PLANNING & ECONOMIC DEVELOPMENT DIVISION STAFF REPORT

TO STATE OF THE CARD

101 East Orange Street P.O. Box 429 Hillsborough, NC 27278

Report Date: May 7, 2025

Tom King, AICP, CZO - Senior Planner Secretary to the Board of Adjustment

BOARD OF ADJUSTMENT

Agenda Item: 4.A

CASE NUMBER	CASE NAME	APPLICANT/PROPERTY OWNERS
BA-02-2025	Durham Technical Community College Orange County Campus Expansion	Timmons Group/Orange County & The Trustees of Durham Technical Community College
HEARING DATE May 14, 2025	PARCEL ID NUMBER 9873-33-0977	PROPERTY ADDRESS/LOCATION 525 College Park Road

BRIEF SUMMARY OF REQUEST

Special Use Permit Modification for a 12,239 square foot, two-story building addition.

EXISTING	EXISTING	SURROUNDING	FUTURE LAND	SIZE OF
ZONING	LAND USE	ZONING/LAND USE	USE CATEGORY	PROPERTY
ESU	Vocational School, & park & ride lot	North: ESU (Town) & R-1 (County)/Wooded tract & houses South: ESU/Wooded tract & townhouses East: ESU/Townhouses West: ESU/Wooded tract	Employment Area	20 acres

DISCUSSION OF STAFF FINDINGS

COMPLIANCE with the UDO (UNIFIED DEVELOPMENT ORDINANCE)

The proposed development complies with all applicable UDO provisions.

COMPATIBILITY with the CSP (COMPREHENSIVE SUSTAINABILITY PLAN (2030))

The proposed development generally complies with the Future Land Use Map & applicable CSP provisions.

GENERAL STANDARDS/FINDINGS OF FACT SUMMARY

All four general standards/findings of fact appear to be met.

ATTACHMENTS: 1. Application materials 2. FLUM & UDO 3. Zoning history provisions

DESCRIPTION OF SUBJECT PROPERTY:

Physical Conditions:

Lot Size:		20 acres	
Lot Frontage: West:		College Park Road – 666.25 feet	
	South:	Waterstone Drive – 587.91 feet	
Lot Shape:		Irregular being wider on the west side and narrowing to the east.	
Topography: The property sits higher than the two streets. Topography is highest in the northeast		The property sits higher than the two streets. Topography is highest in the northeast and	
slopes west/southwest. The developed area of the site is relatively flat.		slopes west/southwest. The developed area of the site is relatively flat.	
Lot Coverage: Mostly wooded on the far east, central, north and northwest areas of the site.		Mostly wooded on the far east, central, north and northwest areas of the site.	
Sensitive Areas: Stream head exists in NW corner of the property. Stream subject to 50-foot-wide st		Stream head exists in NW corner of the property. Stream subject to 50-foot-wide stream	
		buffer; 100-foot total width.	
		An historic roadbed crosses the central portion of the site in a SE to NW direction.	

<u>Built Conditions:</u> The property is developed as a two-story vocational school located on the west/southwest

side of the property. A 124-space park-and-ride lot is located along the southeastern boundary of the property.



to Date: 2021. Source: Orange County Land Records/GIS.

DETAILED PROJECT DESCRIPTION:

- 1. Removal of four ground-mounted solar panels and a semi-circular portion of the existing 40,175 square-foot, two-story building. Both features to be removed are on the southwest side of the building.
- 2. A 12,239 square foot, two-story addition to the southwest side of the building. The resulting building square footage will be 52,414 square feet.

A total of 262 parking spaces are required and provided for the project. No additional parking is to be constructed. Instead, the owner proposes use of 197 existing school parking spaces combined with 65 spaces located in the 124-space park and ride lot. Fifty-nine parking spaces will be left for park and ride use.

CONFORMANCE WITH WATERSTONE MASTER PLAN APPROVAL CONDITIONS:

The property is located within Waterstone, a master planned development. The Waterstone development was approved by the town in 2004 and is subject to two documents governing development within the project: (i) a general conditions document applicable to the entire project, and (ii) a parcel-specific conditions document.

Staff offer the following comments regarding compliance with applicable conditions from the two documents:

General Conditions Applicable to the Entire Waterstone Development:

<u>Condition #15: Park and Ride.</u> "The developer shall address in its application for a Special Use Permit for each of the non-residential Parcels shown on the Waterstone Master Plan the suitability of each such Parcel as a location for a "park and ride" facility."

Staff Comment: The meeting minutes of the 2006 hearing where the initial community college project was approved reflect the 125-space park and ride lot as being offered as an alternative for the project subject to funding availability. There was no discussion as to how the spaces could or could not be used, or if it was a specific requirement of permit approval; however, the applicant presented the lot as an asset to the campus, town and county. The original approved project plans show the park and ride lot.

When community college officials first approached staff about the current project, staff recommended a parking study be performed to assess park and ride lot use. VHB Engineering NC, P.C. performed a parking study of the campus in July 2024 (see Attachment #1). The study evaluated existing school parking and the park and ride lot. The park-and-ride lot had a maximum parking demand of 21 spaces during the study period. A hypothetical doubling of the demand coinciding with higher school occupancy in the spring and fall semesters, coupled with the proposed building expansion, showed 42 spaces should satisfy potential park and ride lot demand. (*Note:* The VHB study was based on a slightly larger building addition (336 square feet) than currently proposed.)

Conditions of Approval Applicable to Specific Parcels Identified on the Waterstone Master Plan:

Parcel #16: Community College

1. "That a community college campus is permitted on this parcel."

Staff Comment: Condition has been met.

2. "That the amount of impervious surface on this Parcel shall be determined as part of the Special Use Permit process for this Parcel."

Staff Comment: This is a vague condition leaving the board with no guidance in determining compliance. The existing site contains 4.18 acres (20.9%) of impervious surface, with 0.10 acres proposed. This equals 4.28 acres (21.4%) of impervious surface coverage at project completion; a 0.5% increase in total site impervious surface coverage.

3. "That the developer shall provide pedestrian access to Parcel 17 from this Parcel."

Staff Comment: Condition met when school was built.

FINDINGS OF FACT ANALYSIS:

The following analysis represents staff's professional opinion based upon review of the application materials, UDO, Future Land Use Map and CSP. The Board must make its own determination as to whether <u>all</u> findings are met. <u>This determination must be based on factual, competent, material and substantial evidence</u> presented at the hearing.

Section 3 (Administrative Procedures), Subsection 3.8 (Special Use Permit), Paragraph 3.8.3 (General Standards/Findings of Fact): The Board of Adjustment shall not approve a Special Use Permit application unless it makes each of the following findings concerning the proposed special use:

3.8.3.1 That the use or development is located, designed, and proposed to be operated so as to maintain the public health, safety, and general welfare.

Applicant Statement Supporting Finding: The proposed expansion allows for a greater public safety education program as well as education in other trades. Public health, safety and general welfare will be improved through the introduction into the community of more individuals trained in the emergency response field.

Staff Analysis: Staff find no reason why the proposed development will be detrimental to public health, safety and general welfare.

3.8.3.2 That the use or development complies with all required regulations and standards of this Ordinance, including all applicable provisions of Articles 4, 5, and 6 and all applicable regulations.

Applicant Statement Supporting Finding: The development will comply with all UDO requirements and conditions, as well as any other applicable local, state and federal regulations unless relieved from such requirements in writing.

Staff Analysis: Staff offer the following in relation to this finding:

1. Compliance with Section 4

The project complies with the intent of the ESU (Entranceway Special Use) district described in UDO Section 4 (Zoning Districts) (see Attachment #2). The property subject to the request is located within the larger Waterstone development; a project containing a diverse mixture of commercial, office and employment uses along a primary entrance into town.

2. <u>Compliance with Section 5</u>

UDO Section 5 (Use Standards) contains no use-specific standards for Vocational Schools.

3. Compliance with Section 6

The town's Technical Review Committee have reviewed the submitted construction drawings and found them to comply with all applicable requirements of UDO Section 6 and other town regulations.

3.8.3.3 That the use or development is located, designed, and proposed to be operated so as to maintain or enhance the value of contiguous property, or that the use or development is a public necessity, and

Applicant Statement Supporting Finding: The project site is located at the corner of Waterstone Drive and College Park Road. Project design uses building materials already in use on campus.

Staff Analysis: Staff find no reason why the use will injure the value of contiguous property. The proposed addition will face, and sits higher than, the corner of Waterstone Drive and College Park Road with properties to the immediate west and south being vacant and wooded. The development is not a public necessity.

3.8.3.4 That the use or development conforms with the general plans for the physical development of the Town and is consistent with the Town's Comprehensive Plan.

Applicant Statement Supporting Finding: The development is an expansion of an existing community college campus. It will conform with the general plans for the physical development of the town and is consistent with the comprehensive plan.

Staff Analysis: Staff evaluated the project in relation to the town's Future Land Use Map and CSP and offers the following findings:

1. Future Land Use Map

The property is classified as "Employment Area" (see Attachment #2). The proposed development conforms with this land use category as follows:

- a. The use offers a community service.
- b. The building is located on a site overlooking the intersection of Waterstone Drive and College Park Road. Both streets are lined with street trees that break up the view of the building from adjacent streets and sidewalks.
- c. The property has direct driveway access to two major roads: Waterstone Drive and College Park Road. The town's adopted Street Manual classifies Waterstone Drive as a "Multi Lane Boulevard," and College Park Road as a "Commercial/Industrial Collector." Waterstone Drive connects directly with Old NC 86 to the west and NC 86 South to the east. Both streets are state-maintained streets classified as "Minor Arterials." College Park Road intersects with Cates Creek Parkway (classified by the town as a "Residential Collector") to the north. Cates Creek Parkway exits onto Old NC 86 to the west.

2. *CSP*

The proposed development is consistent with the following provision of the adopted CSP:

a. Economic Development and Tourism Element

Goal #3: "Increase access to opportunity, education, employment and wealth."

<u>Strategy:</u> "Participate in partnerships and programs that contribute toward meeting economic system and tourism goals in a sustainable and equitable manner."

<u>Strategy Point #5:</u> "Coordinate and support organizations and agencies that provide business support programs."

The community college provides valuable educational and training opportunities for the community that ultimately supports local and regional business and industry. Approval of the expansion offers the college the opportunity to grow and continue the provisions of this valuable service.

RECOMMENDED CONDITIONS OF APPROVAL:

Staff have no recommended conditions for this project, if approved. However, the board may attach reasonable and appropriate conditions and safeguards to the permit but may not include requirements for which the town has no authority to apply under state statute or that the courts have held to be unenforceable.

VOTING REQUIREMENT:

A majority vote is required to grant a Special Use Permit modification.



GENERAL APPLICATION Special Use Permit, Variance or Appeal Board of Adjustment Hearing

Planning and Economic Development Division 101 E. Orange St., PO Box 429, Hillsborough, NC 27278 919-296-9475 | Fax: 919-644-2390 www.hillsboroughnc.gov

This application is for a special use permit (including modifications), variance or appeal. Incomplete applications will not be accepted or processed.

Permit or Relief Requested: Special Use Permit Modification

PROJECT LOCATION AND DESCRIPTION **Durham Technical Community College** Project Name: Orange County Campus Expansion Project Type: Institutional Property Address/Location: 525 College Park Rd, Hillsborough, NC 27278 PIN(s): 9873330977 Size of Property (Acres/Sq. Ft.): 19.99/870714 20 Acres Current Use of Property: Education Building Proposed Use of Property: Education Building Use Class (from UDO Sections 5.1.7 and 5.1.8); School: Vocational Number Existing Buildings to Remain: 1 **Number Proposed Buildings:** Gross Floor Area Existing Buildings: 40,175 Gross Floor Area Proposed Buildings: 12,575 239 Number Lots Proposed: Number Dwelling Units Proposed: 0 Brief Summary of Request (use separate sheet if necessary): Modification to existing special use permit for the expansion of the existing Durham Technical Community College Orange County Campus building.

CERTIFICATION AND SIGNATURES

Applications will not be accepted without signature of legal property owner or official agent.

I certify that the information presented by me in this application and all accompanying documents are true and accurate to the best of my knowledge, information, and belief; and I acknowledge that the processing of this application may require additional town, county and/or state permits, approvals and associated fees.

Legal Property Owner: Durham Technical Community	
Mailing Address: 1637 E. Lawson St.	
City, State, ZIP Code: Durham, NC 27703	
Telephone: 919-536-7201 x1001	
Email: kleitscha@durhamtech.edu	
Signature: Andrew Kleitsch Digitally signed by Andrew Kleitsch Date: 2024.11.12 09:53:20 -05'00'	
Date: 2024-11-12	

Legal Relationship of Applicant to Property Owner: Engineer







AUTHORIZATION FORM

Owner's Authorization for Agent Board of Adjustment Hearing

Planning and Economic Development Division 101 E. Orange St., PO Box 429, Hillsborough, NC 27278 919-296-9475 | Fax: 919-644-2390

www.hillsboroughnc.gov

This form must accompany any application to go before the Board of Adjustment in which the application will not be represented by the legal property owner. Each owner shown on the property owner's deed must sign this authorization form.

I/We Travis Myren				
(print names of legal p	roperty owners)			
hereby authorize William Altman				
(print name of	fagent)			
to represent me/us in processing an application for Specia	Use Permit Modification			
on my/our behalf. In authorizing the agent to represent me/	us, I/we as owner/owners attest that:			
 The application is made in good faith. All information contained in the application is accurate and complete. The agent is authorized to accept any and all conditions that may be placed on the approval. I/we as the property owner(s) am/are bound by any decision of the board, including any and all conditions attached to board approvals. 				
Travis Myren Date: 2025.02.14 14:58:01 -05'00'				
Signature of Owner	Signature of Owner			
Tuo via Muna v				
Travis Myren				
Print Name of Owner	Print Name of Owner			
NORTH CAROLINA	<u>Orangl</u> county			
Sworn to and subscribed before me on this 4th day of F	<u>2025</u> by			
Thuis Mimon	0			
Print Name of Person Making Statement	·			
NINGS S. ALLING	Melissa S. allison			
SW CTAR Z	Signature of Notary Public			
SEALL OTARL Z	Melissa S Allison			
A	Print Commissioned Name of Notary Public			
EO WUBLI	2-11-28			
OF COUNTING	Commission Expiration Date			
Will Committee	Commission Expiration Date			
The individual(s) making the above statement is/are person	nally known / or identification was produced .			



AUTHORIZATION FORM

Owner's Authorization for Agent Board of Adjustment Hearing

Planning and Economic Development Division 101 E. Orange St., PO Box 429, Hillsborough, NC 27278 919-296-9475 | Fax: 919-644-2390

www.hillsboroughnc.gov

This form must accompany any application to go before the Board of Adjustment in which the application will
not be represented by the legal property owner. Each owner shown on the property owner's deed must sign
this authorization form.

/We Andrew Kleitsch	gal property owners)	
	gai property owners)	
hereby authorize William Altman	ne of agent)	
•		
to represent me/us in processing an application for Special Control of the contro		
on my/our behalf. In authorizing the agent to represent	me/us, I/we as owner/owners attest that:	
attached to board approvals.	·	
Andrew Kleitsch Digitally signed by Andrew Kleitsch Date: 2025.01.21 09:23:54 -05'00'		
Signature of Owner	Signature of Owner	
Andrew Kleitsch		
Print Name of Owner	Print Name of Owner	
NORTH CAROLINA	COUNTY	
Sworn to and subscribed before me on this <u>21st</u> day of	f <u>January</u> 20 <u>25</u> by	
Andrew Kleitsch	,	
Print Name of Person Making Statement	Ciribally alread by Danie Jaffrica	
Millian Market	Donice Jeffries Digitally signed by Donice Jeffries Date: 2025.01.21 10:04:56 -05'00'	
THE OF SEASON AND	Signature of Notary Public	
Continuo de la contin	Donice Jeffries	
	Print Commissioned Name of Notary Public	
OBLIC S	September 8, 2026	
COUNTRIBUTE	Commission Expiration Date	
The individual(s) making the above statement is/are pe	rsonally known x or identification was produced	



SUPPLEMENTAL FORM Special Use Permit

Planning and Economic Development Division 101 E. Orange St., PO Box 429, Hillsborough, NC 27278 919-296-9475 | Fax: 919-644-2390 www.hillsboroughnc.gov

To the Hillsborough Board of Adjustment:	
ı, <u>Will Altman, PE</u> issue a Special Use Permit in the name of ^{Durham Technical C}	, hereby petition the Board of Adjustment to
use of the property described in the attached General Ap if not adequately explained there, as more fully described	plication in a manner set forth on that form or,
Authority to grant the request is contained in the Hillsbor	ough Unified Development Ordinance sections:
Section 5	

Factors Relevant to Permit Issuance

The Hillsborough Unified Development Ordinance imposes the following four general standards/findings of fact on the special use requested by the applicant. Below or on a separate sheet, indicate the facts you intend to show and the arguments you intend to make to convince the Board of Adjustment that it can properly reach these four required findings.

1. That the use or development is located, designed, and proposed to be operated so as to maintain the public health, safety, and general welfare.

The expansion is being proposed to protect the public health, safety, and general welfare of the community. The expansion will allow for a greater public safety education program as well as other trades which improves the public health, safety, and general welfare by introducing more individuals into emergency response fields. The proposed development is subject to all of the requirements of the Unified Development Ordinance.

2. That the use or development complies with all required regulations and standards of the Unified Development Ordinance, including all applicable provisions of articles 4, 5, and 6 and all applicable regulations.

The development shall comply with all sections of the UDO, conditions of approval, and any other applicable local, state, and federal regulations. It is understood that unless relieved of a requirement, in writing, all UDO requirements must be met.

