

BARBEE CHAPEL APARTMENTS

5101 BARBEE CHAPEL RD
CHAPEL HILL, NC 27517

CONDITIONAL ZONING PERMIT DRAWINGS

PROJECT NUMBER: TLA-22001

DATE: SEPTEMBER 29, 2022

REVISED: FEBRUARY 21, 2023

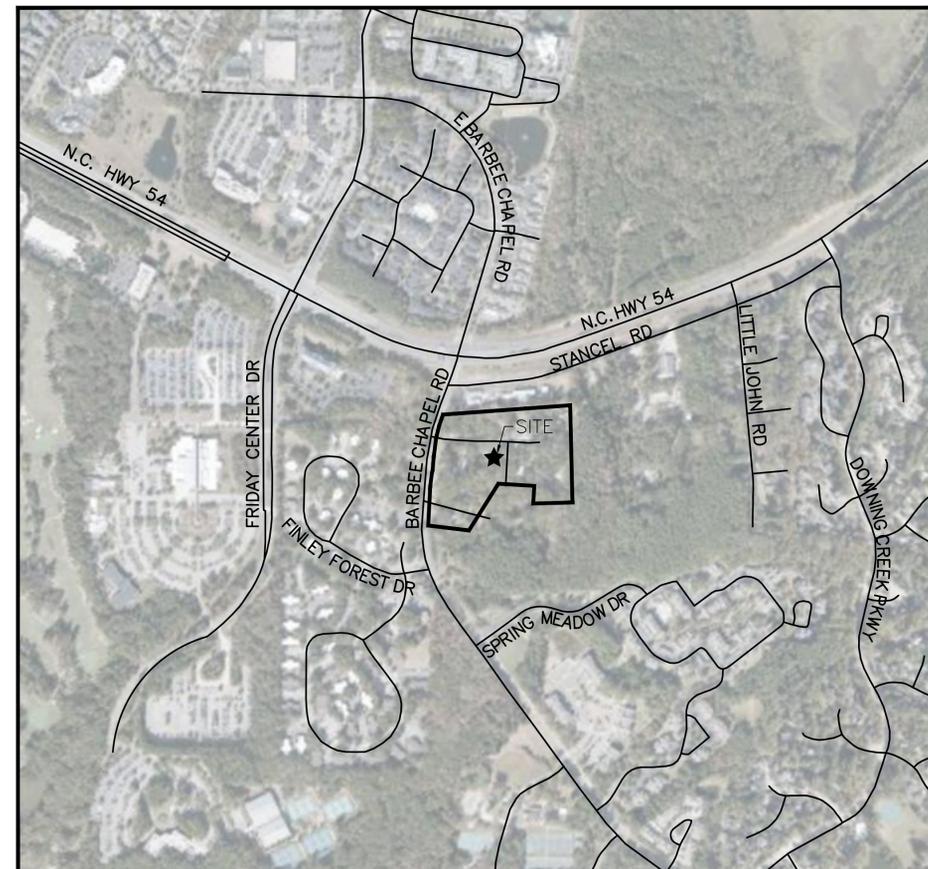
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SITE DATA	
PIN	9798-04-72-8235, 9798-04-72-7580, 9798-04-72-9483, 9798-04-72-9596, 9798-04-82-2404, 9798-04-82-2505, 9798-04-82-3481, 9798-04-82-1515, 9798-04-72-9722, 9798-04-82-4628
SITE AREA	455,841 SF / 10.46 AC
GROSS LAND AREA	455,841 SF + 10%(455,841 SF) = 501,425 SF / 11.51 AC
ZONING	EXISTING R-2 PROPOSED R-6
RIVER BASIN	CAPE FEAR
WATERSHED	JORDAN LAKE - UPPER NEW HOPE
WATERSHED PROTECTION	JORDAN LAKE WATERSHED, F/J-B
EXISTING USE	SINGLE FAMILY
PROPOSED USE	MULTI-FAMILY
UNITS	PROPOSED 326 MULTI-FAMILY UNITS 24 TOWNHOME UNITS 350 TOTAL UNITS
DENSITY	PROPOSED 31 UNITS/ACRE
IMPERVIOUS	EXISTING 1.69 AC (14.7% OF GLA) MAX ALLOWED 8.06 AC (70.0% OF GLA)
BUILDING HEIGHT	ALLOWED 39' PROPOSED 60'
RECREATION SPACE	REQUIRED 0.05 * 501,425 SF = 25,071 SF PROPOSED 25,071 SF
VEHICULAR PARKING	REQUIRED STUDIO MIN 1 PER UNIT, MAX 1.25 PER UNIT 1-BED MIN 1 PER UNIT, MAX 1.25 PER UNIT 2-BED MIN 1.4 PER UNIT, MAX 1.75 PER UNIT 3-BED MIN 1.75 PER UNIT, MAX 2.25 PER UNIT PROPOSED PER LUMO
EV PARKING	PROPOSED > 5% OF PROPOSED PARKING
BIKE PARKING	REQUIRED 1 PER 4 UNITS PROPOSED PER LUMO
SETBACKS	REQUIRED STREET = 20' INTERIOR = 10' SOLAR = 8' PROPOSED STREET = 20' INTERIOR = 8' SOLAR = 6'
BUFFERS	REQUIRED NORTH: 20' TYPE C EAST/SOUTH: 10' TYPE B WEST: 20' TYPE C PROPOSED NORTH: 6' MODIFIED EAST: 8-10' MODIFIED SOUTH: 4-10' MODIFIED WEST: 10-15' MODIFIED
DISTURBED AREA	480,000 SF (11.0 AC)



VICINITY MAP

1" = 500'



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REVISIONS

NO.	DATE	REVISION
1	11.23.2022	REVISED PER 1ST CZP COMMENTS
2	02.21.2023	REVISED PER 2ND CZP COMMENTS
3		
4		
5		
6		

CONDITIONAL ZONING PERMIT DRAWINGS FOR:

BARBEE CHAPEL APARTMENTS
5101 BARBEE CHAPEL RD
CHAPEL HILL, NC 27517
PROJECT NUMBER: TLA-22001

ORANGE COUNTY SOLID WASTE STANDARD PLAN NOTES (CONSTRUCTION WASTE):

- 1. ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER SHALL BE ASSESSED PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT TO ENSURE COMPLIANCE WITH THE COUNTY'S REGULATED RECYCLABLE MATERIALS ORDINANCE (RMO) AND TO ASSESS THE POTENTIAL FOR DECONSTRUCTION AND/OR THE REUSE OF SALVAGEABLE MATERIALS. CONTACT THE ORANGE COUNTY SW ENFORCEMENT OFFICER AT 919-968-2788 TO ARRANGE FOR THE ASSESSMENT.
- 2. PURSUANT TO THE COUNTY'S RMO, CLEAN WOOD WASTE, SCRAP METAL, AND CORRUGATED CARDBOARD PRESENT IN CONSTRUCTION OR DEMOLITION WASTE MUST BE RECYCLED.
- 3. PURSUANT TO THE COUNTY'S RMO, ALL HALLERS OF MIXED CONSTRUCTION AND DEMOLITION WASTE WHICH INCLUDES ANY REGULATED RECYCLABLE MATERIALS SHALL BE LICENSED BY ORANGE COUNTY.
- 4. PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE, THE APPLICANT SHALL HOLD A PRE-DEMOLITION/PRE-CONSTRUCTION CONFERENCE WITH SOLID WASTE STAFF. THIS MAY BE THE SAME PRE-CONSTRUCTION MEETING HELD WITH OTHER DEVELOPMENT/ENFORCEMENT OFFICIALS.
- 5. THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS ("ACM") AND/OR OTHER HAZARDOUS MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH ANY AND ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES.

LANDSCAPE PROTECTION NOTES:

- 1. PLAN SHOWS RARE AND SPECIMEN TREES IN ACCORDANCE WITH THE ORDINANCE THAT WAS IN EFFECT AT THE TIME OF APPROVAL.
- 2. LANDSCAPING SHALL BE COORDINATED TO PRESERVE EXISTING TREES AS MUCH AS POSSIBLE. CONFLICTS BETWEEN PROPOSED PLANTINGS AND EXISTING TREES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR REMEDIATION.
- 3. ALL IRRIGATION SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC CONTROLLERS THAT ACTIVATE THE SYSTEM ACCORDING TO A DESIRED FREQUENCY AND DURATION, AND SHALL ALSO BE EQUIPPED WITH RAIN OR SOIL MOISTURE SENSORS THAT WILL PREVENT IRRIGATION DURING PERIODS OF RAINFALL OR WHEN THERE IS SUFFICIENT MOISTURE IN THE GROUND FOR PLANT HEALTH AND SURVIVAL IN ACCORDANCE WITH THE LOCAL GOVERNMENT WATER CONSERVATION ORDINANCES.

PAVEMENT MARKING/SIGNAGE NOTES:

- 1. ALL SIGNAGE SHALL BE COORDINATED WITH THE TOWN OF CHAPEL HILL.
- 2. ALL SIGNAGE SHALL MEET MUTCD STANDARDS AND SPECIFICATIONS.
- 3. ALL SIGNAGE SHALL MEET NCDOT PEDESTRIAN SAFETY SPECIFICATIONS.
- 4. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) AND/OR TOWN OF CHAPEL HILL STANDARDS AND SPECIFICATIONS.
- 5. ALL SIGNS SHALL BE PRISMATIC AND ADHERE TO THE MINIMAL RETROREFLECTIVITY STANDARDS FOUND IN THE LATEST VERSION OF THE MUTCD.
- 6. ALL PAVEMENT MARKINGS ON PUBLIC STREETS SHALL BE THERMOPLASTIC AND ARE TO BE PLACED PER NCDOT STANDARDS (REFERENCE 2012 NCDOT DETAILS (1205.01-1205.12))
- 7. SIGN DESIGNS FOR STREET NAME SIGNS SHALL BE APPROVED BY TRANSPORTATION/ENGINEERING DEPARTMENT STAFF TO ENSURE COMPLIANCE WITH MUTCD SPECIFICATIONS. DESIGNS MUST BE APPROVED BY TOWN STAFF PRIOR TO ACCEPTANCE OF STREETS OR ISSUANCE OF 1ST CO.
- 8. ALL STREET NAME SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD INCLUDING MIXED CASE LETTERING, PROPOPER LETTER HEIGHTS, AND RETROREFLECTIVITY.

CONSTRUCTION MANAGEMENT NOTES:

- 1. ALL LARGE TRUCKS AS RELATED TO VEHICULAR CONSTRUCTION TRAFFIC SHALL ENTER/LEAVE THE SITE THROUGH THE TEMPORARY CONSTRUCTION ENTRANCES & EXITS AS SHOWN ON THIS PLAN. LANE CLOSURES SHALL BE ESTABLISHED AS SHOWN ON THIS PLAN AND CONSTRUCTION PERSONNEL SHALL BE IN ATTENDANCE TO MANAGE AND DIRECT VEHICULAR AND PEDESTRIAN TRAFFIC.
- 2. ENTRANCE AND EXIT GATES SHALL BE CLOSED UNLESS CONSTRUCTION OR DELIVERY VEHICLES ARE ENTERING OR EXITING THE CONSTRUCTION SITE.
- 3. THE CONTRACTOR SHALL PROVIDE WORK ZONE TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH ALL APPLICABLE NCDOT STANDARDS. REFER TO THE TRAFFIC AND PEDESTRIAN CONTROL PLAN FOR SPECIFIC NOTES AND DETAILS.
- 4. NO OPEN BURNING SHALL BE PERMITTED.
- 5. THE APPLICANT SHALL POST A CONSTRUCTION SIGN ON THE DEVELOPMENT SITE THAT LISTS THE FOLLOWING:
 - PROPERTY OWNER'S REPRESENTATIVE & TELEPHONE NUMBER
 - CONTRACTOR'S REPRESENTATIVE & TELEPHONE NUMBER
 - TELEPHONE NUMBER FOR REGULATORY INFO AT TIME OF BUILDING PERMIT
 - SIGN MAY BE A MAXIMUM OF 32 SF AND A MAXIMUM HEIGHT OF 8 FT.
- 6. FENCING AROUND PROJECT SHALL INCLUDE ACCESS GATES WITH A 20-FOOT SWING OR SLIDE MOTION.
- 7. CONSTRUCTION FENCE SHALL BE MODIFIED AS REQUIRED DURING CONSTRUCTION PHASING FOR PEDESTRIAN CIRCULATION.
- 8. PRIOR TO ANY TRAFFIC LANE AND/OR SIDEWALK CLOSURES, THE APPLICANT SHALL CONTACT THE CHAPEL HILL TRAFFIC ENGINEERING OFFICE (919-969-5096 OR 919-969-5100) AT LEAST 5 WORKING DAYS BEFORE THE PROPOSED WORK TO APPLY FOR A LANE CLOSURE PERMIT.
- 9. ROAD CLOSURES ON PUBLIC STREETS MUST BE COORDINATED WITH AND APPROVED BY THE TOWN OF CHAPEL HILL.
- 10. TEMPORARY STREET ROAD SIGNS ARE REQUIRED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADS ALLOWS FOR THE PASSAGE OF VEHICLES. SIGNS SHALL BE OF APPROVED SIZE, WEATHER RESISTANT AND BE MAINTAINED UNTIL REPLACED BY PERMANENT SIGNS.
- 11. CONTRACTOR TO PROVIDE DEDICATED ONSITE PARKING SPACES FOR INSPECTORS AT EACH BUILDING AND NEAR THE JOB TRAILER FOR THE DURATION OF CONSTRUCTION
- 12. ROADS WITH CURB AND GUTTER AND THE FIRST LIFT OF ASPHALT WILL NEED TO BE CONSTRUCTED BEFORE COMBUSTIBLES ARE ON SITE IN ORDER TO MEET REQUIREMENTS FROM FIRE CODE, STORMWATER, AND OWASA. HYDRANTS SHALL BE ACTIVE IN THE AREAS FOR CONSTRUCTION.

GENERAL NOTES:

- 1. CONTRACTOR TO NOTIFY SURROUNDING PROPERTIES 7 DAYS PRIOR TO STARTING CONSTRUCTION.
- 2. CONTRACTOR TO PROVIDE NOTICE TO THE TOWN OF CHAPEL HILL REGARDING SPECIFIC DATES FOR ANY NECESSARY ROAD CLOSURES AND LANE REDUCTIONS.
- 3. GENERAL CONTRACTOR TO COORDINATE WITH SPECIFIC PROPERTIES AFFECTED BY THE PROPOSED ROAD CLOSURES IF REQUIRED TO ENSURE CONTINUOUS ACCESS TO THE AFFECTED PROPERTIES.
- 4. ALL SHOWN PARKING SPACE MARKINGS SHALL BE PER THE TOWN OF CHAPEL HILL CODE FOR PARKING LOTS.
- 5. MINIMUM CORNER CLEARANCES FROM THE CURBLINE OF INTERSECTING STREETS SHALL BE AT LEAST 20' FROM THE POINT OF TANGENCY. NO DRIVEWAYS OR PARKING SPACES SHALL ENCRACH ON THIS MINIMUM CORNER CLEARANCE.
- 6. WITHIN THE SIGHT DISTANCE TRIANGLES SHOWN, NO OBSTRUCTION BETWEEN 2' AND 8' IN HEIGHT ABOVE THE CURB LINE ELEVATION SHALL BE LOCATED IN WHOLE OR IN PART. OBSTRUCTIONS INCLUDE BUT ARE NOT LIMITED TO ANY BERM, FOLIAGE, FENCE, WALL, SIGN, OR PARKED VEHICLE.
- 7. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST TOWN OF CHAPEL HILL, NCDOT AND OWASA STANDARDS AND SPECIFICATIONS.
- 8. ALL DIMENSIONS SHOWN ON SITE PLAN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 9. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER, PROVIDED BY CONTRACTOR RESPONSIBLE FOR EXCAVATION.
- 10. EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING OR INSTALLATION. THE CONTRACTOR SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO THE SUBSTITUTION OF ALTERNATE EQUIPMENT.
- 11. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
- 12. CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE UTILITY COMPANIES FOR ANY REQUIRED RELOCATION (I.E. POWER POLES, TELEPHONE PEDESTALS, WATER METERS, ETC.).
- 13. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL SCHEDULE AND HOLD A PRE-CONSTRUCTION CONFERENCE WITH THE TOWN OF CHAPEL HILL ENGINEERING DEPARTMENT, ORANGE COUNTY SOIL AND EROSION DEPARTMENT, ENGINEER, AND OWNER/REPRESENTATIVE.
- 14. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- 15. ALL STREET NAME SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD INCLUDING MIXED CASE LETTERING, PROPER LETTER HEIGHTS, AND RETROREFLECTIVITY.
- 16. ALL ASPHALT EDGES SHALL BE SAW CUT TO PROVIDE A GOOD LONGITUDINAL JOINT. MILL 1.5 FEET AT 1.5 INCHES DEEP MINIMUM TO PROVIDE A LONGITUDINAL LAP JOINT FOR FINAL SURFACE LAYER. NO MILLING SHALL BE LET FOR A PERIOD OF TIME GREATER THAN 48 HOURS BEFORE A STREET IS TO BE REPAVED/RESURFACED.
- 17. SEPARATE BUILDING PERMITS ARE REQUIRED FOR RETAINING WALLS, DUMPSTER ENCLOSURES, MONUMENTS, SIGNS, OR OTHER ACCESSORY STRUCTURES OR ELEMENTS.
- 18. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.
- 19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR RELOCATION OF ALL EXISTING UTILITIES IN COORDINATION WITH THE APPROPRIATE UTILITY, AGENCY, OR COMPANY.
- 20. EXISTING CONTOURS ARE BASED ON SURVEY COMPLETED BY SUMMIT. EXISTING UTILITIES SHOWN ARE BASED ON SURVEY AND THE BEST AVAILABLE RECORDS. THE CONTRACTOR, HOWEVER, SHALL VERIFY CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE PLANS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. FOR NECESSARY PLAN OR GRADE CHANGES, NO EXTRA COMPENSATION SHALL BE PAID TO CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- 21. EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED/RESTORED TO THEIR ORIGINAL CONDITION OR TO THE SATISFACTION OF THE OWNER BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
- 22. MECHANICAL EQUIPMENT MUST BE PLACED AT OR ABOVE THE BASE FLOOD ELEVATION PLUS 2 FEET.
- 23. A ZONE FOR FIRE DEPARTMENT LADDERS AND FIREFIGHTING OPERATIONS MUST BE PROVIDED, REQUIRING ALL LINES TO BE BURIED SURROUNDING STRUCTURES.
- 24. IF APPLICABLE, BACK WASH WATER FROM THE POOL SHALL DISCHARGE INTO THE SANITARY SEWER SYSTEM, NOT STORM SEWER, AND SHALL NOT EXCEED 50 GALLONS PER MINUTE.
- 25. CONTRACTOR TO CONTACT THE CHAPEL HILL STORMWATER MANAGEMENT DIVISION AT 919-969-7246 TO SCHEDULE SITE INSPECTION AT LEAST TEN (10) DAYS IN ADVANCE OF REQUESTING THE CERTIFICATE OF OCCUPANCY.
- 26. IMPROVEMENTS, STRUCTURES, FIXTURES, SIGNS, TABLES, CHAIRS, PLANTERS, OR ANY OTHER OBJECT SHALL NOT BE PLACED IN SIDEWALK AREAS FOR ANY PERIOD OF TIME.
- 27. HVAC CONDENSATE AND FLOOR DRAINS FROM THE ROOFED PARKING AREA SHALL NOT BE CONNECTED TO THE STORM SEWER SYSTEM. NO ELEVATOR SUMP PUMP DISCHARGE MAY ENTER THE STORM SEWER SYSTEM.
- 28. ANY ROOF DRAINS OR OTHER PLUMBING INTENDED TO DISCHARGE TO THE STORM SEWER SYSTEM NOT SHOWN ON THE APPROVED PLANS ARE NOT APPROVED. ANY DISCHARGE DIRECTED TO THE STORM SEWER SYSTEM THAT IS NOT APPROVED WILL NEED TO APPROVAL FROM THE TOWN OF CHAPEL HILL STORMWATER MANAGEMENT DIVISION.
- 29. THE NORTH CAROLINA DEPARTMENT OF INSURANCE SHALL REVIEW AND APPROVE ANY PROJECTS LISTED IN TABLE 104.1 OF THE NORTH CAROLINA ADMINISTRATION AND POLICIES CODE BEFORE THE TOWN OF CHAPEL HILL WILL BEGIN ITS BUILDING PERMIT REVIEW.
- 30. A SINGLE ELECTRICAL SERVICE SHALL BE PROVIDED TO SERVE THE STRUCTURE WITH THE EXCEPTION OF THE FIRE PUMP, IN ACCORDANCE WITH ARTICLE 230.2(A) OF THE 2017 NORTH CAROLINA ELECTRICAL CODE.
- 31. CURB AND GUTTER AND AT LEAST THE FIRST LIFT OF ASPHALT FOR THE ROADS MUST BE PLACED PRIOR TO THE START OF CONSTRUCTION.
- 32. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE APPLICANT SHALL PROVIDE THE MINIMUM REQUIRED HANDICAPPED PARKING SPACES AND DESIGN ALL HANDICAPPED PARKING SPACES, RAMPS, CROSSWALKS, AND ASSOCIATED INFRASTRUCTURE ACCORDING TO THE AMERICANS WITH DISABILITIES ACT STANDARDS, NORTH CAROLINA BUILDING CODE, AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) CODE, AND TOWN STANDARD.
 - A. THE NUMBER OF PARKING SPACES SHALL COMPLY WITH NCBC 2018 SECTION 1106.1.1 PER 6 COMPLIANT SPACES OR PORTION THEREOF MUST BE VAN ACCESSIBLE. NO SLOPE SHALL EXCEED 2% IN ANY DIRECTION. SIGNAGE SHALL BE PLACES IN ACCORDANCE WITH NCBC 2018 REQUIREMENTS, MUTCD AND ACC A 117.1.
 - B. CURB CUTS AND ACCESSIBLE ROUTES PER ICC A117.1 2009 EDITION. CROSS SLOPE LIMITED TO 2%. CALL TOWN OF CHAPEL HILL BUILDING INSPECTIONS OFFICE FOR INSPECTION PRIOR TO PLACEMENT OF CONCRETE.
 - C. SLOPES GREATER THAN 5% REQUIRES CONSTRUCTION AS A RAMP.
- 33. FINAL LOCATION OF GAS LINE INSTALLED BY DOMINION ENERGY TO BE VERIFIED IN FIELD PRIOR TO THE INSTALLATION OF ANY FINISHINGS REQUIRING GAS CONNECTIONS, INCLUDING BUT NOT LIMITED TO FIRE PITS, FIRE TABLES AND OUTDOOR GRILLING STATIONS. CONTRACTOR SHALL COORDINATE WITH DOMINION ENERGY, LANDSCAPE ARCHITECT, ARCHITECT AND OWNER FOR CONNECTIONS TO GAS LINE. CONNECTIONS TO BE PROVIDED BY A LICENSED GAS FITTER/TECHNICIAN AND SHALL CONFIRM TO ALL LOCAL AND STATE REGULATIONS.

