Administrative Site Review Application



Planning and Development Customer Service Center • One Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-996-2500

This form is required when submitting site plans as referenced in Unified Development Ordinance (UDO) Section 10.2.8. Please check the appropriate building types and include the plan checklist document when submitting. Office Use Only: Case #: Planner (print): Please review UDO Section 10.2.8. to determine the site plan tier. If assistance determining a Site Plan Tier is needed a Site Plan Tier Verification request can be submitted online via the Permit and Development Portal. (Note: There is a fee for this verification service.) Site Plan Tier: Tier Two Site Plan Tier Three Site Plan **Building and Development Type Site Transaction History** (Check all that apply) Detached General Subdivision case #: Scoping/sketch plan case #: Attached Mixed use Certificate of Appropriateness #: Townhouse Civic Board of Adjustment #: Apartment **Cottage Court** Zoning Case #: _____ Tiny house Frequent Transit Design Alternate #: _____ **Development Option** Open lot **GENERAL INFORMATION** Development name: Inside City limits? Yes No Property address(es): Site P.I.N.(s): Please describe the scope of work. Include any additions, expansions, and uses (UDO 6.1.4). **Current Property Owner(s):** Title: Company: Address: Phone #: Email: Applicant Name (If different from owner. See "who can apply" in instructions): Relationship to owner: Lessee or contract purchaser Owner's authorized agent Easement holder Company: Address:

Phone #: Email:					
NOTE: please attach purchase agreement or contract, lease or easement when submitting this form.					
Developer Contact:					
Company:		Title:			
Address:					
Phone #:	Email:				
Applicant Name:					
Company:	Address:				
Phone #:	Email:				
		(DE : 0175 DATE TABLE			
		/PE + SITE DATE TABLE p all developments)			
SITE DATA	ppiioabio	BUILDING DATA			
Zoning district(s) (please provide the acreage	e of each):	xisting gross floor area (not to be demolished):			
Gross site acreage:		existing gross floor area to be demolished:			
# of parking spaces proposed:		New gross floor area:			
Max # parking permitted (7.1.2.C):		Total sf gross (to remain and new):			
Overlay District (if applicable):		Proposed # of buildings:			
Existing use (UDO 6.1.4):		roposed # of stories for each:			
Proposed use (UDO 6.1.4):		Proposed # of basement levels (UDO 1.5.7.A.6)			
s	TORMWAT	ER INFORMATION			
Imperious Area on Parcel(s): Existing (sf) Proposed total (sf)		Impervious Area for Compliance (includes ROW):			
		Existing (sf) Proposed total (sf)			
DECIDENTIAL	0/5040	HIT LODGING DEVELORMENTS			
	& OVERNIG	Total # of hatal hadrooms:			
Total # of dwelling units:	2hr	Total # of hotel bedrooms:			
# of bedroom units: 1br 2br 3br # of lots:		4br or more Is your project a cottage court? Yes No			
π οι ισιο.		is your project a cottage court: Tes Ties			

Continue to Applicant Signature Block on Page 4.

A frequent transit development?

) No

) Yes

APPLICANT SIGNATURE BLOCK

Pursuant to state law (N.C. Gen. Stat. § 160D-403(a)), applications for development approvals may be made by the landowner, a lessee or person holding an option or contract to purchase or lease land, or an authorized agent of the landowner. An easement holder may also apply for development approval for such development as is authorized by the easement.

Acting as an authorized agent requires written permission from the property owner for the purposes of making this development approval and/or permit application. Written permission from the property owner to act as an authorized agent must be made available to the City of Raleigh upon request.

By submitting this application, the undersigned applicant acknowledges that they are either the property owner or one of the persons authorized by state law (N.C.G.S. 160D-403(a)) to make this application, as specified in the application. The undersigned also acknowledges that the information and statements made in the application are correct and the undersigned understands that development approvals are subject to revocation for false statements or misrepresentations made in securing the development approval, pursuant to N.C. Gen. Stat. § 160D-403(f).

The undersigned indicates that the property owner(s) is aware of this application and that the proposed project described in this application will be maintained in all respects in accordance with the plans and specifications submitted herewith, and in accordance with the provisions and regulations of the City of Raleigh Unified Development Ordinance.

The undersigned hereby acknowledges that, pursuant to state law (N.C.G.S. 143-755(b1), if this permit application is placed on hold at the request of the applicant for a period of six consecutive months or more, or if the applicant fails to respond to comments or provide additional information requested by the City for a period of six consecutive months or more, then the application review is discontinued, and a new application is required to proceed and the development regulations in effect at the time permit processing is resumed shall apply to the new application.

Signature:	Date:
Printed Name:	
Signature:	Date:
Printed Name:	

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Site Plan Tier: Tier To	Site Plan Tier: Tier Two Site Plan Tier Three Site Plan						
	nd Development Type k all that apply)	Site Transaction History					
Detached Attached Townhouse ✓ Apartment Tiny house Open lot	General Mixed use Civic Cottage Court Frequent Transit Development Option	Subdivision case #: Scoping/sketch plan case #: Certificate of Appropriateness #: Board of Adjustment #: Zoning Case #: Design Alternate #:					
GENERAL INFORMATION							

Development name: Blue Ridge Multifamily Yes ✓ No Inside City limits? Property address(es): 2500 Blue Ridge Rd

Site P.I.N.(s): 0785717617

Please describe the scope of work. Include any additions, expansions, and uses (UDO 6.1.4).

Construction of a proposed apartment b	ouilding with i	esidential uses, parking deck, and surface parking		
Current Property Owner(s): BLUE RIDGE PROPERTY OWNER LLC				
Company: Northwood Ravin Title: Managing Member				
Address: 3015 Carrington Mill Blvd., Suit	Address: 3015 Carrington Mill Blvd., Suite 460, Morrisville, NC 27560			
Phone #: 919-354-3677	n@nwravin.com			
Applicant Name (If different from owner. See "who can apply" in instructions): McAdams				
Relationship to owner: ☐ Lessee or contract purchaser ☑ Owner's authorized agent ☐ Easement holder				

Company: MCAdams		Address: 62 I	
	Phone #: 919-287-0815	Email: balderson@mcadamsco.com	

NOTE: please attach purchase agreement or contract, lease or easement when submitting this form

Title: Managing Member Company: Northwood Ravin

Address: 3015 Carrington Mill Blvd., Suite 460, Morrisville, NC 27560 Phone #: 919-354-3677 Email: jfurman@nwravin.com

Applicant Name: Jonathan Balderson, PE

Company: McAdams Address: 621 Hillsborough St. Suite 500, Raleigh NC 27603 Phone #: 919-287-0815 Email: balderson@mcadamsco.com

DEVELOPMENT TYPE + SITE DATE TABLE

(Applicable to all developments)		
SITE DATA	BUILDING DATA	
Zoning district(s) (please provide the acreage of each): NX-7-CU	Existing gross floor area (not to be demolished): 0	
Gross site acreage: 3.62	Existing gross floor area to be demolished:	
# of parking spaces proposed:	New gross floor area: 602,407	
Max # parking permitted (7.1.2.C):	Total sf gross (to remain and new): 602,407	
Overlay District (if applicable): n/a	Proposed # of buildings: 1	
Existing use (UDO 6.1.4): Commercial	Proposed # of stories for each: 7	
Proposed use (UDO 6.1.4): Residential	Proposed # of basement levels (UDO 1.5.7.A.6)	

STORMWATER INFORMATION Imperious Area on Parcel(s): Impervious Area for Compliance

(includes ROW): Existing (sf) 112,739 Proposed total (sf) 135129 Existing (sf) 146224 Proposed total (sf) 172486

RESIDENTIAL & OVERNIGHT LODGING DEVELOPMENTS Total # of dwelling units: 260 Total # of hotel bedrooms: # of bedroom units: 1br 109 2br 115

of lots: Is your project a cottage court? Yes No A frequent transit development? Yes No

APPLICANT SIGNATURE BLOCK Pursuant to state law (N.C. Gen. Stat. § 160D-403(a)), applications for development approvals may be made by the landowner, a lessee or person holding an option or contract to purchase or lease land, or an authorized

as is authorized by the easement. Acting as an authorized agent requires written permission from the property owner for the purposes of making this development approval and/or permit application. Written permission from the property owner to act as an authorized agent must be made available to the City of Raleigh upon request.

agent of the landowner. An easement holder may also apply for development approval for such development

By submitting this application, the undersigned applicant acknowledges that they are either the property owner or one of the persons authorized by state law (N.C.G.S. 160D-403(a)) to make this application, as specified in the application. The undersigned also acknowledges that the information and statements made in the application are correct and the undersigned understands that development approvals are subject to revocation for false statements or misrepresentations made in securing the development approval, pursuant to N.C. Gen. Stat. § 160D-403(f).

The undersigned indicates that the property owner(s) is aware of this application and that the proposed project described in this application will be maintained in all respects in accordance with the plans and specifications submitted herewith, and in accordance with the provisions and regulations of the City of Raleigh Unified

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ı	apply to the new application.	
ı		
ı	Signature:	Date: 2024-08-21
ı	Printed Name: Sonathan Balderson	
ı	Signature:	Date:

BLUE RIDGE MULTIFAMILY

2500 BLUE RIDGE ROAD RALEIGH, NORTH CAROLINA 27607 **ADMINISTRATIVE SITE REVIEW**

CITY OF RALEIGH CASE# ASR-XXXX-2024 PROJECT NUMBER: RAV23003 DATE: SEPTEMBER 6, 2024

ZONING CONDITIONS:

- PROHIBITED USES ARE EXCLUDED FROM THIS SITE PLAN. PROHIBITED FACILITIES ARE EXCLUDED FROM THIS SITE PLAN.
- UNITS WILL NOT EXCEED 260.
- BUILD-TO-REQUIREMENTS WILL BE MET BY PROPOSED BUILDING
- NO STANDALONE BUILDINGS ARE PROPOSED WITH THIS SITE PLAN.
- CONDITIONS WILL BE MET WITH THIS BUILDING

SITE DATA

PHYSICAL ADDRESS:		2500 BLUE RIDGE ROAD, RALEIGH NORTH CAROLINA 27607			
PARCEL PIN:		0785717617			
ZONING:		NX-7-CU			
OVERLAY DISTRICT:		NONE			
WATERSHED:		HOUSE CREEK			
SITE AREA		GROSS: 157.655 SF / 3.6	52 AC. ROW D	DEDICATION=6,699 SF, NET SITE AREA=150,956 SF / 3.47 AC	
FLOODWAY/FLOODPLAIN:		NONE			
PROPOSED USES:		RESIDENTIAL			
BUILDING DATA:		RESIDENTIAL:		454,637 SF	
		PARKING DECK: TOTAL: TOTAL RESIDENTIAL UN	ITS:	147,770 SF 602,407 SF 260 UNITS	
PARKING DATA:	VEHICLE PARKING	REQUIRED:		VEHICULAR PARKING (MAX) PER UDO SEC. 7.1.2.C)	
		1-BEDROOM: 2-BEDROOM: 3-BEDROOM: TOTAL MAXIMUM AI		109 * 1.5 PER UNIT = 164 SPACES 115 * 2.25 PER UNIT = 259 SPACES 36 * 3 PER UNIT = 108 SPACES 531 SPACES	
		PROPOSED:		256 STANDARD SPACES 78 COMPACT SPACES 1 EV INSTALLED - 54 EV CAPABLE 1 EV ADA VAN - 3 EV ADA CAPABLE 10 ADA SPACES (3 VAN SPACES INCLUDED)	
				346 TOTAL SPACES	
	ACCESSIBLE PARKING	REQUIRED:	6 SPACES 2 VAN		
		PROPOSED:		(7 STANDARD SPACES & 3 VAN)	
	BIKE PARKING	REQUIRED:	64 LONG TE	ERM SPACES; 13 SHORT TERM SPACES	
		RESIDENTIAL	LONG TERM SHORT TERM	· · · · · · · · · · · · · · · · · · ·	
		PROPOSED:	64 LONG TEI 78 SPACES T	ERM SPACES; 14 SHORT TERM SPACES TOTAL	
BUILDING + PARKING SETBACKS	BUILD-TO	REQUIRED BLUE RIDGE ROAD (I LAKE BOONE TRAIL (PROVIDED BLUE RIDGE ROAD (I LAKE BOONE TRAIL (PRIMARY STE PRIMARY STR	REET): 229' (50% OF 457.3') REET): 68.6' LF (68.6'/294.2'=23.3%)	
	PARKING SETBACK	BLUE RIDGE ROAD (PRIN LAKE BOONE TRAIL (PRI		ET): 10' (VIA UDO SECTION 3.2.6.C.)	
	BUILDING SETBACK	REAR & SIDE LOT LINE: REAR & SIDE LOT LINE:		0 OR 3' (VIA UDO SECTION 3.2.6.C.) 0 OR 6' (VIA UDO SECTION 3.2.6.C.)	
EXISTING IMPERVIOUS:	I	3.36 AC. (146,224 SF)			
	OCATION	, , ,			
PROPOSED IMPERVIOUS ALL	OCATION:	3.96 AC. (172,486 SF)			
BUILDING HEIGHT		MAXIMUM ALLOWED: PROPOSED:	7 STORIES (7 STORIES	(PRINCIPAL BUILDING)	
OUTDOOR AMENITY AREA		REQUIRED: 15,096 SF (0.35 AC) 0.35 ACRES (15,096 SF, 10.0% OF 3.47 ACRES)			
		PROVIDED: 15130 SF (0.35 AC) 0.35 ACRES (15,130 SF, 10.0% OF 3.47 ACRES)			
TREE CONSERVATION		NO TREE CONSERVATION IS REQUIRED ON THE SUBJECT PARCEL AS THERE ARE NOT ANY QUALIFY TREES PRESENT WITHIN THE PARCEL THAT ARE NOT IMPACTED BY LESS THAN 30% BY HARDSCAPE.			

SHEET INDEX

PROJECT NOTES EXISTING CONDITIONS

C1.01 **DEMOLITION PLAN**

C2.00 SITE PLAN C2.01 **BUILD-TO & AMENITY PLAN**

C3.00 GRADING AND STORM DRAINAGE PLAN

UTILITY PLAN C8.00 SITE DETAILS

STORM DRAINAGE DETAILS C8.03 SANITARY SEWER DETAILS

SITE DETAILS

C8.04 WATER DETAILS

C8.05 WATER DETAILS C9.00 **SCM PLAN VIEW & DETAILS**

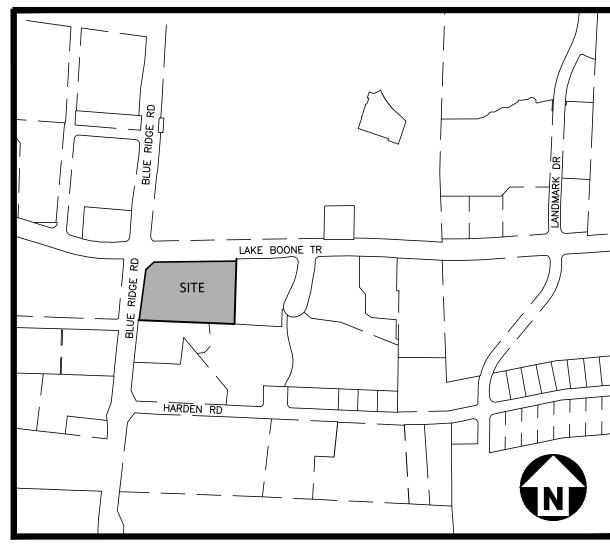
C9.01 SCM DETAILS

L5.00 CODE LANDSCAPE PLAN CODE LANDSCAPE DETAILS L5.01

BY OTHERS

FLOOR PLANS

BUILDING ELEVATIONS



VICINITY MAP

SOLID WASTE COMPLIANCE STATEMENT:

- THE DEVELOPER ACKNOWLEDGES THAT THEY HAVE REVIEWED AND ARE IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN THE SOLID WASTE DESIGN
- THE SOLID WASTE REMOVAL FOR THIS PROJECT WILL BE HANDLED BY A PRIVATE
- REFUSE WILL BE COLLECTED IN ROLL-OUT TRASH AND RECYCLING CARTS THAT WILL BE BROUGHT OUT CURB SIDE FOR PICKUP. PICKUP WILL BE PROVIDED

ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-2409, and the Public Utilities Department at (919) 996-4540 at least twenty four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for Inspection, Install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a <u>Fine and Possible Exclusion</u> from future work in the City of Raleigh.



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

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

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND **CONSTRUCTION STANDARDS**

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

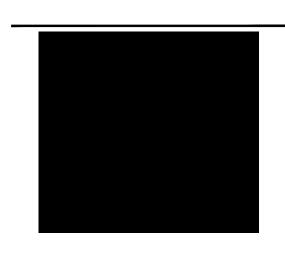
CONTACT

JONATHAN BALDERSON balderson@mcadamsco.com PHONE: 919. 287. 0815

CLIENT

NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD RALEIGH, NORTH CAROLINA 27560





REVISIONS

NO. DATE

ADMINISTRATIVE SITE REVIEW FOR:

BLUE RIDGE MULTIFAMILY 2500 BLUE RIDGE ROAD RALEIGH, NC 27607 PROJECT NUMBER: RAV23003

SITE PLAN NOTES:

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST CITY OF RALEIGH AND/OR NCDOT STANDARDS
- 2. ALL DIMENSIONS SHOWN ON SITE PLAN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER, PROVIDED BY CONTRACTOR RESPONSIBLE FOR EXCAVATION.
- 4. EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING OR INSTALLATION. THE CONTRACTOR SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO THE SUBSTITUTION OF ALTERNATE EQUIPMENT.
- 5. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE ENGINEER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE OWNER.
- EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED/RESTORED TO THEIR ORIGINAL CONDITION OR TO THE SATISFACTION OF THE OWNER BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
- THE CONTRACTOR SHALL NOTE THAT THE DRAWINGS MAY NOT SHOW EVERY OFFSET, TRANSITION, FITTING, ETC. THAT MAY BE REQUIRED. THE CONTRACTOR SHALL INSTALL SUCH STANDARD APPURTENANCES AS REQUIRED TO CLOSELY FOLLOW THE GRADES AND ALIGNMENTS DEPICTED ON THE PLANS.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE UTILITY COMPANIES FOR ANY REQUIRED RELOCATION (I.E. POWER POLES, TELEPHONE PEDESTALS, WATER METERS, ETC.).
- 9. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH CITY OF RALEIGH STORMWATER AND EROSION CONTROL DEPARTMENT FOR EROSION CONTROL AND ENGINEERING INSPECTIONS PRIOR TO ANY WATER OR SEWER ABANDONMENT, REMOVAL OR INSTALLATIONS.

GENERAL NOTES

- 1. OWNER RESERVES RIGHT TO ADJUST SITE IMPROVEMENTS AND MODIFY BUILDING FOOTPRINTS FROM THOSE SHOWN ON THIS PLAN.
- 2. PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF RALEIGH PUBLIC WORKS, ENGINEERING INSPECTIONS DEPARTMENT (919) 996-6824. AND A REPRESENTATIVE OF THE ENGINEER AND OWNER.
- 3. CONSTRUCTION, MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE SITE CONTRACTOR, AFTER PERMISSION BY EROSION CONTROL INSPECTOR.
- 4. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE PLANS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE AND ENGINEER IMMEDIATELY.

STORM DRAINAGE NOTES:

- 1. ALL STORM DRAINAGE PIPES SHOWN ARE TO BE CLASS III REINFORCED CONCRETE (RCP) UNLESS NOTED
- 2. ALL STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST CITY OF RALEIGH AND
- 3. ALL CONCRETE SHALL MEET A MINIMUM 3000 PSI COMPRESSIVE STRENGTH.

PLASTIC MANNER UNDER THE TAMPING BLOWS OR PROOF ROLLING.

- 4. ALL PIPE IN STORM DRAIN STRUCTURES SHALL BE STRUCK EVEN WITH INSIDE WALL.
- 5. ALL PIPE JOINTS SHALL BE MADE WITH PREFORMED JOINT SEALER, WHICH CONFORMS TO AASHTO SPECIFICATION M-198 FOR TYPE B FLEXIBLE PLASTIC GASKETS UNLESS OTHERWISE NOTED.
- 6. THE INTERIOR SURFACES OF ALL STORM DRAINAGE STRUCTURES SHALL BE POINTED UP AND SMOOTHED TO AN ACCEPTABLE STANDARD USING MORTAR MIXED TO MANUFACTURER'S SPECIFICATIONS.
- 7. ALL BACKFILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATION MATTER, WASTE CONSTRUCTION MATERIAL OR OTHER OBJECTIONABLE MATERIAL. SAID MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A
- 8. MATERIALS DEEMED BY THE OWNER'S REPRESENTATIVE OR GEOTECHNICAL ENGINEER AS UNSUITABLE FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
- 9. BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE THOROUGHLY COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST. THE TOP EIGHT (8) INCHES SHALL BE COMPACTED TO 100 PERCENT STANDARD PROCTOR.
- 10. UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO RISE IN UNBACKFILLED TRENCHES AFTER PIPE

DEMOLITION NOTES

- THE INFORMATION SHOWN WAS TAKEN FROM DESIGN DRAWINGS AND FIELD SURVEY WHEREVER POSSIBLE.
 ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE ENGINEER
 PRIOR TO START OF CONSTRUCTION. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF
 ALL SETBACKS, EASEMENTS, AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
- 2. THE LOCATIONS OF ALL UTILITIES SHOWN ON THIS PLAN ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UTILITIES WITH THE UTILITY OWNERS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 3. ALL DEMOLITION MATERIAL WILL BE REMOVED FROM THE SITE AND DISPOSED OF IN A PROPER LOCATION AND METHOD AS DESIGNATED BY THE LOCAL AUTHORITIES.
- 4. CONTRACTOR SHALL NOTIFY NC811 (811 OR 800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR TO CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- 5. CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE UTILITY COMPANIES FOR ANY REQUIRED RELOCATION (I.E. POWER POLES, TELEPHONE PEDESTALS, WATER METERS, ETC.).
- 6. THE CONTRACTOR SHALL, AT ALL TIMES, KEEP THE PREMISES AND ADJACENT ROADWAYS FREE FROM ACCUMULATIONS OF WASTE MATERIALS OR RUBBISH CAUSED BY HIM, HIS EMPLOYEES OR HIS WORK. ALL DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE ON A DAILY BASIS.

GRADING NOTES:

- 1. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION, FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- 2. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER, PROVIDED BY CONTRACTOR RESPONSIBLE FOR EXCAVATION.
- 3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS AS APPLICABLE.
- 4. CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- 5. PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF RALEIGH STORMWATER AND EROSION CONTROL DEPARTMENT, THE ENGINEER AND A REPRESENTATIVE OF THE OWNER.
- 6. SOIL UNDER BUILDINGS, PAVED AREAS AND WITHIN SLOPES GREATER THAN 3:1 (H:V) SHALL BE APPROVED, PLACED AND COMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER. THESE SOILS SHALL BE COMPACTED TO THE STANDARD PROCTOR MAXIMUM DRY DENSITY UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

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 storm drain 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
- 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 ³/₄" copper* 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. Install 4" PVC* sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum.
- 11. 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.
- 12. 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.
 13. NCDOT / Railroad Encroachment Agreements are required for any utility work (including main extensions &
- service taps) within state or railroad ROW prior to construction.

 14. 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@raleighnc.gov for more information.
 15. 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 Systems in North Carolina.
 16. The devices shall meet the American Society of Sanitary Engineering (SAAE) standards and be on the
- 17. The device and installation shall meet the guidelines of Appendix A Guidelines and Requirements for the Cross Connection Program in Raleigh's Service Area.

University of Southern California approval list.

- Cross Connection Program in Raleigh's Service Area.

 18. 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.

 19. 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.

SANITARY SEWER NOTES:

- 1. ALL SEWER SERVICES IN PUBLIC R.O.W. SHALL BE INSTALLED BY A LICENSED UTILITY CONTRACTOR.
- 2. BEFORE COMMENCING ANY EXCAVATION IN ANY HIGHWAY, STREET, PUBLIC SPACE, OR IN AN EASEMENT, THE NORTH CAROLINA UNDERGROUND DAMAGE PREVENTION ACT REQUIRES NOTIFICATION OF EACH UTILITY OWNER HAVING U.G. UTILITIES LOCATED IN THE PROPOSED AREA TO BE EXCAVATED, EITHER ORALLY OR IN WRITING, NOT LESS THAN 2 DAYS NOR MORE THAN 10 WORKING DAYS PRIOR TO STARTING OF THE INTENT TO EXCAVATE
- 3. ANY EXISTING UTILITY APPURTENANCES SHALL NOT BE REUSED ON PROPOSED IMPROVEMENTS.
- 4. ALL PROPOSED SEWER ON THIS SITE IS TO BE PRIVATE.
- 5. ALL 8" SEWER SHALL BE PVC SDR-35 AND ALL 6" SEWER SHALL BE PVC SCH.40 UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 6. MINIMUM COVER TO FINISHED GRADE OF 5 FEET IN TRAFFIC AREAS TO BE PROVIDED FOR ALL COLLECTOR LINES 4 INCHES AND LARGER. IF LESS THAN 5 FEET OR DEEPER THAN 12', DUCTILE IRON PIPE SHALL BE REQUIRED WITH TYPE 1 BEDDING TO A COVER AT A MIN OF 3 FEET.
- 7. MINIMUM SLOPE FOR THE 8 INCH SANITARY SEWER COLLECTION LINE IS 0.50% AND THE MINIMUM SLOPE FOR THE 6 INCH SANITARY SEWER SHALL BE NO LESS THAN 1.0% (WITH CLEANOUTS EVERY 75 LINEAL FEET).
- 8. SEWER CLEANOUTS ARE NOT ALLOWED IN DRIVEWAYS, SIDEWALKS AND PARKING LOTS UNLESS SHOWN OTHERWISE. CLEANOUTS WITHIN ASPHALT PAVED TRAFFIC AREAS SHALL BE INSTALLED IN TRAFFIC RATED MINI-MANHOLES, DOMESTICALLY CAST.
- 9. ALL EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY ACTUAL LOCATION AND DEPTHS IN FIELD PRIOR TO BEGINNING CONSTRUCTION.
- 10. UTILITY SLEEVES SHALL BE PVC (SCH. 40). INSTALL WITH 2' MINIMUM COVER. CAP AND MARK BOTH ENDS.