Last revised: December 2023

Date

	That the use or development is located, designed, and proposed to be operated so as to maintain or enhance the value of contiguous property or that the use or development is a public necessity.
	The proposed development is located along the frontage of Waterstone Drive and College Park Road. The design utilizes consistent building materials with what is already present on campus to maintain or enhance the value of contiguous property.
	That the use or development conforms with the general plans for the physical development of the Town and is consistent with the Hillsborough Comprehensive Plan.
	The development conforms with the general plans for the physical development of the Town and is consistent with the Hillsborough Comprehensive Plan. The development is an expansion onto the existing Durham Tech campus
request applica followin	ified Development Ordinance also imposes the following use-specific requirements on the use sed by the applicant (town staff will assist the applicant in listing the specific requirements). The not should be prepared to demonstrate that the proposed use will comply with each of the not specific requirements if the land is used in a manner consistent with the plans, applications her information presented to the board:
None.	
-	that all the information presented by me in this application is accurate to the best of my dge, information, and belief.
10	11/15/2024

Signature of Applicant



To: Andrew Kleitsch
Vice President Finance/Chief Financial Officer
Durham Technical Community College
1637 E. Lawson Street
Durham, NC 27703

Date: August 15, 2024

Memorandum

Project #: 39670.01

From: Andrew Topp, PE, PTOE Re: Durham Technical Community College (DTCC)

Orange County Campus - Parking Study

Hillsborough, NC

Durham Technical Community College (DTCC) has plans to construct an addition to the educational building on the DTCC Orange County campus along College Park Road in Hillsborough, North Carolina. VHB Engineering NC, P.C. (VHB) was retained by DTCC to conduct a parking study for the proposed development. As shown on the conceptual site plan (Figure 1 in the Appendix), access to the campus parking lot and park-and-ride lot are accessible via a full-movement driveway on College Park Road and a right-in, right-out driveway on Waterstone Drive. The campus is located at 525 College Park Road and will undergo redevelopment to construct an addition (12,575 square feet) to the existing educational building (40,175 square feet).

An evaluation of current and future parking demand was conducted for the campus as well as the park-and-ride lot to help DTCC understand their parking needs and determine what may be required for future campus expansions.

As required by the Town of Hillsborough Unified Development Ordinance (UDO) (Development Standards, last amended March 11, 2024), Table 6.13.3.4, the minimum number of parking spaces that shall be provided for a Vocational School, at the rate of 1 parking space per 200-SF of indoor space, resulting in a total of 264 required minimum number of parking spaces for this project (Table 1).

Table 1: UDO Required Parking

Proposed Development	Indoor Area With Expansion	Required Parking Ratio by UDO	Required Parking Spaces
DTCC Orange Campus Expansion	52,750 SF	1 space per 200 SF	264

As indicated in the UDO, an applicant may propose a reduced rate of required parking specified in Section 6.13.3.3.a, Allowable Parking Reductions and Additions, in accordance with a parking study that is conducted based on the industry standards and/or comparable site data.

Based on rates published in the Institute of Transportation Engineers (ITE) Parking Generation (5th Edition), the peak parking demand on a weekday for a Junior/Community College is 188 spaces, typically occurring between 10 AM and 2 PM. As summarized in Table 2, the results based on ITE standards are approximately 29% lower than the UDO requirements for this project.



Table 2: ITE Parking Generation Results

Land Use Code ¹ Land Use	Indoor Area With Expansion	Weekday (Monday – Friday)			
		Average Rate	Peak Period	Total	
540	Junior / Community College	52,750 SF	3.57	10 AM – 2 PM	188
Development Total 188				188	

^{1.} Land Use Code and trip generation rates are determined based on ITE Parking Generation, 5th Edition.

Existing and Projected Parking Demand

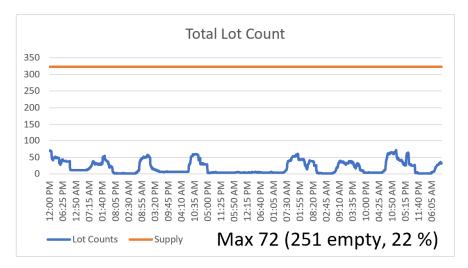
The existing DTCC parking lot contains 199 spaces, and the park-and-ride parking lot contains 124 spaces. The park-and-ride lot is used by the Town of Hillsborough and GoTriangle as a free park-and-ride location. Parking demand fluctuates day to day based on the number of classes in session. To help determine the maximum parking demand and availability of parking, vehicle counts were collected to measure the total number of vehicles within the lots over the course of a multiday collection period. The parking data were collected from 12:00 PM on Wednesday, July 10, 2024, to 11:00 AM on Thursday, July 25, 2024, while the DTCC Summer Term was in session, and the results are summarized in Exhibit 1. Pneumatic tubes were used to continuously collect the vehicle movements into and out of the two driveways along with park-and-ride lot. An in-person field parking occupancy measurement was also conducted at the beginning, end, and midway through the data collection to help verify the calculations.

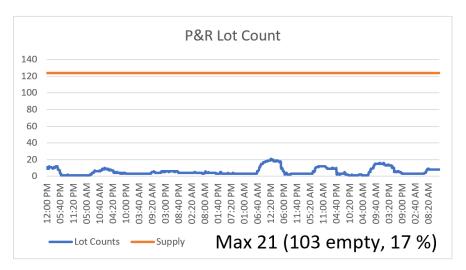
The number of vehicles present within each parking zone fluctuated over the course of the collection period with peak parking experienced around 12:50 PM on Wednesday, July 17^h, 2024. At that time, there was a maximum parking demand of 72 spaces with 251 empty spaces (~22% occupied) within the collection area of campus.

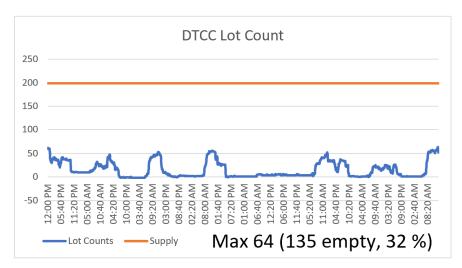
As shown in Exhibit 1, the Durham Technical Community College lot was recorded to have 135 empty spaces, the park-and-ride lot was recorded to have 103 empty spaces (~22% occupied) at their maximum occupancy periods. Exhibit 1 on the following page illustrates the areas of parking data collection and the occupied spaces over the course of the collection period for each of the lots.



Exhibit 1: Existing Parking Demand – Summer Term









Based on course data provided by DTCC, the summer course offerings are about half of those in the fall or spring (45 compared to 84 and 101, respectively). The maximum parking demand recorded for a typical summer semester week was 64 occupied spaces in the DTCC lot. An adjustment factor based proportionally on the course offerings in the fall and spring, as well as the additional square footage was applied to the collected parking data. As shown in Table 3, the expected parking demand for a typical fall or spring semester week is 119 spaces and 163 occupied spaces, respectively. Based on conversations with on-campus staff, this number is consistent with their observations where the lot is generally half full most weekdays and close to two thirds full on their busiest days throughout the year. A proportional parking demand increase associated with the building expansion results in a demand of 189 spaces, which can be accommodated within the current parking lot with a 10-space surplus.

Table 3: Field Based Parking Calculations

DTTC Semester	Course Offerings	Parking Demand	Parking Supply	Parking Net
Summer Term	45	64 spaces (counted)	199	135 Space Surplus
Fall Term	84	119 spaces (estimated)	199	115 Space Surplus
Spring Term	101	144 spaces (estimated)	199	55 Space Surplus
Future Maximum with	131	189	199	10 Space
Expansion (+31%)	(estimated)	(estimated)		Surplus

There are currently 199 spaces in the lots surrounding the existing Durham Technical Community College building, with 124 spaces in the park-and-ride lot. Based on the results of the park-and-ride count, there was a maximum parking demand of 21 spaces. This is consistent with available aerial photography reviewed and conversations with DTCC staff familiar with the lot. Based on a hypothetical doubling of this demand to coincide with higher occupancies in the spring and fall, there is still a surplus of spaces available in the park-and-ride lot. Table 4 illustrates the number of parking spaces available on the property when the DTCC and park-and-ride lots are combined. The total combined surplus of parking with the expansion in place and park-and-ride included is 92 spaces.

Table 4: Field Based Parking Calculations with Park-and-Ride

DTTC Semester	DTCC Estimated Parking Demand	DTCC Parking Supply	Park & Ride Estimated Parking Demand	Park & Ride Parking Supply	Parking Net
Future Maximum with Expansion (+31%)	189	199	42	124	92 Space Surplus

Ref: 39670.01 August 15, 2024 Page 5



Conclusion

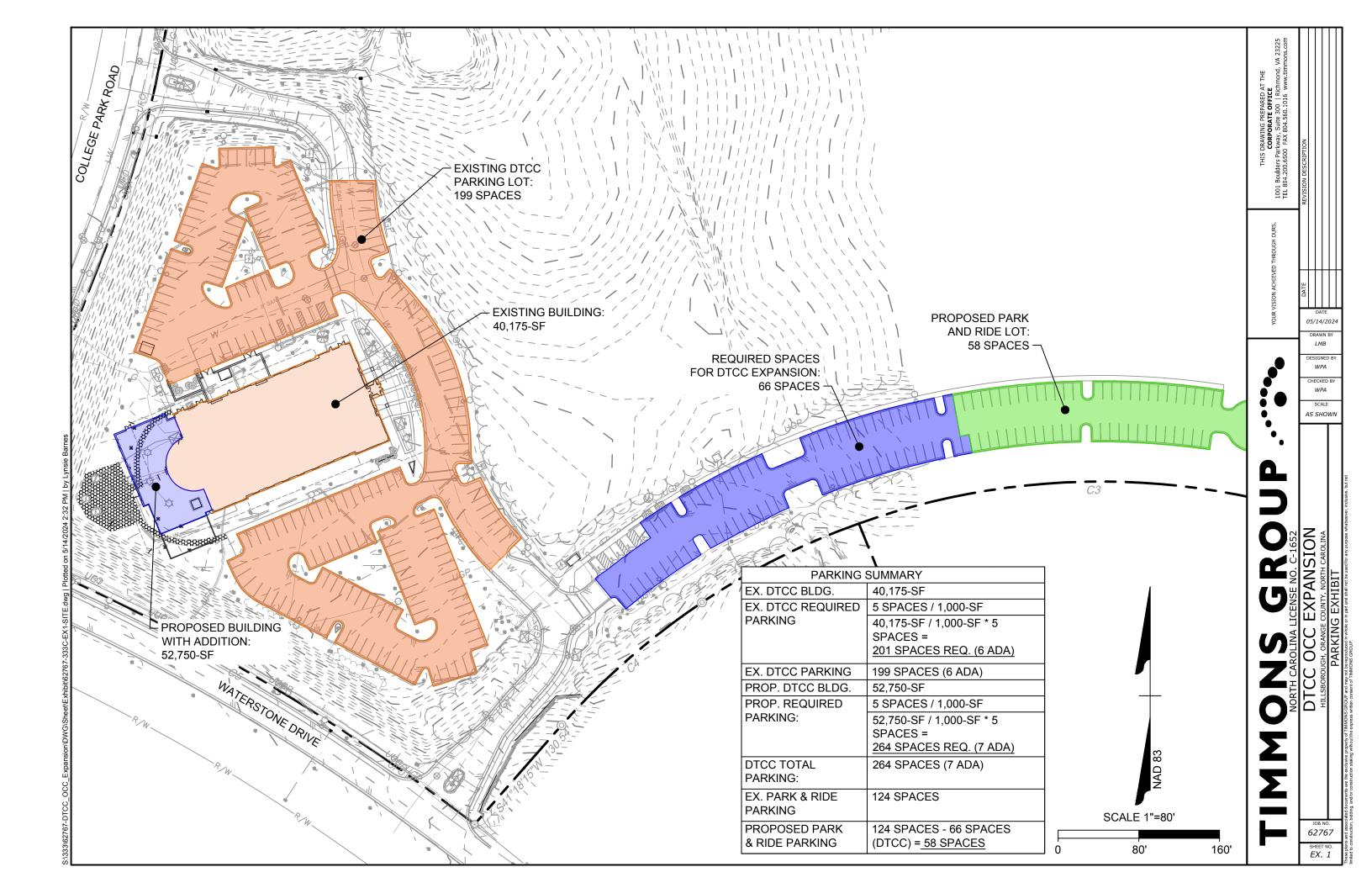
Based on the results of this parking evaluation, the DTCC Orange County site with the building expansion is expected to have a maximum parking demand of 189 spaces. This number is consistent with the ITE projected demand of 188 spaces for a building of this size and observations from daily users of the lots. The campus currently has 199 spaces available, which will accommodate the projected demand in the spring or fall semesters with the expansion in place.

The park-and-ride lot located next to the DTCC parking lot has an excess number of spaces within close proximity of the DTCC building. Based on the results of the analysis, the 323 total combined spaces will accommodate the parking demand of both the DTCC and park-and-ride use with an estimated 92-space surplus. As a result, no additional onsite parking needs to be constructed to accommodate their anticipated parking demand.

Ref: 39670.01 August 15, 2024 Page 6



Appendices



SPECIAL USE MODIFICATION DRAWINGS FOR:

DURHAM TECHNICAL COMMUNITY COLLEGE ORANGE COUNTY CAMPUS EXPANSION

525 COLLEGE PARK RD, HILLSBOROUGH, NC 27278

TOWN OF HILLSBOROUGH BOARD OF ADJUSTMENT CASE # BA-02-2025



SITE	DATA	ΔΤ Δ	RI	F

SHE	DATA TABLE
PROJECT NAME:	DURHAM TECHNICAL COMMUNITY COLLEGE ORANGE COUNTY CAMPUS EXPANSION
STATE CONSTRUCTION OFFICE (SCO) NUMBER	23-26062-02A
PROPERTY OWNER/ DEVELOPER:	DURHAM TECHNICAL COMMUNITY COLLEGE 1637 E LAWSON ST, DURHAM, NC 27703 ORANGE COUNTY 300 W. TRYON ST., HILLSBOROUGH, NC 27278
PIN ID:	9873330977
DEED ACRES:	20
PROPERTY ZONING:	ESU
CURRENT USE:	VOCATIONAL SCHOOL
PROPOSED USE:	VOCATIONAL SCHOOL
DISTURBED AREA:	0.54 ACRES
RIVER BASIN:	CATES CREEK (NEUSE)
SURFACE WATER CLASSIFICATION:	LOWER ENO UNPROTECTED
PARKING REQUIREMENTS:	EXISTING DTCC PARKING: 197 SPACES (6 ADA) EXISTING PARK AND RIDE PARKING: 124 SPACES (5 ADA) REQUIRED PARKING SPACES: 1 SPACES / 200-SF: 52,414-SF / 200-SF X 1 SPACE = 262 SPACES PROVIDED DTCC PARKING SPACES: 262 SPACES (7 ADA) PROVIDED PARK AND RIDE PARKING: 59 SPACES (5 ADA) ADA SPACES REQUIRED: 7 SPACES (FOR DTCC)
EXISTING IMPERVIOUS:	4.18 AC
NEW IMPERVIOUS:	0.10 AC
TOTAL POST DEVELOPMENT IMPERVIOUS:	4.28 AC



ARCHITECT

KATHERINE HOGAN ARCHITECTS CONTACT: KATHERINE HOGAN, AIA LEED AP PHONE: (919) 793-5063 553 PYLON DRIVE RALEIGH, NC 27606

OWNERS

DURHAM TECHNICAL COMMUNITY COLLEGE CONTACT: MARIE-PIERRE LUSSIER. PMP PHONE: (919) 747-4544 4601 CREEKSTONE DR, SUITE 130 DURHAM, NC 27703

ORANGE COUNTY CONTACT: TRAVIS MYREN PHONE: (919) 245-2300 300 W. TRYON ST. HILLSBOROUGH, NC 27278

APPLICANT / CIVIL ENGINEER

TIMMONS GROUP CONTACT: WILL ALTMAN, PE PHONE: (919) 866-4938 5410 TRINITY ROAD, SUITE 102 RALEIGH, NC 27607

katherine hogan architects

Durham Tech -**Orange County** Campus -Expansion

525 College Park Rd, Hillsborough, NC 27278

SEAL | DATE

COPYRIGHT 2024 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED WITHOUT PERMISSION FROM

KATHERINE HOGAN ARCHITECTS

TIMMONS GROUP YOUR VISION ACHIEVED THROUGH OURS.

