

BUILDING INSPECTIONS & PERMITS TOWN OF APEX CERTIFICATION

This drawing has been reviewed by the Town of Apex Building Inspections & Permits Department, and to the best of my knowledge and belief, conforms to the requirements established within the Town's Code of Ordinances and the North Carolina State Building Codes. However, this signature does not constitute a variance from any requirements contained in any federal, state, or local code, law, specification, rule or ordinance. It is the sole responsibility of the owner/developer, or any of his agents or contract professionals to ensure that this construction plan meets all the aforementioned requirements.

By: **N/A**
sewens 10/06/2023 11:16:42 AM

ELECTRIC TOWN OF APEX CERTIFICATION

This drawing has been reviewed by the Town of Apex Electric Department, and to the best of my knowledge and belief, conforms to the requirements established in the Standard Specifications and Construction Details and the Unified Development Ordinance of the Town of Apex. However, this signature does not constitute a variance from any requirements contained in any federal, state, or local code, law, specification, rule or ordinance. It is the sole responsibility of the owner/developer, or any of his agents or contract professionals to ensure that this construction plan meets all the aforementioned requirements.

By: **Approved**
rsmith 10/02/2023 2:59:39 PM

FIRE DEPARTMENT TOWN OF APEX CERTIFICATION

This drawing has been reviewed by the Town of Apex Fire Department, and to the best of my knowledge and belief, conforms to the requirements established within the Town's Standard Specifications, Fire Protection Ordinances, and the North Carolina International Fire Code. However, this signature does not constitute a variance from any requirements contained in any federal, state, or local code, law, specification, rule or ordinance. It is the sole responsibility of the owner/developer, or any of his agents or contract professionals to ensure that this construction plan meets all the aforementioned requirements.

By: **Approved**
khugench 10/02/2023 10:44:56 AM

PARKS, RECREATION, AND CULTURAL RESOURCES TOWN OF APEX CERTIFICATION

These plans have been reviewed by the Town of Apex, and to the best of my knowledge and belief, conform to representations made by the developer to myself and the Parks, Recreation, and Cultural Resource Advisory Commission consistent with the projects requirements for public Parks and Recreation, either in total or in part, as outlined in the Town of Apex Unified Development Ordinance and Town of Apex Code of Ordinances. However, this signature does not constitute a variance from any requirements contained in any federal, state, or local code, law, specification, rule or ordinance. It is the sole responsibility of the owner/developer, or any of his agents or contract professionals to ensure that this construction plan meets all the aforementioned requirements.

By: **N/A**
tgmpr 10/02/2023 3:47:56 PM

PLANNING/ZONING TOWN OF APEX CERTIFICATION

This construction drawing has been reviewed by the Town of Apex Planning Department, and to the best of my knowledge and belief, conforms to the Subdivision or Site Plan that was approved by the Town of Apex Town Council or Technical Review Committee, as appropriate, and meets the standards of the Town of Apex Unified Development Ordinance. This signature does not constitute a variance from any requirements of the originally approved Subdivision or Site Plan cited above, or any federal, state, or local code, law, specification, rule, guideline, or ordinance. It is the sole responsibility of the owner/developer, or any of his agents or contract professionals to ensure that this construction plan meets all the aforementioned requirements.

By: **Approved**
lstaudemair 10/03/2023 8:59:54 AM

TRANSPORTATION & INFRASTRUCTURE DEVELOPMENT TRANSPORTATION ENGINEERING TOWN OF APEX CERTIFICATION

This drawing has been reviewed by the Town of Apex Transportation & Infrastructure Development Department, and to the best of my knowledge and belief, provides an acceptable transportation system with consideration for the elements contained within the Transportation Plan conforming to the requirements established in the Standard Specifications & Standard Details and the Unified Development Ordinance of the Town of Apex. However, this signature does not constitute a variance from any requirements contained in any federal, state, or local code, law, specification, rule or ordinance. It is the sole responsibility of the owner/developer, or any of his agents or contract professionals to ensure that this construction plan meets all the aforementioned requirements.

