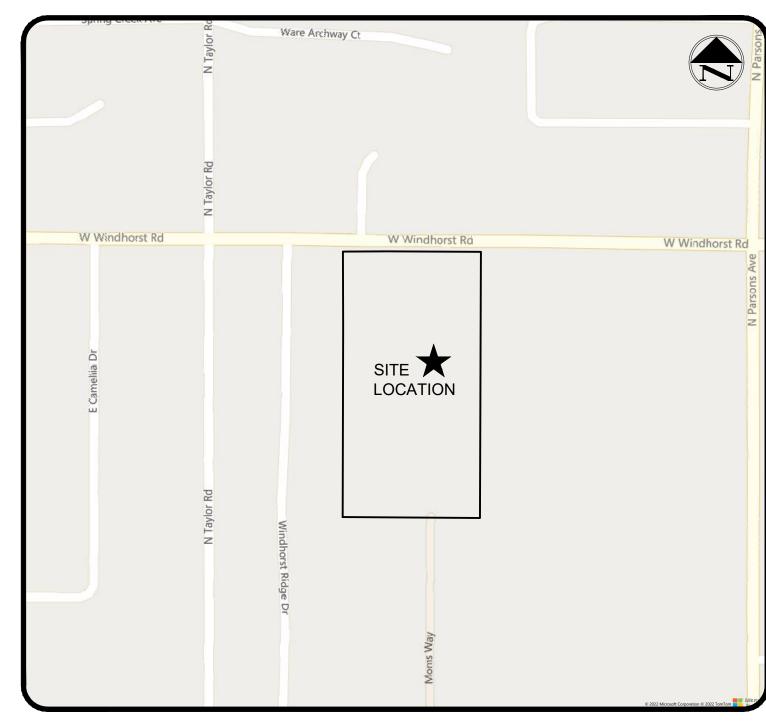
# CONSTRUCTION PLANS For

# WINDHORST COMMONS

SECTION 15, TOWNSHIP 20 SOUTH, RANGE 20 EAST HILLSBOROUGH COUNTY, FLORIDA



VICINITY MAP

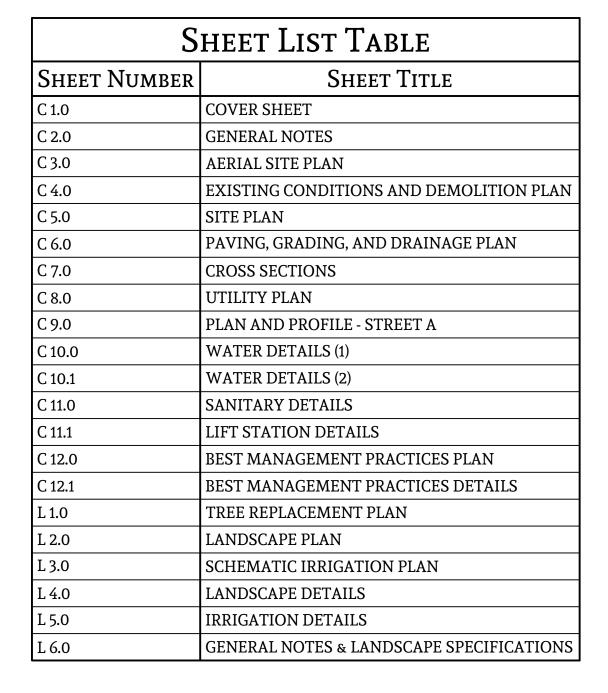
	PROPERTY DESCRIPTION
LEGAL DESCRIPTIO	n Provided By: W.C. Sherrill and Company, LLC.
DESCRIPTION:	
SOUTH, RANGE 2	THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 15, TOWNSHIP 29 20 EAST, LESS THE WEST 104 FEET OF THE NORTH 208 FEET AND LESS THE NORTH 25 FEET FOR ROAD, ALI IG IN HILLSBOROUGH COUNTY, FLORIDA.
1	

Call 48 Hours Before You Dig

**Know what's below** 

**Call** before you dig.

1 (800) 432-4770



## PROJECT TEAM MEMBERS:

DEVELOPER: Habitat for Humanity 505 E. Jackson Street Tampa, Florida 33602 PHONE: (813) 239-2242

Surveyor: Lutz, Florida 33559

ENGINEER: LEVELUP CONSULTING, LLC 505 E. Jackson Street Suite 200 Tampa, Florida 33602 Рноме: (813) 375-0616

W.C. SHERRILL AND COMPANY, LLC. 26232 Wesley Chapel Boulevard Рноме: (813) 345-4270



**VERTICAL DATUM INFORMATION** 

Site Data Table

Project Area 4.34 Acres±

67361.0000

PD per PD 08-0270

PROJECT LOCATION

Urban Service Area

MINIMUM FRONT YARD SETBACK

MINIMUM SIDE YARD SETBACK

MINIMUM REAR YARD SETBACK

Maximum Building Height

Comprehensive Plan Designation/FLU

Folio Number

Address

MINIMUM LOT SIZE 3,480 Sq. Ft.

MINIMUM LOT WIDTH 40'

HILLSBOROUGH COUNTY, FLORIDA

Section 15, Towhship 20, Range 20

Prior Major Modification- 21-0944

205 West Windhorst Road, Brandon FL 33510

Zone "X" Panel No. 12057c0385H, 08/28/2008

DATUM OF 1988 (NAVD 88) AND ARE RELATIVE TO THE NATIONAL GEODETIC SURVEY BENCHMARK "VB-434" HAVING A PUBLISHED ELEVATION OF 57.41 FEET

PI#6163

ngineering Business Certificate of Authorization No. 327 Florida Certificate of Authorization No. LC26000638

**KYLE GLORIOSO** 

**REGISTRATION NUMBER 88699** 

## LAKE / POND EXCAVATION NOTE 1.) NO EXCAVATION SHALL EXTEND BELOW THE PERMITTED DESIGN DEPTHS/ELEVATIONS SHOWN ON THE DRAWINGS. UNLESS ADDITIONAL TESTING SUPPORTS OTHERWISE: AND NO LOWER SEMI-CONFINING UNIT CLAYEY SOIL MATERIAL AND / OR LIMESTONE MATERIALS SHALL BE EXCAVATED. REGARDLESS IF THESE MATERIALS ARE ENCOUNTERED WITHIN THE PERMITTED EXCAVATION DEPTHS/ELEVATIONS. IF ANY LOWER SEMI-CONFINING UNIT CLAY SOIL MATERIÁLS OR LIMESTONE MATERIALS ARE ENCOUNTERED ABOVE THI PERMITTED DEPTHS /ELEVATIONS. THEN EXCAVATION OPERATIONS SHALL CEASE IN THE GENERAL AREA. EPC WETLANDS MANAGEMENT STAFF MUST BE CONTACTED PRIOR TO ANY EXCAVATION OF CLAYS. \* IN THE ABSENCE OF ANY CONFINING OR SEMI-CONFINING UNIT CLAYEY SOILS, A MINIMUM OF FIVE FEET UNDISTURBED SOILS SHALL REMAIN ABOVE THE UNDERLYING LIMESTONE. NATURAL RESOURCES "THE WETLAND CONSERVATION AREA SHALL BE RETAINED IN A NATURAL STATE PURSUANT TO THE HILLSBOROUGH COUNTY LAND DEVELOPMENT CODE (LDC) AS AMENDED; THE HILLSBOROUGH COUNTY ENVIRONMENTAL PROTECTION ACT, CHAPTER 84-446; AND CHAPTER 1-11, RULES OF THE HILLSBOROUGH COUNTY ENVIRONMENTAL PROTECTION COMMISSION. IN ADDITION, A 30 FOOT SETBACK FROM THE WETLAND CONSERVATION AREA IS REQUIRED AND SHALL CONFORM TO THE PROVISIONS STIPULATED WITHIN THE HILLSBOROUGH COUNTY LAND DEVELOPMENT CODE. 2.) PRUNING OF A GRAND OAK, WITH THE EXCEPTION OF MINOR PRUNING, IS PROHIBITED UNLESS CONDUCTED IN ACCORDANCE WITH THE ANSI-A-300 PRUNING STANDARDS, AND PERFORMED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) OR A REGISTERED CONSULTING ARBORIST WITH THE AMERICAN SOCIETY OF CONSULTING ARBORISTS (ASCA). MINOR PRUNING IS THE PRUNING OF A TREE BY THE REMOVAL OF BRANCHES NO GREATER THAN THREE INCHES IN DIAMETER AT THE POINT ( CONNECTION TO A SUPPORTING BRANCH AND SHALL BE IN ACCORDANCE WITH THE ANSI A-300 PRUNING STANDARDS. A NOTARIZED AFFIDAVIT AFFIRMING AN ISA CERTIFIED ARBORIST OR AN ASCA REGISTERED CONSULTING ARBORIST WILL CONDUCT OR PROVIDE ONSITE SUPERVISION OF THE PRUNING SHALL BE SUBMITTED TO THE COUNTY PRIOR TO THE PRUNING OF A GRAND OAK. AN ISA CERTIFIED ARBORIST OR AN ASCA REGISTERED CONSULTING ARBORIST CONTRACTED BY A PROPERTY OWNER TO PRUNE A GRAND OAK SHALL ASSUME FULL RESPONSIBILITY FOR ALL PRUNING ACTIVITIES DETERMINED IN NONCOMPLIANCE WITH STANDARDS SPECIFIED WITHIN THE LAND DEVELOPMENT CODE. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIPLINE OF A TREE TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY THE 4.) ADEQUATE PROTECTION MEASURES (I.E., HAY BALES, BAFFLES, SODDING AND SANDBAGGING) SHALL BE PROVIDED, AS NECESSARY, TO MINIMIZE EROSION AND DOWNSTREAM SEDIMENTATION CAUSED BY SURFACE WATER RUN-OFF ON EXPOSED LAND SURFACES. 5.) ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATIVE MATERIAL THAT WILL. WITHIN A REASONABLE TIME FRAME. DETER SOIL DISTURBANCE SODDING, PLUGGING, SPRIGGING OR SEEDING IS ACCEPTABLE FOR STABILIZATION; HOWEVER, SODDING MAY BE REQUIRED IN AREAS OF EROSION-PROBES OF WHERE SLOPES ARE GREATER THAN 5:1. VEGETATION OTHER THAN GRASS IS ACCEPTABLE UNLESS OTHERWISE SPECIFIED. FOR COMMERCIAL SITE DEVELOPMENT PROJECTS, NO MORE THAN 50% OF THE LANDSCAPED AREA MAY BE PLANTED WITH SHALLOW-ROOTED (I.E., ST. AUGUSTINE) TURF GRASS VARIETIES. THESE TURF GRASS VARIETIES SHALL BE CONSOLIDATED IN AND LIMITED TO AREAS THAT ARE PROVIDED WITH CENTRAL AUTOMATIC IRRIGATION SYSTEMS. GENERAL OPERATION AND MAINTENANCE PLAN FOR SURFACE WATER MANAGEMENT SYSTEM 1.) THE OWNER SHALL CHECK WEIR (AND/OR ORIFICE) IN ALL CONTROL STRUCTURES PERIODICALLY TO ASSURE THAT THEY ARE FREE FROM DEBRIS WHICH MAY HAVE EFFECT ON THEIR HYDRAULIC FUNCTION. ANY DAMAGES OR CLOGGING NEED TO BE REPAIRED AND/OR CLEANED IMMEDIATELY. 2.) THE OWNER AND/OR OPERATION/MAINTIENANCE ENTITY SHALL NOT CONSTRUCT OR MAINTAIN ANY BUILDING OR STRUCTURE OR UNDERTAKE OR PERFORM ANY ACTIVITY IN THE WETLANDS, BUFFER AREAS, DRAINAGE EASEMENTS AND CONSERVATION AREAS. 3.) THE POND BANKS SHOULD BE REGULARLY MOWED, WITH GRASS CLIPPINGS REMOVE FROM THE POND, AND NOTE THAT ANY ERODED BANKS SHOULD BE REPAIRED AND 4.) PICK UP GRASS CLIPPINGS AFTER CUTTING, MOW FREQUENTLY ENOUGH TO PREVENT THATCH BUILDUP, LIMIT FERTILIZER USE AROUND THE RETENTION POND AND DO NOT FERTILIZE GRASS IN THE POND AREA. 5.) RESOD DISTURBED SIDE SLOPE AND ANY AREAS WHERE GRASS OR SOD HAS BEEN REMOVED OR ERODED. 6.) ALL STORMWATER PIPES, INLETS, YARD DRAINS, CATCH BASINS, MANHOLES, FLUMES, POND INFLOW AND OUTFALL STRUCTURES, INCLUDING OIL SKIMMERS AND DISCHARGE PIPES, SHOULD BE INSPECTED ON REGULAR BASIS (MONTHLY OR QUARTERLY) AND AFTER SEVERE RAINFALLS. THEY SHOULD BE MAINTAINED TO OPERATE AS DESIGNED BY REMOVING BUILT UP DEBRIS AND VEGETATION FROM INLETS, OUTLETS, CULVÉRTS, REPAIR DETERIORATION STRUCTURES. HOA TO ASSUME 0&M RESPONSIBILITIES. 7.) NOTE THAT CHEMICALS, OILS, GREASES, OR SIMILAR WASTES ARE NOT TO BE DISPOSED OF DIRECTLY OR THROUGH STORM SEWERS TO THE STORMWATER FACILITY. TREATMENT PONDS ARE DESIGNED TO REMOVE NORMAL ROAD, PARKING LOT, ROOF, AND YARD RUNOFF ONLY. 8.) NO ALTERATION OF ANY PART OF THE STORMWATER FACILITIES IS PERMITTED WITHOUT PRIOR APPROVAL FROM ALL APPLICABLE GOVERNING AGENCIES. 9.) IT IS USUALLY MORE COST EFFECTIVE TO MONITOR AND PERFORM ROUTINE ON SURFACE WATER MANAGEMENT SYSTEM THAN TO LET IT FAIL AND THEN HAVE TO RECONSTRUCT 10.) THE REMOVAL OF LITTORAL SHELF VEGETATION (INCLUDING CATTAILS) FROM THE WET DETENTION PONDS IS PROHIBITED UNLESS OTHERWISE APPROVED BY THE GOVERNIN WATER MANAGEMENT DISTRICT. REMOVAL INCLUDED DREDGING, THE APPLICATION OF HERBICIDE, CUTTING, AND THE INTRODUCTION OF GRASS CARP. ANY QUESTIONS REGARDING AUTHORIZED ACTIVITIES WITHIN THE WET DETENTION PONDS SHALL BE ADDRESSED TO THE DISTRICTS SURFACE WATER REGULATION MANAGER, LOCAL SERVICE 11.) PERIODIC INSPECTIONS OF ALL SWALES WITHIN THE PROPERTY ARE REQUIRED IN ORDER TO MAINTAIN THE CAPACITY TO CONVEY THE INTENDED HYDRAULIC CONVEYANCE.

**GENERAL NOTES** 

1.) THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE ENGINEER/ARCHITECT. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO

4.) CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO THE OWNER'S ENGINEER FOR APPROVAL. FAILURE TO OBTAIN APPROVAL

8.) IT WILL BE NECESSARY TO EXAMINE, COORDINATE AND ADJUST ACCORDINGLY THE PROPOSED LOCATIONS OF THE VARIOUS COMPONENTS OF THE SITE UTILITIES. THE LAYOUTS INDICATED IN THE PLANS ARE NOT EXACT AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT COORDINATION DRAWINGS SHOWING PIPE SIZ

9.) PRIOR TO ANY CLEARING, AREAS THAT ARE CUT CORRIDORS SHALL BE ROOT PRUNED WITH A DOSKO BRAND ROOT PRUNER, OR APPROVED EQUAL. PROVIDE TREE PROTECTION

SAFETY NOTES

1.) DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE

3.) CONTRACTOR SHALL PROVIDE AND MAINTAIN ITS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH ITS HEALTH & SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND

4.) ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.

HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUBCONTRACTORS WITH ADEQUATE INFORMATION AND INING TO ENSURE THAT ALL EMPLOYEES AND SUBCONTRACTORS AND SUBCONTRACTORS' EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL

REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE

THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND

HIGHWAY CONSTRUCTION. MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL

ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE

7.) IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN

8.) THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO

9.) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK

PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

2.) LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION

RULES AND REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART

CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CALL SUNSHINE-ONE (1-800-432-4770) TO ARRANGE FIELD LOCATIONS

BARRICADES, IN ACCORDANCE WITH HILLSBOROUGH COUNTY SPECIFICATIONS, AROUND EXISTING TREES TO REMAIN. COORDINATE WITH OWNER'S ARBORIST PRIOR TO

STRUCTURES, AND ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SCHEDULING AND COORDINATION OF THE ALL UNDERGROUND WORK ASSOCIATED WITH

WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES.

IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES,

3.) ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK

6.) THE WATER, SANITARY SEWER AND STORM DRAINAGE FACILITIES ARE SUBJECT TO THE REVIEW AND APPROVAL OF HILLSBOROUGH COUNTY PGMD.

2.) ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST REVISION.

BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENS

REMOVAL OF EXISTING TREES IN CONFLICT WITH PROPOSED UNDERGROUND UTILITIES.

PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.

10.) ALL UTILITY CONFLICTS NEED TO BE RESOLVED PRIOR TO CONSTRUCTION.

INCLUDING BUT NOT LIMITED TO TECO, VERIZON, BRIGHTHOUSE, TECO PEOPLE GAS AND THEIR SUBCONTRACTORS

7.) CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES BEFORE ORDERING MATERIALS AND CASTING STRUCTURES.

RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNE

10.) ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.

CALLED FOR IN THESE PLANS

### 1.) STANDARD INDEXES REFER TO THE LATEST EDITION OF HILLSBOROUGH COUNTY TECHNICAL MANUAL 2.) ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN CCORDANCE WITH HILLSBOROUGH COUNTY ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURE WITH THE EXCEPTION OF MITERED END SECTIONS WHICH ARE NOT INCLUDED IN LENGTHS.

ALL DRAINAGE STRUCTURE TOPS AND COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS. ALL STORM DRAINAGE PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE

SITE PLAN AND COORDINATE GEOMETRY NOTES

TOPOGRAPHIC INFORMATION SHOWN IS BASED ON A SURVEY CONDUCTED BY W.C. SHERRILL AND COMPANY ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF

2.) ALL POINTS AND MONUMENTS SHALL BE SURVEYED UPON MOBILIZATION TO VERIFY THEIR ACCURACY. ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION

MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL

LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER

UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION CERTIFIED BY A REGISTERED

**CLEARING / DEMOLITION NOTES** 

PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN AS INDICATED ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE SHOWN

THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER

REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED, PROVIDED THAT THE MATERIAL IS

OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS

DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER

4.) ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.

PAVING AND GRADING NOTES

ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS TO BE BACK FILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY.

REFER TO THE LATEST EDITION OF F.D.O.T. "ROADWAY AND TRAFFIC DESIGN STANDARDS" FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURBING AND GUTTERS

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT TO HILLSBOROUGH CO. AND

10.) A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN PLACE MATERIALS AS REQUIRED BY THESE PLANS AND THE

11.) THE CONTRACTOR IS RESPONSIBLE TO PREVENT ANY WIND OR STORMWATER RUNOFF EROSION AND IMPLEMENT A STORMWATER POLLUTION PREVENTION PLAN THAT MEETS

DRAINAGE NOTES

FDOT SPECIFICATIONS. UPON COMPLETION OF PROPOSED CONSTRUCTION, SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER STATING THAT ALL

VARIOUS AGENCIES. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF

3.) ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR

DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

4.) PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS

ALL PAVEMENT MARKINGS SHALL BE MADE WITH PERMANENT THERMOPLASTIC AND SHALL CONFORM TO APPLICABLE F.D.O.T. STANDARD INDEXES.

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

NGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOILS REPORT.

ENGINEER'S CERTIFICATIONS, FOR FINALIZATION PURPOSES, WILL BE MADE UNTIL THIS INFORMATION IS RECEIVED AND APPROVED BY THE ENGINEER

O REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM HILLSBOROUGH COUNTY AND OR THE OWNER.

APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.

PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE

6.) CURBING WILL BE PLACED AT THE EDGE OF ALL PAVEMENT, AS SHOWN ON THE PLANS.

12.) ALL PRIVATE ROADS TO BE OWNED AND MAINTAINED BY THE H.O.A.

REGULATORY REQUIREMENTS. REFER TO THE STORMWATER POLLUTION PREVENTION NOTES.

EARTHWORK FROM THE SITE

LAND SURVEYOR. THIS "AS-BUILT" INFORMATION SHALL INCLUDE INVERT ELEVATIONS, LOCATION OF FITTINGS, LOCATION OF STRUCTURES FOR ALL UTILITIES INSTALLED. NO

ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.

THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.