VIRGINIA NORTH CAROLINA THIS DRAWING PREPARED AT THE RALEIGH OFFICE 5410 Trinity Road, Suite 102 Raleigh, NC 27607 FAX 919.859.5663 www.timmons.com

North Carolina License No. C-1652 Site Development | Residential | Infrastructure | Technology 50352-333



SHEET IS	SUE	
NO.	DESCRIPTION	DATE
1	SCHEMATIC DESIGN	06.10.24
2	DESIGN DEVELOPMENT	09.19.24
3	DESIGN DEVELOPMENT - SCO	10.18.24
4	1ST EC&S SUBMITTAL	11.14.24
5	1ST SUP SUBMITTAL	11.15.24
6	2ND SUP SUBMITTAL	01.22.25
7	3RD SUP SUBMITTAL	02.19.25
8	4TH SUP SUBMITTAL	03.19.25
9	50% CD SUBMITTAL - SCO	03.31.25
10	5TH SUP SUBMITTAL	04.11.25
11	100% CONSTRUCTION DOC	04.11.25
SCO NO.	23-2	26062-01

COVER SHEET

SHEET NUMBER

A VESTED RIGHT PERSUANT TO NCGS 160D-108 & SECTION 1.8 OF THE UNIFIED DEVELOPMENT ORDINANCE IS ESTABLISHED AS OF THE DATE HEREOF. UNLESS TERMINATED AT AN EARLIER DATE, THE RESTED RIGHT OF THE APPROVAL SHALL BE VALID

Sheet List Table

Sheet Title

COVER SHEET

AREA MAP

OVERALL EXISTING CONDITIONS PLAN

OVERALL SITE PLAN **EXISTING CONDITIONS & DEMOLITION PLAN**

SITE & UTILITY PLAN

GRADING & DRAINAGE PLAN

BIORETENTION DETAIL

STORMWATER COMPLIANCE PLAN

EROSION & SEDIMENTATION CONTROL PLAN - PHASE I

EROSION & SEDIMENTATION CONTROL PLAN - PHASE II

SITE DETAILS

SITE DETAILS

PARKING EXHIBIT

OVERALL PLANTING PLAN

PLANTING PLAN

LANDSCAPE NOTES & DETAILS

OVERALL TREE PROTECTION PLAN

TREE PROTECTION PLAN, NOTES, & DETAILS

BUILDING ELEVATIONS - RENOVATION EAST, NORTH AND SOUTH

WEST + SOUTH ELEVATIONS

Sheet Number

C0.2

C0.3

C1.0

C2.0

C3.0

C3.1

C3.2

C4.0

C4.1

C5.0

C5.1

L0.1

L1.0

L2.0

L3.0

L4.0

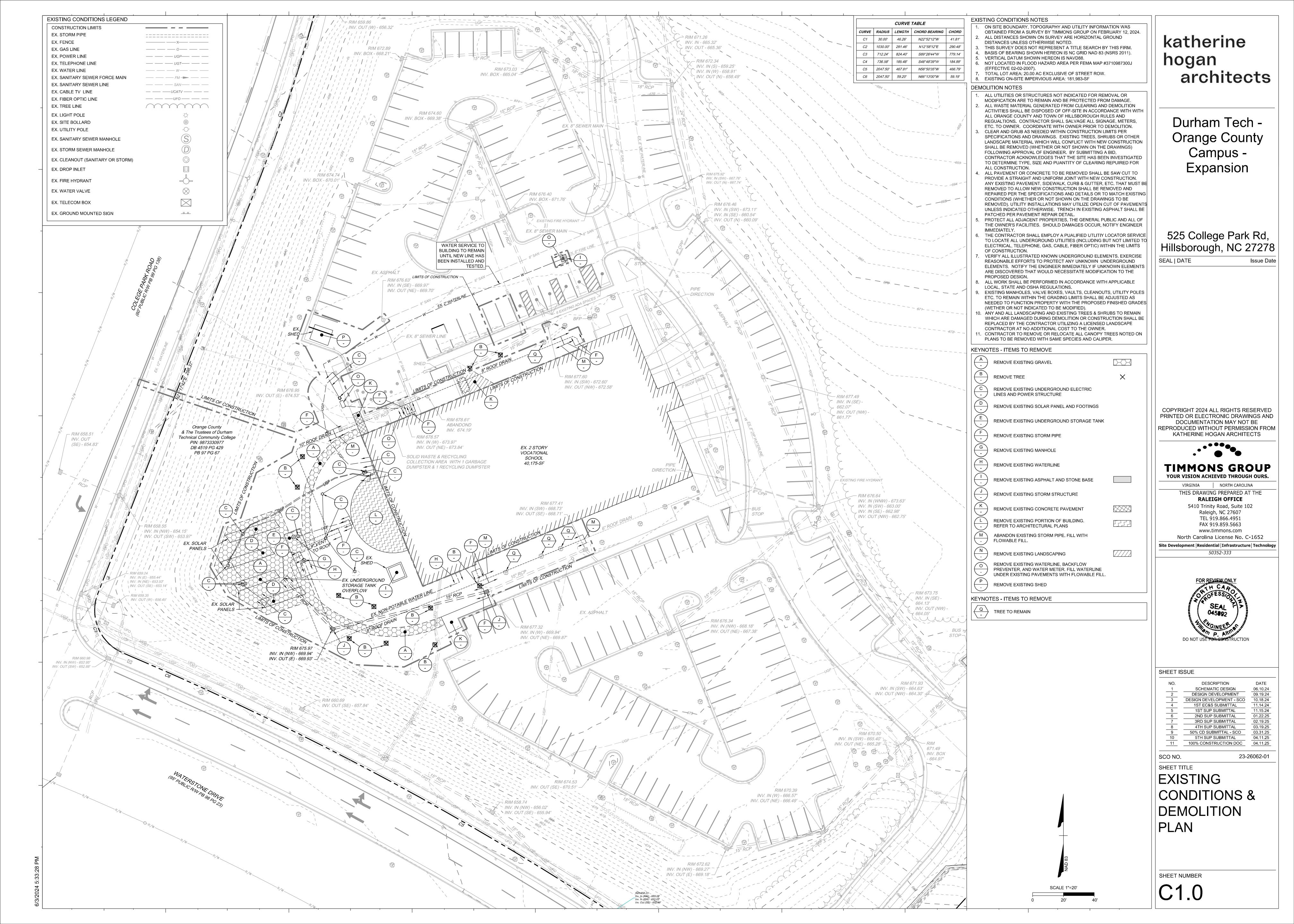
A-08.00

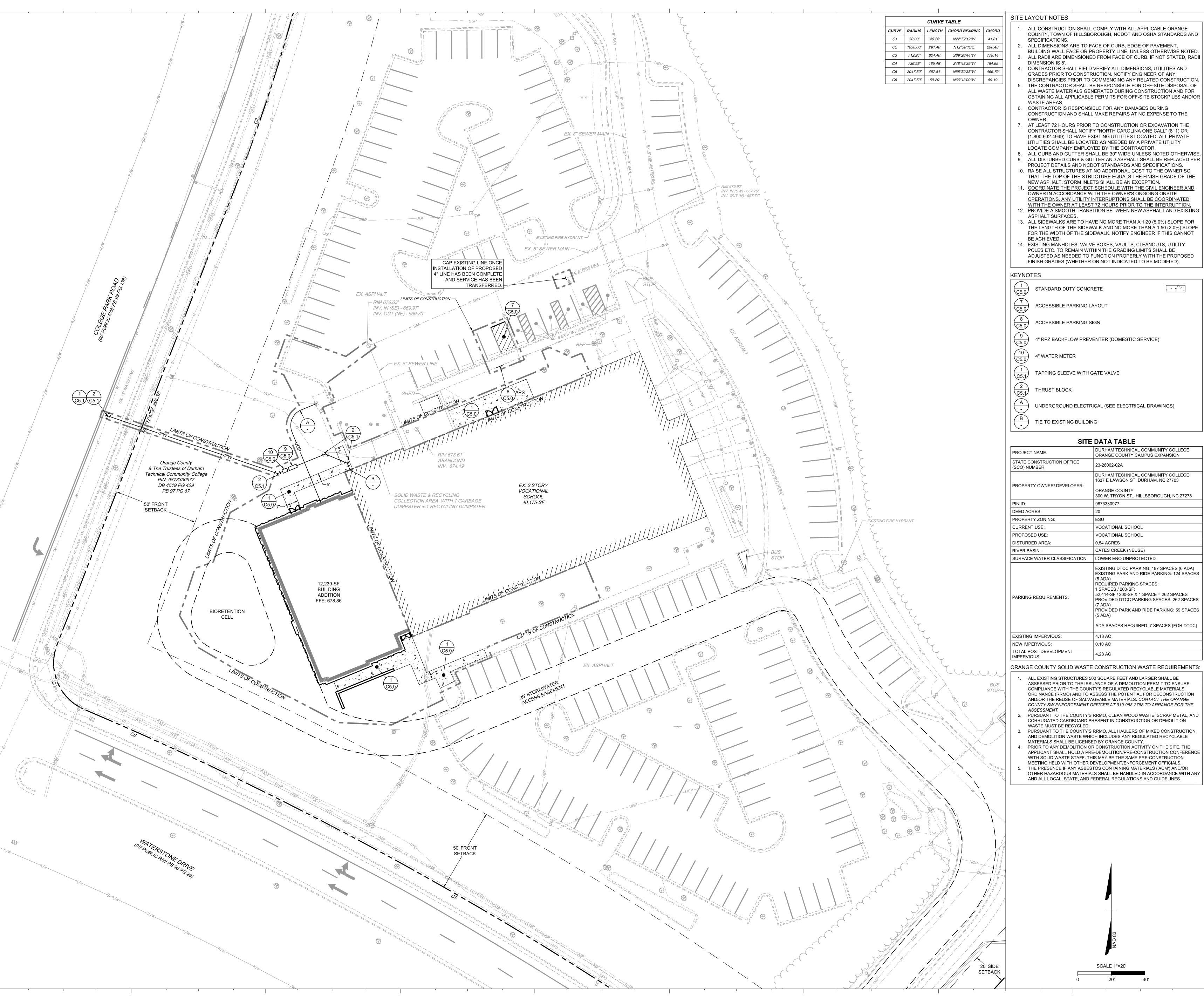
A-08.01











- ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE ORANGE COUNTY, TOWN OF HILLSBOROUGH, NCDOT AND OSHA STANDARDS AND
- ALL DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT, BUILDING WALL FACE OR PROPERTY LINE, UNLESS OTHERWISE NOTED.
- ALL RADII ARE DIMENSIONED FROM FACE OF CURB. IF NOT STATED, RADII CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, UTILITIES AND
- GRADES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING ANY RELATED CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OFF-SITE DISPOSAL OF ALL WASTE MATERIALS GENERATED DURING CONSTRUCTION AND FOR OBTAINING ALL APPLICABLE PERMITS FOR OFF-SITE STOCKPILES AND/OR
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES DURING CONSTRUCTION AND SHALL MAKE REPAIRS AT NO EXPENSE TO THE
- (1-800-632-4949) TO HAVE EXISTING UTILITIES LOCATED. ALL PRIVATE UTILITIES SHALL BE LOCATED AS NEEDED BY A PRIVATE UTILITY
- LOCATE COMPANY EMPLOYED BY THE CONTRACTOR. ALL CURB AND GUTTER SHALL BE 30" WIDE UNLESS NOTED OTHERWISE.
- PROJECT DETAILS AND NCDOT STANDARDS AND SPECIFICATIONS. 0. RAISE ALL STRUCTURES AT NO ADDITIONAL COST TO THE OWNER SO THAT THE TOP OF THE STRUCTURE EQUALS THE FINISH GRADE OF THE NEW ASPHALT. STORM INLETS SHALL BE AN EXCEPTION.
- OWNER IN ACCORDANCE WITH THE OWNER'S ONGOING ONSITE OPERATIONS. ANY UTILITY INTERRUPTIONS SHALL BE COORDINATED <u> VITH THE OWNER AT LEAST 72 HOURS PRIOR TO THE INTERRUPTION.</u> 12. PROVIDE A SMOOTH TRANSITION BETWEEN NEW ASPHALT AND EXISTIN
- 13. ALL SIDEWALKS ARE TO HAVE NO MORE THAN A 1:20 (5.0%) SLOPE FOR THE LENGTH OF THE SIDEWALK AND NO MORE THAN A 1:50 (2.0%) SLOPE FOR THE WIDTH OF THE SIDEWALK. NOTIFY ENGINEER IF THIS CANNOT
- 4. EXISTING MANHOLES, VALVE BOXES, VAULTS, CLEANOUTS, UTILITY POLES ETC. TO REMAIN WITHIN THE GRADING LIMITS SHALL BE ADJUSTED AS NEEDED TO FUNCTION PROPERLY WITH THE PROPOSED FINISH GRADES (WHETHER OR NOT INDICATED TO BE MODIFIED).

4

STANDARD DUTY CONCRETE ACCESSIBLE PARKING LAYOUT

ACCESSIBLE PARKING SIGN

4" WATER METER

TAPPING SLEEVE WITH GATE VALVE

TIE TO EXISTING BUILDING

SITE DATA TABLE DURHAM TECHNICAL COMMUNITY COLLEGE ORANGE COUNTY CAMPUS EXPANSION

23-26062-02A DURHAM TECHNICAL COMMUNITY COLLEGE 1637 E LAWSON ST, DURHAM, NC 27703 PROPERTY OWNER/ DEVELOPER: ORANGE COUNTY

300 W. TRYON ST., HILLSBOROUGH, NC 27278 9873330977 VOCATIONAL SCHOOL VOCATIONAL SCHOOL 0.54 ACRES CATES CREEK (NEUSE)

SURFACE WATER CLASSIFICATION: LOWER ENO UNPROTECTED EXISTING DTCC PARKING: 197 SPACES (6 ADA) EXISTING PARK AND RIDE PARKING: 124 SPACES REQUIRED PARKING SPACES:

1 SPACES / 200-SF: 52,414-SF / 200-SF X 1 SPACE = 262 SPACES PROVIDED DTCC PARKING SPACES: 262 SPACES PROVIDED PARK AND RIDE PARKING: 59 SPACES

ADA SPACES REQUIRED: 7 SPACES (FOR DTCC)

4.18 AC 0.10 AC TOTAL POST DEVELOPMENT

ORANGE COUNTY SOLID WASTE CONSTRUCTION WASTE REQUIREMENTS:

- 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 (RRMO) 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
- PURSUANT TO THE COUNTY'S RRMO, CLEAN WOOD WASTE, SCRAP METAL, AND CORRUGATED CARDBOARD PRESENT IN CONSTRUCTION OR DEMOLITION WASTE MUST BE RECYCLED. PURSUANT TO THE COUNTY'S RRMO, ALL HAULERS OF MIXED CONSTRUCTION
- MATERIALS SHALL BE LICENSED BY ORANGE COUNTY. 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.
- THE PRESENCE IF 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.

katherine hogan architects

Durham Tech -Orange County
Campus Expansion

525 College Park Rd, Hillsborough, NC 27278

SEAL | DATE

COPYRIGHT 2024 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED WITHOUT PERMISSION FROM KATHERINE HOGAN ARCHITECTS



VIRGINIA NORTH CAROLINA THIS DRAWING PREPARED AT THE RALEIGH OFFICE 5410 Trinity Road, Suite 102 Raleigh, NC 27607 TEL 919.866.4951 FAX 919.859.5663 www.timmons.com

North Carolina License No. C-1652 Site Development | Residential | Infrastructure | Technology

50352-333



ΙTΕ
0.24
9.24
8.24
4.24
5.24
2.25
9.25
9.25
1.25
1.25
1.25

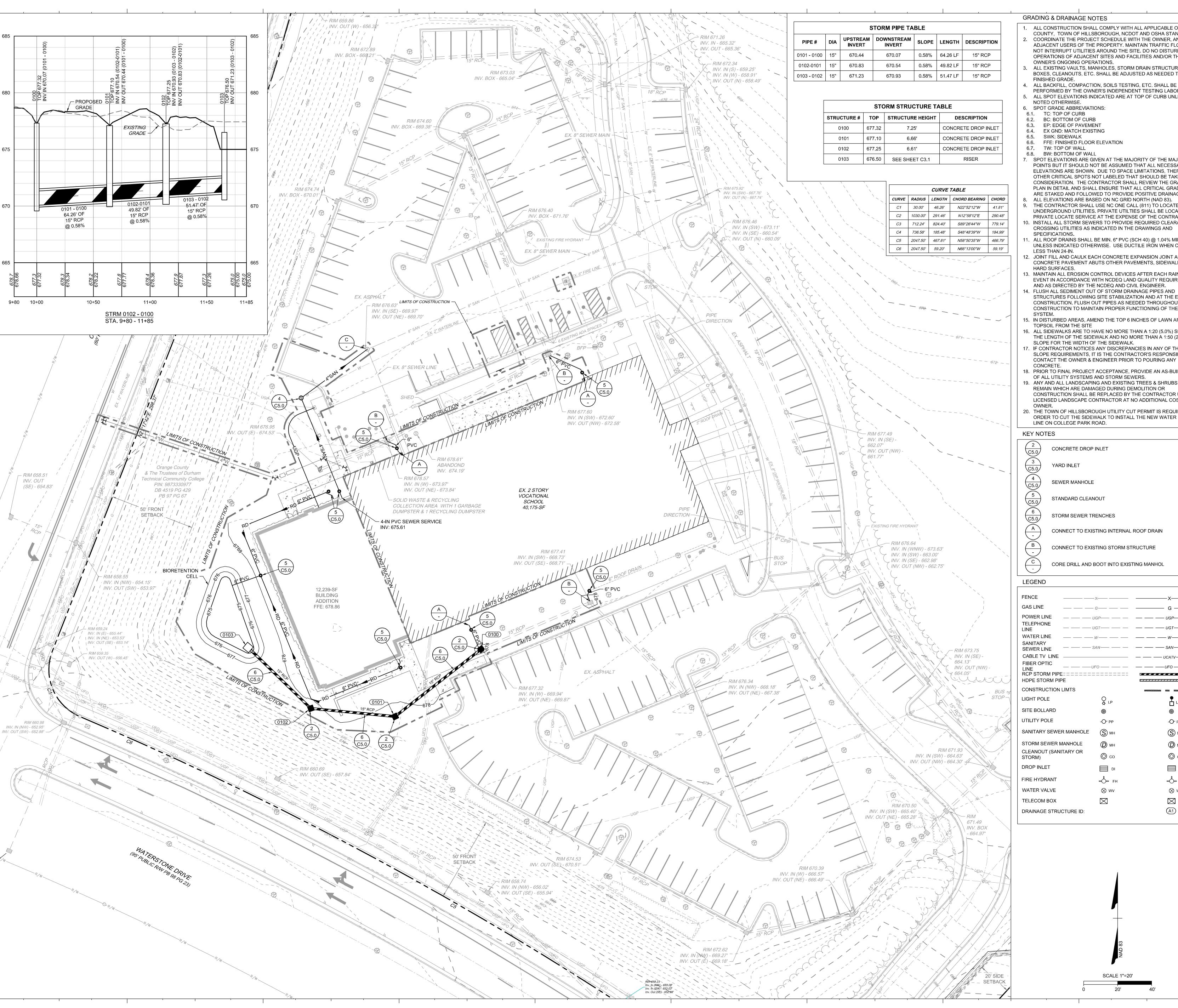
23-26062-01

SITE & UTILITY

PLAN

SHEET NUMBER

C2.0



GRADING & DRAINAGE NOTES

- ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE ORANGE COORDINATE THE PROJECT SCHEDULE WITH THE OWNER, AND ADJACENT USERS OF THE PROPERTY. MAINTAIN TRAFFIC FLOW AND DO OPERATIONS OF ADJACENT SITES AND FACILITIES AND/OR THEIR
- OWNER'S ONGOING OPERATIONS.
- . ALL BACKFILL, COMPACTION, SOILS TESTING, ETC. SHALL BE
- PERFORMED BY THE OWNER'S INDEPENDENT TESTING LABORATORY.
- SPOT GRADE ABBREVIATIONS:
- 6.1. TC: TOP OF CURB 6.2. BC: BOTTOM OF CURB
- 6.3. EP: EDGE OF PAVEMENT 6.4. EX GND: MATCH EXISTING
- 6.5. SWK: SIDEWALK
- 6.6. FFE: FINISHED FLOOR ELEVATION 6.7. TW: TOP OF WALL
- SPOT ELEVATIONS ARE GIVEN AT THE MAJORITY OF THE MAJOR BREAK POINTS BUT IT SHOULD NOT BE ASSUMED THAT ALL NECESSARY SPOT ELEVATIONS ARE SHOWN. DUE TO SPACE LIMITATIONS, THERE MAY BE

- JOINT FILL AND CAULK EACH CONCRETE EXPANSION JOINT AND WHERE
- 3. MAINTAIN ALL EROSION CONTROL DEVICES AFTER EACH RAINFALL EVENT IN ACCORDANCE WITH NCDEQ LAND QUALITY REQUIREMENTS
- AND AS DIRECTED BY THE NCDEQ AND CIVIL ENGINEER 4. FLUSH ALL SEDIMENT OUT OF STORM DRAINAGE PIPES AND STRUCTURES FOLLOWING SITE STABILIZATION AND AT THE END OF
- CONSTRUCTION. FLUSH OUT PIPES AS NEEDED THROUGHOUT
- TOPSOIL FROM THE SITE 16. ALL SIDEWALKS ARE TO HAVE NO MORE THAN A 1:20 (5.0%) SLOPE FOR
- THE LENGTH OF THE SIDEWALK AND NO MORE THAN A 1:50 (2.0%) SLOPE FOR THE WIDTH OF THE SIDEWALK. 17. IF CONTRACTOR NOTICES ANY DISCREPANCIES IN ANY OF THESE SLOPE REQUIREMENTS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO
- OF ALL UTILITY SYSTEMS AND STORM SEWERS. 19. ANY AND ALL LANDSCAPING AND EXISTING TREES & SHRUBS TO REMAIN WHICH ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR USING A
- 20. THE TOWN OF HILLSBOROUGH UTILITY CUT PERMIT IS REQUIRED IN ORDER TO CUT THE SIDEWALK TO INSTALL THE NEW WATER SERVICE LINE ON COLLEGE PARK ROAD.