WATER NOTES:

- 1. WATER TO BE USED DURING CONSTRUCTION SHALL EITHER HAVE A PERMANENT TAP INSTALLED THROUGH A NEW SERVICE TAP PERMIT, OR A RENTAL OF A HYDRANT METER SHALL BE SECURED TEMPORARILY; THROUGH THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- 2. WATER DESIGN
- 2.1. PUBLIC WATER SYSTEMS SHALL CONFORM TO PUBLIC DISTRIBUTION SYSTEM STANDARDS.
 2.2. PRIVATE DISTRIBUTION SYSTEMS SHALL HAVE A MASTER METER AND MASTER BACK FLOW DEVICE.
- 3. ALL 6" & 8" WATERLINES, SHALL BE DUCTILE IRON PRESSURE CLASS 350 PER CITY OF RALEIGH STANDARDS. ALL 2" WATERLINE SHALL BE TYPE K-COPPER.
- 4. ALL MAINS SHALL HAVE A MINIMUM 36" COVER.
- 5. ALL MAINS SHALL HAVE A TYPE 1 LAYING CONDITIONS (GEOTECHNICAL EVALUATION AND COMPACTION
- 6. ALL MAINS SHALL HAVE A WORKING PRESSURE OF 150 PSI AND A SURGE PRESSURE OF 300 PSI.

REPORTS SHALL BE PROVIDED TO ENGINEER WITH AS-BUILT SUBMITTAL)

- 7. SERVICE CONNECTIONS CAN ONLY BE MADE TO A PRESSURIZED PIPE UP TO 12" PER CORPUD HANDBOOK.
- 8. REFER TO CORPUD HANDBOOK FOR TESTING AND APPROVAL PROCEDURE PRIOR TO ACCEPTANCE.
- 9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI.
- 10. ALL EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY ACTUAL LOCATION AND DEPTHS IN FIELD PRIOR TO BEGINNING CONSTRUCTION.



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

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

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

The John R. McAdams Company, Inc.
621 Hillsborough Street
Suite 500

phone 919. 823. 4300 fax 919. 361. 2269 license number: C-0293, C-187

Raleigh, NC 27603

www.mcadamsco.com

CLIENT

NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460

RALEIGH, NORTH CAROLINA 27560



FAMILY E REVIEW ROAD A 27607

BLUE RIDGE MULTIFA ADMINISTRATIVE SITE RE 2500 BLUE RIDGE RO



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. RAV-23003

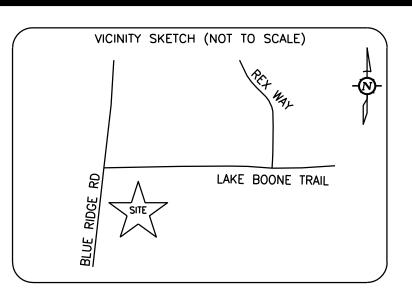
FILENAME RAV23003-ASR-N1

CHECKED BY LLH

DRAWN BY JLB
SCALE N/A
DATE 09.06.2024

PROJECT NOTES

CO.00



PEMA INFO

PER REVIEW OF FIRM MAP NO 3720078500K,

EFFECTIVE DATE: 7/19/2022, THIS PARCEL IS

NOT IN A FLOOD HAZARD AREA AND IS

DESIGNATED AS ZONE "X".

GENERAL NOTES

A.) The accompanying survey was made on the ground and correctly shows the location of all buildings, structures and other improvements situated on the above premises; that there are no visible encroachments on the subject property or upon the land abutting said property.

B.) This map or plat and the survey on which it is based were made in accordance with laws regulating surveying in the State of North Carolina.

C.) The property described herein is the same property described in Chicago Title Insurance Company Commitment No. 23-15102CH dated December 15, 2023 and all easements, covenants and restrictions referenced in said title commitment or apparent from a physical inspection of the site or otherwise known to me have been plotted hereon or otherwise noted as to their effect on the Subject Property.

- D.) Except as shown, all visible utilities serving the subject property enter through adjoining public street(s) and/or recorded public utility easement(s).
- E.) The surveyor currently is covered by a professional liability policy in the amount of \$1 million.
- F.) The Subject Property has direct physical access to Lake Boone Trail & Blue Ridge Road, both being a dedicated public right-of-way

 G.) There was no apparent evidence of cemeteries or burial grounds observed on site.
- H.) There are no party walls or visible encroachments on said described property by streets, alleys or buildings, structures or other improvements situated on adjoining property, except as shown on the survey.
- observed on site at time of survey.

 J.) The Subject Property forms a mathematically closed figure and is contiguous with adjacent parcels with no apparent gaps, gores or

I.) There was no apparent evidence of wetland delineation markers were

K.) There was no evidence of recent street or sidewalk constructor repairs at the time of survey.L.) There was no evidence of site use as a solid waste dump, sump, or sanitary landfill at the time of survey.

LEGEND OF SYMBOLS EXISTING BOUNDARY MARKER BSL BUILDING SETBACK L R/W RIGHT OF WAY LINE CONCRETE MONUMENT C/L ROAD CENTERLINE -O MATHEMATICAL POINT ☑ ELECTRICAL BOX SURVEYED PROP LINE TRAFFIC POLE — - - — ADJOINING PROP LINE T TELEPHONE PED M GAS ASSEMBLY ---- X ---- BARBED WIRE FENCE CATCH BASIN ₩ WATER VALVE — OH — OVERHEAD LINE W WATER METER OBSERVED ENCROACHMENT C LIGHT POLE YARD INLET

Iicensed surveyor cannot certify to the location of non-visible structures, thus cannot accept liability for underground structure location.

Professional Land Surveying

10505 Leafwood Place (919) 280-8189

Raleigh NC 27613 FAX 995-9616

FIRM# L4382 E-MAIL: raleigh@murphygeomatics.com

Note: Any underground lines shown are based on surface evidence. T

ACAD_NC Raleigh 2500 Blue Ridge Rd (TOPO).dwg

D DUMPSTER

BOLLARD

M MAILBOX

--- SIGN

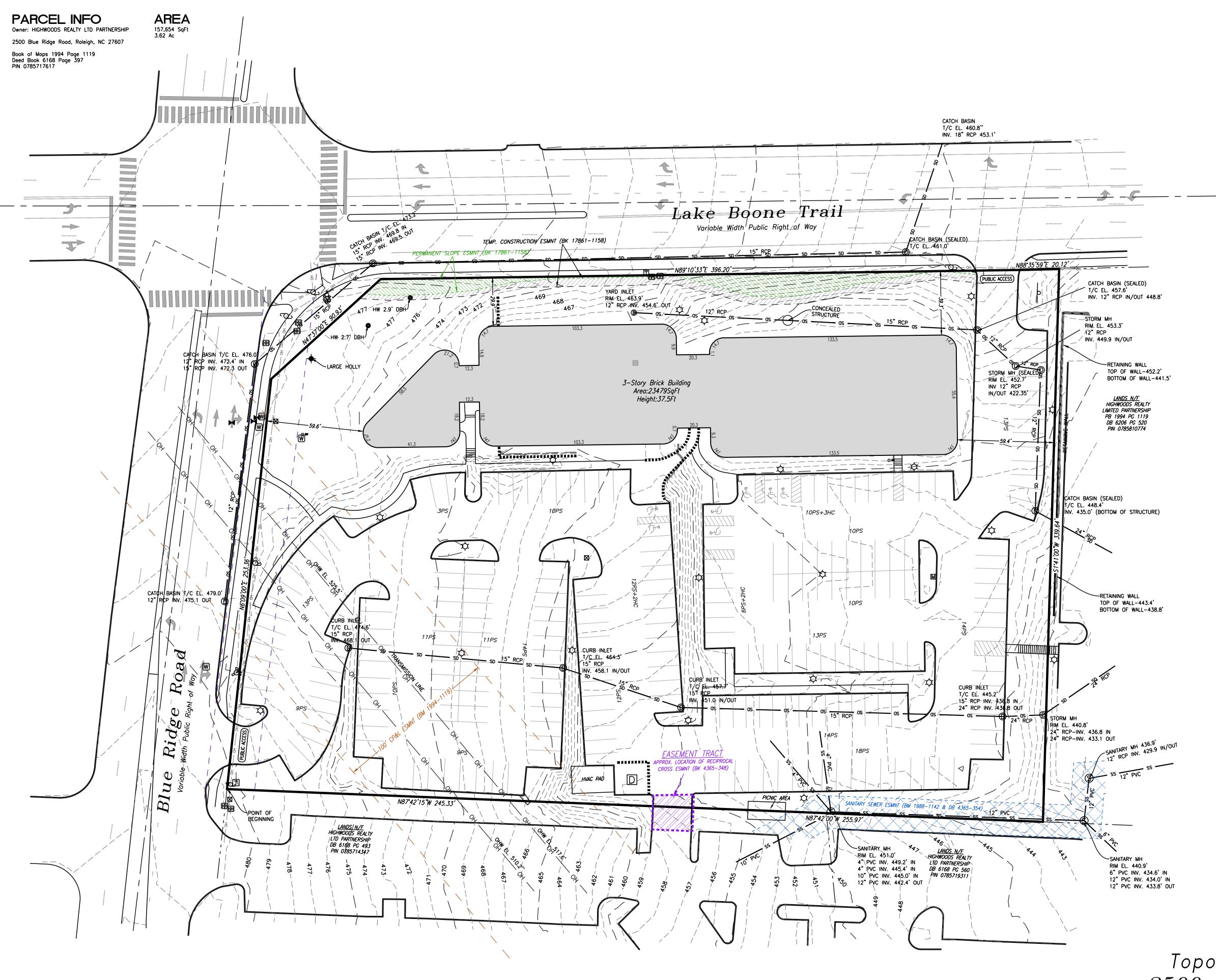
PLOTTED TITLE EXCEPTION
PS REGULAR PARKING SPACE

& HANDICAPPED SPACE

UNDERGROUND FIBER

DRAINAGE MANHOLE

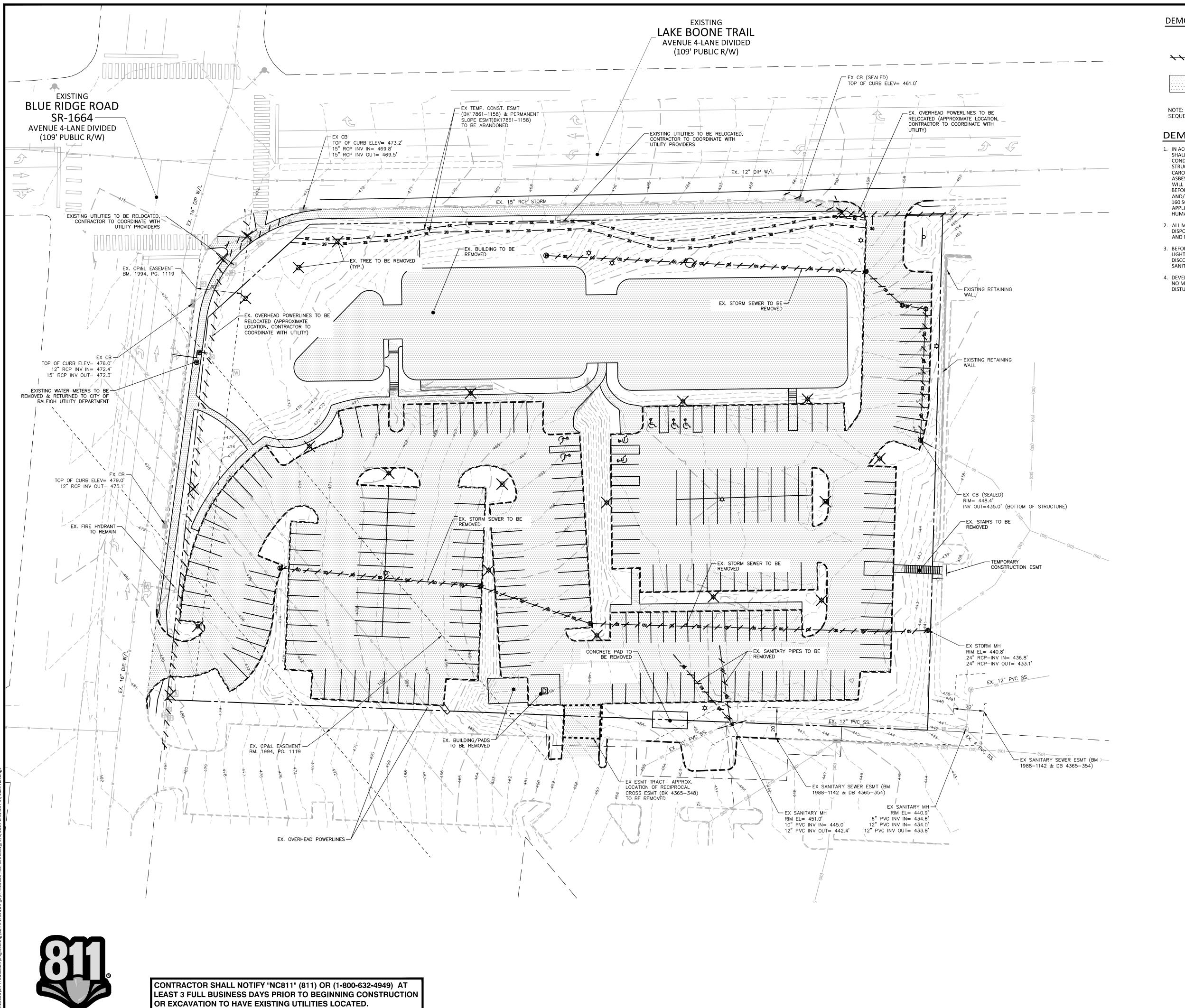
S SANITARY MANHOLE



Sheet 1 of 1
Topographical Survey
2500 Blue Ridge Road
City of Raleigh, Wake County, NC
March 2024 - Scale 1"=30"

BAR GRAPH: 1 inch = 30 ft.

File Name:ACAD_NC RALEIGH 2500 BLUE RIDGE RD (TOPO).DWG



CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE

THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811".

REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

Know what's below.
Call before you dig.

DEMOLITION LEGEND

TREE

TREE OR OTHER VEGETATION TO BE REMOVED

UNDERGROUND UTILITY TO BE REMOVED

AREA TO BE REMOVED (SIDEWALK, CURB AND GUTTER, STRUCTURES, ASPHALT, CONCRETE PAVING, ETC.)

NOTE: SEE PLAN FOR DETAILED DEMOLITION PROCEDURES, SEQUENCING AND SPECIFICATIONS.

DEMOLITION NOTES:

- 1. IN ACCORDANCE WITH 40 CFR, PART 61, SUBPART M, A THOROUGH INSPECTION SHALL BE CONDUCTED FOR ASBESTOS-CONTAINING MATERIALS, PRIOR TO CONDUCTING A RENOVATION OR DEMOLITION ACTIVITY OF AN EXISTING STRUCTURE. THE ASBESTOS INSPECTION MUST BE CONDUCTED BY A NORTH CAROLINA ACCREDITED ASBESTOS INSPECTOR. ALL REGULATED AND/OR FRIABLE ASBESTOS-CONTAINING MATERIALS IDENTIFIED DURING THE SURVEY, WHICH WILL BE DISTURBED, MUST BE PROPERLY REMOVED BY ACCREDITED INDIVIDUALS BEFORE BEGINNING THE RENOVATION OR DEMOLITION ACTIVITY. IF REGULATED AND/OR FRIABLE ASBESTOS CONTAINING MATERIALS TO BE REMOVED EXCEED 160 SQUARE FEET, 260 LINEAR FEET OR 35 CUBIC FEET, A PERMIT SHALL BE APPLIED FOR THROUGH THE NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES.
- 2. ALL MATERIAL TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT A PERMITTED SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL LAWS.
- 3. BEFORE STARTING DEMOLITION OR MODIFICATION OF EXISTING STRUCTURES, LIGHT POLES, ELECTRICAL DISTRIBUTION, ETC., CONTRACTOR TO COORDINATE DISCONNECTION OF ELECTRICAL POWER, COMMUNICATIONS, WATER SERVICE, SANITARY SERVICE, ETC WITH ASSOCIATED UTILITY COMPANY AND OWNER.
- 4. DEVELOPER TO REMOVE BUILDING WITHIN TREE CONSERVATION AREA USING NO MOTORIZED OR HEAVY EQUIPMENT WITH TIRES OR TRACKS AND NO DISTURBANCE TO THE AREA.



The John R. McAdams Company, Inc. 621 Hillsborough Street Suite 500 Raleigh, NC 27603

phone 919. 823. 4300 fax 919. 361. 2269 license number: C-0293, C-187

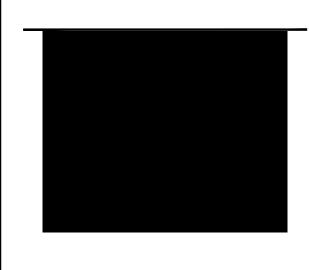
www.mcadamsco.com

CLIENT

NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460 RALEIGH, NORTH CAROLINA 27560



NORTHWOOD RAVIN



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REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. RAV-23003 FILENAME RAV23003-ASR-DM1 CHECKED BY

DRAWN BY SCALE DATE 09.06.2024

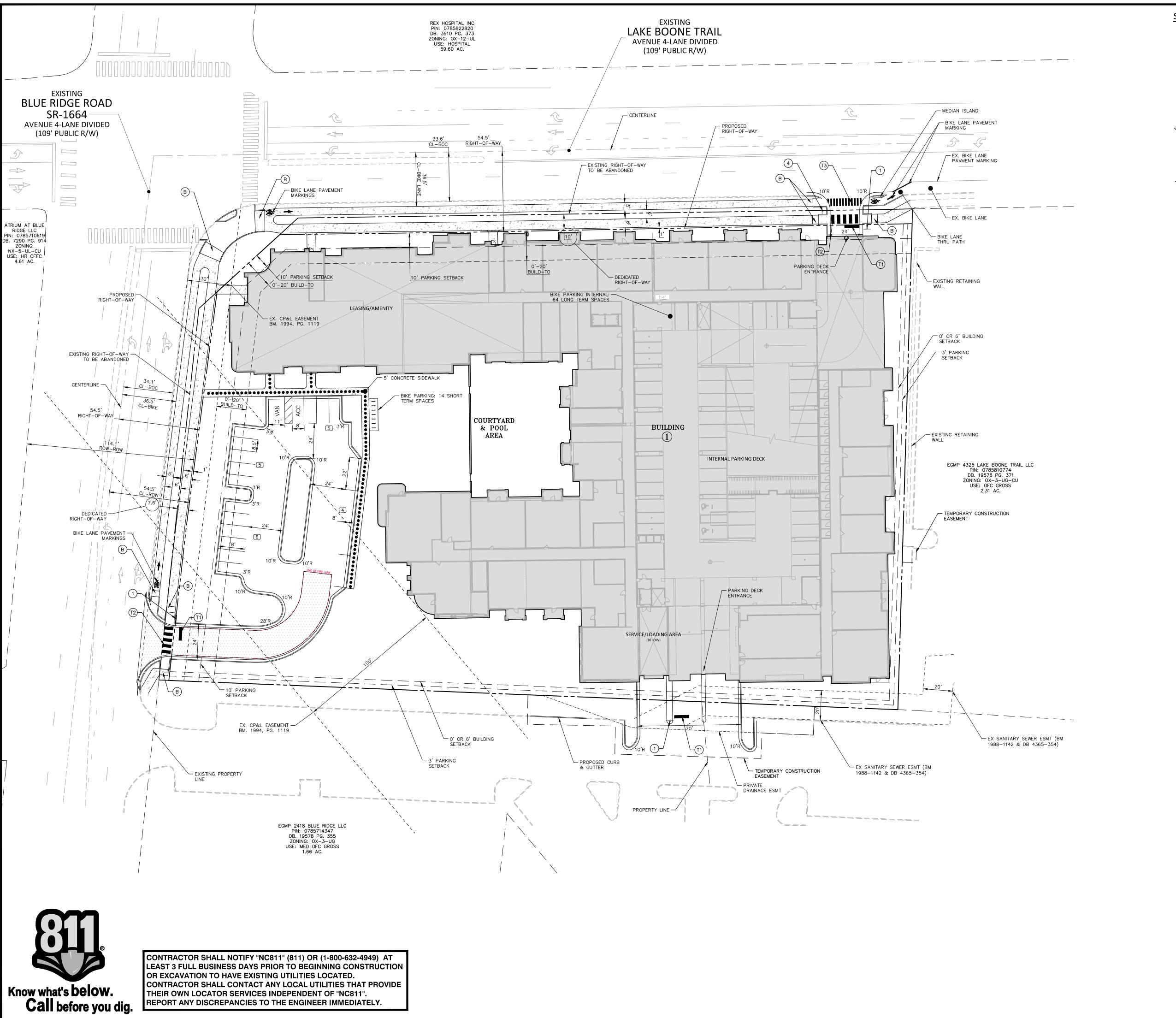
SHEET

DEMOLITION PLAN

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

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION



SITE LEGEND

SIGNAGE YARD LIGHTS LIGHT POLE POWER POLE TRAFFIC DIRECTIONAL ARROW ACCESSIBLE PARKING STALL VAN VAN ACCESSIBLE PARKING STALL

ACCESSIBLE ROUTE

RIGHT-OF-WAY LINE EASEMENT LINE FIRE LANE PAINT -----CENTERLINE

HEAVY DUTY ASPHALT PAVEMENT

PARKING SPACE COUNT

ACCESSIBLE RAMPS

PAVEMENT MARKING LEGEND

LANE LINES/MARKINGS T1 24" WHITE STOP BAR T2 CITY OF RALEIGH PEDESTRIAN CROSSWALK T3 CITY OF RALEIGH BIKE CROSSWALK

ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC AND ARE TO BE PLACED PER NCDOT STANDARDS (REFERENCE NCDOT DETAILS (1205.01-1205.12)

SIGNAGE LEGEND



ENDS MUTCD R3-17/R3-17B 24"X18"

SEE SHEET CO.00 FOR ALL PROJECT, SITE, GRADING, STORM

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST

VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS,

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

DRAINAGE AND UTILITY NOTES

SPECIFICATIONS AND DETAILS.



