REVISIONS	
DATE	DESCRIPTION

1230 North US1, Suite 3
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www.Newkirk-Engineering.com
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L.C. # 2600384
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PRE-DEVELOPMENT
BASIN MAP
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	1"=40'

DRAWING NUMBER
PRE



NEWKIRK ENGINEERING, INC.

CIVIL ENGINEERING - TRANSPORTATION - CEI - LANDSCAPE ARCHITECTURE
1230 N US HWY 1, SUITE 3, ORMOND BEACH, FLORIDA 32174 386-872-7794

PRE-DEVELOPMENT

TIME OF CONCENTRATION CALCULATIONS

BASIN: PRE-1

Sheet Flow

Tt = Travel time (min)

s = slope

L = Flow length (ft)

n = Manning's Roughness Coefficient

P2 = 2-year/24-hour rainfall (in)

s =

0.00200 ft/ft

L =

100 ft

n =

0.15 Grass, Short

P2 =

5 in

EL 2 =

108.20 Upstream Invert

EL 1 =

108.00 Downstream Invert

Tt =

19.7 min

$$s = \frac{EL_2 - EL_1}{L}$$

$$Tt = \frac{(.0007(nL)^{0.8}(60))}{(\sqrt{P2} * s^{0.4})}$$

Overland Flow

Tt = Travel time (min)

s = slope

L = Flow length (ft)

V = Velocity (ft/s)

s =

0.01653 ft/ft

L =

853 ft

V =

2.07 ft/s

Unpaved

EL 2 =

108.00 Upstream Invert

EL 1 =

93.90 Downstream Invert

Tt =

6.9 min

$$V_{Paved} = 20.3282s^{-5}$$

$$Tt = \frac{L}{60V}$$

Open Channel Flow

Tt = Travel time (min)

s = slope (ft/ft)

L = Flow length (ft)

n = Manning's Roughness Coefficient

a = Area

p = Wetted perimeter

R = Hydraulic radius (a/p)

V = Velocity (ft/s)

s =

ft/ft

L =

0 ft

n =

0

a =

0 sf

p =

0 ft

R =

0.00 ft

V =

0.00 ft/s

EL 2 =

0.0 Upstream Invert

EL 1 =

0.0 Downstream Invert

Tt =

0.0 min

Tc =

26.5 min

$$V = \frac{1.486 R^{\frac{2}{3}} s^{0.5}}{n}$$

$$Tt = \frac{L}{60V}$$

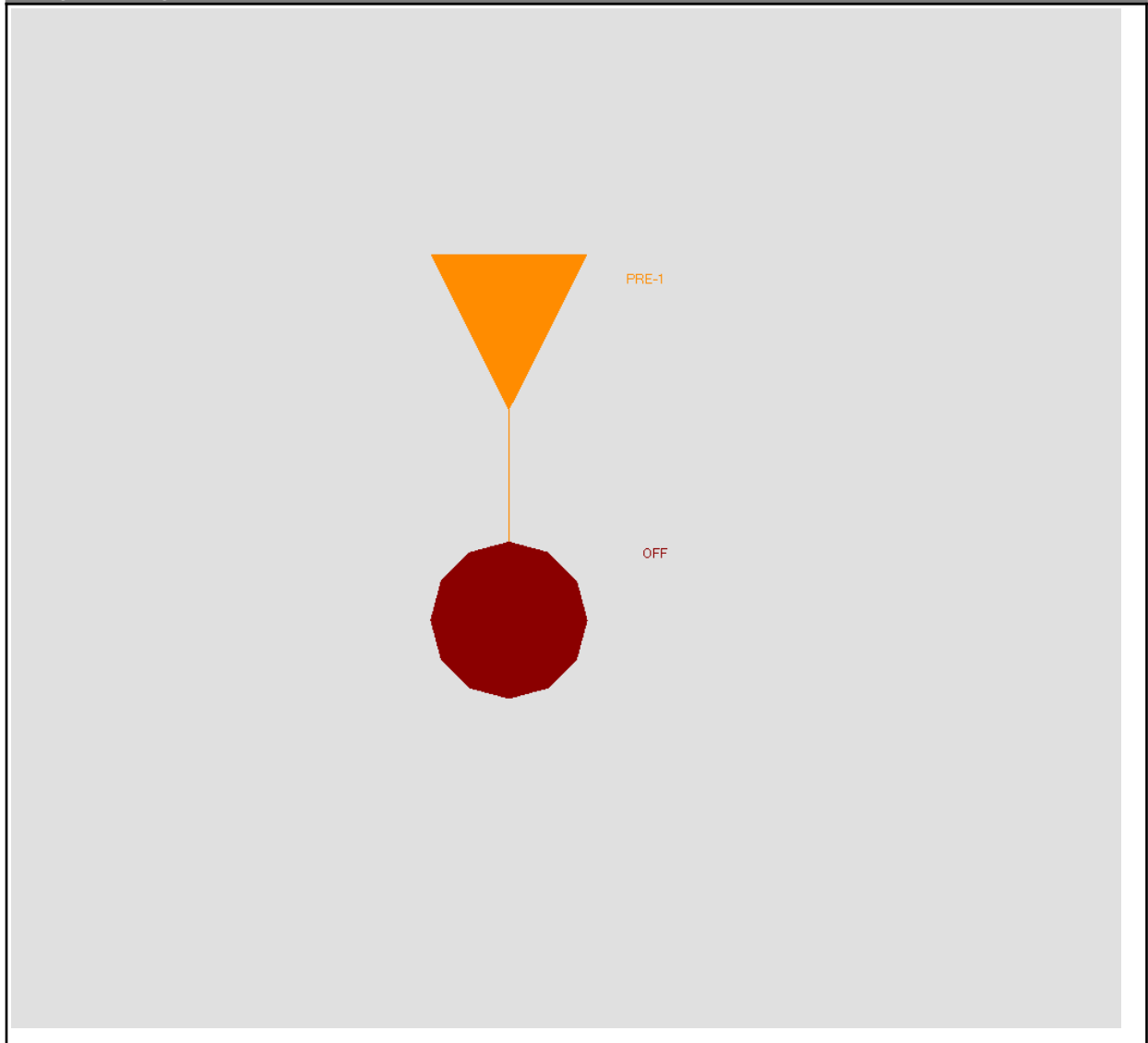
PRE-DEVELOPMENT HYDROGRAPH WORKSHEET

BASIN NAME	BASIN ACRES	PERVIOUS		IMPERVIOUS		WET POND NWL		WETLAND		COMPOSITE CN
		ACRES	CN	ACRES	CN	ACRES	CN	ACRES	CN	
PRE	12.000	12.000	39.00		98.0		100.0		93.0	39.00
TOTAL	12.000	12.000	39.00		98.0		100.0		93.0	39.00

PRE-DEVELOPMENT						
BASIN NAME	SOIL TYPE	DESCRIPTION	CONDITION	HYDRAULIC GROUP	AREA (AC)	CN
PRE	6 TAVARES SAND (0 - 5 % SLOPES)	GRASSLAND	GOOD	A	5.119	39
	32 LAKE FINE SAND (0 - 5 % SLOPES)	GRASSLAND	GOOD	A	6.881	39
	TOTAL				12.000	39.00

SOURCES: SCS SOILS SURVEY FOR VOLUSIA COUNTY, FLORIDA
 SCS TR 55, Agricultural Lands, Woods

Background Image: PRE



Simple Basin: PRE-1

Scenario: Scenario1
Node: OFF
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 26.5000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256

Peaking Factor: 256.0
 Area: 12.0000 ac
 Curve Number: 39.0
 % Impervious: 0.00
 % DCIA: 0.00
 % Direct: 0.00
 Rainfall Name:

Comment:

Simple Basin Runoff Summary [Scenario1]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
PRE-1	01_MA_25Y	0.07	19.7000	4.10	0.05	12.0000	39.0	0.00	0.00
PRE-1	02_10Y_24H	2.33	12.5000	7.00	0.75	12.0000	39.0	0.00	0.00
PRE-1	03_25Y_24H	6.36	12.4167	9.00	1.57	12.0000	39.0	0.00	0.00
PRE-1	04_100Y_24H	14.87	12.3667	12.00	3.16	12.0000	39.0	0.00	0.00