CONSTRUCTION STANDARDS AND SPECIFICATIONS

- 1.) MAINTENANCE OF TRAFFIC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND IN ACCORDANCE WITH STATE OF FLORIDA D.O.T. STANDARD INDEX 600.
- ALL PAVEMENT STRIPING AND TRAFFIC FLOW ARROWS SHALL BE THERMOPLASTIC COMPOUND, MEETING THE REQUIREMENTS OF AASHTO M 249-79 (LATEST EDITION) AND BE INSTALLED IN SUBSTANTIAL COMPLIANCE WITH F.D.O.T. STANDARD FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), SECTION 711 WITH RPMS PER FDOT #17352 ALL WORK PERFORMED WITHIN THE RIGHT OF WAY SHALL CONFORM TO
- FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION). (AKA: STANDARD SPECS FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND OPERATIONS ON THE STATE HIGHWAYS SYSTEM (LATEST EDITION) (AKA: STANDARD INDEX). COMPLIANCE WITH ALL APPLICABLE INDICES IS REQUIRED
- FDOT ROADWAY PLANS PREPARATION MANUAL VOLUME 1, CHAPTERS 2 AND 25 (LATEST EDITION). FDOT FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION (LATEST EDITION)
- ALL TRAFFIC STRIPES AND MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC. THE PERMITTEE SHALL FURNISH THE FDOT WITH THE MANUFACTURE'S CERTIFICATION THAT THE THERMOPLASTIC IS "LEAD-FREE".
- 4.) ALL PROPOSED PAVEMENT MARKINGS TO MEET AND MATCH EXISTING PAVEMENT MARKINGS

- THE UNDERLYING LIMESTONE.
- 3.) POND BERMS ADJACENT TO WETLANDS, WHERE SHOWN, SHALL BE CONSTRUCTED AS EARLY AS PRACTICAL IN THE RELATED POND EXCAVATION OPERATION. THE PURPOSE IS TO PREVENT TURBID WATER DISCHARGE TO THE WETLAND DURING POND EXCAVATION. CONTROL STRUCTURES ARE TO BE TEMPORARILY BLOCKED IF NECESSARY TO PREVENT
- 4.) WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATERS FROM CONSTRUCTION AREAS, THE WATER SHALL BE TREATED PRIOR TO DISCHARGE TO THE WETLANDS AND TO PROTECTED UPLANDS. TREATMENT METHODS INCLUDE, FOR EXAMPLE, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE VEGETATED AREAS (OTHER THAN UPLAND PRESERVATION AREAS AND WETLAND BUFFERS), SEDIMENT BASINS, OR CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS. POND TURBIDITY LEVELS MUST BE VISUALLY EVALUATED UPON CONSTRUCTION COMPLETION. ADDITIONAL MEASURES SUCH AS TEMPORARY LOWERING OF POND WATER LEVELS BY PUMPING TURBID WATER TO OVERLAND FILTRATION MAY BE NECESSARY TO PREVENT

### SANITARY SEWER NOTES

- 1.) SANITARY SEWERS, RECLAIMED WATER MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE. 2.) WHERE SANITARY SEWERS, RECLAIMED WATER MAINS AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH PIPES SHALL BE CONSTRUCTED OF DUCTILE IRON PIPES (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING.
- 3.) ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).
- 4.) WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS
- 5.) A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. 6.) IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION. THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF
- 7.) WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM THE JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED

8.) MINIMUM FORCE MAIN DEPTH IS 48", MINIMUM GRAVITY SEWER LINE DEPTH IS 5'.

- 9.) ALL ON SITE PVC GRAVITY SANITARY SEWER SHALL BE IN ACCORDANCE WITH THE HILLSBOROUGH COUNTY WATER AND WASTE WATER TECHNICAL MANUAL. SOLID WALL PVC PIPE SHALL COMPLY WITH ASTM D 3034 AND ALL APPLICABLE ASTM DOCUMENTS AS COVERED IN SECTION NO. 2 OF ASTM D 3034. MINIMUM WALL THICKNESS OF SDR-26 IS REQUIRED. REFERENCE EXHIBIT # S-6A FOR SERVICE LATERAL DETAIL.
- 10.) ALL SANITARY SEWER WORK SHALL CONFORM WITH APPLICABLE AGENCY STANDARDS AND SPECIFICATIONS 11.) PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW SANITARY SEWER LINES TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY
- LOCATION AND ELEVATION OF ALL EXISTING UTILITIES NEAR THE POINT OF CONNECTION AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES WITH DESIGN
- 12.) ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO PLACEMENT OF PAVING AND AGAIN PRIOR TO OBTAINING CERTIFICATE OF BASE OCCUPANCY. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS
- 13.) THE CONTRACTOR SHALL PERFORM AN INFILTRATION OR EXFILTRATION TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION OF TESTING AND
- NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY. 14.) GRAVITY SANITARY SEWER PIPES WHICH ARE LOCATED UNDER UNPAVED AREAS SHALL COMPLY WITH AWWA C-900 AND SHALL BE CLASS 150 SDR 18.

### WATER DISTRIBUTION NOTES

- 1.) SANITARY SEWERS, RECLAIMED WATER MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE
- 2.) WHERE SANITARY SEWERS, RECLAIMED WATER MAINS AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING.
- 3.) ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED
- 4.) WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS
- 5.) A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- 6.) IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF
- 7.) WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER
- OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM THE JOINTS ON THE, SEWER OR FORCE MAIN (STAGGERED
- 8.) ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
- 9.) ALL WATER SYSTEM WORK SHALL CONFORM TO HILLSBOROUGH CO. UTILITIES DEPARTMENT STANDARDS AND SPECIFICATIONS.
- 10.) CONFLICTS BETWEEN WATER AND STORM OR SANITARY SEWER TO BE RESOLVED BY ADJUSTING THE WATER LINES AS NECESSARY AND PER ABOVE REQUIREMENTS.
- 11.) ALL ON SITE PVC WATER MAINS 4 INCHES THROUGH 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-900 AND SHALL BE CLASS 150 SDR 18. ALL ON-SITE PVC WATER MAINS 2" TO 3" SHALL BE CLASS 120 AND MEET REQUIREMENTS OF SDR 21 IN ACCORDANCE WITH ASTM D-2241. WATER MAINS SMALLER THAN 1 1/2" SHALL BE P.E. PIPE MEETING AWWA C-901. PIPE SHALL BE POLY-E DRISCO-PIPE 5100 ULTRALINE OR ENDOPURE BY ENDOT OR APPROVED EQUAL. PIPE SHALL BE BLUE OR ENCASED IN BLUE SLEEVE.
- 12.) ALL DUCTILE IRON PIPE AND JOINTS SHALL BE IN ACCORDANCE WITH THE HILLSBOROUGH CO. UTILITIES DEPARTMENT TECHNICAL MANUAL MATERIAL SPECIFICATIONS
- 13.) ALL DUCTILE FITTINGS SHALL BE COMPACT WITH A MINIMUM PRESSURE RATING OF 350 PSI AND SHALL CONFORM TO THE REQUIREMENTS OF AWWA STANDARD C-153/A21.53, LATEST EDITION. ALL FITTINGS SHALL BE COATED AND LINED AS SPECIFIED ABOVE FOR DUCTILE IRON PIPE.
- 14.) THRUST BLOCKS ARE NOT ALLOWED FOR WATER MAINS LARGER THAN 4 INCHES.
- 15.) ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS TO BE IN ACCORDANCE WITH HILLSBOROUGH CO. UTILITIES DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY DWNER'S ENGINEER AND MUNICIPALITY INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.
- 16.) CONTRACTOR TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING AND PRESSURE TEST ON ENTIRE WATER SYSTEM. COPIES OF ALL BACTERIOLOGICAL TESTS TO BE SUBMITTED TO OWNER'S ENGINEER.
- 17.) PIPE DEFLECTION SHALL BE IN ACCORDANCE WITH AWWA STANDARD C-600, LATEST EDITION.
- 18.) ALL EXISTING AND PROPOSED VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADES AS ESTABLISHED IN THE FIELD. NO ADDITIONAL COMPENSATION SHALL BE MADE BY THE
- 19.) WHERE A HOUSE OR OTHER CONNECTION TERMINATES, THE CONTRACTOR SHALL PROVIDE AND INSTALL 2" x 4" STAKE WITH A MINIMUM OF EIGHTEEN INCHES (18") ABOVE GROUND AND TWO FEET (2') BELOW GROUND THE TOP TWELVE INCHES (12") ARE TO BE PAINTED BLUE
- 20.) THE CONTRACTOR/ENGINEER OF RECORD SHALL CONTACT THE HILLSBOROUGH COUNTY PUBLIC UTILITY DEPT. INSPECTION SECTION AND LINE MAINTENANCE TO SET UP THE PRE-CONSTRUCTION MEETING. CONTACT MATT CIOFALO @ 272-5977 EXT. 43534 FOR INSPECTIONS AND THE SOUTH/CENTRAL LINE MAINTENANCE UNIT AT 671-7604 OR THE NORTHWEST LINE MAINTENANCE UNIT AT 554-5010.
- 21,) CONTRACTOR TO EXPOSE WATER MAIN AND FURNISH TAPPING SLEEVE AND VALVE FOR WATER METER TAP AND INSTALL 2" POLYETHYLENE (P.E.) WATER SERVICE LINE FROM MAIN TO METER. HILLSBOROUGH COUNTY PUBLIC UTILITIES WILL PERFORM THE TAPPING OPERATION.
- 22.) ALL NON-METALLIC PIPE WILL BE INSTALLED WITH 2 PAIR, 10-GAUGE COPPER TRACER WIRE. 23.) THE LOCATION OF ALL NEWLY INSTALLED FIRE HYDRANTS SHALL BE IDENTIFIED WITH A BLUE REFLECTIVE PAVEMENT MARKER INSTALLED ON THE ROADWAY, PERPENDICULAR
- D THE FIRE HYDRANT. THE REFLECTIVE MARKER WILL BE LOCATED IN THE CENTER OF THE LANE CLOSEST TO THE HYDRAN' 24.) THE ENGINEER OF RECORD AND/OR CONTRACTOR WILL BE RESPONSIBLE FOR THE FLOW TESTING AND COLOR CODING OF ALL NEWLY INSTALLED FIRE HYDRANTS IN THE
- EXISTING OR PROPOSED HILLSBOROUGH COUNTY RIGHT OF WAY AND UTILITY EASEMENTS THAT ARE TO BE DEDICATED TO HILLSBOROUGH COUNTY PRIOR TO THE FINAL INSPECTION OF THE PROJECT. THE ENGINEER OF RECORD AND/OR CONTRACTOR SHALL REFER TO NFPA STANDARD 291 FOR FLOW TESTING AND COLOR-CODING METHODS AND
- 25.) CONTRACTOR TO COORDINATE WITH KEN WILLIAMS FOR SOUTH/CENTRAL @ 813-671-7604, OR VICTOR LEBRON FOR NORTHWEST @ 813-554-5010 OF THE HILLSBOROUGH COUNTY PUBLIC UTILITIES DEPT. PRIOR TO THE SELECTION AND ORDERING OF THE WATER METER AND/OR BACKFLOW PREVENTION DEVICE ASSEMBLIES.
- 26.) THE MASTER METER ASSEMBLY SHALL BE DIRECTLY ACCESSIBLE BY BOOM TRUCK OFF OF THE COUNTY R.O.W. OR BY AN INTERIOR ROAD THAT IS NOT BLOCKED BY A WALL, FENCE, OR GATE. THE ELEVATION OF THE CONCRETE SLAB WILL BE HIGHER THAN THE IMMEDIATE SURROUNDING AREA. DO NOT MULCH AREA AROUND SLAB. DO NOT PLANT ANY LANDSCAPE THAT WILL HINDER DIRECT ACCESS IN THE FUTURE TO THE METER ASSEMBLY.
- 27.) CONTRACTOR MUST COORDINATE THE SHUTDOWN OF THE EXISTING POTABLE WATER, WASTEWATER FORCEMAIN, OR RECLAIMED WATER MAIN WITH HILLSBOROUGH COUNTY FIELD MAINTENANCE SERVICES. CONTACT THE NORTHWEST UNIT AT 813-554-5010 OR THE SOUTH/CENTRAL UNIT AT 813-671-7604.
- 28.) ALL ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- 29.) CONTRACTOR TO CONTACT TERRY SHIFLETT/COUNTY WATER LINE MAINTENANCE SUPERVISOR @ (813)298-3943 AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. A PLAN TO MAINTAIN SERVICE TO EXISTING WATER CUSTOMERS MUST BE DEVELOPED, AS NOTIFICATIONS TO EXISTING CUSTOMERS WILL NEED TO BE SENT OUT. 30.) CONTRACTOR TO CONTACT THE UTILITY COORDINATION TEAM BY EMAIL NOTIFICATION TO UTILITYCOORDINATION@HCFLGOV.NET AT LEAST 1 WEEK PRIOR TO CONSTRUCTION.

## DEWATERING NOTES

- 1.) NO EXCAVATION SHALL EXTEND BELOW THE PERMITTED DESIGN DEPTHS/ELEVATIONS SHOWN ON THE DRAWINGS. UNLESS ADDITIONAL TESTING SUPPORTS OTHERWISE: AND NO LOWER SEMI-CONFINING UNIT CLAYEY SOIL MATERIAL AND / OR LIMESTONE MATERIALS SHALL BE EXCAVATED, REGARDLESS IF THESE MATERIALS ARE ENCOUNTERED WITHIN THE PERMITTED EXCAVATION DEPTHS/ELEVATIONS. IF ANY LOWER SEMI-CONFINING UNIT CLAY SOIL MATERIALS OR LIMESTONE MATERIALS ARE ENCOUNTERED ABOVE TH PERMITTED DEPTHS /ELEVATIONS, THEN EXCAVATION OPERATIONS SHALL CEASE IN THE GENERAL AREA. EPC WETLANDS MANAGEMENT STAFF MUST BE CONTACTED PRIOR TO ANY EXCAVATION OF CLAYS. \* IN THE ABSENCE OF ANY CONFINING OR SEMI-CONFINING UNIT CLAYEY SOILS, A MINIMUM OF FIVE FEET UNDISTURBED SOILS SHALL REMAIN ABOVE
- 2.) THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND THE GEOTECHNICAL ENGINEER IF SIGNIFICANT CLAY LAYERS ARE ENCOUNTERED DURING POND EXCAVATION. POND EXCAVATION DEPTHS MAY BE RAISED TO ELIMINATE OR MINIMIZE EXCAVATION OF CLAY MATERIAL. IF THE EXCAVATION EXPOSES CLAYS OR VERY CLAYEY SANDS TO THE FINAL POND SURFACES, THE EXPOSED CLAY AND CLAYEY AREAS SHALL BE COVERED WITH ONE FOOT OF CLEAN SANDY SOILS.

Consulting, llo

LEVELUP



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PROJECT No.

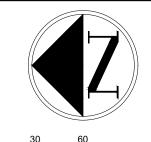
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LevelUp Consulting, llc



505 E. Jackson Street Suite 200 Tampa, Florida 33602 Office: 813-375-0616 www.levelupflorida.com



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KYLE GLORIOSO

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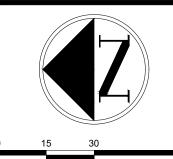
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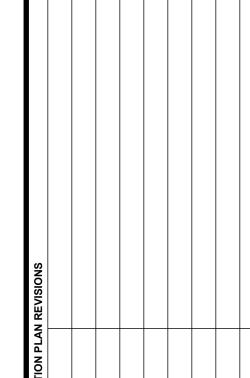
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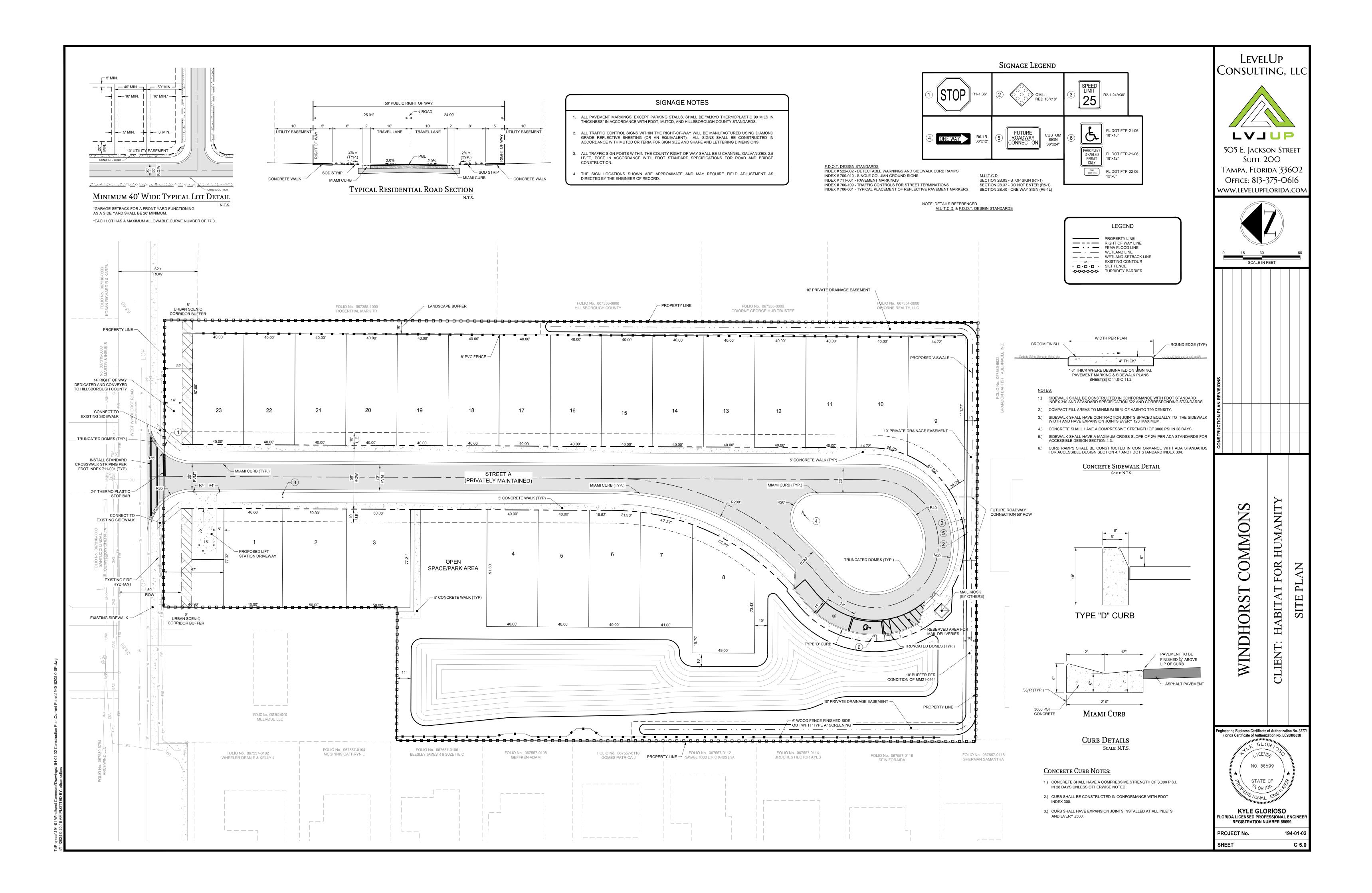
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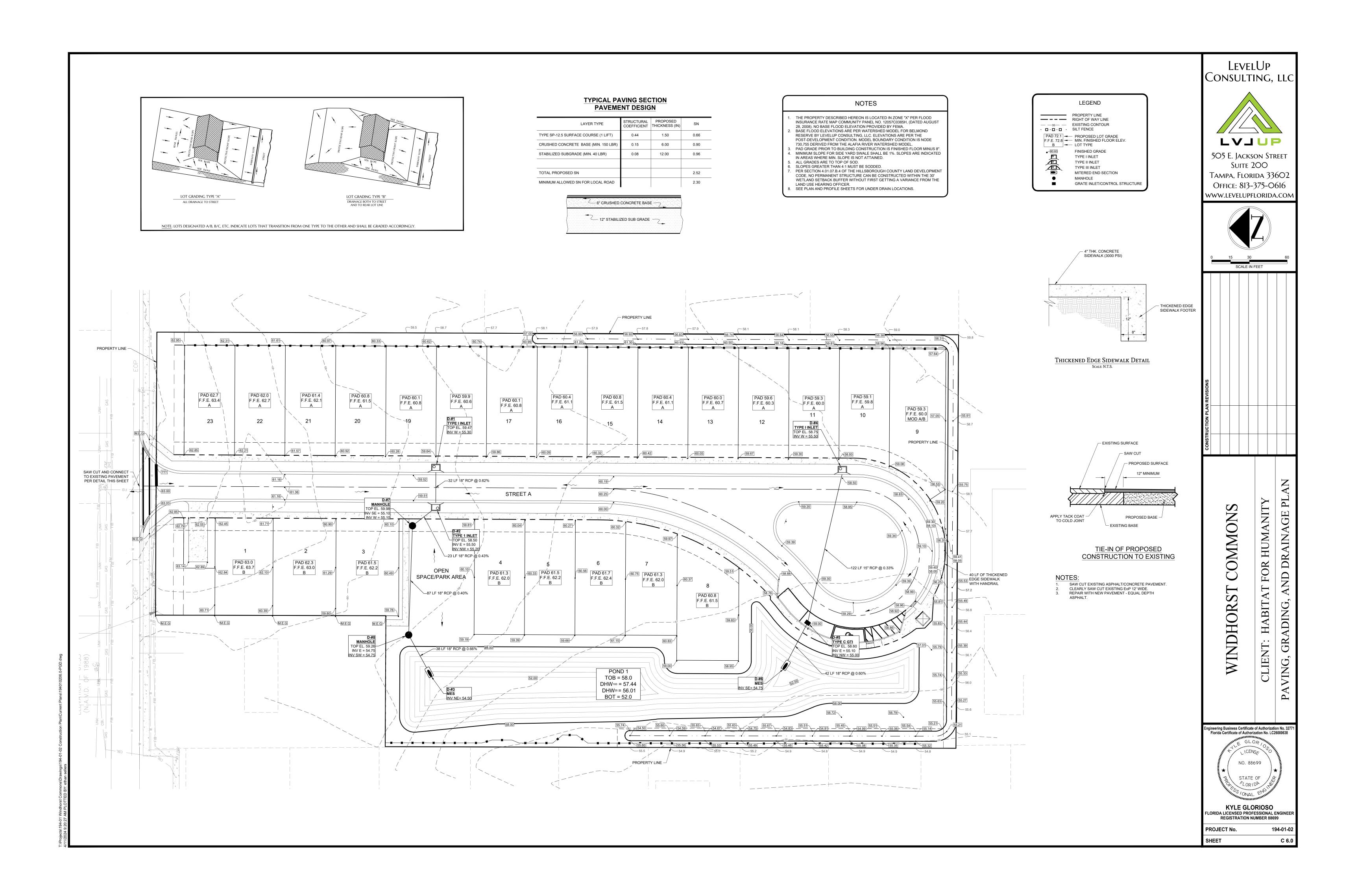
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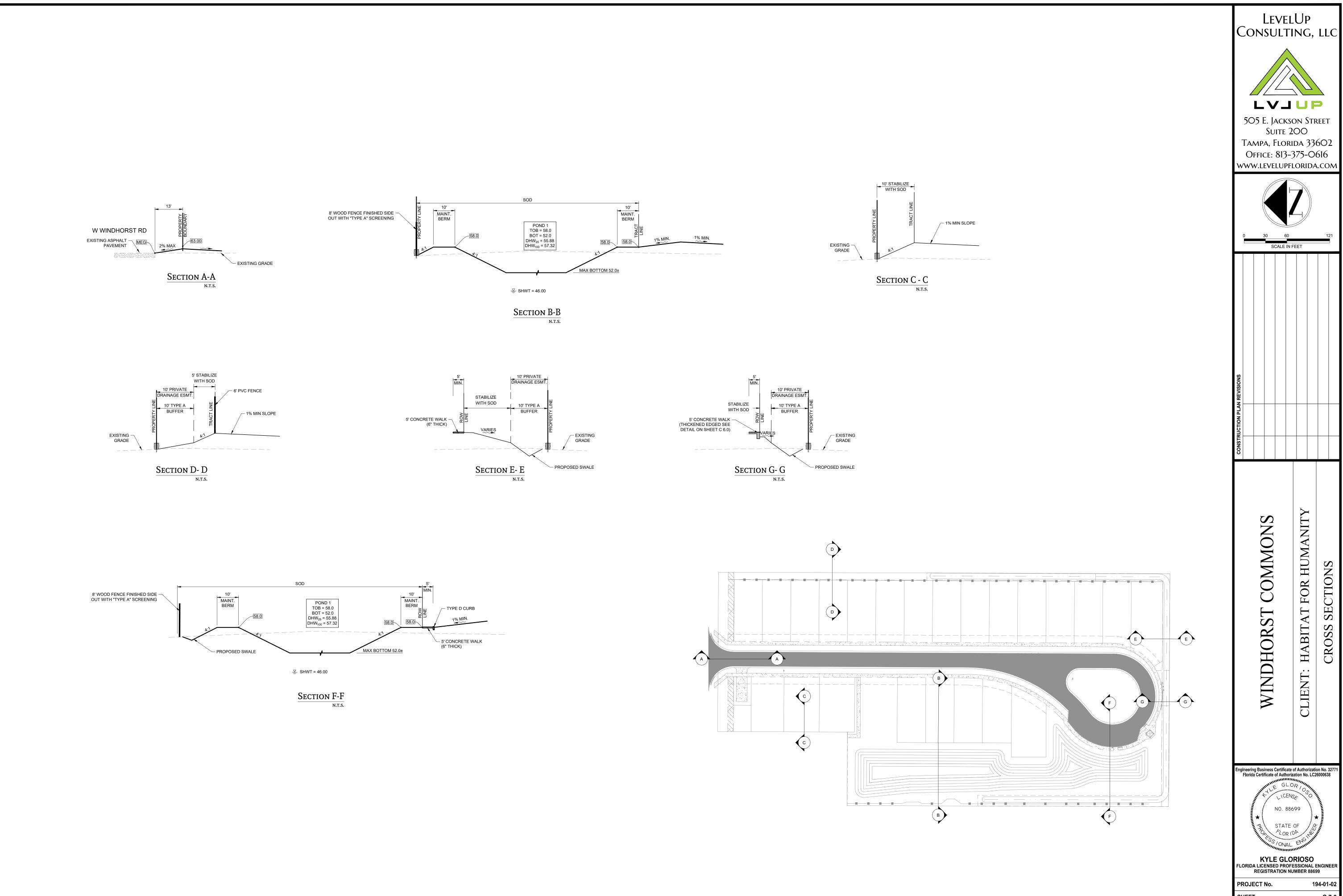
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Engineering Business Certificate of Authorization No. 3277 Florida Certificate of Authorization No. LC26000638 STATE OF **KYLE GLORIOSO** LORIDA LICENSED PROFESSIONAL ENGINEER REGISTRATION NUMBER 88699