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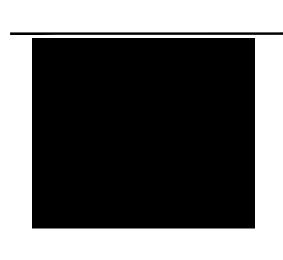
NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460 RALEIGH, NORTH CAROLINA 27560



NORTHWOOD RAVIN

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REVISIONS

NO. DATE

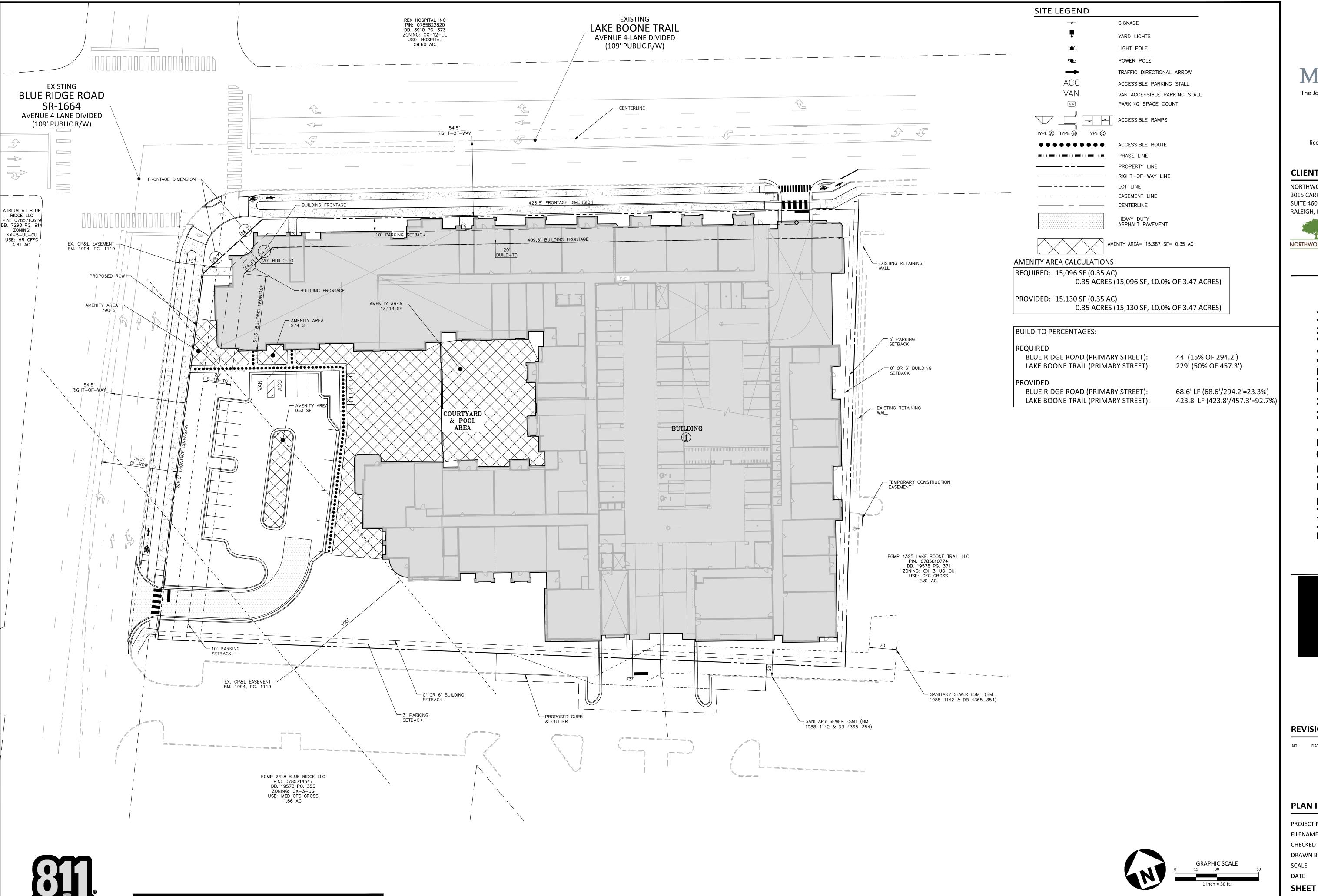
PLAN INFORMATION

PROJECT NO. RAV-23003 FILENAME RAV23003-ASR-S1 CHECKED BY DRAWN BY

SCALE DATE 09.06.2024 SHEET

C2.00

SITE PLAN



CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT

OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED.

THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811".

REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

Know what's below.

Call before you dig.

LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION

CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE

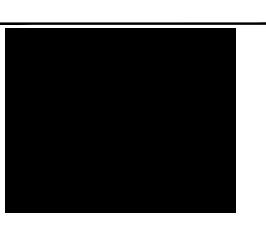
The John R. McAdams Company, Inc. 621 Hillsborough Street Suite 500 Raleigh, NC 27603 phone 919. 823. 4300 fax 919. 361. 2269 license number: C-0293, C-187 www.mcadamsco.com

CLIENT

NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460 RALEIGH, NORTH CAROLINA 27560



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REVISIONS

NO. DATE

SEE SHEET CO.00 FOR ALL PROJECT, SITE, GRADING, STORM

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST

VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS,

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

DRAINAGE AND UTILITY NOTES

SPECIFICATIONS AND DETAILS.

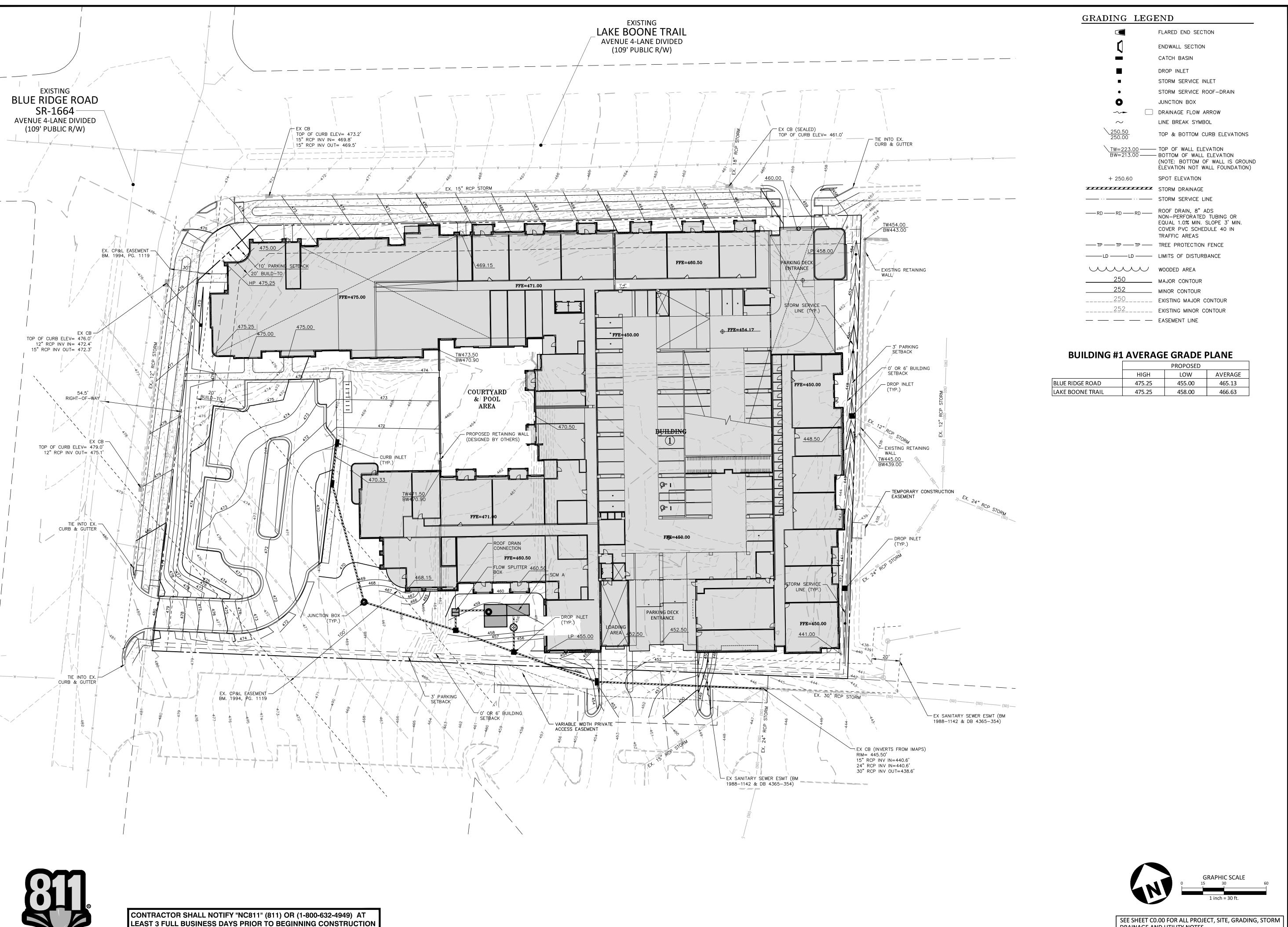
PLAN INFORMATION

PROJECT NO. RAV-23003 FILENAME RAV23003-ASR-S1 CHECKED BY

DRAWN BY 1":30' 09.06.2024

BUILD-TO & AMENITY

PLAN





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phone 919. 823. 4300 fax 919. 361. 2269 license number: C-0293, C-187

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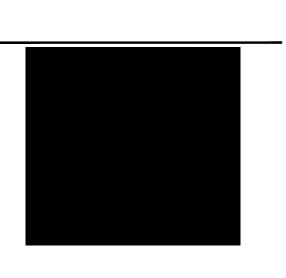
NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460

RALEIGH, NORTH CAROLINA 27560



NORTHWOOD RAVIN

BLU



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. RAV-23003 FILENAME CHECKED BY

DRAWN BY SCALE DATE 09.06.2024

SHEET

GRADING & STORM DRAINAGE PLAN

DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

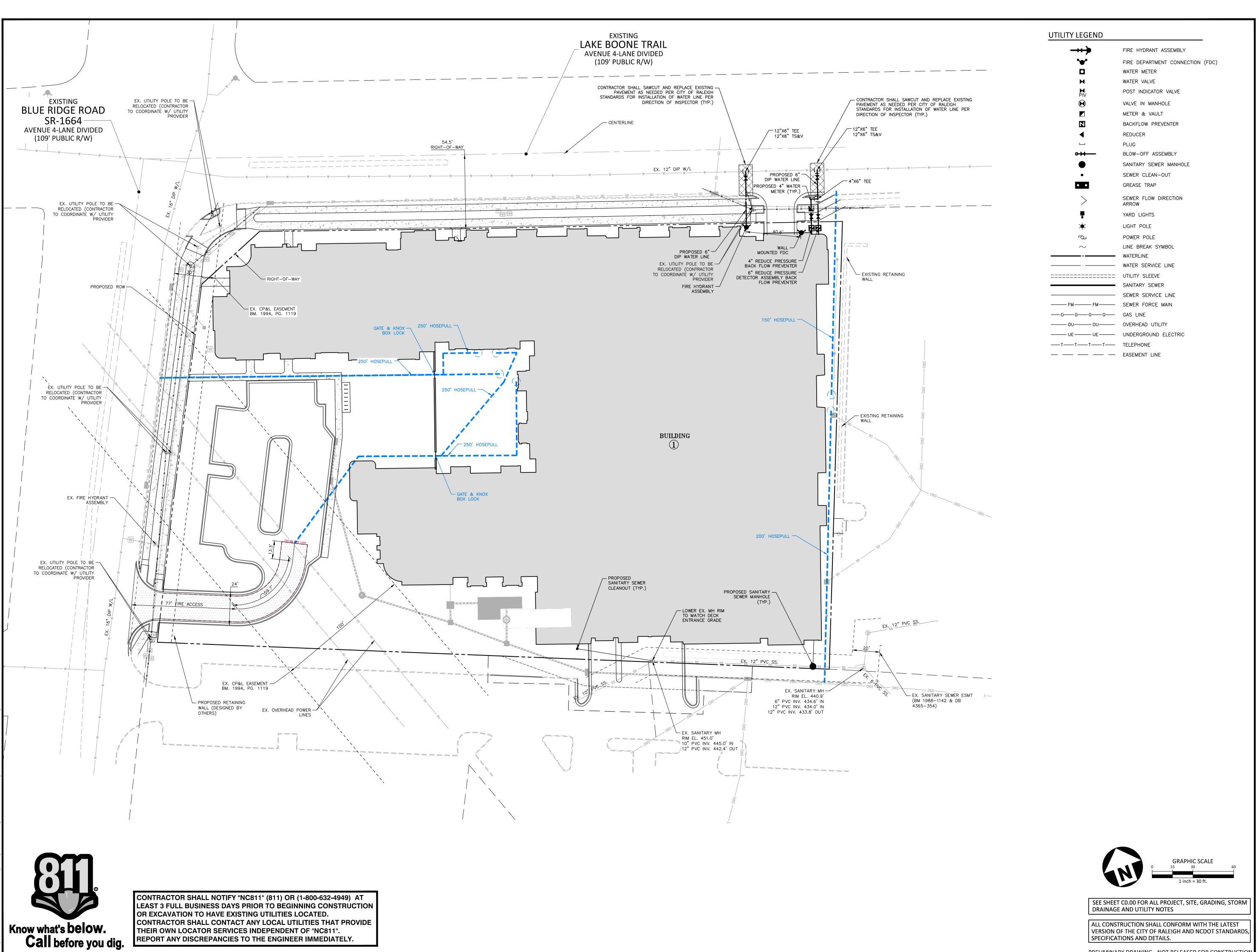
Know what's below.
Call before you dig.

OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED.

THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811".

REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE



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NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460 RALEIGH, NORTH CAROLINA 27560



NORTHWOOD RAVIN

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REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. RAV-23003 FILENAME RAV23003-ASR-U1 CHECKED BY

DRAWN BY SCALE DATE 09.06.2024

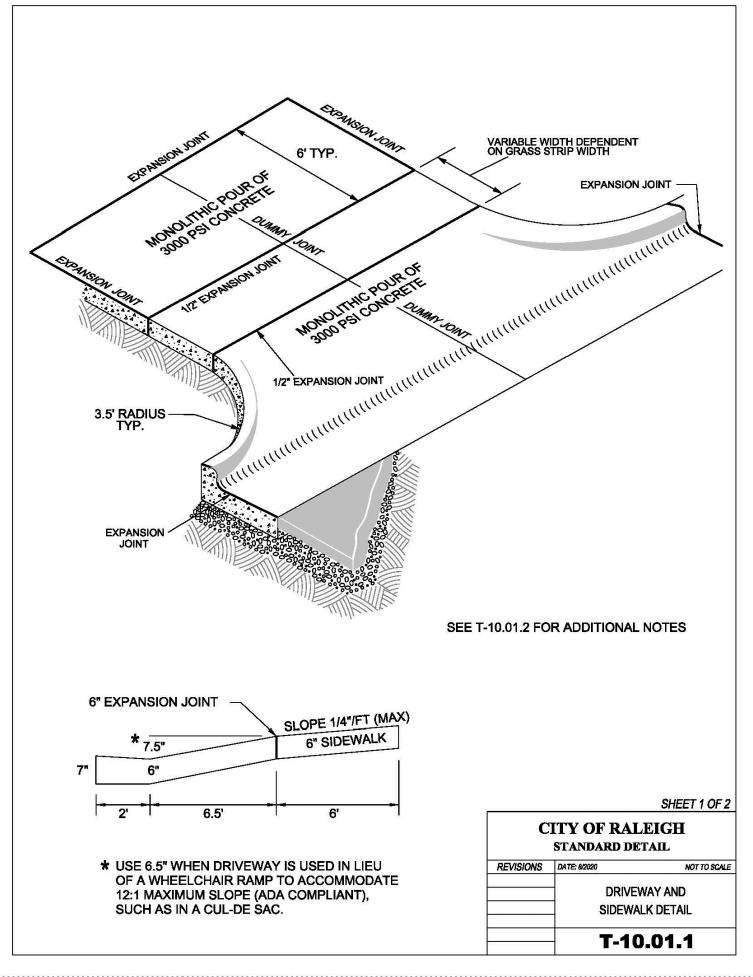
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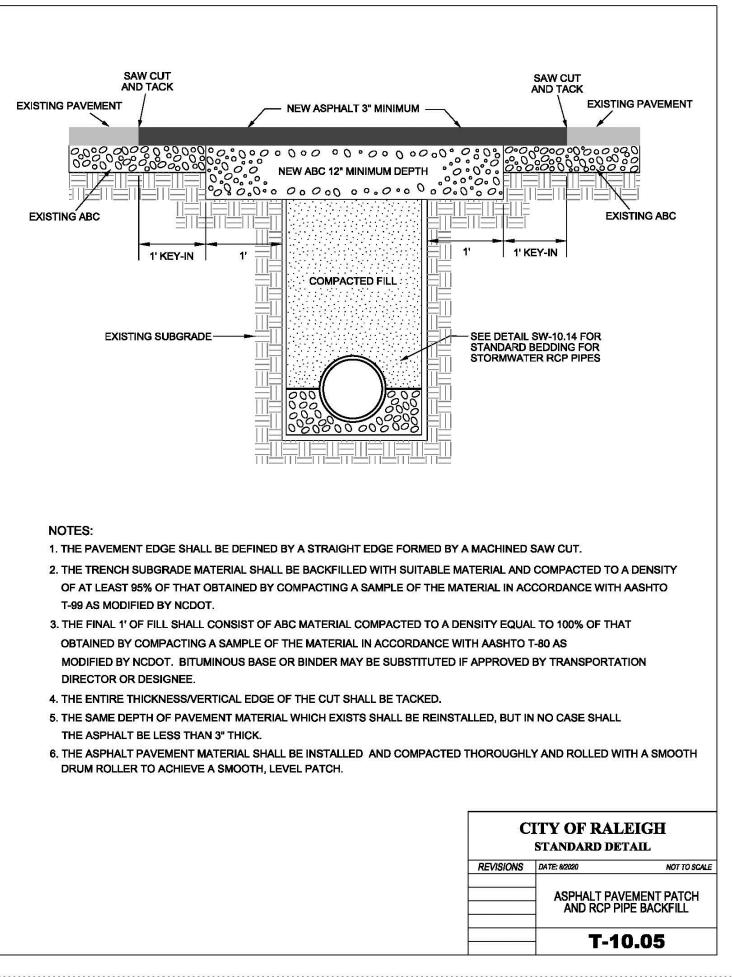
SPECIFICATIONS AND DETAILS.

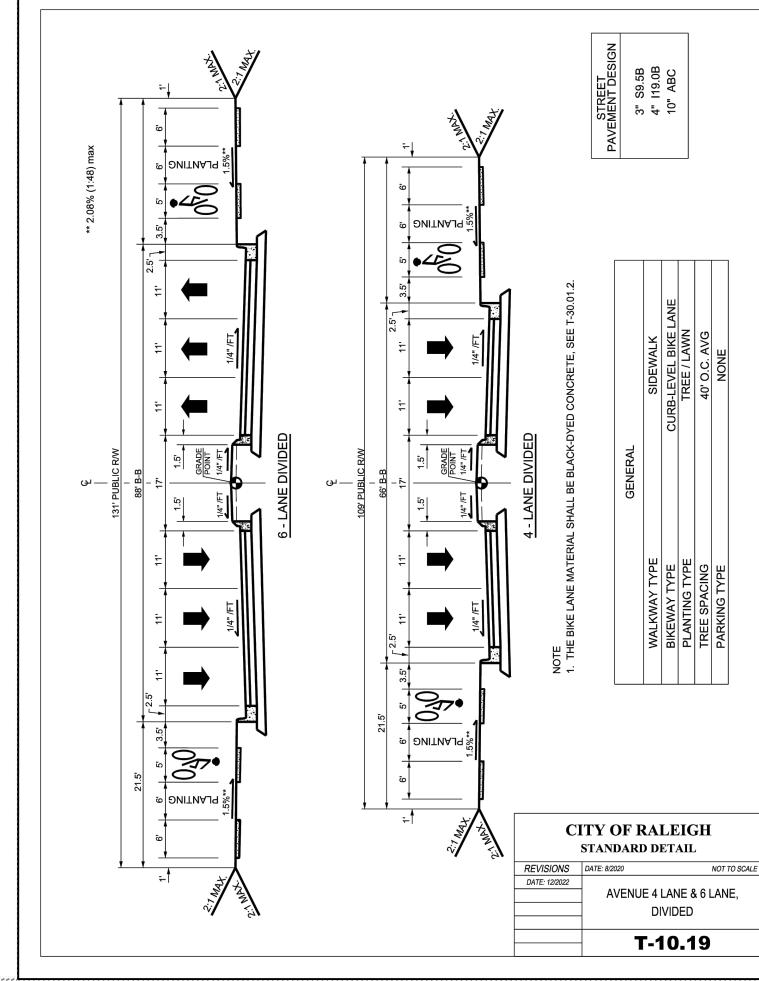
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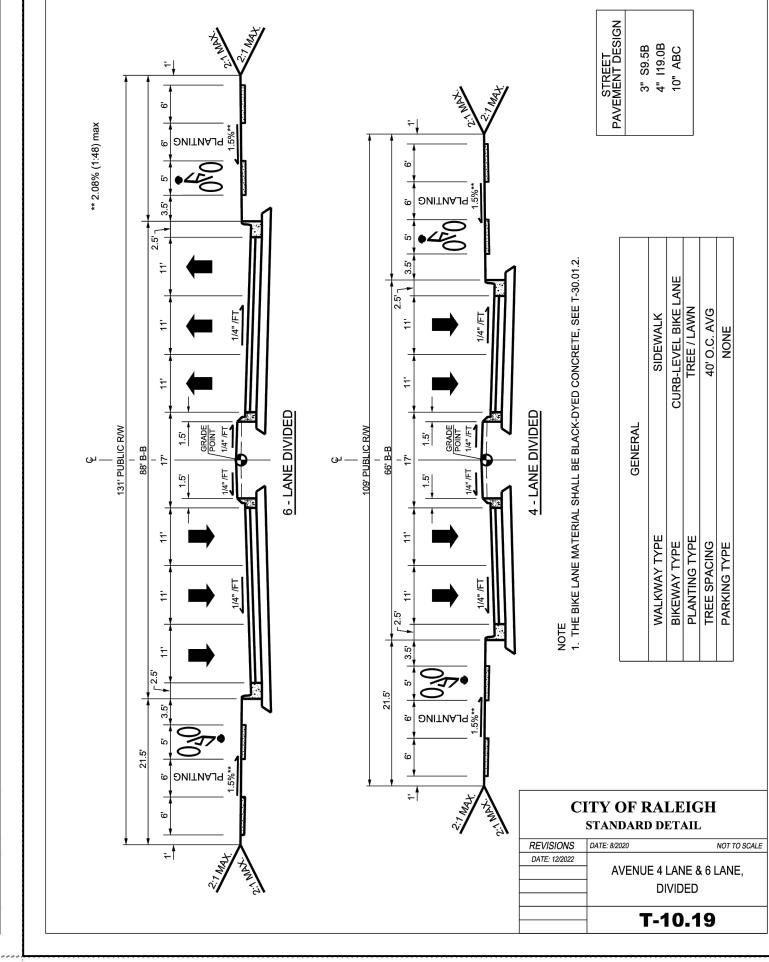
UTILITY PLAN

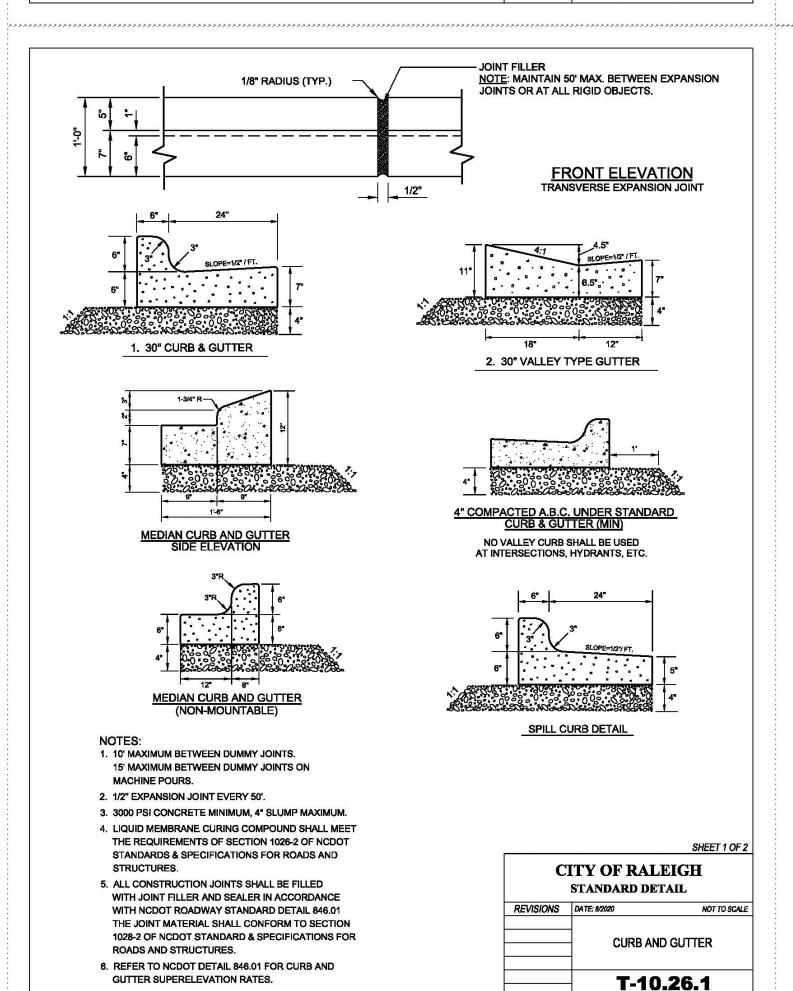
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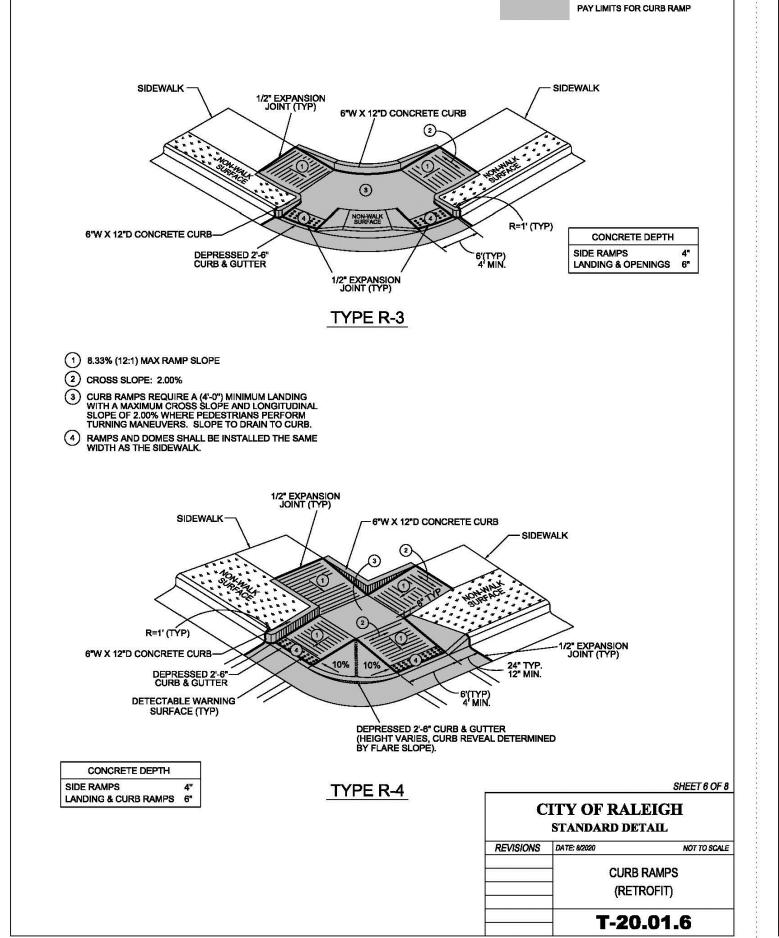












CITY OF RALEIGH **CURB RAMPS GENERAL NOTES**

- 1. CITY OF RALEIGH STANDARD CURB RAMPS HAVE BEEN DEVELOPED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND PUBLIC RIGHT OF WAY ACCESS GUIDELINES (PROWAG).
- 2. CURB RAMPS SHALL BE PROVIDED AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. SIDEWALK ACCESS RAMPS SHALL BE LOCATED AS INDICATED IN THE DETAIL, HOWEVER, THE LOCATION MAY BE ADJUSTED IN COORDINATION WITH THE CITY OF RALEIGH WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT.
- 3. DOUBLE WHEELCHAIR RAMPS ARE TO BE INSTALLED AT ALL PUBLIC STREET INTERSECTIONS WHERE SIDEWALK IS REQUIRED.
- 4. THE WALKING SURFACE SHALL BE SLIP RESISTANT. THE COLOR FOR THE DETECTABLE WARNING AREA SHALL BE YELLOW FOR CONTRAST.
- 5. NO SLOPE ON THE SIDEWALK ACCESS RAMP SHALL EXCEED 1"/FT (12:1) IN RELATIONSHIP TO THE GRADE OF THE STREET.
- 6. IN NO CASE SHALL THE WIDTH OF THE SIDEWALK ACCESS RAMP BE LESS THAN 48" ALL RAMPS SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.
- 7. USE CLASS A (3000 PSI) CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NONSKID SURFACE.
- 8. A 1/2" EXPANSION JOINT INSTALLED FULL DEPTH WILL BE REQUIRED WHERE THE CONCRETE SIDEWALK ACCESS RAMP JOINS THE CURB AND ALSO WHERE NEW CONCRETE ABUTS
- 9. CURB RAMPS SHOULD BE PLACED PARALLEL TO THE DIRECTION OF TRAVEL.

