



- 1. CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE-CALL CENTER (NC 811) BY DIALING 811 OR 1-800-632-4949 AT LEAST 72 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY OR DIGGING AND HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK.
- AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
- 4. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND DO NOT INCLUDE MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN
- 5. ALL DEMOLITION WASTE AND DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
- 6. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR GETS WRITTEN AUTHORIZATION FROM THE LOCAL
- 7. ASBESTOS OR HAZARDOUS MATERIALS, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL
- NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED 8. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS. AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED. CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR
- 9. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL, AND OSHA REGULATIONS WHEN OPERATING DEMOLITION EQUIPMENT AROUND UTILITIES.
- 10. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE NCDOT STANDARDS, AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH THE LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT, AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
- 11. CONTRACTOR SHALL PROTECT AT ALL TIMES ADJACENT STRUCTURES AND ITEMS FROM DAMAGE DUE TO DEMOLITION OR CONSTRUCTION ACTIVITIES
- 12. CONTRACTOR SHALL REMOVE EXISTING VEGETATION AND IMPROVEMENTS WITHIN LIMITS OF DISTURBANCE UNLESS NOTED OTHERWISE.

13. TREES OUTSIDE OF CONSTRUCTION LIMITS OR TREES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED.



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CONSULTING GROUP, PLLC

Project Manager:	BCF
Drawn By:	DLC
Checked By:	BCF
Project Number:	24138
Drawing Number:	D-1592

may not apply depending on site conditions and the delegated authority having jurisdiction.

Required Ground Stabilization Timeframes				
Site Area Description		Stabilize within this many calendar days after ceasing land disturbance		
(a)	Perimeter dikes, swales, ditches, and perimeter slopes	7	None	
(b)	High Quality Water (HQW) Zones	7	None	
(c)	Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed	
(d)	Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed	
(e)	Areas with slopes flatter than 4:1	14	 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope 	

ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

	Temporary Stabilzation	Permanent Stabilzation
	Temporary grass seed covered with straw or other mulches and tackifiers	Permanent grass seed covered with straw or other mulches and tackifiers
	 Hydroseeding Rolled erosion control products with or without temporary grass seed 	Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding
	Appropriately applied straw or other mulchplastic sheeting	Shrubs or other permanent plantings covered with mulch
		Uniform and evenleyh distributed ground cover sufficient to restrain erosion
		Structural methods such as concrete, asphalt, or retaining walls
I		Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

SECTION A: SELF-INSPECTION

Inspect

(1) Rain gauge

good working

were delayed shall be noted in the Inspection Record.

(during normal

usiness hours)

At least once per

in 24 hours

calendar days and

After each phase of

rain event ≥ 1.0 inch the site limits.

discharge outfalls | calendar days and

(4) Perimeter of At least once per 7

or offsite (where

accessible)

(6) Ground

measures

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures Apply flocculants at the concentrations specified in the NC DWR List of Approved

SELF-INSPECTION, RECORDKEEPING AND REPORTING

Self-inspections are required during normal business hours in accordance with the table

below. When adverse weather or site conditions would cause the safety of the inspection

personnel to be in jeopardy, the inspection may be delayed until the next business day on

greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be

performed upon the commencement of the next business day. Any time when inspections

Inspection records must include:

2. Date and time of the inspectio

Date and time of the inspection,

the following shall be made:

within 24 hours of a then a record of the following shall be made:

NOTE: The rain inspection resets the required 7 calendar day inspection requirement

shall not commence until the E&SC plan authority has approved these items.

ain event ≥ 1.0 inch | 4. Evidence of indicators of stormwater pollution such as oil

within 24 hours of a | 1. Actions taken to clean up or stabilize the sediment that has left

ain event ≥ 1.0 inch | 1. Description, evidence and date of corrective actions taken, and

edevelopment, permanent ground cover).

rain event ≥ 1.0 inch $\begin{vmatrix} 1 \end{vmatrix}$ 4. Indication of whether the measures were operating properly

5. Description of maintenance needs for the measure,

.. Identification of the discharge outfalls inspected

sheen, floating or suspended solids or discoloration,

If visible sedimentation is found outside site limits, then a record of

2. Description, evidence, and date of corrective actions taken, and

If the stream or wetland has increased visible sedimentation or a

2. Records of the required reports to the appropriate Division

Regional Office per Part III, Section C, Item (2)(a) of this permit.

.. The phase of grading (installation of perimeter E&SC measures,

clearing and grubbing, installation of storm drainage facilities,

. Documentation that the required ground stabilization measures

completion of all land-disturbing activity, construction or

have been provided within the required timeframe or an

assurance that they will be provided as soon as possible.

Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,

(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,

e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and

3. An explanation as to the actions taken to control future

3. Name of the person performing the inspection

5. Indication of visible sediment leaving the site,

within 24 hours of a 3. Name of the person performing the inspection

If no daily rain gauge observations are made during weekend or

holiday periods, and no individual-day rainfall information is available

record the cumulative rain measurement for those un-attended days

no rainfall occurred shall be recorded as "zero." The permittee may

use another rain-monitoring device approved by the Division.

Description, evidence, and date of corrective actions taken

which it is safe to perform the inspection. In addition, when a storm event of equal to or

- *PAMS/Flocculants* and in accordance with the manufacturer's instructions. Provide ponding area for containment of treated Stormwater before discharging
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE Maintain vehicles and equipment to prevent discharge of fluids.

- Provide drip pans under any stored equipment.
- 3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the
- Collect all spent fluids, store in separate containers and properly dispose as
- hazardous waste (recycle when possible). Remove leaking vehicles and construction equipment from service until the problem
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTI

Never bury or burn waste. Place litter and debris in approved waste containers.

- Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- from upland areas and does not drain directly to a storm drain, stream or wetland. Cover waste containers at the end of each workday and before storm events or
- provide secondary containment. Repair or replace damaged waste containers. Anchor all lightweight items in waste containers during times of high winds. Empty waste containers as needed to prevent overflow. Clean up immediately if

On business days, clean up and dispose of waste in designated waste containers.

Locate waste containers on areas that do not receive substantial amounts of runoff

containers overflow Dispose waste off-site at an approved disposal facility.

PAINT AND OTHER LIQUID WASTE

- Do not dump paint and other liquid waste into storm drains, streams or wetlands. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- . Contain liquid wastes in a controlled area.
- 4. Containment must be labeled, sized and placed appropriately for the needs of site. 5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from

construction sites.

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place
- on a gravel pad and surround with sand bags. Provide staking or anchoring of portable toilets during periods of high winds or in high
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

SECTION B: RECORDKEEPING

inspection at all times during normal business hours.

Item to Document

(a) Each E&SC Measure has been installed and

does not significantly deviate from the locations,

(b) A phase of grading has been completed.

accordance with the approved E&SC Plan.

all E&SC Measures have been performed.

Additional Documentation

requirement not practical:

PART II, SECTION G, ITEM (4)

DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structure that withdraw water from the surface when these devices need to be drawn down

for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather)

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal

(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include

Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause deposition of sediment into water of the United States.

d) Vegetated, upland areas of the sites are a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above,

. Documentation to be Retained for Three Years

dimensions and relative elevations shown on the

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile
- Provide stable stone access point when feasible

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

The approved E&SC plan as well as any approved deviation shall be kept on the site. The

approved E&SC plan must be kept up-to-date throughout the coverage under this permit.

Documentation Requirements

Initial and date each E&SC Measure on a copy of the

approved E&SC Plan or complete, date and sign an

inspection report that lists each E&SC measure shown on

the approved E&SC Plan. This documentation is required

upon the initial installation of the E&SC measures or if the

E&SC measures are modified after initial installation.

Initial and date a copy of the approved E&SC plan or

Initial and date a copy of the approved E&SC plan or

complete, date and sign an inspection report to indicate

complete, date and sign an inspection report to indicate th

completion of the corrective action.

complete, date and sign an inspection report to indicate

The following items pertaining to the E&SC plan shall be kept on site and available for

(d) The maintenance and repair requirements for | Complete, date and sign an inspection report.

In addition to the E&SC plan documents above, the following items shall be kept on the site

and available for inspectors at all times during normal business hours, unless the Division

(b) Records of inspections made during the previous twelve months. The permittee shall

record the required observations on the Inspection Record Form provided by the

Division or a similar inspection form that includes all the required elements. Use of

electronically-available records in lieu of the required paper copies will be allowed if

All data used to complete the e-NIO and all inspection records shall be maintained for a period

of three years after project completion and made available upon request. [40 CFR 122.41]

provides a site-specific exemption based on unique site conditions that make this

(a) This General Permit as well as the Certificate of Coverage, after it is received.

shown to provide equal access and utility as the hard-copy records.

ONSITE CONCRETE WASHOU CONCRETE NOTING DEVICE (18"X24" MIN.) THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY. BELOW GRADE WASHOUT STRUCTURE ABOVE GRADE WASHOUT STRUCTURE

CONCRETE WASHOUTS

- 2. Dispose of, or recycle settled, hardened concrete residue in accordance with local
- and state solid waste regulations and at an approved facility. B. Manage washout from mortar mixers in accordance with the above item and in
- Install temporary concrete washouts per local requirements, where applicable. If a alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two
- types of temporary concrete washouts provided on this detail. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or
- be pumped out and removed from project. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum.
- spills or overflow Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the
- approving authority Install at least one sign directing concrete trucks to the washout within the project
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary

HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.

Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE Create designated hazardous waste collection areas on-site.

SECTION C: REPORTING

(b) Oil spills if:

environment.

Occurrence

(b) Oil spills and

1(b)-(c) above

(c) Anticipated

122.41(m)(3)]

122.41(m)(3)]

122.41(I)(7)]

(d) Unanticipate

ypasses [40 CFR

(e) Noncompliance

endanger health or the

vironment[40 CFR

release of hazardous

substances per Item

deposition in a stream

1. Occurrences that Must be Reported

They are 25 gallons or more,

Permittees shall report the following occurrences:

(Ref: 40 CFR 302.4) or G.S. 143-215.85.

2. Reporting Timeframes and Other Requirements

(b) Anticipated bypasses and unanticipated bypasses.

(a) Visible sediment deposition in a stream or wetland.

- Place hazardous waste containers under cover or in secondary containment.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

They are less than 25 gallons but cannot be cleaned up within 24 hours,

(a) Releases of hazardous substances in excess of reportable quantities under Section 311

) Noncompliance with the conditions of this permit that may endanger health or the

After a permittee becomes aware of an occurrence that must be reported, he shall contact

the appropriate Division regional office within the timeframes and in accordance with the

other requirements listed below. Occurrences outside normal business hours may also be

Reporting Timeframes (After Discovery) and Other Requirements

· Within 7 calendar days, a report that contains a description of the

sediment and actions taken to address the cause of the deposition

Division staff may waive the requirement for a written report on a

If the stream is named on the NC 303(d) list as impaired for sediment-

related causes, the permittee may be required to perform additional

determine that additional requirements are needed to assure compliance

monitoring, inspections or apply more stringent practices if staff

Within 24 hours, an oral or electronic notification. The notification

shall include information about the date, time, nature, volume and

A report at least ten days before the date of the bypass, if possible.