By: **Approved**
rdalton 10/02/2023 5:10:09 PM

WATER RESOURCES SOIL EROSION & SEDIMENTATION CONTROL TOWN OF APEX CERTIFICATION

This drawing has been reviewed by the Town of Apex, and to the best of my knowledge and belief, conforms to the requirements established in the Soil Erosion and Sedimentation Control Ordinance of the Town of Apex. However, this signature does not constitute a variance from any requirements contained in any federal, state, or local code, law, specification, rule or ordinance. It is the sole responsibility of the owner/developer, or any of his agents or contract professionals to ensure that this construction plan meets all the aforementioned requirements. This signature does not constitute plan approval, only plan requirements. A separate letter of plan approval will be mailed to the financially responsible person at a later date according to the construction sequence.

By: **N/A**
tpatterson 10/02/2023 12:46:40 PM

WATER RESOURCES STORMWATER ENGINEERING TOWN OF APEX CERTIFICATION

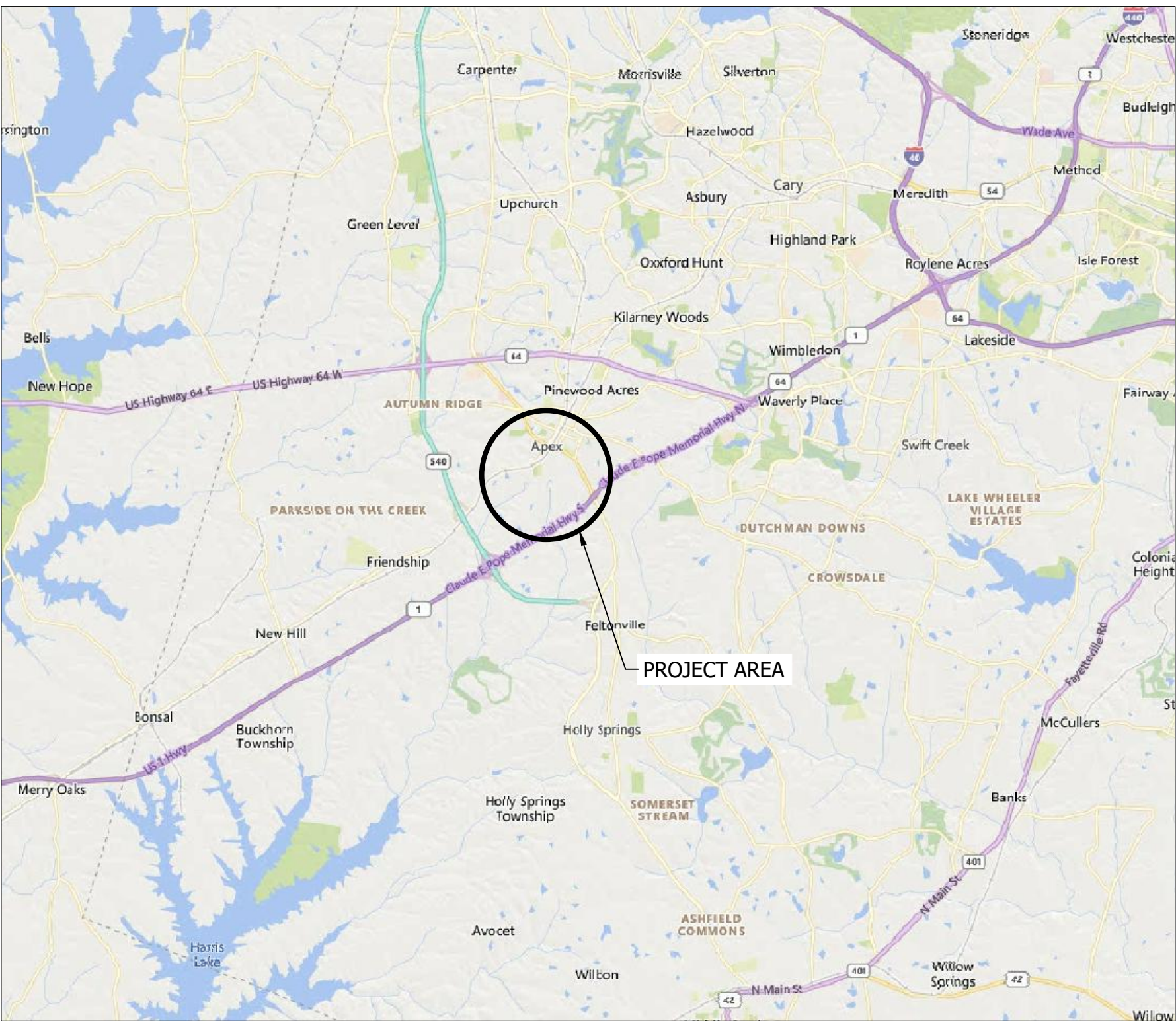
This drawing has been reviewed by the Town of Apex Water Resources Stormwater & Utility Engineering Division and to the best of my knowledge and belief, conforms to the requirements established in the Standard Specifications and Standard Details and the Unified Development Ordinance of the Town of Apex. However, this signature does not constitute a variance from any requirements contained in any federal, state, or local code, law, specification, rule or ordinance. It is the sole responsibility of the owner/developer, or any of his agents or contract professionals to ensure that this construction plan meets all the aforementioned requirements. This signature serves as the stormwater permit for this project.