Simple Basin Mass Balance Summary [Scenario1]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
PRE-1 [in]	01_MA_25Y	4.10	0.00	0.05	0.00	0.00	0.00	4.05
PRE-1 [ft3]	01_MA_25Y	178596	0	2324	0	0	0	176272
PRE-1 [ac-ft]	01_MA_25Y	4.10	0.00	0.05	0.00	0.00	0.00	4.05
PRE-1 [in]	02_10Y_24H	7.00	0.00	0.75	0.00	0.00	0.00	6.25
PRE-1 [ft3]	02_10Y_24H	304920	0	32624	0	0	0	272296
PRE-1 [ac-ft]	02_10Y_24H	7.00	0.00	0.75	0.00	0.00	0.00	6.25
PRE-1 [in]	03_25Y_24H	9.00	0.00	1.57	0.00	0.00	0.00	7.43
PRE-1 [ft3]	03_25Y_24H	392040	0	68377	0	0	0	323663
PRE-1 [ac-ft]	03_25Y_24H	9.00	0.00	1.57	0.00	0.00	0.00	7.43
PRE-1 [in]	04_100Y_24H	12.00	0.00	3.16	0.00	0.00	0.00	8.84
PRE-1 [ft3]	04_100Y_24H	522720	0	137448	0	0	0	385272

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
	4H							
PRE-1 [ac-ft]	04_100Y_2 4H	12.00	0.00	3.16	0.00	0.00	0.00	8.84

Node: OFF

Scenario: Scenario1

Type: Time/Stage

Base Flow: 0.00 cfs

Initial Stage: 94.25 ft

Warning Stage: 94.25 ft

Boundary Stage:

Comment:

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
OFF	01_MA_25Y	94.25	94.25	0.0000	0.07	0.00	0
OFF	02_10Y_24H	94.25	94.25	0.0000	2.33	0.00	0
OFF	03_25Y_24H	94.25	94.25	0.0000	6.36	0.00	0
OFF	04_100Y_24H	94.25	94.25	0.0000	14.87	0.00	0

Node Mass Balance Condensed [Scenario1]

Node Name	Sim Name	Total Inflow [ft3]	Total Outflow [ft3]	Stored Volume (Flow Based) [ft3]
OFF	01_MA_25Y	2321	0	2321
OFF	02_10Y_24H	32607	0	32607
OFF	03_25Y_24H	68349	0	68349
OFF	04_100Y_24H	137399	0	137399

Simulation: 01_MA_25Y

Scenario: Scenario1
Run Date/Time: 12/1/2022 9:39:35 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	4.10 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 02_10Y_24H

Scenario: Scenario1
Run Date/Time: 12/1/2022 9:39:37 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	7.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 03_25Y_24H

Scenario: Scenario1
Run Date/Time: 12/1/2022 9:39:38 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	9.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 04_100Y_24H

Scenario: Scenario1
 Run Date/Time: 12/1/2022 9:39:42 AM
 Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
 Reference ET Folder:
 Unit Hydrograph
 Folder:

Lookup Tables

Boundary Stage Set:
 Extern Hydrograph Set:
 Curve Number Set:

 Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set:
 Roughness Set:
 Crop Coef Set:
 Fillable Porosity Set:

Conductivity Set:

Leakage Set:

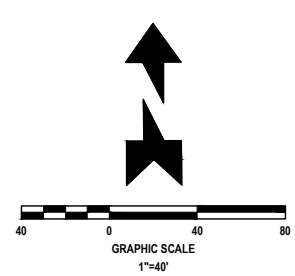
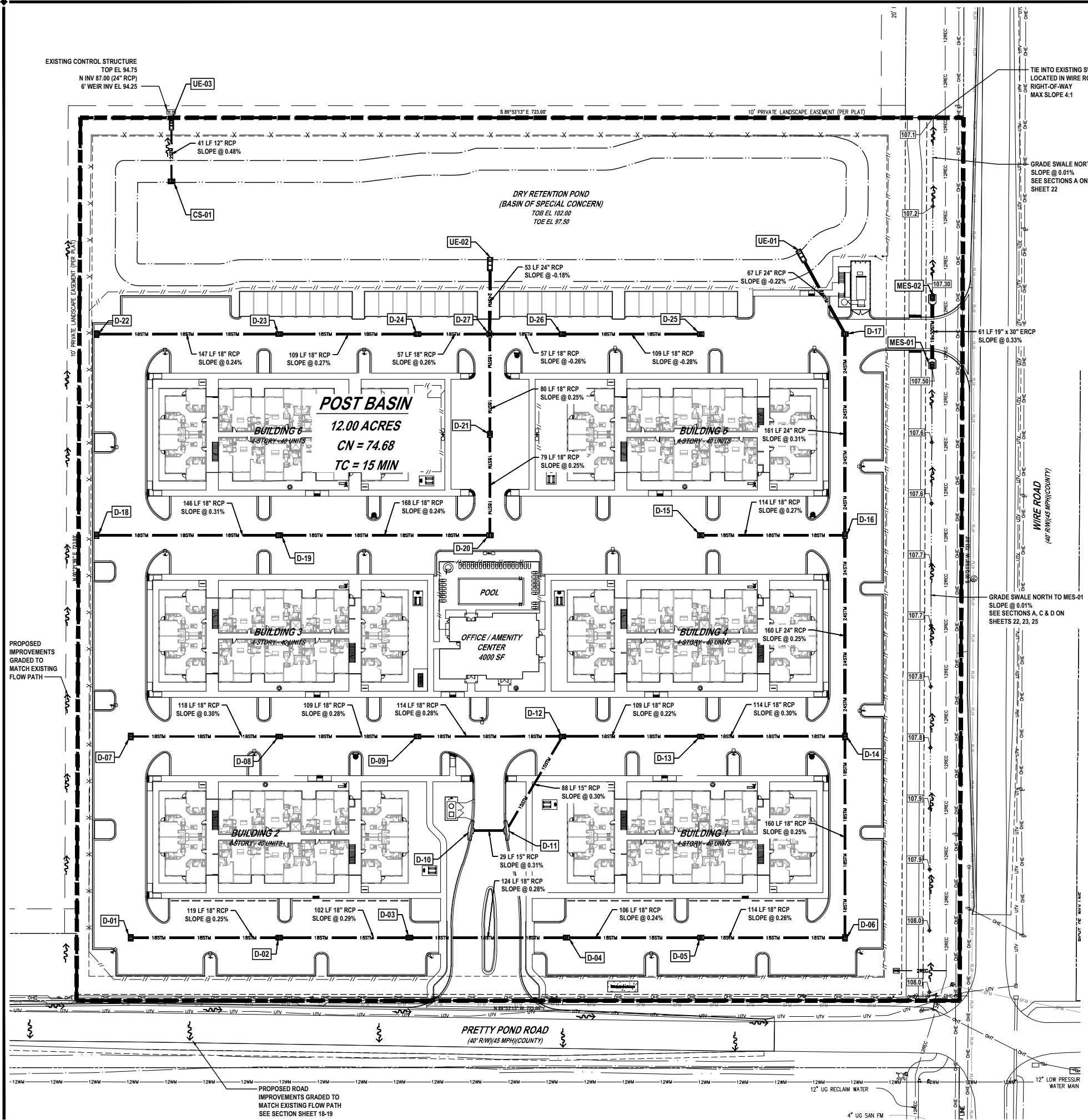
Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	12.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

APPENDIX C

POST-DEVELOPMENT CALCULATIONS



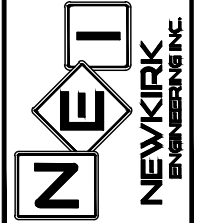
- LEGEND**
- BASIN LINE
 - PARCEL LINE

SUMMARY OF DRAINAGE:

THE MINIMUM WATER QUALITY TREATMENT VOLUME REQUIRED FOR AN ON-LINE RETENTION TREATMENT SYSTEM SHALL TREAT THE RUNOFF FROM THE FIRST (1) ONE-INCH OF RAINFALL (SWFWMD MANUAL PART IV, SECTION 4.1.C). TOTAL TREATMENT VOLUME SHALL AGAIN BE AVAILABLE WITHIN 72 HOURS, HOWEVER, ONLY THAT VOLUME WHICH CAN AGAIN BE AVAILABLE WITHIN 36 HOURS MAY BE COUNTED AS PART OF THE VOLUME REQUIRED FOR WATER QUANTITY STORAGE UNDER PART III OF THIS VOLUME II.