GRADING & STORM DRAINAGE NOTES:

- 1. CONTRACTOR SHALL NOTIFY NC 811 (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR TO CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF NC 811. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- 2. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION CONFERENCE WITH THE ORANGE COUNTY SOIL AND EROSION CONTROL OFFICER, TOWN OF CHAPEL HILL STORM WATER MANAGEMENT DIVISION, AND OWNER'S REP/ENGINEER.
- 3. CONTRACTOR TO CONTACT JAMES HUGGINS WITH THE TOWN OF CHAPEL HILL AT 919-969-5088 TO POST EROSION CONTROL BOND, ALONGS WITH A PERFORMANCE GUARANTEE PER, PRIOR TO ANY LAND DISTURBANCE.
- 4. GRADING AND CONTOURS ARE BASED ON NORTH AMERICAN VERTICAL DATUM 88 (NAV88).
- 5. SOIL UNDER BUILDINGS AND PAVED AREAS SHALL BE APPROVED, PLACED AND COMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER AND SHOULD MEET OR EXCEED TOWN OF CHAPEL HILL STANDARDS.
- 6. GRADING IN AREAS DESIGNATED AS "ACCESSIBLE" SHALL COMPLY WITH ALL FEDERAL AND LOCAL ACCESSIBILITY RULES AND GUIDELINES. EVEN THOUGH PLANS MAY NOT SHOW ALL SPOT ELEVATIONS IN THESE REGIONS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE AREAS ARE GRADED TO AMERICAN DISABILITY ACT (ADA) COMPLIANT SPECIFICATIONS.
- 7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY AREAS WHERE SPILL CURB IS NECESSARY TO CONVEY RUNOFF TO THE NEAREST CATCH BASIN OR DROP INLET. THE OWNER AND/OR ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR CURBING INSTALLED PRIOR TO PAVING THAT DOES NOT DRAIN PROPERLY.
- 8. ALL PROPOSED INLETS, CATCH BASINS, AND DROP INLETS SHALL BE PROTECTED BY EROSION CONTROL MEASURES AS SHOWN AND SPECIFIED ON THE EROSION CONTROL PLAN
- 9. THE CURB INLETS AND YARD INLETS SHALL BE CONSTRUCTED IN THE LOCATIONS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR REPORTING ANY DISCREPANCIES IN THE CATCH BASIN ELEVATIONS OR THE PROPOSED PIPE SLOPES TO THE ENGINEER. THE CONTRACTOR IS ALSO RESPONSIBLE TO REPORT ANY CONFLICTS BETWEEN ANY UTILITY, STORM DRAIN LINE, WATER LINE, SEWER LINE OR ANY OTHER PROPOSED OR EXISTING STRUCTURE TO THE ENGINEER.
- 10. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS. THE CONTRACTOR SHALL FIELD VERIFY GRADES SURROUNDING ALL BUILDINGS PRIOR TO GRADING ACTIVITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- 11. PIPE SPECIFIED AS RCP MAY BE SUBSTITUTED IF APPROVED BY THE TOWN OF CHAPEL HILL WITH APPROVED MATERIALS PER THE TOWN OF CHAPEL HILL STANDARDS AND SPECIFICATIONS OUTSIDE OF PUBLIC RIGHT OF WAY AND EASEMENTS. ALL BEDDING FOR ALTERNATE MATERIALS SHALL CONFORM TO NCDOT, AASHTO AND ASTM SPECIFICATIONS.
- 12. THE MINIMUM PIPE SIZE WITHIN A PUBLIC RIGHT-OF-WAY IS 15".
- 13. FOR ALL PIPE OUTLETS 60" AND GREATER (SINGLE) AND 36" (MULTIPLE) HEADWALLS/ENDWALLS SHALL BE USED AND A 4" HIGH BLACK POLY COATED CHAIN LINK FENCE PLACED OVER THE WALL.
- 14. FOR NPDES PERMIT COMPLIANCE: ALL SLOPES 3:1 AND STEEPER MUST BE STABILIZED WITHIN 7 DAYS, ALL OTHER AREAS MUST BE STABILIZED WITHIN 14 DAYS.
- 15. ALL STORM PIPE SPECIFIED AS REINFORCED CONCRETE (RCP) SHALL BE MINIMUM CLASS III PIPE.
- 16. ALL STORM PIPE SHALL BE LAID AT LEAST 10" HORIZONTALLY OR 18" VERTICALLY FROM ANY WATER MAIN AND 24" VERTICALLY FROM ANY SEWER MAIN. REFER TO NCAC 021 RULES FOR EXEMPTIONS.
- 17. GEOTEXTILE FABRIC OR APPROVED EQUIVALENT ARE REQUIRED AT ALL DISSIPATOR PADS.

FIRE DEPARTMENT NOTES:

- 1. SITE SHALL COMPLY WITH THE LATEST NATIONAL BUILDING AND FIRE CODES.
- 2. FUNCTIONAL FIRE PROTECTION SHALL BE PROVIDED PRIOR TO THE ARRIVAL OF COMBUSTIBLE MATERIALS ON THE SITE.
- 3. FIRE ACCESS ROUTE SHALL HAVE A MINIMUM RADIUS OF 28' (FACE OF CURB) TO ALLOW FIRE APPARATUS ACCESS THROUGH SITE. (IFC 503.2.4).
- 4. ANY GATES ACROSS FIRE APPARATUS ACCESS ROADS SHALL BE A MINIMUM WIDTH OF 20', BE OF SWINGING OR SLIDING TYPE AND HAVE AN EMERGENCY MEANS OF OPERATION. GATES IN FIRE TRUCK APPARATUS ACCESS ROUTES SHALL BE OPERABLE BY EITHER FORCIBLE ENTRY OR KEYS AND MUST BE CAPABLE OF BEING OPERATED MY ONE PERSON. ALL GATES IN FIRE TRUCK APPARATUS ACCESS ROUTES SHALL BE INSTALLED AND MAINTAINED ACCORDING TO UL375 AND ASTM F2200.
- 5. ALL PORTIONS OF THE FIRST FLOOR OF THE BUILDING MUST BE WITHIN 150' OF THE FIRE ACCESS ROUTE (IFC 503.1.1), UNLESS OTHERWISE APPROVED BY THE FIRE MARSHALL.
- 6. BUILDING ADDRESSES SHALL BE PLACED ON BOTH SIDES OF THE BUILDING ON A CLEARLY VISIBLE PLACARD FOR LOCATION PURPOSES.
- 7. ALL FIRE TRUCK ACCESSIBLE ROUTES SHALL BE RATED FOR 80,000 LB AND HAVE A MINIMUM CLEAR WIDTH OF 26' (IFC 503.2.1) UNLESS OTHERWISE APPROVED BY THE FIRE MARSHALL.
- 8. FIRE RISER ROOM SHALL BE EQUIPPED WITH AN EXTERNAL LOCK BOX.
- 9. RISER ROOM SHALL HAVE ADEQUATE DRAINAGE FOR EMERGENCY RPE DISCHARGE.
- 10. PRIVATE FIRE SERVICE MAINS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 24, NC FFC 507.2.1.
- 11. ALL CONSTRUCTION AND DEMOLITION CONDUCTED SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF 2018 NC FIRE CODE CHAPTER 33.
- 12. OPEN BURNING OF TREES, LIMBS, STUMPS, AND CONSTRUCTION DEBRIS ASSOCIATED WITH THIS DEVELOPMENT IS PROHIBITED.
- 13. DURING CONSTRUCTION, VEHICLE ACCESS FOR FIRE FIGHTING SHALL BE PROVIDED. TEMPORARY STREET SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION IMPEDS PASSAGE OF VEHICLES. SIGNS SHALL BE OF AN APPROVED SIZE, WEATHER RESISTANCE AND MAINTAINED UNTIL REPLACED BY PERMANENT SIGNS.
- 14. THE OWNER/DEVELOPER SHALL DESIGNATE ONE PERSON TO BE THE FIRE PREVENTION PROGRAM SUPERINTENDENT WHO SHALL BE RESPONSIBLE FOR ENFORCING CHAPTER 14 OF THE NCFPC AND THE ON-SITE FIRE PREVENTION PROGRAM AND ENSURE THAT IT IS CARRIED OUT THROUGH COMPLETION OF THE PROJECT.
- 15. A WORKING SPACE OF NOT LESS THAN 36" IN WIDTH AND DEPTH AND 78" IN HEIGHT SHALL BE PROVIDED ON ALL SIDES EXCEPT FOR WALL MOUNTED FDC'S UNLESS OTHERWISE APPROVED BY THE FIRE CODE OFFICIAL. THE FDC'S WHERE REQUIRED MUST BE PHYSICALLY PROTECTED BY AN APPROVES BARRIER FROM IMPACTS.
- 16. ANY REQUIRED FDC'S FOR ANY BUILDING SHALL MEET THE DESIGN AND INSTALLATION REQUIREMENTS FOR THE CURRENT, APPROVED EDITION OF NFPA 13, 13D, 13R, OR 14 OF THE NCFPC 2018 AND TOWN ORDINANCES, 7-38 FOR LOCATIONS. FDC'S SHALL BE INSTALLED ON THE STREET/ADDRESS SIDE OF THE BUILDING AND WITHIN 300' OF A HYDRANT OR UNLESS OTHERWISE APPROVED BY THE FIRE CODE OFFICIAL AND SHALL NOT BE OBSTRUCTED OR HINDERED BY PARKING OR LANDSCAPING.
- 17. WHERE A FIRE HYDRANT IS LOCATED ON A FIRE APPARATUS ACCESS ROAD, THE MINIMUM ROAD WIDTH SHALL BE 26 FEET (7925 mm), EXCLUSIVE OF SHOULDERS (SEE FIGURE D103.1).
- 18. FIRE APPARATUS ACCESS ROADS SHALL NOT BE OBSTRUCTED IN ANY MANNER, INCLUDING THE PARKING OF VEHICLES. THE MINIMUM WIDTHS AND CLEARANCES ESTABLISHED IN SECTIONS 503.2.1 AND 503.2.2 SHALL BE MAINTAINED AT ALL TIMES. 2018 NCFPC 503.4 (FIRE)
- 19. WHERE REQUIRED BY THE FIRE CODE OFFICIAL, APPROVED SIGNS OR OTHER APPROVED NOTICES OR MARKINGS THAT INCLUDE THE WORDS NO PARKING-FIRE LANE SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS TO IDENTIFY SUCH ROADS OR PROHIBIT THE OBSTRUCTION THEREOF. THE MEANS BY WHICH FIRE LANES ARE DESIGNATED SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION AT ALL TIMES AND BE REPLACED OR REPAIRED WHEN NECESSARY TO PROVIDE ADEQUATE VISIBILITY. 2018 NCFPC SECTION 503.3 AND APPENDIX D 103.6, D 103.6.1, D 103.6.2.
- 20. THE FIRE CODE OFFICIAL IS AUTHORIZED TO REQUIRE THE INSTALLATION AND MAINTENANCE OF GATES OR OTHER APPROVED BARRICADES ACROSS FIRE APPARATUS ACCESS ROADS, TRAILS, OR OTHER ACCESSWAYS, NOT INCLUDING PUBLIC STREETS, ALLEYS, OR HIGHWAYS. ELECTRIC GATE OPERATORS, WHERE PROVIDED, SHALL BE LISTED IN ACCORDANCE WITH UL 325. GATES INTENDED FOR AUTOMATIC OPERATION SHALL BE DESIGNED, CONSTRUCTED, AND INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ASTM F2200. 2018 NCFPC SECTION 503 AND APPENDIX D103.
- 21. THE GRADE OF THE FIRE APPARATUS ACCESS ROAD SHALL BE WITHIN THE LIMITS ESTABLISHED BY THE FIRE CODE OFFICIAL BASED ON THE FIRE DEPARTMENT'S APPARATUS 503.2.8 ANGLES OF APPROACH AND DEPARTURE. THE ANGLES OF APPROACH AND DEPARTURE FOR FIRE APPARATUS ACCESS ROADS SHALL BE WITHIN THE LIMITS ESTABLISHED BY THE FIRE CODE OFFICIAL BASED ON THE FIRE DEPARTMENT'S APPARATUS. D 103.2 GRADE. FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 10 PERCENT IN GRADE. EXCEPTION: GRADES STEEPER THAN 10 PERCENT AS APPROVED BY THE FIRE CHIEF. 2018 NCFPC SECTION 503 AND APPENDIX D.

ORANGE WATER AND SEWER AUTHORITY UTILITY NOTES:

- 1. STANDARDS AND SPECIFICATIONS - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH OWASA STANDARDS AND SPECIFICATIONS LATEST REVISED EDITION.
- 2. PRECONSTRUCTION CONFERENCE - A PRECONSTRUCTION CONFERENCE WITH THE OWASA CONSTRUCTION INSPECTOR IS REQUIRED BEFORE BEGINNING ANY UTILITY CONSTRUCTION.
- 3. PROJECT ACCEPTANCE - IN ADDITION TO A FINAL INSPECTION APPROVED BY THE OWASA CONSTRUCTION INSPECTOR, THE FOLLOWING DOCUMENTS MUST BE RECEIVED AND APPROVED BY OWASA BEFORE ACCEPTANCE OF THE PROJECT AND THE SETTING OF METERS:
 - ENGINEER'S CERTIFICATION OF PUBLIC SEWER - ORIGINAL DOCUMENT
 - ENGINEER'S CERTIFICATION OF PUBLIC WATER - ORIGINAL DOCUMENT
 - ASSET LETTER - ORIGINAL DOCUMENT
 - LETTER OF DEDICATION - ORIGINAL DOCUMENT
 - AS BUILT DRAWINGS (INCLUDING 1"=100' SCALE SITE PLAN) AS BUILTS OF SEWER CONSTRUCTION SUBJECT TO REVIEW AND APPROVAL BY NCDENR DIVISION OF WATER QUALITY.
 - MANHOLE DATA SHEETS
 - RECORDED PLAT
 - ORIGINAL RECORDED WATER AND SEWER DEEDS OF EASEMENT - PREPARED USING OWASA'S STANDARD FORM.
- 4. SEWER STATEMENT - SEWER LINES UNDER CONSTRUCTION SHALL BE PLUGGED WITH A MECHANICAL PLUG AT THE FIRST MANHOLE UPSTREAM FROM THE POINT OF CONNECTION. PLUG SHALL BE PLACED IN THE OUTLET CONNECTION AND SECURED WITH STEEL CABLE. PLUG SHALL REMAIN IN PLACE UNTIL ACCEPTANCE OF LINES BY OWASA. WATER, STONE, DIRT, OR ANY OTHER DEBRIS SHALL NOT BE ALLOWED TO ENTER THE OWASA SANITARY SEWER SYSTEM DURING FLUSHING OPERATIONS OR AT ANY OTHER TIME. CONSTRUCTION TAKING PLACE IN THE VICINITY OF ANY EXISTING OWASA SEWER LINES OR MANHOLES SHALL NOT CAUSE ANY INFLOW OF SURFACE WATER OR DEBRIS TO ENTER THE REMAIN ACCESSIBLE AT ALL TIMES. THE OWNER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES INCURRED TO THE OWASA SANITARY SEWER SYSTEM AND FINES IMPOSED BY THE STATE OF NORTH CAROLINA DIVISION OF WATER QUALITY DUE TO SEWER SPILLS OR OVERFLOWS.
- 5. SEWER SERVICES - SEWER SERVICES LOCATED WITHIN PUBLIC RIGHT-OF-WAY OR OWASA SEWER EASEMENTS MUST BE CONSTRUCTED OF DUCTILE IRON PIPE FROM THE TAP UP TO AND INCLUDING THE FIRST CLEAN-OUT. EXCEPT FOR DEAD END MANHOLES, ALL 4" INCH SEWER SERVICES MUST BE TAPPED INTO THE SEWER MAIN. ALL 6" SERVICES MUST BE CONNECTED TO A MANHOLE. CLEANOUTS SHALL BE SPACED NO MORE THAN 75 FEET APART. CLEANOUTS LOCATED IN PAVEMENT AREAS SHALL BE HEAVY DUTY TRAFFIC RATED CONSTRUCTION.
- 6. BLOCKING AND RODDING - RETAINER GLANDS TO BE USED ON ALL MECHANICAL JOINTS IN ADDITION TO RODDING AND BLOCKING.
- 7. EXISTING VALVES - CONTRACTOR RESPONSIBLE FOR VERIFYING THAT EXISTING VALVE AT THE POINT OF CONNECTION TO THE OWASA SYSTEM IS ADEQUATE FOR PERFORMING AND PASSING HYDROSTATIC PRESSURE AND LEAKAGE TEST. CONTRACTOR, AT HIS EXPENSE, MAY OPTIONALLY REPLACE VALVE OR INSTALL A NEW VALVE FOR THE PURPOSE OF PERFORMING A PRESSURE TEST FOR NEW MAIN INSTALLATION. IF CONTRACTOR ELECTS TO PRESSURE TEST AGAINST EXISTING VALVE, CONTRACTOR ACCEPTS RESPONSIBILITY FOR ENSURING PASSING PRESSURE TEST IN ACCORDANCE WITH OWASA REQUIREMENTS. IN ANY CASE, NO CLAIM WHATSOEVER SHALL BE MADE AGAINST OWASA FOR FAILURE OF PRESSURE TEST. EXISTING WATER VALVES SHALL BE OPERATED BY OWASA PERSONNEL ONLY. VALVES THAT SEPARATE PURITY APPROVED WATER AND UNAPPROVED WATER ARE TO REMAIN CLOSED AT ALL TIMES. VALVES MAY BE TEMPORARILY OPENED FOR LOADING AND FLUSHING BY THE OWASA INSPECTOR ONLY.
- 8. DECHLORINATION REQUIREMENTS - THE CONTRACTOR SHALL BE RESPONSIBLE FOR NEUTRALIZATION OF CHLORINATED WATER AT THE POINT OF DISCHARGE FROM THE MAIN BEING TESTED. THIS SHALL OCCUR FOLLOWING CHLORINATES TO DISINFECT A MAIN OR ANY OTHER TIME WHEN ELVATED LEVELS OF CHLORINE COULD POTENTIALLY BE DISCHARGED INTO THE ENVIRONMENT BY THE CONTRACTOR. AT THE TIME THE DISINFECTION AND PURITY TESTING PROCEDURES ARE DISCUSSED WITH THE OWASA CONSTRUCTION INSPECTOR, THE PROCEDURE FOR DECHLORINATION WILL BE COVERED. ABSOLUTELY NO FLUSHING, DISINFECTION, OR PURITY SAMPLING IS TO TAKE PLACE WITHOUT PRIOR APPROVAL OF A SAMPLING PLAN BY THE OWASA INSPECTOR.
- 9. PLEASE BE ADVISED THAT OWASA APPROVAL OF THIS PROJECT IS FOR COMPLIANCE WITH OWASA POLICIES, STANDARDS, AND SPECIFICATIONS ONLY. ALL OTHER MATTERS PERTAINING TO THIS PROJECT ARE THE RESPONSIBILITY OF THE DESIGN ENGINEER. OWASA APPROVAL DOES NOT PRECLUDE THE DEVELOPER, PROJECT ENGINEER, CONTRACTOR, OR OTHER AGENTS OR PARTIES ACTING ON THEIR BEHALF FROM FULL COMPLIANCE WITH OWASA CURRENT STANDARDS, SPECIFICATIONS, AND PROCEDURES OR FROM COMPLYING WITH ANY AND ALL STATUTES, RULES, REGULATIONS, AND ORDINANCES WHICH MAY BE IMPOSED BY OTHER GOVERNMENT AGENCIES (LOCAL, STATE, AND FEDERAL) WHICH MAY HAVE JURISDICTION. VIOLATIONS WILL RESULT IN THE OWASA PROJECT APPROVAL BEING RESCINDED.
- 10. CONTACT NC 811 (811 OR 1-800-632-4949) AND OWASA (919-968-4421) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION TO HAVE EXISTING UTILITIES LOCATED.
- 11. DISCHARGE FROM THIS PROJECT MUST BE IN COMPLIANCE WITH THE OWASA SEWER USE ORDINANCE. A GREASE INTERCEPTOR SHALL BE PROVIDED WHEN IN THE OPINION OF OWASA IT IS NECESSARY FOR THE PROPER HANDLING OF WASTEWATER CONTAINING EXCESSIVE AMOUNTS OF GREASE. ALL INTERCEPTION UNITS MUST BE OF THE TYPE AND CAPACITY WHICH IS CERTIFIED BY THE PROJECT ENGINEER AS MEETING THE REQUIREMENTS OF OWASA.
- 12. BACKFLOW PREVENTION WILL BE REQUIRED IN ACCORDANCE WITH OWASA CROSS-CONNECTION CONTROL ORDINANCE AND MANUAL.
- 13. DOMESTIC SERVICE TO INCLUDE REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY.
- 14. FIRE SERVICE TO INCLUDE RPDA BACKFLOW DEVICE.
- 15. FIRE PROTECTION SYSTEMS - PRESSURE TESTING, CHLORINATION, AND PURITY TESTING SHALL BE COMPLETED BEFORE THE INSTALLATION OF THE RPDA UNIT.
- 16. REMOTE READ-OUT DEVICES - RPDA AND RPZ DEVICES LOCATED INSIDE BUILDINGS MUST BE EQUIPPED WITH AN AMR METER TO BE PURCHASED FROM OWASA AND INSTALLED BY THE CONTRACTOR. CONTACT THE OWASA CONSTRUCTION INSPECTOR FOR DETAILS OF THIS INSTALLATION.
- 17. FOR FIRE SERVICE BACKFLOW DEVICES, USE A DOUBLE CHECK DETECTOR, REDUCED PRESSURE ZONE ASSEMBLY MEETING THE STANDARDS OF THE OWASA CROSS CONNECTION CONTROL ORDINANCE AND MANUAL. INSTALL THE DEVICE IN AN INTERNAL RISER ROOM WITH EXTERNAL ACCESS. CLEARANCES SHALL COMPLY WITH THE OWASA CROSS CONNECTION CONTROL ORDINANCES AND MANUAL. ACCESS TO RISER ROOM FROM OUTSIDE SHALL INCLUDE PROVISIONS FOR THE FIRE DEPARTMENT SUCH AS A KNOX BOX.
- 18. ALL BUILDINGS WITH FIRE SUPPRESSION LINES MUST HAVE BACKFLOW DEVICES LOCATED INSIDE THE BUILDING AND AN ABOVE GROUND LOCATION ADJACENT TO THE OUTSIDE WALL WHERE THE WATERLINE ENTERS THE BUILDING.
- 19. FOR IRRIGATION SERVICE BACKFLOW DEVICE, USE A REDUCED PRESSURE ZONE ASSEMBLY MEETING THE STANDARDS OF THE OWASA CROSS CONNECTION CONTROL ORDINANCE AND MANUAL. INSTALL THE IRRIGATION DEVICE INSIDE AN ABOVE GROUND HOT BOX.
- 20. UNDERGROUND VAULTS FOR METERS SHALL BE DRAINED BY PVC SCHEDULE 40 DRAINS TO DAYLIGHT INTO SLOPES. CONNECTION TO STORM STRUCTURES IS ONLY ALLOWED WITH THE CONSENT OF OWASA. DRAIN SIZES SHALL BE 2" DIAMETER FOR METERS OR DEVICES LESS THAN 2" AND SHALL BE 4" DIAMETER FOR DEVICES OVER 2".
- 21. CONNECTION OF SANITARY SEWER SERVICE TO AN EXISTING MANHOLE SHALL COMPLY WITH OWASA STANDARDS, INCLUDING: CORE DRILL FOR OPENING INTO MANHOLE AND INSTALL WITH FLEXIBLE BOOT. IF PAVEMENT CUT IS REQUIRED, CONTRACTOR SHALL PATCH PAVEMENT IN ACCORDANCE WITH TOWN OF CHAPEL HILL STANDARDS AND PROPER GEOENGINEERING INFORMATION FOR SOIL LOADING.
- 22. IF HYDRAULIC ELEVATORS ARE USED THE SUMP MUST BE PLUMBED TO SANITARY SEWER LINES.
- 23. FIRE HYDRANTS MUST BE FULLY FUNCTIONAL AND PHYSICALLY APPROVED BY OWASA BEFORE COMBUSTIBLE MATERIALS CAN BE BROUGHT ON TO THE SITE.