By: **Approved**
rpatterson 10/02/2023 12:46:45 PM

WATER RESOURCES UTILITY ENGINEERING TOWN OF APEX CERTIFICATION

This drawing has been reviewed by the Town of Apex Water Resources Department, and to the best of my knowledge and belief, conforms to the requirements established in the Standard Specifications and Standard Details of the Town of Apex. However, this signature does not constitute a variance from any requirements contained in any federal, state, or local code, law, specification, rule or ordinance. It is the sole responsibility of the owner/developer, or any of his agents or contract professionals to ensure that this construction plan meets all the aforementioned requirements.

By: **Approved**
jdillon 10/05/2023 2:57:39 PM



VICINITY MAP
NOT TO SCALE

WAKE COUNTY NORTH CAROLINA GoAPEX ROUTE 1 BUS STOP IMPROVEMENTS SEPTEMBER 2023



BOARD OF COMMISSIONERS
CHAIR: SHINICA THOMAS
VICE CHAIR: SUSAN EVANS
COUNTY MANAGER: DAVID ELLIS
DON MIAL MATT CALABRIA CHERYL STALLINGS
JAMES WEST VICKIE ADAMSON



120 North Boylan Avenue • Raleigh, NC 27603-1423
(919) 828-0531 • thewootencompany.com
License Number : F-0115



REVISIONS

**FINAL DRAWING
FOR CONSTRUCTION**

APPROVED EXCEPTIONS	
The following items have been approved as exceptions for this drawing by the Town of Apex Department Director(s), and to the best of my knowledge and belief, this drawing conforms to the requirements established by the Director(s) allowing deviation from the Standard Specifications and Standard Details of the Town of Apex. The signature below represents that the requesting Engineer has been granted a variance ONLY for the items listed. The developer/engineer/contractor is solely responsible for meeting all applicable requirements.	
(List items below add number as needed)	
APPROVED EXCEPTION	DIRECTOR GRANTING EXCEPTION
1. 601.A.1	
2.	
3.	
By: Ana Wadsworth, P.E. Requesting Engineer	Date: 4/28/23

SHEET INDEX

C-0.01 COVER SHEET
C-0.02 NOTES & LEGEND

JAMES STREET AT E. WILLIAMS STREET BUS STOPS

C-1.0 EXISTING CONDITIONS & DEMOLITION PLAN
C-2.0 SIDEWALK LAYOUT PLAN
C-2.1 PAVEMENT MARKING PLAN
C-3.0 SIDEWALK GRADING & DRAINAGE PLAN
C-3.1 SIDEWALK GRADING & DRAINAGE PLAN 2