Nithin 7 calendar days, a report that includes an evaluation of the

Within 7 calendar days, a report that contains a description of the

including exact dates and times, and if the noncompliance has not

been corrected, the anticipated time noncompliance is expected to

oncompliance, and its causes; the period of noncompliance,

continue; and steps taken or planned to reduce, eliminate, and

revent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6)

Division staff may waive the requirement for a written report on a

with the federal or state impaired-waters conditions.

Within 24 hours, an oral or electronic notification.

Within 24 hours, an oral or electronic notification.

location of the spill or release.

quality and effect of the bypass

case-by-case basis.

reported to the Department's Environmental Emergency Center personnel at (800)

of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA

They cause sheen on surface waters (regardless of volume), or

They are within 100 feet of surface waters (regardless of volume).

Do not store hazardous chemicals, drums or bagged materials directly on the ground.

EFFECTIVE: 04/01/19

DATE THAT THE LAND DISTURBING ACTIVITY WILL BEGIN.

- 2. LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL APPROPRIATE EROSION CONTROL MAY NOT PROCEED UNTIL EROSION CONTROL MEASURES ARE INSPECTED AND APPROVED BY THE ENGINEER.
- 3. SCHEDULING OF A PRE-CONSTRUCTION CONFERENCE WITH THE WAKE COUNTY WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907) PRIOR TO INITIATING LAND DISTURBING ACTIVITIES IS REQUIRED. FOR INSPECTION CALL 919-819-8907. 48 HOUR
- 4. INSTALL TREE PROTECTION FENCING AROUND ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS SHOWN ON PLANS.
- 5. PROVIDE 20' X 50' X 6" STONE CONSTRUCTION ENTRANCES AS SHOWN ON PLAN.
- 6. SEED OR OTHERWISE PROVIDE GROUND COVER DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION FOR ALL EXPOSED SLOPES WITHIN 7 DAYS OF COMPLETION OF ANY PHASE OF GRADING ON PERIMETER AREAS AND SLOPES STEEPER THAN 3:1. ALL OTHER AREAS SHALL BE STABILIZED WITHIN 14 DAYS.
- 8. THE ENGINEER RESERVES THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES SHOULD THE PLAN OR ITS IMPLEMENTATION PROVE TO BE INADEQUATE.
- DISTURBING ACTIVITY. APPROVAL BY THE COUNTY DOES NOT SUPERSEDE ANY OTHER PERMIT OR APPROVAL
- BASIN. THESE RULES ARE ENFORCED BY THE DIVISION OF WATER RESOURCES (DWR). DIRECT ANY QUESTIONS ABOUT THE APPLICABILITY OF THESE RULES TO YOUR PROJECT TO THE REGIONAL WATER QUALITY SUPERVISOR, RALEIGH REGIONAL OFFICE AT
- 11. ALL AREAS DOWNSTREAM OF TEMPORARY BASINS AND DITCHES ARE TO BE STABILIZED IMMEDIATELY UPON CONSTRUCTION.

Construction Sequence:

- 2. CALL WAKE COUNTY WATERSHED MANAGER JEEVAN NEUPANE AT (919) 819-8907 A MINIMUM OF 48 HOURS IN ADVANCE TO
- 3. ANY DEWATERING ON THE SITE SHALL BE DONE THROUGH A SILT BAG THAT IS CONSTANTLY MONITORED.
- CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER
- CLEAR AND GRUB EXISTING VEGETATION AS SHOWN ON THE DEMOLITION PLAN. REMOVE EXISTING STRUCTURES AND UTILITIES AS SHOWN ON THE DEMOLITION PLAN. BEGIN GRADING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE. INSTALL TEMPORARY SKIMMER SEDIMENT BASINS, ALONG WITH TEMPORARY DIVERSION DITCHES THAT SHALL BE INSTALLED TO ENSURE
- 7. SEDIMENT BASIN FOR PERMANENT USE AS WET POND SHALL BE REMOVED AS FOLLOWS: DEWATER (THROUGH SILT BAG), CLEAN SEDIMENT, AND REMOVE BAFFLES. RE-SHAPE THE BASIN AS REQUIRED BY THE DESIGN DRAWINGS, INCLUDING EXCAVATION/SHAPING OF THE FOREBAY. SEED AND STABILIZE BASIN SLOPES. DEWATERING OPERATIONS THROUGH SILT BAGS
- 8. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME FRAME.
- 9. INSTALLATION OF UNDERGROUND UTILITIES AND STONE BASE FOR ROADWAYS.
- 10. INSTALLATION OF CONCRETE CURB & GUTTER, CONCRETE SIDEWALK, & ASPHALT PAVEMENT.
- 11. WHEN GRADING IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL WATERSHED MANAGER JEEVAN NEUPANE FOR
- 12. IF SITE IS APPROVED, MAINTAIN TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATERS, SHOULD
 - NEUPANE. OBTAIN CERTIFICATE OF COMPLETION.

Seeding Specifications

NPDES Stormwater Discharge Permit for Construction Activities (NCGO1 - 4/1/19) NCDEQ/Division of Energy, Mineral and Land Resources

SECTION E: GROUND:		
	Required Ground St	abilization Timeframes
Site Area Descripti	Stabilize within many calendar days after ceasir land disturbance	Timeframe variations
 (a) Perimeter dikes, swales, ditches, perimeter slope 	and 7	None
(b) High Quality Wa (HQW) Zones	ter 7	None
(c) Slopes steeper t 3:1	han 7	If slopes are 10' or less in length a not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 30 length and with slopes steeper th -7 days for perimeter dikes, swale ditches, perimeter slopes and HQ Zones -10 days for Falls Lake Watershed
(e) Areas with slope flatter than 4:1	s 14	-7 days for perimeter dikes, swale ditches, perimeter slopes and HQ -10 days for Falls Lake Watershed there is zero slope.
round stabilization she recticable but in no control of ctivity. Temporary grundate stable against ROUND STABILIZATI tabilize the ground stabilize echniques in the table	all be converted to pe ase longer than 90 cal- ound stabilization sha accelerated erosion un ON SPECIFICATION officiently so that rain a below:	truction activities, any areas with tem rmanent ground stabilization as soon ender days after the last land disturbin il be maintained in a manner to rende tibli permanent ground stabilization is a will not dislodge the soil. Use one of the
	Stabilization	Permanent Stabilization
	covered with straw or	. Permanent grass seed covered with stras

Seedbed Preparation

- 1. Chisel compacted areas and spread topsoil three inches deep over adverse soil conditions, if available
- 2. Rip the entire area to six inches deep 3. Remove all loose rock, roots and other obstructions, leaving surface
- reasonably smooth and uniform 4. Apply agricultural lime, fertilizer and superphosphate uniformly and mix with
- soil (see mixture below) 5. Continue tillage until a well-pulverized, firm, reasonably uniform seedbed is prepared four to six inches deep.

6. Seed on a freshly prepared seedbed and cover seed lightly with seeding

- equipment or cultipack after seeding 7. Mulch immediately after seeding and anchor mulch.
- 8. Inspect all seeded areas and make necessary repairs or reseedings within the planting season, if possible. If stand should be more than 60% damaged, reestablish following the original lime, fertilizer and seeding rates.

9. Consult Wake County Soil & Water or NC State Cooperative Extension on

maintenance treatment and fertilization after permanent cover is established

Asphalt emulsion at 400 gals/acre

Agricultural Limestone 2 tons/acre (3 tons/acre in clay soils) 1,000 lbs/acre - 10-10-10 Fertilizer 500 lbs/acre - 20% analysis Superphosphate Mulch 2 tons/acre - small grain straw

Seeding Schedule

For Shoulders, Side Ditches, Slopes (Max 3:1):		
Date	Туре	Planting Rate
Aug 15– Nov 1	Tall Fescue	300 lbs/acre
Nov 1– Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1– Apr 15	Tall Fescue	300 lbs/acre
•	Hulled Common Bermudagrass	25 lbs/acre

Tall Fescue AND Browntop 125 lbs/acre (Tall Fescue); 35 Aug 15 Millet or Sorghum-Sudan Ibs/acre (Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)

For Shoulders, Side Ditches, Slopes (3:1 to 2:1):

Sericea Lespedeza (scarified) and use the following 50 lbs/acre (Sericea Lespedeza); Jun 1 combinations:

Add Tall Fescue 120 lbs/acre Jun 30 Or add Weeping Love grass 10 lbs/acre

AND Abruzzi Rye

Mar 1

Mar 1- Or add Hulled Common Jun 30 Bermudagrass Tall Fescue AND Browntop 120 lbs/acre (Tall Fescue); 35 lbs/acre Mullet or Sorghum-Sudan (Browntop Mullet); 30 lbs/acre (Sorghum-Sudan Hybrids)

Sericea Lespedeza (unhulled 70 lbs/acre (Sericea Lespedeza); 120 unscarified) AND Tall lbs/acre (Tall Fescue)

Consult Wake County Soil & Water Conservation District or NC State Cooperative Extension for additional information concerning other alternatives for vegetation of denuded areas. The above

vegetation rates are those that do well under local conditions; other seeding rate combinations

*** **TEMPORARY**: Reseed according to optimum season for desired permanent vegetation. Do not allow temporary cover to grow more than 12" in height before mowing; otherwise, fescue

EROSION

CROSLANI SOUTHEAS

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CONSULTI GROUP, PLA

Project Manager: Drawn Bv Checked By 24138 Project Number D-1592 Drawing Number:

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

Do not discharge concrete or cement slurry from the site.

- addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- discharged to the storm drain system or receiving surface waters. Liquid waste must
- install protection of storm drain inlet(s) closest to the washout which could receive
- limits. Post signage on the washout itself to identify this location.
- products, follow manufacturer's instructions. 10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout

Wake County Basin Removal Sequence:

1. SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.

Effective September 1, 2008

not exceed 35 feet.

approved BMP.

d. Stockpile slopes shall be 2:1 or flatter.

sediment loss from a stockpile.

