

Memorandum

TO: Mayor and Town Board of Commissioners
FROM: Danny Johnson, AICP, Planning Director
DATE: May 27, 2020
RE: Agenda Item C. 2.

Public hearing (quasi-judicial) on Case: SP 19-04, Rolesville Crossfit site plan review for a one-story commercial building on a total of 1.78 acres, located at 850 Granite Falls Blvd and zoned Commercial Outlying Special Use District (CO-SUD).

Background

A request for a site plan approval (quasi-judicial) for 7,394 square foot, one-story commercial building, located at 850 Granite Falls Blvd for a total site of 1.78 acres zoned Commercial Outlying Special Use District (CO-SUD). The site plan shows proposed building intend for a fitness center facility with the required parking spaces, driveways, sidewalks, water and sewer services, lighting, landscaping, and exterior building views for development of the site.

2017 Rolesville Comprehensive Plan

The Future Land Use Map, adopted with the 2017 Comprehensive Plan, classifies these parcels for commercial use.

Traffic Impact Analysis (TIA)

The professional project engineer prepared an analysis for the Traffic Impact Analysis for the proposed fitness center site. The report results were the proposed development will generate less than the required standard for peak-hour morning or afternoon of fewer than 100 vehicles per hour and less than the daily trip generation of 1,000 vehicles that would require a Traffic Impact Analysis under Section 9.11 of the UDO. Therefore, no traffic impact analysis is required for this proposed development.

Neighborhood Meeting

A neighborhood meeting was held on February 27, 2020 at 7:00 pm at the current crossfit facility at 6440 Rogers Rd. Three persons attended and a summary report of the meeting is included in the attachments.

Technical Review Committee and Planning Staff Recommendations

Town of Rolesville

PO Box 250 / Rolesville, North Carolina 27571 / RolesvilleNC.gov / 919.556.3506

The Technical Review Committee has reviewed the proposed Site Plan and recommends approval as presented. The Planning Staff recommendation is to approve the Rolesville Crossfit Site Plan as shown subject to the evidence and testimony presented at the public hearing.

Suggested Town Board motion

I move to approve public hearing Case SP 19-04, Rolesville Crossfit Site Plan with the evidence and testimony received at the hearing to determine the findings of fact.

Attachments

SP 19-04 Location-Zoning Map

SP 19-04 Site Plan Application

SP 19-04 Proposed Site Plan

SP 19-04 Rolesville Crossfit Generation Letter

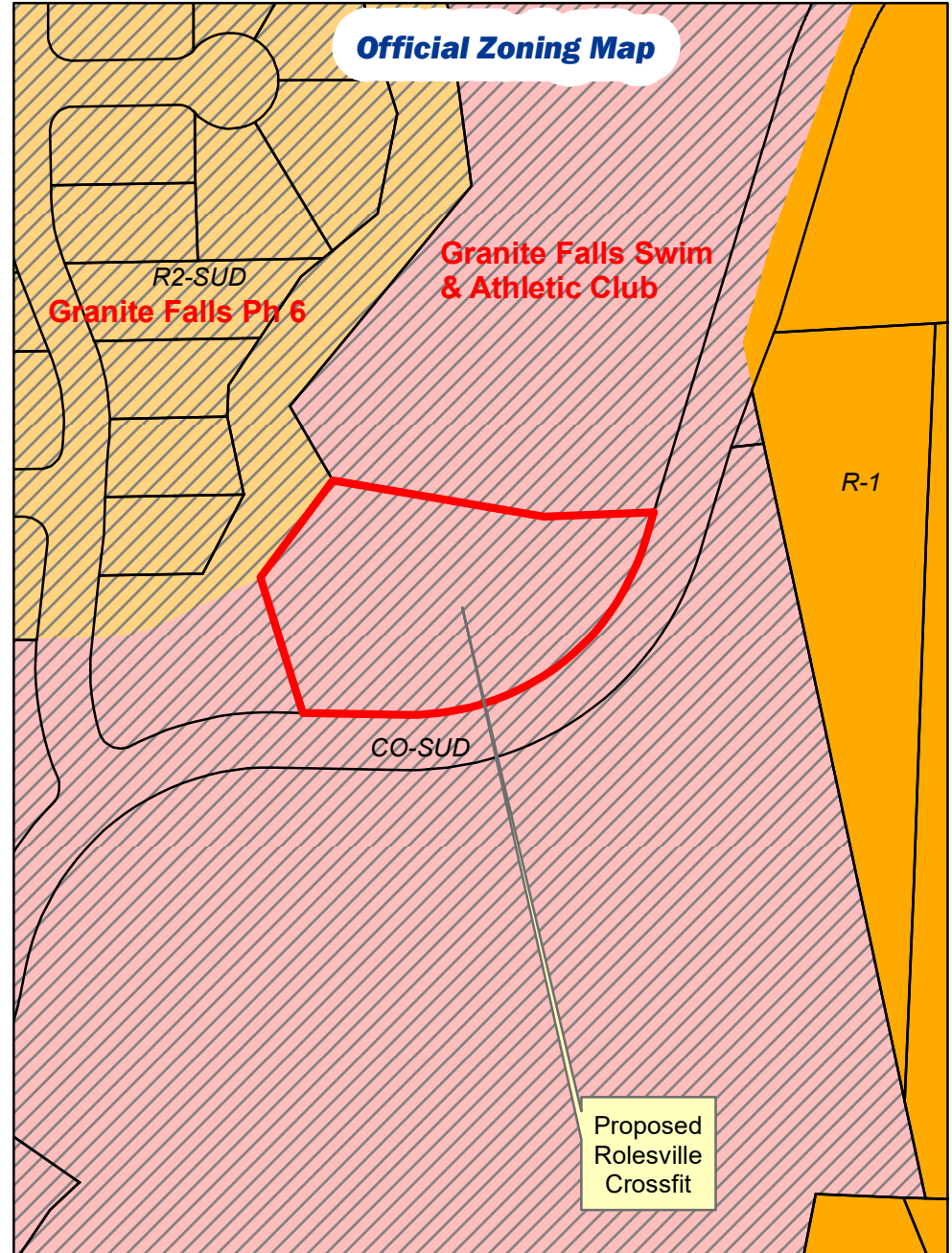
SP 19-04 Rolesville Crossfit Neighborhood Meeting Summary