C-4.0 SITE PLAN: BUS STOPS #21
C-4.1 SITE PLAN: BUS STOPS #28, #32
C-4.2 SITE PLAN: BUS STOPS #35

C-5.0 CROSS SECTIONS
C-5.1 CROSS SECTIONS 2
C-5.2 CROSS SECTIONS 3

C-6.0 EROSION PLAN

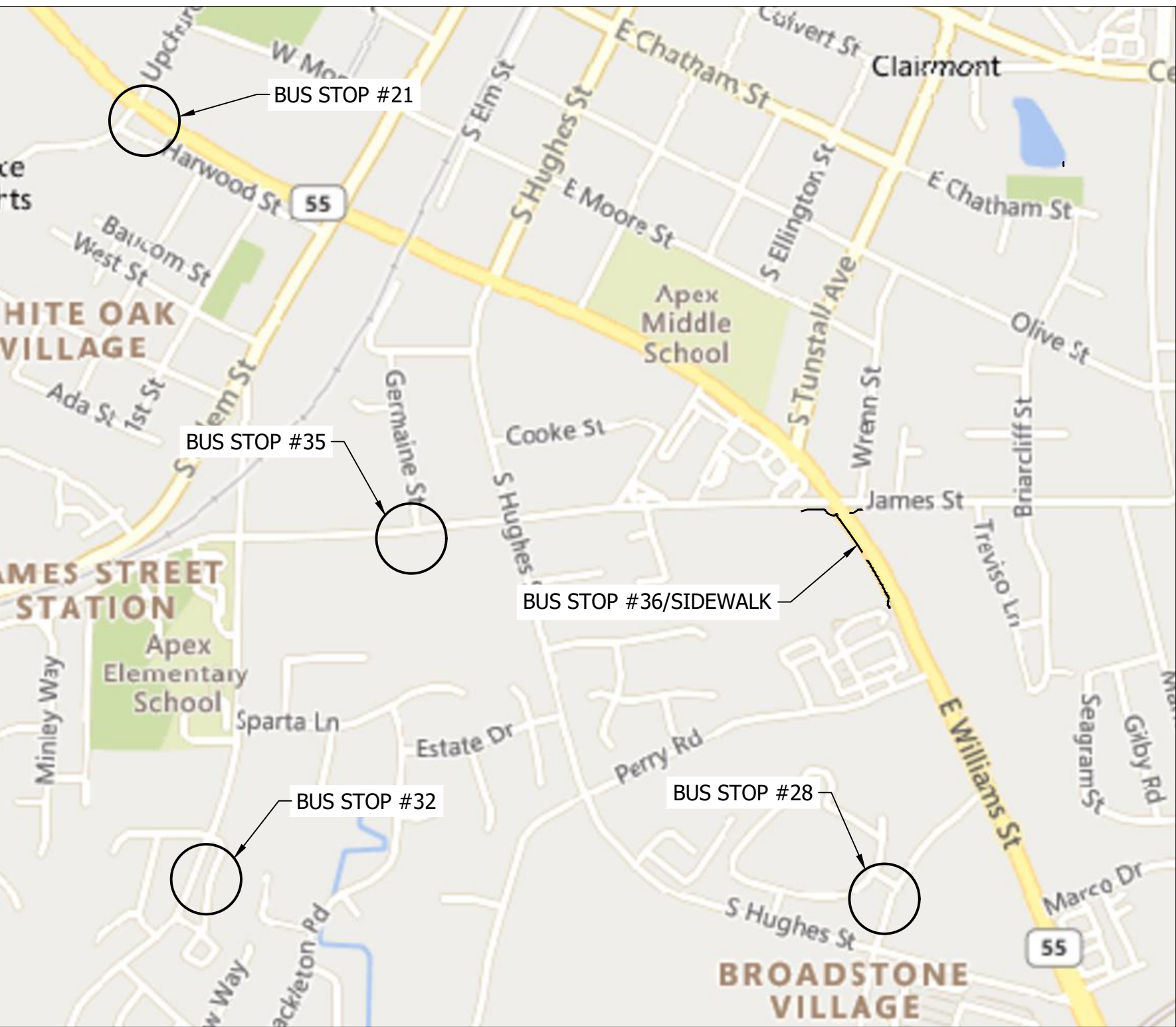
C-7.0 DETAILS
C-7.1 DETAILS CONTINUED
C-7.2 DETAILS CONTINUED
C-7.3 EROSION CONTROL DETAILS
C-7.4 TRAFFIC CONTROL DETAILS