EXISTING CONCRETE.

SHEET 8 OF 8 CITY OF RALEIGH STANDARD DETAIL REVISIONS DATE: 8/2020 NOT TO SCALE **CURB RAMP NOTES** T-20.01.8



The John R. McAdams Company, Inc. 621 Hillsborough Street Suite 500 Raleigh, NC 27603

phone 919. 823. 4300 fax 919. 361. 2269

license number: C-0293, C-187

www.mcadamsco.com

NORTHWOOD RAVIN LLC THE PAVEMENT SECTIONS SHOWN ARE PRELIMINARY. THE CONTRACTOR SHALL VERIFY PAVEMENT DESIGN WITH THE GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH

CONCRETE (4,500 PSI, W/ MEDIUM BROOM

CRUSHED AGGREGATE 4.0"

BASE COURSE (ABC) PER 520 NCDOT STANDARD SPEC

CLIENT

3015 CARRINGTON MILL BLVD RALEIGH, NORTH CAROLINA 27560



BE

REVISIONS

NO. DATE

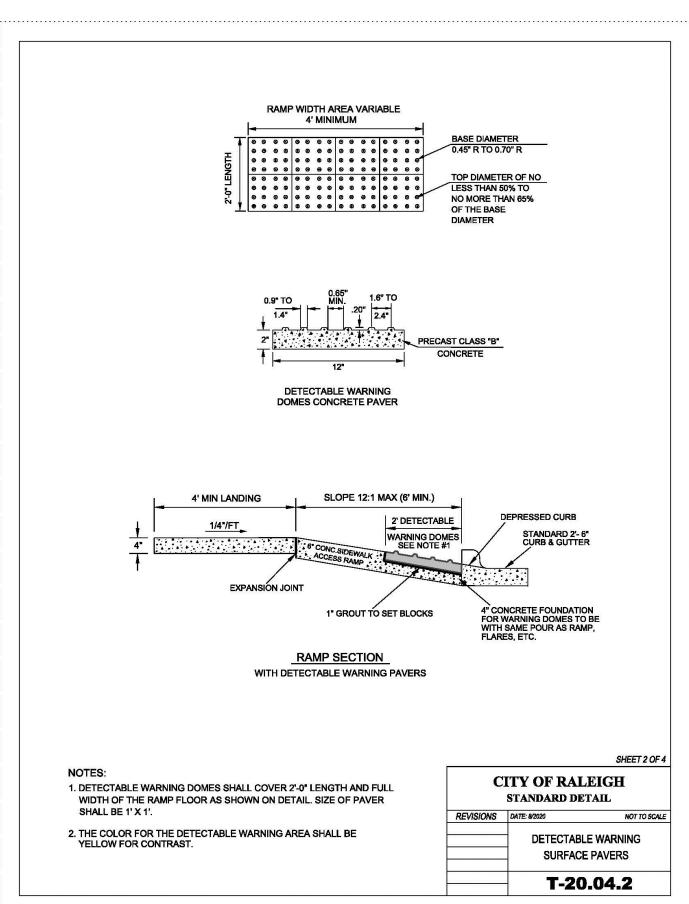
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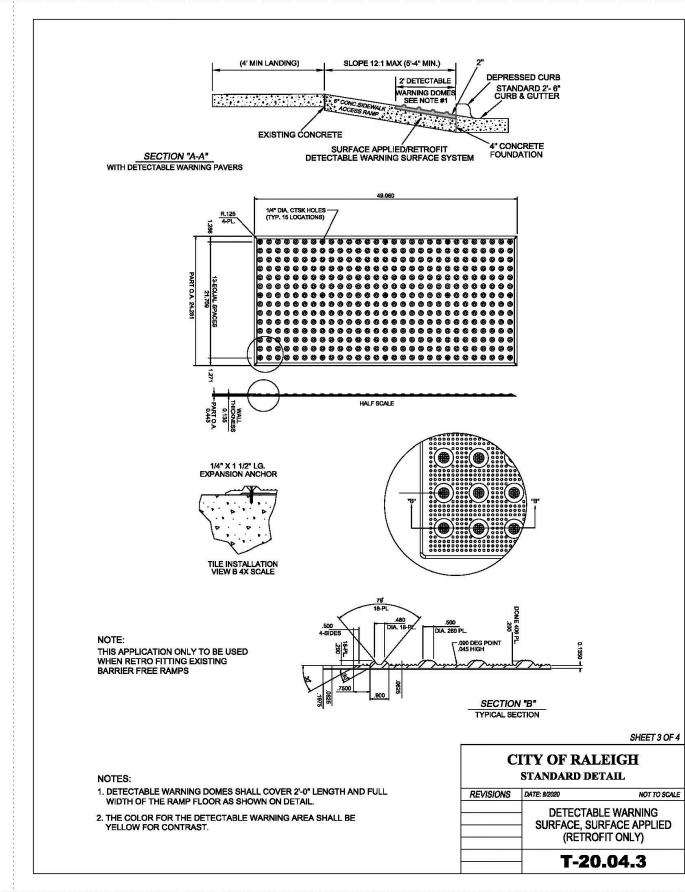
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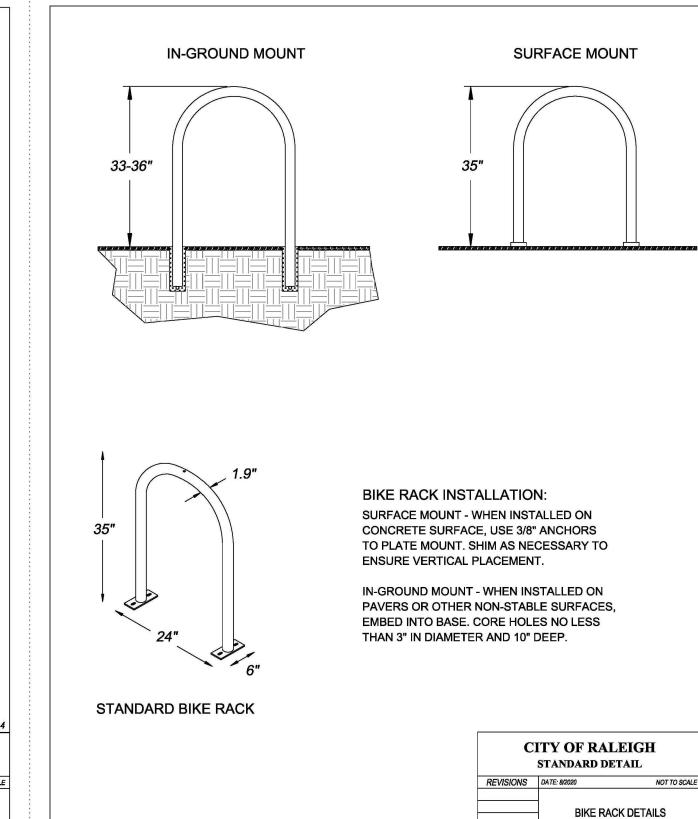
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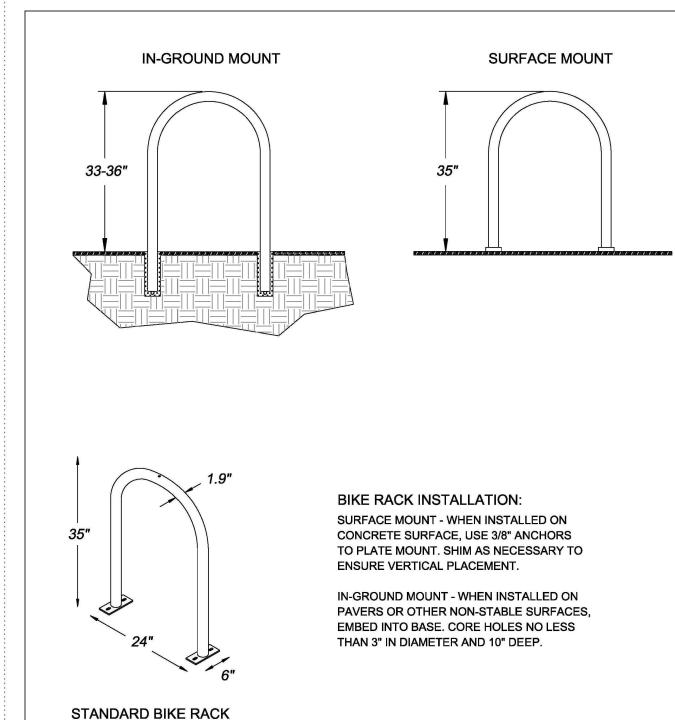
DATE 09.06.2024 **SHEET**

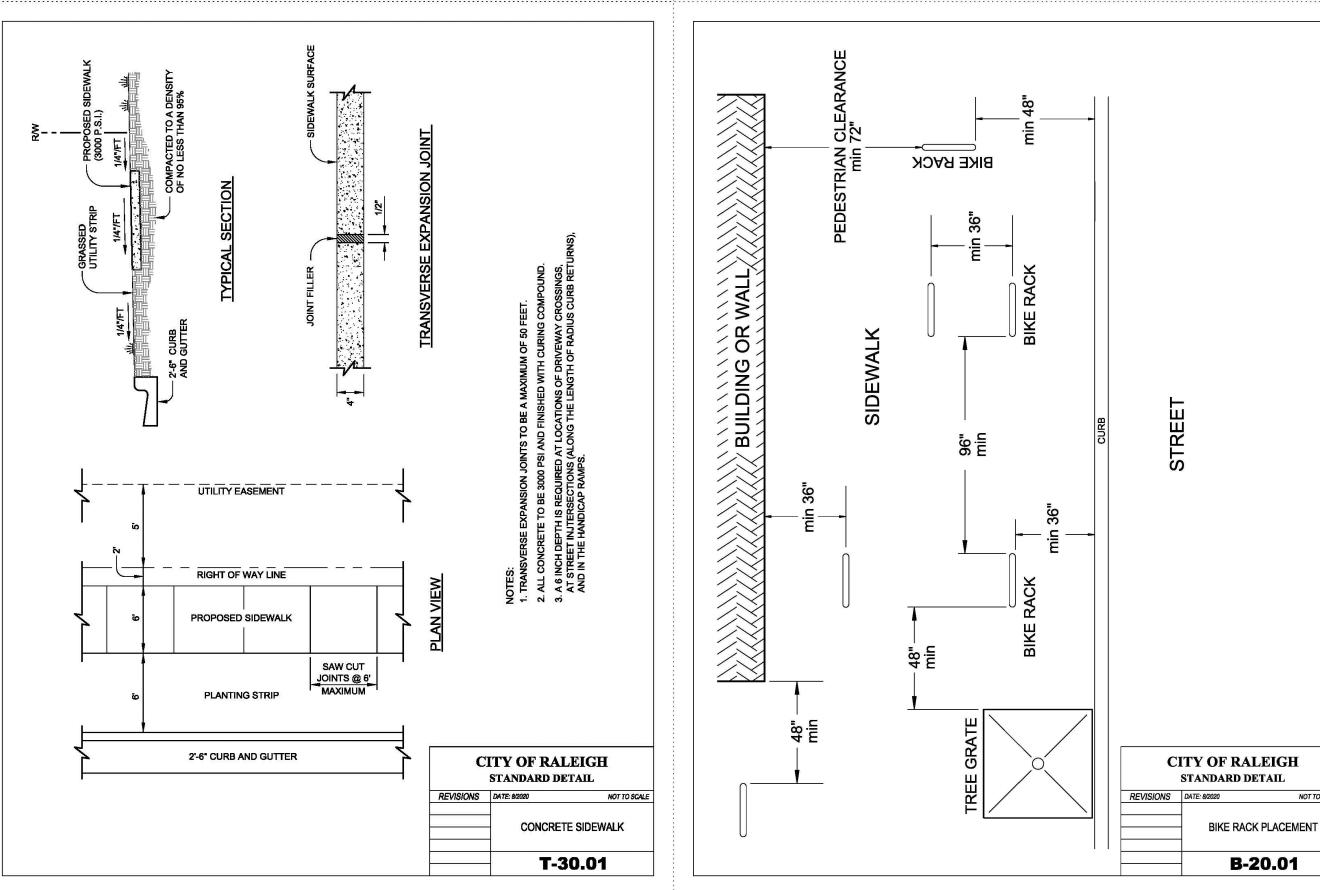
SITE DETAILS

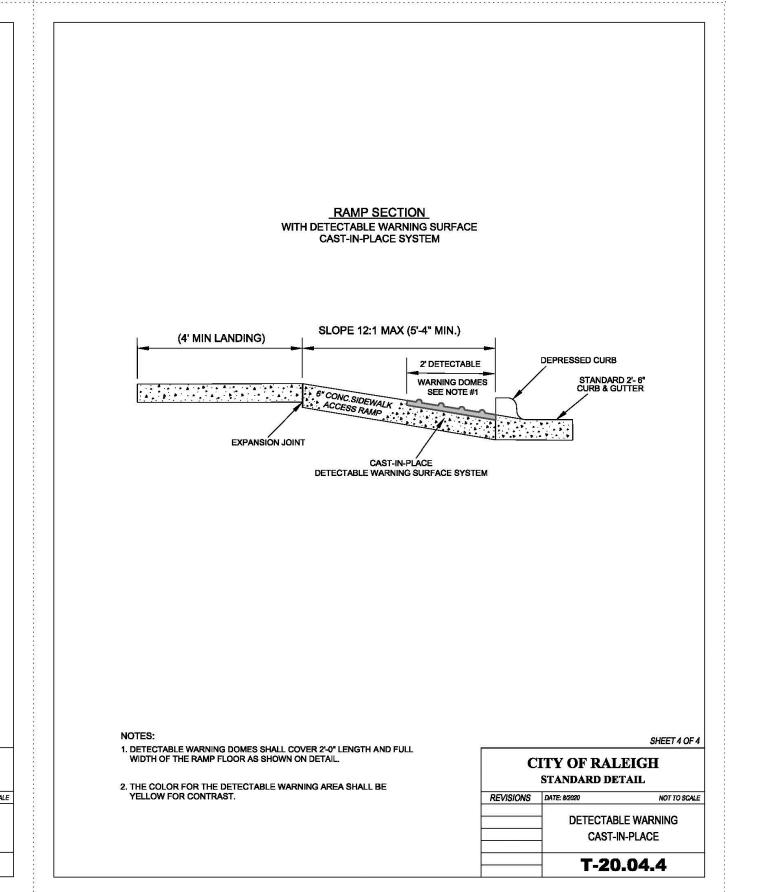


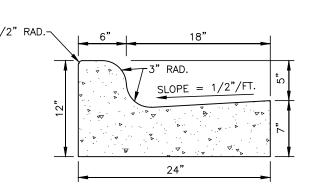




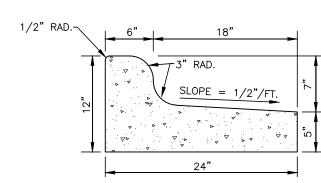








STANDARD 24" CURB AND GUTTER



24" SPILL CURB AND GUTTER

B-20.03

- NOTES:

 1. 10' MAXIMUM BETWEEN DUMMY JOINTS. 15' MAXIMUM BETWEEN DUMMY JOINTS ON MACHINE POURS.
- 2. 1/2" EXPANSION JOINT EVERY 50'.
- 3. 3000 PSI CONCRETE MINIMUM, 4" SLUMP MAXIMUM.
- 4. LIQUID MEMBRANE CURING COMPOUND SHALL MEET THE REQUIREMENTS OF SECTION 1026-2 OF NCDOT STANDARDS AND SPECIFICATIONS FOR ROADS AND STRUCTURES.
- 5. ALL CONSTRUCTION JOINTS SHALL BE FILLED WITH FILLER AND SEALER IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DETAIL 846.01. THE JOINT MATERIAL SHALL CONFORM TO SECTION 1028-2 OF THE NCDOT STANDARDS AND SPECIFICATIONS FOR ROADS AND STRUCTURES.
- 6. REFER TO NCDOT DETAIL 846.01 FOR CURB AND GUTTER SUPERELEVATION RATES.

24" CURB AND GUTTER
N.T.S.



The John R. McAdams Company, Inc. 621 Hillsborough Street Suite 500 Raleigh, NC 27603

phone 919. 823. 4300 fax 919. 361. 2269 license number: C-0293, C-187

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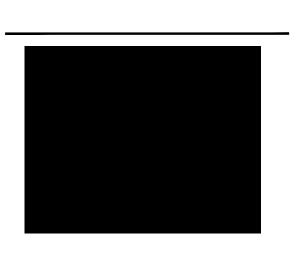
CLIENT

NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460 RALEIGH, NORTH CAROLINA 27560



NORTHWOOD RAVIN

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REVISIONS

NO. DATE

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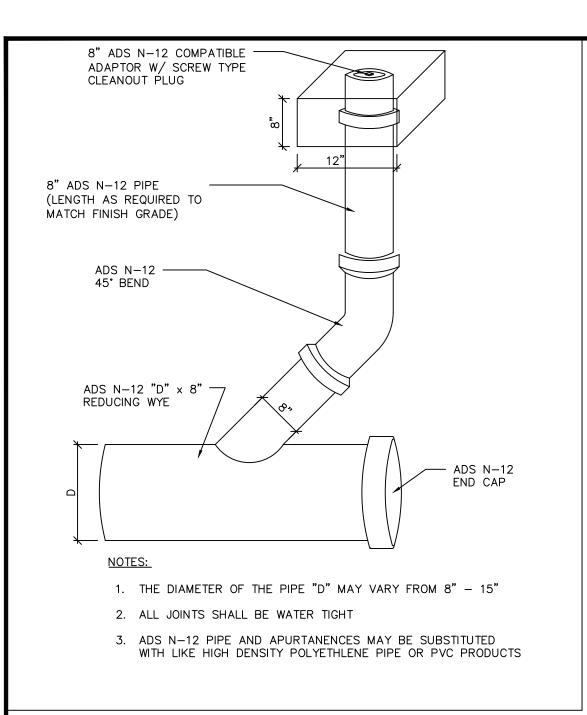
PROJECT NO. RAV-23003 FILENAME RAV23003-ASR-D1

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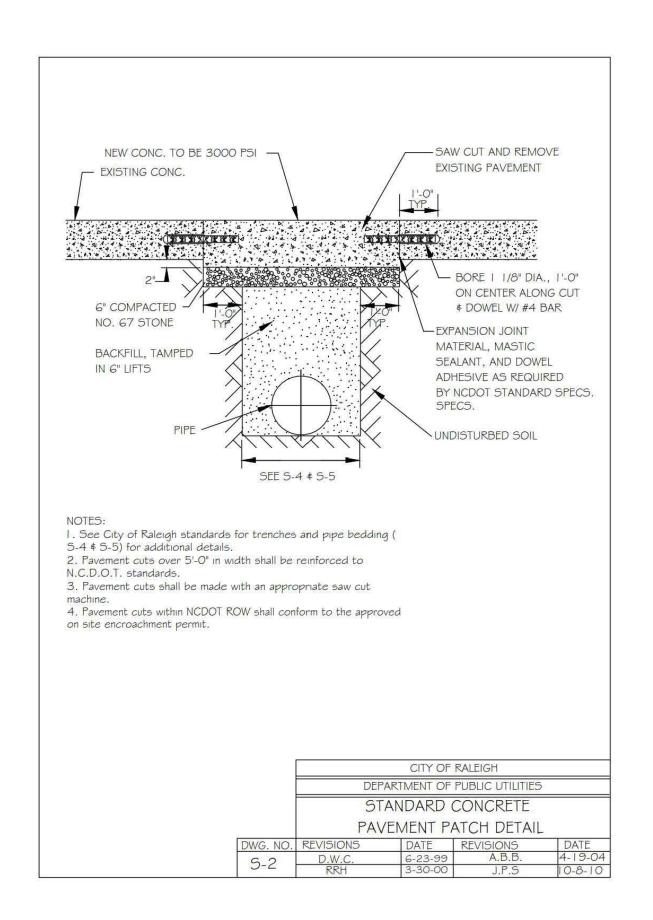
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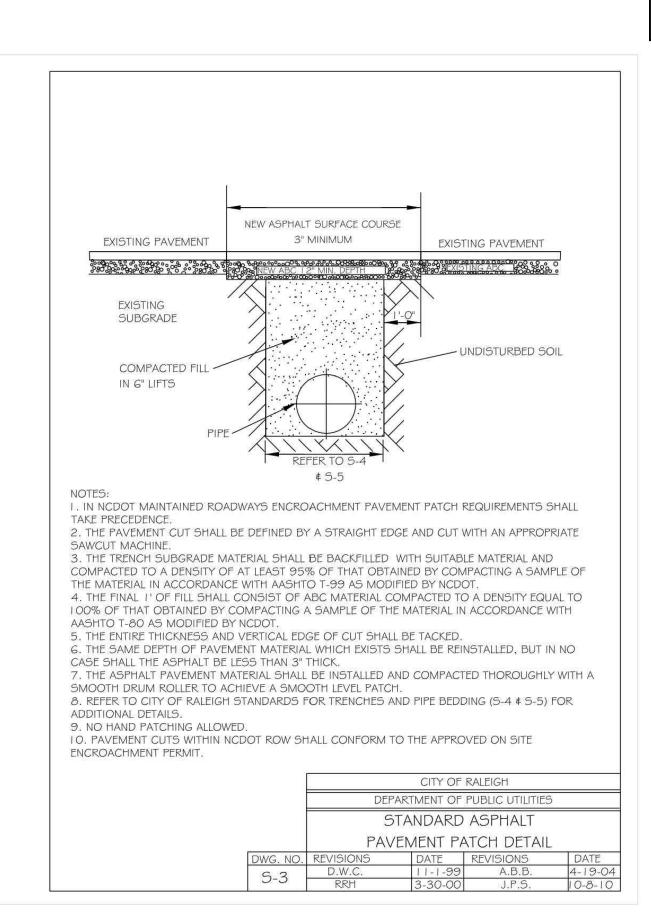
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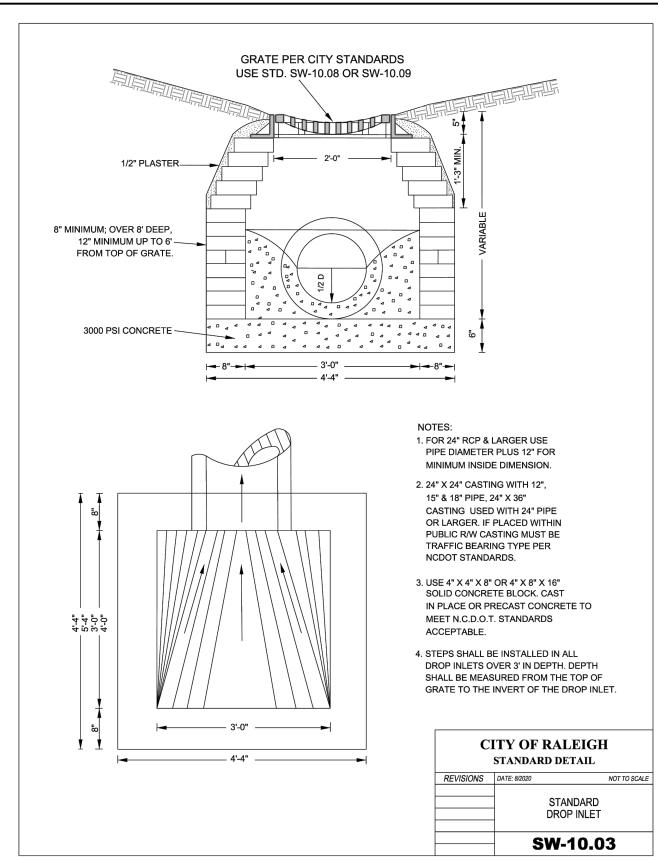
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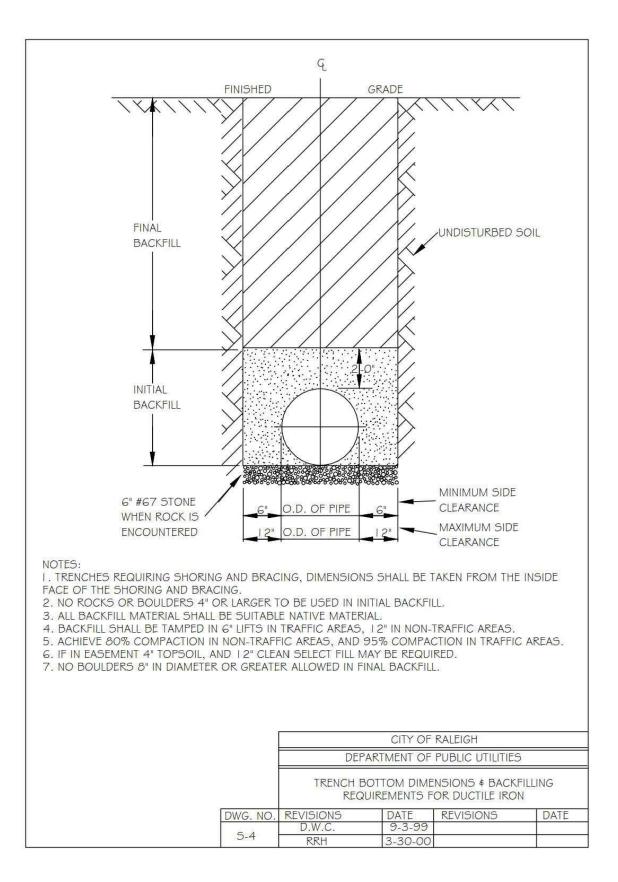