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license number: C-0293, C-187

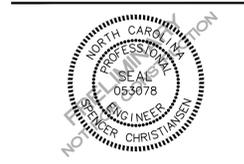
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**BARBEE CHAPEL APARTMENTS
CONDITIONAL ZONING PERMIT
DRAWINGS
5101 BARBEE CHAPEL RD
CHAPEL HILL, NC 27517**



REVISIONS

NO.	DATE	REVISED PER	1ST C2P COMMENTS
	11.23.2022		REVISED PER 1ST C2P COMMENTS
	02.21.2023		REVISED PER 2ND C2P COMMENTS

PLAN INFORMATION

PROJECT NO.	TLA-22001
FILENAME	TLA22001-N1
CHECKED BY	SJC
DRAWN BY	WHM
SCALE	NTS
DATE	09.29.2022

SHEET

PROJECT NOTES

C0.00

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF CHAPEL HILL AND NCDOT ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



Know what's below.
Call before you dig.

CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.



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02.21.2023	REVISED PER 2ND CZP COMMENTS	

PLAN INFORMATION

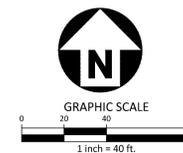
PROJECT NO.	TLA-22001
FILENAME	TLA22001-S1
CHECKED BY	SJC
DRAWN BY	WHM
SCALE	1" = 40'
DATE	09.29.2022

SHEET

SITE PLAN

C2.00

SEE SHEET C0.00 FOR ALL PROJECT, SITE,
GRADING, STORM DRAINAGE AND UTILITY
NOTES
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SITE LEGEND

	SIGNAGE
	YARD LIGHTS
	LIGHT POLE
	POWER POLE
	TRAFFIC DIRECTIONAL ARROW
	ACCESSIBLE PARKING STALL
	VAN ACCESSIBLE PARKING STALL
	PARKING SPACE COUNT
	ACCESSIBLE RAMPS
	ACCESSIBLE ROUTE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	LOT LINE
	EASEMENT LINE
	RECREATIONAL AREA 25,071 SF

OWASA UTILITY EASEMENT
(D.B. 8392, PG. 452)

N/F
DUB PROPERTIES
PIN:9798-82-28-6920
PID:141873
D.B. 7876, PG. 177
P.B. 199, PG. 189

N/F
NC DEPT OF TRANSPORTATION
PIN:9798-72-78-8288
PID:211060
D.B. 327, PG. 554

N/F
NR HILLMONT PROPERTY
OWNER LP
PIN:9798-82-65-2259
PID:141871
D.B. 9440, PG. 209
P.B. 177, PG. 378

N/F
NR HILLMONT PROPERTY
OWNER LP
PIN:9798-82-21-3916
PID:141876
D.B. 9533, PG. 198

N/F
NR HILLMONT PROPERTY
OWNER LP
PIN:9798-82-60-8392
PID:141884
D.B. 9440, PG. 209
P.B. 177, PG. 378

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PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION



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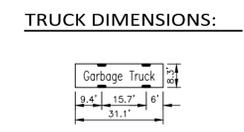
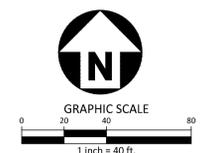
PLAN INFORMATION

PROJECT NO.	TLA-22001
FILENAME	TLA22001-SW1
CHECKED BY	SJC
DRAWN BY	WHM/LIL
SCALE	1" = 40'
DATE	09.29.2022

SOLID WASTE PLAN

C2.01

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES
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INTERMITTENT STREAM PER TOWN OF CHAPEL HILL
JORDAN LAKE RIPARIAN BUFFER
EX PROPERTY LINE

PRIVATE VARIABLE WIDTH SCM MAINTENANCE AND ACCESS EASEMENT HEREBY DEDICATED

OWASA UTILITY EASEMENT (D.B. 8392, PG. 452)

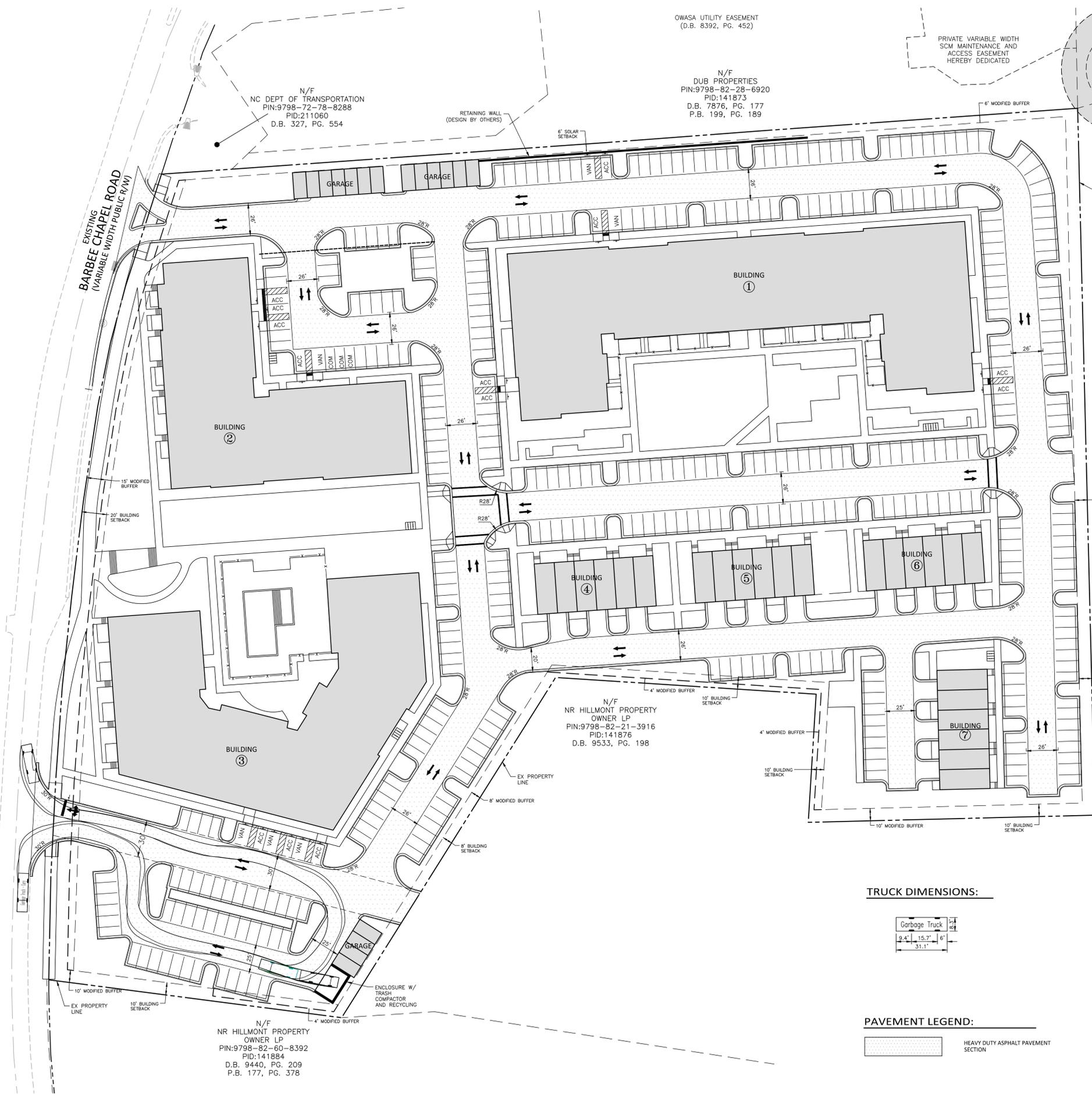
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PID:141873
D.B. 7876, PG. 177
P.B. 199, PG. 189

N/F NC DEPT OF TRANSPORTATION
PIN:9798-72-78-8288
PID:211060
D.B. 327, PG. 554

N/F NR HILLMONT PROPERTY OWNER LP
PIN:9798-82-21-3916
PID:141876
D.B. 9533, PG. 198

N/F NR HILLMONT PROPERTY OWNER LP
PIN:9798-82-60-8392
PID:141884
D.B. 9440, PG. 209
P.B. 177, PG. 378

EXISTING BARBEE CHAPEL ROAD (VARIABLE WIDTH PUBLIC R/W)



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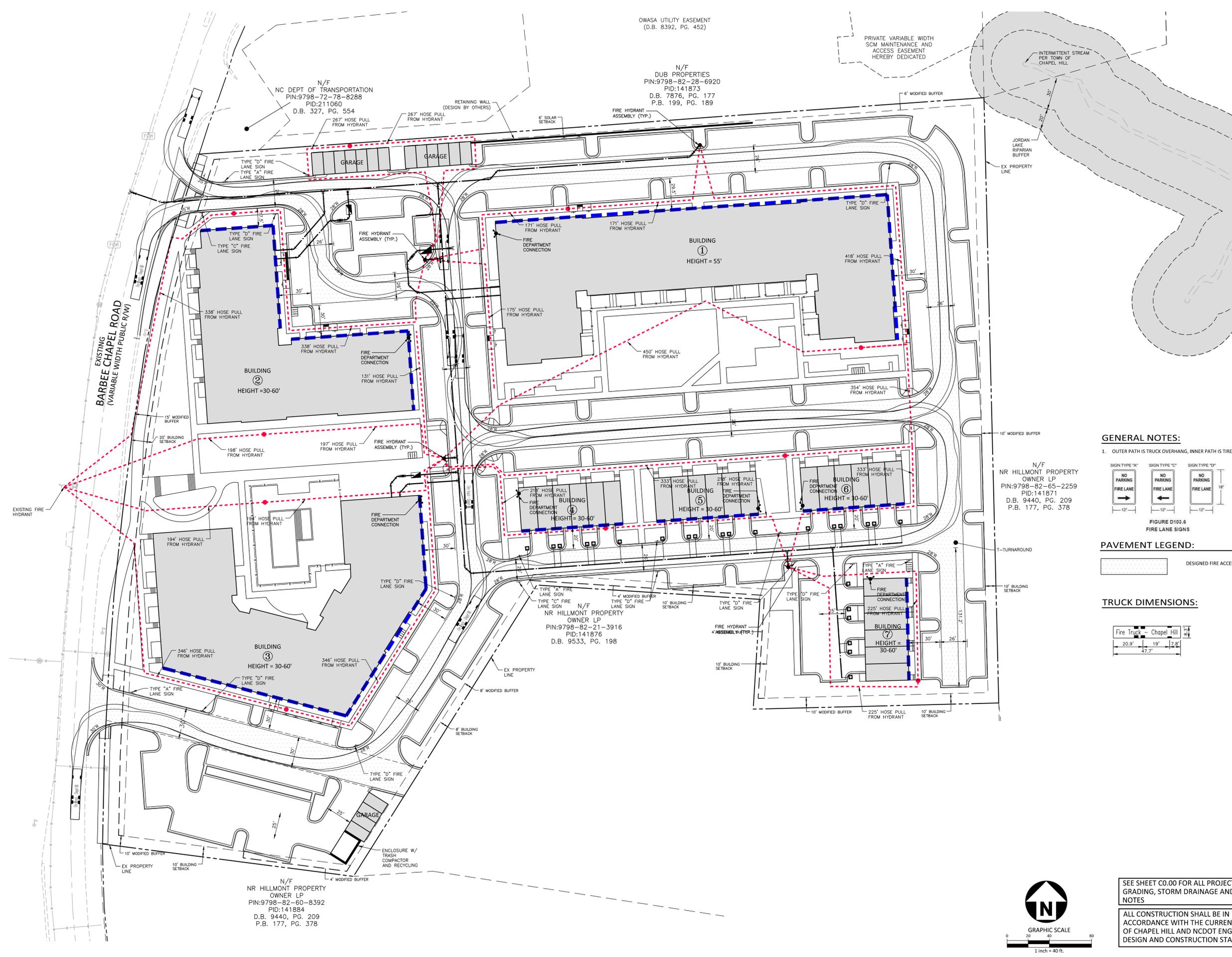
PLAN INFORMATION

PROJECT NO. TLA-22001
 FILENAME TLA22001-FP1
 CHECKED BY SJC
 DRAWN BY WHM/JLL
 SCALE 1" = 40'
 DATE 09.29.2022

SHEET

FIRE PROTECTION PLAN

C2.02



GENERAL NOTES:

1. OUTER PATH IS TRUCK OVERHANG, INNER PATH IS TIRE TRACKING

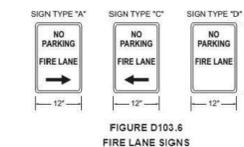
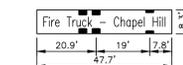


FIGURE D103.6
FIRE LANE SIGNS

PAVEMENT LEGEND:



TRUCK DIMENSIONS:



N/F
 NR HILLMONT PROPERTY
 OWNER LP
 PIN:9798-82-65-2259
 PID:141871
 D.B. 9440, PG. 209
 P.B. 177, PG. 378

OWASA UTILITY EASEMENT
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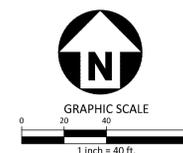
PRIVATE VARIABLE WIDTH
SCM MAINTENANCE AND
ACCESS EASEMENT
HEREBY DEDICATED

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PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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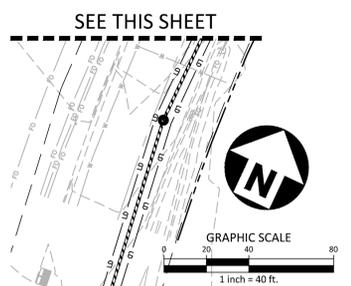
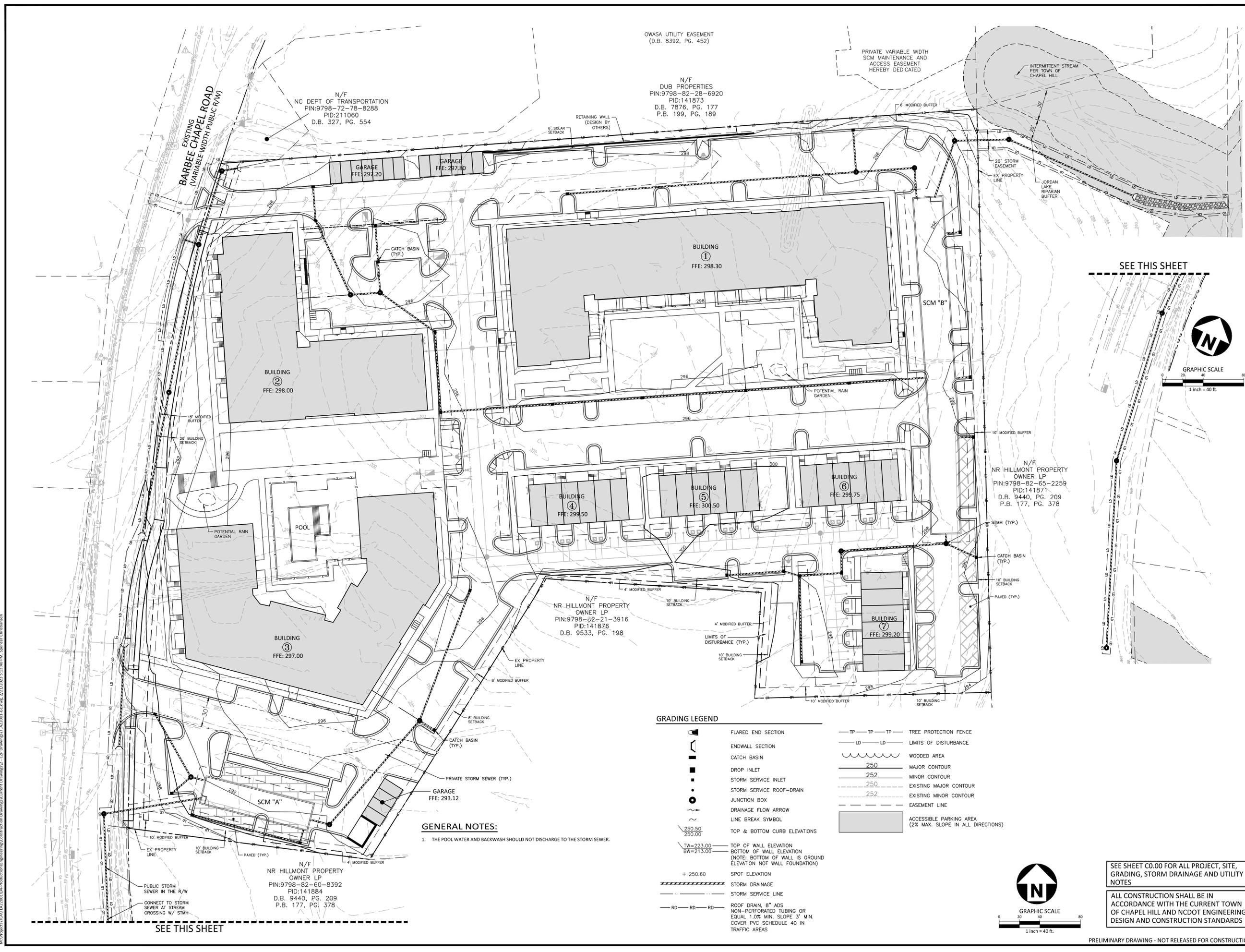
PLAN INFORMATION

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 FILENAME TLA22001-G1
 CHECKED BY SJC
 DRAWN BY WHM
 SCALE 1" = 40'
 DATE 09.29.2022

SHEET

GRADING PLAN

C3.00



SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF CHAPEL HILL AND NCDOT ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

M:\Projects\TLA\TLA22001\04-Production\Engineering\Construction\Drawings\Current Drawings\3 - CZP Drawings\TLA22001-G1.dwg, 2/21/2023 5:13:40 PM, Spencer Christensen



McADAMS

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BARBEE CHAPEL APARTMENTS
CONDITIONAL ZONING PERMIT
DRAWINGS
5101 BARBEE CHAPEL RD
CHAPEL HILL, NC 27517



REVISIONS

NO.	DATE	REVISION
11.23.2022	REVISED PER 1ST CZP COMMENTS	
02.21.2023	REVISED PER 2ND CZP COMMENTS	

PLAN INFORMATION

PROJECT NO. TLA-22001
 FILENAME TLA22001-U1
 CHECKED BY SJC
 DRAWN BY WHM/LIL
 SCALE 1" = 40'
 DATE 09.29.2022

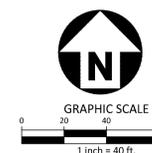
SHEET

UTILITY PLAN

C4.00

UTILITY LEGEND

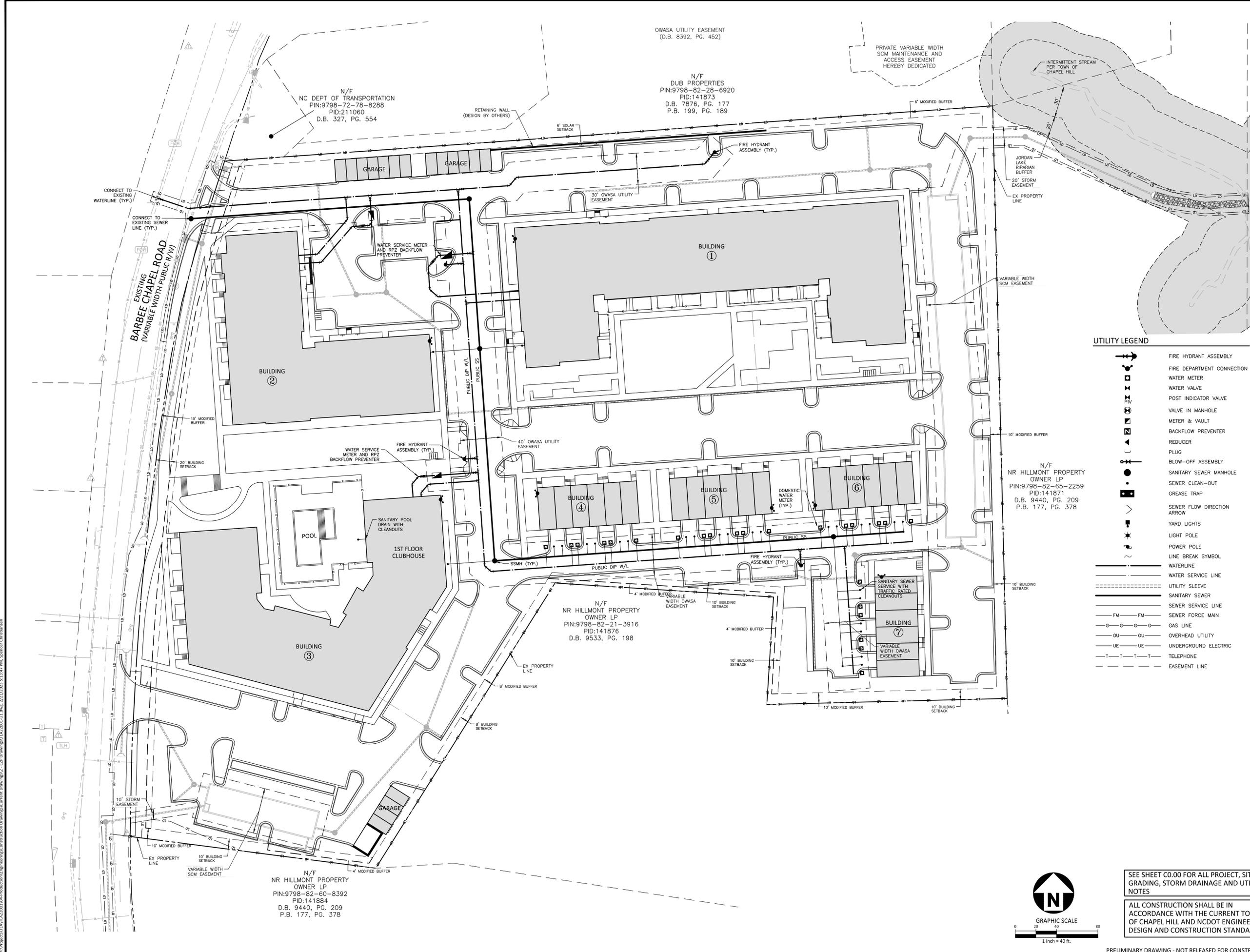
- FIRE HYDRANT ASSEMBLY
- FIRE DEPARTMENT CONNECTION (FDC)
- WATER METER
- WATER VALVE
- POST INDICATOR VALVE
- VALVE IN MANHOLE
- METER & VAULT
- BACKFLOW PREVENTER
- REDUCER
- PLUG
- BLOW-OFF ASSEMBLY
- SANITARY SEWER MANHOLE
- SEWER CLEAN-OUT
- GREASE TRAP
- SEWER FLOW DIRECTION ARROW
- YARD LIGHTS
- LIGHT POLE
- POWER POLE
- LINE BREAK SYMBOL
- WATERLINE
- WATER SERVICE LINE
- UTILITY SLEEVE
- SANITARY SEWER
- SEWER SERVICE LINE
- SEWER FORCE MAIN
- GAS LINE
- OVERHEAD UTILITY
- UNDERGROUND ELECTRIC
- TELEPHONE
- EASEMENT LINE



SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

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PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION



OWASA UTILITY EASEMENT
(D.B. 8392, PG. 452)

N/F
DUB PROPERTIES
PIN:9798-82-28-6920
PID:141873
D.B. 7876, PG. 177
P.B. 199, PG. 189

N/F
NC DEPT OF TRANSPORTATION
PIN:9798-72-78-8288
PID:211060
D.B. 327, PG. 554

N/F
NR HILLMONT PROPERTY
OWNER LP
PIN:9798-82-65-2259
PID:141871
D.B. 9440, PG. 209
P.B. 177, PG. 378

N/F
NR HILLMONT PROPERTY
OWNER LP
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PID:141876
D.B. 9533, PG. 198

N/F
NR HILLMONT PROPERTY
OWNER LP
PIN:9798-82-60-8392
PID:141884
D.B. 9440, PG. 209
P.B. 177, PG. 378

M:\Projects\TLA\22001\04-Production\Engineering\Construction Drawings\Current Drawings\3 - CZP Drawings\TLA22001-U1.dwg, 2/21/2023 5:13:47 PM, Spencer Christensen



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CHAPEL HILL, NC 27517



REVISIONS

Table with 3 columns: NO., DATE, REVISIONS. Includes entries for 11.23.2022 and 02.21.2023.