SIG-1.0 SIGNAL PLANS
SIG-1.1 ELECTRICAL DETAILS 1/5
SIG-1.2 ELECTRICAL DETAILS 2/5
SIG-1.3 ELECTRICAL DETAILS 3/5
SIG-1.4 ELECTRICAL DETAILS 4/5
SIG-1.5 ELECTRICAL DETAILS 5/5

PUBLIC INFRASTRUCTURE TABLE:

STORM DRAIN (24") - 164 LF
STORM DRAIN (18") - 414 LF
STORM DRAIN (15") - 22 LF
CURB & GUTTER (2.5') - 642 LF
SIDEWALK (5') - 873 LF

**Standard Specifications & Standard Details
Version: February 28, 2023**



PROJECT AREA MAP
NOT TO SCALE

C-0.01

C-2.0

<p>Approved rdallion 10/02/2023 5:11:36 PM</p> <hr/> <p>Transportation Engineering</p> <p>N/A sewens 10/06/2023 11:21:16 AM</p> <hr/> <p>Building Inspections</p> <p>Approved jdillon 10/09/2023 10:46:39 AM</p> <hr/> <p>Water Resources – Utility Engineering</p> <p>N/A rsmith 10/02/2023 3:00:50 PM</p> <hr/> <p>Electric</p> <p>N/A rpatterson 10/02/2023 12:47:34 PM</p> <hr/> <p>Water Resources – Soil & Erosion Control</p>	<p>Approved cpatterson 10/02/2023 12:47:36 PM</p> <hr/> <p>Water Resources – Stormwater</p> <p>Approved mcourtney 10/02/2023 9:52:52 AM</p> <hr/> <p>Planning</p> <div> <p>Approved jphouse 10/04/2023 3:51:10 PM</p> </div> <hr/> <p>Planning – Transportation</p> <p>N/A khuangjerich 10/02/2023 10:45:48 AM</p> <hr/> <p>Fire</p> <p>N/A tgunsmith 10/02/2023 3:48:53 PM</p> <hr/> <p>Parks, Recreation & Cultural Resources</p>
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T:\Projects\Wake_County-2461\GJ-GoApex.Route1_BusStopImpri_CADD\DrawingSets\04-SITE-PLAN-Bus Stops-2461-GJ.dwg WORK 9/28/2023 11:04 AM



BUS STOP #21 - W. WILLIAMS ST AT UPCHURCH ST
PROPOSED IMPROVEMENTS: AMENITY PAD, SHELTER, & BENCH
SCALE: AS NOTED

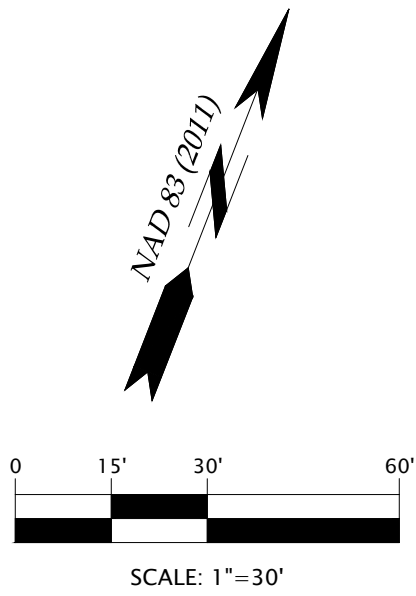
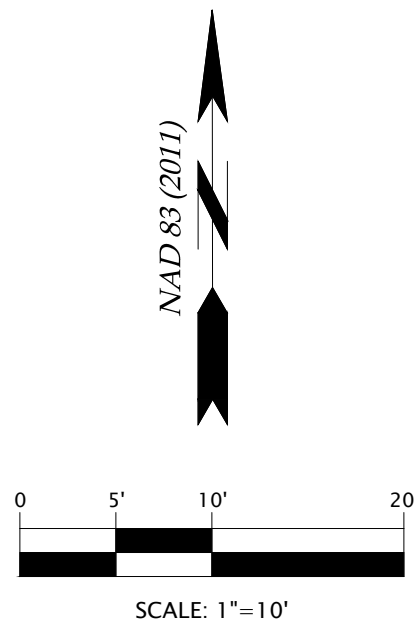
SIGHT DISTANCE CALCULATION PER AASHTO GREEN BOOK, CHAPTER 9 9.5 SIGHT DISTANCE