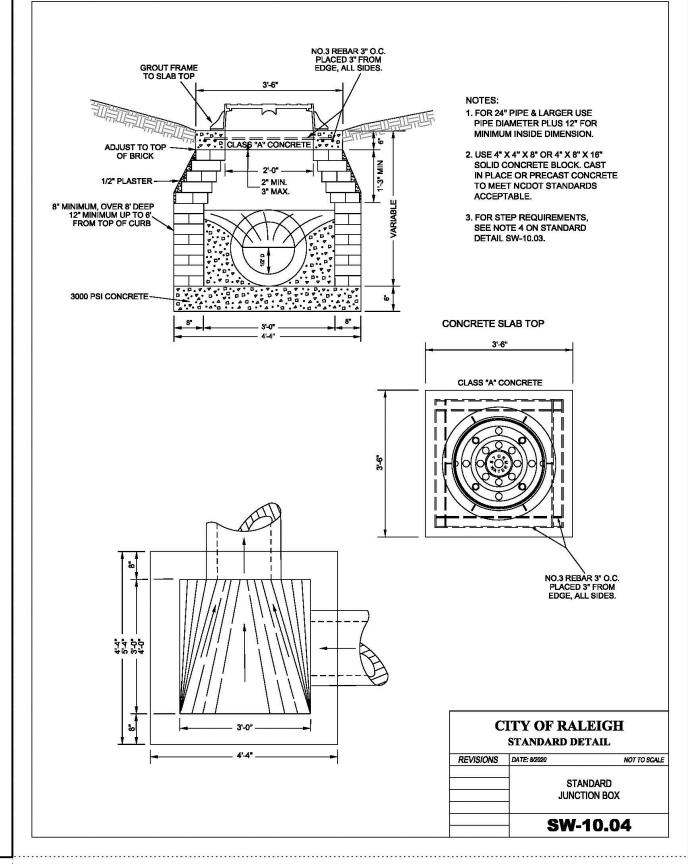
STORMWATER CLEANOUT, NTS

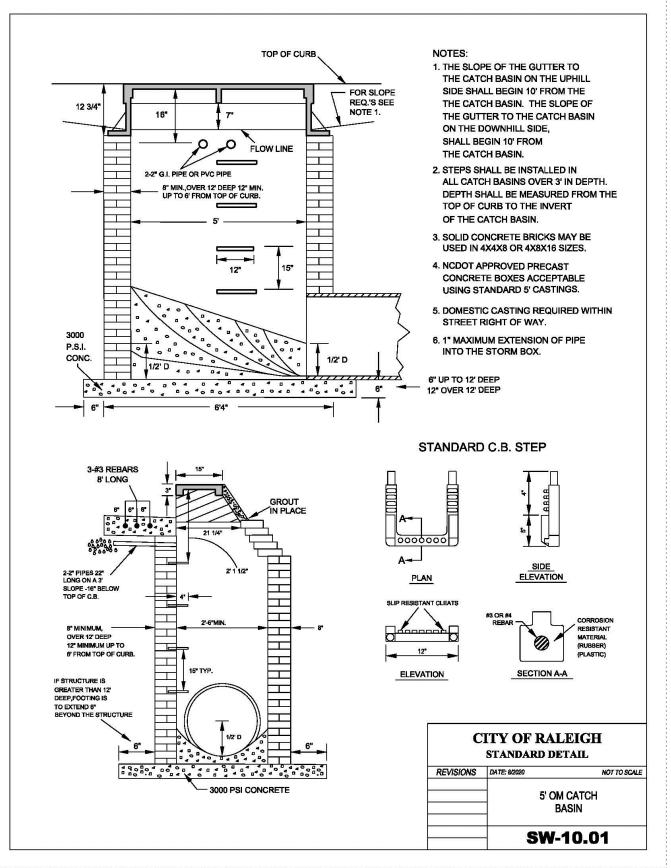














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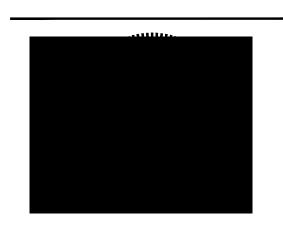
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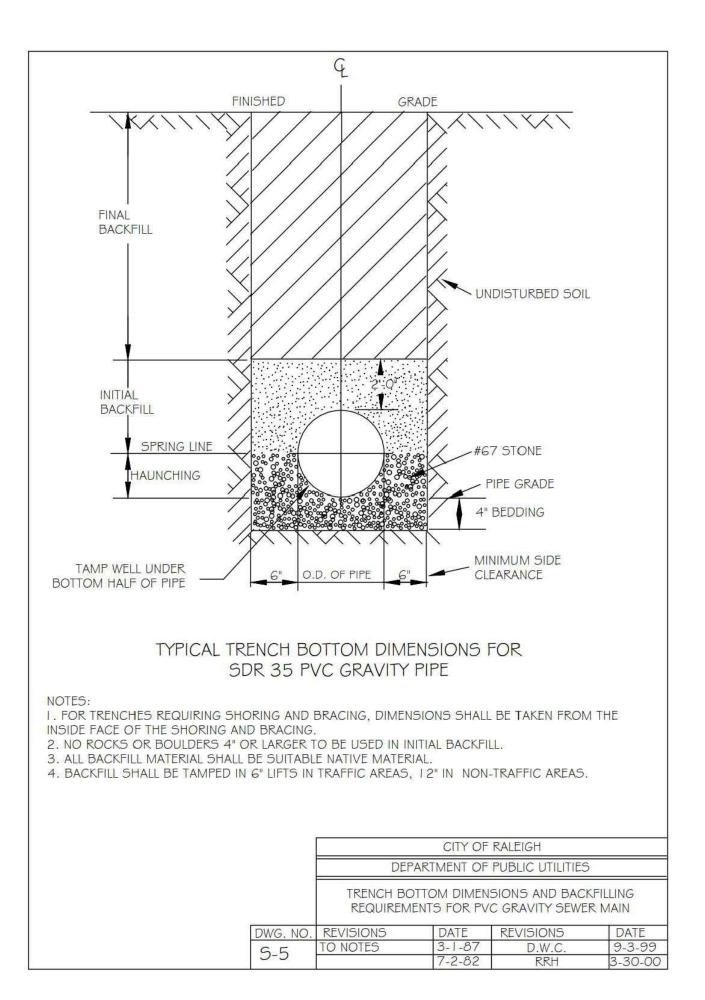
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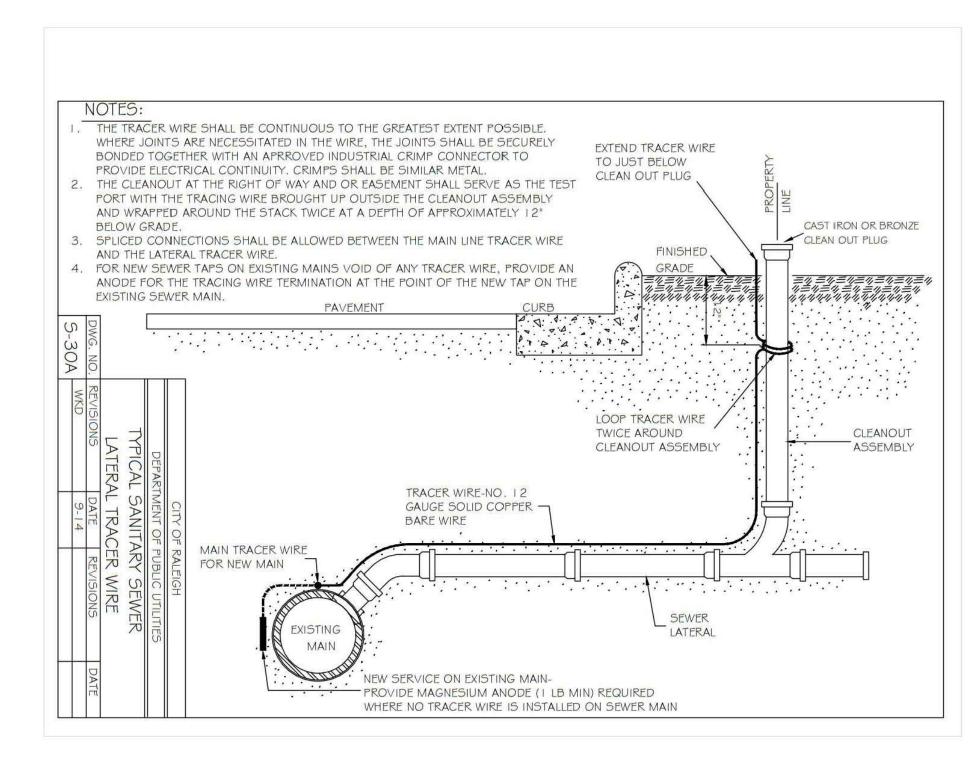
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DATE 09.06.2024 **SHEET**

STORM DRAINAGE

DETAILS





INTERCEPTORS	SEPARATORS			
CAPACITY (GAL.)	CAPACITY (GAL.)			
300	1000			
550	1200			
750	1600			
1000				
1200				
1500				
2000				
2500	Į.			
3000				
4000				
5000				
6000				
8000				

NOTES:

I. BAFFLE WALL LOCATED AT A DISTANCE FROM INLET WALL $\frac{2}{3}$ TO $\frac{3}{4}$ OF THE TOTAL LENGTH OF THE INTERCEPTOR OR SEPARATOR AS SHOWN ON DETAIL S-40. BAFFLE WALLS LOCATED AT A DISTANCE APPROXIMATELY OF $rac{1}{3}$ OF THE TOTAL LENGTH OF THE

2. EACH INTERCEPTOR OR SEPARATOR SHALL HAVE INLET AND OUTLET TEES. THE OUTLET TEE SHALL EXTEND 50% INTO THE LIQUID DEPTH. THE INLET TEE SHALL EXTEND 25% INTO THE LIQUID DEPTH. INLET AND OUTLET TEES MUST BE OPEN TO ALLOW THE COLLECTION OF F.O.G. SAMPLE. SEPARATOR AS SHOWN ON DETAIL 5-40.01.

3. ACESS OPENINGS OVER EACH COMPARTMENT WITHIN THE INTERCEPTOR OR SEPARATOR SHALL

BE 24 INCHES IN DIAMETER AND CONTAIN PICK HOLES. ALL COVERS SHALL BE CONSTRUCTED OF CAST IRON OR EQUIVALENT TRAFFIC BEARING MATERIAL. MANHOLE COVERS MUST EXTEND TO FINISH GRADE AND BE INSTALLED TO EXCLUDE THE ENTRANCE OF STORMWATER INTO THE INTERCEPTOR OR SEPARATOR.

4. FULL SIZE DUAL SWEEP CLEANOUTS SHALL BE INSTALLED ON THE INLET AND OUTLET SIDES OF THE INTERCEPTOR OR SEPARATOR.

5. INTERCEPTORS AND SEPARATORS MUST BE VENTED IN ACCORDANCE WITH THE NC STATE PLUMBING CODE.

6. CONCRETE: 4000 PSI @ 28 DAYS. 7. DESIGN: ACI 318 BUILDING CODE

ASTM C1613-06 FOR GREASE INTERCEPTORS ASTM C913-02 FOR WATER AND WASTEWATER STRUCTURES

ASTM C890-06 FOR MINIMAL STRUCTURAL DESIGN LOADING 8. INTERCEPTORS AND SEPARATORS SHALL BE DESIGNED TO WITHSTAND AN H-20 WHEEL LOAD.

9. INTERCEPTORS OR SEPARATORS MADE OF POLYETHYLENE OR FIBERGLASS SHALL INCLUDE A MINIMUM 12,000 PSI TENSILE STRENGTH, 19,000 PSI FLEXURAL STRENGTH, AND 800,000 PSI

10. ALL INTERCEPTORS AND SEPARATORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

	CITY OF RALEIGH				
		DEPART	TMENT OF	PUBLIC UTILITIE:	5
DIMENSIONS: GREASE INTERCEPTORS OIL-WATER-SAND SEPARATORS				· · · · · · · · · · · · · · · · · · ·	
DWG. NO.	REVISIONS		DATE	REVISIONS	DATE
5-41	RRH ABB	3/9/00	3/19/04	D.H.L.	6/18/08



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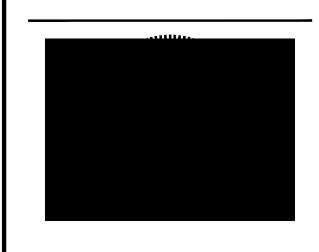
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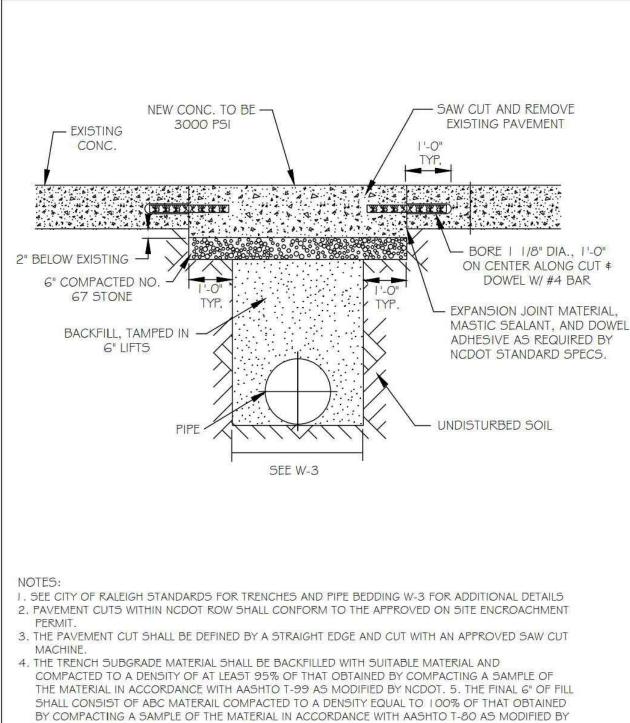
PLAN INFORMATION

PROJECT NO. RAV-23003

CHECKED BY DRAWN BY SCALE

SHEET

SANITARY SEWER DETAILS



MINIMUM 36" HORIZONTAL CLEARANCE

TOWARDS FIRE TRUCK ACCESS.

TRAFFIC FLANGE BETWEEN 2" - 6"

FIRE HYDRANT, PUMPER NOZZLE TO BE POINTED

COMPACTED BACKFILL (TAMPED IN 6" LIFTS)

6" MIN. BRANCH PIPE

WATEROUS, CLOW, EAST JORDAN IRON WORKS, OR US PIPE.

4. STEEL RODS AND BOLTS SHALL BE 3" HOT DIPPED GALVANIZED

5. FIRE HYDRANTS WILL BE INSTALLED IN TRUE VERTICAL POSITION

INSTALLED NO MORE THAN 10' FROM HYDRANT AND POURED IN CONCRETE. FIRE HYDRANTS TO BE LOCATED IN ROW OR 2 FOOT EASEMENT ADJACENT TO ROW

2. BRANCH PIPE SHALL BE DUCTILE IRON AWWA C 150-96 3. 6" GATE VALVE SHALL BE AWWA C500-86 OPEN LEFT

RESTRAINING GLANDS

/ CURB AND GUTTER

FROM ANY OBJECT.

ABOVE GRADE

SIDEWALIN

1'-3"x 1'-3"x 4" THICK

ANYTIME SITE WORK, CONSTRUCTION,

HYDRANT. THE PERSON RESPONSIBLE

FOR THE WORK IS RESPONSIBLE FOR

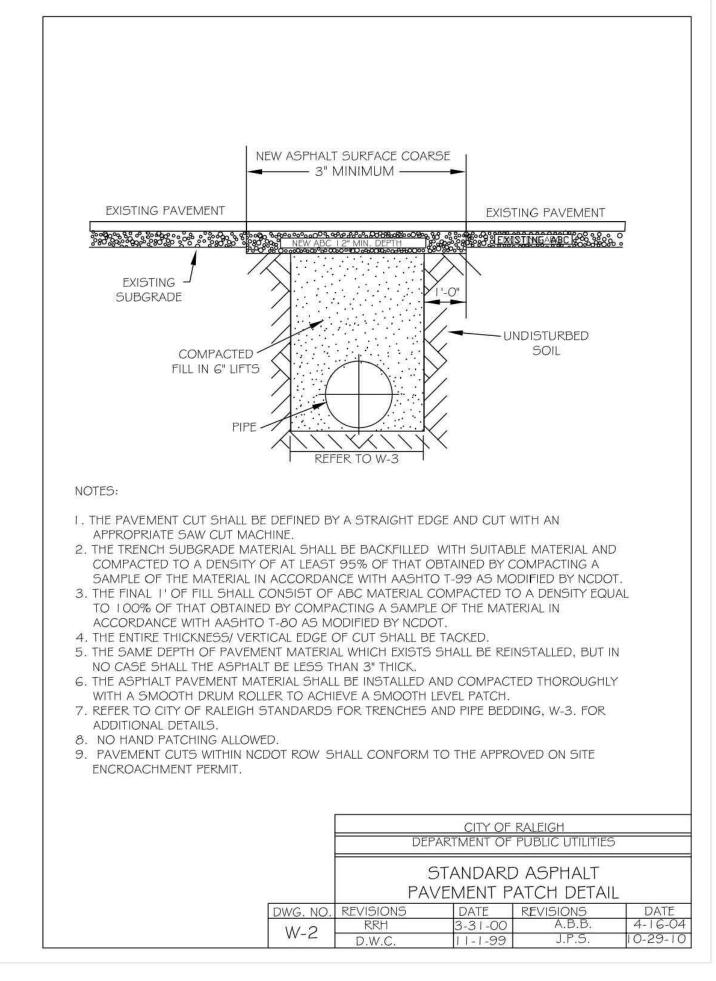
WITHIN COMPLIANCE.

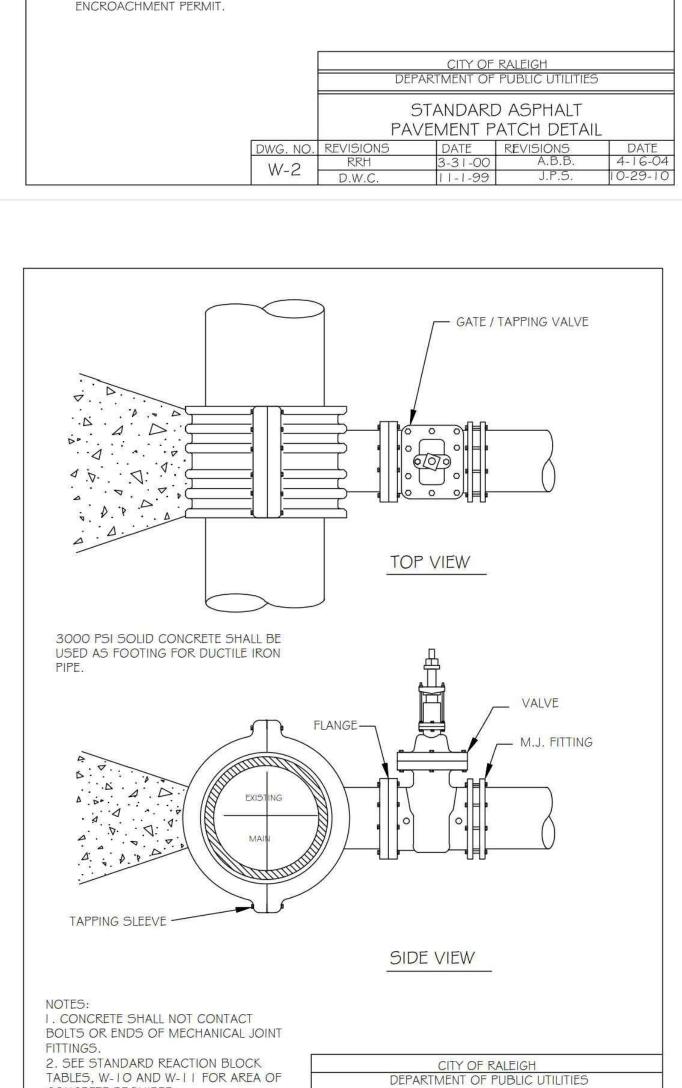
ADJUSTING THE FIRE HYDRANT TO STAY

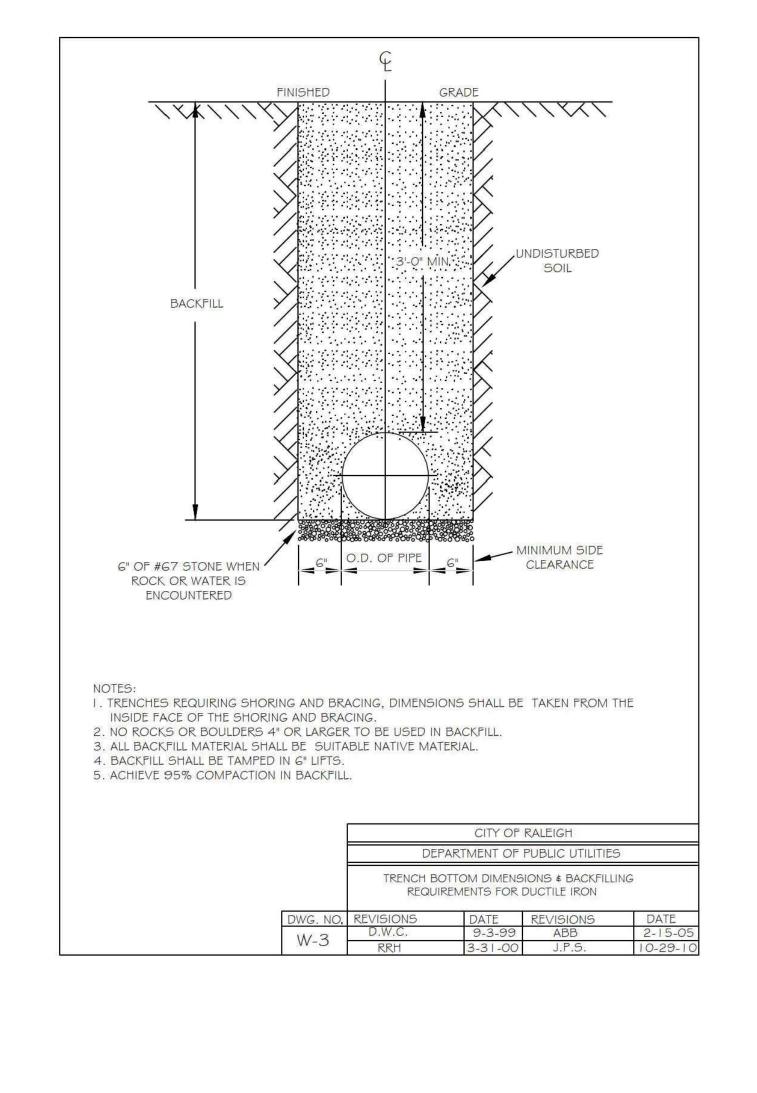
ROAD WORK, OR ANY OTHER WORK CHANGES THE GRADE OF THE FIRE