PROJECT No. 194-01-02



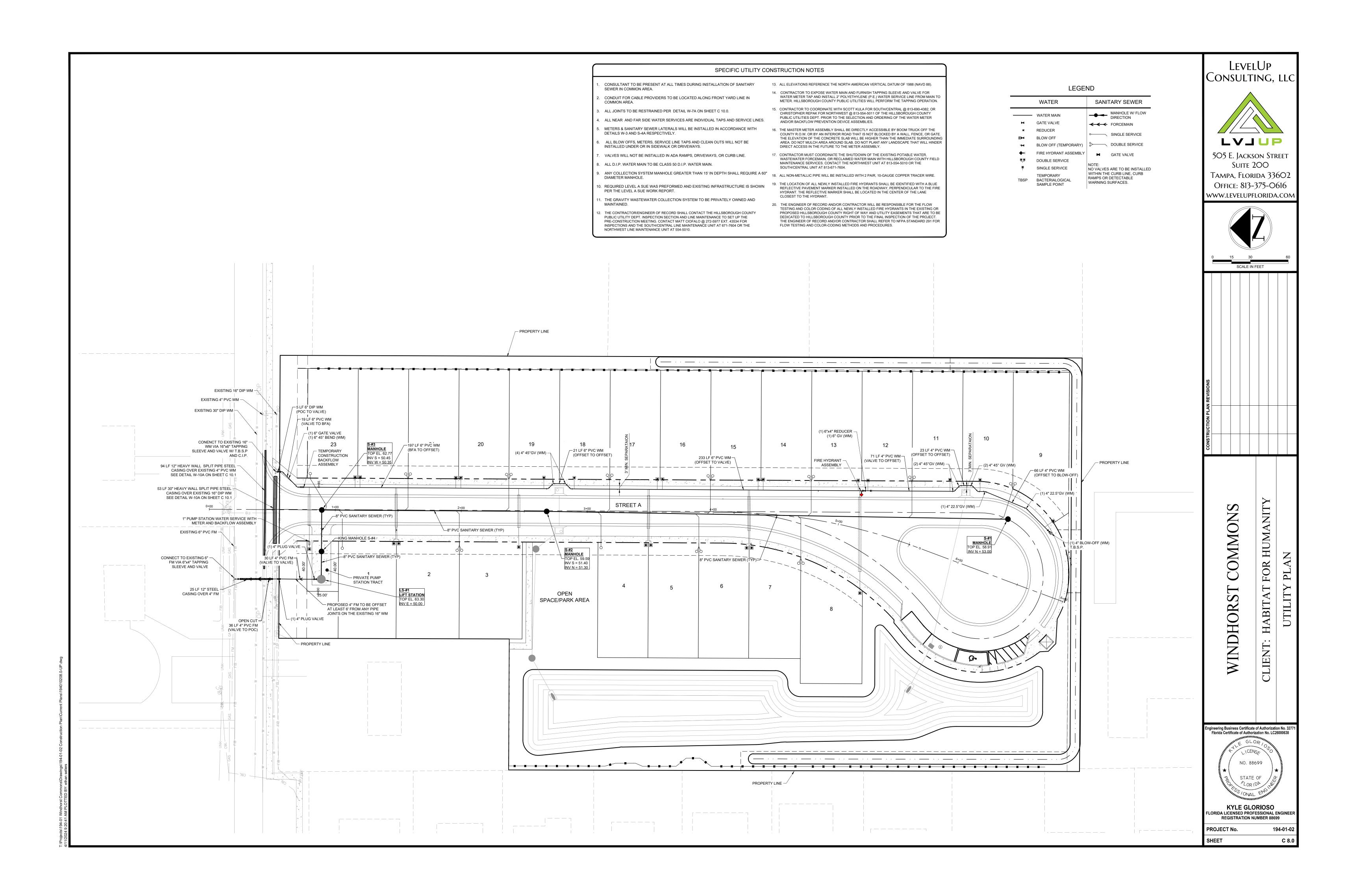


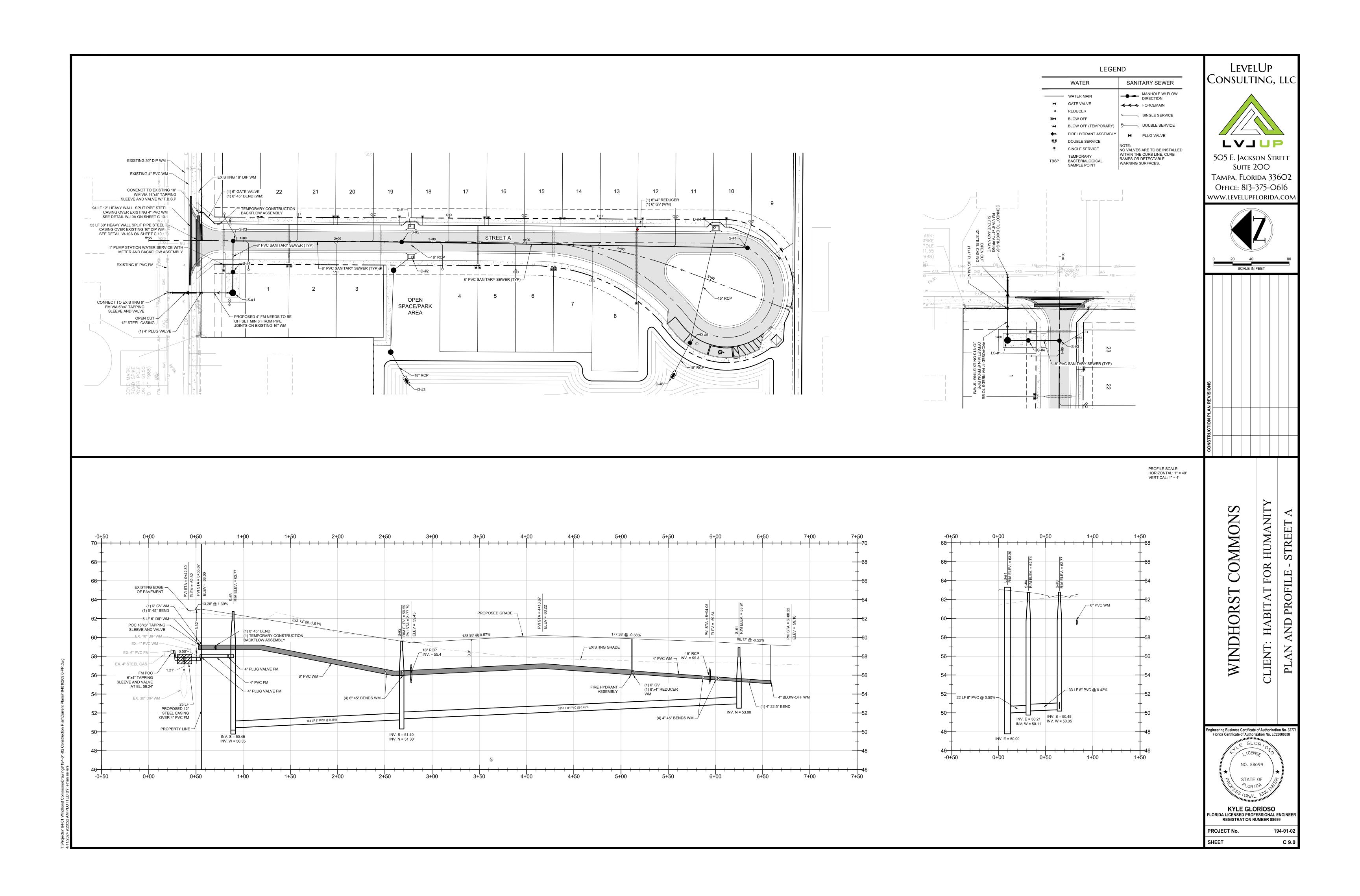


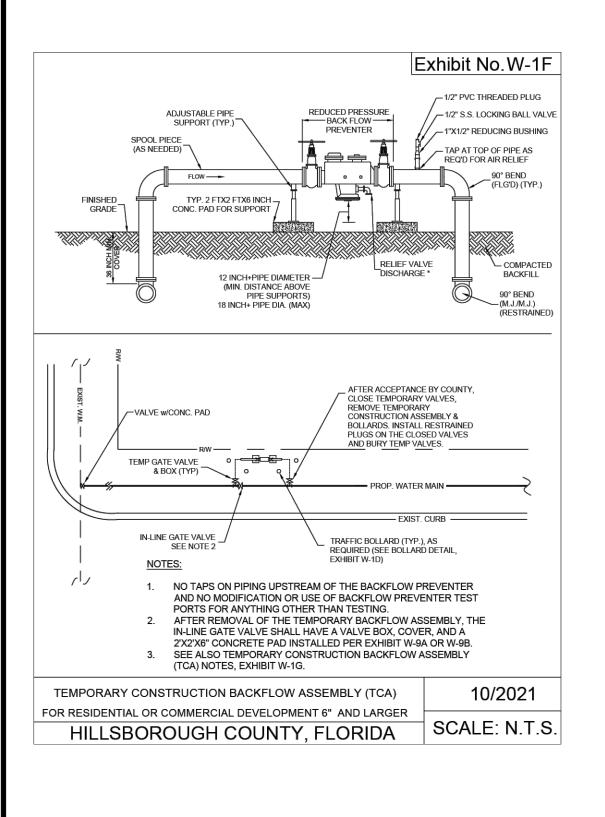
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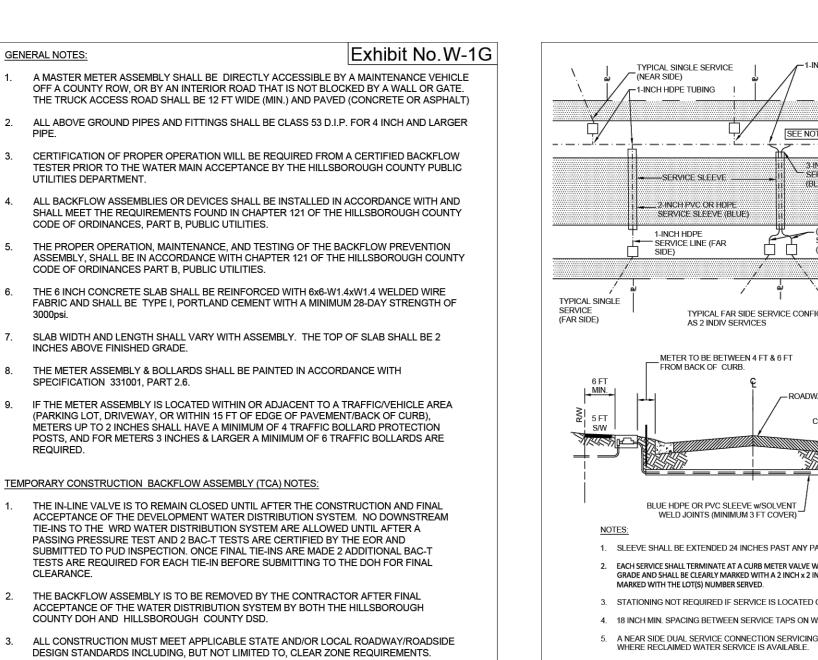
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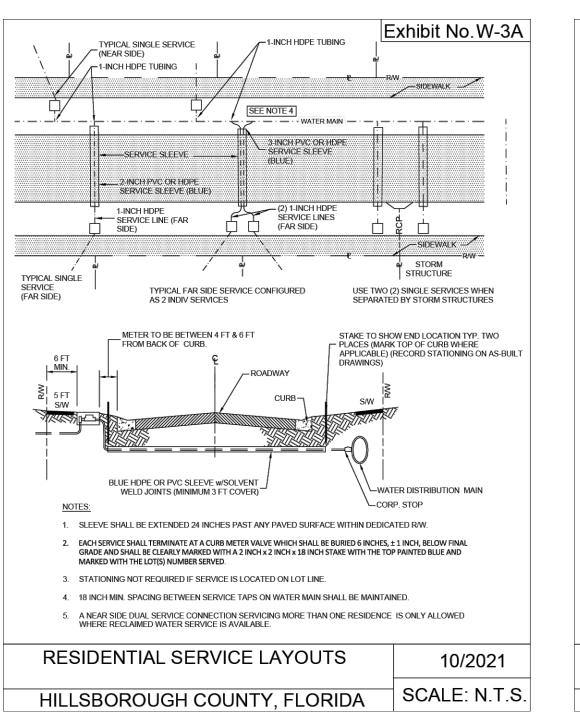


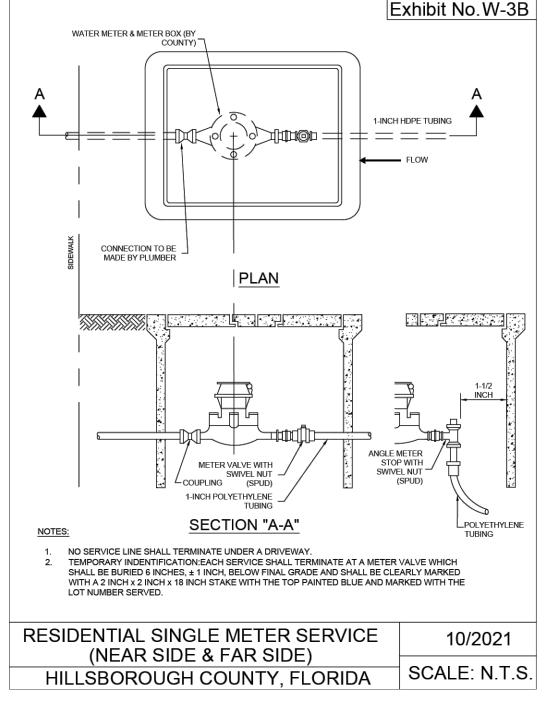


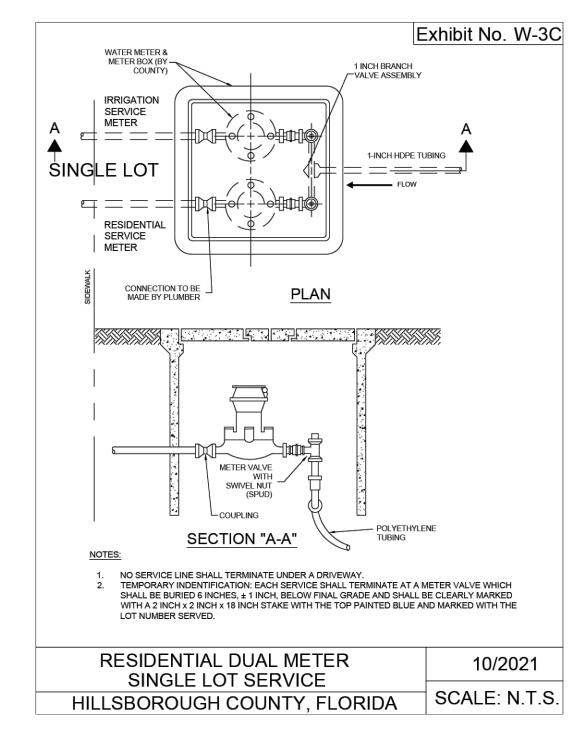


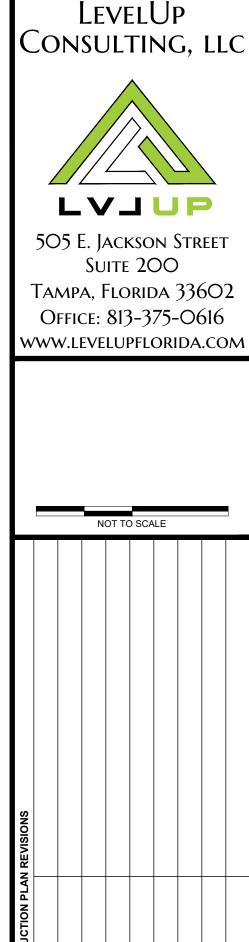
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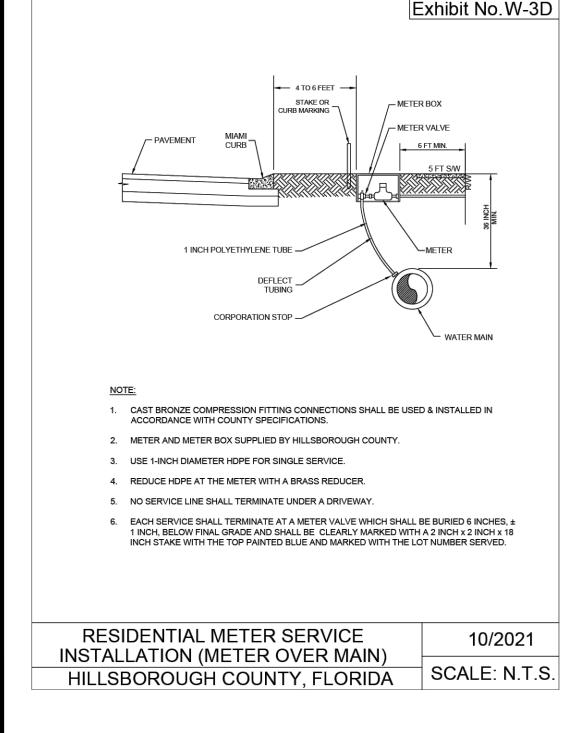
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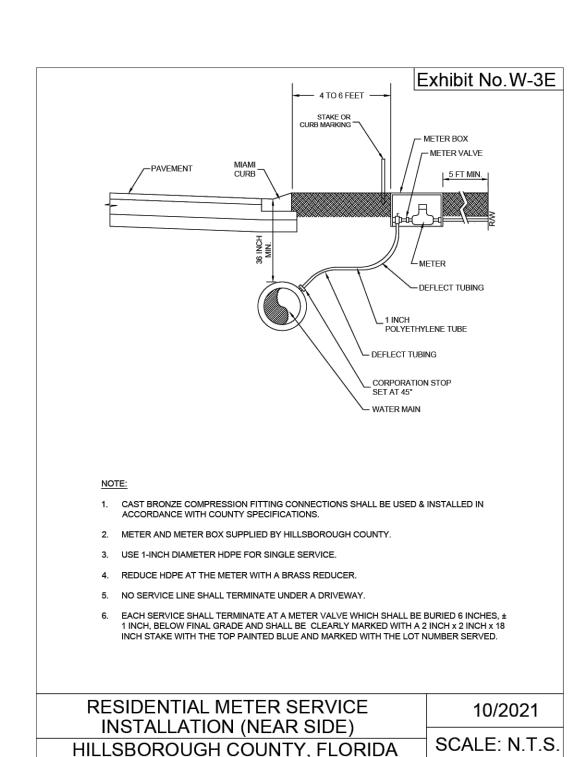