REVISIONS	
DATE	DESCRIPTION

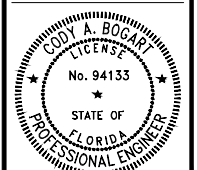
1230 North US1, Suite 3
Ormond Beach, Florida 32174
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www.Newkirk-Engineering.com
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L.C. # 2600384
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Civil Engineering
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Landscape Architecture



POST DEVELOPMENT
DRAINAGE BASIN
SUMMIT APARTMENTS
PRETTY POND ROAD
ZEPHYRHILLS, FL 33540

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CODY BOGART, PE # 94133 ON



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PROJECT No:	2021-346
DATE:	AUGUST 2022
DESIGN BY:	CAB
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	1" = 40'

DRAWING NUMBER

POST

POST-DEVELOPMENT CALCULATIONS

BASIN	BASIN ACRES	PERVIOUS		DCIA IMPERVIOUS		NON DCIA IMPERVIOUS		WETLANDS		COMPOSITE CN	NON DCIA CN
		ACRES	CN	ACRES	CN	ACRES	CN	ACRES	CN		
POST	12.000	4.743	39.00	6.237	98.00	1.020	98.00		93.00	74.68	49.44
TOTAL	12.000	4.743	39.00	6.237	98.00	1.020	98.00		93.00	74.68	49.44

POST-DEVELOPMENT

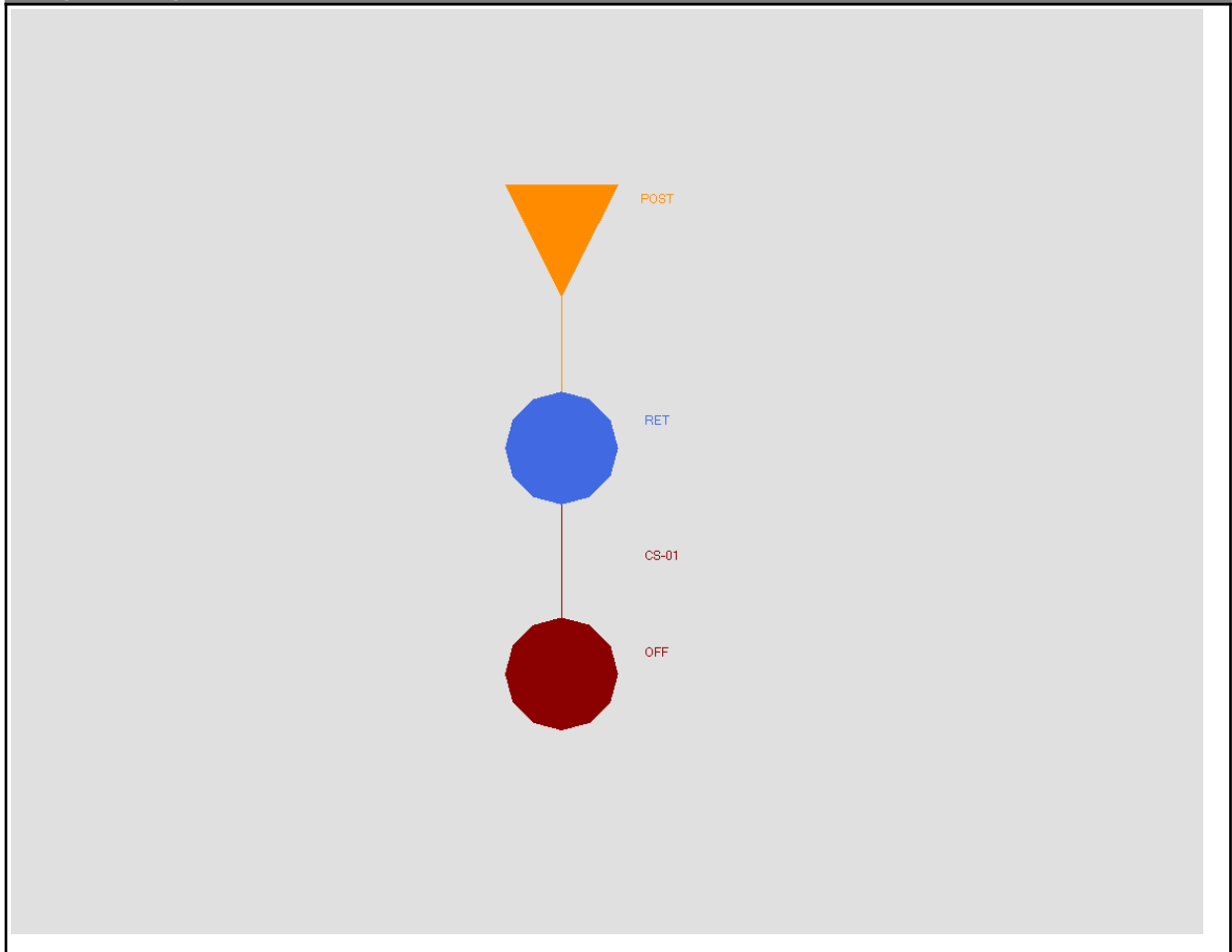
BASIN NAME	SOIL TYPE	DESCRIPTION	CONDITION	HYDRAULIC GROUP	AREA (AC)	CN
POST	6 TAVARES SAND (0 - 5 % SLO	URBAN OPEN	GOOD	A	5.119	39.00
	32 LAKE FINE SAND (0 - 5 % SL	URBAN OPEN	GOOD	A	6.881	39.00
	TOTAL				12.000	39.00

DCIA IMP	DIRECT	IMP
%	%	%
52.0%		60.5%

Treatment Volume Calculations			
SWFWMD Dry Retention Pond			
A. 1"	of runoff over drainage basin		1.000 Ac-Ft
B. Impervious area x	1" (excluding pond)		0.605 Ac-Ft
C. + Additional 50% for OFW (1.5 x Max of A or B)			1.500 Ac-Ft
D. Total Required Treatment Volume			1.500 Ac-Ft
E. Total Provided Treatment Volume			2.491 Ac-Ft

Post Dry Retention Pond						
Stage (MSL)	Area (SF)	Area (Ac)	Volume (Ac-Ft)		Treatment Depth = Treatment Volume	
			Total	Above EL	/ Basin Area	
					Treatment Depth (in) = 2.491	
97.50	43,473	0.998			Bottom of Pond	
98.00	46,086	1.058	0.514	0.514		
99.00	51,357	1.179	1.632	1.632		
100.00	57,064	1.310	2.877	2.877		
101.00	62,770	1.441	4.252	4.252		
102.00	68,346	1.569	5.758	5.758	Top of Bank	
						Treatment Vol Elevation (Ft) 99.69 Treatment Vol (Ac-Ft) 2.491

Background Image: POST



Simple Basin: POST

Scenario: Scenario1
Node: RET
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 15.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 12.0000 ac
Curve Number: 39.0
% Impervious: 60.50
% DCIA: 52.00
% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin Runoff Summary [Scenario1]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
POST	01_MA_24H	13.12	12.0833	4.10	2.20	12.0000	81.0	60.50	52.00
POST	02_10Y_24H	24.81	12.1000	7.00	4.16	12.0000	75.3	60.50	52.00
POST	03_25Y_24H	34.69	12.1000	9.00	5.68	12.0000	73.0	60.50	52.00
POST	04_100Y_24H	50.88	12.1000	12.00	8.11	12.0000	70.7	60.50	52.00