Soil stockpiles shall be located on the approved plan and shall adhere to the

a. A 25-foot temporary maintenance and access easement shall be shown

c. A note shall be provided on the approved plan that stockpile height shall

e. Approved BMPs shall be shown on a plan to control any potential

f. Stockpiling materials adjacent to a ditch, drainageway, watercourse

g. Any concentrated flow likely to affect the stockpile shall be diverted to an

h. Off-site spoil or borrow areas must be in compliance with Wake County

UDO and State Regulations. All spoil areas over an acre are required to

have an approved sediment control plan. Developer/Contractor shall notify

Wake County of any offsite disposal of soil, prior to disposal. Fill of FEMA Floodways and Non-encroachment Areas are prohibited except as

otherwise provided by subsection 14-19-2 of the Wake County Unified

. Seeding or covering stockpiles with tarps or mulch is required and will reduce erosion problems. Tarps should be keyed in at the top of the slope

(builders, etc.), the financial responsible party must notify Wake County

j. If a stockpile is to remain for future use after the project is complete

k. The approved plan shall provide for the use of staged seeding and

1. Establish and maintain a vegetative buffer at the toe of the slope (where

mulching on a continual basis while the stockpile is in use.

Development Ordinance (certifications and permits required)

Maintenance Requirements to be Noted on the Plan

of a new responsible party for that stockpile

to keep water from running underneath the plastic.

wetland, stream buffer, or other body of water shall be avoided unless an

stockpile shall be shown at the outer limit of this easement? b Stockpile footprints shall be setback a minimum of 25' from adjacent

alternative location is demonstrated to be unavailable

around all proposed stockpiles (erosion control measures surrounding the

- CONTACT NCDEQ RALEIGH REGIONAL OFFICE (919) 791-4200 TO DETERMINE THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES CONTACT PERSON TO RECEIVE DEWATERING NOTIFICATIONS. AT LEAST 10 DAYS PRIOR TO BEGINNING DEWATERING ACTIVITY, SEND EMAIL TO NCDEQ-DEMLR CONTACT PERSON AND COPY ENVIRONMENTAL CONSULTANT THAT MET YOU ONSITE. THE EMAIL SHOULD INCLUDE: E&SC JURISDICTION: WAKE COUNTY, WAKE COUNTY PROJECT: NAME, NUMBER, AND LOCATION (CITY/TOWN), ENVIRONMENTAL CONSULTANT NAME, AND ADDRESS THE FOLLOWING: A) REASON FOR CONVERSION, B) BASIN #, C) DEWATERING METHOD, AND D) ALL OTHER NECESSARY INFO FROM PART II, SECTION G, ITEM 4 OF THE NCG01. KEEP EMAIL FOR YOUR NDPES MONITORING DOCUMENTATION
- AFTER RECEIVING POSITIVE CONFIRMATION FROM NCDEQ-DEMLR THAT YOU MAY REMOVE THE BASIN OR ON > DAY 11, WHICHEVER IS SOONER, REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
- 4. PERFORM SEEDBED PREPARATION, SEED, MULCH AND ANCHOR ANY RESULTING BARE AREAS IMMEDIATELY.
- INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
- WHEN SITE IS FULLY STABILIZED. CALL ENVIRONMENTAL CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVICE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION. NOTE: A MEETING SHOULD ALSO BE SCHEDULED WITH THE ENVIRONMENTAL CONSULTANT TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORMWATER USE. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.

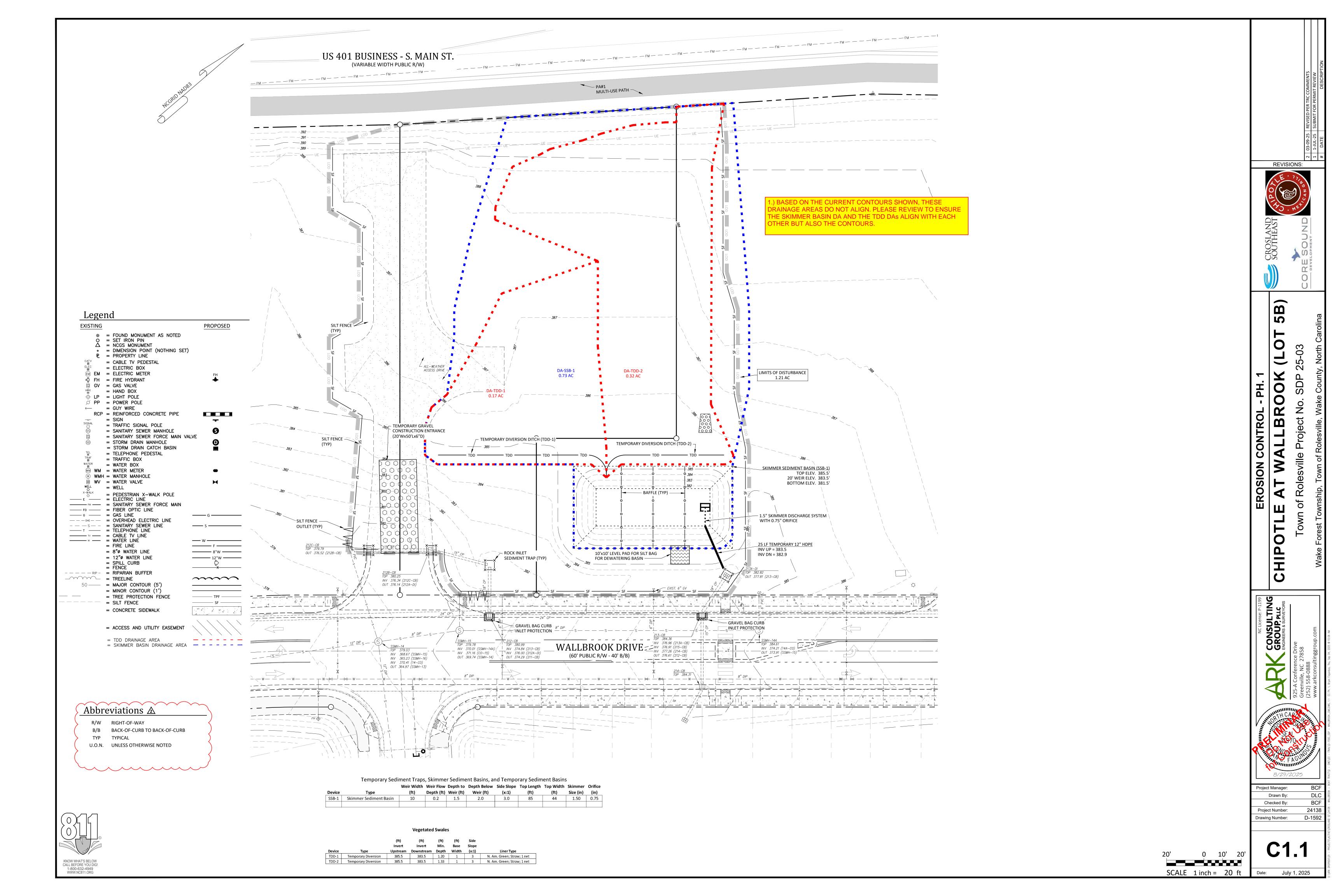
Erosion Control Provisions:

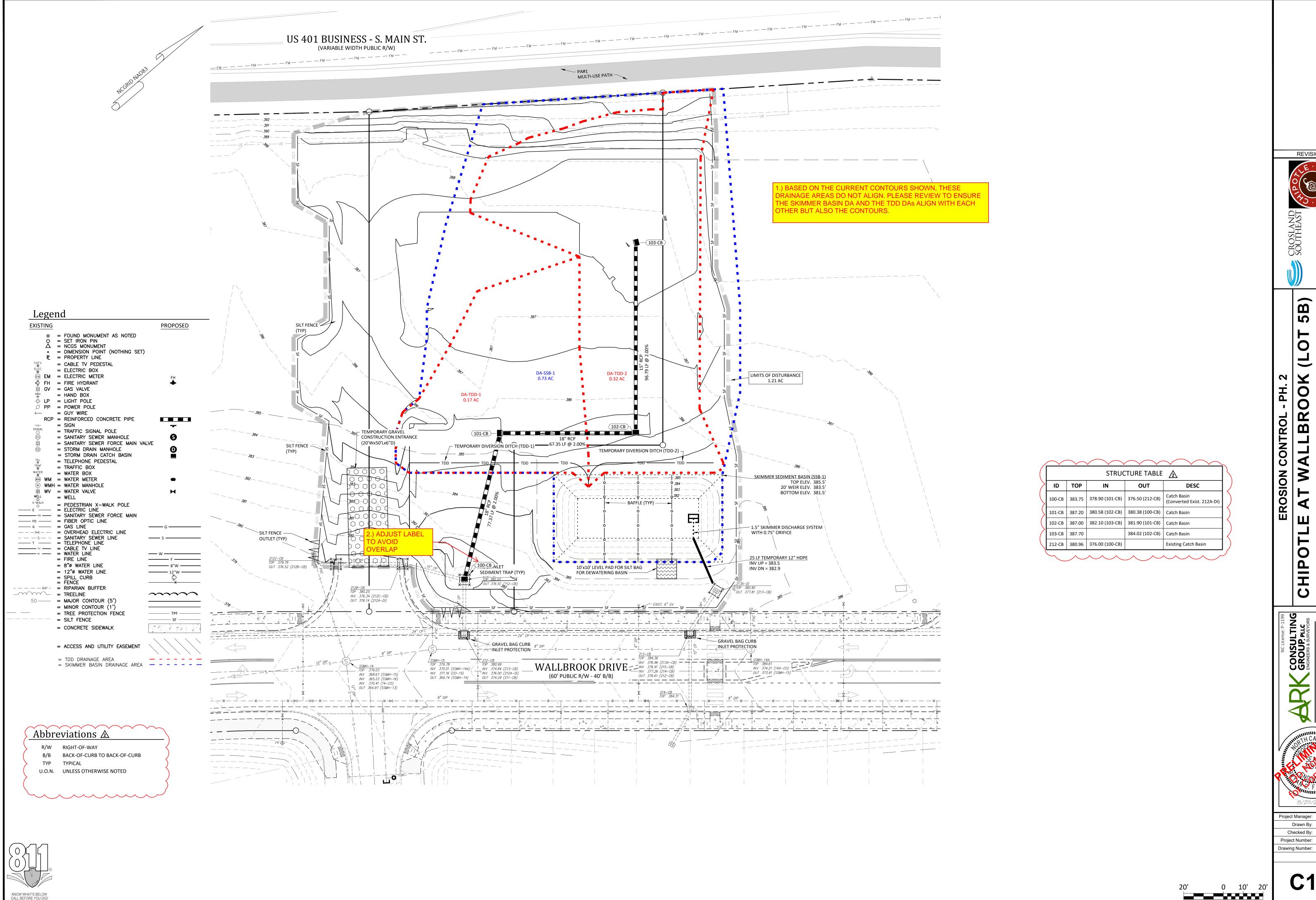
- . NO PERSON MAY INITIATE A LAND DISTURBING ACTIVITY BEFORE NOTIFYING WAKE COUNTY WATERSHED MANAGEMENT OF THE