PLAN INFORMATION

Table with 2 columns: PROJECT NO., FILENAME, CHECKED BY, DRAWN BY, SCALE, DATE. Includes values like TLA-22001, TLA22001-D1, SJC, WHM/LIL, NTS, 09.29.2022.

SHEET

SITE DETAILS
C8.00

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. ST-5.2. TITLE: ACCESSIBLE RAMP. Includes diagrams of ramp cross-sections and a table of dimensions.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. ST-5.4. TITLE: ACCESSIBLE RAMP. Includes a list of 13 notes and a table of dimensions.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. P-1. TITLE: LOT LAYOUT SCHEDULE. Includes tables for STANDARD AUTOMOBILES and COMPACT AUTOMOBILES, and diagrams of parking layouts.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. ST-5.3. TITLE: ACCESSIBLE RAMP. Includes diagrams of ramp cross-sections and a table of dimensions.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. N.T.S. TITLE: CURB TRANSITION DETAILS. Includes diagrams showing transitions between different curb and gutter types.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. ST-4. TITLE: TYPICAL SIDEWALK. Includes a cross-section diagram of a sidewalk and a table of dimensions.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. N.T.S. TITLE: ACCESSIBLE PARKING SPACE SIGN. Includes diagrams of sign placement and a table of dimensions.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. N.T.S. TITLE: CONCRETE SIDEWALK. Includes a cross-section diagram of a concrete sidewalk and a table of dimensions.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. ST-2. TITLE: CURB & GUTTER SECTION. Includes a cross-section diagram of a curb and gutter and a table of dimensions.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. N.T.S. TITLE: ACCESSIBLE SIDEWALK RAMP. Includes a cross-section diagram of an accessible sidewalk ramp and a table of dimensions.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. N.T.S. TITLE: STANDARD 24" CURB AND GUTTER. Includes a cross-section diagram of a standard curb and gutter.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. N.T.S. TITLE: 24" SPILL CURB AND GUTTER. Includes a cross-section diagram of a spill curb and gutter.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. N.T.S. TITLE: 24" CURB AND GUTTER. Includes a cross-section diagram of a curb and gutter.

STANDARD DETAILS ENGINEERING DEPARTMENT DET. NO. N.T.S. TITLE: CONCRETE SIDEWALK. Includes a cross-section diagram of a concrete sidewalk.

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF CHAPEL HILL AND NCDOT ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

STORMWATER CONTROL MEASURE 'A' CONSTRUCTION SPECIFICATIONS

GENERAL NOTES

- PRIOR TO CONSTRUCTION, ANY DISCREPANCIES IN THE PLANS AND NOTES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION.
- PRIOR TO ANY CONSTRUCTION OR PLACEMENT OF ANY BACKFILL, THE ONSITE GEOTECHNICAL ENGINEER SHALL INSPECT THE EXCAVATION AREA FOR THE UNDERGROUND SCM WITHIN THIS AREA TO ASSESS WHETHER SUITABLE SOILS EXIST AT THE SUBGRADE LEVEL. IF THE CONTRACTOR CONSTRUCTS AND COVERS UP THE UNDERGROUND SCM PRIOR TO INSPECTION, THEN THIS AREA SHALL BE UNCOVERED AND TESTED (TO THE ENGINEER'S AND OWNER'S APPROVAL) AT THE CONTRACTOR'S EXPENSE.
- THE FACILITY SHALL NOT BE USED AS A TEMPORARY EROSION CONTROL DEVICE (I.E. SEDIMENT TRAP OR SEDIMENT BASIN) DURING CONSTRUCTION.
- PRIOR TO PLACING STORMFILTER CARTRIDGES WITHIN THE UNDERGROUND SYSTEM, THE CONTRACTOR SHALL REQUEST AN ONSITE MEETING WITH THE DESIGN ENGINEER AND THE EROSION CONTROL INSPECTOR TO ENSURE THE UPSTREAM DRAINAGE AREA IS COMPLETELY STABILIZED (I.E. GOOD VEGETATIVE COVER). IF THE CONTRACTOR DECIDES TO PLACE THE STORMFILTER CARTRIDGES PRIOR TO APPROVAL FROM THE DESIGN ENGINEER AND THE EROSION CONTROL INSPECTOR, THEN THE CONTRACTOR SHALL EXCAVATE/REPLACE, AS NECESSARY, THE COMPONENTS NEEDED FOR THE SYSTEM TO FUNCTION PROPERLY AT HIS / HER EXPENSE SHOULD THE STORMFILTER CARTRIDGES NOT FUNCTION PROPERLY (I.E. WILL NOT DRAIN DUE TO SEDIMENT DEPOSITION) DUE TO AN UNSTABILIZED UPSTREAM DRAINAGE AREA.
- ONCE CONSTRUCTED, THE STORMFILTER CARTRIDGES SHALL NOT RECEIVE STORMWATER RUNOFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO THE UNDERGROUND SYSTEM HAS BEEN COMPLETELY STABILIZED AND SITE CONSTRUCTION IS COMPLETE.
- ALL COMPONENTS OF THE UNDERGROUND SCM SYSTEM (STORMFILTER MANHOLE, CONCRETE VAULT, JOINT / RISER CONNECTIONS, ENDCAPS, ACCESS MANHOLES, ETC) SHALL BE DESIGNED BY OTHERS. ANY VARIATIONS OR CHANGES MADE FROM THESE SPECIFICATIONS AND DRAWINGS DURING THE ORDERING AND/OR INSTALLATION OF ALL COMPONENTS MUST BE APPROVED BY THE DESIGN ENGINEER. THE STRUCTURAL DESIGN OF THE UNDERGROUND SCM, ALONG WITH ITS ASSUMPTIONS, IS ALSO BY OTHERS. THE JOHN R. McADAMS COMPANY, INC. AND ITS EMPLOYEES ASSUME NO LIABILITY WITH RESPECT TO ANY ASPECT OF THE STRUCTURAL DESIGN FOR THE UNDERGROUND SCM SYSTEM.
- ALL PIPE / RISER CONNECTIONS AND JOINTS ASSOCIATED WITH THE UNDERGROUND SCM SYSTEM SHALL BE WATER TIGHT. THE MECHANISM FOR ACHIEVING THIS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW.
- THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ANY PUMPING EQUIPMENT, ETC. NEEDED FOR REMOVAL OF WATER FROM VARIOUS PARTS OF THE UNDERGROUND SCM SYSTEM SITE. IT IS ANTICIPATED THAT PUMPING WILL BE NECESSARY IN THE EXCAVATION AREAS DURING PLACEMENT OF FILL WITHIN THIS AREA AS NECESSARY. THE CONTRACTOR SHALL KEEP THE WATER LEVEL BELOW THE BOTTOM OF THE EXCAVATION. THE MANNER IN WHICH THE WATER IS REMOVED SHALL BE SUCH THAT THE EXCAVATION BOTTOM AND SIDE SLOPES ARE STABLE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADHERE TO ALL CURRENT OSHA REGULATIONS FOR CONFINED SPACE ENTRY AND PROVIDE SUCH DURING ENGINEER WALK-THROUGH/INSPECTION.
- ALL PIPE PENETRATIONS THROUGH A CONCRETE STRUCTURE (I.E. STORMFILTER CARTRIDGE / DETENTION SYSTEM, STORM DRAINAGE MANHOLES, ETC) SHALL BE MADE WATERTIGHT USING NON-SHRINK CEMENTITIOUS GROUT.
- EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

STORMWATER MANAGEMENT SYSTEM MATERIAL SPECIFICATIONS

- THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM IS TO BE DESIGNED BY OTHERS. ANY CHANGES TO THE PLANS SHALL BE PROVIDED TO THE DESIGN ENGINEER FOR REVIEW. PRIOR TO INSTALLATION, SHOP DRAWINGS OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE PROVIDED TO THE DESIGN ENGINEER AND TO THE TOWN OF CHAPEL HILL FOR REVIEW.
- FILTER CARTRIDGES SHALL BE CONTECH STORMFILTERS WITH PHOSPHOSORB MEDIA. INSTALLATION OF THE STORMWATER DEVICE SHALL BE PER THE MANUFACTURER'S INSTALLATION GUIDELINES AND SPECIFICATIONS.
- ACCESS RISERS SHALL BE INSTALLED PER STRUCTURAL SPECIFICATIONS. ACCESS STEPS / LADDERS SHALL BE ATTACHED TO THE RISERS TO ALLOW FOR ACCESS INTO THE STORMWATER MANAGEMENT SYSTEM.
- THE 24"Ø DIP OUTLET BARREL OF THE DETENTION SYSTEM SHALL BE CLASS 350 DIP, MEETING THE REQUIREMENTS OF ASTM A716. THE PIPE JOINTS SHALL BE LOCKING JOINTS PER ANSI/AWWA C110/A21.10 OR ANSI/AWWA C153/A21.53 STANDARDS.
- THE CONTRACTOR SHALL INSTALL THE STORMFILTER SYSTEM PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR TO PROVIDE A LETTER FROM MATERIAL SUPPLIER(S) STATING MATERIALS MEET THE SPECIFIED STANDARDS PRIOR TO INSTALLATION.
- COVER AND REVIEW OF SITE CONDITIONS TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE SYSTEM TO BE THE RESPONSIBILITY OF THE MANUFACTURER.

STATEMENT OF RESPONSIBILITY

- ALL REQUIRED MAINTENANCE AND INSPECTIONS OF THIS FACILITY SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER, PER THE EXECUTED OPERATION AND MAINTENANCE AGREEMENT FOR THIS FACILITY.

FOUNDATION NOTES

- ONCE THE EXCAVATION IS COMPLETE AND PRIOR TO INSTALLATION OF THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM, THE ONSITE GEOTECHNICAL ENGINEER SHALL VERIFY THE BEARING CAPACITY OF THE UNDERLYING SOILS TO SERVE AS A FOUNDATION FOR THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM. IF THE ONSITE GEOTECHNICAL ENGINEER DEEMS THE FOUNDATION SOILS AS UNSUITABLE, THEN THE UNSUITABLE MATERIAL SHOULD BE REMOVED DOWN TO A SUITABLE DEPTH AND THEN BUILT BACK UP TO THE CORRECT ELEVATION WITH A COMPACTED BACKFILL MATERIAL THAT IS APPROVED BY THE ONSITE GEOTECHNICAL ENGINEER. THE APPROVED BACKFILL MATERIAL SHOULD HAVE A GRADATION THAT WILL NOT ALLOW THE MIGRATION OF FINES, WHICH COULD CAUSE SETTLEMENT OF THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM. IF NECESSARY, A GEOTEXTILE FABRIC CAN BE USED TO SEPARATE THE UNDERLYING SOILS AND THE BACKFILL MATERIAL. THIS GEOTEXTILE FABRIC (IF USED) IS TO BE SPECIFIED BY THE ON-SITE GEOTECHNICAL ENGINEER.
- PLEASE NOTE THAT IF THE CONTRACTOR CONSTRUCTS AND COVERS UP THE EXCAVATION FOR THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM PRIOR TO INSPECTION, THEN THIS AREA SHALL BE UNCOVERED AND TESTED (TO THE ENGINEER'S AND OWNER'S APPROVAL) AT THE CONTRACTOR'S EXPENSE.
- THE FOUNDATION SUBGRADE SHALL BE GRADED TO A UNIFORM OR SLIGHTLY SLOPING GRADE PRIOR TO PLACEMENT OF THE BEDDING MATERIAL. IF THE FOUNDATION SUBGRADE WILL BE EXPOSED FOR AN EXTENDED PERIOD OF TIME DURING CONSTRUCTION, THEN IT SHOULD BE GRADED TO A SLIGHT SLOPE SUCH THAT SATURATION OF THE SUBGRADE DOES NOT OCCUR.
- THE BEDDING MATERIAL FOR THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM SHALL BE SPECIFIED BY THE ON-SITE GEOTECHNICAL ENGINEER. TYPICALLY, A WELL-GRADED GRANULAR MATERIAL WILL BE USED FOR THE BEDDING. PLEASE NOTE THAT IF CONSTRUCTION EQUIPMENT WILL BE OPERATING FOR AN EXTENDED PERIOD OF TIME ON THE BEDDING, THEN THE APPROPRIATE MEASURES (E.G. ENGINEERED FABRIC, STIFF GEOGRID, ETC.) SHALL BE TAKEN TO ENSURE THE INTEGRITY OF THE BEDDING IS NOT COMPROMISED.
- THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ANY PUMPING EQUIPMENT, ETC. NEEDED FOR REMOVAL OF WATER FROM THE EXCAVATION. IT IS BEST TO BEGIN THE CONSTRUCTION OF THE DETENTION SYSTEMS AT THE DOWNSTREAM END WITH THE OUTLET ALREADY CONSTRUCTED TO ALLOW A ROUTE FOR WATER TO ESCAPE.
- THE CONTRACTOR SHALL PROVIDE A FOUNDATION DRAIN FOR THE UNDERGROUND DETENTION SYSTEM DESIGNED BY OTHERS. THE UNDERDRAIN SYSTEM SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATION AND SHALL POSITIVELY DRAIN TO DOWNSTREAM STRUCTURE. THE ONSITE GEOTECHNICAL ENGINEER SHALL DETERMINE IF FOUNDATION DRAINS ARE NOT REQUIRED FOR THE UNDERGROUND SCM SYSTEM. THE DESIGN ENGINEER SHALL BE NOTIFIED FOLLOWING THIS DETERMINATION.

BEDDING NOTES

- THE EXCAVATION SUB GRADE MUST BE TRANSIT LEVEL.
- THE EXCAVATION PIT SHALL BE LINED (ON THE BOTTOM AND ALL FOUR SIDES) WITH A NON-WOVEN GEO-TEXTILE (GEOFLEX 401 OR APPROVED EQUIVALENT). THE ONSITE GEOTECHNICAL ENGINEER SHALL APPROVE FABRIC FOR USE.
- THE SUBGRADE FOR THE DETENTION SYSTEM CAN BE A CONCRETE SLAB, OR CLEAN GRANULAR MATERIAL WITH A MAXIMUM AGGREGATE SIZE OF 3/4". THE BEDDING SHALL BE FREE FROM ROCK FORMATIONS, PROTRUDING STONES, FROZEN LUMPS, ROOTS, AND OTHER FOREIGN MATERIAL.
- PREPARE THE SUBGRADE PER THE ONSITE GEOTECHNICAL ENGINEER'S DIRECTION (APPROXIMATELY 5'-6" BELOW GRADE ON WHICH SLAB WILL SET). THE BEDDING MATERIAL SHOULD BE GRADED SUCH THAT A SMOOTH UNIFORM GRADE IS ESTABLISHED TO ALLOW FOR OPTIMUM PLACEMENT OF THE SAND FILTER.
- THE SUBGRADE MUST SUPPORT THE DETENTION SYSTEM WITHOUT DIFFERENTIAL SETTLEMENT BETWEEN PIECES.
- IF CONSTRUCTION EQUIPMENT WILL BE OPERATING FOR AN EXTENDED PERIOD OF TIME ON THE BEDDING, THEN THE APPROPRIATE MEASURES (E.G. STIFF GEOGRID, ETC.) SHALL BE TAKEN TO ENSURE THE INTEGRITY OF THE BEDDING IS NOT COMPROMISED.

BACKFILL MATERIAL NOTES

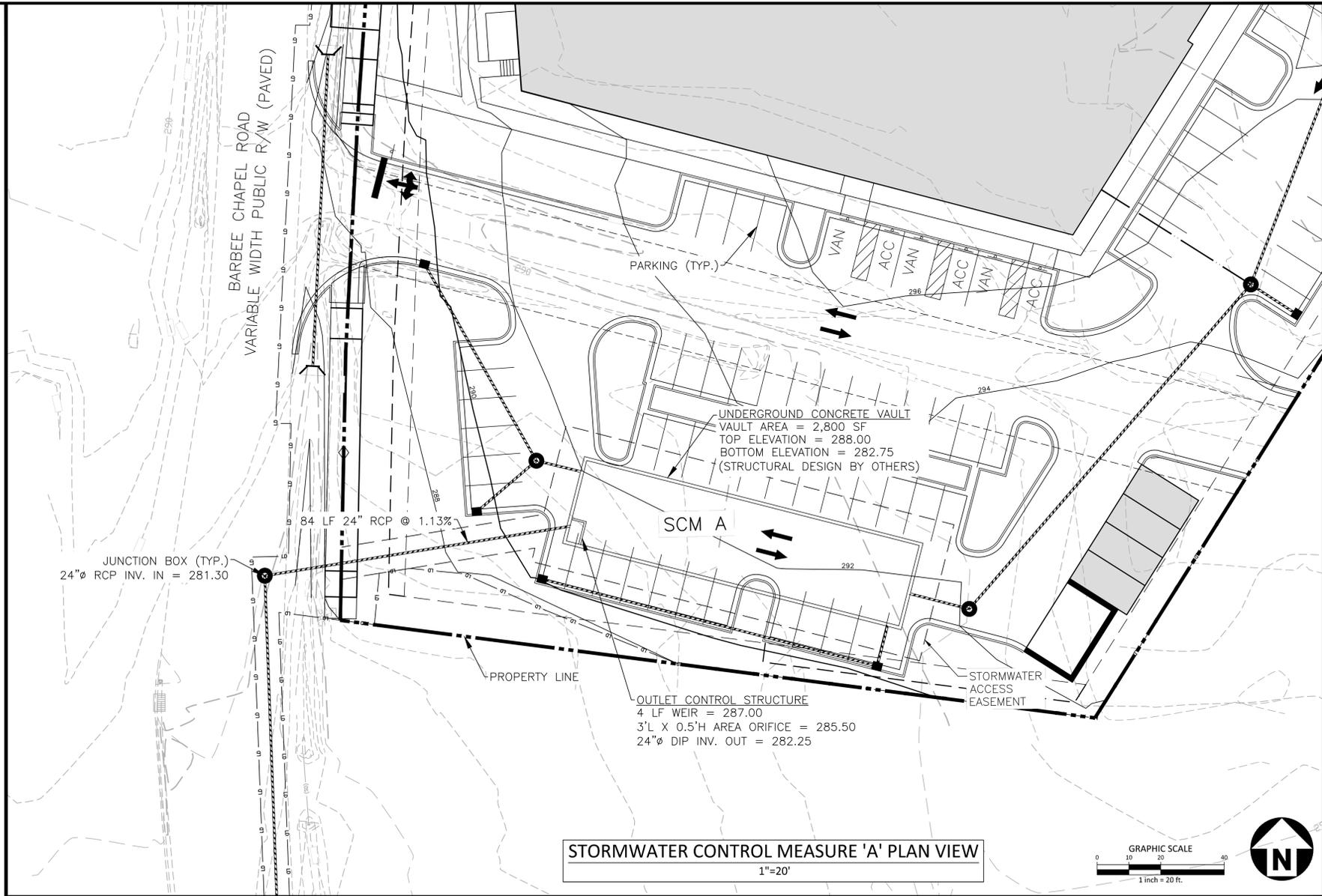
- THE ON-SITE GEOTECHNICAL ENGINEER SHALL SPECIFY THE BACKFILL MATERIAL FOR THE STORMWATER MANAGEMENT SYSTEM.
- THE BACKFILL MATERIAL SHOULD BE FREE OF ROCKS, FROZEN LUMPS, AND OTHER FOREIGN MATTER THAT COULD CAUSE HARD SPOTS WITHIN THE BACKFILL MATERIAL, OR THAT COULD DECOMPOSE AND CREATE VOIDS.
- HIGHLY PLASTIC SILTS, HIGHLY PLASTIC CLAYS, ORGANIC SILTS, ORGANIC CLAYS, AND PEATS SHOULD NOT BE USED AS A BACKFILL MATERIAL.
- THE BACKFILL MATERIAL SHOULD BE PLACED IN 6" LOOSE LIFTS AND COMPACTED TO 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM-D698). THE FILL SOILS SHALL BE COMPACTED AT A MOISTURE CONTENT WITHIN +/- TWO PERCENT OF ITS OPTIMUM MOISTURE CONTENT.
- ANY MATERIAL STOCKPILING ON TOP OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE APPROVED BY THE STRUCTURAL DESIGN ENGINEER OR DETENTION SYSTEM MANUFACTURER.

UNDERGROUND VAULT CONSTRUCTION NOTES

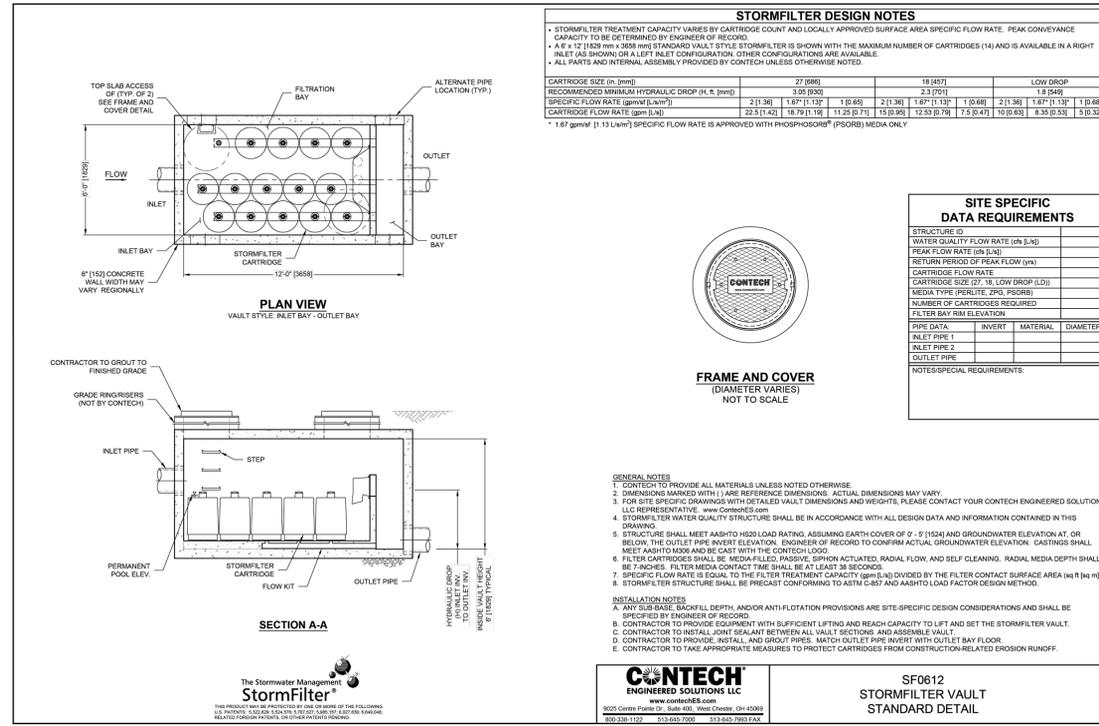
- UNDERGROUND VAULT CONFIGURATION IS TO BE DESIGNED AND PROVIDED BY OTHERS.
- ABSOLUTELY NO RUNOFF SHALL ENTER THE UNDERGROUND VAULT UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
- MANHOLE ACCESS SHALL BE PROVIDED FOR THE UNDERGROUND VAULT. MANHOLES SHALL BE IN COMPLIANCE WITH TOWN OF CHAPEL HILL STANDARD MANHOLE ACCESS SHALL BE A MINIMUM OF 24 INCHES IN DIAMETER TO COMPLY WITH OSHA CONFINED SPACE REQUIREMENTS (OR MINIMUM OSHA REQUIREMENTS APPLICABLE AT TIME OF CONSTRUCTION). CONTRACTOR SHALL PROVIDE ACCESS LADDERS FOR ACCESS BELOW ALL MANHOLES. MANHOLE COVERS SHALL ALLOW FOR PROPER VENTILATION.