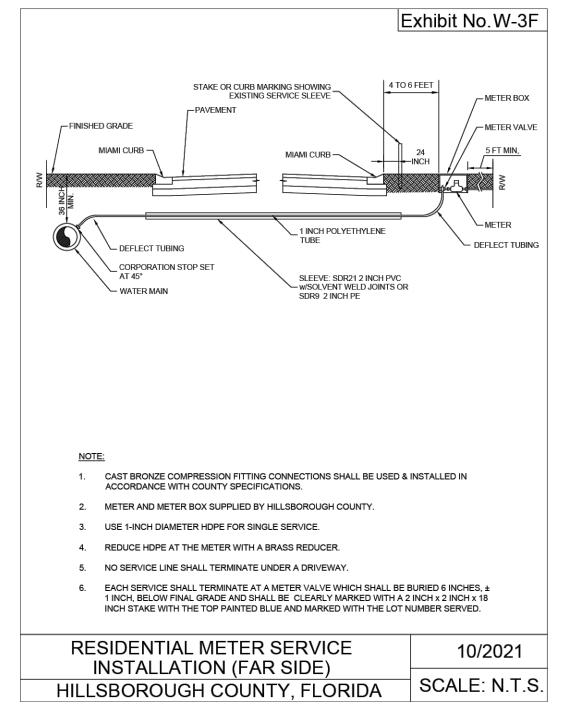


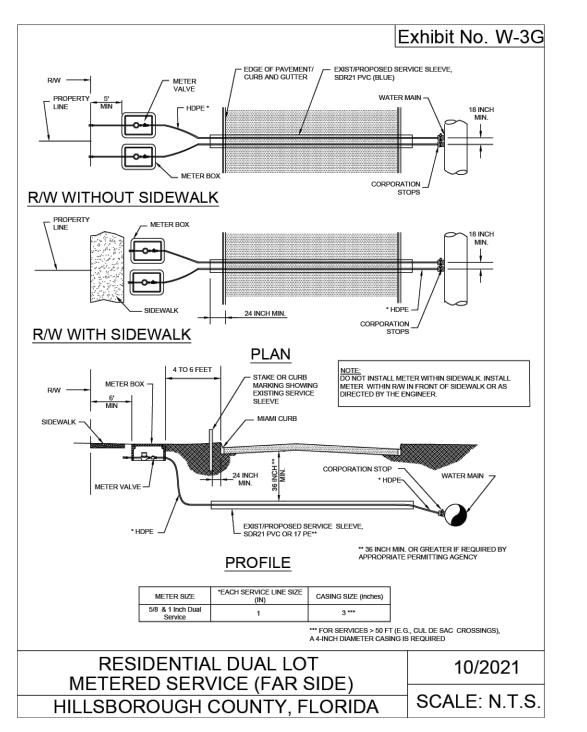


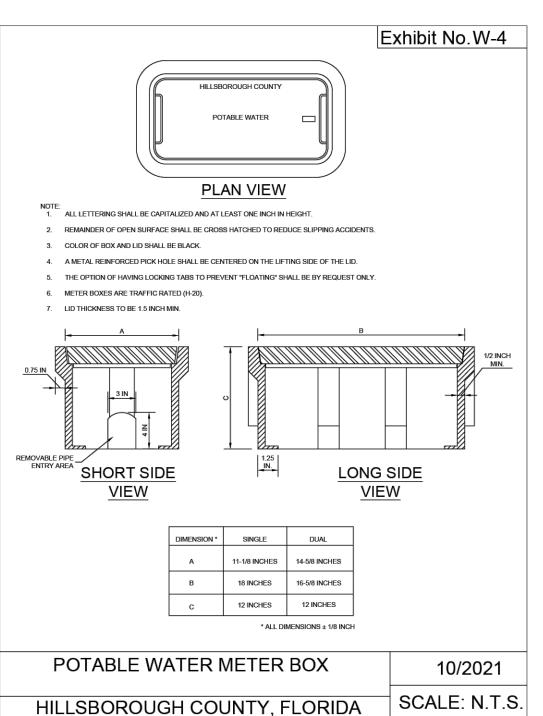


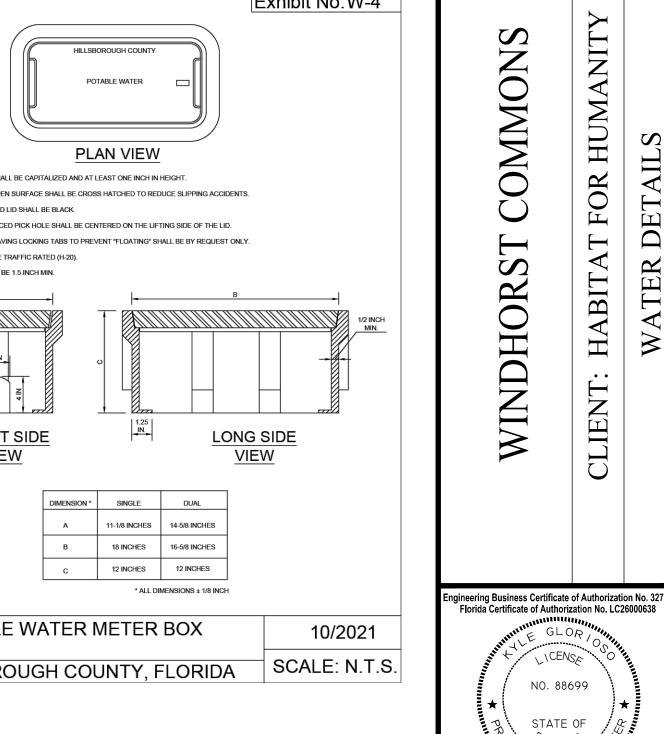
NOTES WATER METER ASSEMBLIES

HILLSBOROUGH COUNTY, FLORIDA











Florida Certificate of Authorization No. LC26000638 NO. 88699 STATE OF KYLE GLORIOSO LORIDA LICENSED PROFESSIONAL ENGINEER REGISTRATION NUMBER 88699 PROJECT No. 194-01-02

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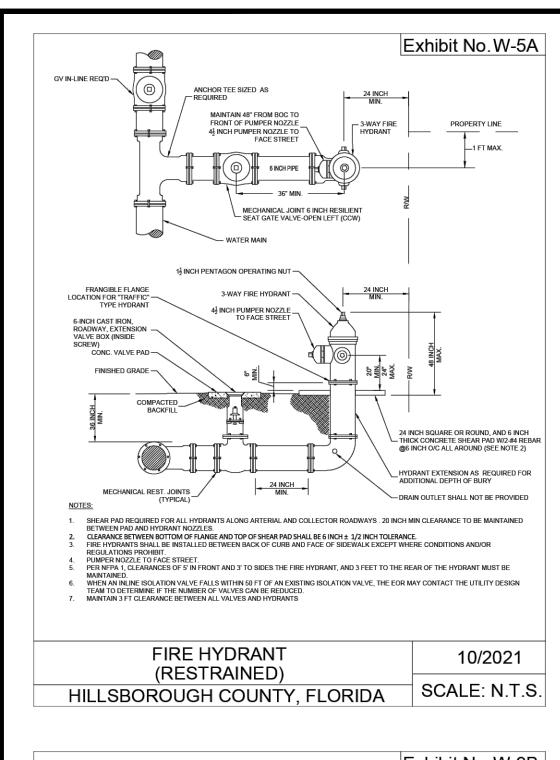
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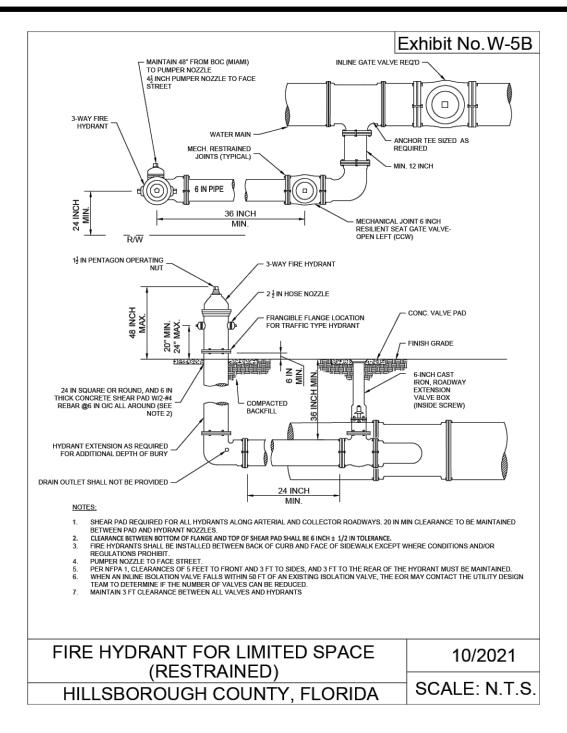
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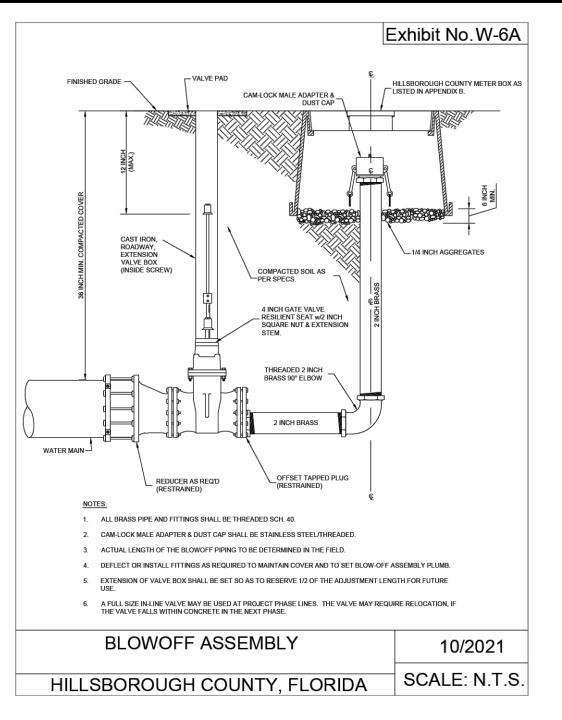
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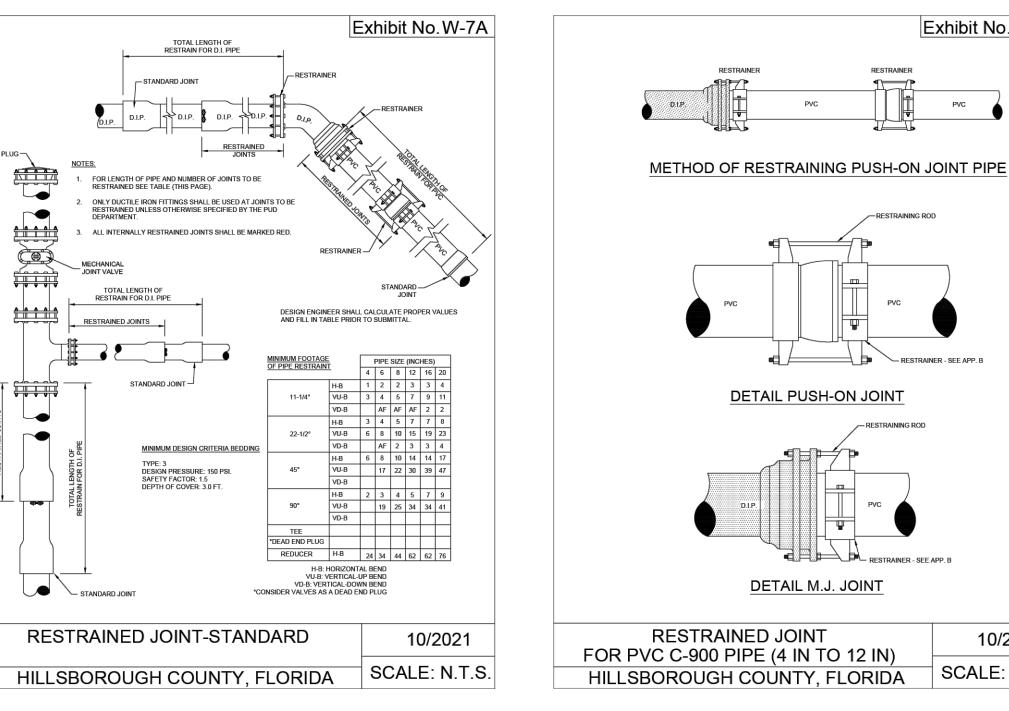
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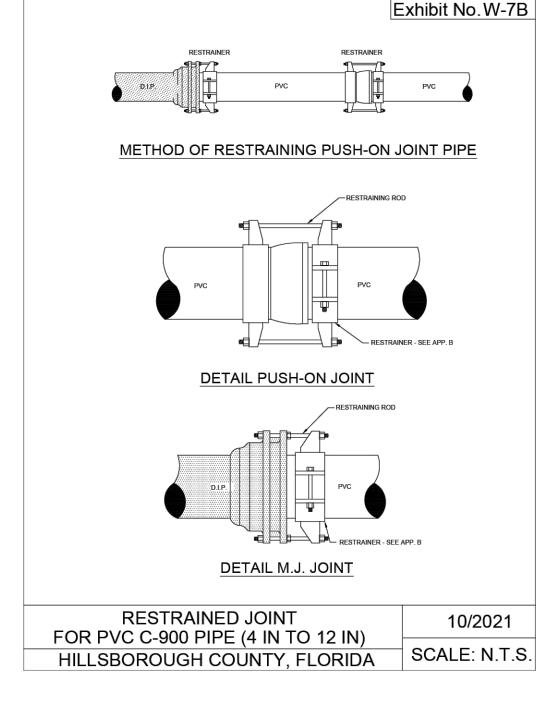
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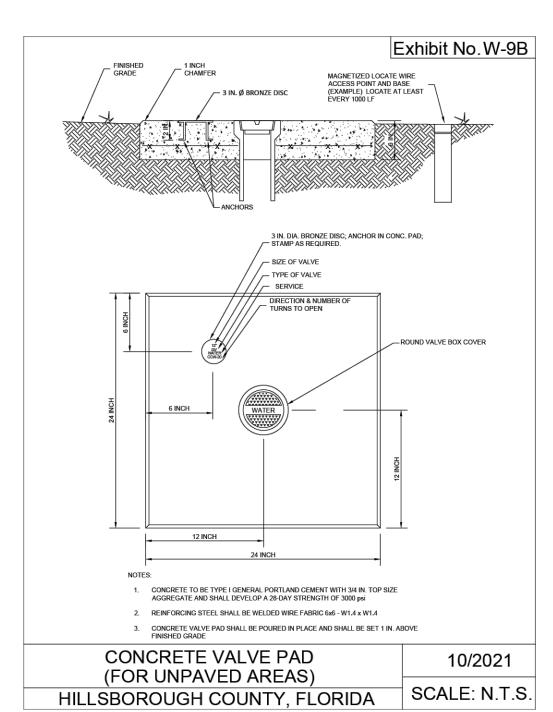