- 7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP ALL EROSION CONTROL DEVICES IN PROPER WORKING ORDER MAY RESULT IN A STOP WORK ORDER OR CIVIL PENALTIES UP TO \$5000.00 PER DAY OF VIOLATION.
- 9. ACCEPTANCE AND APPROVAL OF THIS PLAN IS CONDITIONED UPON YOUR COMPLIANCE WITH FEDERAL AND STATE WATER QUALITY LAWS, REGULATION AND RULES. IN ADDITION LOCAL CITY AND COUNTY ORDINANCES OR RULES MAY ALSO APPLY TO THIS LAND
- 10. PLEASE BE ADVISED OF THE RULES TO PROTECT AND MAINTAIN EXISTING BUFFERS ALONG WATERCOURSES IN THE NEUSE AND RIVER

- 1. EROSION AND SEDIMENT CONTROL (E&SC) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY
- SCHEDULE A PRE-CONSTRUCTION MEETING AND FOR NOTIFICATION OF PROJECT START UP. 4. INSTALL GRAVEL CONSTRUCTION PAD, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN.
- 5. CALL WATERSHED MANAGER, JEEVAN NEUPANE FOR AN ONSITE INSPECTION TO OBTAIN A CERTIFICATE OF COMPLIANCE.
- AS MUCH FLOW AS POSSIBLE IS DIRECTED TO THE BASINS.
- SHALL BE MONITORED CONTINUOUSLY.

- 13. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR FINAL SITE INSPECTION BY THE WATERSHED MANAGER, JEEVAN

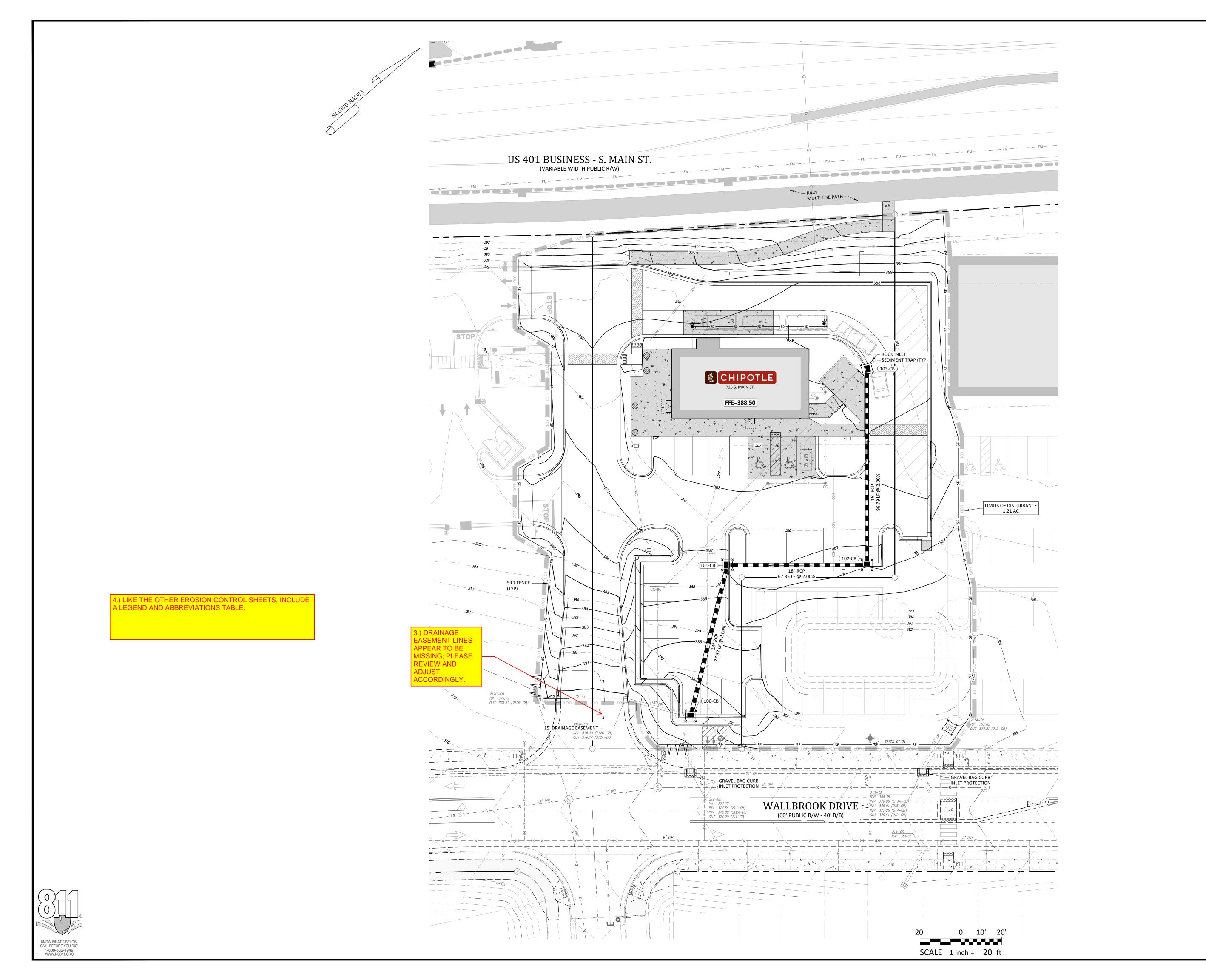




SCALE 1 inch = 20 ft

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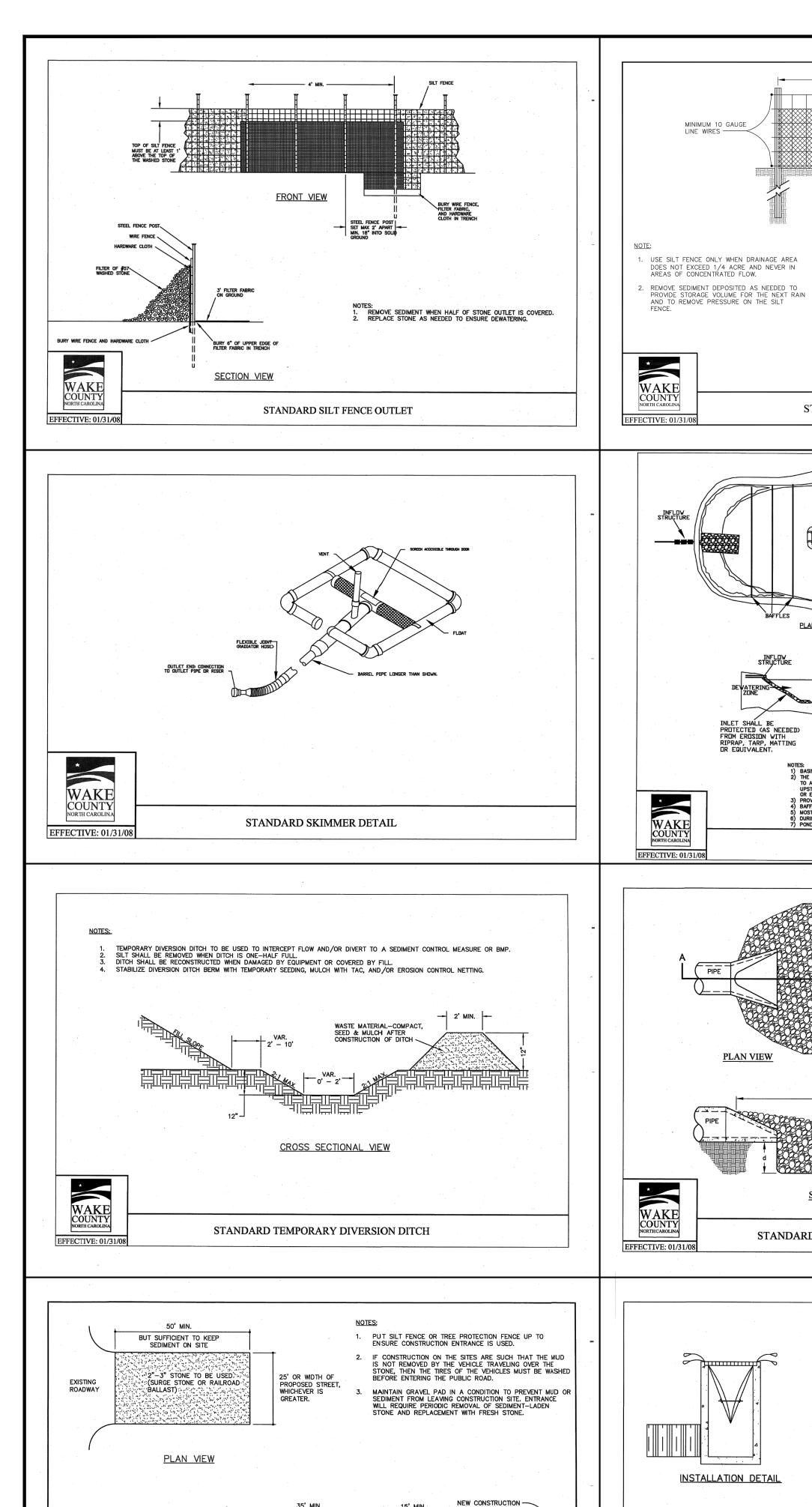
CROSLAND SOUTHEAST

E AT W H

GROUP, PLLC
GROUP, PLLC
ENGINEERS & SURVEYORS

Project Manager: Drawn By: Checked By: 24138 Project Number: D-1592 Drawing Number:

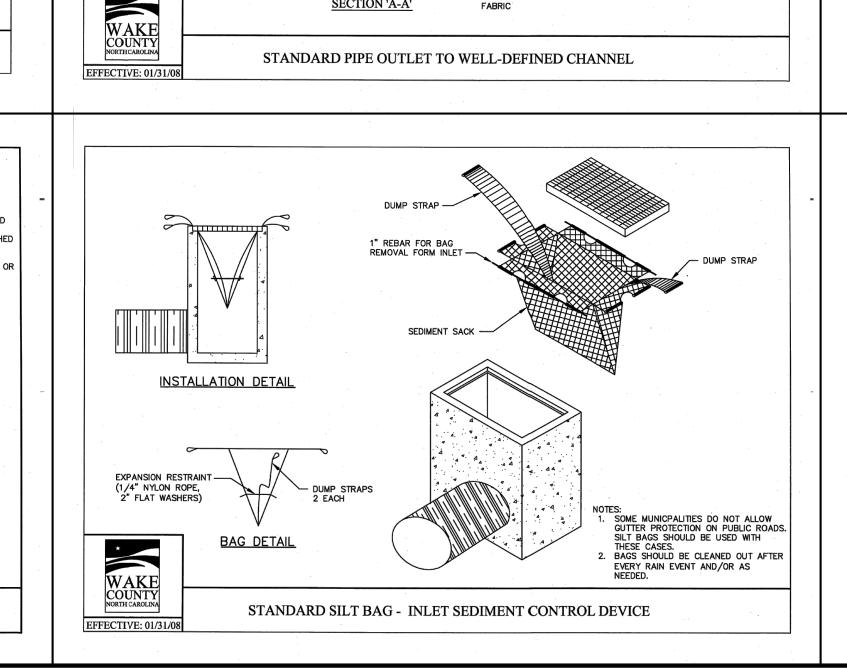
July 1, 2025



EXISTING ROADWAY -

CROSS SECTION

STANDARD CONSTRUCTION ENTRANCE



8'-0" MAXIMUM

FRONT VIEW

___WOVEN WIRE FABRIC

SIDE VIEW

STANDARD TEMPORARY SILT FENCE

PLAN VIEW

FILL SLOPE

8" MINIMUM COVER OVER SKIRT *

ANCHOR SKIRT AS DIRECTED

→ MINIMUM 12-1/2 GAUGE

SECTION THRU WEIR

CMP DUTLET PIPE

NOTES:

1) BASIN SHOULD BE CLEANED OUT WHEN CAPACITY REACHES AN ELEVATION REPRESENTING THAT THE BASIN IS HALF—FULL.

2) THE TARP USED TO PROTECT THE WEIR SHALL BE THE WIDTH SPECIFIED. THE LENGTH OF THE TARP SHALL BE ACCORDING TO AVAILABLE SUPPLY. IF MULTIPLE TARPS ARE TO BE USED, THEN TARPS SHALL BE OVERLAPPED AT LEAST 12°. THE UPSTREAM 12° TARP SHALL OVERLAP THE DOWNSTREAM TARP. THE TARP SHALL BE 50 MIL. HEAVY DUTY SILVER TARPAULINS OR EQUIVALENT FOR U.V. RESISTANCE.

3) PROVIDE A MINIMUM OF THREE PORGUS BAFFLES TO EVENLY DISTRIBUTE FLOW ACROSS THE BASIN, REDUCING TURBULENCE.

4) BAFFLE MATERIAL MUST BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR A SILT FENCE.

5) MOST OF THE SEDIMENT WILL ACCUMULATE IN THE FIRST BAY, SO THIS SHOULD BE REDULY AVAILABLE FOR MAINTENANCE.

6) DURING THE CONSTRUCTION PHASE OF THE PROJECT, PERMANENT STORMWATER RISER SHALL ONLY DEWATER FROM THE TOP OF PIPE.

7) POND SHALL NOT BE CONVERTED FOR STORMWATER USE UNTIL APPROVED BY ENVIRONMENTAL ENGINEER.

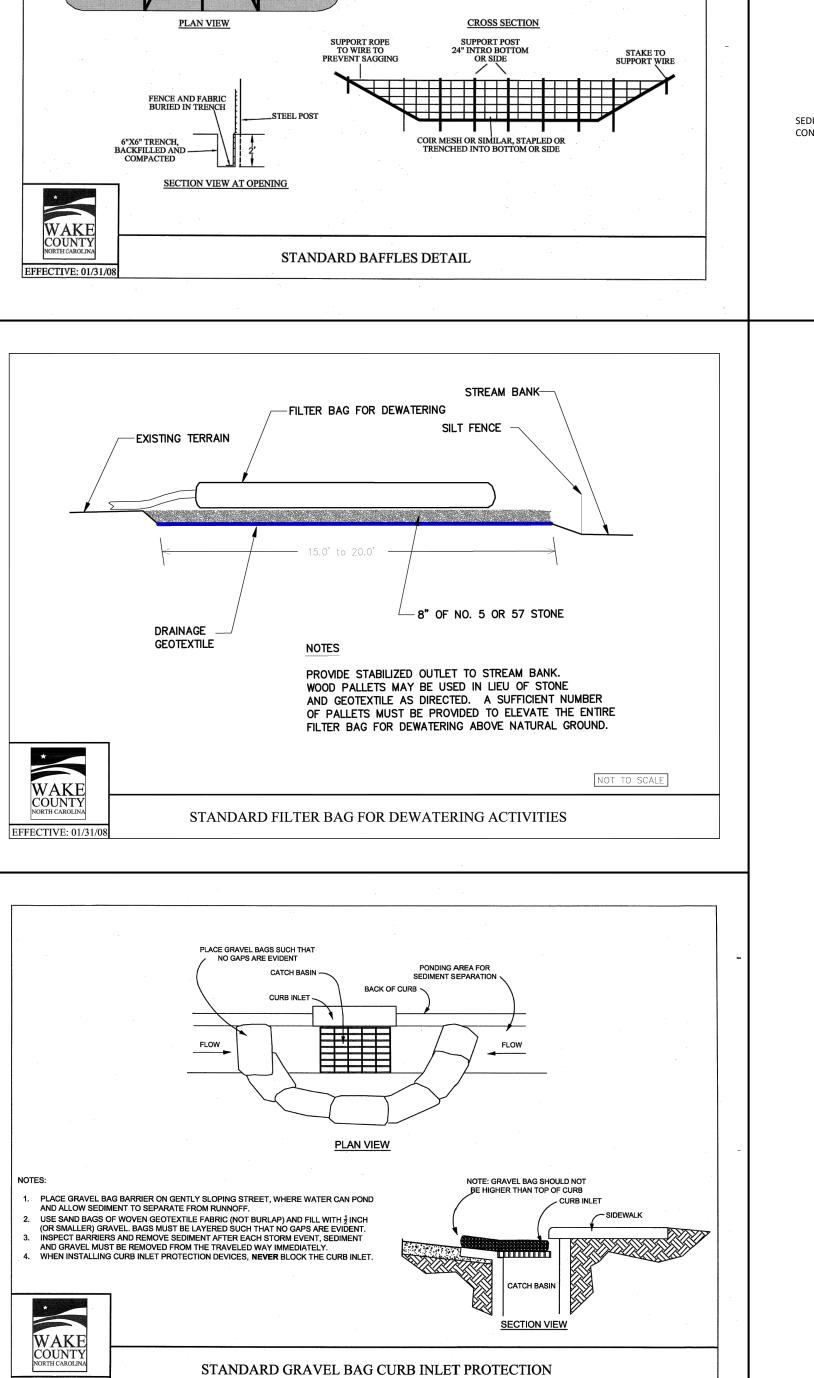
1. L = THE LENGTH OF THE RIPRAP APRON.

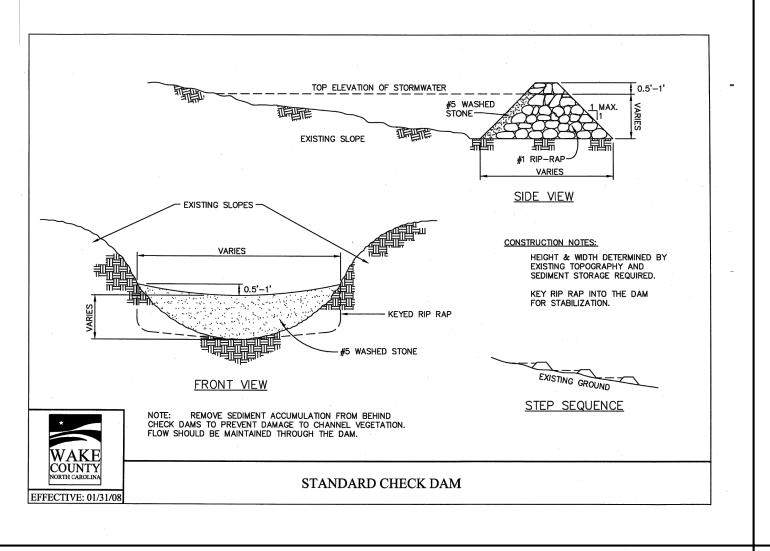
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (INCHES).

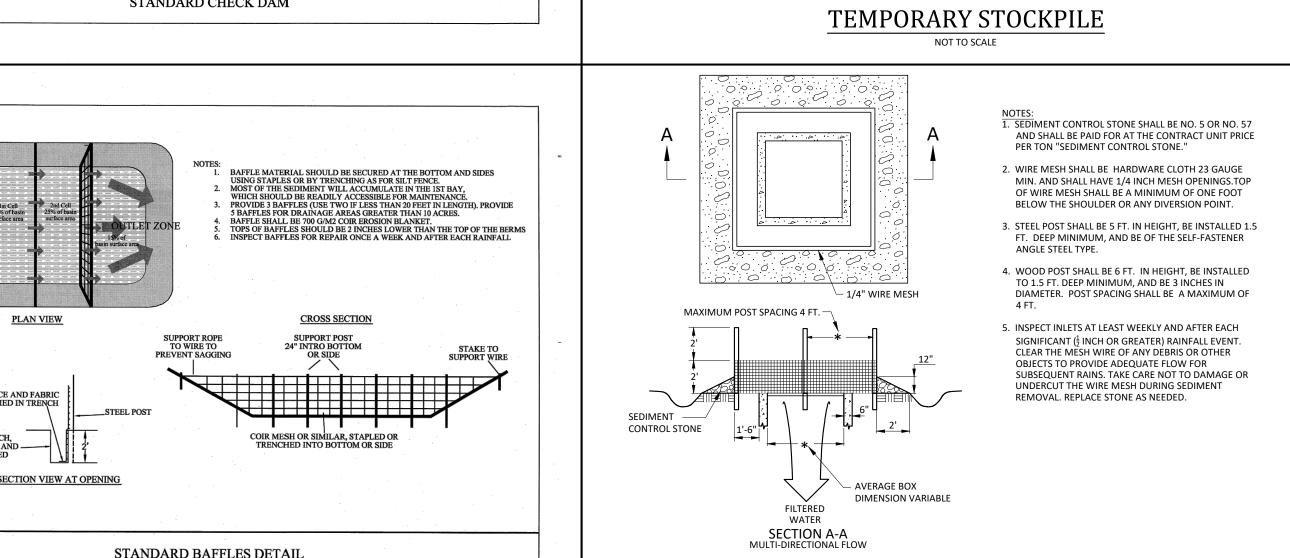
3. IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" (INCHES) ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.