CONCRETE DROP INLET

YARD INLET

SEWER MANHOLE

STANDARD CLEANOUT

STORM SEWER TRENCHES

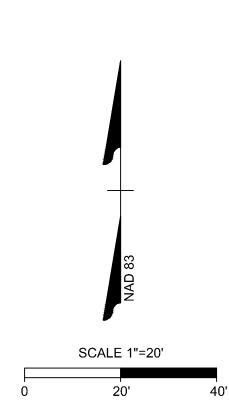
CONNECT TO EXISTING STORM STRUCTURE

CORE DRILL AND BOOT INTO EXISTING MANHOL

POWER LINE

CABLE TV LINE HDPE STORM PIPE CONSTRUCTION LIMTS

SITE BOLLARD UTILITY POLE SANITARY SEWER MANHOLE S MH STORM SEWER MANHOLE CLEANOUT (SANITARY OR FIRE HYDRANT WATER VALVE \boxtimes



katherine hogan architects

Durham Tech -Orange County
Campus Expansion

525 College Park Rd, Hillsborough, NC 27278

SEAL | DATE

COPYRIGHT 2024 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED WITHOUT PERMISSION FROM KATHERINE HOGAN ARCHITECTS



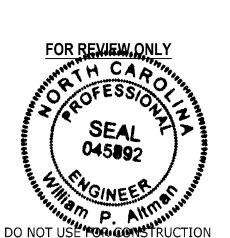
THIS DRAWING PREPARED AT THE RALEIGH OFFICE 5410 Trinity Road, Suite 102 Raleigh, NC 27607 TEL 919.866.4951 FAX 919.859.5663

North Carolina License No. C-1652 Site Development | Residential | Infrastructure | Technology

www.timmons.com

VIRGINIA NORTH CAROLINA

50352-333



SHEET ISSUE DESCRIPTION SCHEMATIC DESIGN DESIGN DEVELOPMENT DESIGN DEVELOPMENT - SCO 1ST EC&S SUBMITTAL 1ST SUP SUBMITTAL 4TH SUP SUBMITTAL 50% CD SUBMITTAL - SCO **5TH SUP SUBMITTAL**

100% CONSTRUCTION DOC

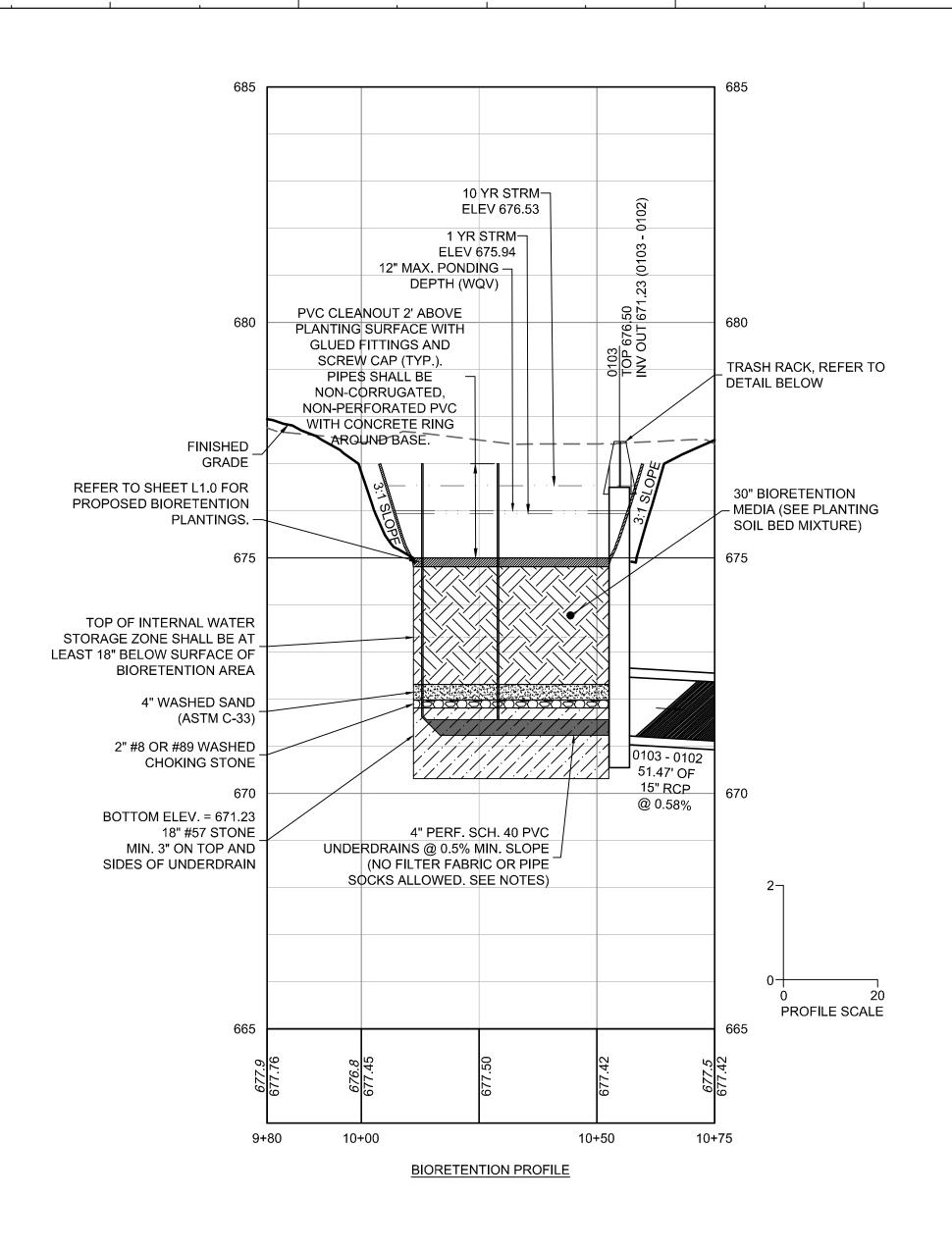
23-26062-01

SCO NO.

GRADING & DRAINAGE PLAN

SHEET NUMBER

C3.0



GENERAL NOTES:

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ORANGE COUNTY, THE TOWN OF HILLSBOROUGH, NCDEQ AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.
- 2. SEE GRADING PLAN FOR MORE INFORMATION ON ENTIRE SITE GRADING.
- 3. DOCUMENTATION OF THE SEASONAL HIGH WATER TABLE WILL BE PROVIDED PRIOR TO SITE PERMIT REVIEW. ELEVATION IS YET TO BE DETERMINED.

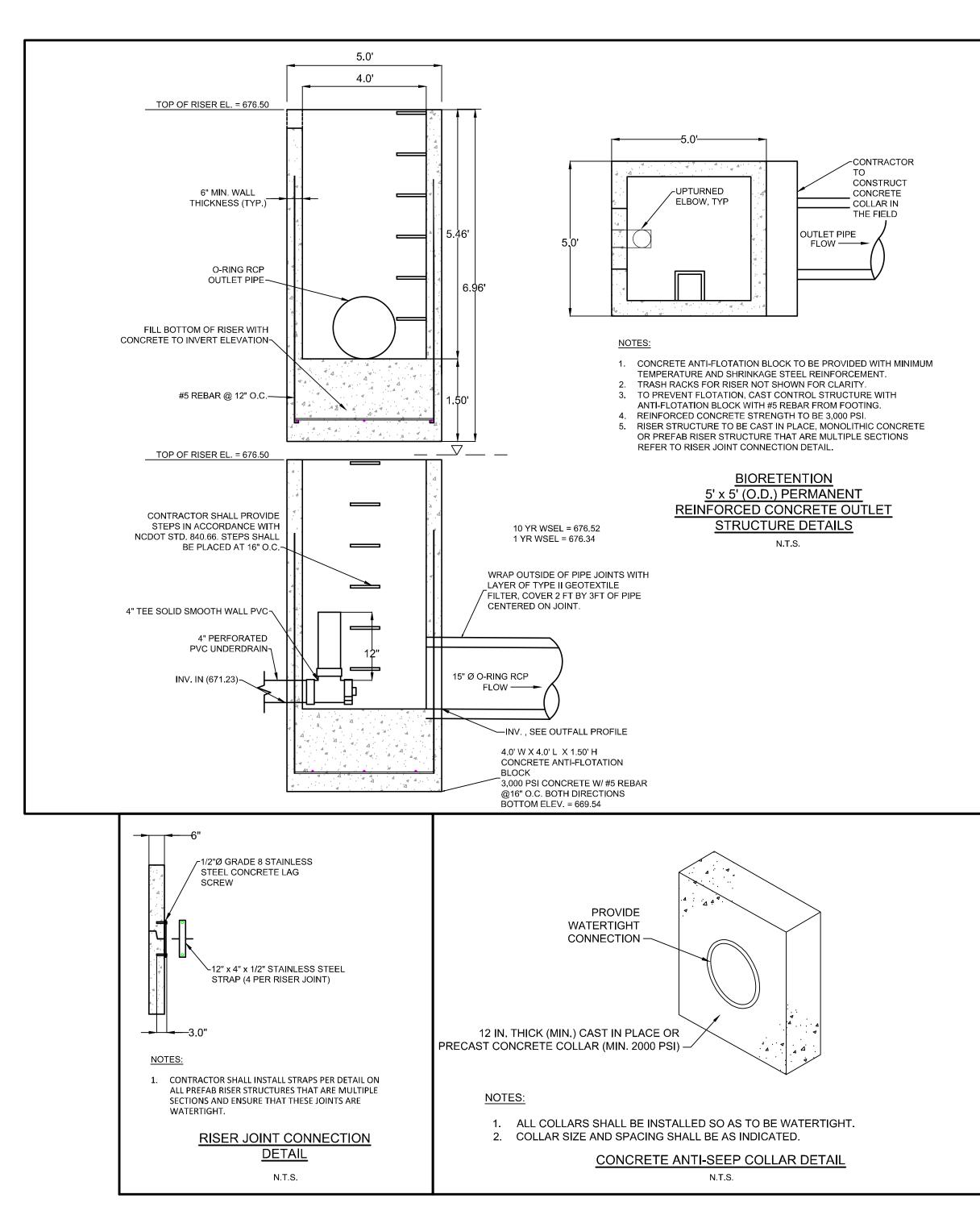
DAM EMBANKMENT AND SOIL COMPACTION SPECIFICATIONS

- 1. CONTROLLED FILL, AS SPECIFIED BY THE GEOTECHNICAL ENGINEER, IN THE DAM EMBANKMENT /KEY TRENCH SHALL BE PLACED IN 6-INCH LOOSE LAYERS (3-INCH LOOSE LAYERS WITHIN 3-FEET OF EITHER SIDE OF THE PRINCIPAL SPILLWAY PIPE TO A DEPTH OF 2-FEET OVER THE PIPE) AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF + OR TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698.
- 2. ALL VISIBLE ORGANIC DEBRIS SUCH AS ROOTS AND LIMBS SHALL BE REMOVED FROM THE FILL MATERIAL PRIOR TO COMPACTION TO THE REQUIRED DENSITY. SOILS WITH ORGANIC MATTER CONTENT EXCEEDING 5% BY WEIGHT SHALL NOT BE USED. STONES GREATER THAN 3-INCH (IN ANY DIRECTION) SHALL BE REMOVED FROM THE FILL PRIOR TO COMPACTION.
- 3. FILL MATERIAL PLACED AT DENSITIES LOWER THAN SPECIFIED MINIMUM DENSITIES OR AT MOISTURE CONTENTS OUTSIDE THE SPECIFIED RANGES OR OTHERWISE NOT CONFORMING TO SPECIFIED REQUIREMENTS SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIALS.
- ANY FILL LAYER THAT IS SMOOTH DRUM ROLLED TO REDUCE MOISTURE PENETRATION DURING A STORM EVENT SHALL BE PROPERLY SCARIFIED PRIOR TO THE PLACEMENT OF THE NEXT SOIL LIFT.
- 5. SURFACE WATER AND STREAM FLOW SHALL BE CONTINUOUSLY CONTROLLED THROUGHOUT CONSTRUCTION AND THE PLACEMENT OF CONTROLLED FILL.
- 6. FOUNDATION AREAS MAY REQUIRE UNDERCUTTING OF COMPRESSIBLE AND/OR UNSUITABLE SOILS IN ADDITION TO THAT INDICATED ON THE PLANS. ALL SUCH UNDERCUTTING SHALL BE PERFORMED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER AND SHALL BE MONITORED AND DOCUMENTED. IN NO CASE SHALL THERE BE AN ATTEMPT TO STABILIZE ANY PORTIONS OF THE FOUNDATION SOILS WITH CRUSHED STONE.
- 7. TREATMENT OF SEEPAGE AREAS, SUBGRADE PREPARATION, FOUNDATION DEWATERING AND ROCK FOUNDATION PREPARATION (I.E., TREATMENT WITH SLUSH GROUTING, DENTAL CONCRETE, ETC.) MAY BE

- REQUIRED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER. ALL SUCH ACTIVITIES SHALL BE CLOSELY MONITORED AND DOCUMENTED BY THE GEOTECHNICAL ENGINEER.
- 8. FILL ADJACENT TO THE RISER AND PRINCIPAL SPILLWAY PIPE SHALL BE PLACED SO THAT LIFTS ARE AT THE SAME LEVEL ON BOTH SIDES OF THE STRUCTURES.
- 9. EARTHWORK COMPACTION WITHIN 3-FEET OF ANY STRUCTURES SHALL BE ACCOMPLISHED BY MEANS OF HAND TAMPERS, MANUALLY DIRECTED POWER TAMPERS OR PLATE COMPACTORS OR MINIATURE SELF-PROPELLED ROLLERS.
- 10. COMPACTION BY MEANS OF DROP WEIGHTS FROM A CRANE OR HOIST SHALL NOT BE PERMITTED.
- 11. HEAVY EQUIPMENT SHALL NOT BE ALLOWED TO PASS OVER CAST-IN-PLACE STRUCTURES (INCLUDING THE CRADLE) UNTIL ADEQUATE CURING TIME HAS ELAPSED.
- 12. TO RE-ESTABLISH VEGETATION AFTER CONSTRUCTION, A 4-INCH LAYER OF TOPSOIL SHALL BE PLACED ON THE DISTURBED EMBANKMENT SURFACE AND THE AREA SEEDED AND MULCHED OR HYDROSEEDED.

TESTING, OBSERVATION, AND CERTIFICATION

- TESTS OF THE DEGREE (%) OF COMPACTION OF THE PLACED FILL IN THE DAM /KEY TRENCH SHALL BE PERFORMED AS A PART OF THE PERMITTEE'S NORMAL QUALITY CONTROL PROGRAM FOR THE CONSTRUCTION OF THE DAM. TESTS SHALL BE CONDUCTED CONCURRENT WITH THE INSTALLATION OF THE COMPACTED FILL AND THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF THE DAM SO THAT THE TESTING CAN BE COMPLETED. SHOULD THE RESULTS OF THE TESTS INDICATE THAT THE SPECIFIED DEGREE OF COMPACTION HAS NOT BEEN OBTAINED; THE PORTIONS OF THE DAM REPRESENTED BY SUCH TESTS SHALL BE REWORKED OR REBUILT. ALL PORTIONS OF THE DAM SHALL ACHIEVE THE SPECIFIED MINIMUM DEGREE OF COMPACTION.
- 2. CONSTRUCTION OF THE SCM SHALL BE DONE UNDER THE OBSERVATION OF A QUALIFIED GEOTECHNICAL ENGINEER, WHO IS REGISTERED AS A PROFESSIONAL ENGINEER IN THE STATE OF NORTH CAROLINA. THE GEOTECHNICAL ENGINEER MUST HAVE EXPERIENCE IN THE DESIGN AND CONSTRUCTION MONITORING OF SCM'S OF THE SIZE AND SCOPE COVERED BY THESE STANDARDS AND GUIDELINES.



PLANTING SOIL BED MIXTURE

5.5 TO 7.00

500 PPM MAXIMUM

2"/HOUR MIN, 6"/HOUR MAX.