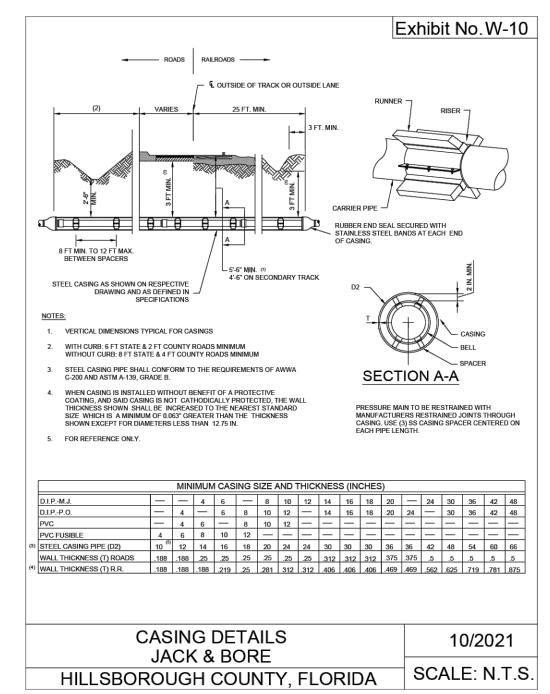


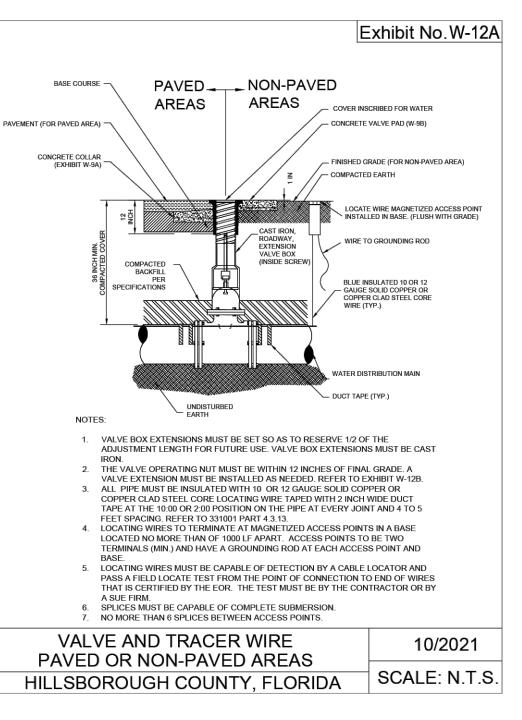


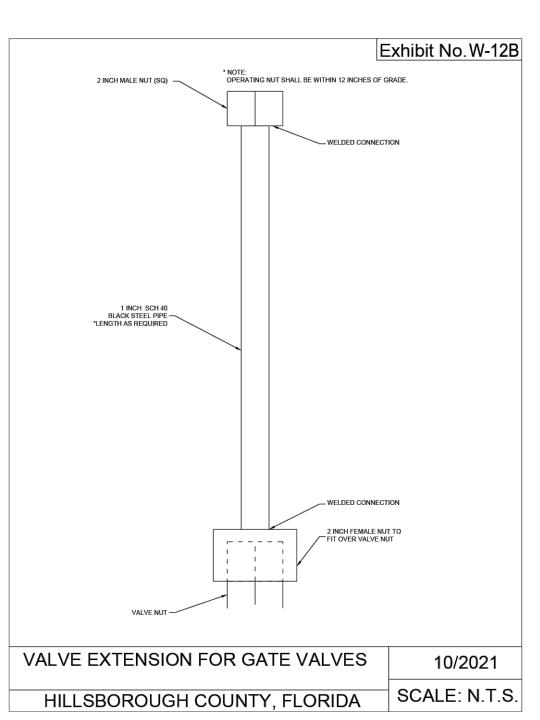


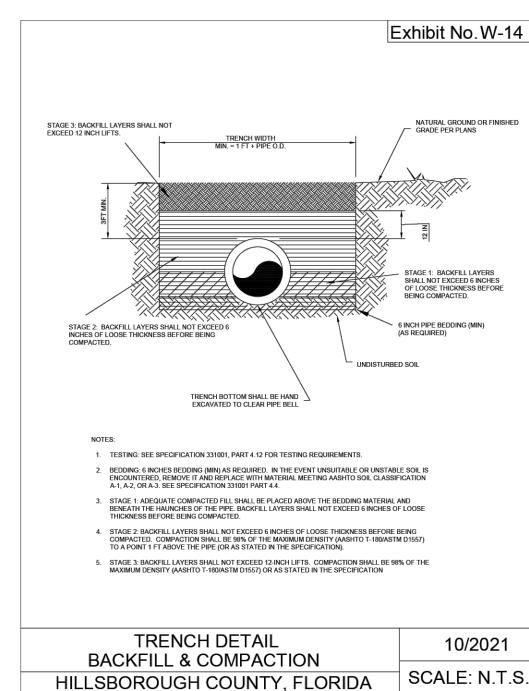


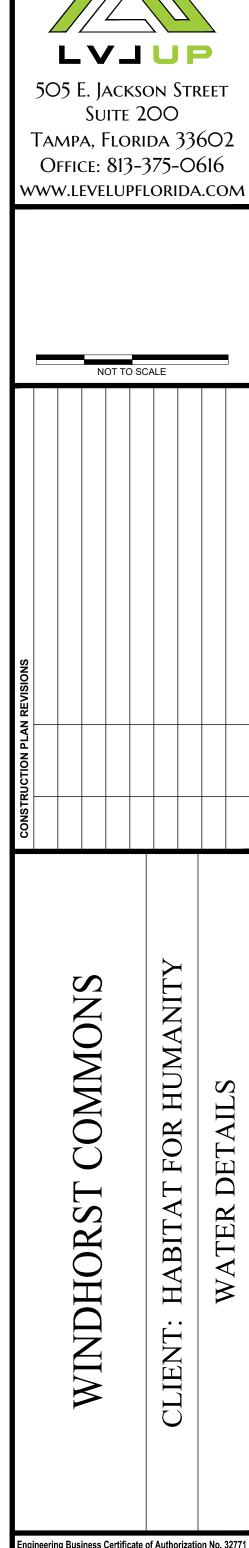






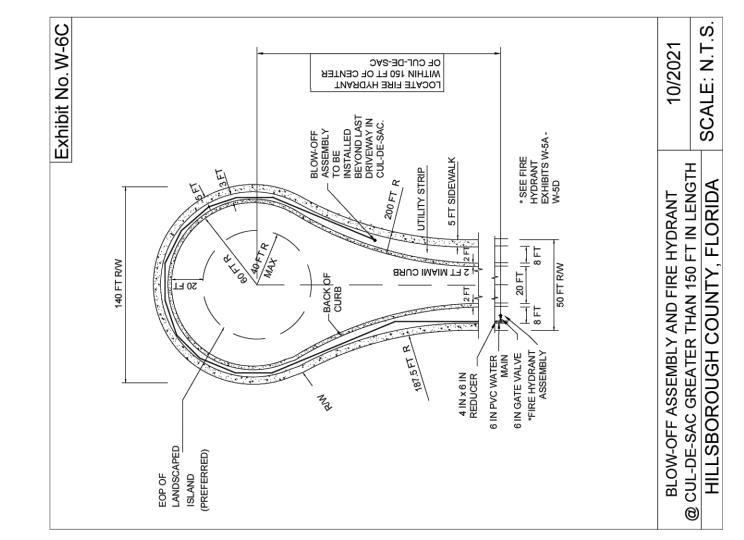


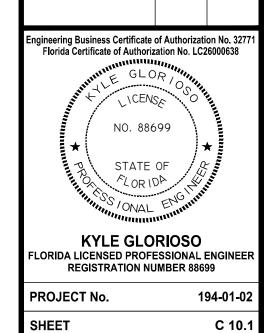


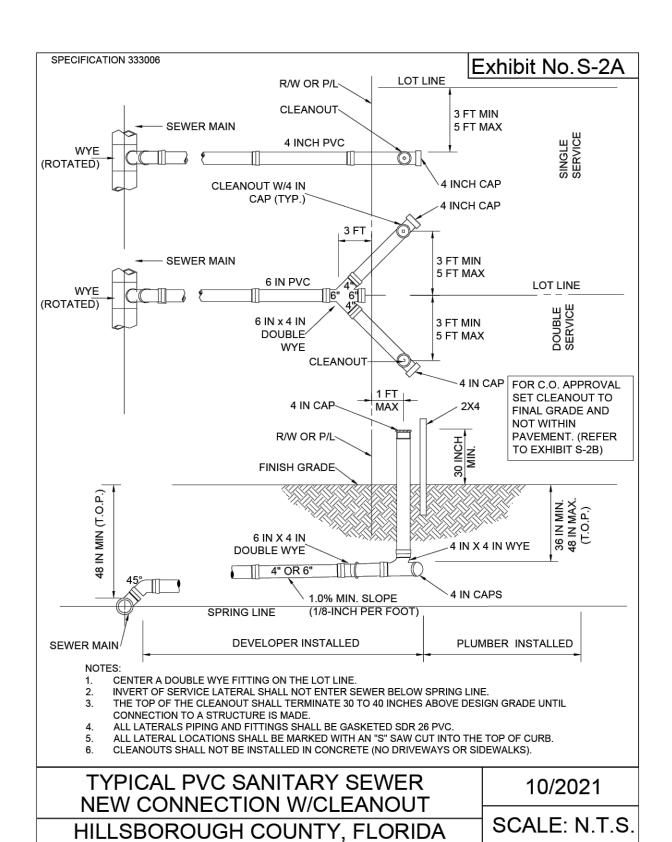


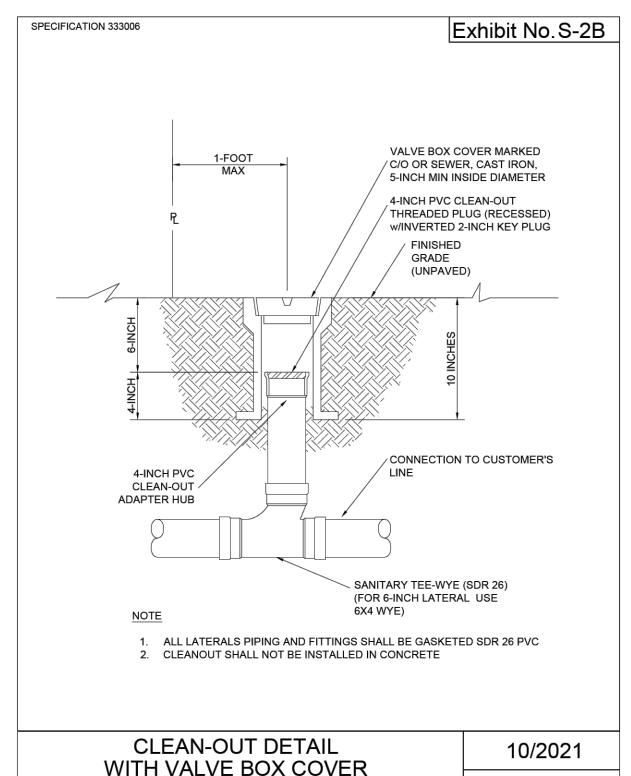
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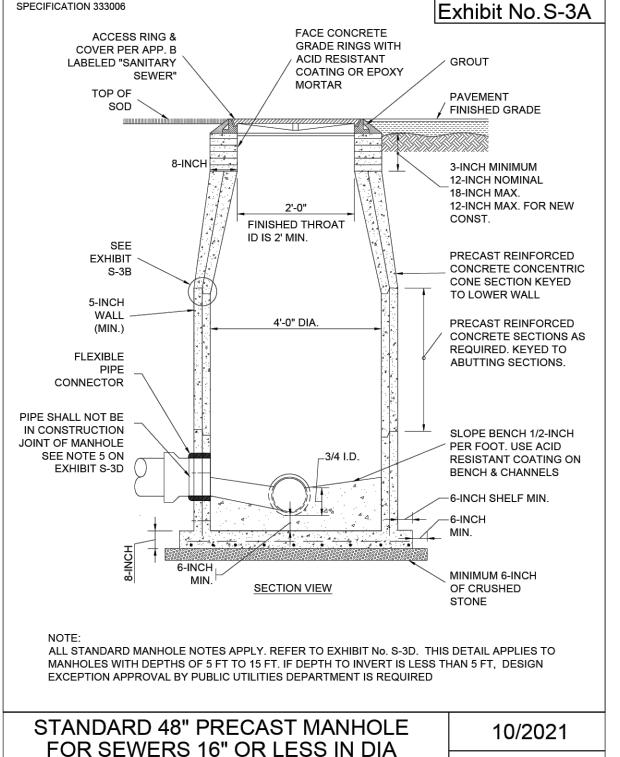






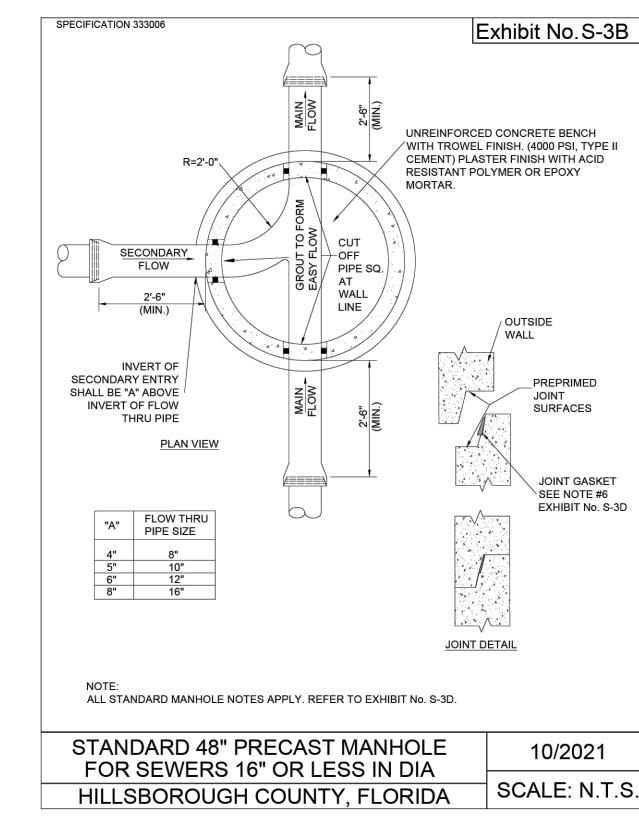
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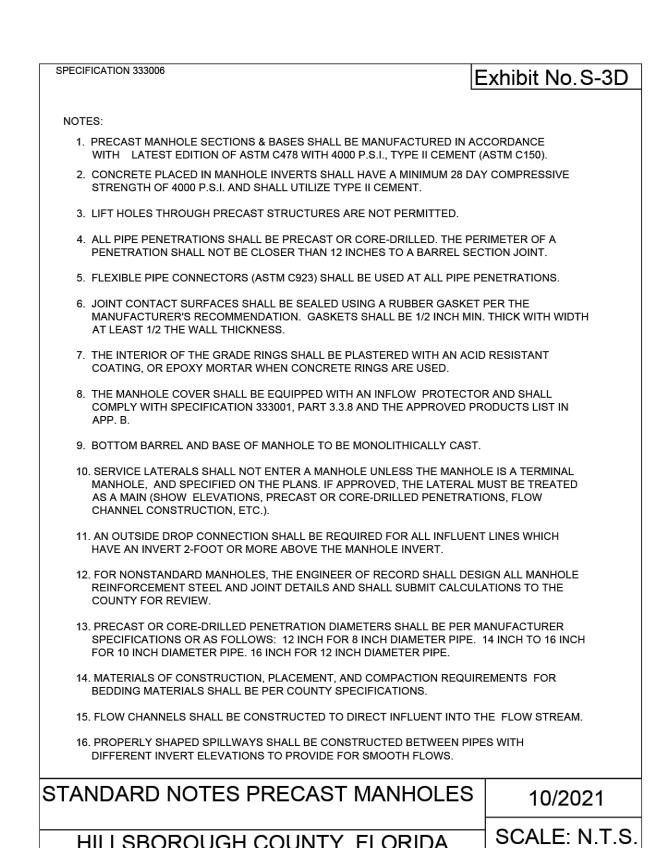
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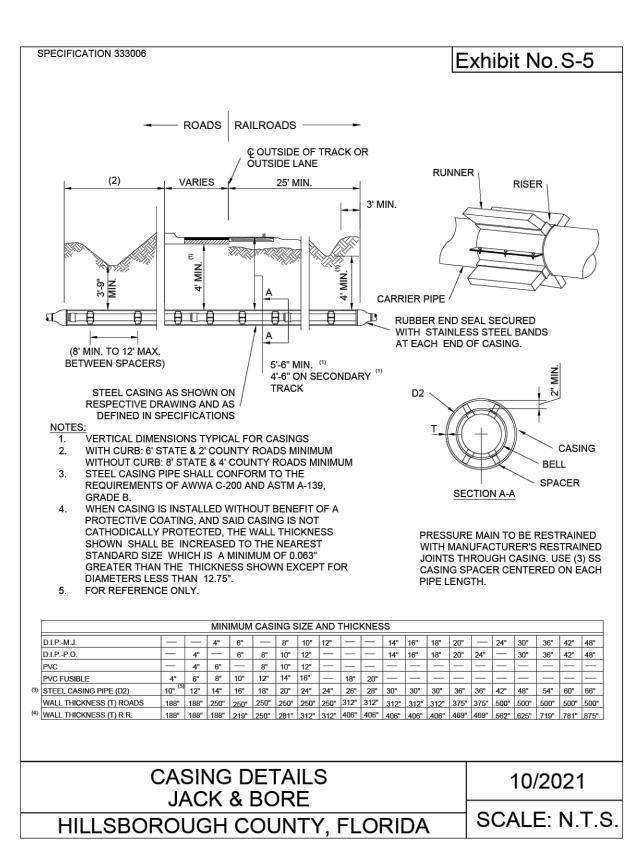
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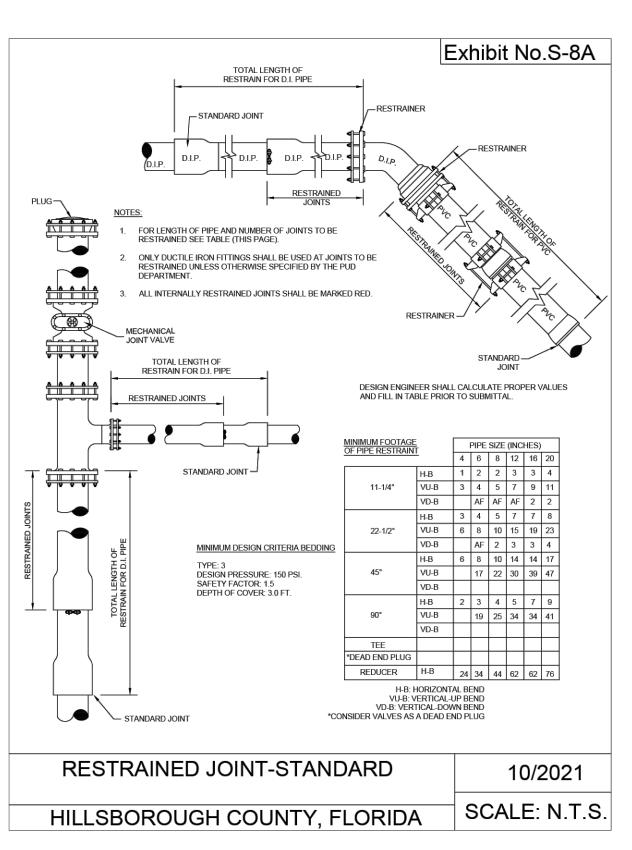
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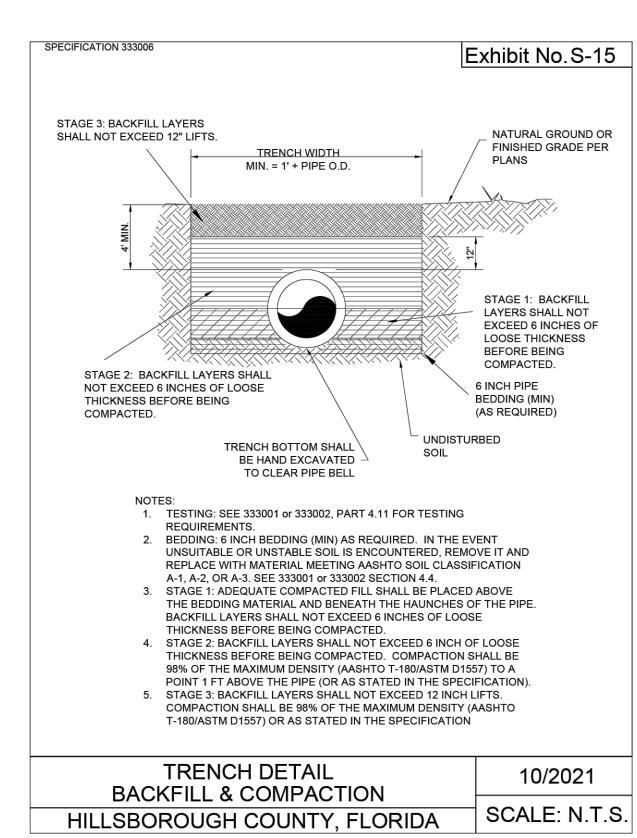


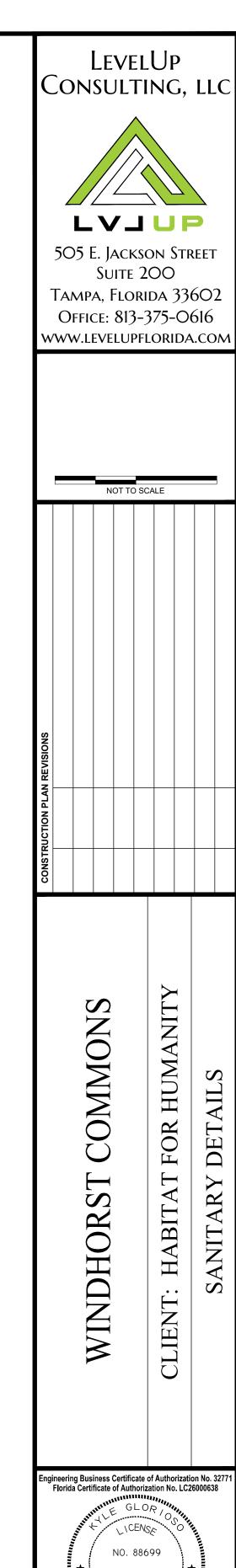


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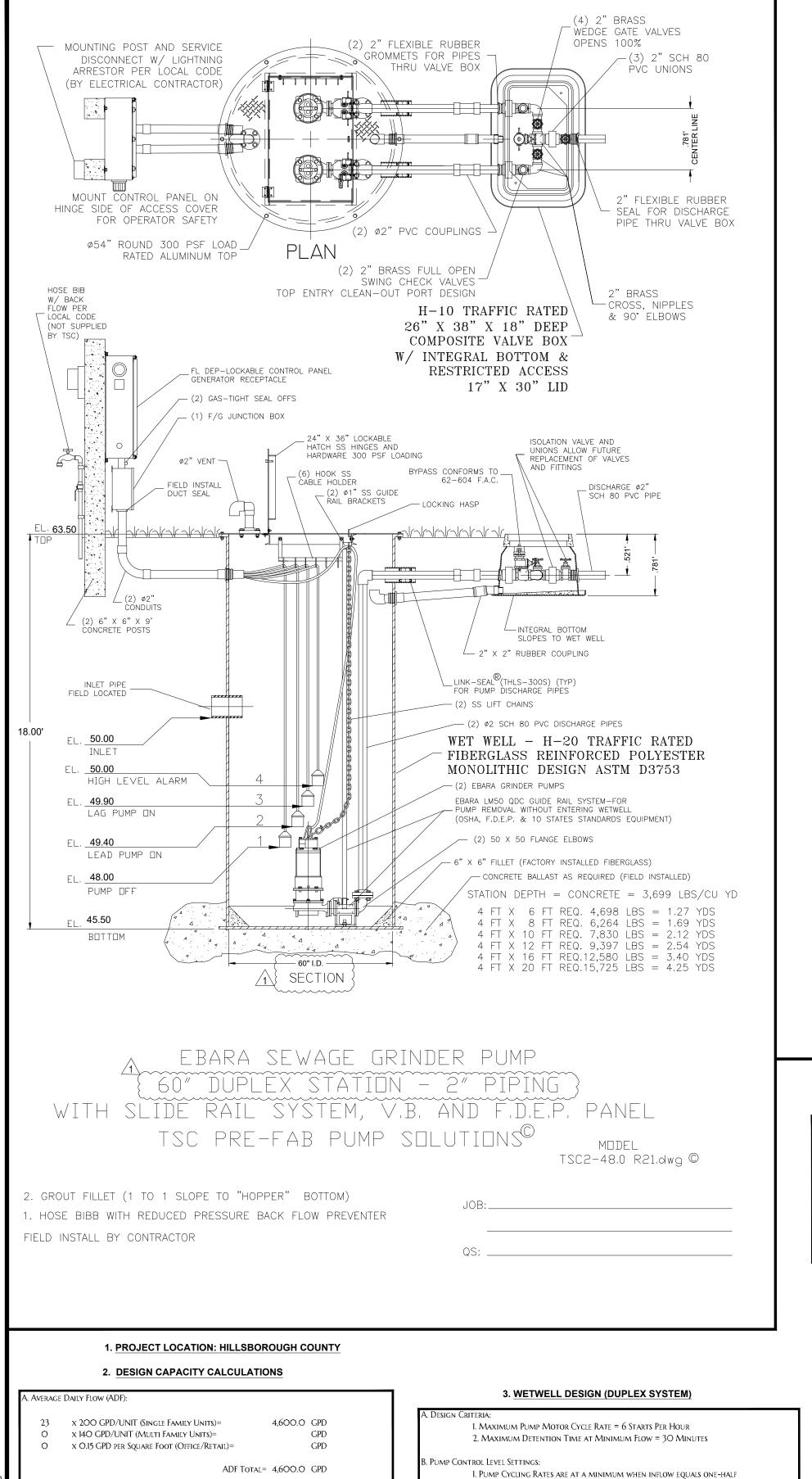






STATE OF KYLE GLORIOSO LORIDA LICENSED PROFESSIONAL ENGINEER REGISTRATION NUMBER 88699 PROJECT No. 194-01-02

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. Peak Influent Rate:

Design Minimum Flow:

(ADF x 0.20) / 1440=

DESIGN PUMP CAPACITY (MINIMUM REQUIRED):

VELOCITY IN FORCE MAIN AT MAX. PUMPING RATE:

PEAK FACTOR = 3.00 (PER UTILITY MANUAL, APPEXDIX 5)

O.6 GPM

80.0 GPM

2.00 FPS

Peak Flow = (ADF x Peak Factor) / 1440 =

THE DESIGN PUMPING RATE OF 8O.O GPM.