ROAD, MINOR = UPCHURCH ST
POSTED SPEED = 45 MPH
DESIGN SPEED, V = 50 MPH
DRIVER HEIGHT 3.5'
DRIVER SETBACK = 14.5' FROM EDGE OF TRAVEL LANE

CASE B2 = LEFT TURN FROM MINOR STREET, TG=7.5

SIGHT DISTANCE = 1.47*V*TG

CASE B1= 551.25 FT
DESIGN DISTANCE = 555 FT



**FINAL DRAWING
FOR CONSTRUCTION**

REVISIONS	
1	TOWN OF APEX CONSTRUCTION DRAWING REVIEW - 1/3/2023
2	TOWN OF APEX CONSTRUCTION DRAWING REVIEW - 2/27/2023
3	TOWN OF APEX CONSTRUCTION DRAWING REVIEW - 3/13/2023
4	TOWN OF APEX CONSTRUCTION DRAWING REVIEW - 4/11/2023
5	TOWN OF APEX CONSTRUCTION DRAWING REVIEW - 5/18/23

APEX	COUNTY OF WAKE	NORTH CAROLINA
	GOAPEX ROUTE 1 BUS STOP IMPROVEMENTS	
SITE PLAN		
BUS STOPS 21		

DESIGNED BY: JCB	
DRAWN BY: JCB	
CHECKED BY: AMW	
PROJECT NO.: 2461-GJ	
DATE: SEPTEMBER 2023	
SCALE: AS NOTED	
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	
C-4.0	

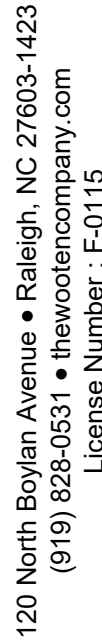


The signatures affixed below certify that this sheet has been reviewed and approved solely per the certifications signified on the cover sheet of these construction plans.

Approved rdalton 10/02/2023 5:12:59 PM	Approved spatterson 10/02/2023 12:48:51 PM
Transportation Engineering	Water Resources – Stormwater
N/A sewens 10/06/2023 11:21:15 AM	Approved blatendrecht 10/20/2023 9:51:29 AM
Building Inspections	Planning
Approved jdillon 10/05/2023 3:03:31 PM	Approved phouse 10/04/2023 3:54:24 PM
Water Resources – Utility Engineering	Planning – Transportation
N/A rsmith 10/02/2023 3:02:03 PM	N/A khuzeingchi 10/02/2023 10:47:00 AM
Electric	Fire
N/A spatterson 10/02/2023 12:48:56 PM	N/A tgmumpkin 10/02/2023 3:50:41 PM
Water Resources – Soil & Erosion Control	Parks, Recreation & Cultural Resources

FINAL DRAWING FOR CONSTRUCTION

REVISIONS	
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4	TOWN OF APEX CONSTRUCTION DRAWING REVIEW - 4/11/2023
5	TOWN OF APEX CONSTRUCTION DRAWING REVIEW - 4/18/23



GoAPEX ROUTE 1 BUS STOP IMPROVEMENTS

SITE PLAN
BUS STOPS 28,32



DESIGNED BY: JCB

DRAWN BY: JCB

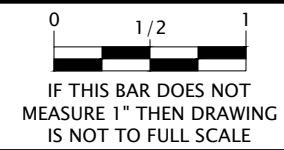
CHECKED BY: AMW

PROJECT NO.: 2461-GJ

DATE: SEPTEMBER 2023

SCALE:

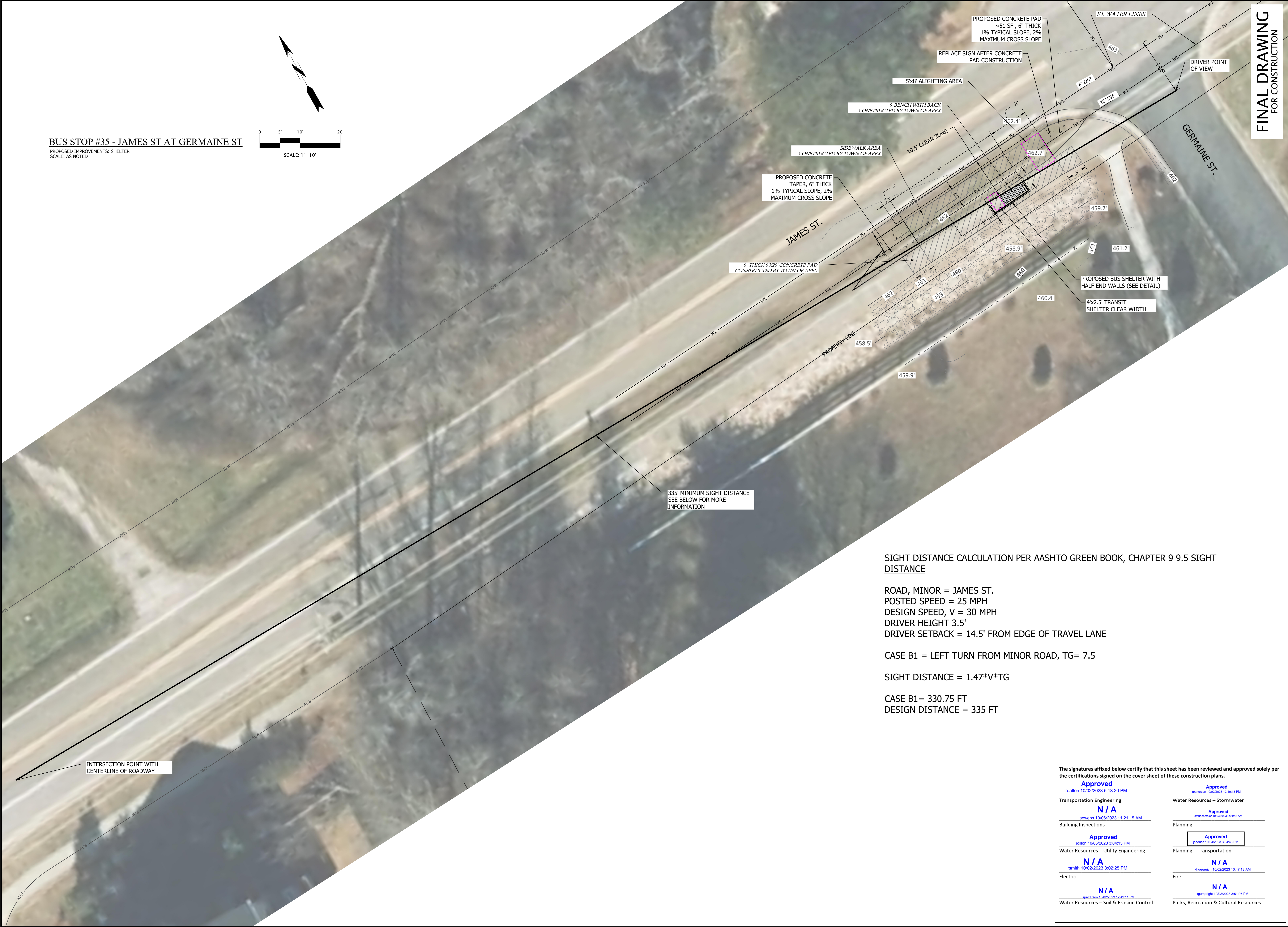
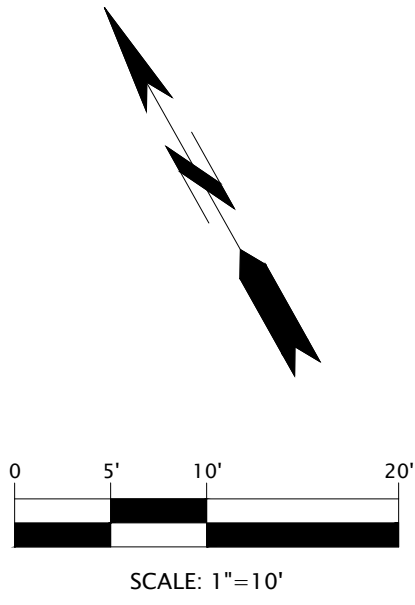
AS NOTED