Simple Basin Mass Balance Summary [Scenario1]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
POST [in]	01_MA_24H	4.10	0.00	2.20	0.00	0.00	0.00	1.90
POST [ft3]	01_MA_24H	178596	0	95778	0	0	0	82818
POST [ac-ft]	01_MA_24H	4.10	0.00	2.20	0.00	0.00	0.00	1.90
POST [in]	02_10Y_24H	7.00	0.00	4.16	0.00	0.00	0.00	2.84
POST [ft3]	02_10Y_24H	304920	0	181279	0	0	0	123641
POST [ac-ft]	02_10Y_24H	7.00	0.00	4.16	0.00	0.00	0.00	2.84
POST [in]	03_25Y_24H	9.00	0.00	5.68	0.00	0.00	0.00	3.32
POST [ft3]	03_25Y_24H	392040	0	247283	0	0	0	144757
POST [ac-ft]	03_25Y_24H	9.00	0.00	5.68	0.00	0.00	0.00	3.32
POST [in]	04_100Y_24H	12.00	0.00	8.11	0.00	0.00	0.00	3.89
POST [ft3]	04_100Y_24H	522720	0	353252	0	0	0	169468
POST [ac-ft]	04_100Y_24H	12.00	0.00	8.11	0.00	0.00	0.00	3.89

Node: OFF

Scenario: Scenario1
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 94.25 ft
 Warning Stage: 94.25 ft
 Boundary Stage:

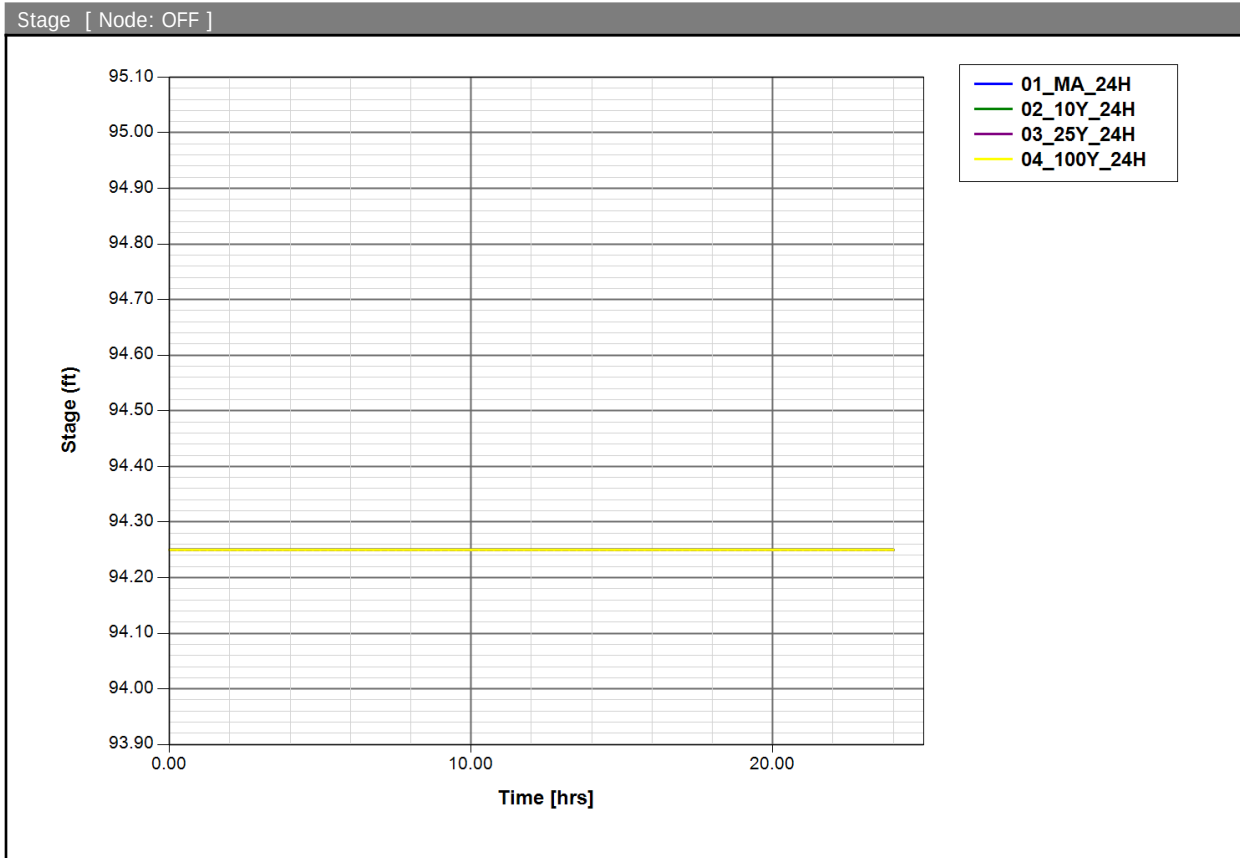
Comment:

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
OFF	01_MA_24H	94.25	94.25	0.0000	0.00	0.00	0
OFF	02_10Y_24H	94.25	94.25	0.0000	0.61	0.00	0
OFF	03_25Y_24H	94.25	94.25	0.0000	1.62	0.00	0
OFF	04_100Y_24H	94.25	94.25	0.0000	3.68	0.00	0

Node Mass Balance Condensed [Scenario1]

Node Name	Sim Name	Total Inflow [ft3]	Total Outflow [ft3]	Stored Volume (Flow Based) [ft3]
OFF	01_MA_24H	0	0	0
OFF	02_10Y_24H	15826	0	15826
OFF	03_25Y_24H	57879	0	57879
OFF	04_100Y_24H	137040	0	137040



Node: RET

Scenario: Scenario1
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 97.50 ft
 Warning Stage: 102.00 ft

Stage [ft]	Area [ac]	Area [ft2]
97.50	0.9980	43473
98.00	1.0580	46086
99.00	1.1790	51357
100.00	1.3100	57064
101.00	1.4410	62770
102.00	1.5690	68346

Comment:

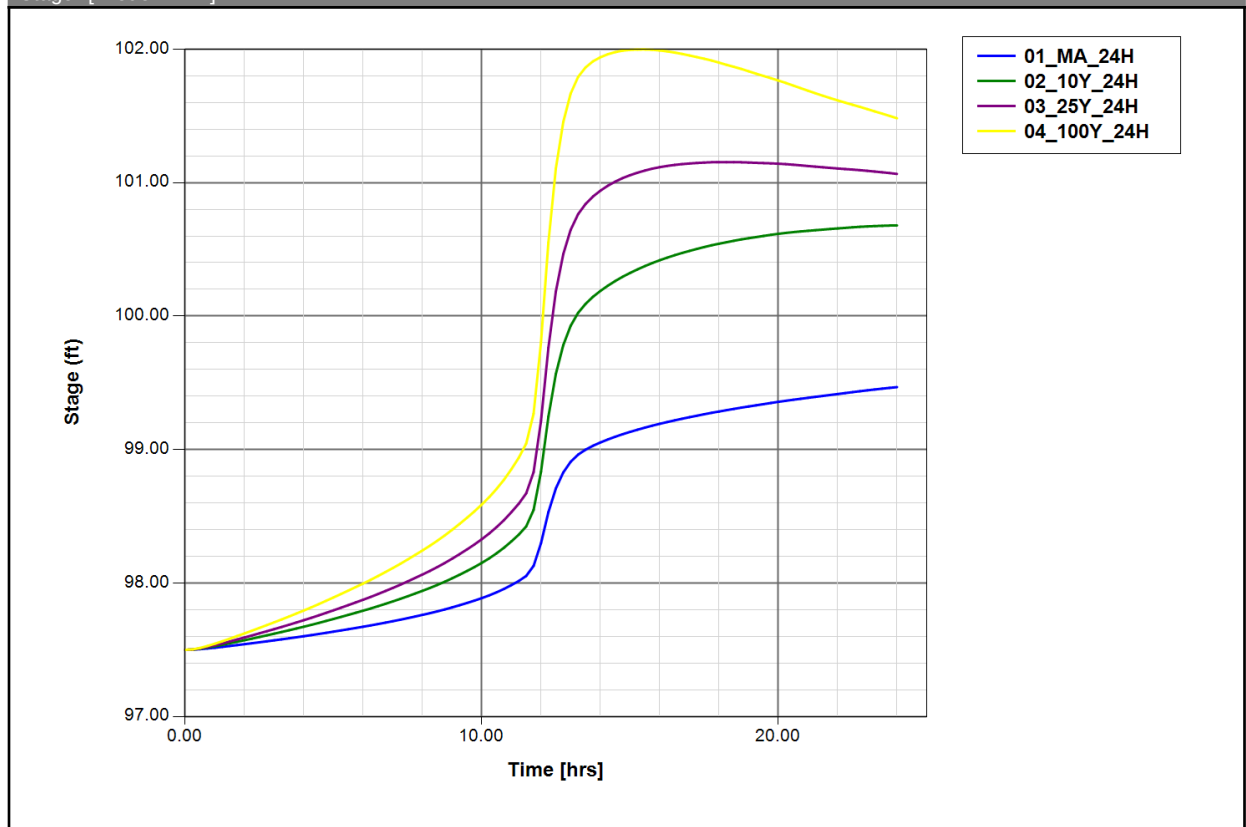
Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
RET	01_MA_24H	102.00	99.47	0.0010	13.11	0.00	54027
RET	02_10Y_24H	102.00	100.68	0.0010	24.81	0.61	60942
RET	03_25Y_24H	102.00	101.15	0.0010	34.69	1.62	63625
RET	04_100Y_24H	102.00	102.00	0.0010	50.88	3.68	68334