SYSTEM TESTING NOTES

- PRIOR TO PLACEMENT OF THE BACKFILL MATERIAL AND STORM FILTER CARTRIDGES, CONTRACTOR SHALL TEST FOR WATER TIGHTNESS. ENTRANCES AND EXITS SHALL BE PLUGGED AND THE SYSTEM COMPLETELY FILLED WITH WATER TO DEMONSTRATE WATER TIGHTNESS. WATER TIGHTNESS MEANS NO SIGNIFICANT FOR A PERIOD OF 24 HOURS. SIGNIFICANT LEAKAGE TO BE DETERMINED BY THE CERTIFYING ENGINEER. CONTRACTOR SHALL PLAN AND SCHEDULE THE FIELD TESTING OF THE SYSTEM (WATER TIGHTNESS) WITH THE ENGINEER AT LEAST 2 WORKING DAYS PRIOR TO THE TEST. THE CONTRACTOR SHALL PROVIDE WRITTEN REPORTS TO THE ENGINEER VERIFYING THE WATER TIGHTNESS OF THE STORMWATER VAULT.



STORMWATER CONTROL MEASURE 'A' PLAN VIEW
1"=20'



SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

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REVISIONS

NO.	DATE	REVISED PER
11.23.2022	REVISED PER 1ST C2P COMMENTS	
02.21.2023	REVISED PER 2ND C2P COMMENTS	

PLAN INFORMATION

PROJECT NO. TLA-22001
FILENAME TLA22001-SCMA
CHECKED BY MCT
DRAWN BY OVL
SCALE 1" = 20'
DATE 09.29.2022

SHEET

SCM A PLAN VIEW
C9.00

M:\Projects\TLA\22001\04-Production\Water Resources\C2P\Current Drawings\Construction Drawings\LA22001-SCMA.dwg, 2/21/2023 10:38:21 AM, Maria Torres

STORMWATER CONTROL MEASURE 'B' CONSTRUCTION SPECIFICATIONS

GENERAL NOTES

- PRIOR TO CONSTRUCTION, ANY DISCREPANCIES IN THE PLANS AND NOTES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION.
- PRIOR TO ANY CONSTRUCTION OR PLACEMENT OF ANY BACKFILL, THE ONSITE GEOTECHNICAL ENGINEER SHALL INSPECT THE EXCAVATION AREA FOR THE UNDERGROUND SCM WITHIN THIS AREA TO ASSESS WHETHER SUITABLE SOILS EXIST AT THE SUBGRADE LEVEL. IF THE CONTRACTOR CONSTRUCTS AND COVERS UP THE UNDERGROUND SCM PRIOR TO INSPECTION, THEN THIS AREA SHALL BE UNCOVERED AND TESTED (TO THE ENGINEER'S AND OWNER'S APPROVAL) AT THE CONTRACTOR'S EXPENSE.
- THE FACILITY SHALL NOT BE USED AS A TEMPORARY EROSION CONTROL DEVICE (I.E. SEDIMENT TRAP OR SEDIMENT BASIN) DURING CONSTRUCTION.
- PRIOR TO PLACING STORMFILTER CARTRIDGES WITHIN THE UNDERGROUND SYSTEM, THE CONTRACTOR SHALL REQUEST AN ONSITE MEETING WITH THE DESIGN ENGINEER AND THE EROSION CONTROL INSPECTOR TO ENSURE THE UPSTREAM DRAINAGE AREA IS COMPLETELY STABILIZED (I.E. GOOD VEGETATIVE COVER). IF THE CONTRACTOR DECIDES TO PLACE THE STORMFILTER CARTRIDGES PRIOR TO APPROVAL FROM THE DESIGN ENGINEER AND THE EROSION CONTROL INSPECTOR, THEN THE CONTRACTOR SHALL EXCAVATE/REPLACE, AS NECESSARY, THE COMPONENTS NEEDED FOR THE SYSTEM TO FUNCTION PROPERLY AT HIS / HER EXPENSE SHOULD THE STORMFILTER CARTRIDGES NOT FUNCTION PROPERLY (I.E. WILL NOT DRAIN DUE TO SEDIMENT DEPOSITION) DUE TO AN UNSTABILIZED UPSTREAM DRAINAGE AREA.
- ONCE CONSTRUCTED, THE STORMFILTER CARTRIDGES SHALL NOT RECEIVE STORMWATER RUNOFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO THE UNDERGROUND SYSTEM HAS BEEN COMPLETELY STABILIZED AND SITE CONSTRUCTION IS COMPLETE.
- ALL COMPONENTS OF THE UNDERGROUND SCM SYSTEM (STORMFILTER MANHOLE, CONCRETE VAULT, JOINT / RISER CONNECTIONS, ENDCAPS, ACCESS MANHOLES, ETC.) SHALL BE DESIGNED BY OTHERS. ANY VARIATIONS OR CHANGES MADE FROM THESE SPECIFICATIONS AND DRAWINGS DURING THE ORDERING AND/OR INSTALLATION OF ALL COMPONENTS MUST BE APPROVED BY THE DESIGN ENGINEER. THE STRUCTURAL DESIGN OF THE UNDERGROUND SCM, ALONG WITH ITS ASSUMPTIONS, IS ALSO BY OTHERS. THE JOHN R. McADAMS COMPANY, INC. AND ITS EMPLOYEES ASSUME NO LIABILITY WITH RESPECT TO ANY ASPECT OF THE STRUCTURAL DESIGN FOR THE UNDERGROUND SCM SYSTEM.
- ALL PIPE / RISER CONNECTIONS AND JOINTS ASSOCIATED WITH THE UNDERGROUND SCM SYSTEM SHALL BE WATER TIGHT. THE MECHANISM FOR ACHIEVING THIS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW.
- THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ANY PUMPING EQUIPMENT, ETC. NEEDED FOR REMOVAL OF WATER FROM VARIOUS PARTS OF THE UNDERGROUND SCM SYSTEM SITE. IT IS ANTICIPATED THAT PUMPING WILL BE NECESSARY IN THE EXCAVATION AREAS. DURING PLACEMENT OF FILL WITHIN THIS AREA (OR OTHER AREAS AS NECESSARY), THE CONTRACTOR SHALL KEEP THE WATER LEVEL BELOW THE BOTTOM OF THE EXCAVATION. THE MANNER IN WHICH THE WATER IS REMOVED SHALL BE SUCH THAT THE EXCAVATION BOTTOM AND SIDE SLOPES ARE STABLE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADHERE TO ALL CURRENT OSHA REGULATIONS FOR CONFINED SPACE ENTRY AND PROVIDE SUCH DURING ENGINEER WALK-THROUGH/INSPECTION.
- ALL PIPE PENETRATIONS THROUGH A CONCRETE STRUCTURE (I.E. STORMFILTER CARTRIDGE / DETENTION SYSTEM, STORM DRAINAGE MANHOLES, ETC.) SHALL BE MADE WATERTIGHT USING NON-SHRINK CEMENTITIOUS GROUT.
- EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

STORMWATER MANAGEMENT SYSTEM MATERIAL SPECIFICATIONS

- THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM IS TO BE DESIGNED BY OTHERS. ANY CHANGES TO THE PLANS SHALL BE PROVIDED TO THE DESIGN ENGINEER FOR REVIEW. PRIOR TO INSTALLATION, SHOP DRAWINGS OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE PROVIDED TO THE DESIGN ENGINEER AND TO THE TOWN OF CHAPEL HILL FOR REVIEW.
- FILTER CARTRIDGES SHALL BE CONTECH STORMFILTERS WITH PHOSPHOSORB MEDIA. INSTALLATION OF THE STORMWATER DEVICE SHALL BE PER THE MANUFACTURER'S INSTALLATION GUIDELINES AND SPECIFICATIONS.
- ACCESS RISERS SHALL BE INSTALLED PER STRUCTURAL SPECIFICATIONS. ACCESS STEPS / LADDERS SHALL BE ATTACHED TO THE RISERS TO ALLOW FOR ACCESS INTO THE STORMWATER MANAGEMENT SYSTEM.
- THE 24" DIP OUTLET BARREL OF THE DETENTION SYSTEM SHALL BE CLASS 350 DIP, MEETING THE REQUIREMENTS OF ASTM A716. THE PIPE JOINTS SHALL BE LOCKING JOINTS PER ANSI/AWWA C110/A21.10 OR ANSI/AWWA C153/A21.53 STANDARDS.
- THE CONTRACTOR SHALL INSTALL THE STORMFILTER SYSTEM PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR TO PROVIDE A LETTER FROM MATERIAL SUPPLIER(S) STATING MATERIALS MEET THE SPECIFIED STANDARDS PRIOR TO INSTALLATION.
- COVER AND REVIEW OF SITE CONDITIONS TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE SYSTEM TO BE THE RESPONSIBILITY OF THE MANUFACTURER.

STATEMENT OF RESPONSIBILITY

- ALL REQUIRED MAINTENANCE AND INSPECTIONS OF THIS FACILITY SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER, PER THE EXECUTED OPERATION AND MAINTENANCE AGREEMENT FOR THIS FACILITY.

FOUNDATION NOTES

- ONCE THE EXCAVATION IS COMPLETE AND PRIOR TO INSTALLATION OF THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM, THE ONSITE GEOTECHNICAL ENGINEER SHALL VERIFY THE BEARING CAPACITY OF THE UNDERLYING SOILS TO SERVE AS A FOUNDATION FOR THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM. IF THE ONSITE GEOTECHNICAL ENGINEER DEEMS THE FOUNDATION SOILS AS UNSUITABLE, THEN THE UNSUITABLE MATERIAL SHOULD BE REMOVED DOWN TO A SUITABLE DEPTH AND THEN BUILT BACK UP TO THE CORRECT ELEVATION WITH A COMPACTED BACKFILL MATERIAL THAT IS APPROVED BY THE ONSITE GEOTECHNICAL ENGINEER. THE APPROVED BACKFILL MATERIAL SHOULD HAVE A GRADATION THAT WILL NOT ALLOW THE MIGRATION OF FINES, WHICH COULD CAUSE SETTLEMENT OF THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM. IF NECESSARY, A GEOTEXTILE FABRIC CAN BE USED TO SEPARATE THE UNDERLYING SOILS AND THE BACKFILL MATERIAL. THIS GEOTEXTILE FABRIC (IF USED) IS TO BE SPECIFIED BY THE ON-SITE GEOTECHNICAL ENGINEER.
- PLEASE NOTE THAT IF THE CONTRACTOR CONSTRUCTS AND COVERS UP THE EXCAVATION FOR THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM PRIOR TO INSPECTION, THEN THIS AREA SHALL BE UNCOVERED AND TESTED (TO THE ENGINEER'S AND OWNER'S APPROVAL) AT THE CONTRACTOR'S EXPENSE.
- THE FOUNDATION SUBGRADE SHALL BE GRADED TO A UNIFORM OR SLIGHTLY SLOPING GRADE PRIOR TO PLACEMENT OF THE BEDDING MATERIAL. IF THE FOUNDATION SUBGRADE WILL BE EXPOSED FOR AN EXTENDED PERIOD OF TIME DURING CONSTRUCTION, THEN IT SHOULD BE GRADED TO A SLIGHT SLOPE SUCH THAT SATURATION OF THE SUBGRADE DOES NOT OCCUR.
- THE BEDDING MATERIAL FOR THE UNDERGROUND STORMWATER MANAGEMENT SYSTEM SHALL BE SPECIFIED BY THE ON-SITE GEOTECHNICAL ENGINEER. TYPICALLY, A WELL-GRADED GRANULAR MATERIAL WILL BE USED FOR THE BEDDING. PLEASE NOTE THAT IF CONSTRUCTION EQUIPMENT WILL BE OPERATING FOR AN EXTENDED PERIOD OF TIME ON THE BEDDING, THEN THE APPROPRIATE MEASURES (E.G. ENGINEERED FABRIC, STIFF GEOGRID, ETC.) SHALL BE TAKEN TO ENSURE THE INTEGRITY OF THE BEDDING IS NOT COMPROMISED.
- THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ANY PUMPING EQUIPMENT, ETC. NEEDED FOR REMOVAL OF WATER FROM THE EXCAVATION. IT IS BEST TO BEGIN THE CONSTRUCTION OF THE DETENTION SYSTEMS AT THE DOWNSTREAM END WITH THE OUTLET ALREADY CONSTRUCTED TO ALLOW A ROUTE FOR WATER TO ESCAPE.
- THE CONTRACTOR SHALL PROVIDE A FOUNDATION DRAIN FOR THE UNDERGROUND DETENTION SYSTEM DESIGNED BY OTHERS. THE UNDERDRAIN SYSTEM SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATION AND SHALL POSITIVELY DRAIN TO DOWNSTREAM STRUCTURE. THE ONSITE GEOTECHNICAL ENGINEER SHALL DETERMINE IF FOUNDATION DRAINS ARE NOT REQUIRED FOR THE UNDERGROUND SCM SYSTEM. THE DESIGN ENGINEER SHALL BE NOTIFIED FOLLOWING THIS DETERMINATION.

BEDDING NOTES

- THE EXCAVATION SUB GRADE MUST BE TRANSIT LEVEL.
- THE EXCAVATION PIT SHALL BE LINED (ON THE BOTTOM AND ALL FOUR SIDES) WITH A NON-WOVEN GEO-TEXTILE (GEOTEX 401 OR APPROVED EQUIVALENT). THE ONSITE GEOTECHNICAL ENGINEER SHALL APPROVE FABRIC FOR USE.
- THE SUBGRADE FOR THE DETENTION SYSTEM CAN BE A CONCRETE SLAB, OR CLEAN GRANULAR MATERIAL WITH A MAXIMUM AGGREGATE SIZE OF 3/4". THE BEDDING SHALL BE FREE FROM ROCK FORMATIONS, PROTRUDING STONES, FROZEN LUMPS, ROOTS, AND OTHER FOREIGN MATERIAL.
- PREPARE THE SUBGRADE PER THE ONSITE GEOTECHNICAL ENGINEER'S DIRECTION (APPROXIMATELY 5'-6" BELOW GRADE ON WHICH SLAB WILL SET). THE BEDDING MATERIAL SHOULD BE GRADED SUCH THAT A SMOOTH UNIFORM GRADE IS ESTABLISHED TO ALLOW FOR OPTIMUM PLACEMENT OF THE SAND FILTER.
- THE SUBGRADE MUST SUPPORT THE DETENTION SYSTEM WITHOUT DIFFERENTIAL SETTLEMENT BETWEEN PIECES.
- IF CONSTRUCTION EQUIPMENT WILL BE OPERATING FOR AN EXTENDED PERIOD OF TIME ON THE BEDDING, THEN THE APPROPRIATE MEASURES (E.G. STIFF GEOGRID, ETC.) SHALL BE TAKEN TO ENSURE THE INTEGRITY OF THE BEDDING IS NOT COMPROMISED.

BACKFILL MATERIAL NOTES

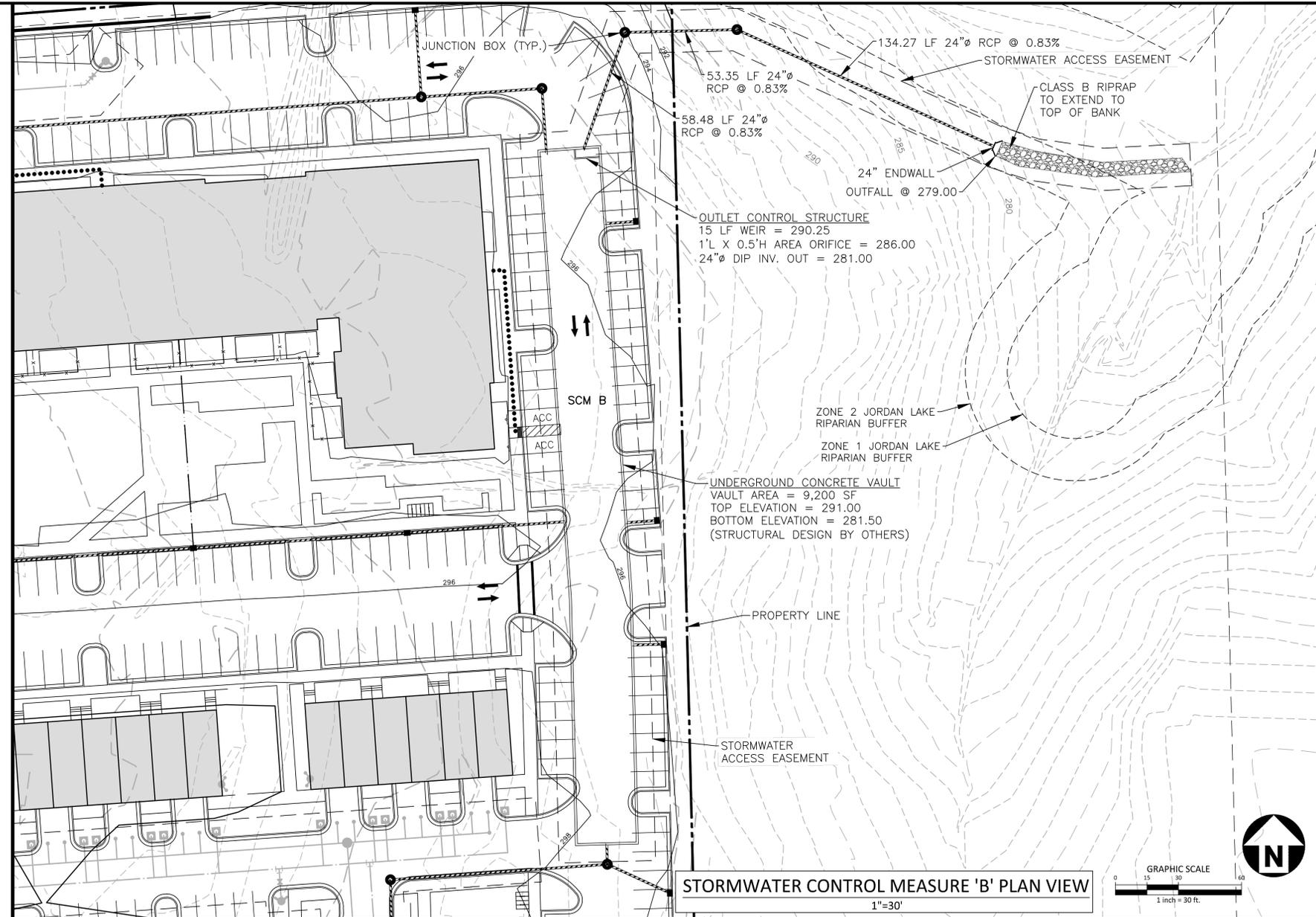
- THE ON-SITE GEOTECHNICAL ENGINEER SHALL SPECIFY THE BACKFILL MATERIAL FOR THE STORMWATER MANAGEMENT SYSTEM.
- THE BACKFILL MATERIAL SHOULD BE FREE OF ROCKS, FROZEN LUMPS, AND OTHER FOREIGN MATTER THAT COULD CAUSE HARD SPOTS WITHIN THE BACKFILL MATERIAL, OR THAT COULD DECOMPOSE AND CREATE VOIDS.
- HIGHLY PLASTIC SILTS, HIGHLY PLASTIC CLAYS, ORGANIC CLAYS, AND PEATS SHOULD NOT BE USED AS A BACKFILL MATERIAL.
- THE BACKFILL MATERIAL SHOULD BE PLACED IN 6" LOOSE LIFTS AND COMPACTED TO 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). THE FILL SOILS SHALL BE COMPACTED AT A MOISTURE CONTENT WITHIN +/- TWO PERCENT OF ITS OPTIMUM MOISTURE CONTENT.
- ANY MATERIAL STOCKPILING ON TOP OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE APPROVED BY THE STRUCTURAL DESIGN ENGINEER OR DETENTION SYSTEM MANUFACTURER.

UNDERGROUND VAULT CONSTRUCTION NOTES

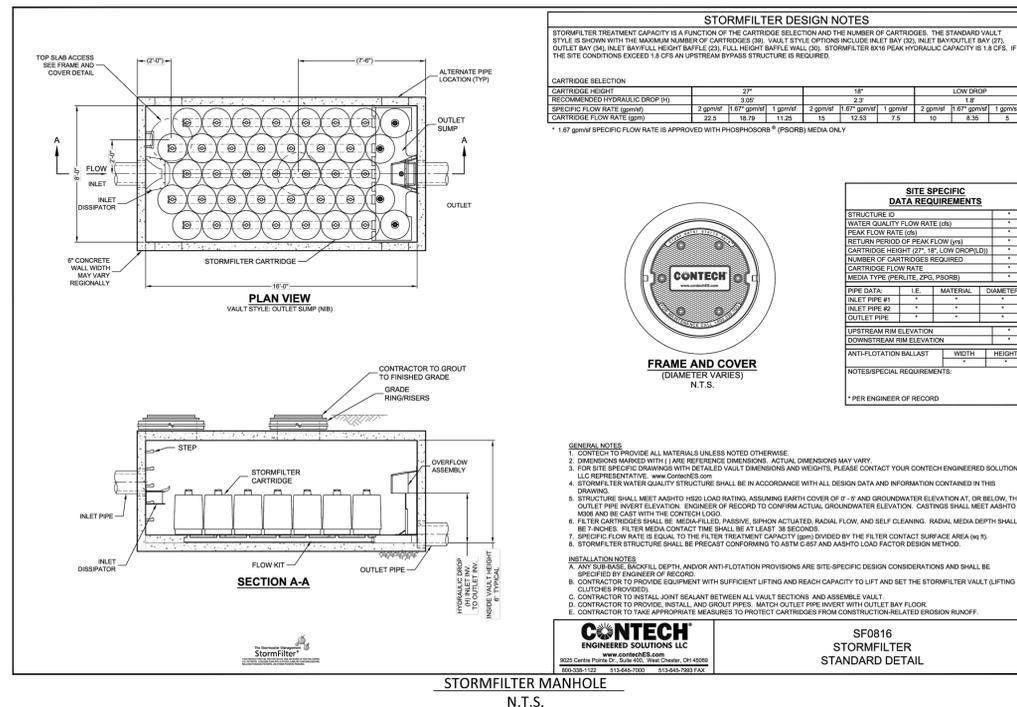
- UNDERGROUND VAULT CONFIGURATION IS TO BE DESIGNED AND PROVIDED BY OTHERS.
- ABSOLUTELY NO RUNOFF SHALL ENTER THE UNDERGROUND VAULT UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
- MANHOLE ACCESS SHALL BE PROVIDED FOR THE UNDERGROUND VAULT. MANHOLES SHALL BE IN COMPLIANCE WITH TOWN OF CHAPEL HILL STANDARD DETAILS BUT SHALL BE A MINIMUM OF 24 INCHES IN DIAMETER TO COMPLY WITH OSHA CONFINED SPACE REQUIREMENTS (OR MINIMUMS OTHERWISE SPECIFIED AT TIME OF CONSTRUCTION). CONTRACTOR SHALL PROVIDE ACCESS LADDERS FOR ACCESS BELOW ALL MANHOLES. MANHOLE COVERS SHALL ALLOW FOR PROPER VENTILATION.

SYSTEM TESTING NOTES

- PRIOR TO PLACEMENT OF THE BACKFILL MATERIAL AND STORM FILTER CARTRIDGES, CONTRACTOR SHALL TEST FOR WATER TIGHTNESS. ENTRANCES AND EXITS SHALL BE PLUGGED AND THE SYSTEM COMPLETELY FILLED WITH WATER TO DEMONSTRATE WATER TIGHTNESS. WATER TIGHTNESS MEANS NO SIGNIFICANT FOR A PERIOD OF 24 HOURS. SIGNIFICANT LEAKAGE TO BE DETERMINED BY THE CERTIFYING ENGINEER. CONTRACTOR SHALL CALL AND SCHEDULE THE FIELD TESTING OF THE SYSTEM (WATER TIGHTNESS) WITH THE ENGINEER AT LEAST 2 WORKING DAYS PRIOR TO THE TEST. THE CONTRACTOR SHALL PROVIDE WRITTEN REPORTS TO THE ENGINEER VERIFYING THE WATER TIGHTNESS OF THE STORMWATER VAULT.