2"/HOUR PREFERRED

10-30

75-85%

5-10%

pH RANGE

P-INDEX

SOLUBLE SALTS

FINES (SILT AND CLAY)

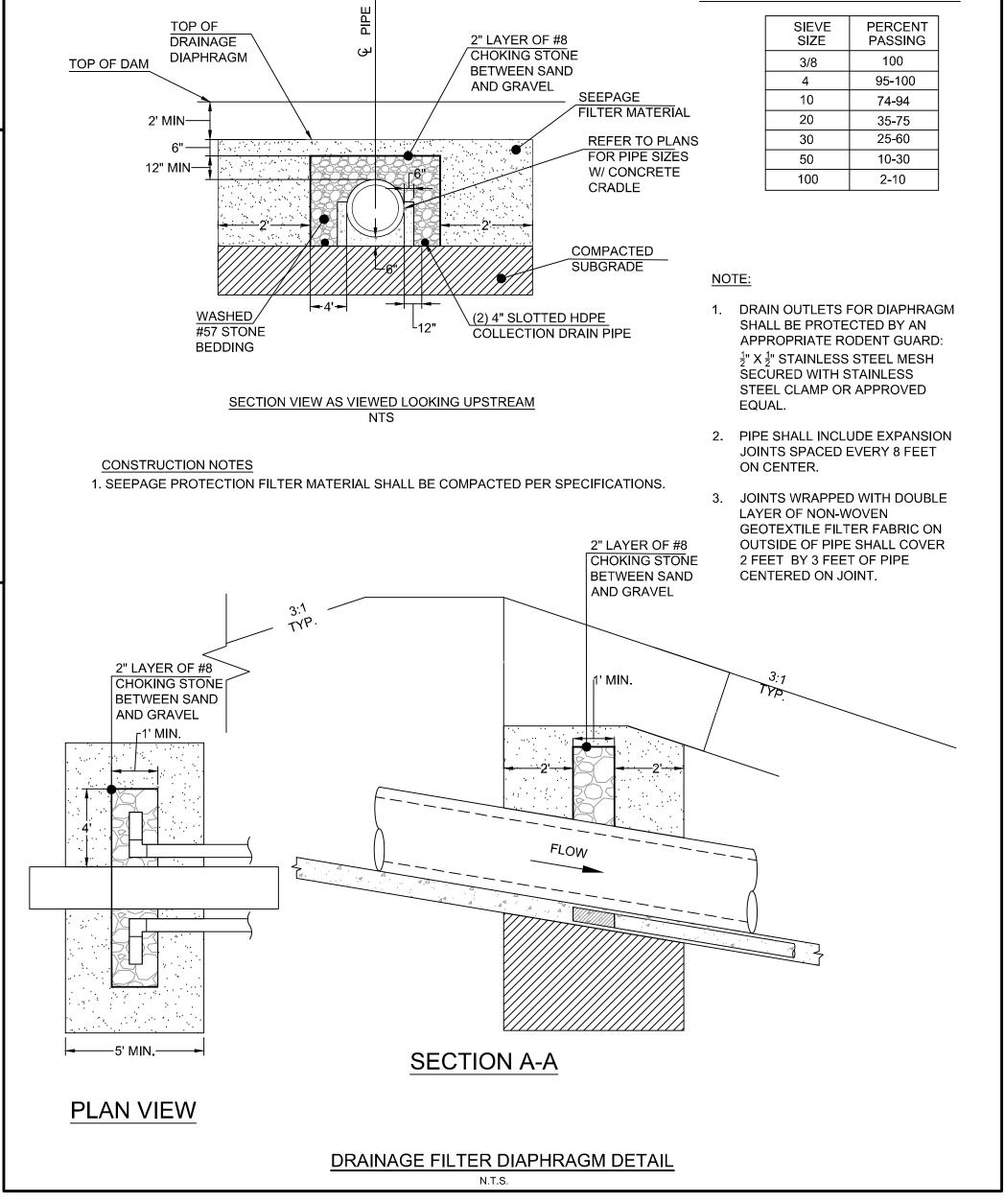
ORGANIC MATERIAL

PERMEABILITY

IWS BIORETENTION CONSTRUCTION SEQUENCE:

- 1. ALL EROSION SEDIMENT AND EROSION CONTROL PRACTICES SHALL BE IN PLACE AND THE SLOPES DRAINING TO THE BIORETENTION AREA SHALL BE STABILIZED BEFORE CONSTRUCTION OF THE BIORETENTION BEGINS.
- 2. INSTALL TEMPORARY SILT FENCE AROUND THE BIORETENTION AREA AS NEEDED.
- 3. EXCAVATE BIORETENTION AREA, PER THE GRADES AND DETAILED ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS.
- 4. CONTACT ENGINEER SO AN AS-BUILT SURVEY CAN BE PERFORMED OF THE BIORETENTION. REFER TO TOWN & COUNTY AS-BUILT STANDARDS FOR DOCUMENTATION DURING INSTALLATION.
- 5. INSTALL STORM DRAINAGE PIPES, STRUCTURES, AND UNDERDRAINS.
- 6. INSTALL BIORETENTION SOIL MEDIA PROFILE.
- 7. FINE GRADE THE SIDE SLOPES OF THE BIORETENTION AREA. DRESS UP VELOCITY DISSIPATER AS NEEDED PER THE PLANS.
- 8. INSTALL SOD BERMUDA GRASS.
- 9. FINE GRADE, SEED AND STABILIZE ANY REMAINING DISTURBED AREAS AROUND THE OUTSIDE OF THE BIORETENTION AREA. REMOVE SILT FENCE.
- 10. UPON COMPLETION OF WORK, CONTACT THE PROJECT ENGINEER AND LANDSCAPE ARCHITECT FOR AN INSPECTION AND TO BEGIN THE AS-BUILT CERTIFICATION PROCESS. AN AS-BUILT SURVEY OF ALL ASPECTS OF THIS FACILITY IS TO BE PROVIDED BY CONTRACTOR AND FURNISHED TO THE ENGINEER. CERTIFICATIONS WILL NOT BE ISSUED IF THE SCM DOES NOT MEET OR EXCEED THE REQUIREMENTS CONTAINED IN THE CONSTRUCTION DOCUMENTS. SHOULD REMEDIAL WORK BE REQUIRED, ALL COSTS ASSOCIATED WITH THE REMEDIAL WORK INCLUDING RE-SURVEY AND RE-INSPECTIONS WILL BE BORNE BY THE CONTRACTOR.

1' (TYP.)



katherine hogan architects

Durham Tech Orange County
Campus Expansion

525 College Park Rd, Hillsborough, NC 27278

SEAL | DATE

COPYRIGHT 2024 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED WITHOUT PERMISSION FROM

KATHERINE HOGAN ARCHITECTS

TIMMONS GROUP

VIRGINIA NORTH CAROLINA

THIS DRAWING PREPARED AT THE

RALEIGH OFFICE

5410 Trinity Road, Suite 102

Raleigh, NC 27607

TEL 919.866.4951

FAX 919.859.5663

www.timmons.com North Carolina License No. C-1652

North Carolina License No. C-1652

Site Development | Residential | Infrastructure | Technology

50352-333



SHEET ISSUE DESCRIPTION DATE SCHEMATIC DESIGN DESIGN DEVELOPMENT DESIGN DEVELOPMENT - SCO 10.18.24 1ST EC&S SUBMITTAL 11.14.24 1ST SUP SUBMITTAL 11.15.24 2ND SUP SUBMITTAL 3RD SUP SUBMITTAL 4TH SUP SUBMITTAL 03.19.25 50% CD SUBMITTAL - SCO 5TH SUP SUBMITTAL 100% CONSTRUCTION DOC

23-26062-01

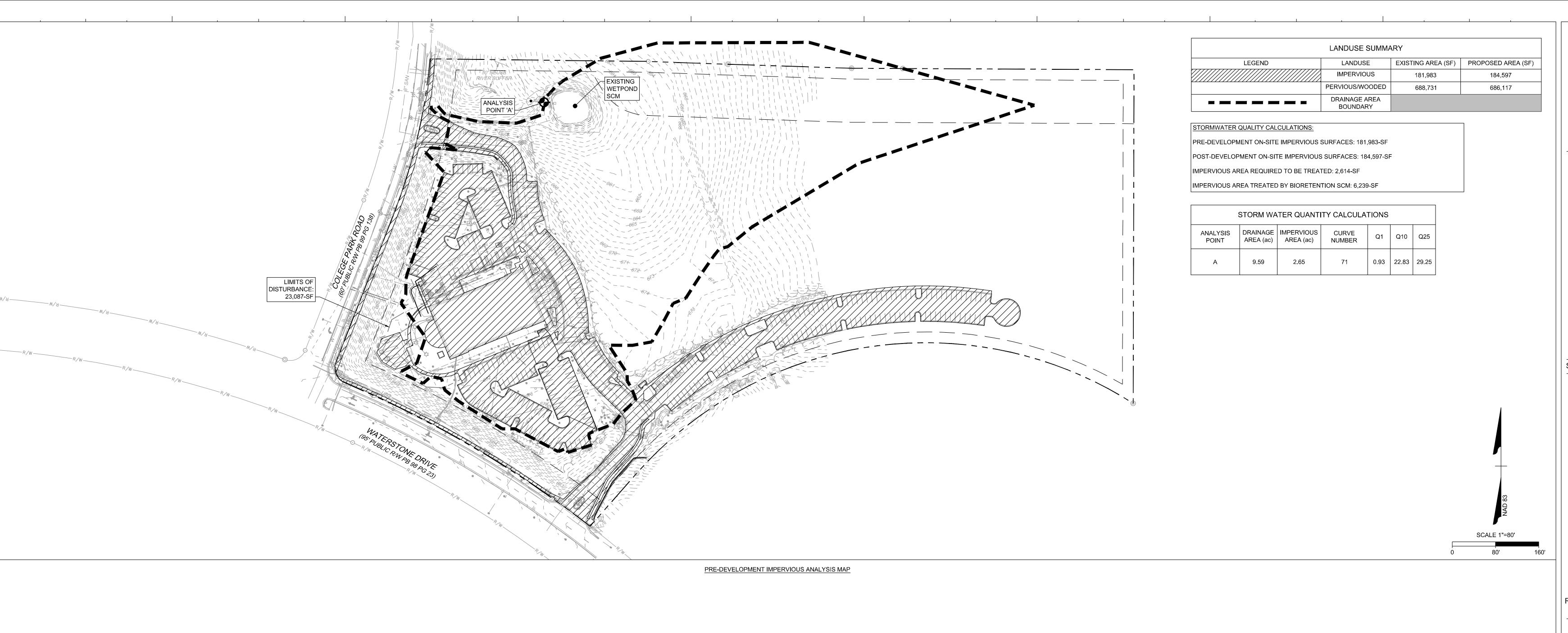
BIORETENTION DETAIL

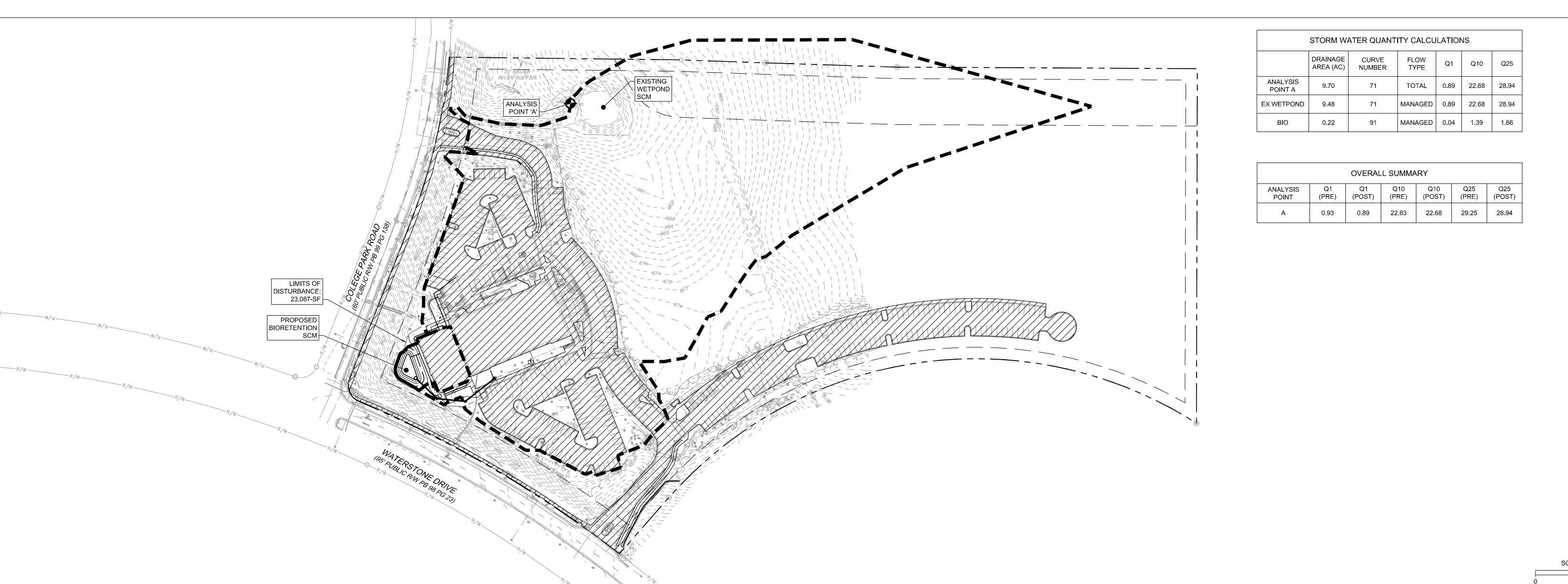
SHEET NUMBER

SCO NO.

SHEET TITLE

C3.1





POST-DEVELOPMENT IMPERVIOUS ANALYSIS MAP

katherine hogan architects

Durham Tech Orange County
Campus Expansion

525 College Park Rd, Hillsborough, NC 27278

SEAL | DATE

COPYRIGHT 2024 ALL RIGHTS RESERVED
PRINTED OR ELECTRONIC DRAWINGS AND
DOCUMENTATION MAY NOT BE
REPRODUCED WITHOUT PERMISSION FROM
KATHERINE HOGAN ARCHITECTS

TIMMONS GROUP YOUR VISION ACHIEVED THROUGH OURS.

VIRGINIA NORTH CAROLINA

THIS DRAWING PREPARED AT THE

RALEIGH OFFICE

5410 Trinity Road, Suite 102

Raleigh, NC 27607

TEL 919.866.4951

FAX 919.859.5663

North Carolina License No. C-1652

Site Development | Residential | Infrastructure | Technology

www.timmons.com

50352-333



SHEET IS	SUE	
NO.	DESCRIPTION	DATE
1	SCHEMATIC DESIGN	06.10.24
	DESIGN DEVELOPMENT	09.19.24
3	DESIGN DEVELOPMENT - SCO	10.18.24
4	1ST EC&S SUBMITTAL	11.14.24
5	1ST SUP SUBMITTAL	11 15 24
6	2ND SUP SUBMITTAL	01.22.25
7	3RD SUP SUBMITTAL	02.19.25
8	4TH SUP SUBMITTAL	03.19.25
9	50% CD SUBMITTAL - SCO	03.31.25
10	5TH SUP SUBMITTAL	04.11.25
11	100% CONSTRUCTION DOC	04.11.25
SCO NO.	23-2	26062-01

SHEET TITLE

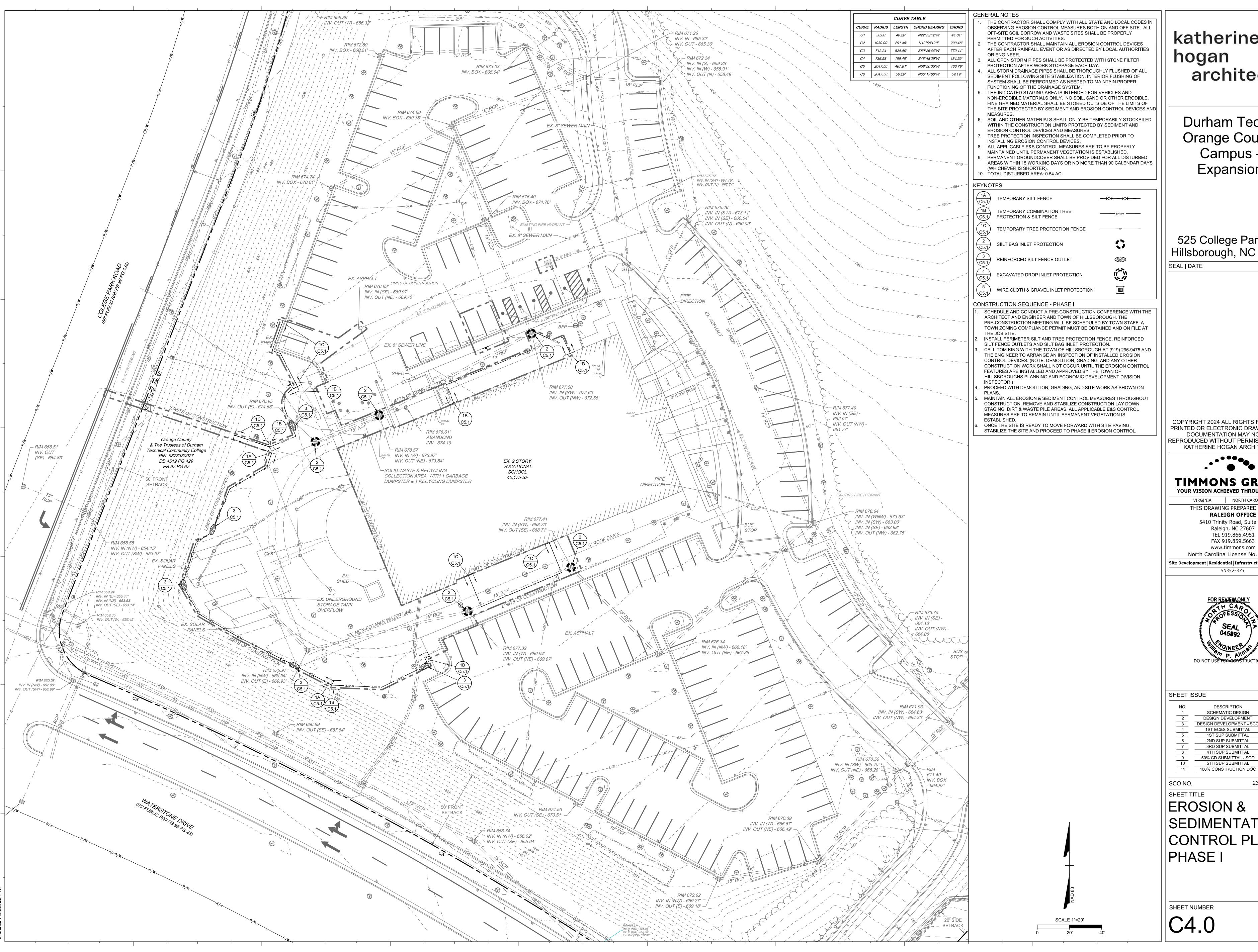
STORMWATER COMPLIANCE PLAN

SHEET NUMBER

GENERAL NOTES:

1. ALL PERMANENT SLOPES, INCLUDING SCM SIDE SLOPES, WILL BE CONSTRUCTED NO STEEPER THAN 3:1.

C3.2



katherine architects

Durham Tech -Orange County
Campus Expansion

525 College Park Rd, Hillsborough, NC 27278

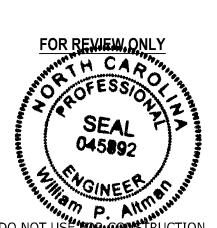
COPYRIGHT 2024 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED WITHOUT PERMISSION FROM KATHERINE HOGAN ARCHITECTS



VIRGINIA NORTH CAROLINA THIS DRAWING PREPARED AT THE RALEIGH OFFICE 5410 Trinity Road, Suite 102 Raleigh, NC 27607 TEL 919.866.4951 FAX 919.859.5663

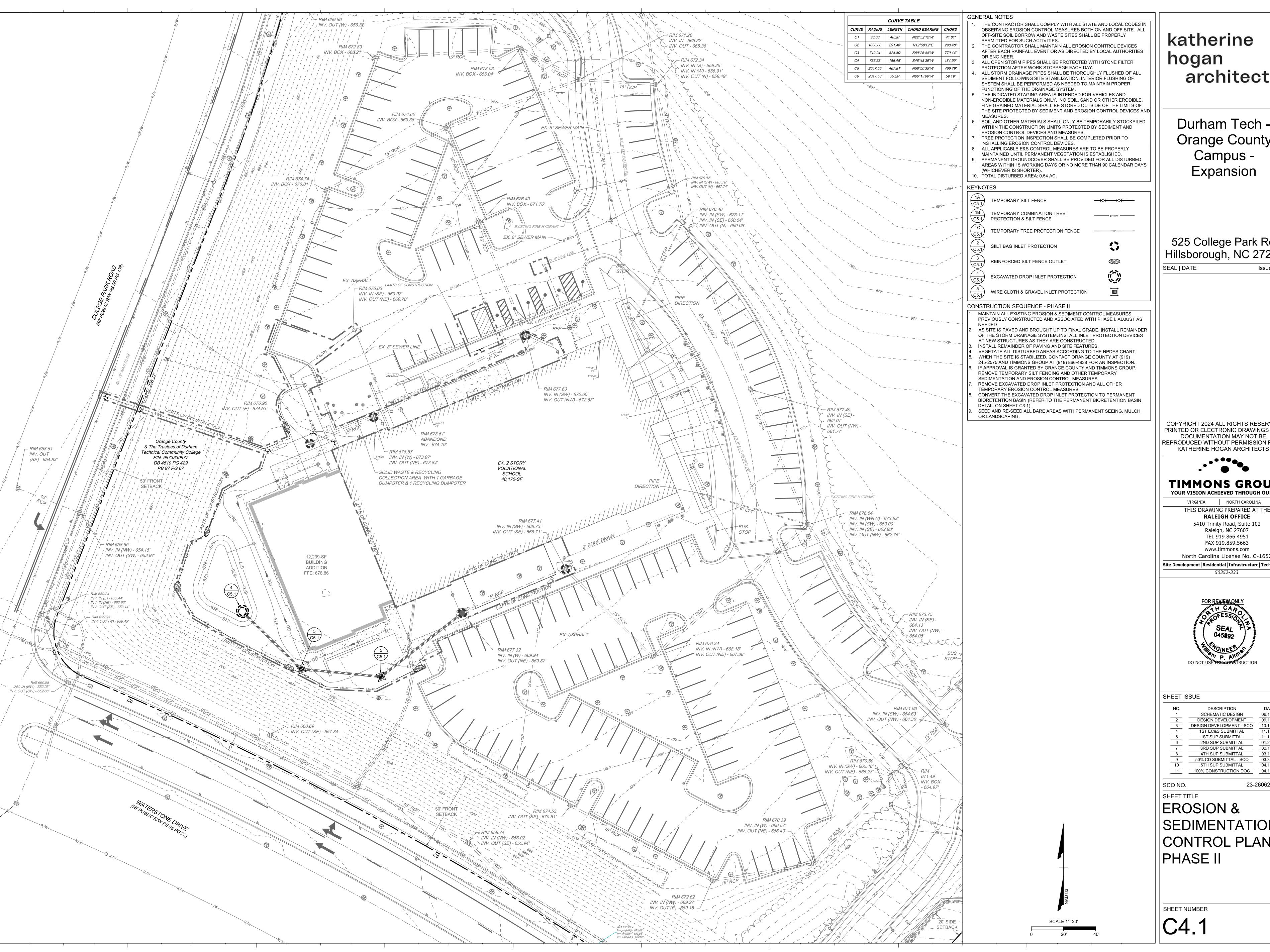
North Carolina License No. C-1652 Site Development | Residential | Infrastructure | Technology

50352-333



110.	DECOIN HON	
1	SCHEMATIC DESIGN	06.10.24
2	DESIGN DEVELOPMENT	09.19.24
3	DESIGN DEVELOPMENT - SCO	10.18.24
4	1ST EC&S SUBMITTAL	11.14.24
5	1ST SUP SUBMITTAL	11.15.24
6	2ND SUP SUBMITTAL	01.22.25
7	3RD SUP SUBMITTAL	02.19.25
8	4TH SUP SUBMITTAL	03.19.25
9	50% CD SUBMITTAL - SCO	03.31.25
10	5TH SUP SUBMITTAL	04.11.25
11	100% CONSTRUCTION DOC	04.11.25
CO NO.	23-	-26062-01
HEET TI		
ERC	SION &	
SED	IMENTAT	ION
	ITDOI DI	Λ Λ Λ

CONTROL PLAN -



katherine hogan architects

Durham Tech -Orange County
Campus Expansion

525 College Park Rd, Hillsborough, NC 27278

COPYRIGHT 2024 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED WITHOUT PERMISSION FROM

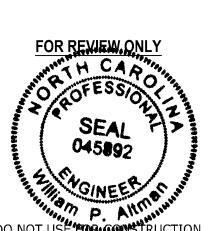


THIS DRAWING PREPARED AT THE RALEIGH OFFICE 5410 Trinity Road, Suite 102 Raleigh, NC 27607 TEL 919.866.4951 FAX 919.859.5663

North Carolina License No. C-1652 Site Development | Residential | Infrastructure | Technology

www.timmons.com

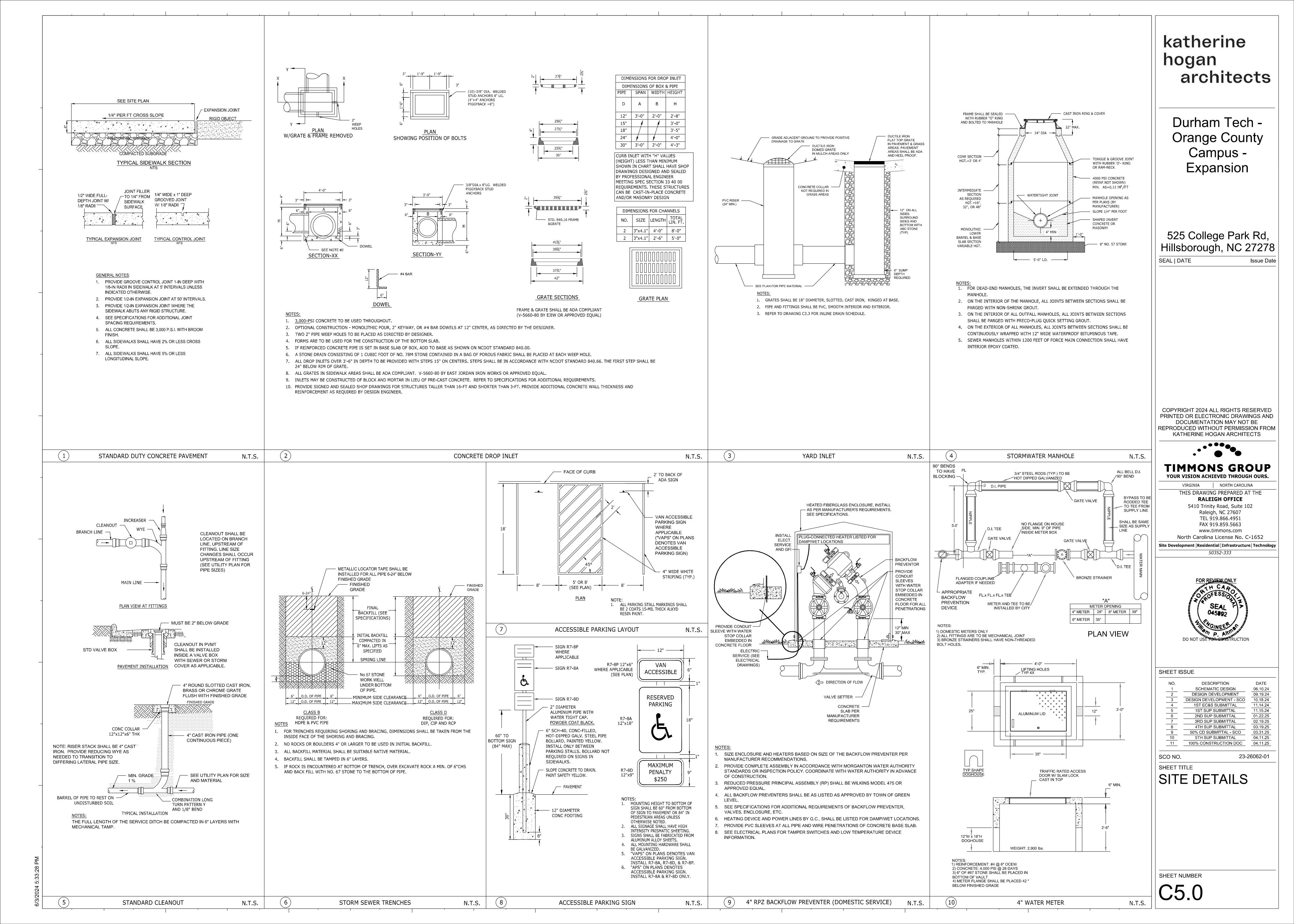
50352-333

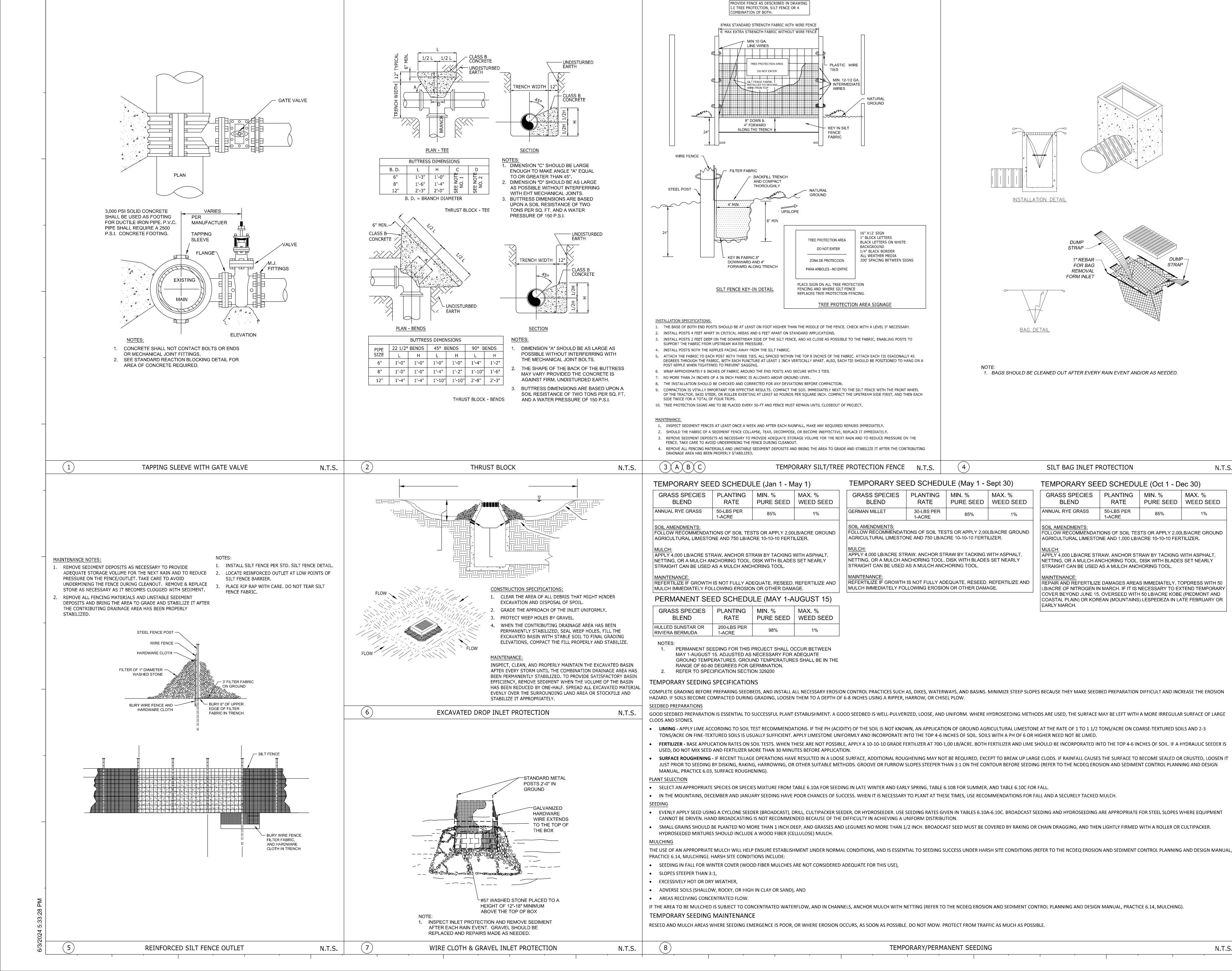


	DESIGN DEVELOPMENT	09.19.24
3	DESIGN DEVELOPMENT - SCO	10.18.24
4	1ST EC&S SUBMITTAL	11 14 24
5	1ST SUP SUBMITTAL	11 15 24
6	2ND SUP SUBMITTAL	01.22.25
7	3RD SUP SUBMITTAL	02.19.25
8	4TH SUP SUBMITTAL	03.19.25
9	50% CD SUBMITTAL - SCO	03.31.25
10	5TH SUP SUBMITTAL	04.11.25
11	100% CONSTRUCTION DOC	04.11.25
SCO NO.	23-	-26062-01
SHEET TI	TLE	
	SION &	

SEDIMENTATION CONTROL PLAN -PHASE II

SHEET NUMBER





katherine hogan architects

Durham Tech -Orange County Campus -Expansion

525 College Park Rd, Hillsborough, NC 27278

SEAL | DATE

COPYRIGHT 2024 ALL RIGHTS RESERVED

PRINTED OR ELECTRONIC DRAWINGS AND

DOCUMENTATION MAY NOT BE

REPRODUCED WITHOUT PERMISSION FROM

KATHERINE HOGAN ARCHITECTS

••••• TIMMONS GROUP

N.T.S.