Node Mass Balance Condensed [Scenario1]

Node Name	Sim Name	Total Inflow [ft3]	Total Outflow [ft3]	Stored Volume (Flow Based) [ft3]
RET	01_MA_24H	95767	0	95767
RET	02_10Y_24H	181255	15843	165413
RET	03_25Y_24H	247239	57894	189345
RET	04_100Y_24H	353196	137022	216174

Stage [Node: RET]



Drop Structure Link: CS-01		Upstream Pipe	Downstream Pipe
Scenario:	Scenario1	Invert: 95.15 ft	Invert: 95.00 ft
From Node:	RET	Manning's N: 0.0120	Manning's N: 0.0120
To Node:	OFF	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 1.00 ft	Max Depth: 1.00 ft
Flow Direction:	Both	Bottom Clip	
Solution:	Combine	Default: 0.00 ft	Default: 0.00 ft
Increments:	0	Op Table:	Op Table:
Pipe Count:	1	Ref Node:	Ref Node:
Damping:	0.0000 ft	Manning's N: 0.0000	Manning's N: 0.0000
Length:	48.00 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.00	Op Table:	Op Table:
Exit Loss Coef:	0.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Pipe Comment:

Weir Component			
Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Sharp Crested Vertical	Top Clip	
Geometry Type:	V-Notch Up	Default:	0.00 ft
Invert:	99.69 ft	Op Table:	
Control Elevation:	99.69 ft	Ref Node:	
Max Depth:	1.70 ft	Discharge Coefficients	
Max Width:	0.83 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Simulation: 01_MA_24H

Scenario: Scenario1
Run Date/Time: 12/1/2022 9:43:45 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	4.10 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 02_10Y_24H

Scenario: Scenario1
Run Date/Time: 12/1/2022 9:43:46 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	7.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 03_25Y_24H

Scenario: Scenario1
Run Date/Time: 12/1/2022 9:43:50 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	9.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 04_100Y_24H

Scenario: Scenario1
Run Date/Time: 12/1/2022 9:43:52 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options

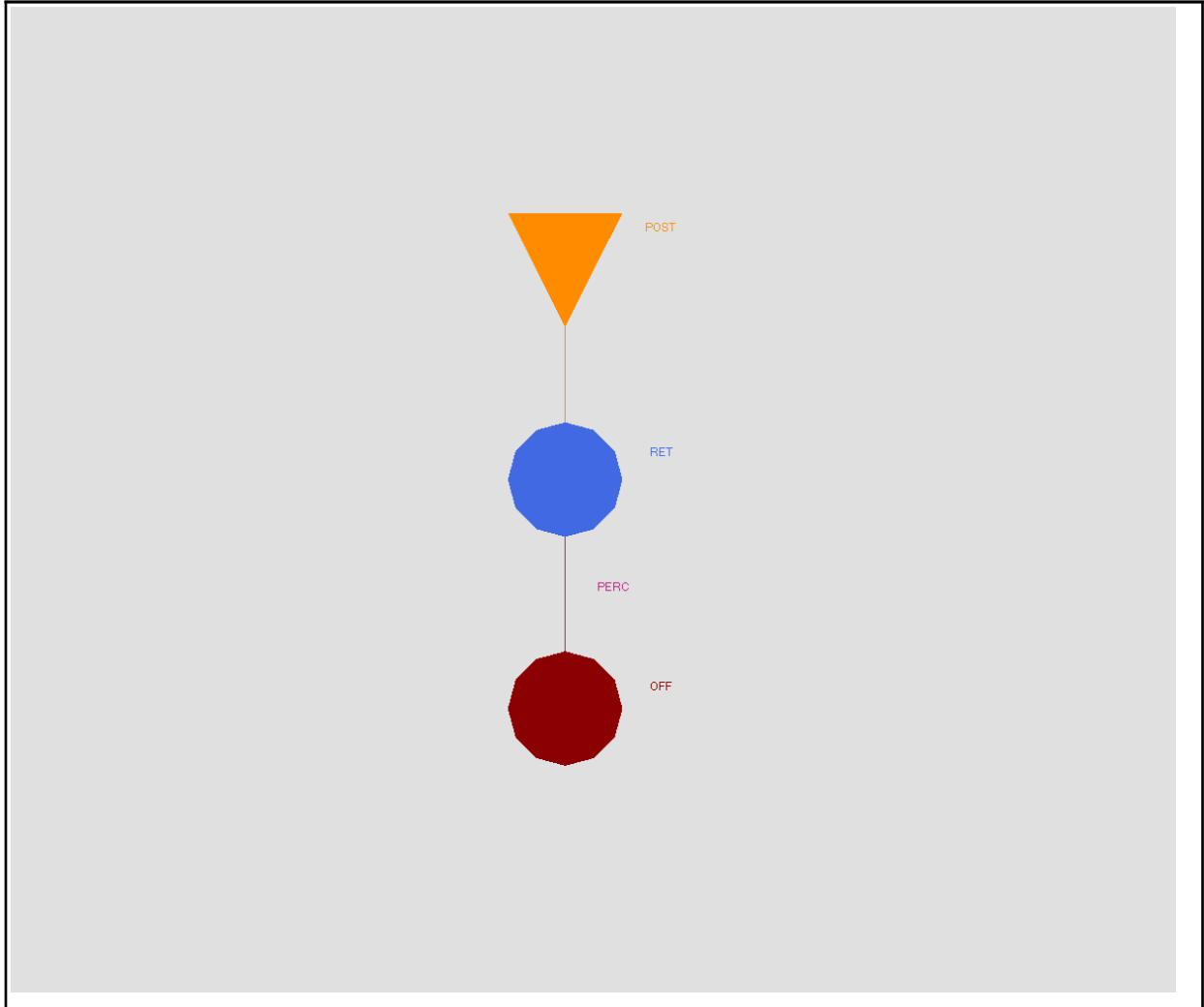
Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	12.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