STORMWATER CONTROL MEASURE 'B' PLAN VIEW
1"=30'



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BARBEE CHAPEL APARTMENTS
CONDITIONAL ZONING PERMIT
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CHAPEL HILL, NC 27517



REVISIONS

NO.	DATE	REVISED PER	COMMENTS
11.23.2022	REVISED PER 1ST CZP COMMENTS		
02.21.2023	REVISED PER 2ND CZP COMMENTS		

PLAN INFORMATION

PROJECT NO. TLA-22001
FILENAME TLA22001-SCMB
CHECKED BY MCT
DRAWN BY OVL
SCALE 1" = 30'
DATE 09.29.2022

SCM B PLAN VIEW
C9.01

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF CHAPEL HILL AND NCDOT ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



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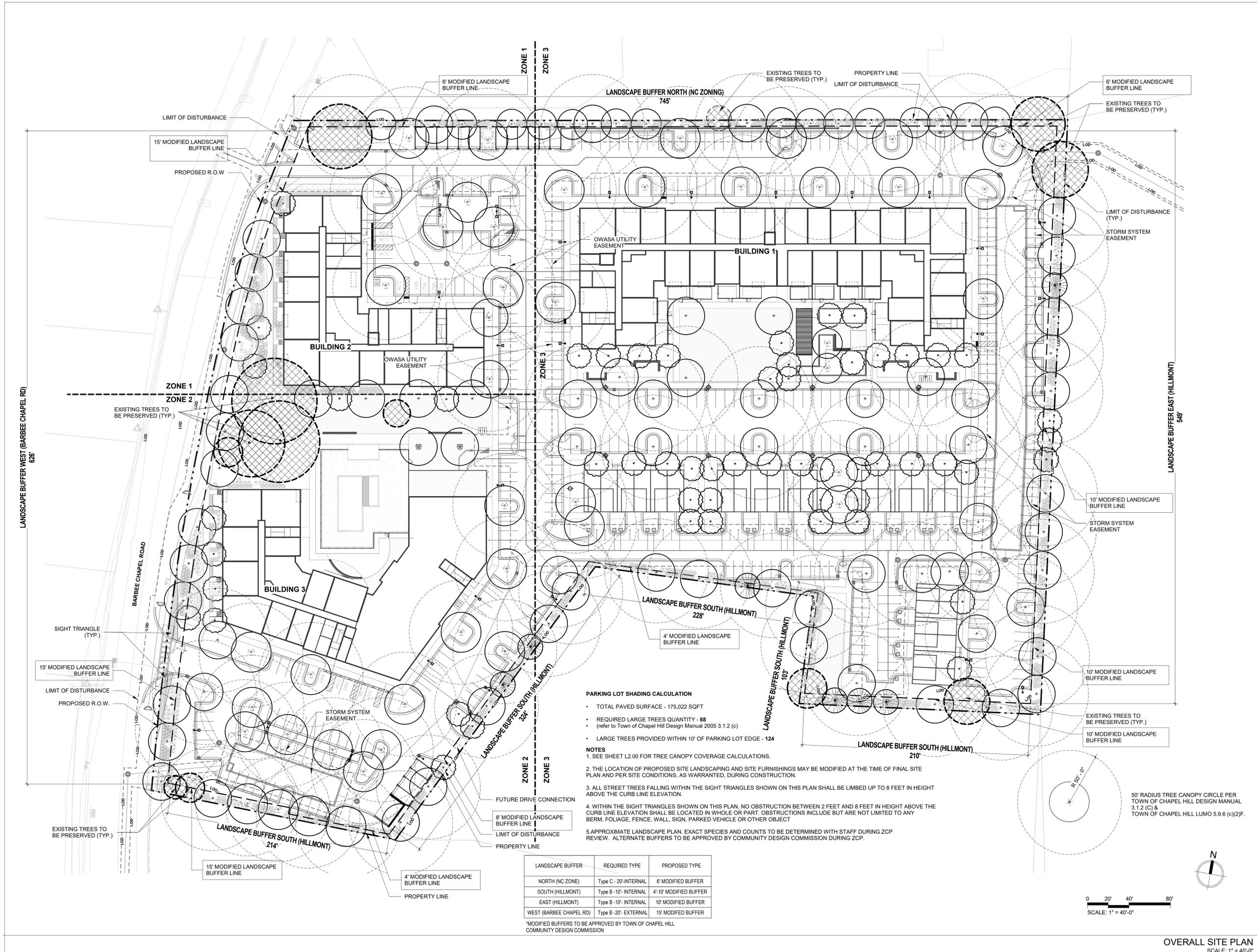
PLAN INFORMATION

PROJECT NO.: P200798

SCALE: AS INDICATED
DATE: 09/29/2022

OVERALL SITE PLAN

L1.00



PARKING LOT SHADING CALCULATION

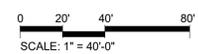
- TOTAL PAVED SURFACE - 175,022 SQFT
- REQUIRED LARGE TREES QUANTITY - 88 (refer to Town of Chapel Hill Design Manual 2005 3.1.2 (c))
- LARGE TREES PROVIDED WITHIN 10' OF PARKING LOT EDGE - 124

NOTES

1. SEE SHEET L2.00 FOR TREE CANOPY COVERAGE CALCULATIONS.
2. THE LOCATION OF PROPOSED SITE LANDSCAPING AND SITE FURNISHINGS MAY BE MODIFIED AT THE TIME OF FINAL SITE PLAN AND PER SITE CONDITIONS, AS WARRANTED, DURING CONSTRUCTION.
3. ALL STREET TREES FALLING WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN SHALL BE LIMBED UP TO 8 FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION.
4. WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, NO OBSTRUCTION BETWEEN 2 FEET AND 8 FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION SHALL BE LOCATED IN WHOLE OR PART. OBSTRUCTIONS INCLUDE BUT ARE NOT LIMITED TO ANY BERM, FOLIAGE, FENCE, WALL, SIGN, PARKED VEHICLE OR OTHER OBJECT
5. APPROXIMATE LANDSCAPE PLAN. EXACT SPECIES AND COUNTS TO BE DETERMINED WITH STAFF DURING ZCP REVIEW. ALTERNATE BUFFERS TO BE APPROVED BY COMMUNITY DESIGN COMMISSION DURING ZCP.

LANDSCAPE BUFFER	REQUIRED TYPE	PROPOSED TYPE
NORTH (NC ZONE)	Type C - 20'-INTERNAL	6' MODIFIED BUFFER
SOUTH (HILLMONT)	Type B - 10'-INTERNAL	4'-10' MODIFIED BUFFER
EAST (HILLMONT)	Type B - 10'-INTERNAL	10' MODIFIED BUFFER
WEST (BARBEE CHAPEL RD)	Type B - 20'-EXTERNAL	15' MODIFIED BUFFER

*MODIFIED BUFFERS TO BE APPROVED BY TOWN OF CHAPEL HILL COMMUNITY DESIGN COMMISSION





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PLAN INFORMATION

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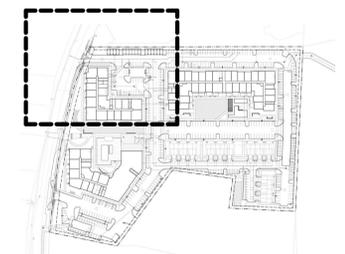
PLANTING PLAN ZONE 01

L1.01

LEGEND

- LOD --- LIMITS OF DISTURBANCE
- TP --- TREE PROTECTION FENCE
- P.L. --- PROPERTY LINE
- CANOPY TREES
- UNDERSTORY TREES
- EVERGREEN TREES
- EXISTING TREES TO BE PRESERVED
- PARKING LOT LIGHTING
- STREET LIGHT

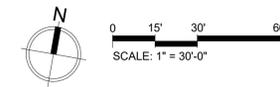
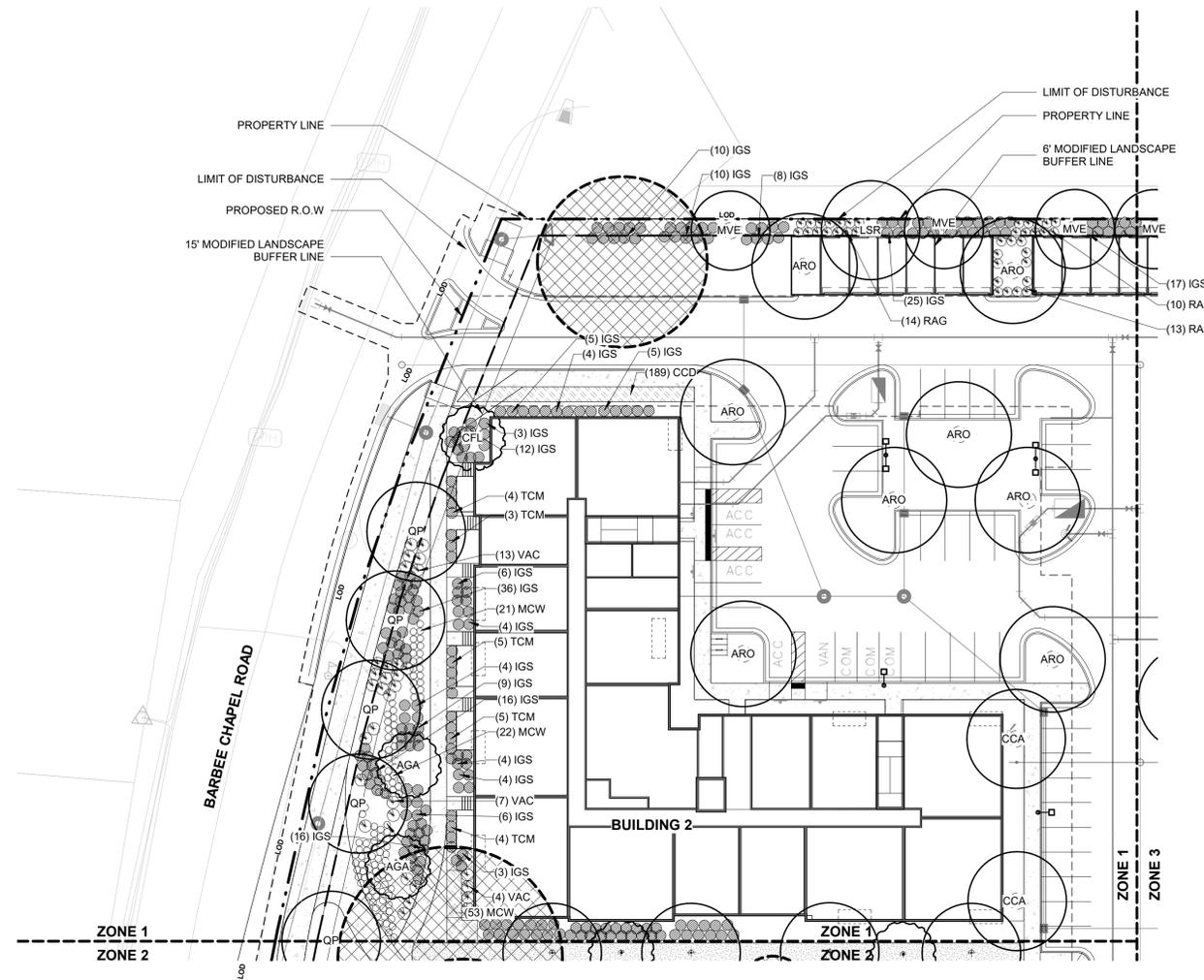
- NOTES**
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TREE SCHEDULE-KEY			
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE
CANOPY TREES			
ARO	Acer rubrum 'October Glory'	October Glory Red Maple	3" Cal
CCA	Carpinus caroliniana 'CCSQU'	Palisade® American Hornbeam	4" Cal
LSR	Liquidambar styraciflua 'Rotundiloba'	Seedless Sweetgum	4" Cal
MVE	Magnolia virginiana 'Emerald Tower'	Upright Sweetbay Magnolia	3" Cal
QFA	Quercus falcata	Southern Red Oak	4" Cal
QP	Quercus phellos	Willow Oak	4" Cal
EVERGREEN CANOPY TREES			
PTA	Pinus taeda	Loblolly Pine	2.5" Cal
UNDERSTORY TREES			
AGA	Amelanchier x grandiflora 'Autumn Brilliance'	Apple Serviceberry	7'-8" Ht.
CFL	Cornus florida	Flowering Dogwood	7'-8" Ht.
Grand total			

SHRUB & ORNAMENTAL GRASS SCHEDULE-KEY			
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE
ORNAMENTAL GRASS			
MCW	Muhlenbergia capillaris 'White Cloud'	White Cloud Muhly Grass	#3
SHRUB			
HIN	Hamamelis x intermedia	Hybrid Witch Hazel	#3
IGS	Ilex glabra 'Shamrock'	Inkberry Holly	#3
IVE	Ilex verticillata	Winterberry Holly	#3
IVH	Itea virginica 'Henry's Garnet'	Virginia sweetspire	#3
RAG	Rhus aromatica 'Grow-low'	Dwarf Sumac 'Gro-low'	#3
TCM	Taxus canadensis 'Marshall'	Spreading Yew	#3
VAC	Viburnum acerifolium	Mapleleaf Viburnum	#3

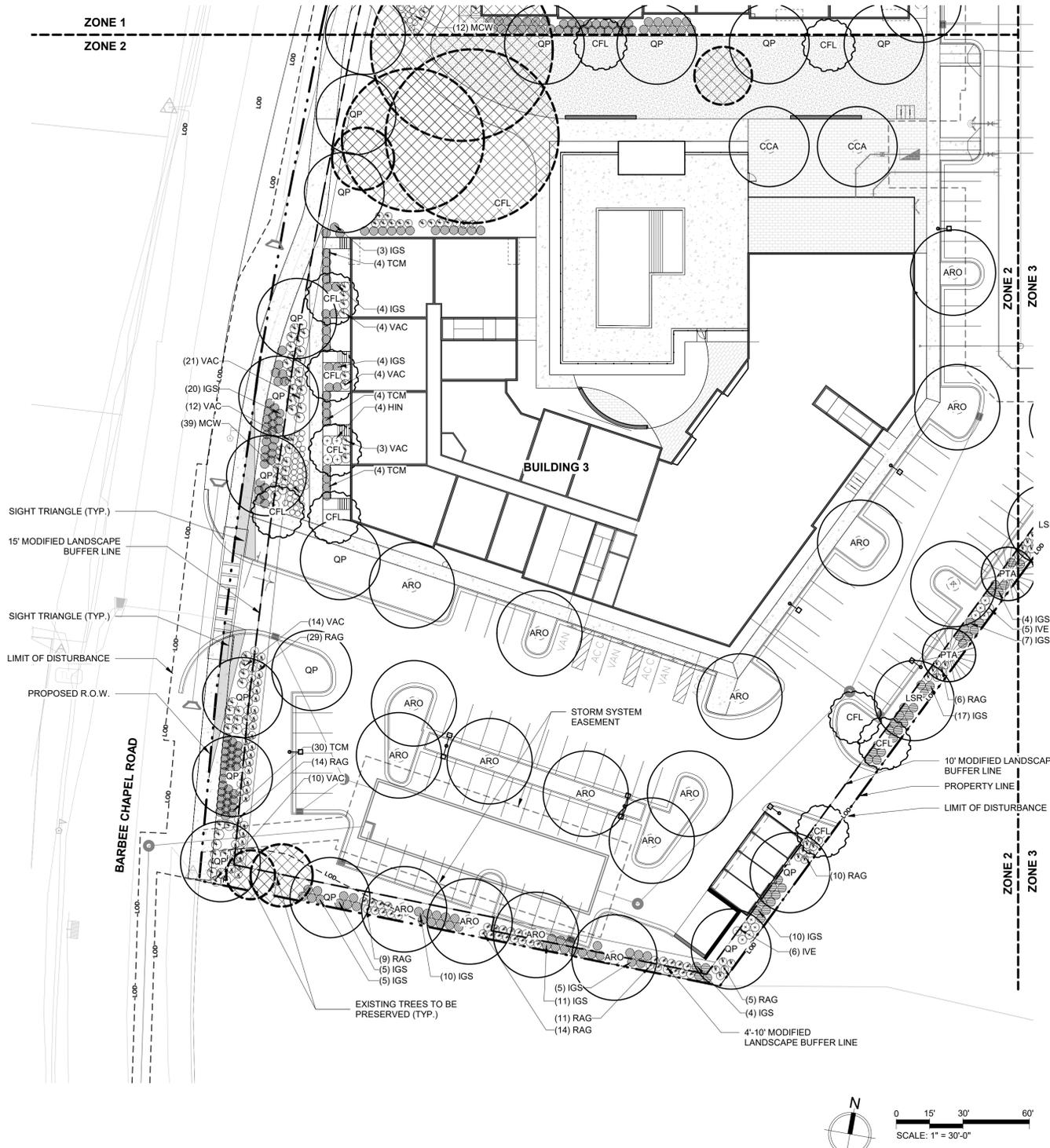
PERENNIAL SCHEDULE - KEY			
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE
CCD	Carex cherokeensis	Cherokee Sedge	#1



TREE SCHEDULE-KEY			
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE
CANOPY TREES			
ARO	Acer rubrum 'October Glory'	October Glory Red Maple	3" Cal
CCA	Carpinus caroliniana 'CCSQU'	Palisade® American Hornbeam	4" Cal
LSR	Liquidambar styraciflua 'Rotundiloba'	Seedless Sweetgum	4" Cal
MVE	Magnolia virginiana 'Emerald Tower'	Upright Sweetbay Magnolia	3" Cal
QFA	Quercus falcata	Southern Red Oak	4" Cal
QP	Quercus phello	Willow Oak	4" Cal
EVERGREEN CANOPY TREES			
PTA	Pinus taeda	Loblolly Pine	2.5" Cal
UNDERSTORY TREES			
AGA	Amelanchier x grandiflora 'Autumn Brilliance'	Apple Serviceberry	7'-8" Ht.
CFL	Cornus florida	Flowering Dogwood	7'-8" Ht.
Grand total			

SHRUB & ORNAMENTAL GRASS SCHEDULE-KEY			
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE
ORNAMENTAL GRASS			
MCW	Muhlenbergia capillaris 'White Cloud'	White Cloud Muhty Grass	#3
SHRUB			
HIN	Hamamelis x intermedia	Hybrid Witch Hazel	#3
IGS	Ilex glabra 'Shamrock'	Inkberry Holly	#3
IVE	Ilex verticillata	Winterberry Holly	#3
IVH	Itea virginica 'Henry's Garnet'	Virginia sweetspire	#3
RAG	Rhus aromatica 'Grow-low'	Dwarf Sumac 'Gro-low'	#3
TCM	Taxus canadensis 'Marshall'	Spreading Yew	#3
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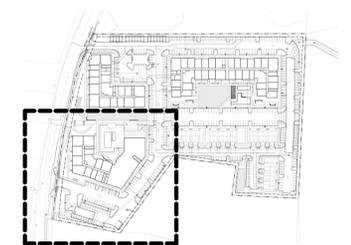
PERENNIAL SCHEDULE - KEY			
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE
CCD	Carex cherokeensis	Cherokee Sedge	#1



LEGEND

- LOD --- LIMITS OF DISTURBANCE
- TP - TREE PROTECTION FENCE
- - - - - PROPERTY LINE
- CANOPY TREES
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- EVERGREEN TREES
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- PARKING LOT LIGHTING
- STREET LIGHT

- NOTES**
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PROJECT NO.: P200798

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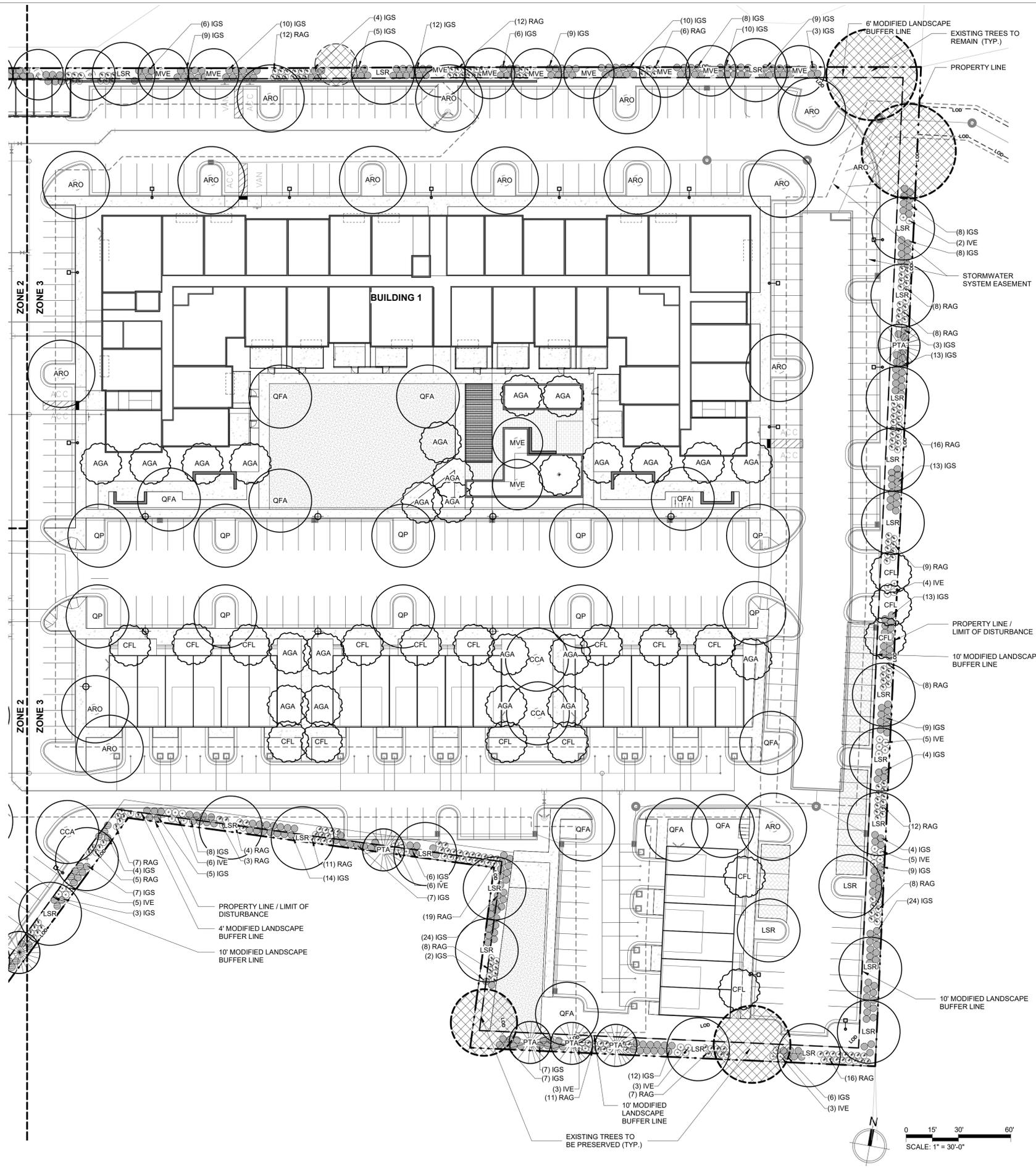
PLANTING PLAN ZONE 2

L1.02

TREE SCHEDULE-KEY			
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE
CANOPY TREES			
ARO	Acer rubrum 'October Glory'	October Glory Red Maple	3" Cal
CCA	Carpinus caroliniana 'CCSQU'	Palisade® American Hornbeam	4" Cal
LSR	Liquidambar styraciflua 'Rotundiloba'	Seedless Sweetgum	4" Cal
MVE	Magnolia virginiana 'Emerald Tower'	Upright Sweetbay Magnolia	3" Cal
QFA	Quercus falcata	Southern Red Oak	4" Cal
QP	Quercus phellos	Willow Oak	4" Cal
EVERGREEN CANOPY TREES			
PTA	Pinus taeda	Loblolly Pine	2.5" Cal
UNDERSTORY TREES			
AGA	Amelanchier x grandiflora 'Autumn Brilliance'	Apple Serviceberry	7'-8" Ht.
CFL	Cornus florida	Flowering Dogwood	7'-8" Ht.
Grand total			

SHRUB & ORNAMENTAL GRASS SCHEDULE-KEY			
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE
ORNAMENTAL GRASS			
MCW	Muhlenbergia capillaris 'White Cloud'	White Cloud Muhly Grass	#3
SHRUB			
HIN	Hamamelis x intermedia	Hybrid Witch Hazel	#3
IGS	Ilex glabra 'Shamrock'	Inkberry Holly	#3
IVE	Ilex verticillata	Winterberry Holly	#3
IVH	Itea virginica 'Henry's Garnet'	Virginia sweetspire	#3
RAG	Rhus aromatica 'Grow-low'	Dwarf Sumac 'Gro-low'	#3
TCM	Taxus canadensis 'Marshall'	Spreading Yew	#3
VAC	Viburnum acerifolium	Mapleleaf Viburnum	#3

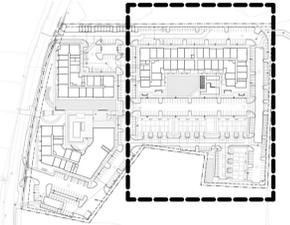
PERENNIAL SCHEDULE - KEY			
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE
CCD	Carex cherokeensis	Cherokee Sedge	#1



LEGEND

- LOD --- LIMITS OF DISTURBANCE
- - - TP - - - TREE PROTECTION FENCE
- - - - - PROPERTY LINE
- CANOPY TREES
- UNDERSTORY TREES
- EVERGREEN TREES
- EXISTING TREES TO BE PRESERVED
- PARKING LOT LIGHTING
- STREET LIGHT

- NOTES**
- SEE SHEET L2.00 FOR TREE CANOPY COVERAGE CALCULATIONS.
 - THE LOCATION OF PROPOSED SITE LANDSCAPING AND SITE FURNISHINGS MAY BE MODIFIED AT THE TIME OF FINAL SITE PLAN AND PER SITE CONDITIONS, AS WARRANTED, DURING CONSTRUCTION.
 - ALL STREET TREES FALLING WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN SHALL BE LIMBED UP TO 8 FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION.
 - WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, NO OBSTRUCTION BETWEEN 2 FEET AND 8 FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION SHALL BE LOCATED IN WHOLE OR PART. OBSTRUCTIONS INCLUDE BUT ARE NOT LIMITED TO ANY BERM, FOLIAGE, FENCE, WALL, SIGN, PARKED VEHICLE OR OTHER OBJECT.
 - APPROXIMATE LANDSCAPE PLAN. EXACT SPECIES AND COUNTS TO BE DETERMINED WITH STAFF DURING ZCP REVIEW. ALTERNATE BUFFERS TO BE APPROVED BY COMMUNITY DESIGN COMMISSION DURING ZCP.