7 CU. FT. CRUSHED STONE MIN.

PROPERTY









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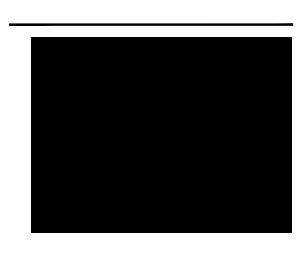
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RALEIGH, NORTH CAROLINA 27560



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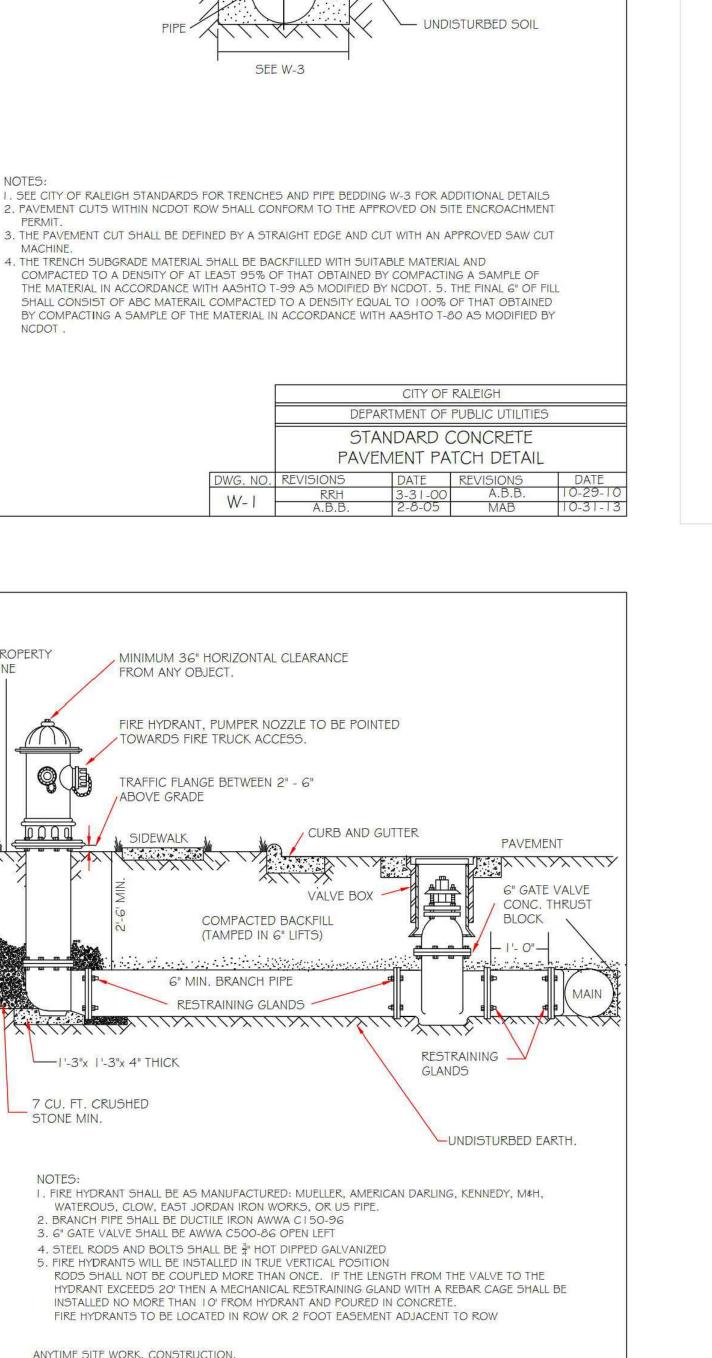
PLAN INFORMATION

PROJECT NO. RAV-23003 FILENAME RAV23003-ASR-D1

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09.06.2024 **SHEET**

WATER DETAILS



CITY OF RALEIGH

RESTRAINING

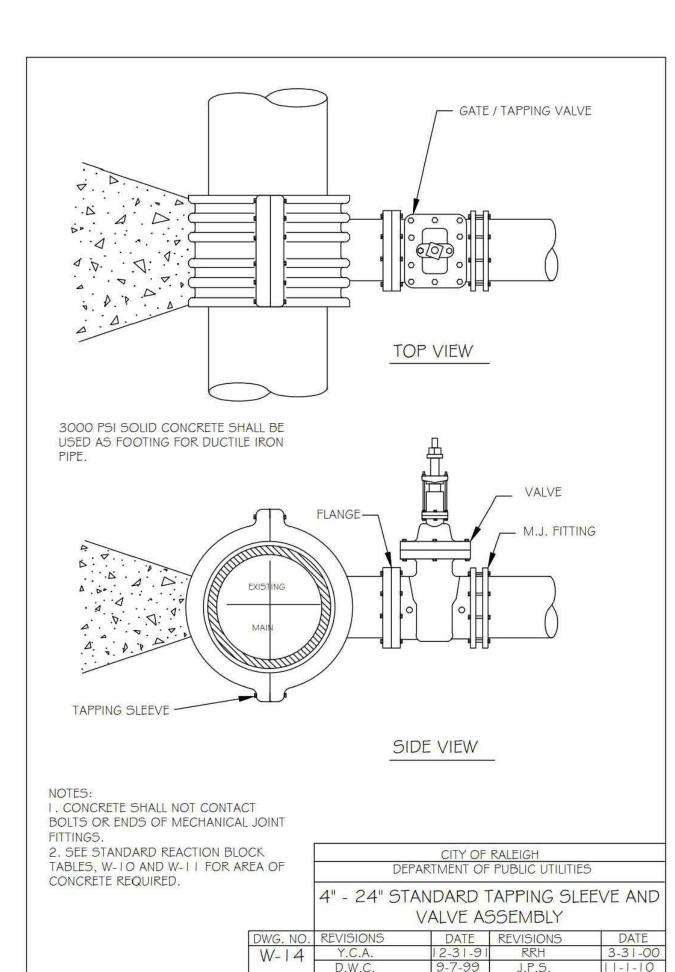
GLANDS

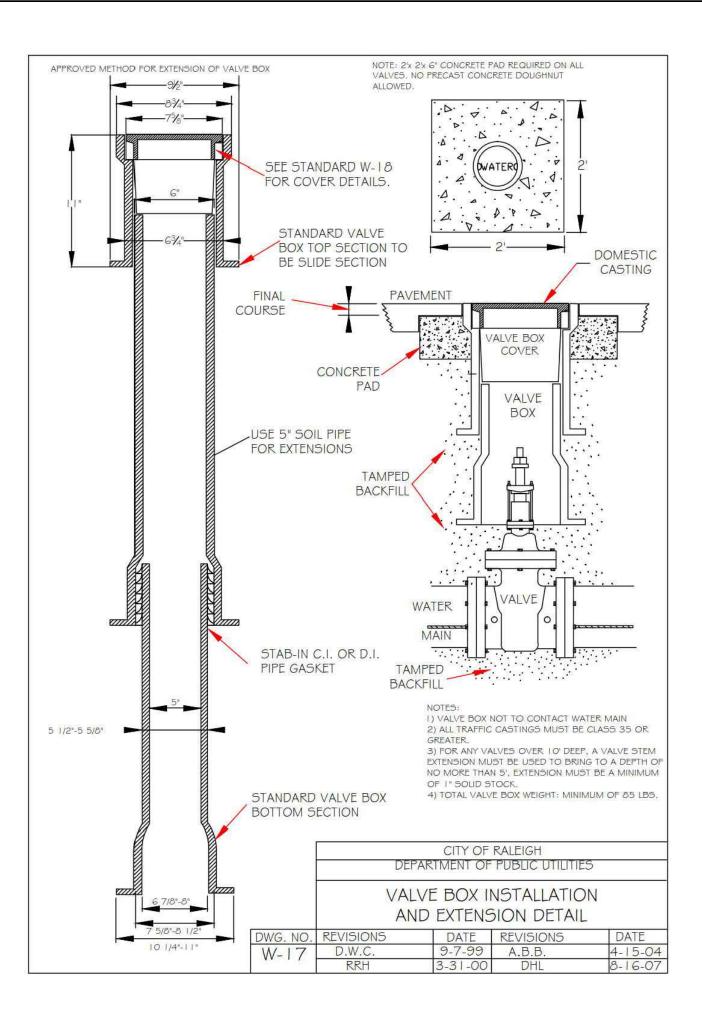
CITY OF RALEIGH

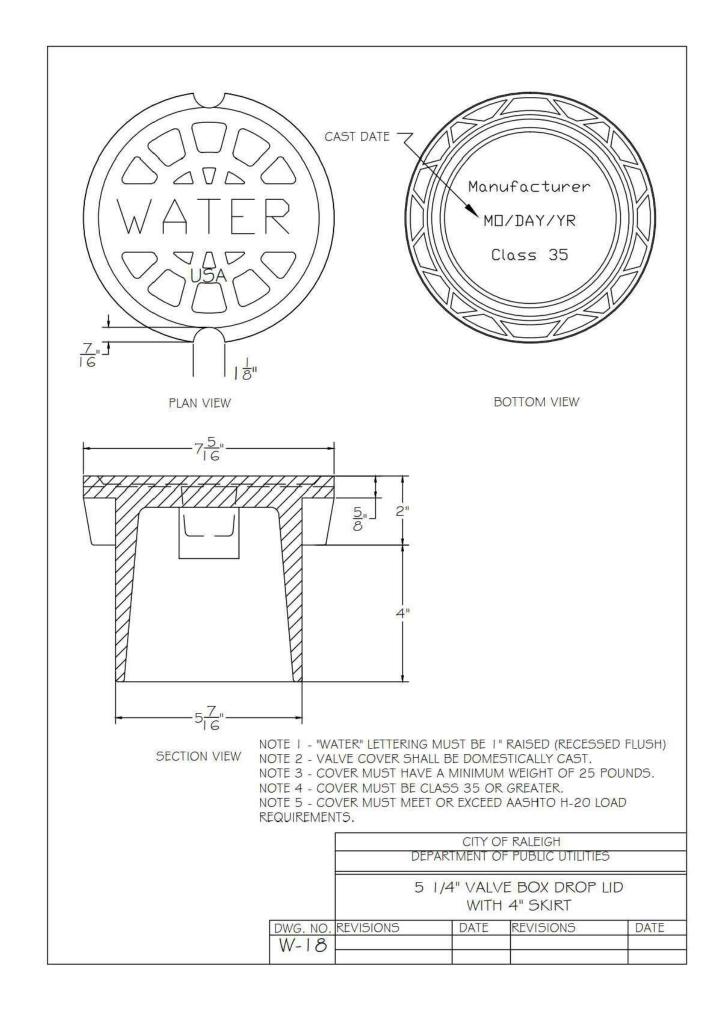
DEPARTMENT OF PUBLIC UTILITIES

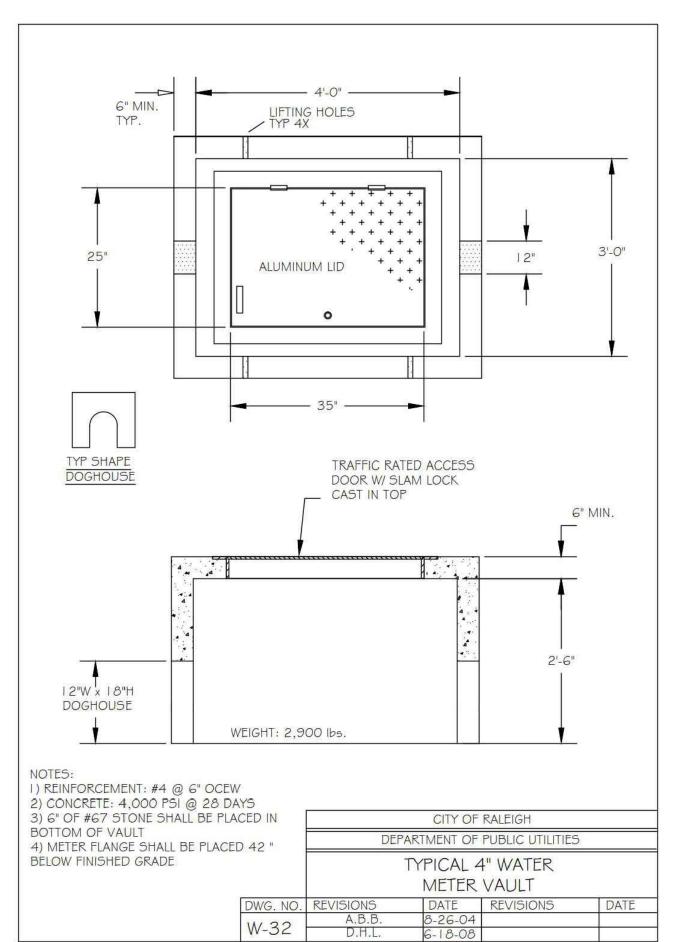
STANDARD FIRE HYDRANT

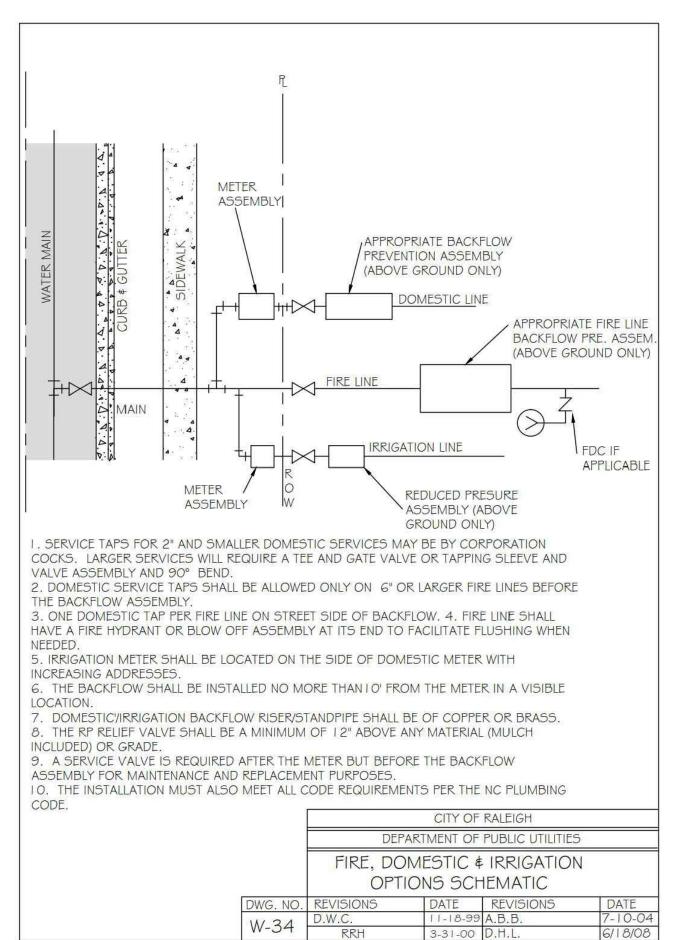
INSTALLATION DETAIL

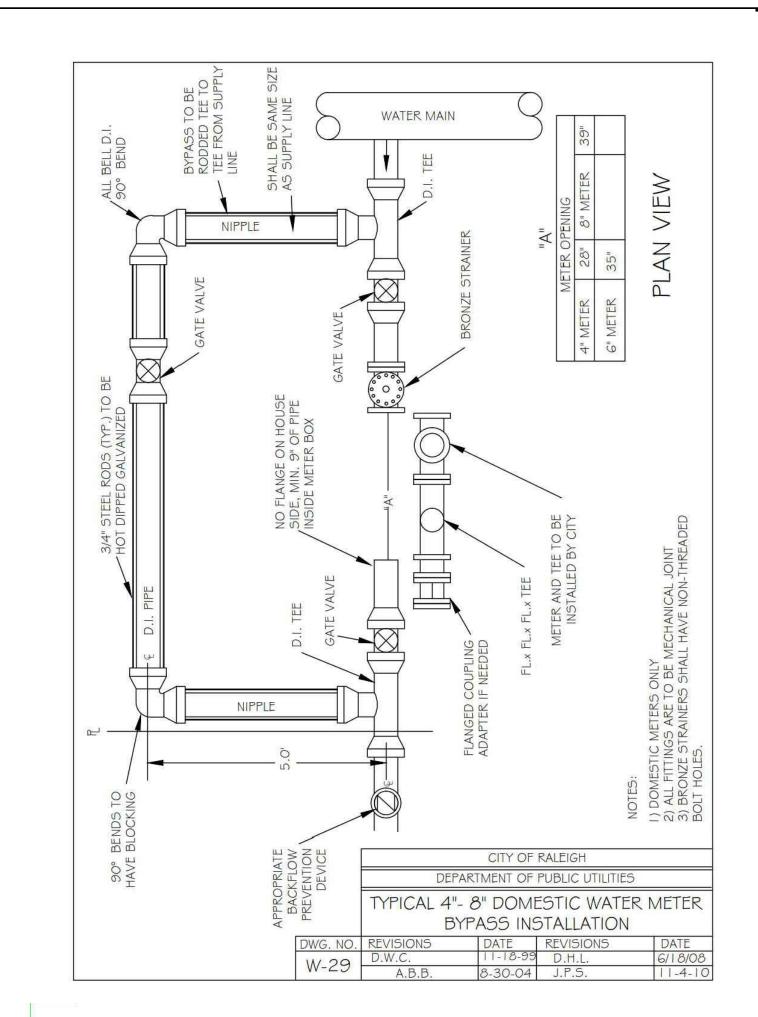


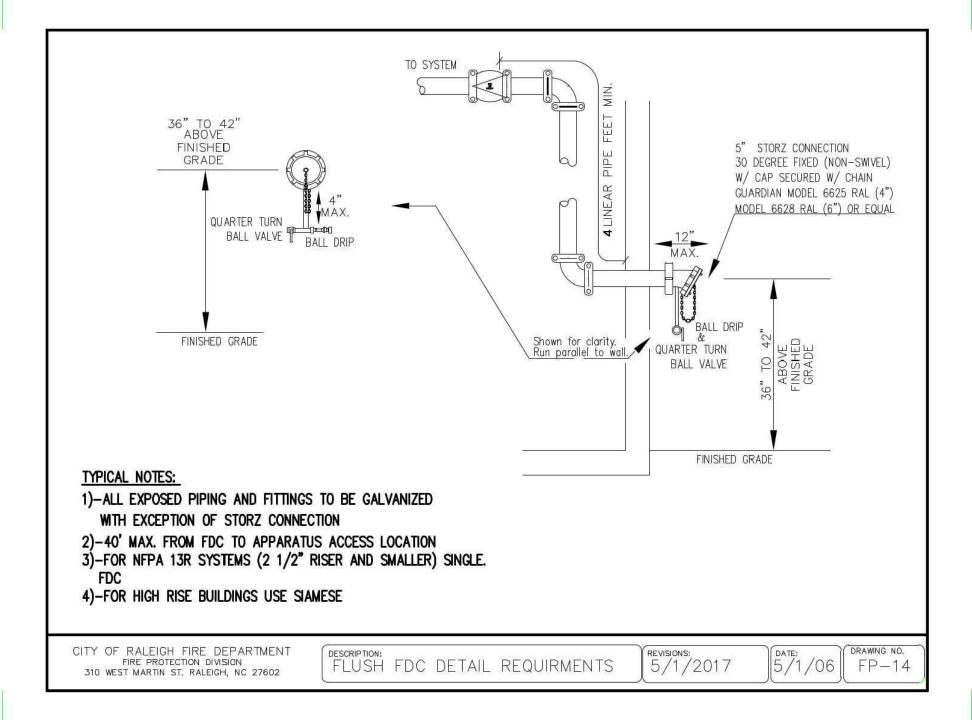














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NORTHWOOD RAVIN

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REVISIONS

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PLAN INFORMATION

PROJECT NO. RAV-23003 FILENAME RAV23003-ASR-D1

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09.06.2024 SHEET

WATER DETAILS

STORMWATER CONTROL MEASURE 'A' CONSTRUCTION SPECIFICATIONS

GENERAL NOTES

- 1. ANY DISCREPANCIES IN THE PLANS AND NOTES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.
- PRIOR TO ANY CONSTRUCTION OR PLACEMENT OF ANY BACKFILL, THE ONSITE GEOTECHNICAL ENGINEER SHALL INSPECT THE EXCAVATION AREA FOR THE STORMWATER AND STORMFILTER VAULTS WITHIN THIS AREA TO ASSESS WHETHER SUITABLE SOILS EXIST AT THE SUBGRADE LEVEL. IF THE CONTRACTOR CONSTRUCTS THE STORMWATER AND STORMFILTER VAULTS PRIOR TO INSPECTION, THEN THIS AREA SHALL BE UNCOVERED AND TESTED (TO THE ENGINEER'S AND OWNER'S APPROVAL) AT THE CONTRACTOR'S EXPENSE.
- 3. THE STORMWATER AND STORMFILTER VAULTS SHALL NOT BE USED AS A TEMPORARY EROSION CONTROL DEVICE (I.E. SEDIMENT TRAP OR SEDIMENT BASIN) DURING CONSTRUCTION.
- 4. PRIOR TO PLACING THE STORMFILTER CARTRIDGES WITHIN THE VAULT, THE CONTRACTOR SHALL REQUEST AN ONSITE MEETING WITH THE DESIGN ENGINEER AND THE EROSION CONTROL INSPECTOR TO ENSURE THE UPSTREAM DRAINAGE AREA IS COMPLETELY STABILIZED (I.E. GOOD VEGETATIVE COVER). IF THE CONTRACTOR DECIDES TO PLACE THE STORMFILTER CARTRIDGES PRIOR TO APPROVAL FROM THE DESIGN ENGINEER AND THE EROSION CONTROL INSPECTOR, THEN THE CONTRACTOR SHALL REPLACE, AS NECESSARY, THE STORMFILTER CARTRIDGES NEEDED FOR THE SYSTEM TO FUNCTION PROPERLY AT HIS / HER EXPENSE SHOULD THE STORMFILTER NOT FUNCTION PROPERLY (I.E. WILL NOT DRAIN DUE TO SEDIMENT DEPOSITION) DUE TO AN UNSTABILIZED UPSTREAM DRAINAGE AREA.
- 5. ONCE CONSTRUCTED, THE STORMWATER AND STORMFILTER VAULTS SHALL NOT RECEIVE STORMWATER RUNOFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREAS TO THE STORMWATER AND STORMFILTER VAULTS HAVE BEEN COMPLETELY STABILIZED AND SITE
- 6. ALL COMPONENTS OF THE STORMWATER AND STORMFILTER VAULTS (JOINT/RISER CONNECTIONS, ENDCAPS, ACCESS MANHOLES, ETC.) SHALL BE DESIGNED BY OTHERS. PRIOR TO ORDERING OR INSTALLATION, THE SITE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN NORTH CAROLINA, TO THE DESIGN ENGINEER FOR REVIEW. THE STRUCTURAL DESIGN OF THE STORMWATER AND STORMFILTER VAULTS, ALONG WITH ITS ASSUMPTIONS, IS ALSO BY OTHERS. THE JOHN R. McADAMS COMPANY, INC. AND ITS EMPLOYEES ASSUME NO LIABILITY WITH RESPECT TO ANY ASPECT OF THE STRUCTURAL DESIGN FOR THE STORMWATER AND STORMFILTER VAULTS.
- 7. THE STRUCTURAL DESIGN FOR THE STORMWATER AND STORMFILTER VAULTS SHALL INCLUDE A FOUNDATION DRAIN (DESIGN BY OTHERS). THE FOUNDATION DRAINS SHALL BE PLACED ON ALL FOUR SIDES OF THE STORMWATER AND STORMFILTER VAULTS WITHIN THE FOUNDATION (NOT DIRECTLY BENEATH). THE FOUNDATION DRAIN SYSTEM SHALL TIE TO THE NEAREST STORM SEWER INLET WITH INVERT LOWER THAN THE INVERT OF THE FOUNDATION DRAIN. THE FOUNDATION DRAIN SYSTEM DESIGN SHALL BE INCLUDED WITH THE STORMWATER AND STORMFILTER VAULTS SHOP DRAWINGS SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW.
- 8. ALL PIPE/RISER CONNECTIONS AND JOINTS ASSOCIATED WITH THE STORMWATER AND STORMFILTER VAULTS SHALL BE WATER TIGHT. THE MECHANIŚM FOR ACHIEVING THIS SHALL BE INCLUDED WITH THE SHOP DRAWINGS SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW.
- 9. INVERTS OF ALL CONCRETE STORM DRAINAGE MANHOLE STRUCTURES SHALL BE FORMED WITH NON-SHRINK GROUT TO THE INVERT ELEVATION OF THE LOWEST PIPE.
- 10. ALL PIPE PENETRATIONS THROUGH CONCRETE STRUCTURES SHALL BE MADE WATERTIGHT USING NON-SHRINK CEMENTITIOUS GROUT.
- 11. THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ANY PUMPING EQUIPMENT, ETC. NEEDED FOR REMOVAL OF WATER FROM VARIOUS PARTS OF THE STORMWATER AND STORMFILTER VAULT SYSTEM SITE. IT IS ANTICIPATED THAT PUMPING WILL BE NECESSARY IN THE EXCAVATION AREAS. DURING PLACEMENT OF FILL WITHIN THIS AREA (OR OTHER AREAS AS NECESSARY), THE CONTRACTOR SHALL KEEP THE WATER LEVEL BELOW THE BOTTOM OF THE EXCAVATION. THE MANNER IN WHICH THE WATER IS REMOVED SHALL BE SUCH THAT THE EXCAVATION BOTTOM AND SIDESLOPES ARE STABLE.
- 12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADHERE TO ALL CURRENT OSHA REGULATIONS FOR CONFINED SPACE ENTRY.
- 13. SCHEDULE A FINAL AS-BUILT INSPECTION AND AS-BUILT SURVEY WITH THE ENGINEER. AN AS-BUILT INSPECTION SHOULD BE SCHEDULED A MINIMUM OF 60 DAYS BEFORE A PERMIT TO IMPOUND IS REQUIRED. ANY COMMENTS OR DEFICIENCIES IN SYSTEM CONSTRUCTION MUST BE CORRECTED TO THE SATISFACTION OF THE ENGINEER AND OWNER BEFORE CERTIFICATION SHALL BE GRANTED. NO WATER SHALL BE IMPOUNDED BEFORE AN APPROVAL TO IMPOUND IS ISSUED FROM THE CITY OF RALEIGH.
- 14. CITY OF RALEIGH INSPECTOR MUST ISSUE FINAL SITE REPORT INDICATING CONSTRUCTION IS COMPLETE PRIOR TO SUBMITTAL OF AS-BUILT CERTIFICATION PACKAGE TO THE CITY.