3. WETWELL DIAMETER (D)= 5 FEET

WETWELL VOLUME = 146.87 GALS / FT. DEPTH

2. Wetwell volume required between Lead Pump Start and Pump Shut

4. WETWELL LEVEL CHANGE BETWEEN PUMP STOP AND LEAD PU! 1.36 FEET

Off Level =  $0.5 \times \text{Cycle Period} \times 1/2 \text{ Pumping Rate} = 200.00 \text{ Gallons}$ 

DESGIN FOR: 1.40 FEET (2.00' MAX)

## GENERAL NOTES LIFT STATION TO BE PRIVATELY OWNED AND MAINTAINED

FURNISH AND INSTALL EBARA SUBMERSIBLE GRINDER PUMPS:

### DESIGN CONDITION:

MODEL	50 DGFU	5	HP
GPM	85	68	 _ FT/TD+
VOLTAGE _	230	THREE	PHASE
DISCHARGE	2"	146mm (5-3/4")	— IMPELL

SEWAGE GRINDER PUMP: RATED FOR TWENTY (20) STARTS PER HOUR.

AIR FILLED MOTOR DESIGNED FOR SEWAGE APPLICATION WITH CLASS F INSULATION.

DUAL MECHANICAL SHAFT SEALS (SILICON CARBIDE / SILICON CARBIDE)

LOCATED OUT OF THE PUMPAGE, IN A SEPARATE OIL FILLED CHAMBER.

HIGH TEMPERATURE BALL BEARINGS B-10 RATING OF 60,000 HOURS, UPPER BEARING - SINGLE ROW AND LOWER BEARINGS - DOUBLE ROW TYPE.

PUMP SHAFT HORSEPOWER (BHP) SHALL NOT EXCEED MOTOR RATED HORSEPOWER THROUGHOUT THE ENTIRE OPERATING RANGE OF THE PUMP PERFORMANCE CURVE.

SINGLE PHASE MOTORS SHALL BE DUAL WOUND, CAPACITOR START-RUN AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260). THREE PHASE MOTORS SHALL BE DUAL WOUND AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260) OR OPERATE ON 460 VOLT BY CHANGING THE MOTOR LEADS INSIDE THE PUMP.

FIBERGLASS WET WELL: SHALL BE A ONE PIECE UNIT WITH INTEGRAL BOTTOM, WALL AND UPPER FLANGE. THE ENTIRE FIBERGLASS WET WELL SHALL HAVE A DYNAMIC LOAD RATING OF 16,000 FT/LBS. EACH UNIT MUST BE SERIAL NUMBERED TO IDENTIFY THE TEST PROCEDURE. ASTM D 3753 & H-20 SPECIFICATIONS SHALL BE REQUIRED AS MINIMUM.

ALUMINUM HATCH: TSC MODEL-54R (54") ROUND WITH 24" X 36" LOCKABLE HATCH, REINFORCED FOR LOAD RATING OF 300 LBS/FT WITH HOLD OPEN SAFETY ARM, LOCKING DEVICE FOR HASP TYPE PADLOCK AND STAINLESS STEEL HARDWARE.

VALVE BOX: FIBERGLASS COMPOSITE (H-10 TRAFFIC RATED) WITH INTEGRAL BOTTOM.

(FOR 1 1/4" AND 2" DISCHARGE PIPING SXS HEADER SYSTEM)

SHALL BE 26" X 38" X 18" WITH 17" X 30" LIMITED ACCESS LID

ACCESSORIES: #304 S/S — GUIDE RAILS, UPPER GUIDE RAIL BRACKETS, CABLE HOLDER, ANCHOR BOLTS AND PUMP LIFTING CHAINS.

<u>VALVES</u>: SHALL BE SEWAGE SERVICE DESIGN BRASS SWING CHECK VALVES WITH TOP ENTRY CLEAN—OUT PORT AND BRASS WEDGE GATE VALVES OPEN 100%.

## <u>PIPING:</u> 2" SCHEDULE 80 PVC.

FLOAT SWITCHES: UL LISTED SJ ELECTRO MODEL (SJ 30 SWENO).

PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMPS, SLIDE RAIL ASSEMBLIES, CONTROL PANEL, JUNCTION BOX, FLOAT SWITCHES, ALUMINUM HATCH AND ACCESSORIES TO INSURE PROPER OPERATION AND WARRANTY.

THE COMPLETE PACKAGE PUMPING STATION SHALL HAVE PUMP BASES, SLIDE RAIL ASSEMBLIES AND DISCHARGE PIPING ASSEMBLED BY TECHNICAL SALES CORPORATION READY TO SHIP FOR FIELD INSTALLATION.

THE MANUFACTURER OF PRE-FAB PUMP SOLUTIONS©:

TECHNICAL SALES CORPORATION, 4621 N. HALE AVE TAMPA, FL 33614 (813)876-9256

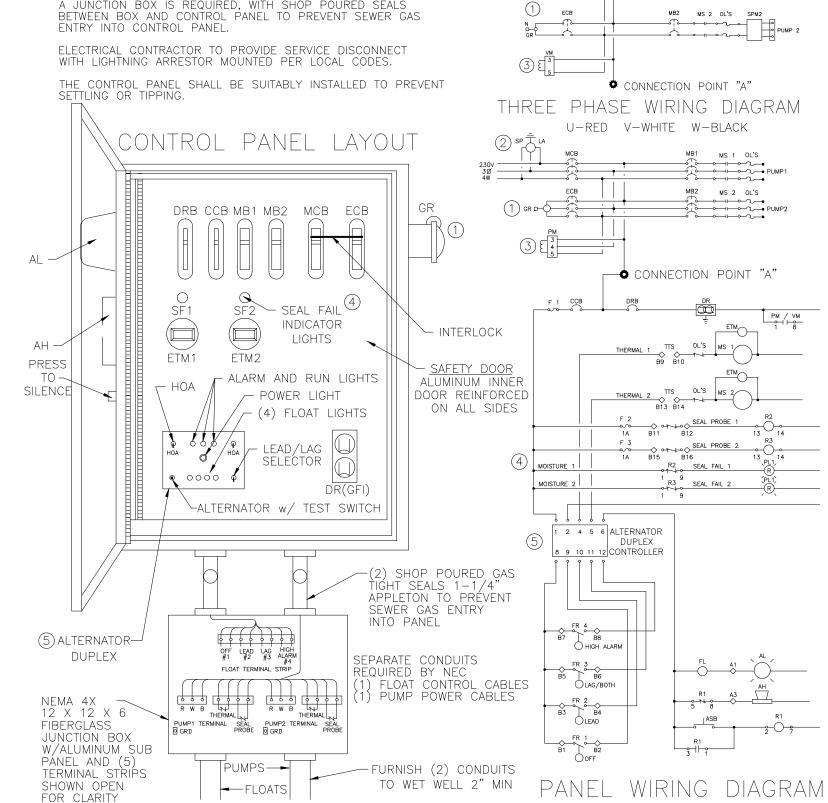
TO BE
WNED AND

CONTROL PANEL —SHALL CONFORM TO FL DEP 62—604 F.A.C.

CONTROL PANEL SHALL BE TSC MODEL # 38—D IN NEMA 4X
FIBERGLASS ENCLOSURE. THE PANEL SHALL MEET STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP), ENVIRONMENTAL
PROTECTION COMMISSION (EPC) AND LOCAL CODE REQUIREMENTS
GOVERNING PRIVATE LIFT STATIONS.

FLOAT SWITCHES AND CONTROL SYSTEM SHALL BE UL LISTED AND INTRINSICALLY SAFE. ALL COMPONENTS SHALL BE UL LISTED.

A JUNCTION BOX IS REQUIRED, WITH SHOP POURED SEALS BETWEEN BOX AND CONTROL PANEL TO PREVENT SEWER GAS ENTRY INTO CONTROL PANEL.



LEGEND MCB MAIN CIRCUIT BREAKER AH ALARM HORN ALARM LIGHT MS MOTOR STARTER ASB ALARM SILENCE BUTTON OVERLOAD HEATERS CCB CONTROL CIRCUIT BREAKER
DR DUPLEX RECEPTACLE PHASE MONITOR PUMP TERMINAL STRIP DRB DUPLEX RECEPTACLE BREAKER RUN CAPACITOR ECB EMERGENCY CIRCUIT BREAKER ETM ELAPSED TIME METER DISCHARGE RESISTOR PUMP RUN INDICATORS FLASHER REGULATOR TERMINAL STRIP FLOAT SWITCH (REGULATOR) START CAPACITOR SEAL FAIL (SHAFT) generator rečeptacle GROUND SR START RELAY
HAND-OFF-AUTOMATIC SELECTOR (2) SP SURGE PROTECTOR
LIGHTNING ARRESTOR TTS THERMAL TERMINAL THERMAL TERMINAL STRIP

MOTOR BREAKER

PANELS SHALL CONFORM TO FLORIDA DEP 62-604 F.A.C.

① GENERATOR RECEPTACLE FOR EMERGENCY
POWER CONNECTION WITH INTERLOCK

SINGLE PHASE WIRING DIAGRAM

U-RED V-WHITE Y-BLACK

230V MAIN MB1 MS 1 OL'S SPM1 PUMP 1

RELAYS ARE PANEL MOUNTED

2) SURGE PROTECTION AND LIGHTNING PROTECTION ON ALL INCOMING LEGS

3) PHASE PROTECTION SHALL BE PROVIDED4) SHAFT SEAL FAIL DETECTION

5 ALTERNATOR W/ TEST SWITCH
PANEL MANUFACTURER SHALL BE A "UL" LISTED SHOP.

OPERATED BY:
"OWNER NAME"
IN CASE OF EMERGENCY CALL
"OWNER PHONE NUMBER"

## 4. SYSTEM CURVE CALCULATIONS PUMP STATION PIPING:

1. Pump Station	i Piping				_	
			Friction			
	Size (in)	QUANTITY	Loss (ea.)	TOTAL		
TEE	2	0				
22.5° Bend	2	0				
45° Bend	2	0				
90° Bend	2	2	11	22		
CHECK VALVE	2	1	13	13		
GATE VALVE	2	1	1.3	1.3		
			Total=	36.30		
		F	PIPE LENGTH=	25.00		
	Total Equivelent Length=				Design For:	100.0

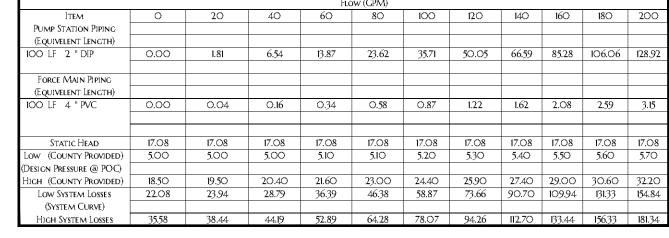
## FORCE MAIN PIPING:

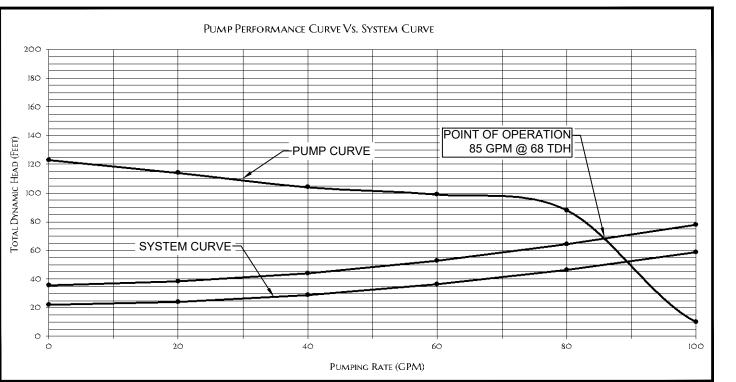
			Friction			
	Size (in)	QUANTITY	Loss (ea.)	TOTAL		
Tee	4	0				
22.5° Bend	4	0				
45° Bend	4	0				
90° Bend	4	0				
Cross	4	0				
GATE VALVE	4	1	2.5	2.5		
Total= 2.50						
Pipe Length= 69.00						
	Т	71.5O	Design For:	100.0		

## STATIC HEAD:

1. Pipe Center Line at Discharge Point:	65.08 ft.
2. Low Water Level (All Pumps Off):	48.00 ft.
3. Total Static Head (B.1B.2.):	17.08 ft.

## SYSTEM HEAD COMPUTATION:





## V. Floatation Calculations - Concrete Wet Well

(1) Barrel Weight = $(A^2 - B^2) \times (\pi/4) \times E \times (W_c) =$	O LB
1) Barrel Weight = $(A^2 - B^2) \times (\pi/4) \times E \times (W_{\odot}) =$ (2) Bottom Slab Weight = $C^2 \times \pi/4 \times D \times W_{\odot} =$ (3) Soil Weight = $(C^2 - A^2) \times \pi/4 \times E \times (12O - 62.4) =$	<b>4</b> ,698 lb
3) SOIL WEIGHT = $(C^2 - A^2) \times \pi/4 \times E \times (120 - 62.4) =$	18,638 LB
4) Total Weight =	23,336 гв
5) $H_2O$ Displaced = (( $A^2 \times \pi/4 \times E$ ) + ( $C^2 \times \pi/4 \times D$ )) $\times 6$	21,O33 lb

Safety Factor =  $\frac{\text{Total Weight}}{\text{H}_2\text{O Displaced}}$ 

TSC DUPLEX PUMP STATION FIBERGLASS WET WELL



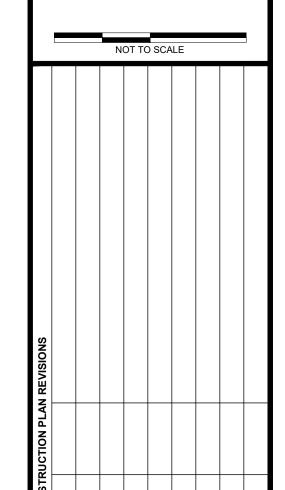
MODEL TSCE2-72.4©

4621 N. HALE AVENUE PH (813)876-9256
TAMPA, FL 33614 FAX (813)874-1194
EMAIL: Sales@TSCTampa.com
REV-9 SCALE: N.T.S.

LevelUp Consulting, llc



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Florida Certificate of Authorization No. LC26000638

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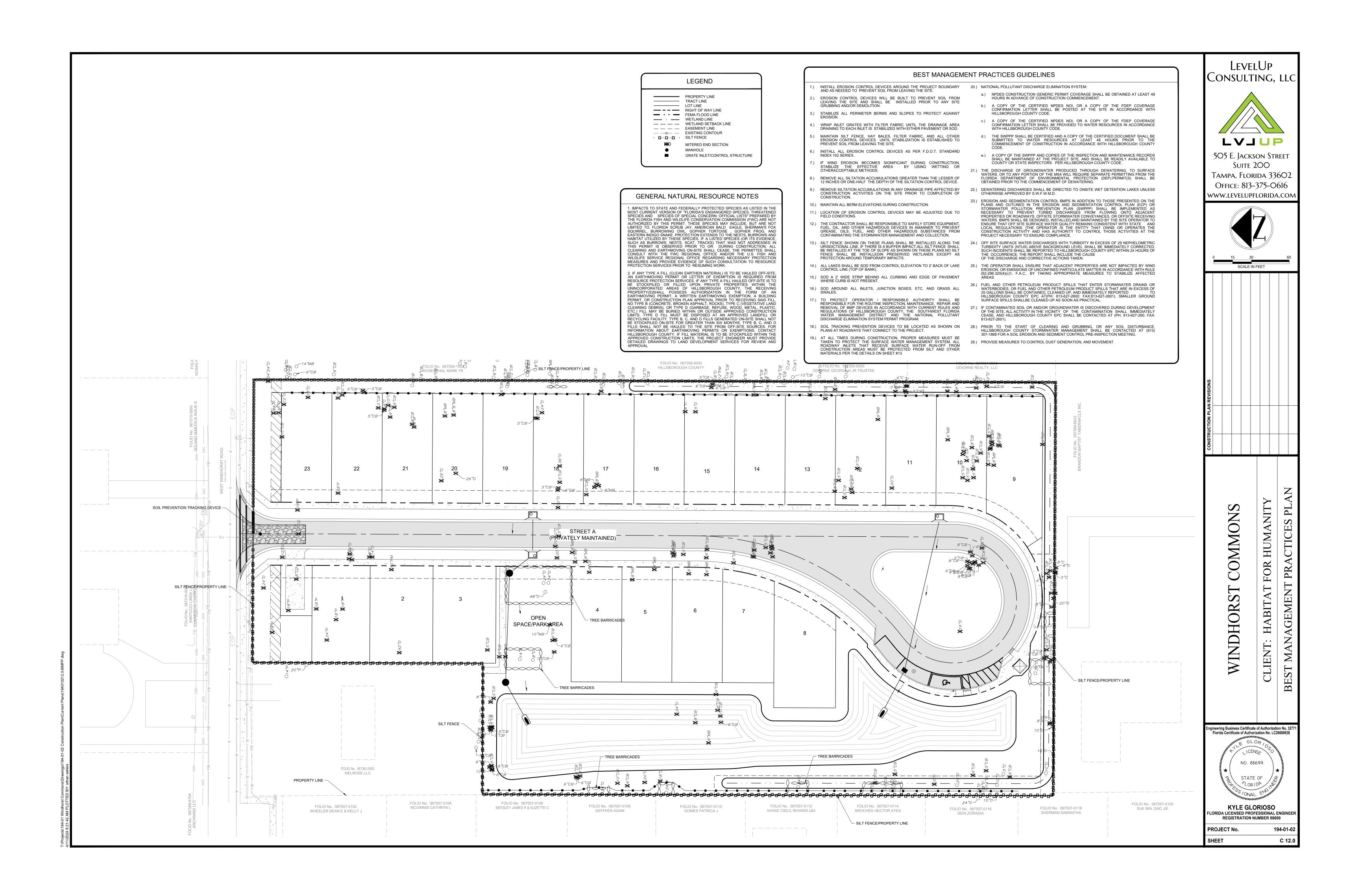
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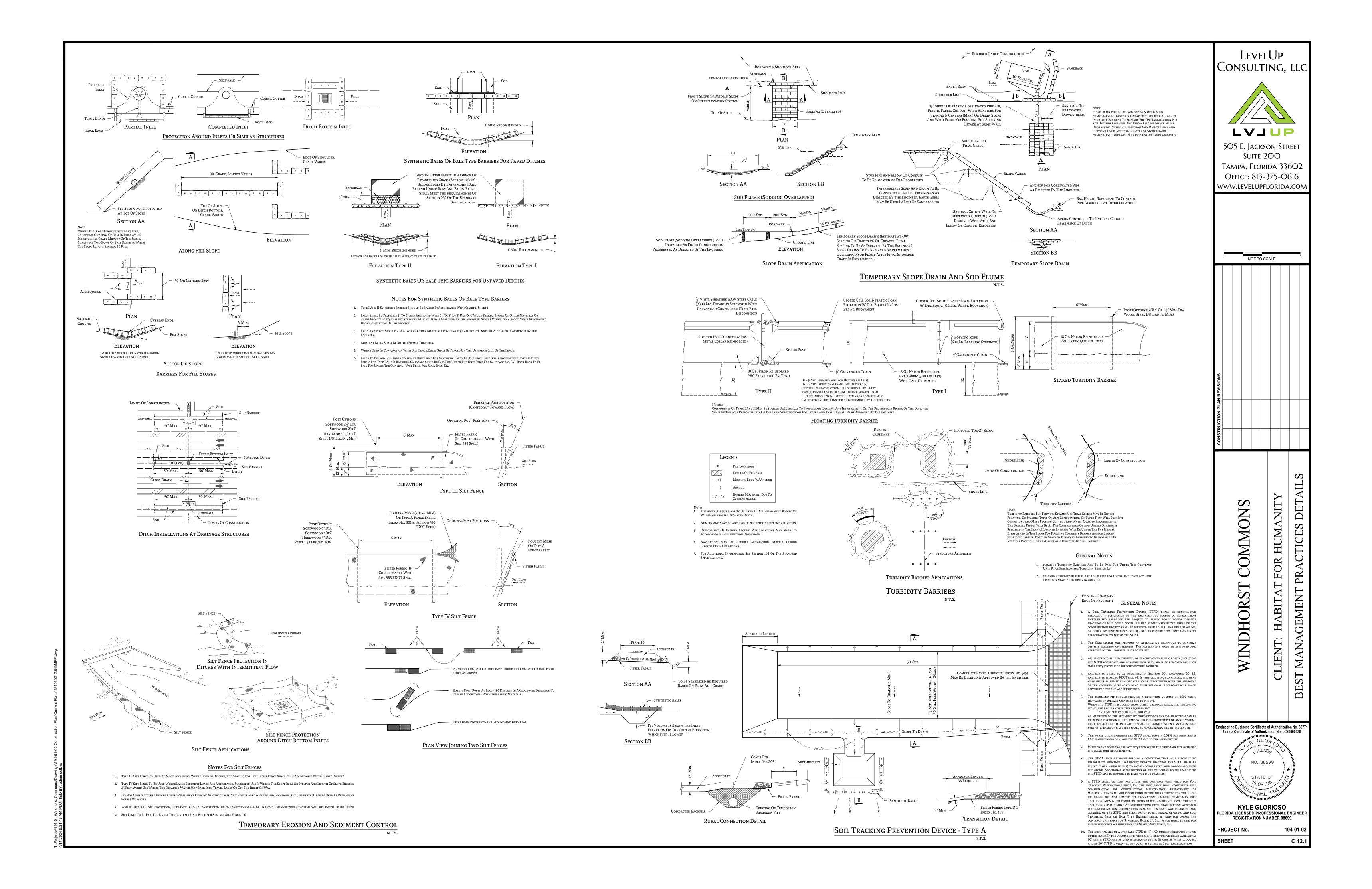
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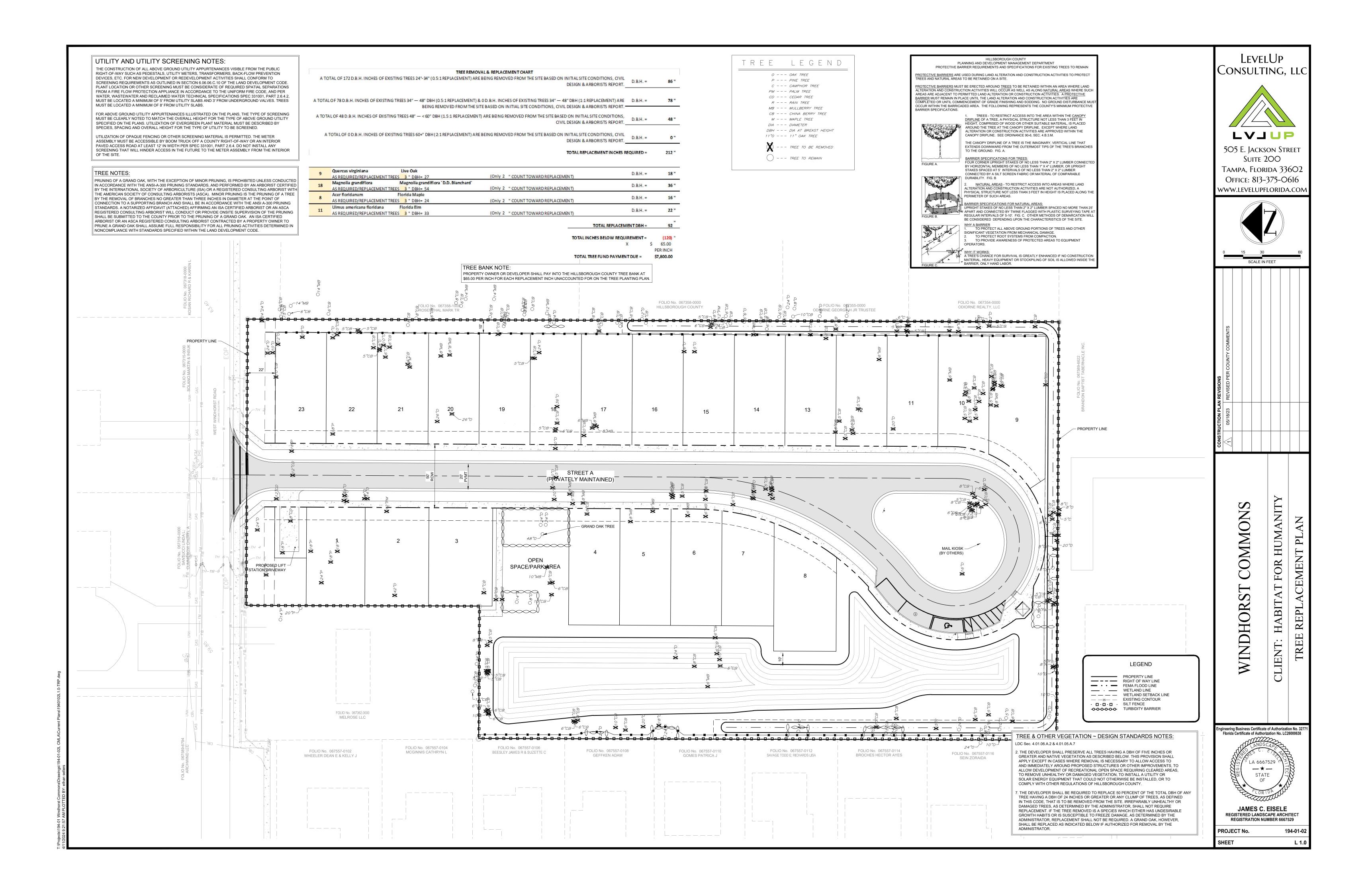
CORIDA