APPENDIX D

RECOVERY

Background Image: REC



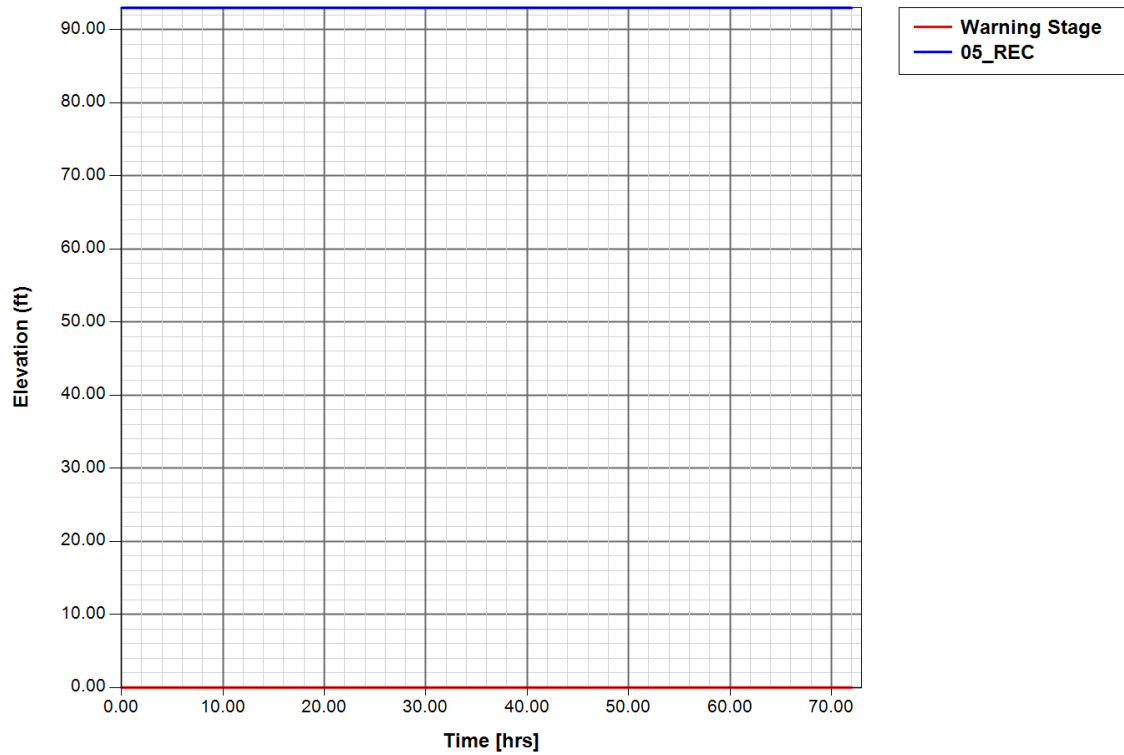
Node: OFF

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 92.95 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	92.95
0	0	0	72.0000	92.95

Comment:

Node Stage w/Warning Stage: OFF [Scenario1]



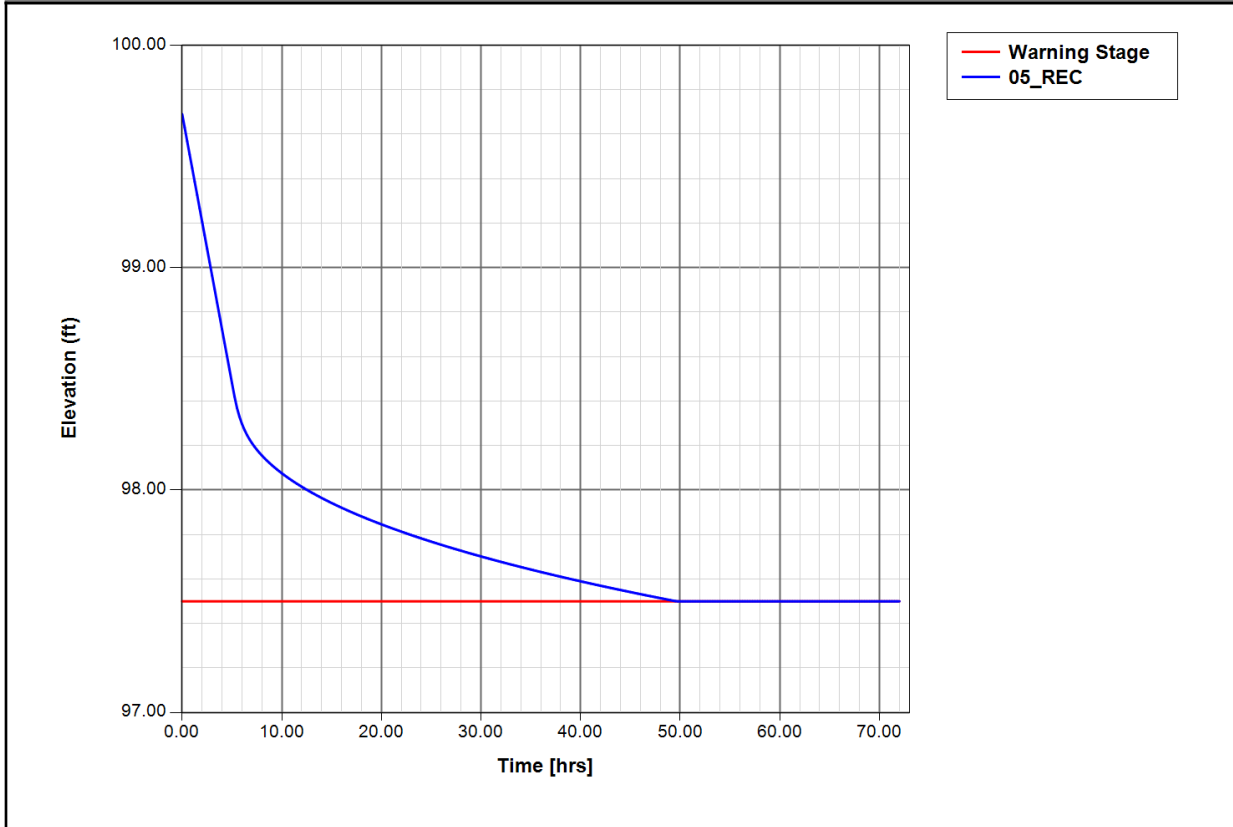
Node: RET

Scenario: Scenario1
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 99.69 ft
 Warning Stage: 97.50 ft

Stage [ft]	Area [ac]	Area [ft2]
97.50	0.9980	43473
98.00	1.0580	46086
99.00	1.1790	51357
100.00	1.3100	57064
101.00	1.4410	62770
102.00	1.5690	68346

Comment:

Node Stage w/Warning Stage: RET [Scenario1]