4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

STANDARD SKIMMER BASIN



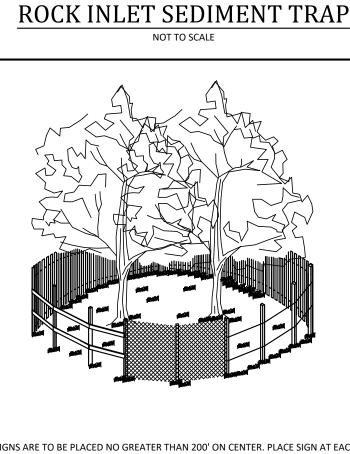




— INSTALL TEMPORARY SILT FENCE WHERE NECESSARY TO RETAIN SEDIMENT

EXISTING GRADE -

TEMPORARY STOCKPILE

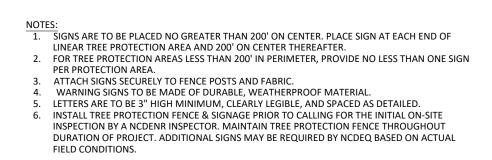


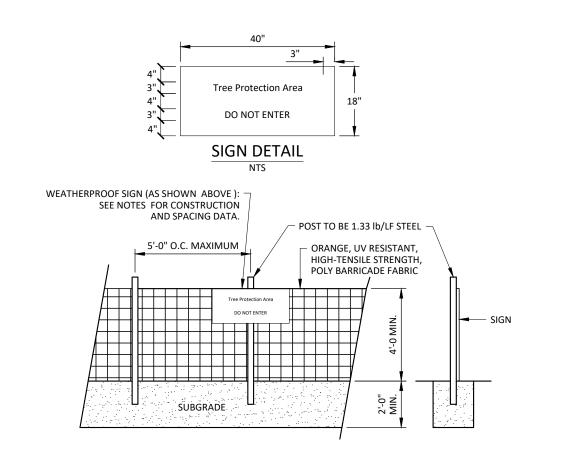
- TEMPORARILY SEED AS SOON AS POSSIBLE

(NO MORE THAN 21 CALENDAR DAYS AFTER FORMATION OF THE STOCKPILE.)

TABILIZE WITH PERMANENT VEGETATION.

IF STOCKPILE WILL NOT BE USED WITHIN 90 DAYS





TREE PROTECTION FENCE

DETAIL 0 CONTROL $\mathbf{\Omega}$ EROSION

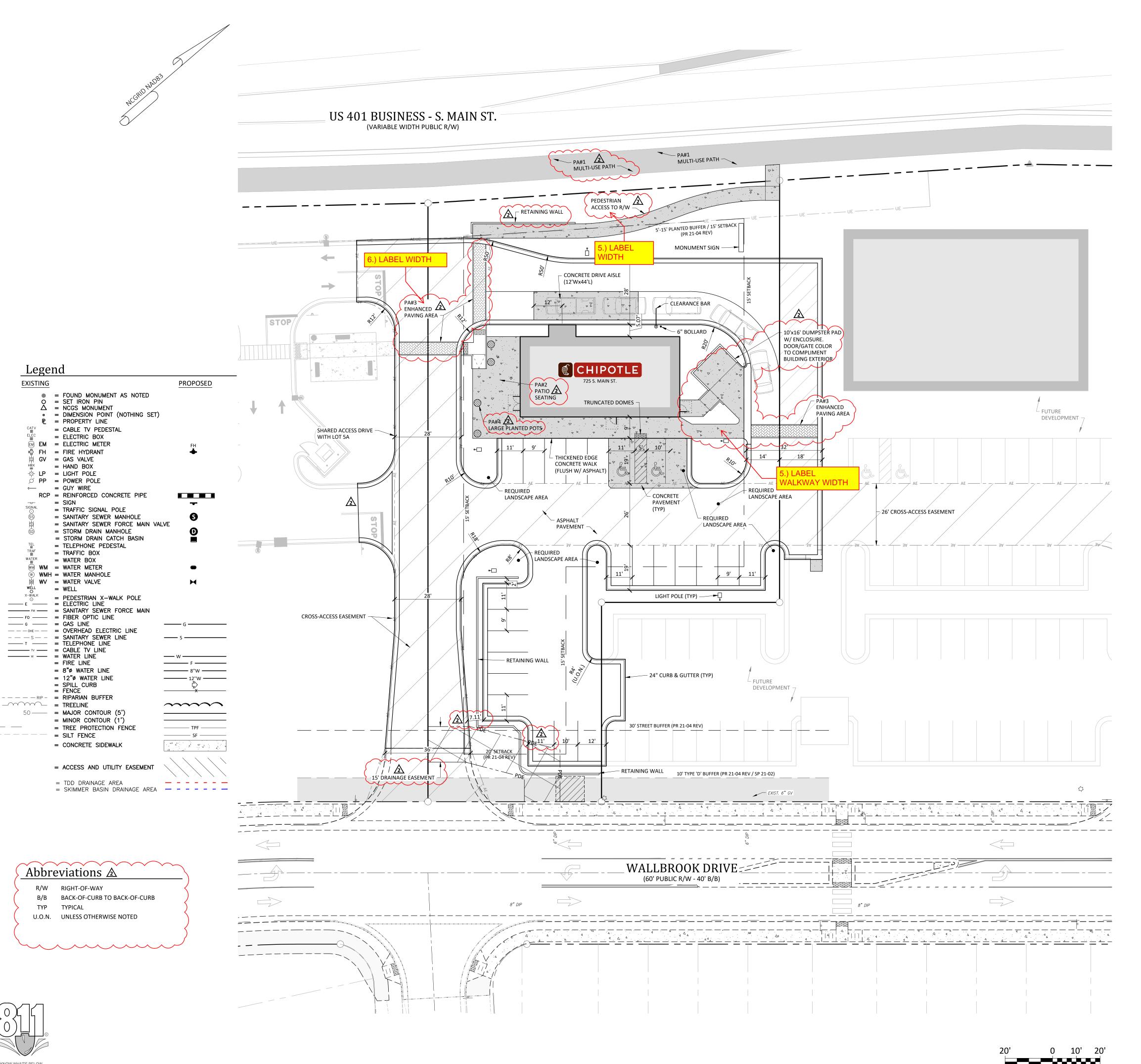
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CONSULTING GROUP, PLLC Project Manager: Drawn Bv

BCF Checked By: 24138 D-1592 Orawing Number:

July 1, 2025



General Notes:

- 1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:
- ALTA/NSPS LAND TITLE SURVEY, PREPARED BY JOHNSON, MIRMIRAN & THOMPSON FOR WALLBROOK LANDCO, LLC, DATED REVISED OCTOBER 1, 2020
- "REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION ROLESVILLE SITE"
- PREPARED BY TERRATECH ENGINEERS, INC., DATED NOVEMBER 26, 2018
 "REVISED WALLBROOK DEVELOPMENT TRAFFIC IMPACT ANALYSIS" PREPARED BY STANTEC CONSULTING SERVICES, INC., DATED AUGUST 11, 2020
- 2. ALL ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE OR THE REQUIREMENTS OF THE JURISDICTION WHERE THIS PROJECT IS TO BE CONSTRUCTED.
- 3. THIS PROPERTY IS LOCATED IN FLOOD ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP (FIRM) 3720175800K, EFFECTIVE DATE: JULY 19,
- 4. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES. CONTRACTOR SHALL HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
- 5. THE OWNER / CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- 6. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE REQUIREMENTS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES HAVING JURISDICTION OVER THIS PROJECT.
- 7. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE PART OF THE REQUIRED CONSTRUCTION DOCUMENTS, AND, IN CASE OF CONFLICT, SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
- 8. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO ARK CONSULTING GROUP, PLLC BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARK CONSULTING GROUP, PLLC IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER ONSITE FEATURES.
- 9. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS AND GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO THE GIVING OF SUCH NOTIFICATION AND THE ENGINEER'S WRITTEN AUTHORIZATION OF SUCH ADDITIONAL WORK.
- 10. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL / BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY / EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
- 11. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE SITE PLAN AND LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER OF ANY DISCREPANCIES.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB & GUTTER. CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY SHALL RESTORE SUCH CONNECTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS, AND IN CONFORMANCE WITH APPLICABLE CODES. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
- 13. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, NOR IS THE ENGINEER RESPONSIBLE FOR ANY CONFLICTS OR SCOPE REVISIONS WHICH RESULT FROM THE SAME. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

🛕 Pedestrian Amentiy Legend

PA #1 MULT-USE PATH / GREENWAY
148 LF MUP/GREENWAY
MAIN ST PROJECT

PA #3 ENHANCED PAVING AREA
DECORATIVE STAMPED ASPHALT PAVING.
SEE DETAIL SHEET C6.1

PA #2 PATIO SEATING

PA #4 LARGE PLANTED POTS SEE DETAIL SHEET C6.1

Parking Requirements: 🛆

PARKING REQUIRED: EATING ESTABLISHMENT

SCALE 1 inch = 20 ft

(OUTDOOR SEATING SHALL BE INCLUDED IN SQUARE FOOTAGE)
MINIMUM: 2.5 / 1000 SF = 3010 / 1000 * 2.5 8 SPACES

MAXIMUM: 10 / 1000 SF = 3010 / 1000 * 7.5

TOTAL REQUIRED PARKING: 8 SPACES
REQUIRED HANDICAP PARKING: 1 SPACE

PARKING PROVIDED:

24 SPACES (INCL. 2 H/C)

30 SPACES

C2.0

Drawing Number:

Date: July 1, 202

CROSLAND SITE PLAN

CROSLAND SOUTHEAST

CROSLA

REVISIONS:

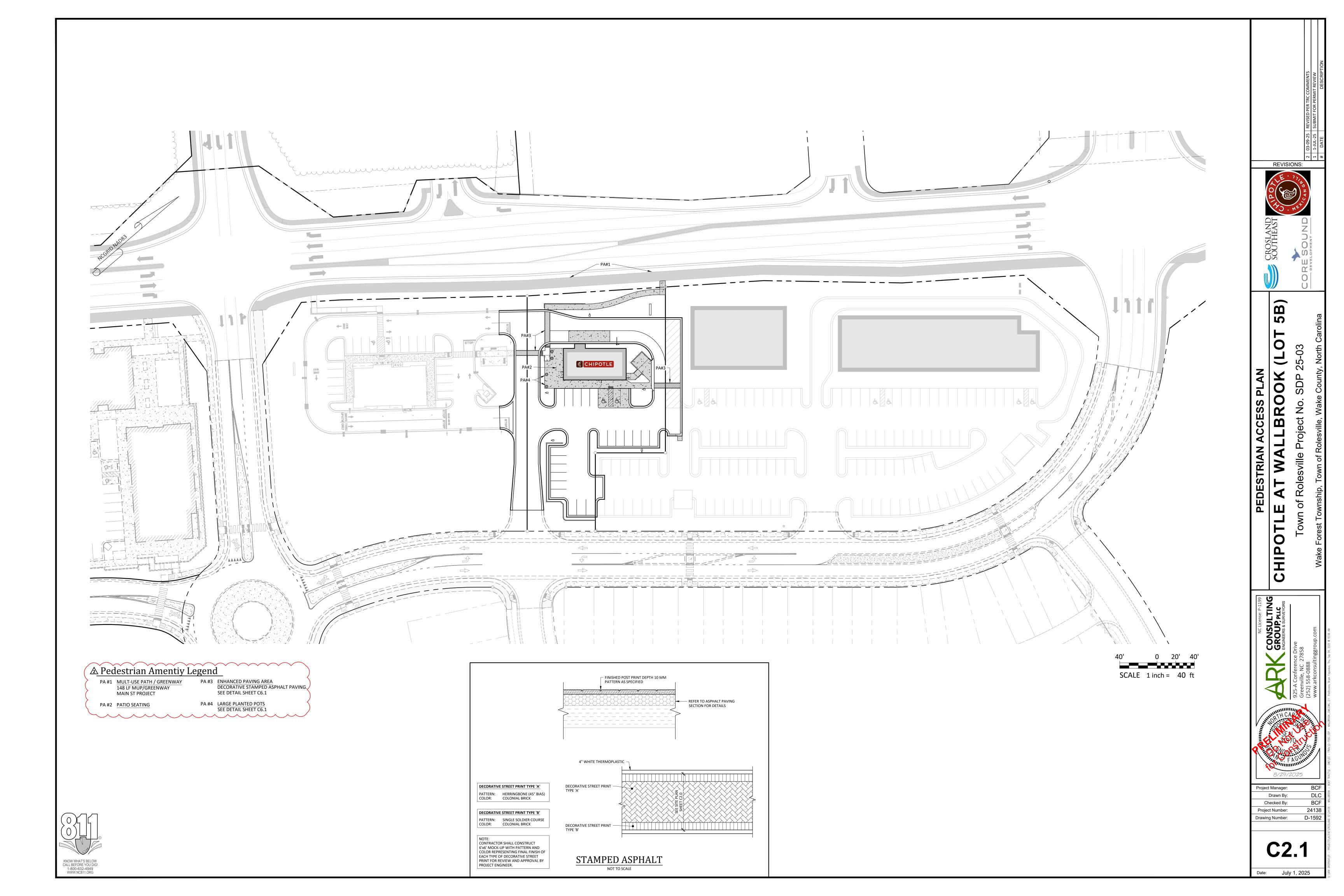
NC License: P-1199
CONSULTING
GROUP, PLLC
ENGINEERS & SURVEYORS
COnference Drive

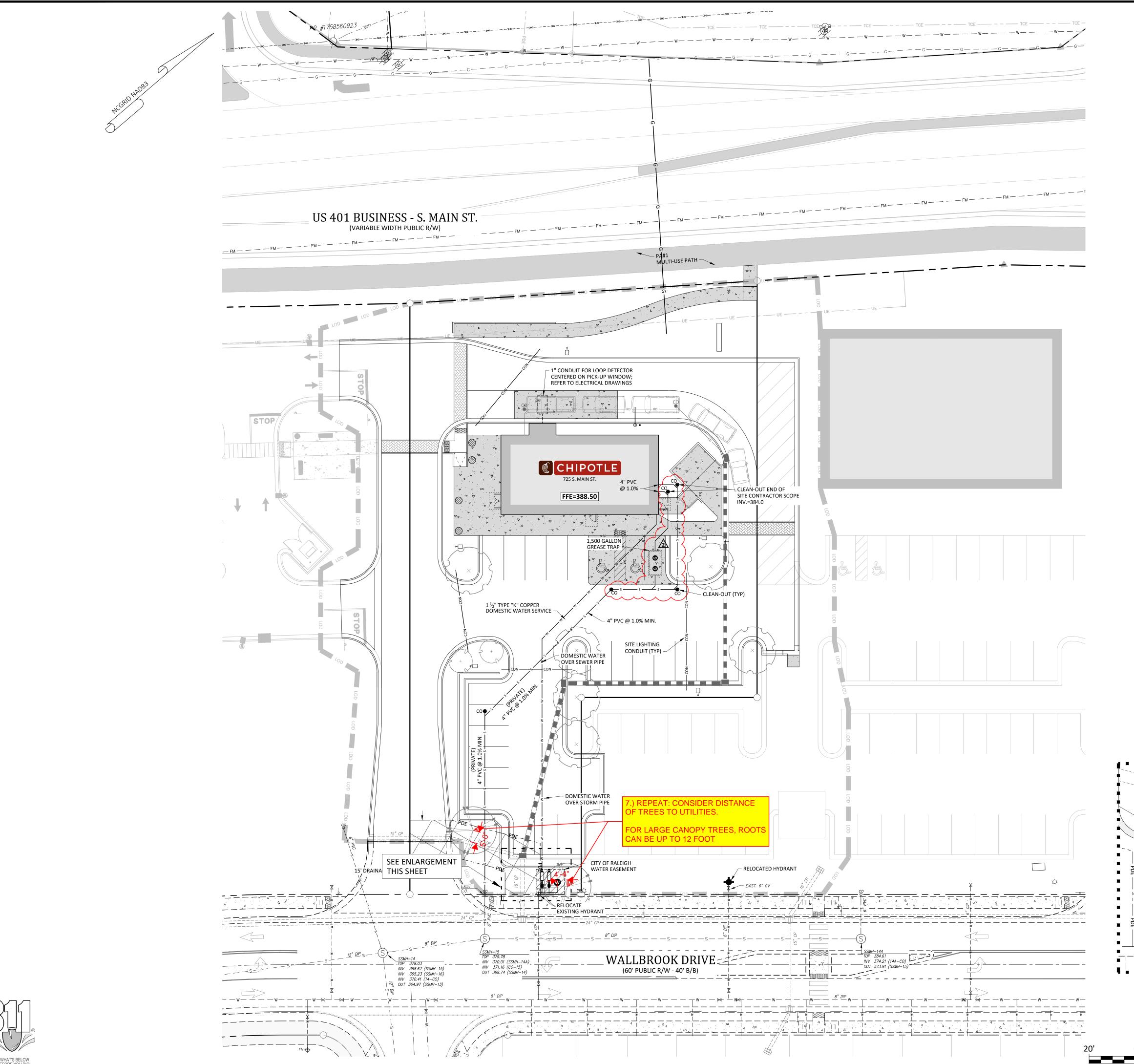
GENGLENGE 925-A Conference Drive Greenville, NC 27858 (252) 558-0888 www.arkconsultinggrou



Project Manager: BCF
Drawn By: DLC
Checked By: BCF
Project Number: 24138

D-1592



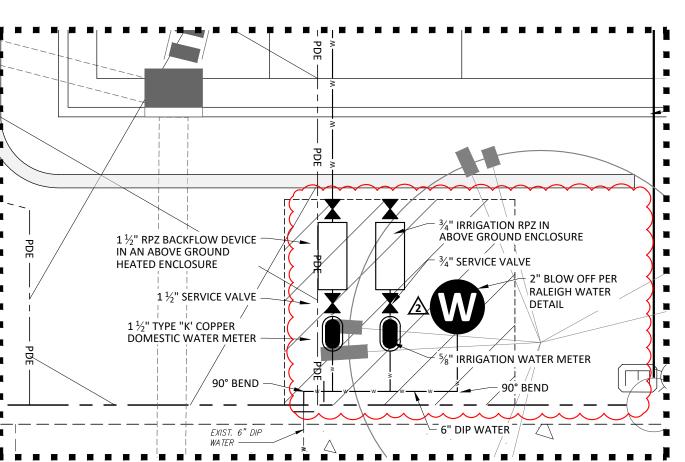


CORPUD Standard Utility Notes:

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
- 2. UTILITY SEPARATION REQUIREMENTS:
 - a. A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
 - b. WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - c. WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
 - d. 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER &
 STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER
 - e. MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORMDRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W- 41 & S-49).
 - f. ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- 3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- 4. DEVELOPER SHALL PROVIDE 30 DAYS ADVANCE WRITTEN NOTICE TO OWNER FOR ANY WORK REQUIRED WITHIN AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY
- 5. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24-HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH
- PUBLIC UTILITIES DEPARTMENT.

 6. SEWER BYPASS PUMPING A BYPASS PLAN SEALED BY AN NC PROFESSIONAL ENGINEER SHALL BE PROVIDED TO RALEIGH WATER PRIOR TO PUMPING OPERATIONS FOR APPROVAL. THE OPERATIONS AND EQUIPMENT SHALL COMPLY WITH THE PUBLIC UTILITIES HANDBOOK.
- 7. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- 8. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- 9. INSTALL WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
- 10. INSPECTIONS OF 4" AND LARGER WATER MAINS OF THE PRIVATE DISTRIBUTION SYSTEM WILL BE INSPECTED AS PART OF THE INFRASTRUCTURE PERMIT.
- 11. PRIVATE SEWER MAINS AS PART OF A COLLECTION SYSTEM ARE PERMITTED AND INSPECTED UNDER THE PRIVATE INFRASTRUCTURE PERMIT FOR SEWER.
- 12. ANY WATER OR SEWER SERVICES ON PRIVATE PROPERTY THAT WILL BE INSTALLED UNDER CONSTRUCTION DRAWINGS MAY REQUIRE A PLUMBING UTILITY PERMIT IN THE CITY OF RALEIGH. CONSULT WITH THE ENGINEERING INSPECTION COORDINATOR DURING THE PRE-CONSTRUCTION MEETING ON THE NECESSARY PERMITS.
- 13. INSTALL SEWER SERVICES WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED PER THE CURRENT NC PLUMBING CODE.
- 14. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI;
 BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS
 LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
- 15. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- 16. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK
 (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO
- 17. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE RW FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A UC AND/OR BUILDING PERMIT. CONTACT (919) 996-4516 OR FOG@RALFIGHNC GOV FOR MORE INFORMATION
- FOG@RALEIGHNC.GOV FOR MORE INFORMATION.