PLANTING PLAN ZONE 03
SCALE: 1" = 30'-0"



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**BARBEE CHAPEL APARTMENTS
CONDITIONAL ZONING PERMIT
DRAWINGS
5101 BARBEE CHAPEL RD
CHAPEL HILL, NORTH CAROLINA, 27517**



REVISIONS

NO.	DATE	REVISION DESCRIPTION
1	11/21/2022	1ST ROUND COMMENTS
2	02/21/2023	REVISED PER 2ND ZCP COMMENTS

PLAN INFORMATION

PROJECT NO.: P200798

SCALE: AS INDICATED
DATE: 09/29/2022

PLANTING PLAN ZONE 03

L1.03



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REVISIONS

NO.	DATE	REVISION DESCRIPTION
1	11/21/2022	1ST ROUND COMMENTS
2	02/21/2023	REVISED PER 2ND CZP COMMENTS

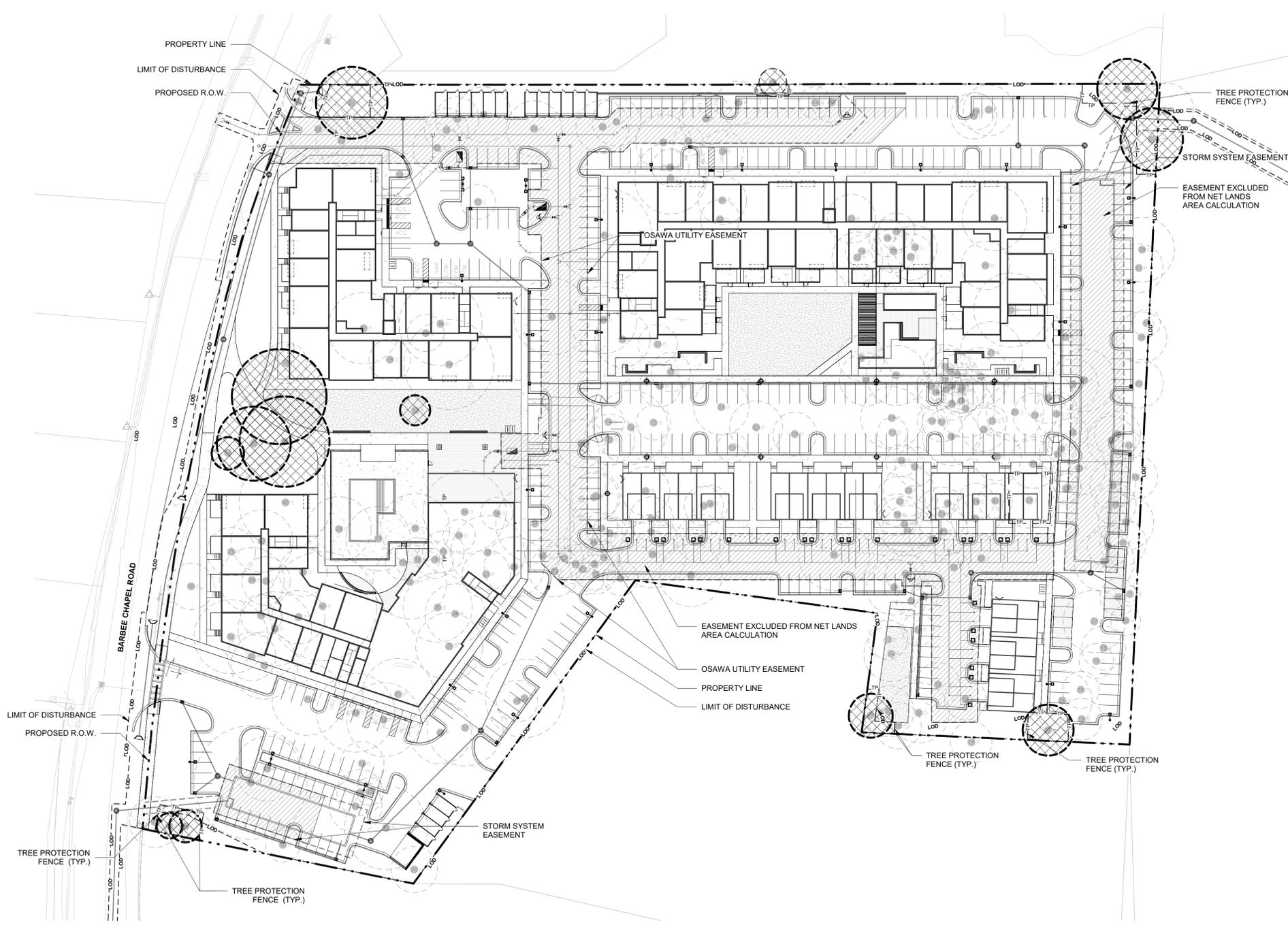
PLAN INFORMATION

PROJECT NO.: P200798

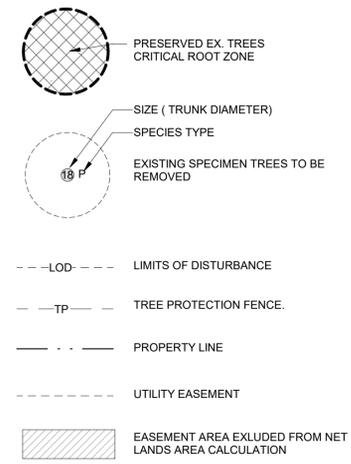
SCALE: AS INDICATED
DATE: 09/29/2022

TREE PROTECTION PLAN

L2.00



LEGEND



EXISTING TREE LEGEND

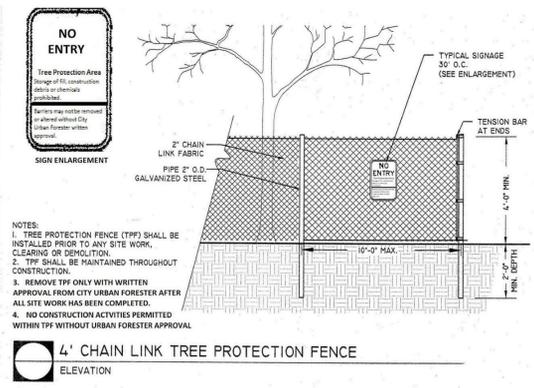
- A ASH
- B BEECH
- C CEDAR
- E ELM
- G SWEET GUM
- H HICKORY
- M MAPLE
- O OAK
- P PINE

- RARE TREES (refer to LUMO Section 5.7.6) - 0
- SIGNIFICANT TREE STANDS - NONE (refer to Tree Evaluation Report)
- SPECIMEN TREES (refer to LUMO Section 5.7.6) - 240
- SPECIMEN TREES TO BE PROTECTED - 13
- SPECIMEN TREES TO BE REMOVED - 227
- LOT SIZE - 455,841 SQF
- NET LOT SIZE (excl. easements and ROWs) - 380,084 SQF
- 30% REQUIRED TREE CANOPY COVERAGE (Multi-Family Residential) - 114,025 SQF
- AREA OF EXISTING CANOPY PROTECTED - 11,535 SQF
- CANOPY DEFICIT - 102,490 SQF
- REPLACEMENT TREES REQUIRED (as per LUMO Section 5.7.2(c)) - 177
- REPLACEMENT TREES PROPOSED - Proposed Canopy Trees: 131
Credits on Trees over 4" Cal (refer to LUMO Section 5.7.2 (c)): 75
Total: 206

NOTES:

1. Protective fencing, fences, or other equally effective measures as determined by the town manager, shall be used to protect areas identified on an approved landscape protection plan during demolition and construction activity. Protective fencing shall be installed according to town standards. Field adjustments may be allowed subject to prior approval by the town manager. All land disturbing activity, storage of equipment, building material, soil, and other debris shall be kept outside the protected areas.
2. Landscaping activities taking place after the removal of protective fencing shall be accomplished with light machinery or hand labor and in accordance with the town's landscaping standards and specifications. This requirement should be noted on the plans.
3. Prior to the commencement of any activities requiring a zoning compliance permit, a pre-construction conference with the town's urban forester or landscape architect shall take place to review procedures for protection and management of all protected landscape elements identified on the landscape protection plan.
4. On-site supervision. For all development other than that related to single-family and two-family dwellings on individual zoning lots, the following on-site supervision is required:
 - i. The applicant shall designate as landscape protection supervisors one or more persons who have completed instruction in landscape protection procedures with the town.
 - ii. It shall be the duty of the landscape protection supervisor to ensure the protection of new or existing landscape elements, as defined in the landscape protection plan. The approved landscape protection supervisor shall supervise all site work to assure that development activity conforms to provisions of the approved landscape protection plan. At least one (1) identified landscape protection supervisor shall be present on the development site at all times when activity that could damage or disturb soil and adjacent landscape elements occurs such as:
 - Clearing and grubbing;
 - Any excavation, grading, trenching or moving of soil;
 - Removal, installation, or maintenance of all landscape elements and landscape protection devices; or
 - Delivery, transporting, and placement of construction materials and equipment on site.

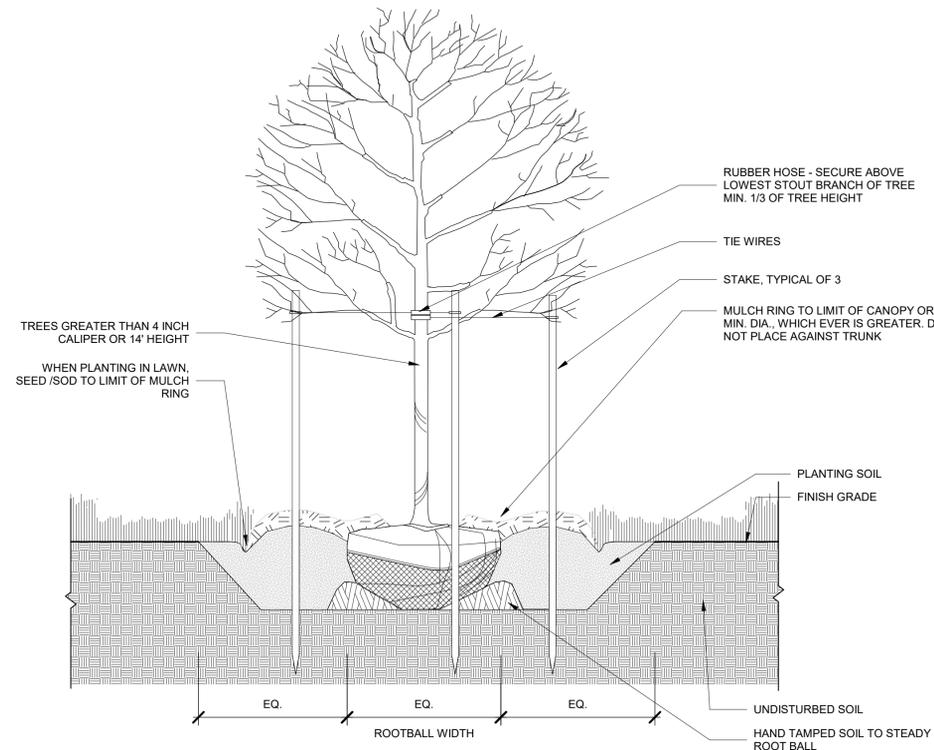
TREE PROTECTION PLAN
SCALE: 1" = 50'-0" **1**



- NOTES:**
1. TREE PROTECTION FENCE (TPF) SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION.
 2. TPF SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
 3. REMOVE TPF ONLY WITH WRITTEN APPROVAL FROM CITY URBAN FORESTER AFTER ALL SITE WORK HAS BEEN COMPLETED.
 4. NO CONSTRUCTION ACTIVITIES PERMITTED WITHIN TPF WITHOUT URBAN FORESTER APPROVAL.

4' CHAIN LINK TREE PROTECTION FENCE
ELEVATION

TREE PROTECTION FENCE DETAIL
SCALE: 3/16" = 1'-0" **2**



NOTES:
1. REFERENCE PLAN FOR ADJACENT PLANTING CONDITIONS. DO NOT CUT CENTRAL LEADER.

SHADE TREE PLANTING
SCALE: 3/4" = 1'-0"

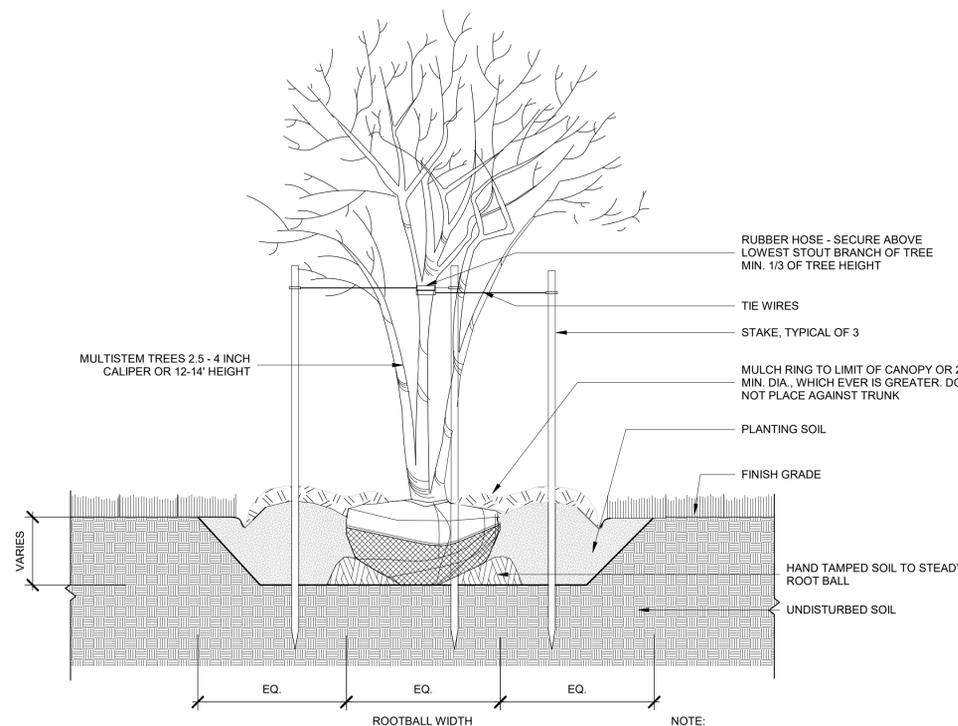
3

TREE SCHEDULE						
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE	ROOT	COUNT	COMMENTS
CANOPY TREES						
ARO	Acer rubrum 'October Glory'	October Glory Red Maple	3" Cal	B&B	50	Limb lowest branch to 7'-0"
CCA	Carpinus caroliniana 'CCSQU'	Palisade® American Hornbeam	4" Cal	B&B	7	Limb lowest branch to 7'-0"
LSR	Liquidambar styraciflua 'Rotundiloba'	Seedless Sweetgum	4" Cal	B&B	26	Limb lowest branch to 7'-0"
MVE	Magnolia virginiana 'Emerald Tower'	Upright Sweetbay Magnolia	3" Cal	B&B	16	
QFA	Quercus falcata	Southern Red Oak	4" Cal	B&B	10	Limb lowest branch to 7'-0"
QP	Quercus phello	Willow Oak	4" Cal	B&B	22	Limb lowest branch to 7'-0"
EVERGREEN CANOPY TREES						
PTA	Pinus taeda	Loblolly Pine	2.5" Cal	B&B	7	
UNDERSTORY TREES						
AGA	Amelanchier × grandiflora 'Autumn Brilliance'	Apple Serviceberry	7'-8" Ht.	B&B	26	
CFL	Cornus florida	Flowering Dogwood	7'-8" Ht.	B&B	29	
Grand total					193	

SHRUB & ORNAMENTAL GRASS SCHEDULE				
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS
SHRUB				
HIN	Hamamelis × intermedia	Hybrid Witch Hazel	#3 48" o.c.	
IGS	Ilex glabra 'Shamrock'	Inkberry Holly	#3 36" o.c.	
IVE	Ilex verticillata	Winterberry Holly	#3 48" o.c.	
IVH	Itea virginica 'Henry's Garnet'	Virginia sweetspire	#3 36" o.c.	
RAG	Rhus aromatica 'Grow-low'	Dwarf Sumac 'Gro-low'	#3 48" o.c.	
TCM	Taxus canadensis 'Marshall'	Spreading Yew	#3 24"-30" spd.	
VAC	Viburnum acerifolium	Mapleleaf Viburnum	#3 36" o.c.	

When selecting shrub species, a minimum of 50% of the total number of required shrubs should be evergreen.

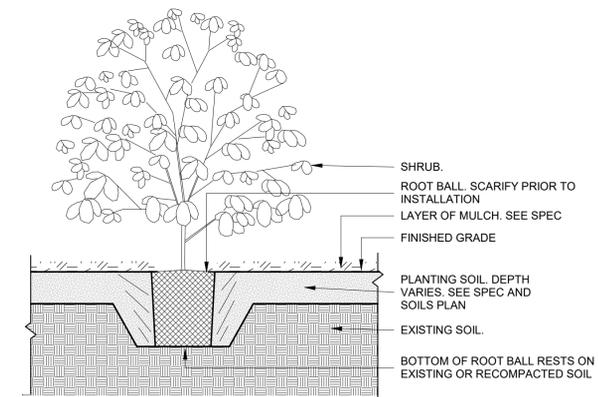
PERENNIAL SCHEDULE				
PLANT ID	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING INCHES
CCD	Carex cherokeensis	Cherokee Sedge	#1	18



NOTE:
1. REFERENCE PLAN FOR ADJACENT PLANTING CONDITIONS. DO NOT CUT CENTRAL LEADER.

ORNAMENTAL TREE PLANTING
SCALE: 3/4" = 1'-0"

1



SHRUB PLANTING DETAIL
SCALE: 3/4" = 1'-0"

2



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PLAN INFORMATION

PROJECT NO.: P200798

SCALE: AS INDICATED
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PLANTING DETAILS AND
PLANTING SCHEDULE
L1.04



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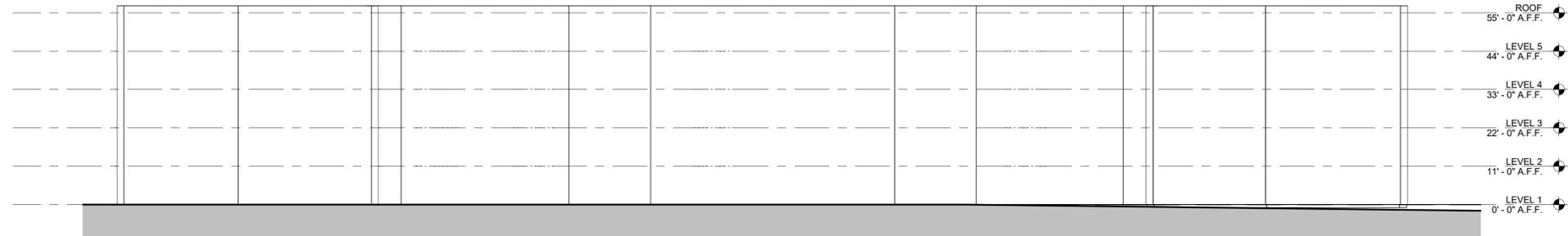
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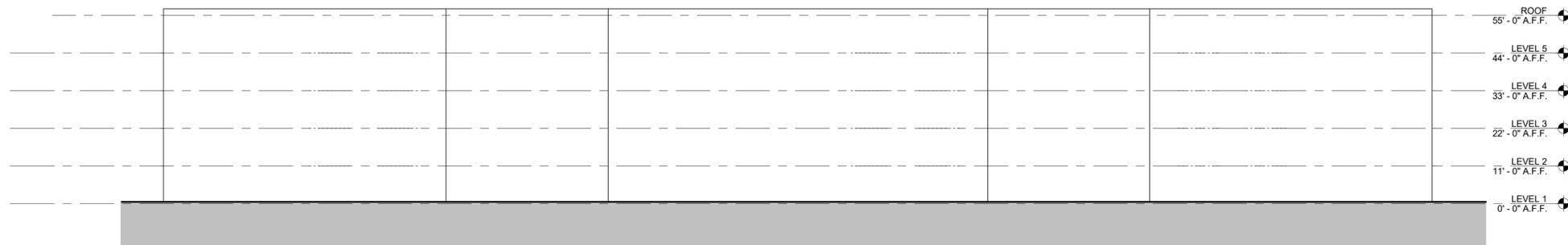
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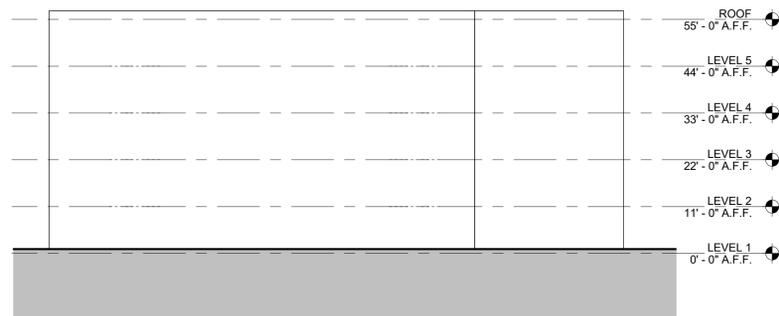
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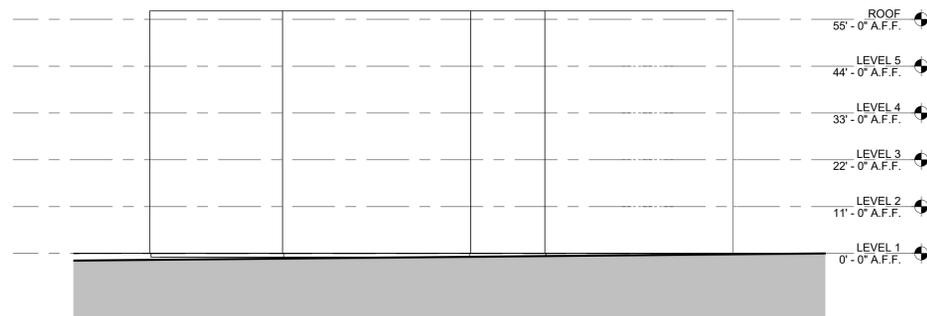
BLDG 1- SOUTH ELEV
1" = 20'-0" 1