MAX. %

YOUR VISION ACHIEVED THROUGH OURS. VIRGINIA NORTH CAROLINA THIS DRAWING PREPARED AT THE RALEIGH OFFICE 5410 Trinity Road, Suite 102 Raleigh, NC 27607

TEL 919.866.4951 FAX 919.859.5663 www.timmons.com North Carolina License No. C-1652

Site Development | Residential | Infrastructure | Technology

50352-333



NO.	DESCRIPTION	DATE
1	SCHEMATIC DESIGN	06.10.24
2	DESIGN DEVELOPMENT	09.19.24
3	DESIGN DEVELOPMENT - SCO	10.18.24
4	1ST EC&S SUBMITTAL	11 14 24
5	1ST SUP SUBMITTAL	11.15.24
6	2ND SUP SUBMITTAL	01.22.25
7	3RD SUP SUBMITTAL	02.19.25
8	4TH SUP SUBMITTAL	03.19.25
9	50% CD SUBMITTAL - SCO	03.31.25
10	5TH SUP SUBMITTAL	04.11.25
11	100% CONSTRUCTION DOC	04.11.25

SHEET TITLE

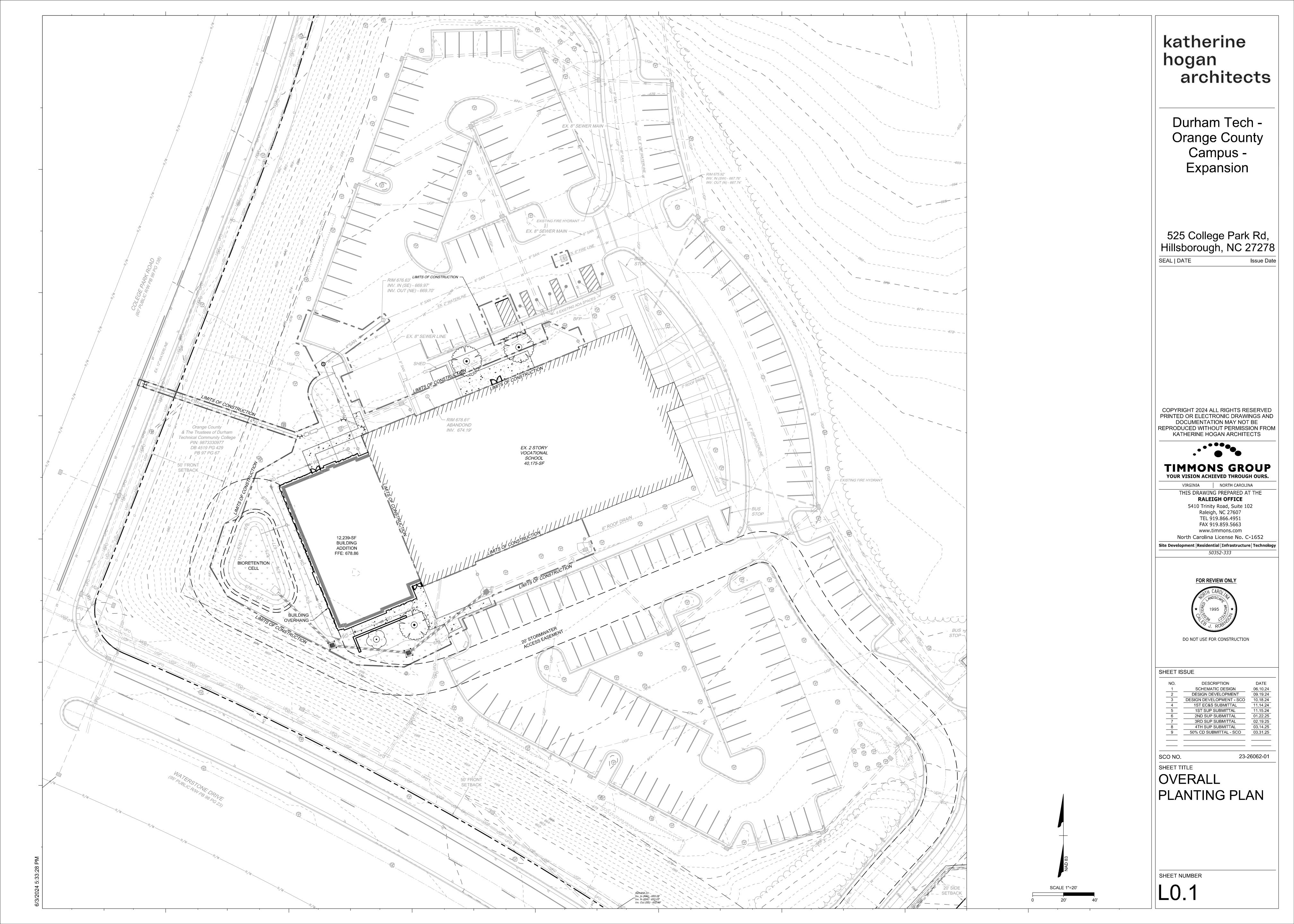
23-26062-01

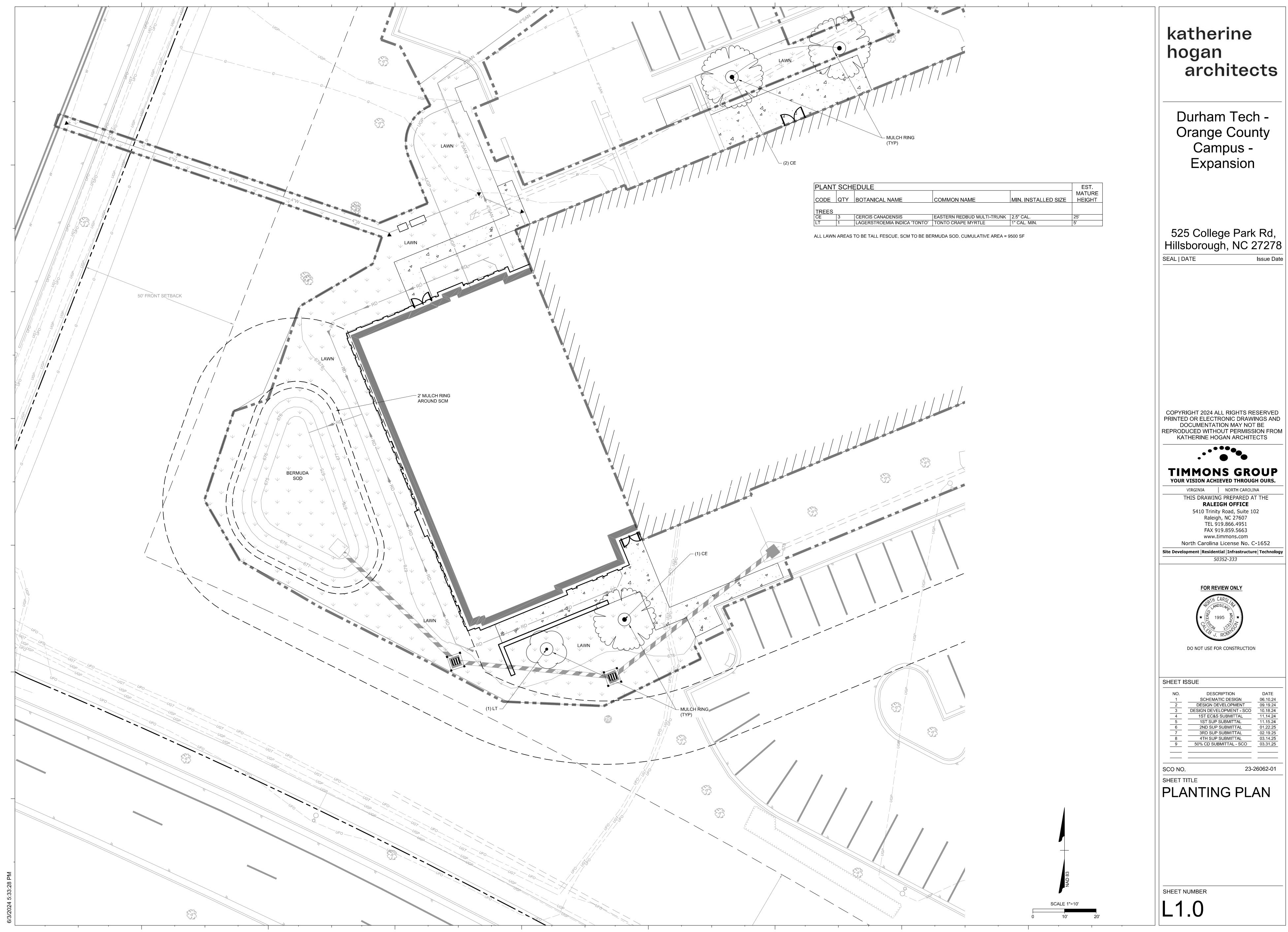
SITE DETAILS

SHEET NUMBER

N.T.S.







COPYRIGHT 2024 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND

HEET IS	SSUE	
NO.	DESCRIPTION	DATE
1	SCHEMATIC DESIGN	06.10.24
2	DESIGN DEVELOPMENT	09.19.24
3	DESIGN DEVELOPMENT - SCO	10.18.24
4	1ST EC&S SUBMITTAL	11.14.24
5	1ST SUP SUBMITTAL	11.15.24
6	2ND SUP SUBMITTAL	01.22.25
7	3RD SUP SUBMITTAL	02.19.25
8	4TH SUP SUBMITTAL	03.14.25
9	50% CD SUBMITTAL - SCO	03.31.25

GENERAL NOTES:

PRE-CONSTRUCTION

1. PRIOR TO CONSTRUCTION LOCATE ALL UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE WORK AREA. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. PROTECT ALL UTILITIES DURING CONSTRUCTION. REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF CONSTRUCTION. 2. CONTRACTOR ENGAGED IN LANDSCAPE IMPLEMENTATION SHALL BE A LANDSCAPE CONTRACTOR

REGISTERED IN THE STATE OF NORTH CAROLINA. 3. VERIFY ALL PLANT MATERIAL QUANTITIES ON PLANS PRIOR TO BIDDING. PLANT LIST TOTALS ARE FOR CONVENIENCE ONLY AND MUST BE VERIFIED.

4. SUBSTITUTIONS OF PLANT MATERIALS SPECIFIED CAN ONLY OCCUR WITH PRIOR WRITTEN APPROVAL BY LANDSCAPE ARCHITECT. TOWN PLANNING AND ECONOMIC DEVELOPMENT STAFF WILL ALSO NEED TO SIGN OFF ON ANY PLANT SUBSTITUTIONS. 5. PRIOR TO THE COMMENCEMENT OF ANY ACTIVITIES REQUIRING A BUILDING OR ZONING PERMIT AN ON-SITE PRE-CONSTRUCTION CONFERENCE SHALL TAKE PLACE WITH THE DEVELOPER AND THE ADMINISTRATOR TO REVIEW PROCEDURES FOR THE PROTECTION AND MANAGEMENT OF ALL LANDSCAPE ELEMENTS THAT ARE TO REMAIN AS IDENTIFIED ON THE LANDSCAPE PLAN. TOWN PLANNING AND ECONOMIC DEVELOPMENT STAFF WILL NEED TO BE INVOLVED IN ANY PRE-CONSTRUCTION MEETINGS. THE TOWN WILL CONDUCT A

REQUIRED PRE-CONSTRUCTION MEETING PRIOR TO BEGINNING CONSTRUCTION. 6. ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION. 7. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE

SAME SPECIES, QUANTITY, AND SIZE. B. PROVIDE PLANT MATERIALS OF QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY INDICATED ON PLANS. ALL PLANT MATERIALS AND INSTALLATION SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". 8.1. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.

8.2. ALL PLANT MATERIAL SHALL BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN

THE PLANT LIST.
8.3. ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD.

CONSTRUCTION / INSTALLATION 1. CONTRACTOR SHALL TAKE 3 REPRESENTATIVE SOIL SAMPLES OF EACH PROPOSED PLANT BED AND SUBMIT COPIES OF THE RESULTS TO THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING TO MAINTAIN HEALTHY PLANT CONDITIONS. 3. ALL LANDSCAPED AND LAWN AREAS ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL. 4. ALL LANDSCAPE ISLANDS SHALL BE GRADED FOR POSITIVE DRAINAGE WITH NO LOW SPOTS ALLOWING

5. INSTALL LANDSCAPE PLANTINGS AT ENTRANCES/EXITS AND PARKING AREAS ACCORDING TO PLANS SO THAT MATERIALS WILL NOT INTERFERE WITH SIGHT DISTANCES.

6. THE SIZE OF THE PLANTING AREA AND SIZE OF PLANT MATERIAL AT MATURITY SHALL ALLOW FOR A 2.5' BUMPER OVERHANG FROM THE BACK OF CURB. 7. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.

8. AREAS DAMAGED FROM PLANT RELOCATION OR OTHER ACTIVITIES OF LANDSCAPE CONTRACTOR TO BE RESEEDED AND ESTABLISHED AT NO ADDITIONAL COST TO THE OWNER. 9. CONTRACTOR IS RESPONSIBLE FOR WATERING ALL PLANT MATERIAL DURING INSTALLATION AND UNTIL FINAL INSPECTION AND ACCEPTANCE BY OWNER. CONTRACTOR SHALL NOTIFY OWNER OF CONDITIONS WHICH AFFECTS THE GUARANTEE. IT MAY BE NECESSARY TO TRUCK IN NON-CITY WATER TO MEET THE NEEDS OF PLANTS.

10. USE HERBICIDES, PESTICIDES, AND FERTILIZER IN A MANNER CONSISTENT WITH THE FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT AND IN ACCORDANCE WITH LABEL RESTRICTIONS. 11. ALL LAWN AREAS TO BE SEEDED SHALL USE A LOCALLY GROWN COMMERCIAL BERMUDA SEED MIX MEETING LATEST STATE OF NORTH CAROLINA AGRICULTURE STANDARDS FOR SEED AND PLANT CERTIFICATION.

12 SEEDING AND STRAW NOTES FOR LAWN AREAS: 12.1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL TO DEPTH NOTED IN SPECIFICATIONS.

12.2. RIP THE ENTIRE AREA TO DEPTH OF NOT LESS THAN 6". 12.3. REMOVE ALL LOOSE ROCKS, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE SMOOTH AND UNIFORM. DISPOSE OF WASTE MATERIAL OFF-SITE.

12.4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPER PHOSPHATE UNIFORMLY AND MIX WITH SOIL. APPLY SOIL AMENDMENTS PER REQUIRED SOIL ANALYSIS RECOMMENDATIONS. 12.5. CONTINUE TILAGE UNTIL A WELL PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED.

12.6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING. 12.7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH. 12.8. INSPECT ALL SEEDED AREAS AND IF POSSIBLE, MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN

THE PLANTING SEASON. IF GRANDSTAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER, AND SEEDING RATES. 12.9. ANCHOR TACK WITH LIQUID ASPHALT AT 400 GAL/ACRE OR EMULSIFIED ASPHALT AT 300 GAL/ACRE. 13.BIODEGRADABLE WEED MATTING (ALL-PRO WEED MAT OR APPROVED EQUAL) SHALL BE REQUIRED IN SHRUB BEDS ADJACENT TO BUILDING FACADE.

14. PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH A MINIMUM 4" DEPTH OF BARK MULCH FROM A LOCAL MULCH SOURCE HARVESTED IN A SUSTAINABLE MANNER. 15. MULCH ALL PLANT BEDS AND TREE RINGS WITH FRESH, CLEAN MATERIAL PER SPECIFICATIONS. DO NOT PILE MULCH AROUND THE BASE OF PLANTS OR TREE TRUNKS. ALL MULCH EDGES SHALL BE NEATLY TUCKED. ALL STRING AND/OR BAILING WIRE SHALL BE REMOVED. DUST SHRUBS AND GROUND COVER AFTER MULCHING TO REMOVE LOOSE MATERIAL FROM PLANTS, DO NOT PLACE MULCH IN CONTACT WITH THE TREE TRUNK:

KEEP A MINIMUM OF 4 INCHES AWAY FROM THE TRUNK BASE. 16. MULCH AND NO-MOW MIXES SHALL BE REPLENISHED AS NEEDED, ESPECIALLY AFTER HEAVY RAIN EVENTS. IF NO-MOW MIX GERMINATES AT A RATE OF LESS THAN 90%, THEN REMOVE OTHER SPECIES AND RESEED.

1. CONTRACTOR TO PROVIDE AND MAINTAIN TEMPORARY IRRIGATION FOR SOD WITHIN THE STORMWATER CONTROL MEASURE UNTIL SOD BECOMES ESTABLISHED.

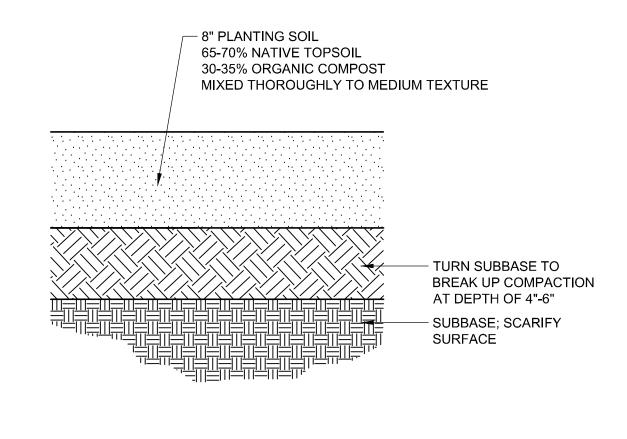
INSPECTIONS/GUARANTEE

1. LANDSCAPE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR, UPON COMPLETION OF LANDSCAPE INSTALLATION, WHO WILL VERIFY COMPLETENESS INCLUDING THE REPLACEMENT OF ALL DEAD PLANT MATERIAL. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A FINAL INSPECTION BY THE LANDSCAPE

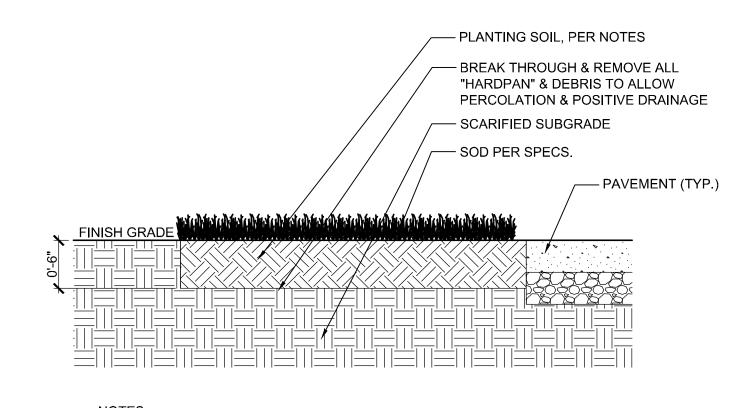
2. PLANT MATERIAL QUANTITIES AND SIZES WILL BE INSPECTED FOR COMPLIANCE WITH APPROVED PLANS BY A SITE PLAN REVIEW AGENT PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY. 3. GUARANTEE ALL EXTERIOR PLANT MATERIALS FOR ONE FULL YEAR AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. WARRANTY PERIOD SHALL BEGIN UPON CERTIFICATE OF OCCUPANCY OR

WHEN THE OWNER TAKES OVER MAINTENANCE, WHICHEVER COMES FIRST.