STORMWATER MANAGEMENT SYSTEM MATERIAL SPECIFICATIONS

- 1. THE 15"0 RCP INLET BARREL SHALL BE CLASS III RCP, MODIFIED BELL AND SPIGOT, MEETING THE REQUIREMENTS OF ASTM C76-LATEST. THE PIPE SHALL HAVE CONFINED O-RING RUBBER GASKET JOINTS MEETING ASTM C-443-LATEST. THE PIPE JOINTS SHALL BE TYPE
- 2. GEOTEXTILE FABRIC FOR THE 15" RCP INLET BARREL JOINTS SHALL BE MIRAFI 180N OR ENGINEER APPROVED EQUAL (NON-WOVEN FABRIC). THE ONSITE GEOTECHNICAL ENGINEER SHALL APPROVE FABRIC FOR USE.
- 3. THE CONCRETE SPLITTER CONTROL BOX SHALL BE PROVIDED WITH STEPS 1'-2" ON CENTER. STEPS SHALL BE PROVIDED ON THE INNER WALL OF THE CONTROL BOX. STEPS SHALL BE IN ACCORDANCE WITH NCDOT STD. 840.66 OR APPROVED EQUAL. PLEASE REFER TO SHEET C9.01 FOR LOCATION OF THE ACCESS STEPS.
- 4. ALL POURED CONCRETE SHALL BE MINIMUM 3000 PSI (28 DAY) UNLESS OTHERWISE NOTED.
- 5. ALL STRUCTURAL DESIGN ASSOCIATED WITH THE STORMWATER AND STORMFILTER VAULTS AND SURROUNDING STRUCTURES SHALL BE DESIGNED BY OTHERS.
- 6. CONTRACTOR TO PROVIDE A LETTER FROM MATERIAL SUPPLIER(S) STATING MATERIALS MEET THE SPECIFIED STANDARDS PRIOR TO

FOUNDATION / BEDDING NOTES

- 1. ONCE THE EXCAVATION IS COMPLETE AND PRIOR TO INSTALLATION OF THE STORMWATER MANAGEMENT SYSTEM, THE ONSITE GEOTECHNICAL ENGINEER SHALL VERIFY THE BEARING CAPACITY OF THE UNDERLYING SOILS TO SERVE AS A FOUNDATION FOR THE STORMWATER MANAGEMENT SYSTEM. IF THE ONSITE GEOTECHNICAL ENGINEER DEEMS THE FOUNDATION SOILS AS UNSUITABLE, THEN THE UNSUITABLE MATERIAL SHOULD BE REMOVED DOWN TO A SUITABLE DEPTH AND THEN BUILT BACK UP TO THE CORRECT ELEVATION WITH A COMPACTED BACKFILL MATERIAL THAT IS APPROVED BY THE ONSITE GEOTECHNICAL ENGINEER. THE APPROVED BACKFILL MATERIAL SHOULD HAVE A GRADATION THAT WILL NOT ALLOW THE MIGRATION OF FINES, WHICH COULD CAUSE SETTLEMENT OF THE STORMWATER MANAGEMENT SYSTEM. IF NECESSARY, A GEOTEXTILE FABRIC CAN BE USED TO SEPARATE THE UNDERLYING SOILS AND THE BACKFILL MATERIAL. THIS GEOTEXTILE FABRIC (IF USED) IS TO BE SPECIFIED BY THE ON-SITE GEOTECHNICAL ENGINEER.
- 2. PLEASE NOTE THAT IF THE CONTRACTOR CONSTRUCTS AND COVERS UP THE EXCAVATION FOR THE UNDERGROUND VAULT SYSTEM PRIOR TO INSPECTION, THEN THIS AREA SHALL BE UNCOVERED AND TESTED (TO THE ENGINEER'S AND OWNER'S APPROVAL) AT THE
- 3. THE FOUNDATION SUBGRADE SHALL BE GRADED TO A UNIFORM OR SLIGHTLY SLOPING GRADE PRIOR TO PLACEMENT OF THE BEDDING MATERIAL. IF THE FOUNDATION SUBGRADE WILL BE EXPOSED FOR AN EXTENDED PERIOD OF TIME DURING CONSTRUCTION, THEN IT SHOULD BE GRADED TO A SLIGHT SLOPE SUCH THAT SATURATION OF THE SUBGRADE DOES NOT OCCUR.
- 4. THE EXCAVATION PIT SHALL BE LINED (ON THE BOTTOM AND ALL FOUR SIDES) WITH A NON-WOVEN GEOTEXTILE FABRIC (MIRAFI 180N OR APPROVED EQUIVALENT). THE ONSITE GEOTECHNICAL ENGINEER SHALL APPROVE FABRIC FOR USE.
- 5. THE BEDDING MATERIAL FOR THE STORMWATER MANAGEMENT SYSTEM SHALL BE SPECIFIED BY THE ON-SITE GEOTECHNICAL ENGINEER. TYPICALLY, A WELL-GRADED GRANULAR MATERIAL WILL BE USED FOR THE BEDDING. PLEASE NOTE THAT IF CONSTRUCTION EQUIPMENT WILL BE OPERATING FOR AN EXTENDED PERIOD OF TIME ON THE BEDDING, THEN THE APPROPRIATE MEASURES (E.G. ENGINEERED FABRIC, STIFF GEOGRID, ETC.) SHALL BE TAKEN TO ENSURE THE INTEGRITY OF THE BEDDING IS NOT COMPROMISED.
- 6. THE CONTRACTOR SHALL PROVIDE A FOUNDATION DRAIN FOR THE STORMWATER MANAGEMENT SYSTEM. THE FOUNDATION DRAIN SHALL CONSIST OF 6-INCH DIA. PERFORATED PVC PIPE WRAPPED IN GEOTEXTILE (SEE MATERIAL SPECIFICATIONS). THESE PIPES SHALL BE PLACED ON ALL FOUR SIDES OF THE STORMWATER MANAGEMENT SYSTEM WITHIN THE FOUNDATION (NOT DIRECTLY BENEATH THE STORMWATER MANAGEMENT SYSTEM). THE 6-INCH PIPES SHALL POSITIVELY DRAIN TO DOWNSTREAM STORM DRAINAGE STRUCTURE.

STORMWATER AND STORMFILTER VAULT CONSTRUCTION NOTES

- 1. STORMFILTER VAULT CONFIGURATION IS PROVIDED ON SHEET C9.02.
- 2. ABSOLUTELY NO RUNOFF SHALL ENTER THE STORMWATER AND STORMFILTER VAULTS UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
- 3. MANHOLE ACCESS SHALL BE PROVIDED FOR THE STORMWATER AND STORMFILTER VAULTS. MANHOLES SHALL BE IN COMPLIANCE WITH CITY OF RALEIGH STANDARD DETAILS BUT SHALL BE A MINIMUM OF 24 INCHES IN DIAMETER TO COMPLY WITH OSHA CONFINED SPACE REQUIREMENTS (OR MINIMUM OSHA REQUIREMENTS APPLICABLE AT TIME OF CONSTRUCTION). CONTRACTOR SHALL PROVIDE ACCESS LADDERS FOR ACCESS BELOW ALL MANHOLES. MANHOLE COVERS SHALL ALLOW FOR PROPER

BACKFILL MATERIAL NOTES

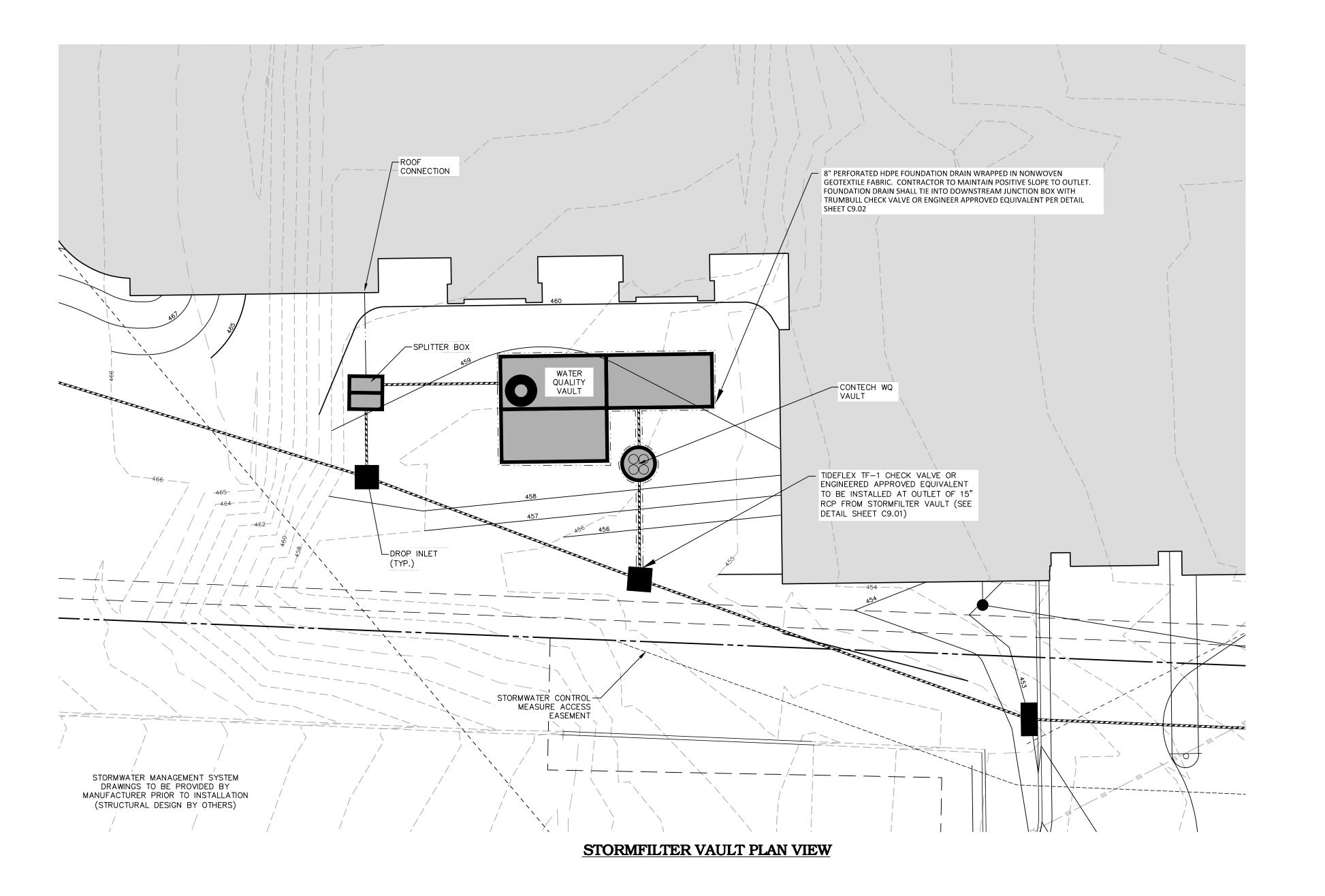
- 1. THE ON-SITE GEOTECHNICAL ENGINEER SHALL SPECIFY THE BACKFILL MATERIAL FOR THE VAULT SYSTEM.
- 2. THE BACKFILL MATERIAL SHOULD BE FREE OF ROCKS, FROZEN LUMPS, AND OTHER FOREIGN MATTER THAT COULD CAUSE HARD SPOTS WITHIN THE BACKFILL MATERIAL, OR THAT COULD DECOMPOSE AND CREATE VOIDS.
- 3. HIGHLY PLASTIC SILTS, HIGHLY PLASTIC CLAYS, ORGANIC SILTS, ORGANIC CLAYS, AND PEATS SHOULD NOT BE USED AS A
- 4. THE BACKFILL MATERIAL AND PLACEMENT SHALL MEET THE SPECIFICATIONS OF THE INTENDED USE OF THE AREA. SOILS, COMPACTION, AND PLACEMENT METHODS SHALL MEET THE OVERALL CRITERIA FOR THIS USE.
- 5. ANY MATERIAL STOCKPILING ON TOP OF THE VAULT SYSTEM SHALL BE APPROVED BY THE STRUCTURAL DESIGN ENGINEER.

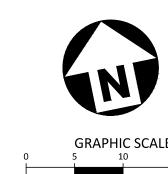
SYSTEM TESTING NOTES

1. PRIOR TO PLACEMENT OF THE BACKFILL MATERIAL, CONTRACTOR SHALL TEST FOR WATER TIGHTNESS. ENTRANCES AND EXITS SHALL BE PLUGGED AND THE SYSTEM COMPLETELY FILLED WITH WATER TO DEMONSTRATE WATER TIGHTNESS. WATER TIGHTNESS MEANS NO LEAKAGE FOR A PERIOD OF 24 HOURS. CONTRACTOR SHALL CALL AND SCHEDULE THE FIELD TESTING OF STORMWATER CONTROL MEASURE WITH THE ENGINEER AT LEAST 2 WORKING DAYS PRIOR TO THE TEST. THE CONTRACTOR SHALL PROVIDE WRITTEN REPORTS TO THE ENGINEER VERIFYING THE WATER TIGHTNESS OF THE STORMWATER MANAGEMENT

STATEMENT OF RESPONSIBILITY

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





SEE SHEET CO.00 FOR ALL PROJECT NOTES.

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION



621 Hillsborough Street

Suite 500 Raleigh, NC 27603 phone 919. 823. 4300 fax 919. 361. 2269 license number: C-0293, C-187

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NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460



NORTHWOOD RAVIN

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REVISIONS

NO. DATE

PLAN INFORMATION

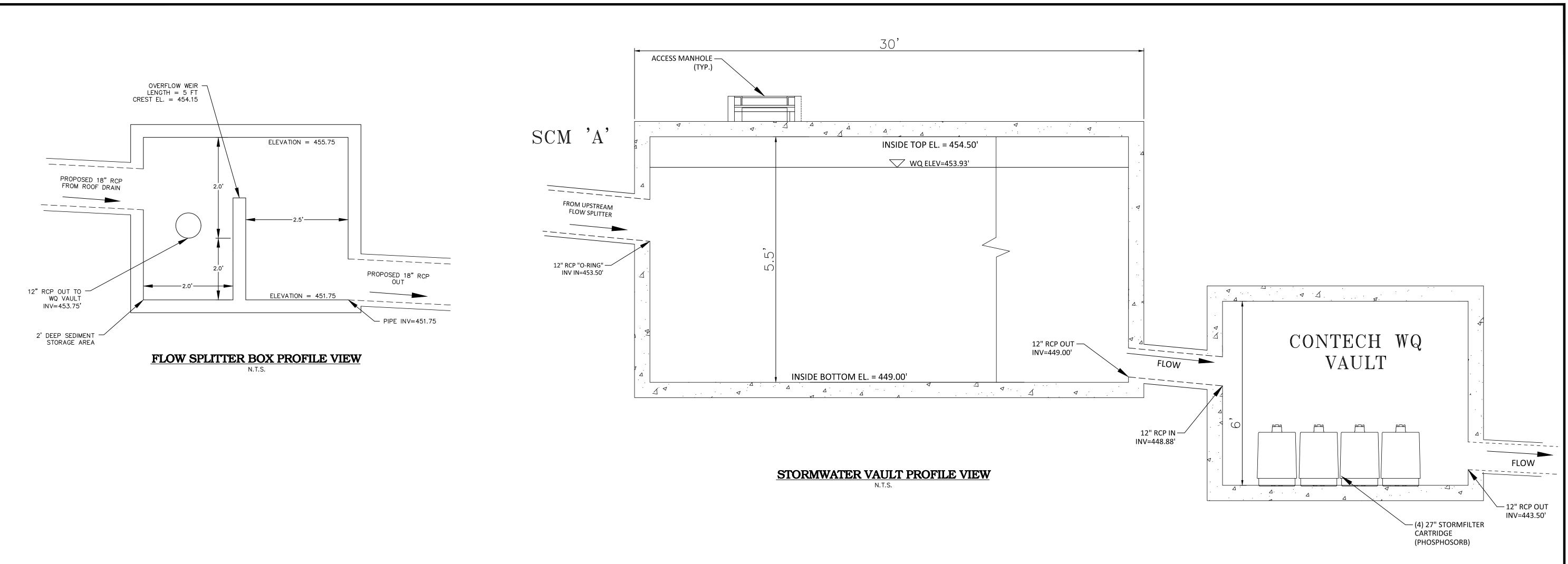
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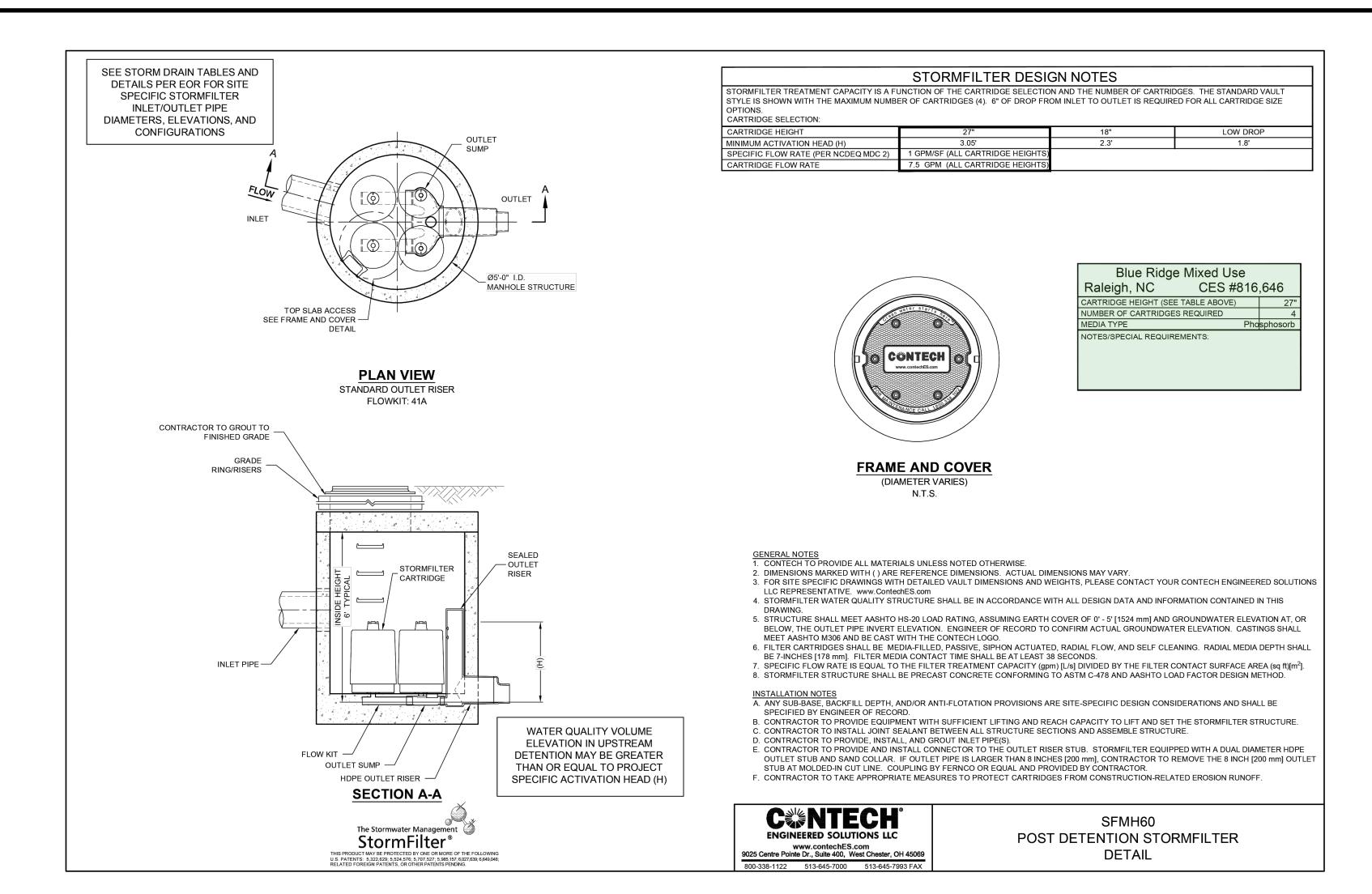
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SCALE 1"=10' 09.06.2024

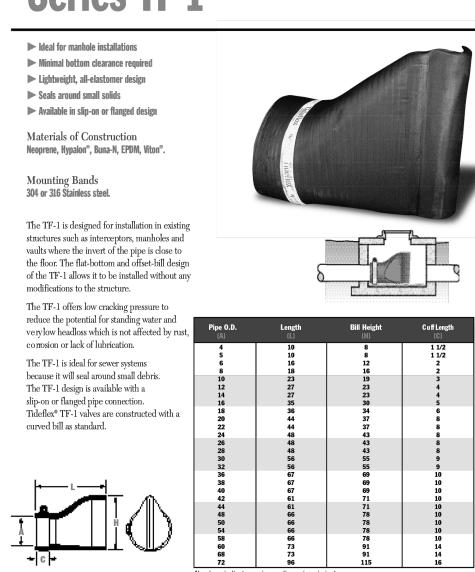
SHEET

STORMWATER CONTROL **MEASURE PLAN VIEW**









TIDEFLEX CHECK VALVE DETAIL

SEE SHEET CO.00 FOR ALL PROJECT NOTES.

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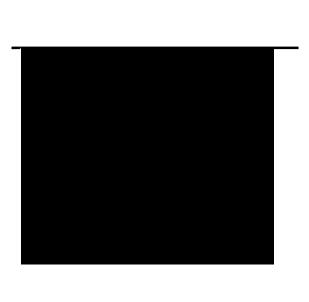
NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460



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REVISIONS

NO. DATE

PLAN INFORMATION

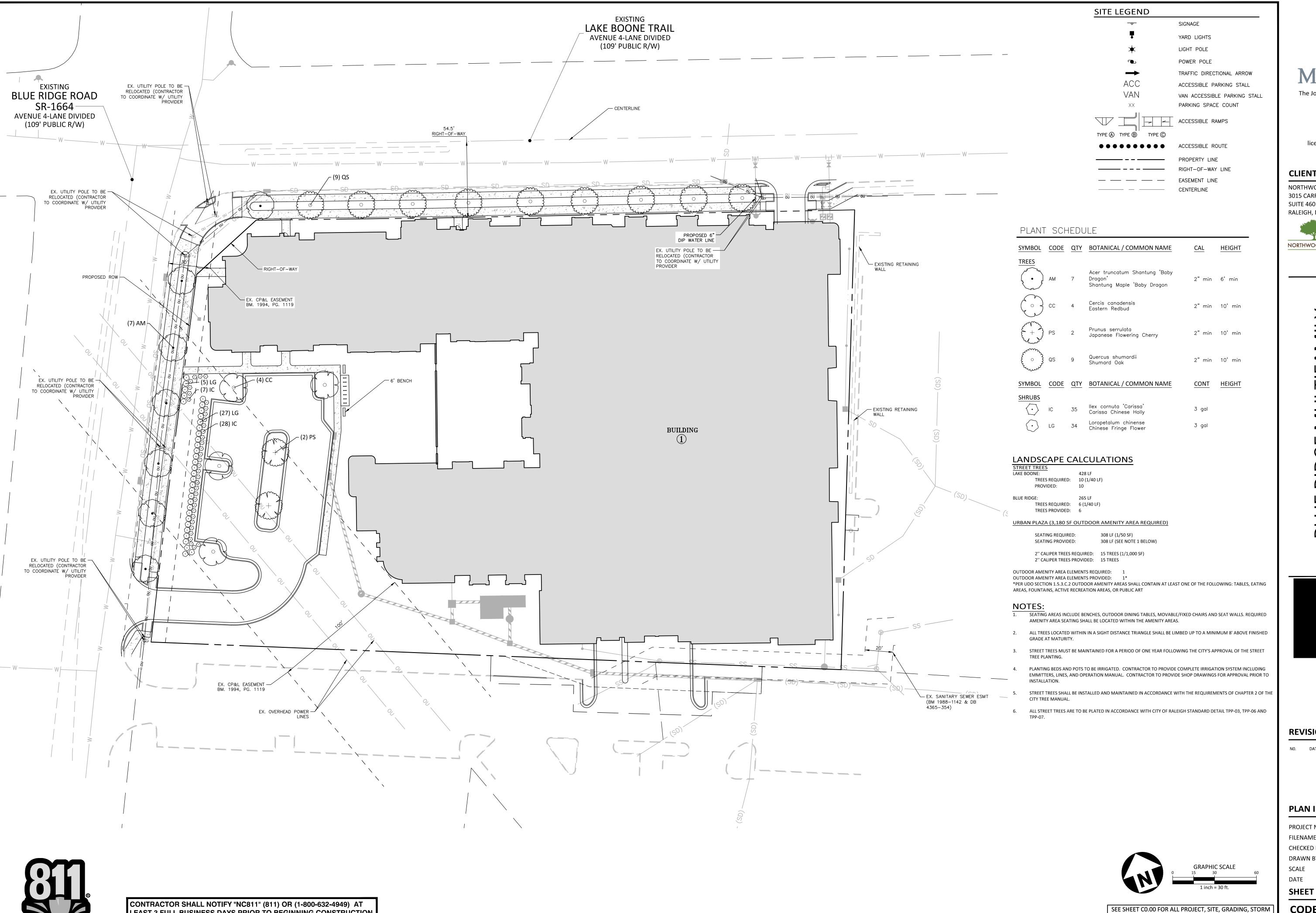
PROJECT NO. RAV-23003 KAN22002-ASR-SW1 FILENAME

CHECKED BY DRAWN BY

SCALE DATE 09.06.2024

SHEET

STORMWATER CONTROL **MEASURE DETAILS**



LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION

CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE

OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED.

THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811".

REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

Know what's below.
Call before you dig.



The John R. McAdams Company, Inc. 621 Hillsborough Street Suite 500 Raleigh, NC 27603

phone 919. 823. 4300 fax 919. 361. 2269 license number: C-0293, C-187

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NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460 RALEIGH, NORTH CAROLINA 27560



NORTHWOOD RAVIN



REVISIONS

NO. DATE

DRAINAGE AND UTILITY NOTES

SPECIFICATIONS AND DETAILS.

ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST

VERSION OF THE CITY OF RALEIGH AND NCDOT STANDARDS,

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

PLAN INFORMATION

PROJECT NO. RAV-23003 FILENAME RAV23003-ASR-LS1 CHECKED BY

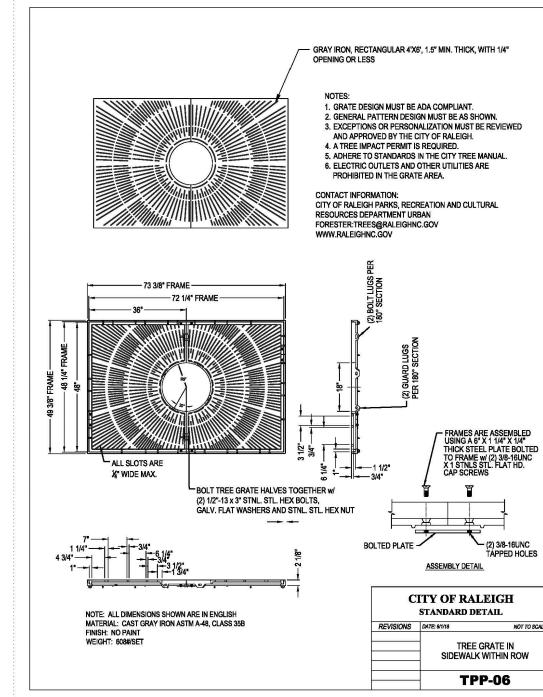
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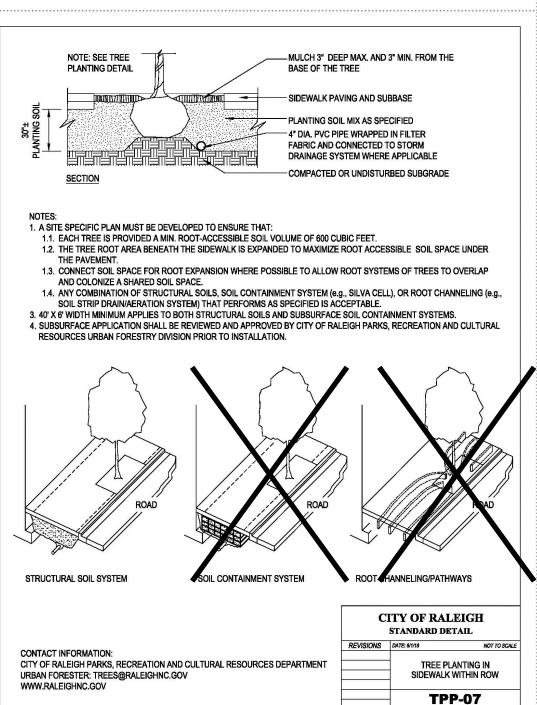
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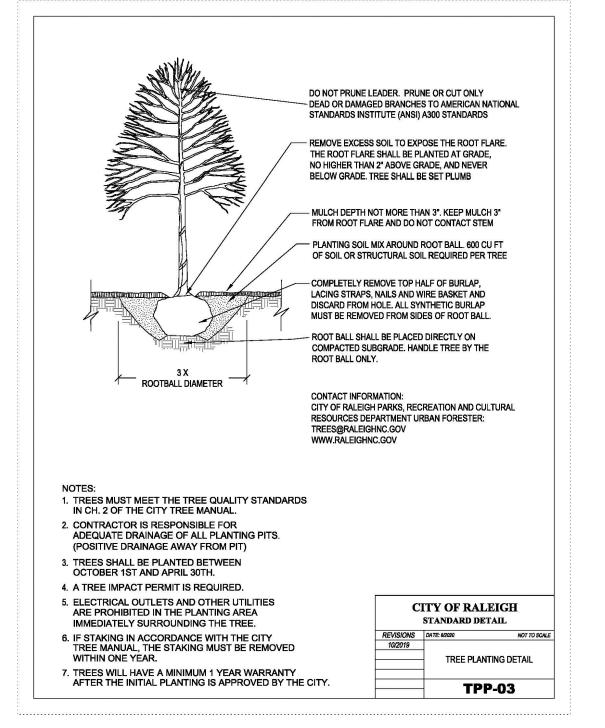
CODE LANDSCAPE PLAN

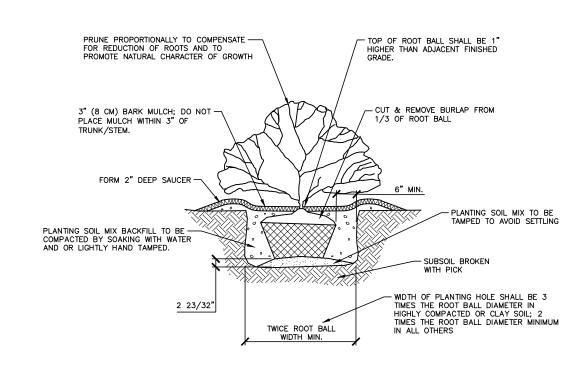
GENERAL LANDSCAPE NOTES:

- 1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
- 2. CONTRACTOR IS RESPONSIBLE FOR THE SITE INSPECTION BEFORE LANDSCAPE CONSTRUCTION AND INSTALLATION IN ORDER TO BECOME FAMILIAR WITH THE EXISTING
- 3. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE BEGINNING DEMOLITION OR INSTALLATION.
- 4. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE NOTES, SPECIFICATIONS, DRAWINGS OR SITE CONDITIONS FOR RESOLUTION PRIOR TO
- 5. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 6. THIS PLAN IS FOR PLANTING PURPOSES ONLY. FOR INFORMATION REGARDING BUILDINGS, GRADING, WALLS, ETC., REFER TO ARCHITECTURE, SITE AND GRADING PLANS.
- 7. VERIFICATION OF TOTAL PLANT QUANTITIES AS SHOWN IN THE PLANT SCHEDULE SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
- 8. CONTRACTOR TO ENSURE PROPER STABILIZATION AND SEEDING OF THE SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
- 9. LANDSCAPE MATERIAL SHALL BE WELL FORMED, VIGOROUS, GROWING SPECIMENS WITH GROWTH TYPICAL OF VARIETIES SPECIFIED AND SHALL BE FREE FROM DAMAGE, INSECTS AND DISEASES. MATERIAL SHALL EQUAL OR SURPASS #1 QUALITY AS DEFINED IN THE CURRENT ISSUE OF "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
- 10. ALL PLANT MATERIAL IS TO BE CAREFULLY HANDLED BY THE ROOT BALL, NOT THE TRUNK, BRANCHES AND/OR FOLIAGE OF THE PLANT. MISHANDLED PLANT MATERIAL MAY BE REJECTED BY THE LANDSCAPE ARCHITECT.
- 11. ALL PLANT MATERIAL IS TO BE WELL ROOTED, NOT ROOT BOUND, SUCH THAT THE ROOT BALL REMAINS INTACT THROUGHOUT THE PLANTING PROCESS. DEFICIENT PLANT MATERIAL MAY BE REJECTED BY THE LANDSCAPE ARCHITECT OR OWNER.
- 12. ALL PLANTS TO BE A MINIMUM OF WHAT IS SPECIFIED IN THE PLANT SCHEDULE. ANY CHANGES OR SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT AND GOVERNING JURISDICTION PRIOR TO ANY HOLE BEING DUG.
- 13. CONTRACTOR TO COORDINATE WITH OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT TO ESTABLISH THE EXTENTS OF MULCH/SEED/SOD IF NOT SPECIFICALLY SHOWN ON PLANS.
- 14. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE IN ALL PLANTING AREAS.
- 15. PROPOSED TREES TO BE PLANTED A MINIMUM 20 FEET FROM ANY LIGHT POLE AS MEASURED FROM TRUNK OF THE TREE TO THE POLE.
- 16. PROPOSED TREES TO BE PLANTED A MINIMUM 10 FEET FROM ANY FIRE HYDRANT AS MEASURED FROM TRUNK OF THE TREE TO THE HYDRANT.
- 17. CONTRACTOR SHALL COMPLETE SOIL TEST IN ALL PLANTING AREAS TO DETERMINE SOIL AMENDMENT REQUIREMENTS UNLESS WAIVED BY OWNER'S REPRESENTATIVE. CONTRACTOR SHALL ADJUST PH AND FERTILITY BASED UPON THE SOIL TEST RESULTS.
- 18. TOPSOIL SHALL BE FREE OF MATERIAL LARGER THAN 1.0 INCH IN DIAMETER OR LENGTH AND SHALL NOT CONTAIN SLAG, CINDERS, STONES, LUMPS OF SOIL, STICKS, ROOTS, TRASH, OR OTHER EXTRANEOUS MATERIAL.
- 19. LOOSEN SUBGRADE / SURFACE SOIL TO A MINIMUM DEPTH OF 6 INCHES. APPLY SOIL AMENDMENTS AND FERTILIZERS AS REQUIRED BY THE SOIL TEST RESULTS TO ACHIEVE A HEALTHY GROWING MEDIA AND MIX THOROUGHLY INTO TOP 4 INCHES OF SOIL. SPREAD PLANTING SOIL MIX TO A DEPTH OF 6 INCHES BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
- 20. IF IMPORTED TOPSOIL IS REQUIRED, THE SUBGRADE SHALL BE SCARIFIED OR TILLED TO A DEPTH OF AT LEAST 6 INCHES PRIOR TO INSTALLATION OF IMPORTED TOPSOIL. FOLLOWING INSTALLATION OF IMPORTED TOPSOIL, THE TOPSOIL SHALL BE TILLED TO INTEGRATE THE SOIL PROFILES.
- 21. PLANT MATERIALS ARE TO BE GUARANTEED FOR A PERIOD OF 12 MONTHS. PLANT MATERIALS WHICH REMAIN UNHEALTHY WILL BE REPLACED BY THE LANDSCAPE CONTRACTOR BEFORE THE EXPIRATION OF THE GUARANTEE PERIOD OR IMMEDIATELY IF SO DIRECTED BY THE OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT.
- 22. ALL TREE PLANTINGS SHALL BE MULCHED TO A DEPTH OF 3 INCHES, AND WITH A MINIMUM 3 FOOT RADIUS FROM BASE OF TREE OR TO DRIPLINE. MULCH SHALL BE FREE OF TRASH AND MAINTAINED WEED FREE. MULCH SHALL NOT COVER THE ROOT FLARE. CONFIRM MULCH SPECIFICATIONS WITH OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT.
- 23. DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF EXTERIOR PLANTS DURING DELIVERY. DO NOT DROP EXTERIOR PLANTS DURING DELIVERY AND HANDLING.
- 24. DELIVER EXTERIOR PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IMMEDIATELY AFTER UNLOADING, STAND THE TREES UP TO REDUCE THE RISK OF SUN SCALD. PROPERLY STAGED TREES ARE STANDING, UNTIED AND SPACED. UNLESS IMMEDIATELY INSTALLED, SET EXTERIOR PLANTS AND TREES IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.
- 25. SEE LANDSCAPE DETAILS FOR TREE STAKING REQUIREMENTS.
- 26. EXCAVATE EDGES OF ALL PLANTING BEDS TO 2 INCH DEPTH TO FORM A NEAT AND CRISP DEFINITION.
- 27. CONTRACTOR SHALL REMOVE DEBRIS AND FINE GRADE ALL PLANTING AREAS PRIOR TO
- 28. REMOVE GUY WIRES AND STAKES AT END OF WARRANTY PERIOD OR ESTABLISHMENT.
- 29. FINISH GRADING: GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN PLUS OR MINUS 1/2 INCH OF FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINISHED GRADING TO AREAS THAT CAN BE PLANTED IN THE IMMEDIATE









O1 SHRUB INSTALLATION SCALE: 3/8"=1'-0"



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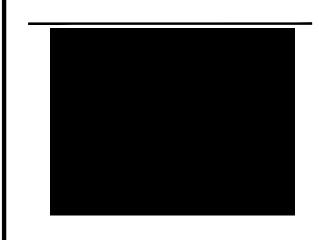
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NORTHWOOD RAVIN LLC 3015 CARRINGTON MILL BLVD SUITE 460 RALEIGH, NORTH CAROLINA 27560



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REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. RAV-23003 FILENAME RAV23003-ASR-LS1

CHECKED BY DRAWN BY 1":30' SCALE

DATE 08.23.2024

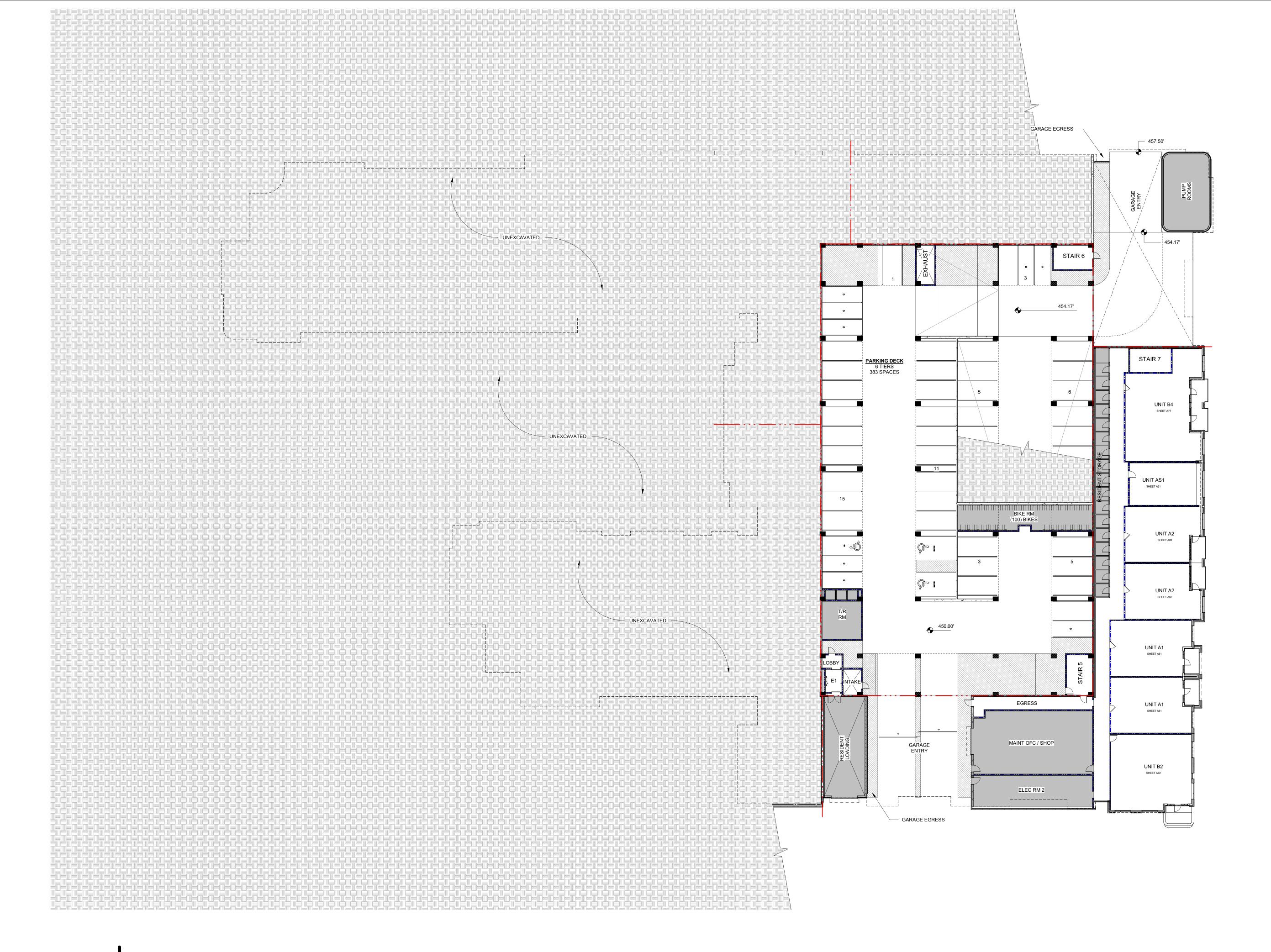
SHEET **CODE LANDSCAPE DETAILS** SEE SHEET CO.00 FOR ALL PROJECT, SITE, GRADING, STORM

SPECIFICATIONS AND DETAILS. PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

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DRAINAGE AND UTILITY NOTES





































UPPER LEVELS TRANSPARENCY:

OVERALL: 26,028 SF REQUIRED: 15%
OPENINGS: 12,486 SF PROVIDED: 48%

GROUND LEVEL TRANSPARENCY:

OVERALL: 6,160 SF REQUIRED: 20%
OPENINGS: 2,532 SF PROVIDED: 41%



NORTH ELEVATION



SOUTH ELEVATION



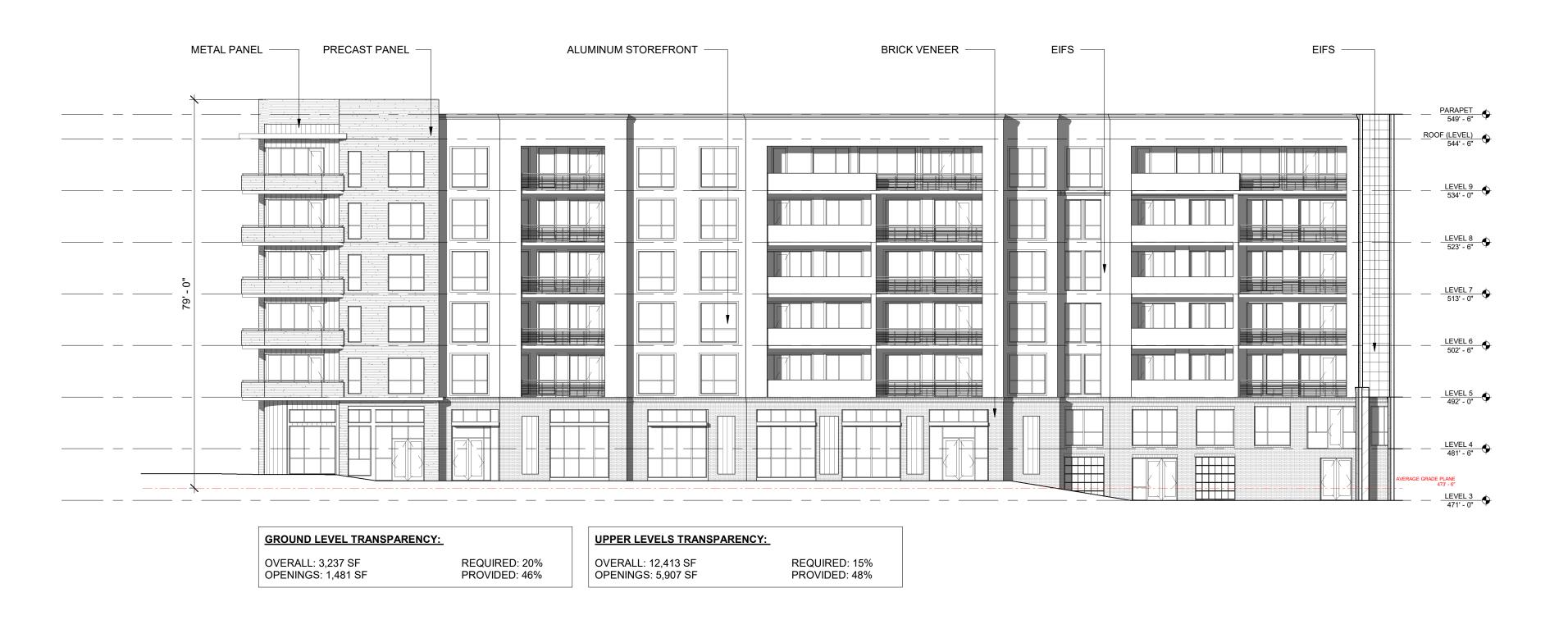




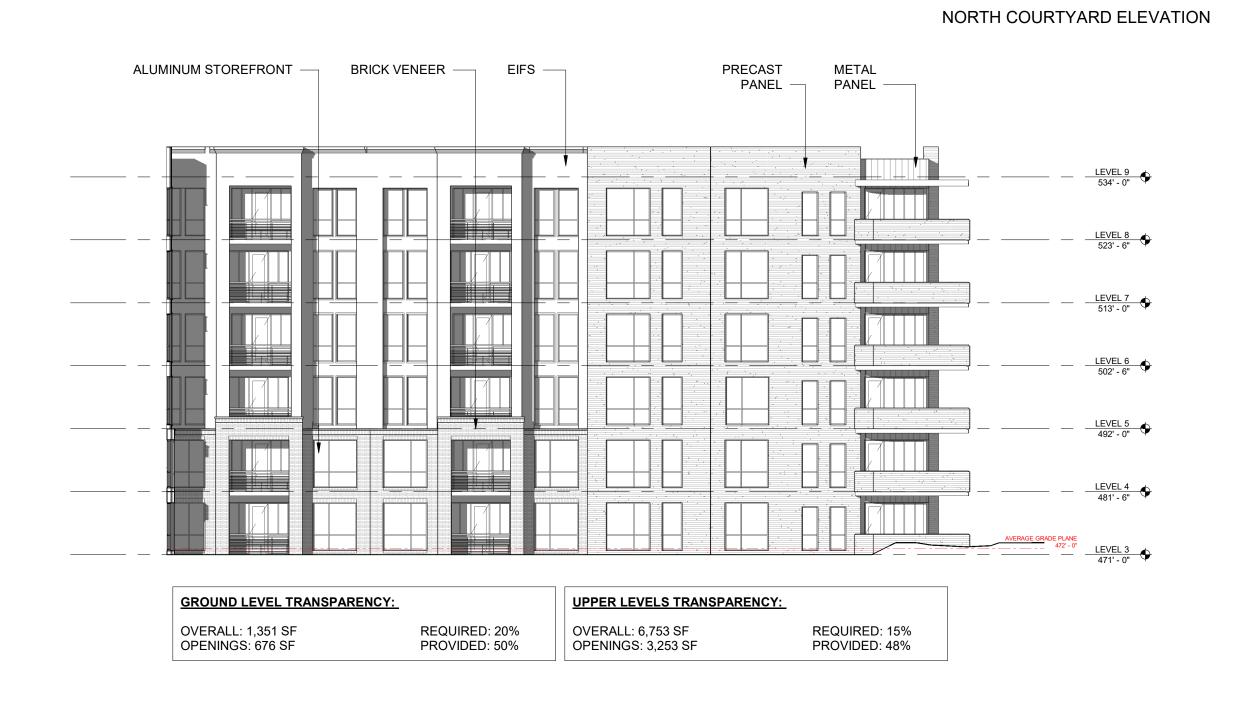
WEST ELEVATION



A42







WEST COURTYARD ELEVATION SOUTH COURTYARD ELEVATION

A43