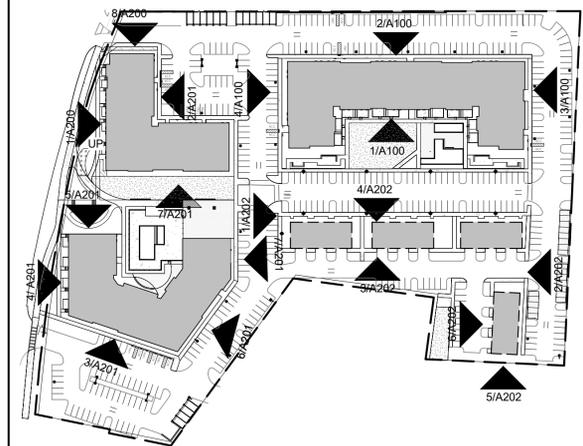
BLDG 1 - NORTH ELEV
1" = 20'-0" 2



BLDG 1- WEST ELEV
1" = 20'-0" 4



BLDG 1 - EAST ELEV
1" = 20'-0" 3



KEY PLAN
REF DRAWING: 11 / A2.00 SCALE: 1" = 15'06" 0

REVISIONS

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PLAN INFORMATION

PROJECT NO.: P200798

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BUILDING ELEVATIONS

A2.00



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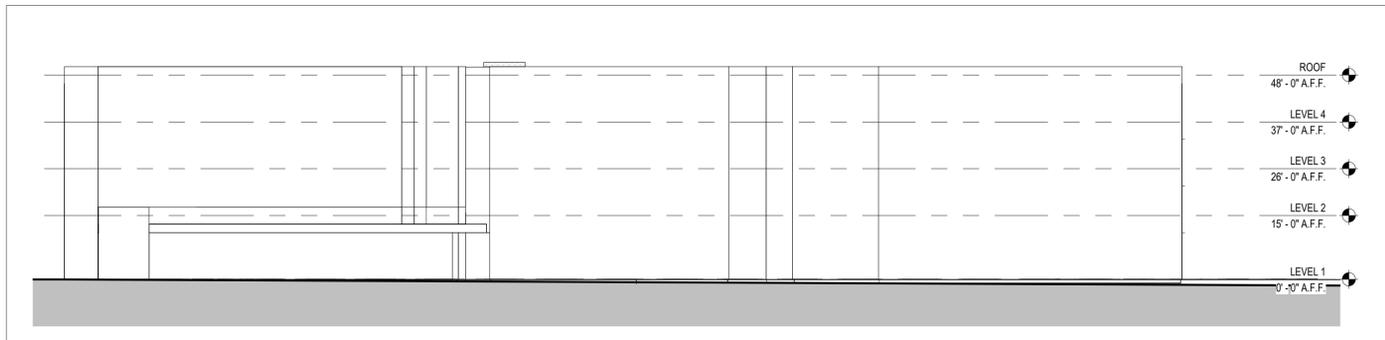
PLAN INFORMATION

PROJECT NO.: P200798

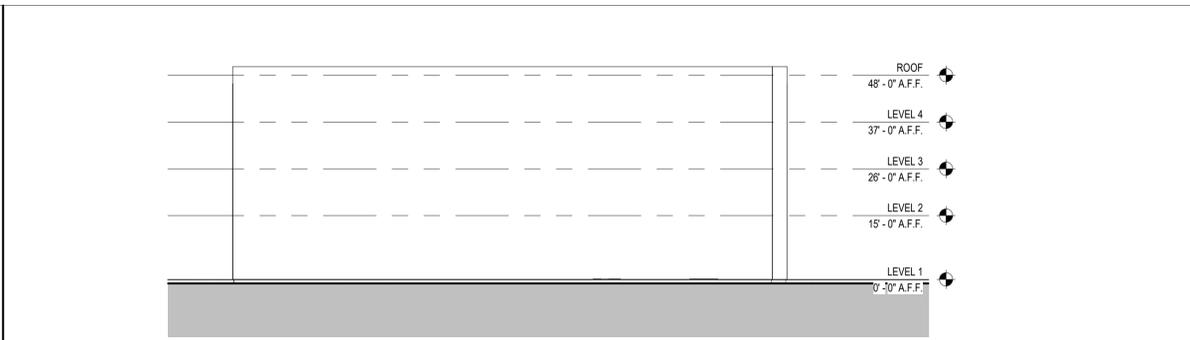
SCALE: AS INDICATED
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BUILDING ELEVATIONS

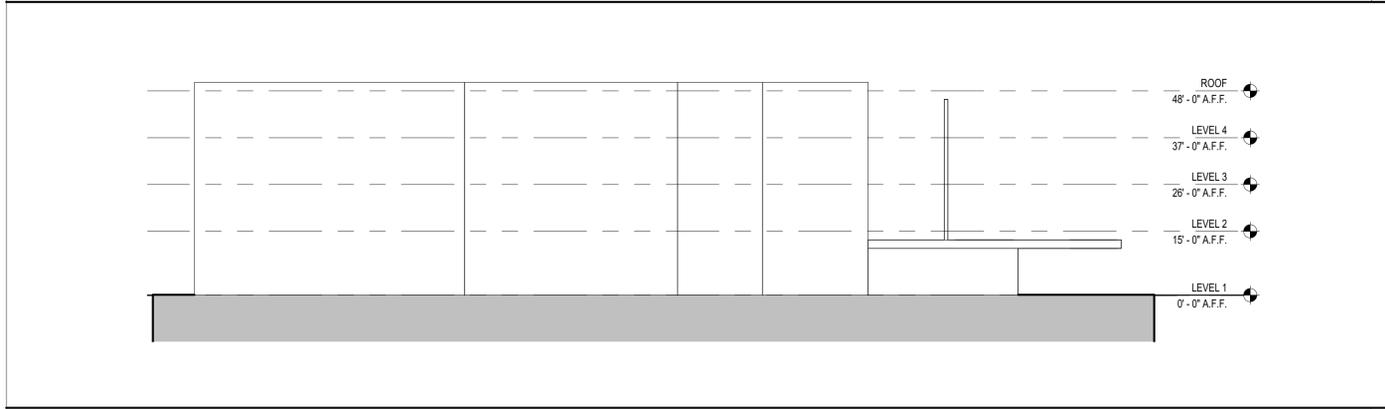
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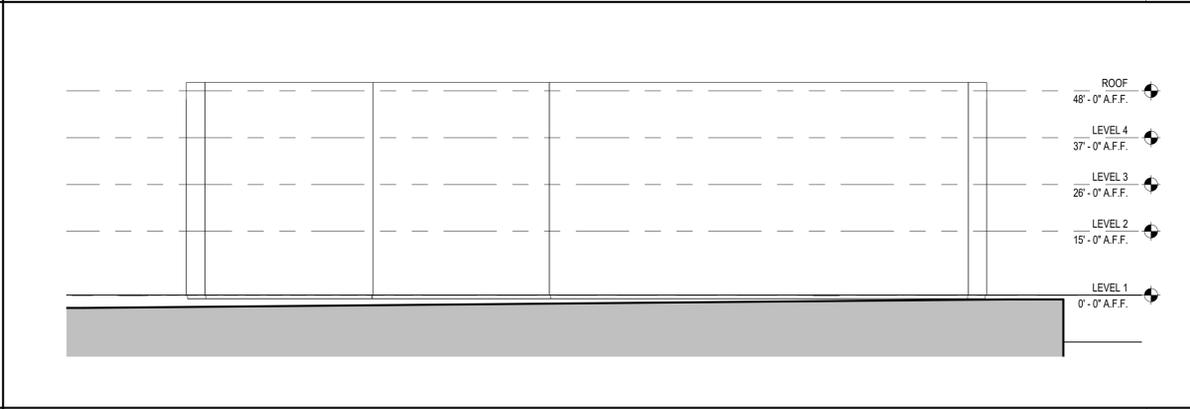
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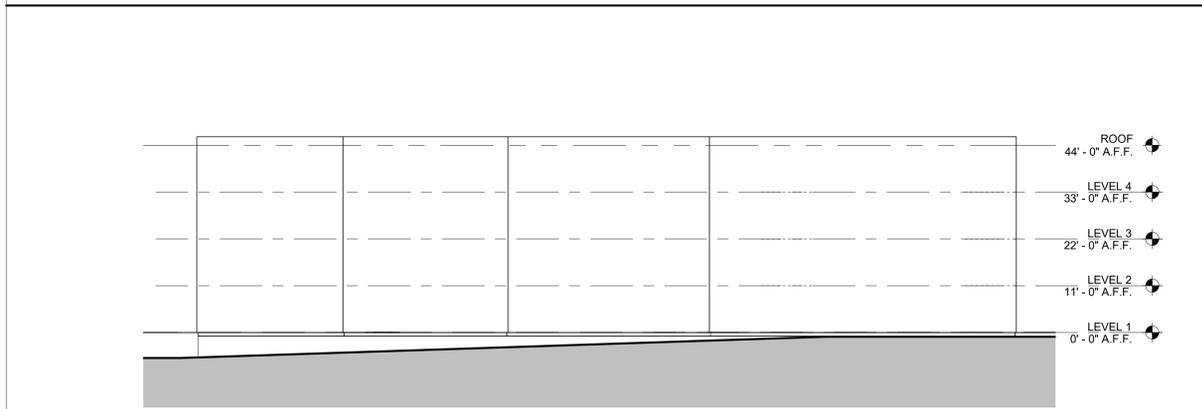
BLDG 3 - WEST ELEV
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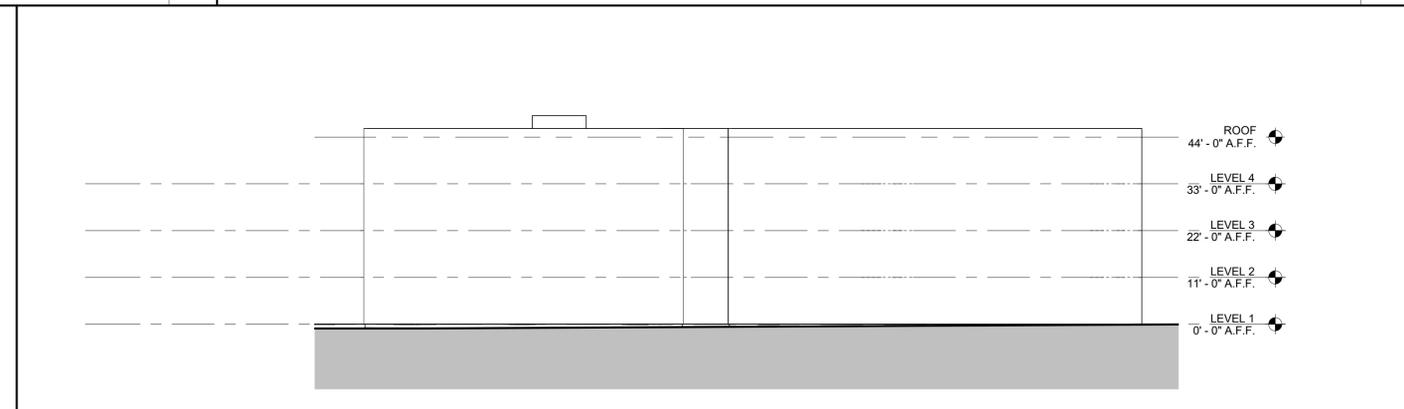
BLDG 3 - EAST ELEV
 1" = 20'-0" 6



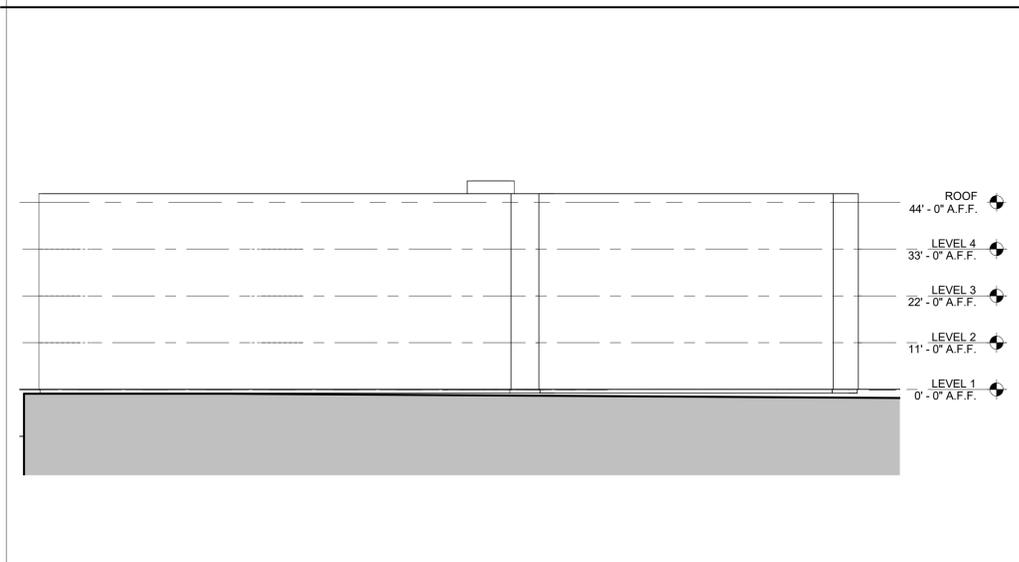
BLDG 3 - SOUTH ELEV
 1" = 20'-0" 3



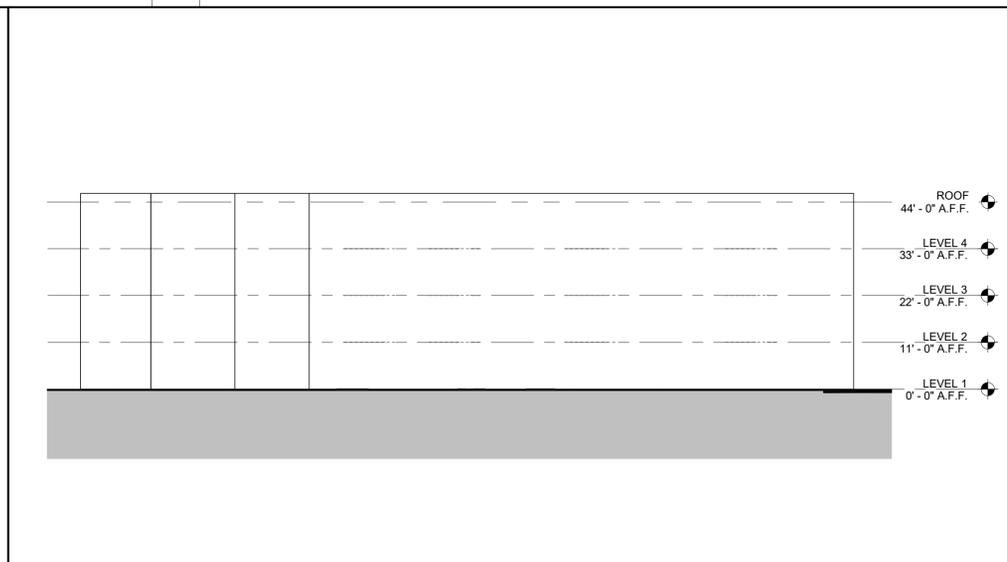
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 1" = 20'-0" 7



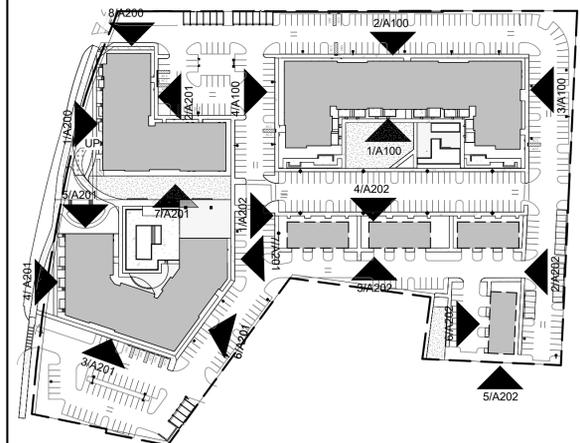
BLDG 2 - EAST ELEV
 1" = 20'-0" 2



BLDG 2 - NORTH ELEV
 1" = 20'-0" 8



BLDG 2 - WEST ELEV
 1" = 20'-0" 1



KEY PLAN
 REF DRAWING: 1 / A2.00 SCALE: 1" = 15'96" 0



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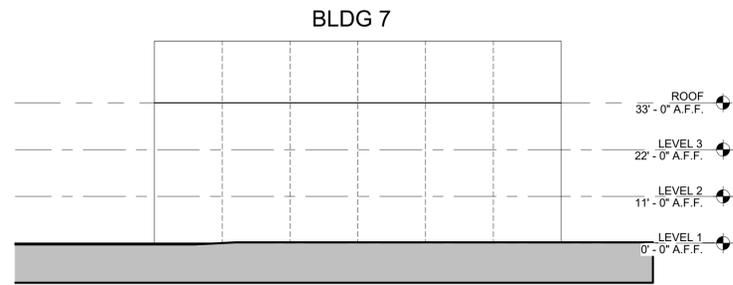
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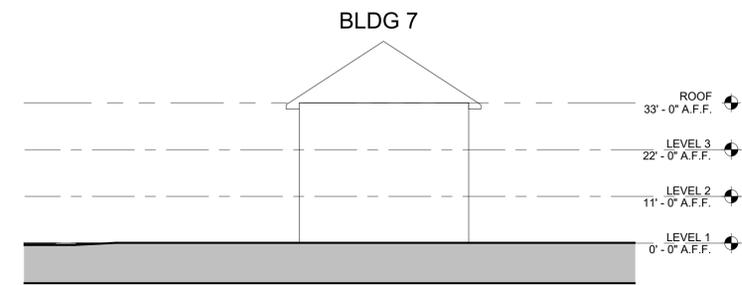


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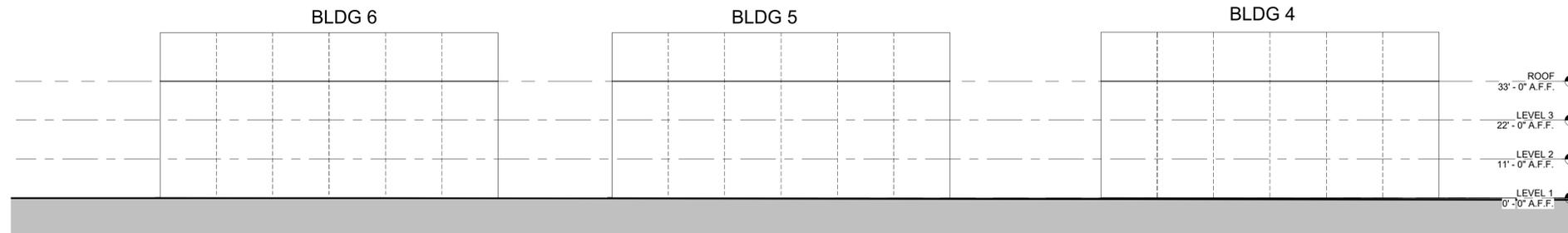
TOWNHOMES- WEST ELEVATION
1" = 20'-0"

6



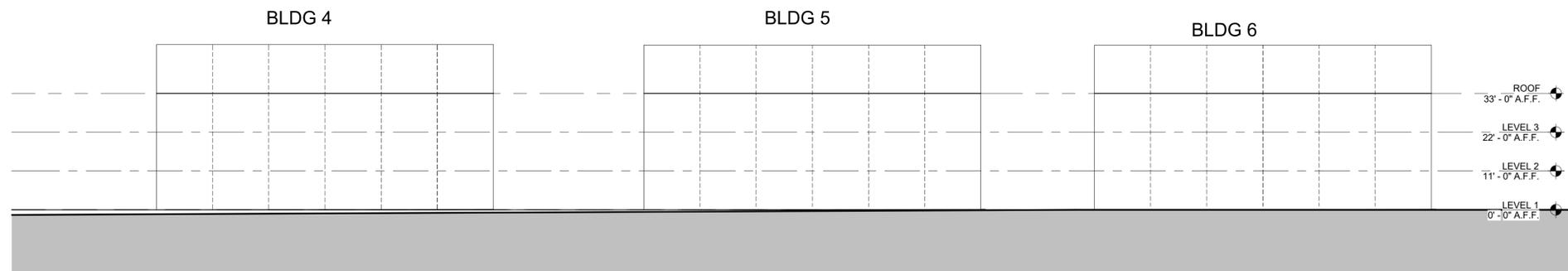
TOWNHOMES- SOUTH ELEVATION
1" = 20'-0"

5



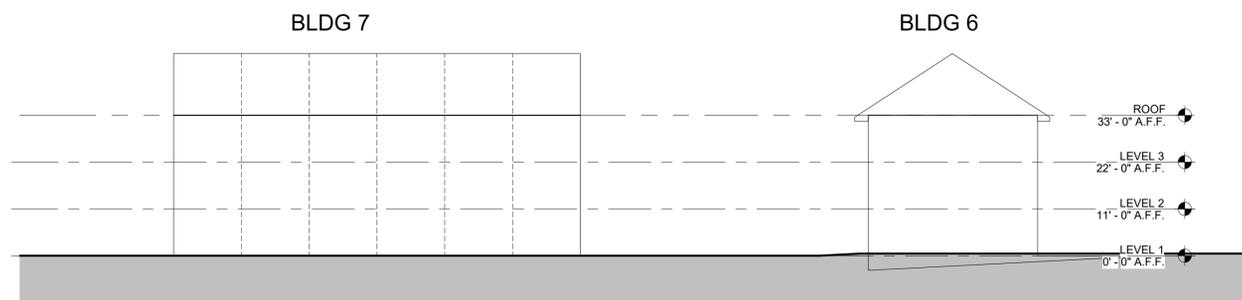
TOWNHOMES- NORTH ELEV
1" = 20'-0"

4



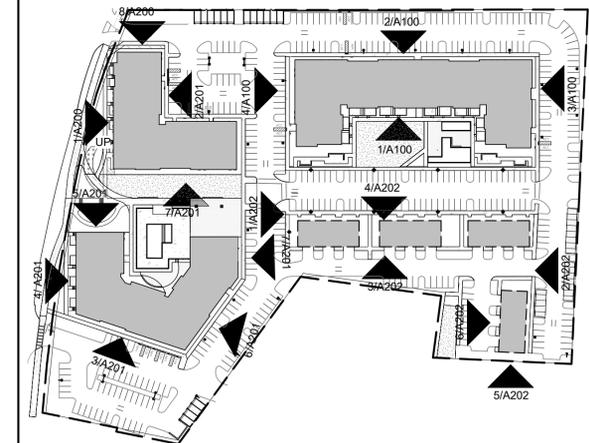
TOWNHOMES - SOUTH ELEV
1" = 20'-0"

3



TOWNHOMES- EAST ELEV
1" = 20'-0"

1



KEY PLAN
1 : 1596

0

REVISIONS

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PLAN INFORMATION

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TOWNHOME ELEVATIONS

A2.02