C-4.1

T:\Projects\Wake_County-2461\GJ-CoApex_Route1_BusStopImpri_CADD\DrawingSets\04-SITE-PLAN-Bus Stops-2461-GJ.dwg WORK 9/28/2023 11:04 AM

BUS STOP #35 - JAMES ST AT GERMAINE ST
PROPOSED IMPROVEMENTS: SHELTER
SCALE: AS NOTED



SIGHT DISTANCE CALCULATION PER AASHTO GREEN BOOK, CHAPTER 9 9.5 SIGHT DISTANCE

ROAD, MINOR = JAMES ST.
POSTED SPEED = 25 MPH
DESIGN SPEED, V = 30 MPH
DRIVER HEIGHT 3.5'
DRIVER SETBACK = 14.5' FROM EDGE OF TRAVEL LANE

CASE B1 = LEFT TURN FROM MINOR ROAD, TG= 7.5

SIGHT DISTANCE = 1.47*V*TG

CASE B1= 330.75 FT
DESIGN DISTANCE = 335 FT

The signatures affixed below certify that this sheet has been reviewed and approved solely per the certifications signed on the cover sheet of these construction plans.	
<div>Approved</div> <div>rdalton 10/02/2023 5:13:20 PM</div> <div>Transportation Engineering</div> <div>N/A</div> <div>Building Inspections</div> <div>Approved</div> <div>jdillon 10/05/2023 3:04:15 PM</div> <div>Water Resources – Utility Engineering</div> <div>N/A</div> <div>Electric</div> <div>N/A</div> <div>Water Resources – Soil & Erosion Control</div>	<div>Approved</div> <div>spatterson 10/02/2023 12:48:18 PM</div> <div>Water Resources – Stormwater</div> <div>Approved</div> <div>tsoukourides 10/03/2023 9:01:42 AM</div> <div>Planning</div> <div>Approved</div> <div>phouse 10/04/2023 3:54:48 PM</div> <div>Planning – Transportation</div> <div>N/A</div> <div>Fire</div> <div>N/A</div> <div>Parks, Recreation & Cultural Resources</div>

REVISIONS

1	TOWN OF APEX CONSTRUCTION DRAWING REVIEW – 1/13/2023
2	TOWN OF APEX CONSTRUCTION DRAWING REVIEW – 2/27/2023
3	TOWN OF APEX CONSTRUCTION DRAWING REVIEW – 3/13/2023
4	TOWN OF APEX CONSTRUCTION DRAWING REVIEW – 4/11/2023
5	TOWN OF APEX CONSTRUCTION DRAWING REVIEW – 5/18/23

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License Number : F-0115

COUNTY OF WAKE

NORTH CAROLINA

GOAPEX ROUTE 1 BUS STOP IMPROVEMENTS

SITE PLAN

BUS STOPS 35

DESIGNED BY: JCB

DRAWN BY: JCB

CHECKED BY: AMW

PROJECT NO.: 2461-GJ

DATE: SEPTEMBER 2023

SCALE: AS NOTED

C-4.2