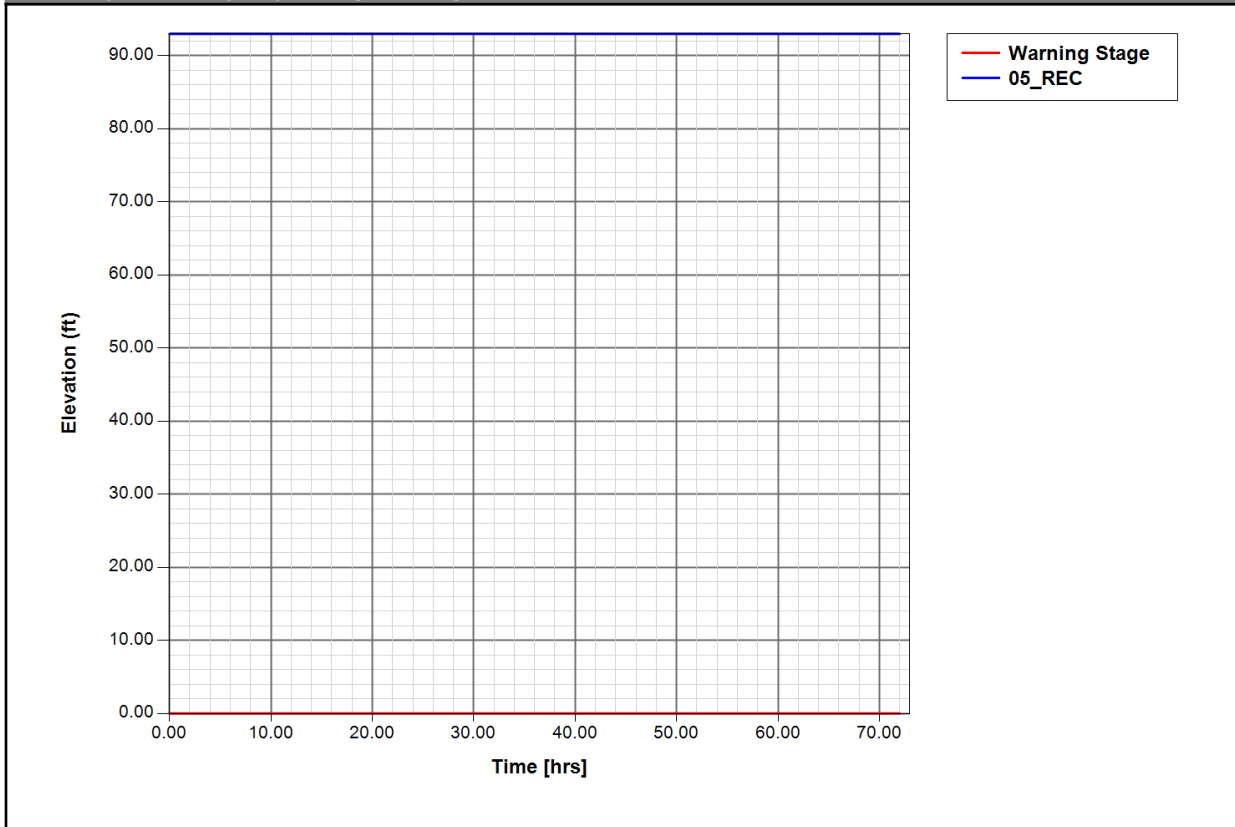
Node: OFF

Scenario: Scenario1
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 92.95 ft
 Warning Stage: 0.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	92.95
0	0	0	72.0000	92.95

Comment:

Node Stage w/Warning Stage: OFF [Scenario1]



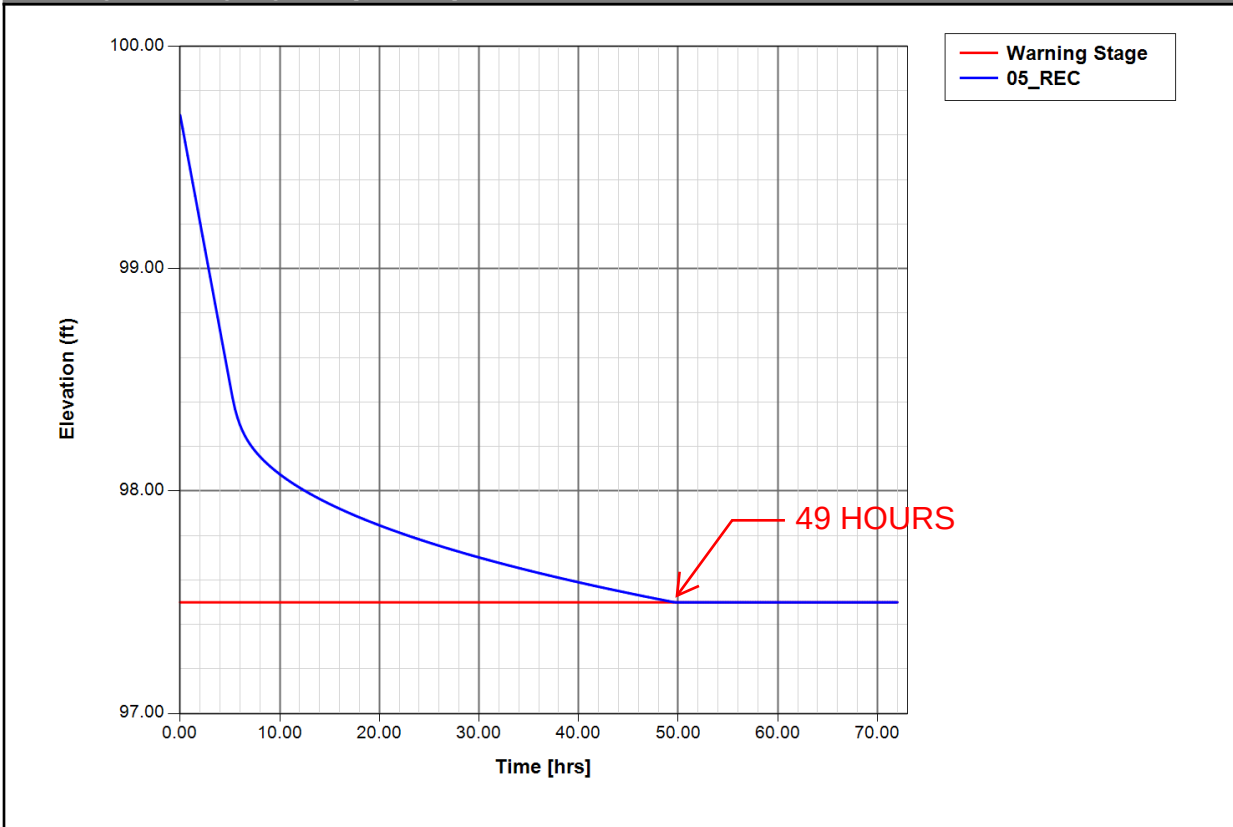
Node: RET

Scenario: Scenario1
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 99.69 ft
 Warning Stage: 97.50 ft

Stage [ft]	Area [ac]	Area [ft2]
97.50	0.9980	43473
98.00	1.0580	46086
99.00	1.1790	51357
100.00	1.3100	57064
101.00	1.4410	62770
102.00	1.5690	68346

Comment:

Node Stage w/Warning Stage: RET [Scenario1]



Percolation Link: PERC

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	RET	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	OFF	Perimeter 1:	1407.00 ft
Link Count:	1	Perimeter 2:	1713.00 ft
Flow Direction:	Both	Perimeter 3:	4539.00 ft
Aquifer Base Elevation:	92.45 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	92.95 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	13.100 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	5.800 fpd		
Fillable Porosity:	0.300		
Layer Thickness:	4.55 ft		

Comment:

APPENDIX E

PIPE SIZING CALCULATIONS

Storm Sewer Design

Project: SUMMIT Engineer:NEWKIRK Road: PRETTY POND ROA Location:PASCO
 Return Period: 25 years County:Pasco Drainage Coefficients: C1 = 0.95 C2 = 0.20 C3 = 0.00
 Outfall Ground Elevation (feet) :97.50 Outfall Hydraulic Grade (feet) :101.15

Str	To	Length	Incr ment	Sub Total	Total CxA acres	Rain i Inc TC Cum TC	Total Runoff cfs	Inlet Top Curb	Up HGL Crown Invert	Dn HGL Crown Invert	Fall HGL Pipe	Pipe Dia n	Slope HGL Pipe	Vel Act Des	Act Q Cap	K V HI
1	2	118.00	0.14	0.14	0.14	7.4	1.0	108.10	103.79	103.78	0.01	18.0	0.008	0.57	1.0	0.50
			0.01	0.01		15.0			102.80	102.50						
D-01						15.0			101.30	101.00	0.30	0.012	0.250		5.8	
2	3	101.00	0.17	0.31	0.30	6.6	2.0	107.94	103.78	103.75	0.03	18.0	0.030	1.11	2.0	0.50
			0.01	0.02		15.0			102.50	102.20						
D-02						18.5			101.00	100.70	0.30	0.012	0.300		6.2	0.01
3	4	123.00	0.10	0.41	0.40	6.3	2.5	109.55	103.75	103.69	0.06	18.0	0.048	1.41	2.5	0.50
			0.01	0.03		15.0			102.20	101.85						
D-03						20.0			100.70	100.35	0.35	0.012	0.280		6.1	0.02
4	5	105.00	0.11	0.52	0.50	6.0	3.0	108.07	103.69	103.61	0.07	18.0	0.071	1.72	3.0	0.50
			0.01	0.04		15.0			101.85	101.60						
D-04						21.5			100.35	100.10	0.25	0.012	0.240		5.6	0.02
5	6	114.00	0.17	0.69	0.67	5.9	3.9	107.66	103.61	103.48	0.13	18.0	0.118	2.21	3.9	0.50
			0.01	0.05		15.0			101.60	101.30						
D-05						22.5			100.10	99.80	0.30	0.012	0.260		5.9	0.04
6	14	160.00	0.18	0.87	0.84	5.7	4.8	108.71	103.48	103.19	0.29	18.0	0.179	2.73	4.8	0.50
			0.01	0.06		15.0			101.30	100.90						
D-06						23.3			99.80	99.40	0.40	0.012	0.250		5.7	0.06
7	8	118.00	0.25	0.25	0.24	7.4	1.8	106.50	105.26	105.23	0.03	18.0	0.025	1.01	1.8	0.50
			0.02	0.02		15.0			105.30	104.95						
D-07						15.0			103.80	103.45	0.35	0.012	0.300		6.2	0.01
8	9	109.00	0.28	0.53	0.51	6.9	3.5	106.50	105.23	105.12	0.11	18.0	0.097	2.00	3.5	0.50
			0.02	0.04		15.0			104.95	104.65						
D-08						16.9			103.45	103.15	0.30	0.012	0.280		6.0	0.03
9	12	114.00	0.26	0.79	0.76	6.7	5.1	106.50	105.12	104.89	0.23	18.0	0.203	2.90	5.1	0.50
			0.02	0.06		15.0			104.65	104.33						
D-09						17.9			103.15	102.83	0.32	0.012	0.280		6.0	0.07
10	11	29.00	0.17	0.17	0.16	7.4	1.2	106.50	104.99	104.98	0.01	15.0	0.030	0.99	1.2	0.50
			0.01	0.01		15.0			103.63	103.54						
D-10						15.0			102.38	102.29	0.09	0.012	0.310		3.9	0.01
11	12	86.00	0.16	0.33	0.32	7.3	2.3	106.50	104.98	104.89	0.09	15.0	0.109	1.88	2.3	0.50
			0.01	0.02		15.0			103.54	103.28						