1. WHERE SEVERAL TREES WILL BE PLANTED CLOSE TOGETHER SUCH THAT THEY WILL LIKELY SHARE ROOT SPACE, TILL IN SOIL AMENDMENTS TO A DEPTH OF 4-6" (10-15CM) OVER THE ENTIRE AREA. 2. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER. 3. DURING THE DESIGN PHASE, CONFIRM THAT WATER DRAINS OUT OF THE SOIL; USE LOWERED PLANTING HOLE DEPTH AND DESIGN ALTERNATE DRAINAGE SYSTEM AS REQUIRED. 4. THOROUGHLY SOAK ROOT BALL AND ADJACENT - DO NOT STAKE TREES EXCEPT WHERE PREPARED SOIL SEVERAL TIMES DURING FIRST MONTH SPECIFIED BY LANDSCAPE ARCHITECT. IF AFTER PLANTING AND REGULARLY THROUGHOUT THE STAKING IS NECESSARY, USE TWO FOLLOWING TWO SUMMERS. OPPOSING STAKES WITH SEPARATE 5. THE PLANTING PROCESS IS SIMILAR FOR DECIDUOUS FLEXIBLE TIES. REMOVE STAKING AT THE AND EVERGREEN TREES. END OF THE FIRST GROWING SEASON. 6. DO NOT WRAP TRUNK; MARK THE NORTH SIDE OF THE TREE IN THE NURSERY AND LOCATE TO THE NORTH IN — 4" RAISED RING OF SOIL TO DIRECT WATER THE FIELD. INTO ROOT BALL. (ESPECIALLY IMPORTANT 7. AVOID PURCHASING TREES WITH TWO LEADERS OR IF ROOT BALL IS RAISED ABOVE GROUND) REMOVE ONE AT PLANTING. OTHERWISE, DO NOT PRUNE TREE AT PLANTING EXCEPT FOR SPECIFIC STRUCTURAL TRIPLE SHREDDED HARDWOOD MULCH. DO NOT PLACE MULCH IN CONTACT WITH TREE. 8. BEFORE PLANTING, ADD 3-4" OF WELL-COMPOSTED LEAVES, RECYCLED YARD WASTE OR OTHER COMPOST - DIG WIDTH OF PLANTING HOLE 3 TIMES THE AND TILL INTO TOP 6" OF PREPARED SOIL. ADD COMPOST DIAMETER OF THE ROOT BALL. AT 20-35% BY VOLUME TO BACKFILL SOIL. PACK BACKFILL SOIL AROUND BASE -OF ROOT BALL TO STABILIZE; ALLOW REST OF BACKFILL TO SETTLE NATURALLY OR TAMP LIGHTLY. 4"-6" DEEPER THAN ROOT BALL. SET ROOT BALL ON UNDISTURBED -SOIL TO PREVENT SETTLING. CUT BURLAP, ROPE, AND WIRE BASKET AWAY FROM TOP AND SIDES OF ROOT BALL. - EXTEND STAKES INTO UNDISTURBED SUBGRADE.



1. All material to be free of toxic substances, weed seed, stones, sticks or other material harmful to plant growth. Topsoil: ph range of 6.0 to 7.0, min. 6% organic matter. 2. Compost: well-composted, stable, weed-free organic matter, ph range of 5.5 to 8. Submit soil sample for analysis ... provide amendments per recommendations. 4. Remove any debris, rocks, or clumps 2" or larger. 5. Do not spread if planting soil, topsoil or subgrade is frozen, muddy, or excessively wet.



NOTES:

1. All sod shall be from a certified grower and be 99% weed free. 2. The sod shall not be shipped until the site is substantially prepared. It shall be stored and

maintained in accordance with the American Nursery Association. 3. The general contractor will provide grades to within an inch of proposed final grades. 4. Planting soil to a minimum depth of 6" (4" uncompacted in situ soil and 2" soil conditioner, such as pine fines or organic compost, thoroughly mixed; or 6" native topsoil), hand-rake smooth.

5. Add additives (per soil test analysis) & blend. 6. Water area to be sodded prior to laying sod. 7. Lay & roll sod, ensuring no gaps; stagger seams; water thoroughly.

SOD INSTALLATION DETAIL

katherine hogan architects

Durham Tech -Orange County
Campus Expansion

525 College Park Rd, Hillsborough, NC 27278 SEAL | DATE

COPYRIGHT 2024 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED WITHOUT PERMISSION FROM KATHERINE HOGAN ARCHITECTS

TIMMONS GROUP YOUR VISION ACHIEVED THROUGH OURS.

VIRGINIA NORTH CAROLINA THIS DRAWING PREPARED AT THE RALEIGH OFFICE 5410 Trinity Road, Suite 102 Raleigh, NC 27607 TEL 919.866.4951 FAX 919.859.5663 www.timmons.com

North Carolina License No. C-1652

Site Development | Residential | Infrastructure | Technology 50352-333



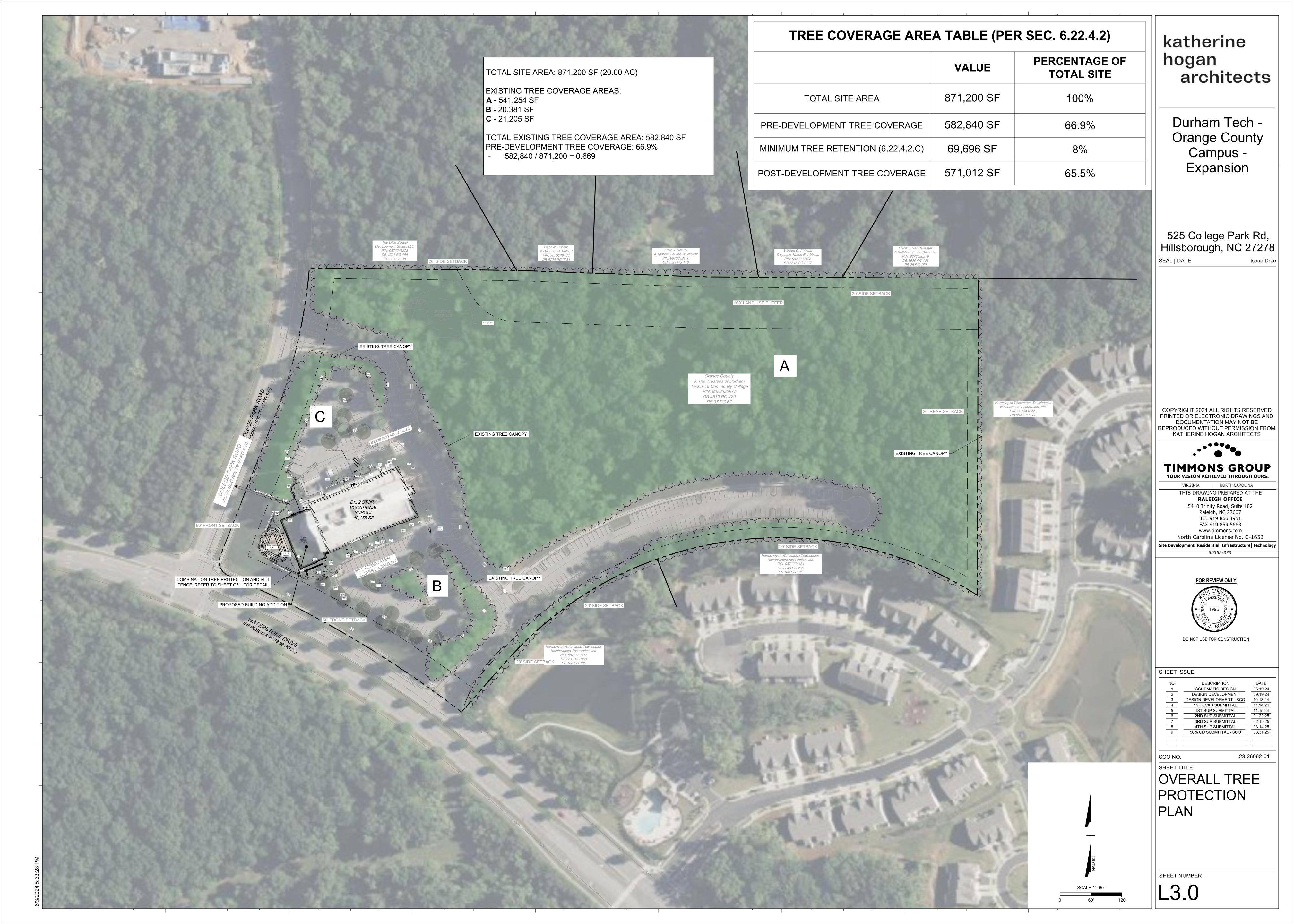
DO NOT USE FOR CONSTRUCTION

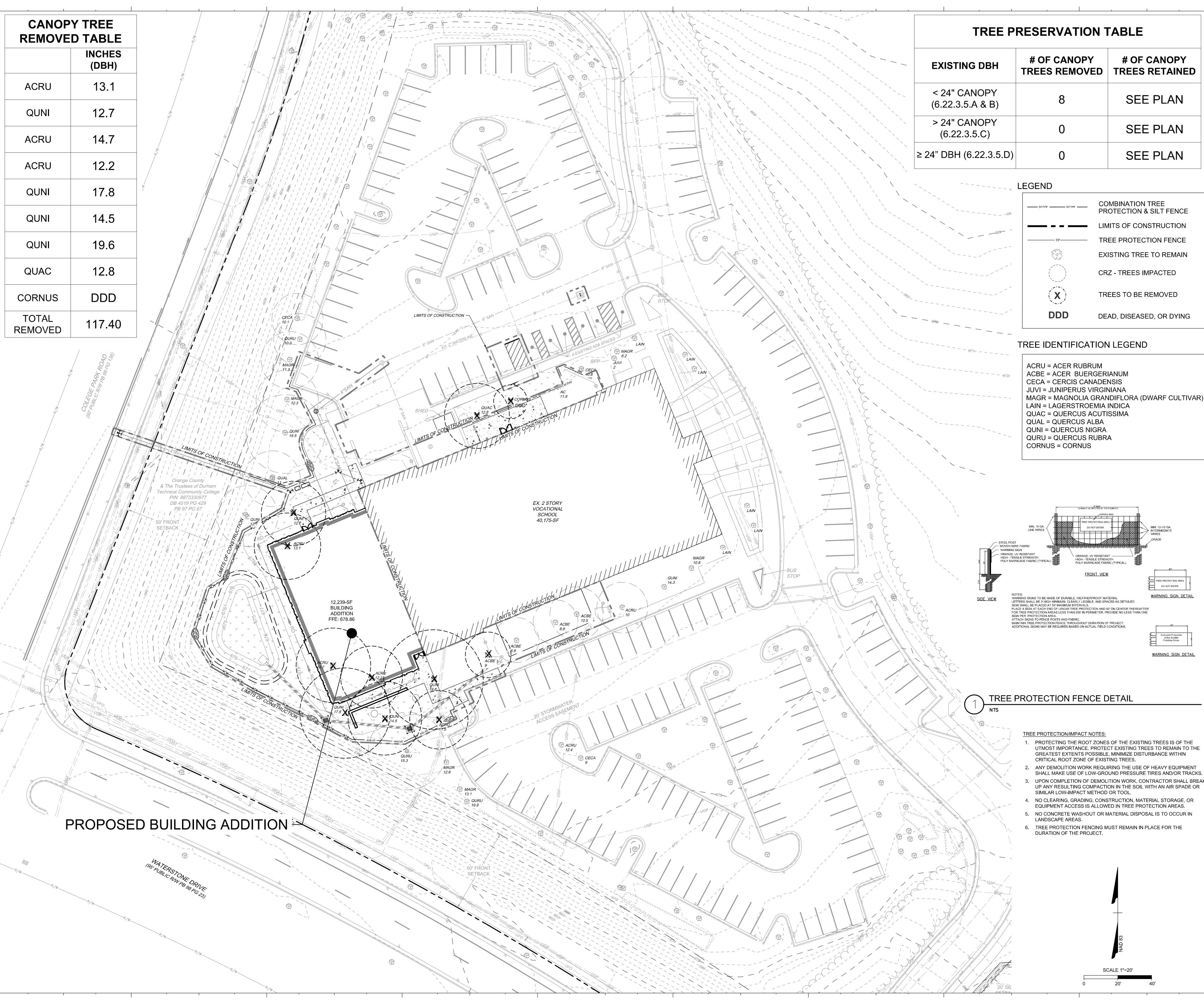
UEET IC	POLIE	
HEET IS	920E	
NO.	DESCRIPTION	DATE
1	SCHEMATIC DESIGN	06.10.24
2	DESIGN DEVELOPMENT	09.19.24
3	DESIGN DEVELOPMENT - SCO	10.18.24
4	1ST EC&S SUBMITTAL	11.14.24
5	1ST SUP SUBMITTAL	11.15.24
6	2ND SUP SUBMITTAL	01.22.25
7	3RD SUP SUBMITTAL	02.19.25
8	4TH SUP SUBMITTAL	03.14.25
9	50% CD SUBMITTAL - SCO	03.31.25
CO NO.	23-2	26062-01
HEET TI	TLE	
A		

LANDSCAPE NOTES & DETAILS

SHEET NUMBER

L2.0





katherine hogan architects

Durham Tech -Orange County Campus -Expansion

525 College Park Rd, Hillsborough, NC 27278

SEAL | DATE

COPYRIGHT 2024 ALL RIGHTS RESERVED PRINTED OR ELECTRONIC DRAWINGS AND DOCUMENTATION MAY NOT BE REPRODUCED WITHOUT PERMISSION FROM



KATHERINE HOGAN ARCHITECTS

VIRGINIA NORTH CAROLINA THIS DRAWING PREPARED AT THE RALEIGH OFFICE 5410 Trinity Road, Suite 102 Raleigh, NC 27607 TEL 919.866.4951

FAX 919.859.5663 www.timmons.com North Carolina License No. C-1652



Site Development | Residential | Infrastructure | Technology

SHEET ISSUE

	DESCRIPTION	DATE
1	SCHEMATIC DESIGN	06.10.24
2	DESIGN DEVELOPMENT	09.19.24
3	DESIGN DEVELOPMENT - SCO	10.18.24
4	1ST EC&S SUBMITTAL	11.14.24
5	1ST SUP SUBMITTAL	11.15.24
6	2ND SUP SUBMITTAL	01.22.25
7	3RD SUP SUBMITTAL	02.19.25
8	4TH SUP SUBMITTAL	03.14.25
9	50% CD SUBMITTAL - SCO	03.31.25

23-26062-01

SCO NO.

TREE PROTECTION PLAN, NOTES, & DETAILS

SHEET NUMBER

L4.0









katherine hogan architects

Durham Technical
Community
College - Orange
County Campus Expansion

525 College Park Rd, Hillsborough, NC 27278





COPYRIGHT 2025 ALL RIGHTS RESERVED
PRINTED OR ELECTRONIC DRAWINGS AND
DOCUMENTATION MAY NOT BE
REPRODUCED WITHOUT PERMISSION FROM
KATHERINE HOGAN ARCHITECTS

NO. DESCRIPT

 1
 SCHEMATIC DESIGN
 06.10.24

 2
 DESIGN DEVELOPMENT
 09.19.24

 3
 DESIGN DEVELOPMENT - SCO
 10.18.24

 4
 1ST EC&S SUBMITTAL
 11.14.24

 5
 1ST SUP SUBMITTAL
 11.15.24

 6
 2ND SUP SUBMITTAL
 01.22.25

 7
 3RD SUP SUBMITTAL
 02.19.25

 8
 4TH SUP SUBMITTAL
 03.19.25

 9
 5TH SUP SUBMITTAL
 04.10.25

23-26062-02

SCO NO.
SHEET TITLE

WEST + SOUTH ELEVATIONS

SHEET NUMBER

A-08.01

ATTACHMENT #2

Future Land Use Map and UDO Provisions Relative to the Case

Future Land Use Map Classification:

Employment Area: These areas include a wide range of business, light industrial, office, research and development, along with related/support services uses including restaurants, small scale retail and convenience shopping/services. Buildings and uses will be sited to limit the visual impact of service and warehousing operations, while still providing convenience for business functionality. These areas are in prime locations with good access to major road networks (where capacity exists or is planned) and rail if needed and should be reserved for high return employment generating uses. Zoning Districts: High Intensity Commercial; Business Park; Economic Development District; Light Industrial, General Industrial; Entranceway Special Use; Special Design Special Use.

UDO Provisions:

Section 4 (Zoning Districts), Subsection 4.4 (Special Use Districts), Paragraph 4.4.1 (Entranceway Special Use), Sub-paragraph 4.4.1.1 (Intent): The purpose of this district is to provide for the development of well-planned and fully integrated projects containing a diverse mixture of commercial, office, and employment uses along the primary entrances to the Town of Hillsborough. This district would be appropriate on major thoroughfares at or near the boundaries of the Town's zoning jurisdiction. This district is not intended to be a vehicle by which new, primarily residential uses are introduced, except where significant new commercial, office or employment uses are also incorporated into the district.

Section 9 (Definitions), Subsection 9.2 (Definitions):

School: Vocational - A public or private school offering general, technical, and vocational instruction that operates in buildings or structures or on premises on land leased or owned by the educational institution for administrative purposes. Such uses include classrooms, laboratories, libraries, cafeterias, and other facilities that further the educational mission of the institution.

ATTACHMENT #3

Zoning History

March 8, 2004: Over 300 acres of property south of I-85 between Old NC 86 and NC 86 South annexed into town's corporate limits and zoned ESU (Entranceway Special Use). The rezoning is subject to a Master Plan including (i) a development map identifying development restrictions by parcel, and (ii) a written set of general and specific development condition. Subject property is identified as "Parcel #16."

<u>February 13, 2006:</u> Town Board of Commissioners issues Special Use Permit #2006-04 for the "Durham Technical Community College Orange County Off-Campus Center Classroom Building & Park and Ride Lot" project. The project included an approximately 40,000 square foot, two-story community college building with 200 off-street parking spaces, and a 125-space park and ride lot. The special use permit contained conditions requiring additional town water, sewer and stormwater approvals, and inspection of tree protection fencing and possible preservation of two specified trees, prior to beginning land clearing activities.

October 2, 2006: Zoning Compliance Permit #3627 issued for community college and park and ride lot.

May 13, 2010: Zoning Compliance Permit issued for wall sign for school.

<u>June 14, 2010:</u> Town Board of Commissioners issue Special Use Permit modification allowing a ground-mounted solar array (solar panels) on the property.

October 14, 2010: Zoning Compliance Permit #4048 issued for pole-mounted photovoltaic system (solar panels) on property.

November 3, 2011: Zoning Compliance Permit #4545 issued for transit shelter at park and ride lot.