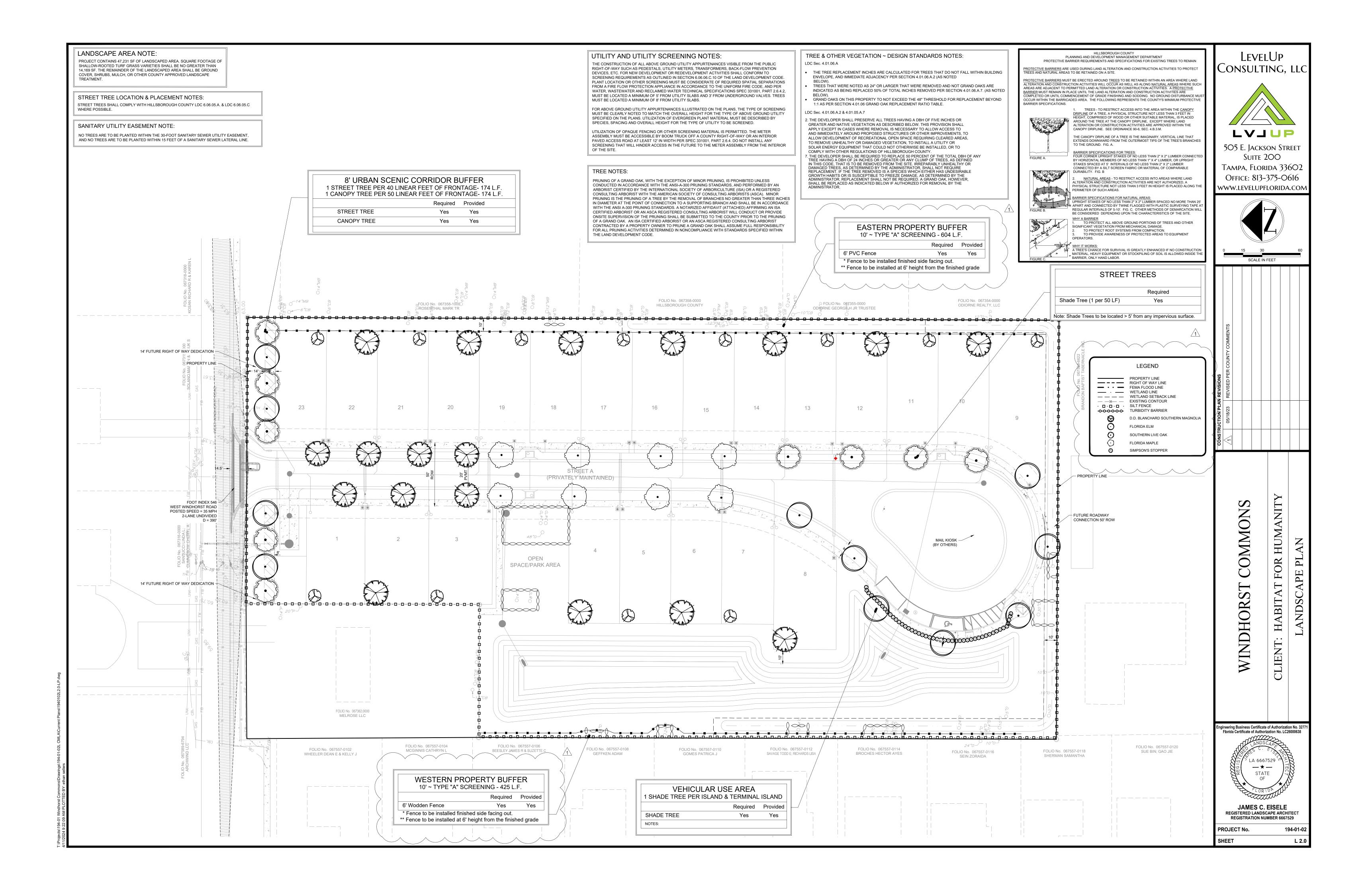
KYLE GLORIOSO
FLORIDA LICENSED PROFESSIONAL ENGINEER
REGISTRATION NUMBER 88699

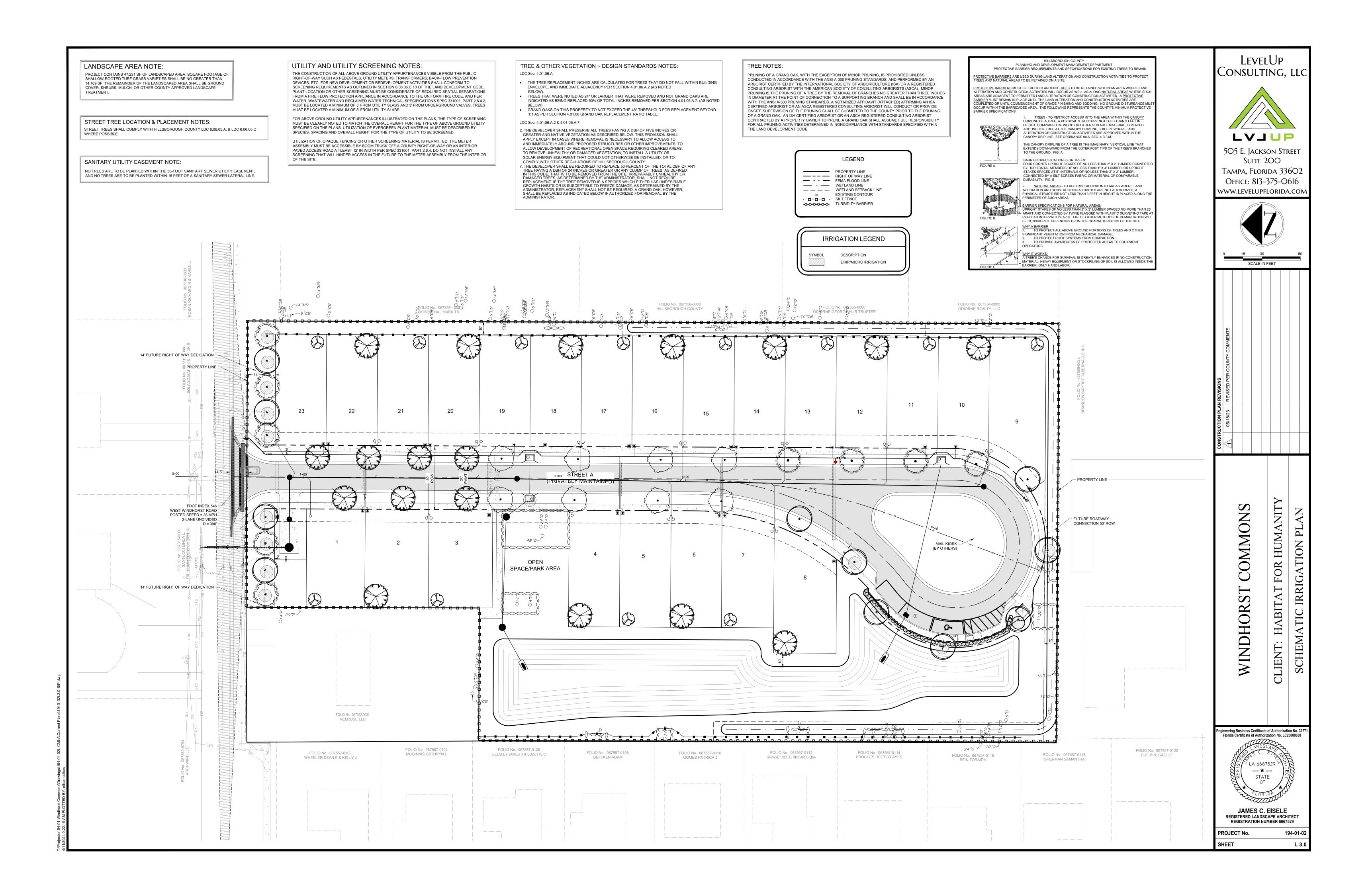
PROJECT No. 194-01-02
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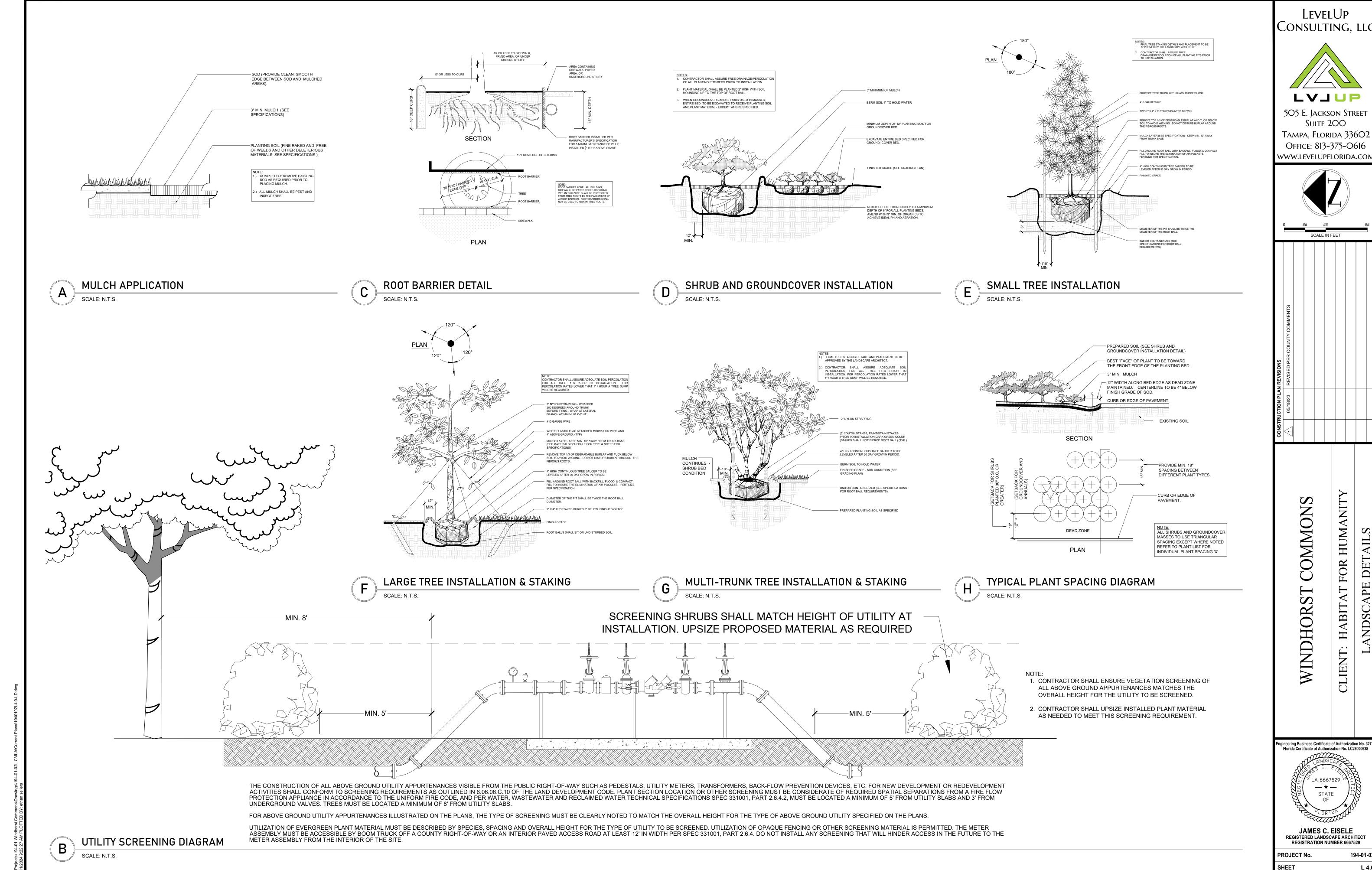












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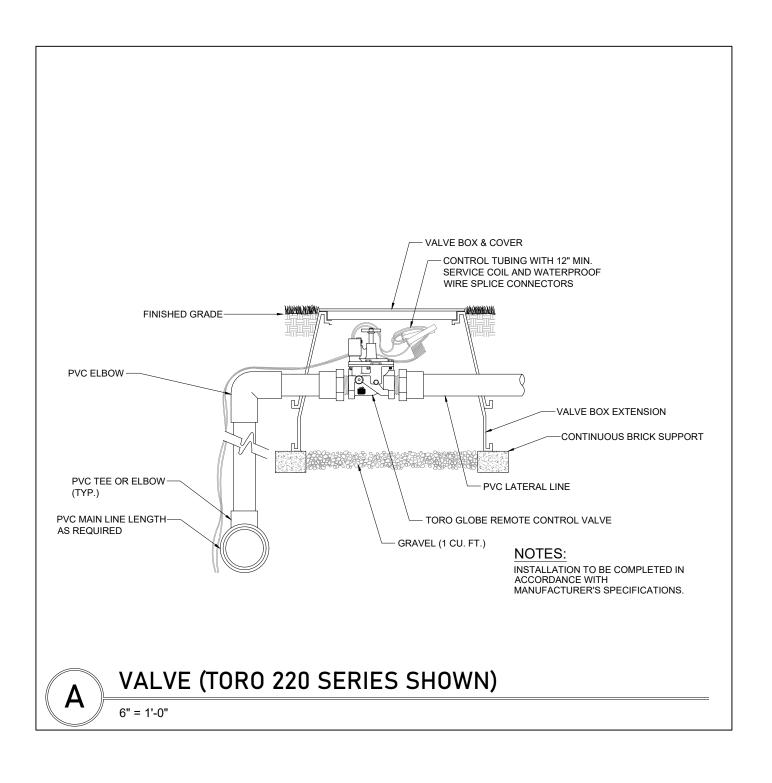
SCALE IN FEET

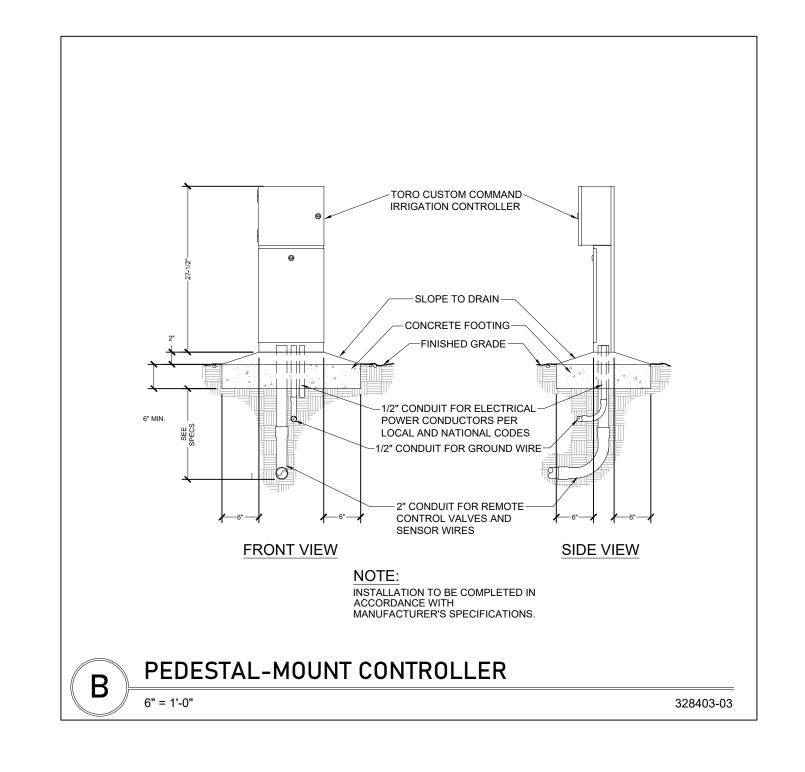
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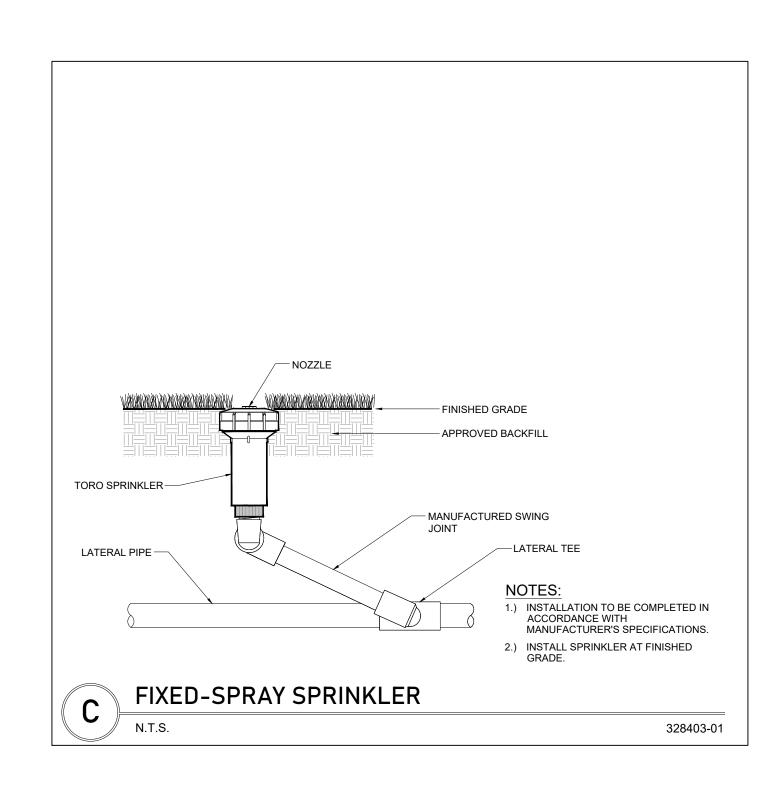
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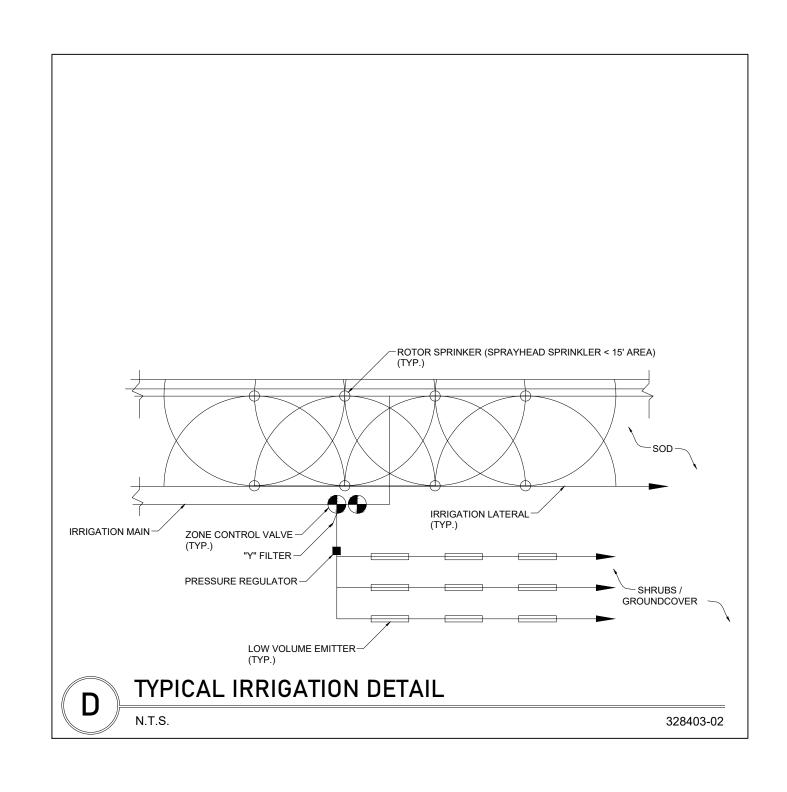
gineering Business Certificate of Authorization No. 327 Florida Certificate of Authorization No. LC26000638 STATE JAMES C. EISELE REGISTERED LANDSCAPE ARCHITECT

REGISTRATION NUMBER 6667529 194-01-02





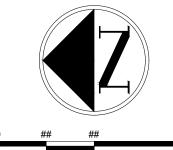








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SCALE IN FEET

15 P.S.I. SHALL BE UTILIZED. 9. NON-POTABLE IRRIGATION LINES TO BE PURPLE IN COLOR. 10. IRRIGATION WATER SUPPLY TO BE PROVIDED BY THE LOWEST WATER QUALITY

SOURCE AVAILABLE. 11. IRRIGATION AND PLANTINGS SHALL COMPLY WITH THE WATER EFFICIENT

1. ALL PROPOSED LANDSCAPING TO BE IRRIGATED BY A 100% AUTOMATIC SYSTEM.

IRRIGATION SPRINKLER ZONES TO BE SEPARATE FOR HIGH AND LOW WATER

REQUIREMENT AREAS AND OPERATED ON DIFFERENT WATERING SCHEDULES.