Storm Sewer Design

Project: SUMMIT Engineer:NEWKIRK Road: PRETTY POND ROA Location:PASCO
 Return Period: 25 years County:Pasco Drainage Coefficients: C1 = 0.95 C2 = 0.20 C3 = 0.00
 Outfall Ground Elevation (feet) :97.50 Outfall Hydraulic Grade (feet) :101.15

Str	To	Length	Incr ment	Sub Total	Total CxA acres	Rain i Inc TC Cum TC	Total Runoff cfs	Inlet Top Curb	Up HGL Crown Invert	Dn HGL Crown Invert	Fall HGL Pipe	Pipe Dia n	Slope HGL Pipe	Vel Act Des	Act Q Cap	K V HI
D-11					15.5				102.29	102.03	0.26	0.012	0.300		3.9	0.03
12	13	109.00	0.29	1.41	1.36	6.6	8.9	106.50	104.89	104.22	0.67	18.0	0.618	5.06	8.9	0.50
			0.02	0.10		15.0			103.53	103.29						
D-12						18.5			102.03	101.79	0.24	0.012	0.220		5.4	0.20
13	14	114.00	0.31	1.72	1.66	6.5	10.8	106.50	104.22	103.19	1.03	18.0	0.899	6.11	10.8	0.50
			0.02	0.12		15.0			103.29	102.95						
D-13						18.9			101.79	101.45	0.34	0.012	0.300		6.2	0.29
14	16	160.00	0.27	2.86	2.76	5.6	15.5	106.50	103.19	102.55	0.64	24.0	0.398	4.92	15.5	0.50
			0.02	0.20		15.0			101.40	101.00						
D-14						24.3			99.40	99.00	0.40	0.012	0.250		12.3	0.19
15	16	114.00	0.32	0.32	0.31	7.4	2.3	106.50	102.60	102.55	0.05	18.0	0.040	1.29	2.3	0.50
			0.02	0.02		15.0			100.80	100.50						
D-15						15.0			99.30	99.00	0.30	0.012	0.260		5.9	0.01
16	17	161.00	0.34	3.52	3.39	5.5	18.8	106.50	102.55	101.61	0.94	24.0	0.587	5.98	18.8	0.50
			0.02	0.24		15.0			101.00	100.50						
D-16						24.8			99.00	98.50	0.50	0.012	0.310		13.7	0.28
17	18	67.00	0.33	3.85	3.71	5.5	20.3	106.50	101.61	101.15	0.46	24.0	0.687	6.47	20.3	0.50
			0.02	0.26		15.0			99.70	99.55						
D-17						25.3			97.70	97.55	0.15	0.012	0.220		11.6	0.32

Storm Sewer Design

Project: SUMMIT Engineer:NEWKIRK Road: PRETTY POND ROA Location:PASCO
 Return Period: 25 years County:Pasco Drainage Coefficients: C1 = 0.95 C2 = 0.20 C3 = 0.00
 Outfall Ground Elevation (feet) :97.50 Outfall Hydraulic Grade (feet) :101.15

Str	To	Length	Incr ment	Sub Total	Total CxA acres	Rain i Inc TC Cum TC	Total Runoff cfs	Inlet Top Curb	Up HGL Crown Invert	Dn HGL Crown Invert	Fall HGL Pipe	Pipe Dia n	Slope HGL Pipe	Vel Act Des	Act Q Cap	K V HI
1	2	146.00	0.35	0.35	0.34	7.4	2.5	105.54	104.29	104.22	0.07	18.0	0.006	1.41	2.5	0.50
			0.02	0.02		15.0			100.40	99.95						
D-18						15.0			98.90	98.45	0.45	0.012	0.310		6.3	
2	3	168.00	0.39	0.74	0.71	7.0	5.0	106.50	104.22	103.90	0.32	18.0	0.018	2.80	5.0	0.50
			0.02	0.04		15.0			99.95	99.55						
D-19						16.7			98.45	98.05	0.40	0.012	0.240		5.6	0.01
3	4	79.00	0.85	1.59	1.53	6.7	10.3	105.90	103.90	103.26	0.65	18.0	0.075	5.83	10.3	0.50
			0.04	0.08		15.0			99.55	99.35						
D-20						17.7			98.05	97.85	0.20	0.012	0.250		5.7	0.02
4	9	77.00	0.24	1.83	1.76	6.7	11.8	105.50	103.26	102.43	0.82	18.0	0.097	6.66	11.8	0.50
			0.01	0.09		15.0			99.35	99.15						
D-21						18.0			97.85	97.65	0.20	0.012	0.260		5.8	0.02
5	6	146.00	0.34	0.34	0.33	7.4	2.4	104.84	102.00	101.93	0.07	18.0	0.092	1.37	2.4	0.50
			0.02	0.02		15.0			100.00	99.65						
D-22						15.0			98.50	98.15	0.35	0.012	0.240		5.6	0.04
6	7	109.00	0.37	0.71	0.68	7.0	4.7	106.50	101.93	101.75	0.19	18.0	0.263	2.69	4.7	0.50
			0.02	0.04		15.0			99.65	99.35						
D-23						16.8			98.15	97.85	0.30	0.012	0.280		6.0	0.06
7	10	54.00	0.38	1.09	1.05	6.8	7.1	106.50	101.75	101.53	0.21	18.0	0.054	4.03	7.1	0.50
			0.02	0.06		15.0			99.35	99.20						
D-24						17.5			97.85	97.70	0.15	0.012	0.280		6.0	0.01
8	9	109.00	0.30	0.30	0.29	7.4	2.1	106.50	102.47	102.43	0.04	18.0	0.097	1.21	2.1	0.50
			0.02	0.02		15.0			99.65	99.35						
D-25						15.0			98.15	97.85	0.30	0.012	0.280		6.0	0.03
9	10	55.00	0.15	2.28	2.19	6.7	14.6	106.50	102.43	101.53	0.90	18.0	0.420	8.24	14.6	0.50
				0.11		15.0			99.35	99.20						
D-26						18.1			97.85	97.70	0.15	0.012	0.270		6.0	0.07
10	11	50.00		3.37	3.24	6.6	21.5	107.10	101.53	101.15	0.38	24.0	0.017	6.83	21.5	0.50
				0.17		15.0			99.65	99.56						
D-27						18.3			97.65	97.56	0.09	0.012	0.180		10.4	0.01