 18. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON THE DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER
- 19. THE DEVICES SHALL MEET THE AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS
- AND BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST.
- THE DEVICE AND INSTALLATION SHALL MEET THE GUIDELINES OF APPENDIX A GUIDELINES AND REQUIREMENTS FOR THE CROSS CONNECTION PROGRAM IN RALEIGH'S SERVICE AREA.
 THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH, INITIAL AND PERIODIC TESTING
- THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT CROSS.CONNECTION@RALEIGHNC.GOV FOR MORE INFORMATION.
- 22. NOTICE FOR PROJECTS THAT INVOLVE AN OVERSIZED MAIN OR URBAN MAIN REPLACEMENT. ANY CITY REIMBURSEMENT GREATER THAN \$250,000.00 MUST UNDERGO THE PUBLIC BIDDING PROCESS.
- 23. PRIVATE SUB-METERING NO RESALE OF WATER SHALL OCCUR WITHOUT APPROVAL OF THE NORTH CAROLINA UTILITY COMMISSION. SUB-METERING SHALL BE IN ACCORDANCE WITH SECTION 1400 OF THE "SAFE DRINKING WATER ACT".



WATER METER ENLARGEMENT

SCALE: 1" = 5'

20' 0 10' 20'

SCALE 1 inch = 20 ft

OTLE AT WALLBR

REVISIONS:

CROSLAND SOUTHEAST

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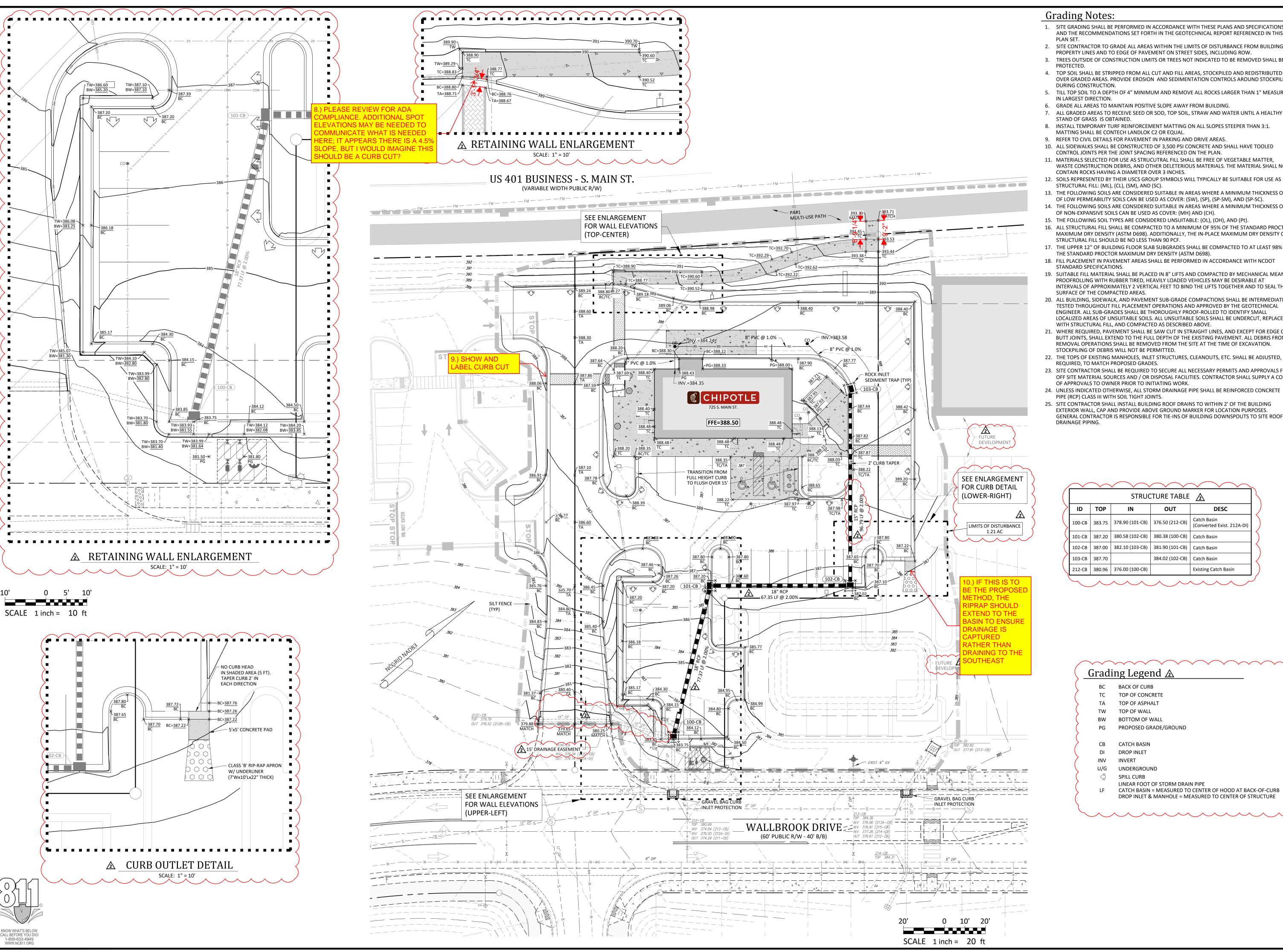
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CONSULTING
GROUP PLLC
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SEAL STANDARD SEAL SOLUTION OF FAGUILIAN BIZ21/2025

Project Manager: BCF
Drawn By: DLC
Checked By: BCF
Project Number: 24138
Drawing Number: D-1592

C3.0

Date: July 1, 202



Grading Notes:

- 1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS
- 2. SITE CONTRACTOR TO GRADE ALL AREAS WITHIN THE LIMITS OF DISTURBANCE FROM BUILDING TO
- PROPERTY LINES AND TO EDGE OF PAVEMENT ON STREET SIDES, INCLUDING ROW. 3. TREES OUTSIDE OF CONSTRUCTION LIMITS OR TREES NOT INDICATED TO BE REMOVED SHALL BE
- 4. TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS. PROVIDE EROSION AND SEDIMENTATION CONTROLS AROUND STOCKPILES
- 5. TILL TOP SOIL TO A DEPTH OF 4" MINIMUM AND REMOVE ALL ROCKS LARGER THAN 1" MEASURED
- IN LARGEST DIRECTION. 6. GRADE ALL AREAS TO MAINTAIN POSITIVE SLOPE AWAY FROM BUILDING.
- 7. ALL GRADED AREAS TO RECEIVE SEED OR SOD, TOP SOIL, STRAW AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- 8. INSTALL TEMPORARY TURF REINFORCEMENT MATTING ON ALL SLOPES STEEPER THAN 3:1.
- MATTING SHALL BE CONTECH LANDLOK C2 OR EQUAL.
- 9. REFER TO CIVIL DETAILS FOR PAVEMENT IN PARKING AND DRIVE AREAS.
- 10. ALL SIDEWALKS SHALL BE CONSTRUCTED OF 3,500 PSI CONCRETE AND SHALL HAVE TOOLED CONTROL JOINTS PER THE JOINT SPACING REFERENCED ON THE PLAN.
- WASTE CONSTRUCTION DEBRIS, AND OTHER DELETERIOUS MATERIALS. THE MATERIAL SHALL NOT CONTAIN ROCKS HAVING A DIAMETER OVER 3 INCHES.
- STRUCTURAL FILL: (ML), (CL), (SM), AND (SC). 13. THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3'
- OF LOW PERMEABILITY SOILS CAN BE USED AS COVER: (SW), (SP), (SP-SM), AND (SP-SC).
- 14. THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3' OF NON-EXPANSIVE SOILS CAN BE USED AS COVER: (MH) AND (CH).
- 15. THE FOLLOWING SOIL TYPES ARE CONSIDERED UNSUITABLE: (OL), (OH), AND (Pt). 16. ALL STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR
- MAXIMUM DRY DENSITY (ASTM D698). ADDITIONALLY, THE IN-PLACE MAXIMUM DRY DENSITY OF STRUCTURAL FILL SHOULD BE NO LESS THAN 90 PCF.
- 17. THE UPPER 12" OF BUILDING FLOOR SLAB SUBGRADES SHALL BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698).
- STANDARD SPECIFICATIONS. 19. SUITABLE FILL MATERIAL SHALL BE PLACED IN 8" LIFTS AND COMPACTED BY MECHANICAL MEANS. PROOFROLLING WITH RUBBER TIRED. HEAVILY LOADED VEHICLES MAY BE DESIRABLE AT
- INTERVALS OF APPROXIMATELY 2 VERTICAL FEET TO BIND THE LIFTS TOGETHER AND TO SEAL THE SURFACE OF THE COMPACTED AREAS. 20. ALL BUILDING, SIDEWALK, AND PAVEMENT SUB-GRADE COMPACTIONS SHALL BE INTERMEDIATELY TESTED THROUGHOUT FILL PLACEMENT OPERATIONS AND APPROVED BY THE GEOTECHNICAL
- LOCALIZED AREAS OF UNSUITABLE SOILS. ALL UNSUITABLE SOILS SHALL BE UNDERCUT, REPLACED WITH STRUCTURAL FILL, AND COMPACTED AS DESCRIBED ABOVE. 21. WHERE REQUIRED, PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, SHALL EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM
- STOCKPILING OF DEBRIS WILL NOT BE PERMITTED. 22. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, CLEANOUTS, ETC. SHALL BE ADJUSTED, AS
- 23. SITE CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR OFF SITE MATERIAL SOURCES AND / OR DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO OWNER PRIOR TO INITIATING WORK.
- 24. UNLESS INDICATED OTHERWISE, ALL STORM DRAINAGE PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SOIL TIGHT JOINTS.
- 25. SITE CONTRACTOR SHALL INSTALL BUILDING ROOF DRAINS TO WITHIN 2' OF THE BUILDING EXTERIOR WALL, CAP AND PROVIDE ABOVE GROUND MARKER FOR LOCATION PURPOSES. GENERAL CONTRACTOR IS RESPONSIBLE FOR TIE-INS OF BUILDING DOWNSPOUTS TO SITE ROOF DRAINAGE PIPING.

STRUCTURE TABLE 🛕				
ID	TOP	IN	OUT	DESC
100-CB	383.75	378.90 (101-CB)	376.50 (212-CB)	Catch Basin (Converted Exist. 212A-DI)
101-CB	387.20	380.58 (102-CB)	380.38 (100-CB)	Catch Basin
102-CB	387.00	382.10 (103-CB)	381.90 (101-CB)	Catch Basin
103-CB	387.70		384.02 (102-CB)	Catch Basin
212-CB	380.96	376.00 (100-CB)		Existing Catch Basin

Grading Legend 🛕

- BACK OF CURB
- TOP OF CONCRETE
- BOTTOM OF WALL
- PROPOSED GRADE/GROUND

- UNDERGROUND
- SPILL CURB LINEAR FOOT OF STORM DRAIN PIPE
- CATCH BASIN = MEASURED TO CENTER OF HOOD AT BACK-OF-CURB DROP INLET & MANHOLE = MEASURED TO CENTER OF STRUCTURE



CONSULTING GROUP, PLLC

REVISIONS:

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