IRRIGATION OVERTHROW TO NONPERVIOUS AND NATURAL AREA TO BE MINIMIZED. 5. A RAIN SHUT OFF TO BE INSTALLED WITH IRRIGATION CONTROLLER SYSTEM.

IRRIGATION PIPING TO BE LOCATED WITHIN PLANTING OR SOD AREAS WHEREVER FEASIBLE. PIPING UNDER ROADS TO BE INSTALLED WITHIN SCHEDULE 40 PVC

ALL TREE, SHRUB AND GROUNDCOVER AREAS TO BE FULLY IRRIGATED WITH MICRO-IRRIGATION / LOW VOLUME EMITTERS. ALL SOD AREAS TO BE IRRIGATED WITH ROTOR OR SPRAY HEAD SPRINKLERS SPACED TO PROVIDE 75-100%

8. A "Y" TYPE FILTER SHALL BE INSTALLED AT THE HEAD END OF LOW VOLUME LINES AND IN-LINE PRESSURE REGULATORS TO REDUCE PRESSURE TO NO MORE THAN

2. IRRIGATION SYSTEM SHALL NOT BE INSTALLED THROUGH EXISTING PLANT

LANDSCAPE ORDINANCE. 12. THIS IRRIGATION PLAN IS SCHEMATIC AND IS FOR PERMITTING PURPOSES ONLY. 13. THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS, SHOWING ALL HEADS, VALVES, AND PIPE LINES TO SCALE AFTER COMPLETION OF PIPING INSTALLATION. THE OWNER SHALL PROVIDE INSTRUCTION: SHEETS AND PARTS LIST COVERING

14. THE CONTRACTOR SHALL MAKE EVERY POSSIBLE EFFORT TO PRESERVE EXISTING PLANT MATERIAL THAT HAS BEEN TAGGED. WHERE SUCH MATERIALS FALLS IN THE PATH OF TRENCHING, THE CONTRACTOR SHALL REROUTE THE PIPE OR HAND TRENCH AS NECESSARY TO PROTECT THE DESIGNATED PLANT MATERIAL. .THE CONTRACTOR MUST RESTORE ANY NEW PLANT MATERIAL OR SOD TO ITS ORIGINAL CONDITION IF IT IS DAMAGED BEFORE THE OWNER WILL GIVE FINAL ACCEPTANCE.

**IRRIGATION NOTES:** 

SLEEVING.

16. ALL PIPE AND CONTROL LINES SHALL BE SLEEVED WITH SLEEVED SCHEDULE 40 PVC AND PLACED A MINIMUM OF 24" BELOW GRADE AND BACKFILLED WITH CLEAN SAND. NO ROCK IS TO BE IN CONTACT WITH THE PVC PIPE. THE CONTRACTOR SHALL PROVIDE MAGNETIC MARKERS AT EACH END OF THE SLEEVE. SLEEVE SHALL BE 4" MINIMUM.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING THE SYSTEM IN COMPLETE ACCORDANCE WITH ALL APPLICABLE CODES ORDINANCES AND LAWS. ANY MODIFICATIONS MADE TO CONFORM WITH SAID CODES, LAWS AND ORDINANCES SHALL BE COMPLETED AT THE CONTRACTORS EXPENSE AT NO

ADDITIONAL COST TO THE CLIENT. 18. ALL CIRCUIT PIPE IS TO BE CLASS 160 PVC OR A HIGHER GRADE.

19. ALL MAIN FITTINGS SHALL BE REINFORCED WITH 2000-PSI POURED CONCRETE THRUST BLOCKS.

20. THE IRRIGATION CONTRACTOR IS FULLY RESPONSIBLE FOR THE WORK UNTIL THE OWNER GIVES FINAL ACCEPTANCE.

21. CONTRACTOR WILL GUARANTEE THE QUALITY OF HIS MATERIALS AND WORK FOR

ONE (1) YEAR. THIS PERIOD BEGINS WITH THE FINAL ACCEPTANCE OF THE OWNER. 22. CONTRACTORS ARE EXPECTED TO PERSONALLY EXAMINE THE SITE AND FULLY ACQUAINT THEMSELVES WITH ALL OF THE EXISTING CONDITIONS SO THAT NO MISUNDERSTANDING MAY AFTERWARDS ARISE TO THE CHARACTER OR AS TO THE EXTENT OF THE WORK TO BE DONE. THIS WILL ALSO ENSURE THE CONTRACTOR WILL BE AWARE OF WHAT PRECAUTIONS NEED TO BE TAKEN TO AVOID INJURY TO

PEOPLE OR DAMAGE TO PROPERTY. 23. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE AND OPERABLE SYSTEM FOR: THE IRRIGATION OF ALL LANDSCAPE PLANTING ON SITE. PLANS AND SPECIFICATIONS MAY NOT INDICATE ALL ITEMS NECESSARY FOR THE PROPER IRRIGATION OF THE PROJECT AND THE CONTRACTOR HOLDS THE RESPONSIBILITY FOR FURNISHING LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR A COMPLETE AND PROPER PROJECT EVEN IF NOT IN THE INITIAL SPECIFICATIONS.

24. ALL IRRIGATION WATER MAINS SHALL BE SEPARATED FROM WATER MAINS BY A MINIMUM HORIZONTAL DISTANCE OF SIX (6') FEET MEASURED EDGE TO EDGE AND A VERTICAL DISTANCE OF TWELVE INCHES (12") BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE MINIMUM SEPARATION CANNOT BE MAINTAINED, SEE CROSSOVER DETAIL REQUIREMENTS IN THE DETAIL

CONTRACTOR SHALL ASSURE ADEQUATE SOIL PERCOLATION FOR ALL TREE PITS PRIOR TO INSTALLATION. FOR PERCOLATION RATES LOWER THAT 1" / HOUR A TREE SUMP WILL BE REQUIRED.

## HILLSBOROUGH COUNTY IRRIGATION NOTES:

- 1. IRRIGATION ZONES DELINEATED AS MICRO-IRRIGATION OR WITH IRRIGATION TECHNIQUES OTHER THAN
- $2. \ \ \mathsf{TURF} \ \mathsf{AREAS} \ \mathsf{ARE} \ \mathsf{ON} \ \mathsf{SEPARATE} \ \mathsf{IRRIGATION} \ \mathsf{ZONES} \ \mathsf{FROM} \ \mathsf{OTHER} \ \mathsf{LANDSCAPE} \ \mathsf{PLANT} \ \mathsf{ZONES}.$ 3. IRRIGATION SPRAYS AND ROTORS ARE NOT COMBINED ON THE SAME CONTROL VALVE CIRCUIT.
- 4. SPRAY AND ROTORS HAVE MATCHING APPLICATION RATES WITHIN EACH IRRIGATION ZONE. 5. IRRIGATION SYSTEM AVOIDS OVER-SPRAY AND RUNOFF ONTO WALKWAYS, ROADWAYS, STRUCTURES OR OTHER
- NON-LANDSCAPED AREAS
- $6. \ \ \mathsf{FOUR} \ \mathsf{FEET} \ \mathsf{WIDE} \ \mathsf{OR} \ \mathsf{LESS} \ \mathsf{LANDSCAPE} \ \mathsf{AREAS} \ \mathsf{CONTAIN} \ \mathsf{MICRO-IRRIGATION} \ \mathsf{ONLY}.$ 7. SPRINKLER SPACING DOES NOT EXCEED 55% OF THE SPRINKLER'S DIAMETER OF COVERAGE.
- 8. IRRIGATION CONTROL EQUIPMENT CONTAINS AN AUTOMATIC IRRIGATION CONTROLLER WITH PROGRAM FLEXIBILITY.UNLESS MECHANICAL, THE AUTOMATIC IRRIGATION CONTROLLER CONTAINS A BATTERY BACK UP TO RETAIN IRRIGATION PROGRAMS.
- 9. EACH LOT TO PROVIDE AN OPERABLE RAIN SENSOR DEVICE EXPOSED TO UNOBSTRUCTED RAINFALL

Engineering Business Certificate Florida Certificate of Author		
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JAMES C. REGISTERED LANDS REGISTRATION NU	CAPE ARCH	
PROJECT No.	1	94-01-0
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## PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER TYPE	HEIGHT	SPECIFICATION	DIVERSITY
•	8	Acer floridanum	Florida Maple	3" D.B.H.		10` Ht.	Florida No.1 or better	17%
	12	Lot Understory Tree	Lot Understory Tree	1" D.B.H.		6` Ht.	Florida No.1 or better	
	18	Magnolia grandiflora `D.D. Blanchard`	D.D. Blanchard Southern Magnolia	3" D.B.H.		10` Ht.	Full to Ground, Florida No. 1 or bette	er 39%
	9	Quercus virginiana	Southern Live Oak	3" D.B.H.		10` Ht.	Florida No. 1 or better	20%
	11	Ulmus americana floridana	Florida Elm	3" D.B.H.		10` Ht.	Florida No.1 or better	24%
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	HEIGHT		SPACING
$\bigcirc$	48	Myrcianthes fragrans	Simpson's Stopper	3 gal.	Pot	36" Ht. Min		36" o.c.

## WINDHORST COMMONS BLANKET LAL CHART - LOTS WITHOUT TREES

Lot#	Lot SF	Required Lot Tree	Provided Lot Tree	Lot Street Frontage	Required Street Tree	Provided Street Tree
1	3,555	1	1	46	1	1
2	3,863	1	1	50	1	1
3	3,861	1	1	50	1	1
4	3,651	1	1	40	1	1
5	3,657	1	1	40	1	1
6	3,637	1	1	41	1	1
7	3,522	1	1	42	1	1
8	4,326	1	1	55	1	1
9	4,761	1	1	42	1	1
10	3,531	1	1	41	1	1
11	3,480	1	1	40	1	1
12	3,480	1	1	40	1	1
13	3,480	1	1	40	1	1
14	3,480	1	1	40	1	1
15	3,480	1	1	40	1	1
16	3,480	1	1	40	1	1
17	3,480	1	1	40	1	1
18	3,480	1	1	40	1	1
19	3,480	1	1	40	1	1
20	3,480	1	1	40	1	1
21	3,480	1	1	40	1	1
22	3,480	1	1	40	1	1
23	3,480	1	1	40	1	1
Total		23	23		23	23
<b>Grand Total</b>						46

# LVJUP 505 E. Jackson Street Suite 200 Tampa, Florida 336O2 Office: 813-375-0616 WWW.LEVELUPFLORIDA.COM

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Consulting, llc

HABITAT FOR HUMANITY CLIENT:

Engineering Business Certificate of Authorization No. 3277

Florida Certificate of Authorization No. LC26000638  $-\star-$ STATE

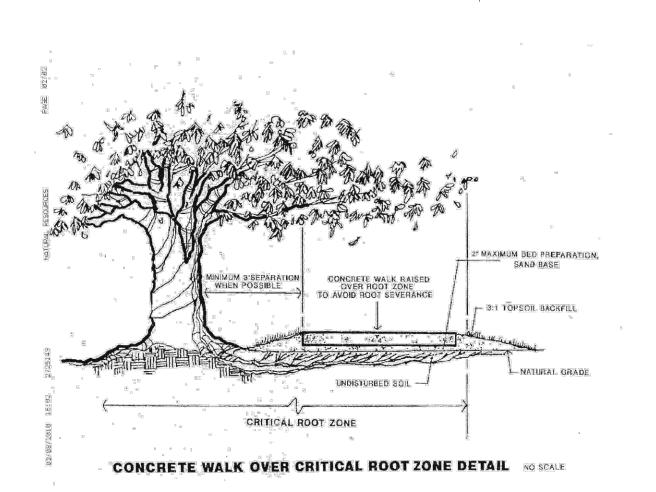
**JAMES C. EISELE** REGISTERED LANDSCAPE ARCHITECT REGISTRATION NUMBER 6667529

194-01-02

PROJECT No.

MISCELLANEOUS

	EEI II IE C C C		
QUANTITY	BOTANICAL NAME	COMMON NAME	SPECIFICATION
TBD	IRRIGATION		100% HEAD TO HEAD IN TURF AREAS, MICRO DRIP EMITTERS FOR ALL PLANTINGS
TBD	BAHIA SOD	BAHIA SOD	TO BE FIELD VERIFIED BY CONTRACTOR. (AREA IS FOR COMMON SPACE ONLY)
TBD	ST. AUGUSTINE SOD	ST. AUGUSTINE SOD	TO BE FIELD VERIFIED BY CONTRACTOR. (AREA IS FOR COMMON SPACE ONLY)
TBD	MULCH	PINE STRAW MULCH	MIN. 3" THICK



## TREE PLANTING NOTES:

GROUPED PLANT SYMBOLS SHOWN ARE REPRESENTATIVE OF GENERAL

TREE AND SHRUB REQUIREMENTS. ALL SUBSTITUTIONS MADE TO

FOLLOW LOCAL COUNTY CODE.

1. ALL TREES SHALL BE GUARANTEED FOR TWO YEARS FROM DATE OF COUNTY ACCEPTANCE

2. EACH TREE SHALL RECEIVE SIX "AGRIFORM" 21 GRAM TABLETS PER MANUFACTURER'S DIRECTIONS.

- 3. FLEXIBILITY SHALL BE GIVEN TO THE PLACEMENT OF STREET TREES TO ACCOMMODATE IMPROVEMENTS SUCH AS DRIVEWAYS, UTILITIES, LIGHTING, ETC
- 4. STREET TREE SHALL HAVE A MINIMUM CLEARANCE OF 15' FROM STREET LIGHTS, SHALL NOT BE INSTALLED WITHIN 10 FT. OF ANY ABOVE GROUND UTILITY OR WITHIN 30 FT. OF THE FACE OF A STOP SIGN
- 5. STREET TREE PLANTINGS IN "COMMON TRACTS" TO BE INSTALLED PRIOR TO AS-BUILT INSPECTION
- 6. TREE PLANTING SHALL INCLUDE ROOT BARRIER PROTECTION TO PREVENT ROOT GROWTH INTO UTILITIES, DRAINAGE, SIDEWALKS AND OTHER PAVED AREAS.
- APPLY A 3" LAYER OF MULCH LAYER TO ALL PROPOSED TREE, SHRUB, GROUND COVER AND VINE PLANTINGS
- 8. ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) A-300 PRUNING STANDARDS.

## **GENERAL NOTES:**

- NO REFERENCE TO ENGINEERING SHOULD BE MADE FROM THIS SHEET. FOR LANDSCAPE REFERENCE ONLY.
- ANY DEVIATION FROM PLANT QUANTITY, SIZE OR GRADE MAY JEOPARDIZE THE CERTIFICATE OF OCCUPANCY.
- THE HEALTHY, NEAT, AND ORDERLY APPEARANCE OF ALL REQUIRED LANDSCAPING MATERIALS IS THE CONTINUAL RESPONSIBILITY OF THE PROPERTY OWNER.
- 4. SLOPES 4:1 OR GREATER SHALL REQUIRE SODDING FOR STABILIZATION. 5. CONTRACTOR SHALL VERIFY ALL FINAL TREE LOCATIONS IN REGARD TO

PROVIDED, AS NECESSARY, TO MINIMIZE EROSION AND DOWNSTREAM

SEDIMENTATION CAUSED BY SURFACE WATER RUN-OFF ON EXPOSED LAND

- CONFLICTS SUCH AS UTILITIES, DRAINAGE, ETC. IN ORDER TO COMPLY WITH SECTION 4.01.05.A OF THE HILLSBOROUGH COUNTY LAND DEVELOPMENT CODE TO MINIMIZE SOIL EROSION PROPOSED LAND ALTERATION ACTIVITIES SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION AND ALTER EXISTING TOPOGRAPHY. ADEQUATE PROTECTION MEASURES (IE. HAY BALES, BAFFLES, SODDING AND SANDBAGGING) SAHLL BE
- ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATIVE MATERIAL THAT WILL, WITHIN A REASONABLE TIME FRAME, DETER SOIL DISTURBANCE. SODDING, PLUGGING, SPRIGGING OR SEEDING IS ACCEPTABLE FOR STABILIZATION; HOWEVER, SODDING MAY BE REQUIRED IN AREAS OF EROSION-PRONE SOILS OR WHERE SLOPES ARE GREATER THAN 5:1. VEGETATION
- OTHER THAN GRASS IS ACCEPTABLE UNLESS OTHERWISE SPECIFIED. FOR COMMERCIAL SITE DEVELOPMENT PROJECTS, NO MORE THAN 50% OF THE LANDSCAPED AREA MAY BE PLANTED WITH SHALLOW-ROOTED (I.E., ST. AUGUSTINE) TURF GRASS VARIETIES. THESE TURF GRASS VARIETIES SHALL BE CONSOLIDATED IN AND LIMITED TO AREAS THAT ARE PROVIDED WITH CENTRAL AUTOMATIC IRRIGATION SYSTEMS.

## GENERAL LANDSCAPE NOTES:

- ALL PLANT MATERIAL TO BE FLORIDA GRADE # 1 OR BETTER, AS DEFINED IN "GRADES AND STANDARDS FOR NURSERY PLANTS", STATE OF FLORIDA DEPT. OF
- . ALL SIZES SHOWN FOR PLANT MATERIAL ON THE PLAN ARE TO BE CONSIDERED MINIMUM. ALL PLANT MATERIAL MUST MEET OR EXCEED THESE MINIMUM REQUIREMENTS FOR BOTH HEIGHT AND SPREAD. ANY OTHER REQUIREMENTS FOR SPECIFIC SHAPE OR EFFECT AS NOTED ON THE PLAN SHALL ALSO BE REQUIRED FOR ACCEPTANCE. ALL TREES TO BE SINGLE TRUNKED, UNLESS OTHERWISE
- NOTED ON PLANS. MINIMUM THREE-INCH (3") THICK LAYER OF MULCH SHALL BE PLACED AROUND ALL NEW PLANT MATERIAL AND BARE GROUND THAT WILL NOT BE COVERED BY EXISTING VEGETATION, SOD, GRAVEL, PAVEMENT OR ANY OTHER GROUND COVER

4. ALL TREES TO BE HEALTHY, FULL SPECIMEN TYPES. ALL PALMS TO BE SUN

- 5. ALL PLANTING BED AREAS TO HAVE 6" OF DARK, FRIABLE TOP SOIL OR BED MIXED
- CHURNED INTO EXISTING SOIL.. 6. NEW PLANT MATERIAL TO BE INSTALLED WILL BE FIELD ADJUSTED TO ACCOMMODATE EXISTING PLANT MATERIAL SUCH AS OVERHEAD CANOPY TREES, UNDERSTORY TREES AND SHRUBS OR GROUND COVER. THIS WILL INSURE
- EXISTING PLANT MATERIAL TO REMAIN IN ITS NATURAL STATE. THEREFORE, NO EXISTING PLANT MATERIAL WILL BE ALTERED BY REMOVING, CUTTING TRIMMING OR DESTROYING IN ORDER TO INSTALL NEW PLANT MATERIAL. 7. ALL TREE STAKING TO BE DONE USING ARBOR TAPE AND THE DUCKBILL ANCHOR
- 8. ALL LANDSCAPED AREAS TO BE IRRIGATED WITH A FULLY AUTOMATED IRRIGATION
- 9. ALL TREES SHALL BE LOCATED AT LEAST SIX FEET AWAY FROM THE FLOWLINE OF PERIMETER PROPERTY SWALES AND PROPOSED STORMWATER INLETS.