SP 19-04 Rolesville Crossfit Site Plan Request

Location Map



Official Zoning Map



 Site Plan location



1 in = 200 ft



Case No. SP19-04

Date 8/30/19

Application

Contact Information

Property Owner McArn Realty, LLC

Address 403 N Cheatham St City/State/Zip Franklinton, NC 27525

Phone 919.632.5374 Email mcarn@brassfieldcommercial.com

Developer Same

Contact Name _____

Address _____ City/State/Zip _____

Phone _____ Email _____

Property Information

Address 850 Granite Falls Blvd

Wake County PIN(s) 1759-82-2247

Current Zoning District CO-SUD Requested Zoning District Same

Total Acreage 1.77 Requested Special Use Crossfit gym

Owner Signature

I hereby certify that the information contained herein is true and completed. I understand that if any item is found to be otherwise after evidentiary hearing before the Town Board of Commissioners, that the action of the Board may be invalidated.

Signature Mark McArn Date 8/30/19

STATE OF NORTH CAROLINA

COUNTY OF Franklin

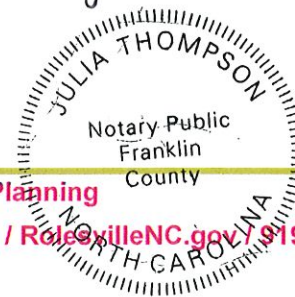
I, a Notary Public, do hereby certify that Mark McArn

personally appeared before me this day and acknowledged the due execution of the foregoing instrument. This

the 30th day of August 2019

My commission expires 04-09-2020

Signature Julia Thomps Seal



Town of Rolesville Planning

PO Box 250 / Rolesville, North Carolina 27571 / RolesvilleNC.gov / 919.554.6517



Application

Applicant Statement

Provide justification for each statement. If necessary, attach a separate sheet.

1. The proposed development and/or use will not materially endanger public health or safety.

~~The proposed development is a low generator retail use. The site will be designed and constructed according to applicable local, state, and federal requirements. Thus, the proposed use will not materially endanger public health or safety.~~

2. The proposed development and/or use will not substantially injure the value of adjoining property.

~~Development of the property is anticipated to increase the value of the property and thus, is not anticipated to substantially injure the value of adjoining property.~~

3. The proposed development and/or use will be in harmony with the scale, bulk, coverage, density, and character of the surrounding area.

~~Within the CO District, the principal use of land is for those service and retail purposes that are properly located near residential areas and which cater to the everyday needs of residential neighborhoods. As a health club, the proposed crossfit gym will provide an alternative fitness option for the neighborhood as a complimentary use to the neighboring Granite Falls Swim and Athletic Club. The development will occupy only approximately 27% built upon area of the site while preserving existing stream buffer and other natural features. Thus, the development will be in harmony with the scale, bulk, coverage, density, and character of the neighborhood in which it is located.~~

4. The proposed development and/or use will generally conform to Rolesville's Comprehensive Plan and other adopted plans.

~~A rezoning is not requested, thus the proposed development will generally conform with the Comprehensive plan and other official plans adopted by the Town.~~

5. The proposed development and /or use is appropriately located with respect to transportation facilities, water and sewer supply, fire and police protection, and similar facilities.

~~The proposed development and/or use is appropriately located with respect to transportation facilities being on Granite Falls Blvd. Public water and sewer supply are located along Granite Falls Blvd. The site is located one (1) mile from the Rolesville Fire Department, EMS, and Police Department.~~

6. The proposed development will not cause undue traffic congestion or create a traffic hazard.

~~Traffic generated by the site is anticipated to be less than 100 AM or PM peak hour trips and less than 1,000 trips per day. Thus, the proposed development will not cause undue traffic congestion or create a traffic hazard~~

7. The proposed development and/or use comply with all applicable requirements of the Unified Development Ordinance.

~~The proposed development and use comply with all applicable requirements of this ordinance.~~



Application

Property Owner Information

Wake County PIN	Property Owner	Mailing Address	Zip Code
1759824864	GRANITE FALLS SWIM & ATHLETIC CLUB LLC	6200 FALLS OF NEUSE RD STE 102, RALEIGH, NC	27609
1759729251	HHHUNT GRANITE FALLS LLC	1401 SUNDAY DR STE 109, RALEIGH, NC	27607
1759812642	BIG BEAR PROPERTIES LLC	1512 OBRIEN CIR, WAKE FOREST, NC	27587

Town of Rolesville Planning

PO Box 250 / Rolesville, North Carolina 27571 / RolesvilleNC.gov / 919.554.6517



POST OFFICE BOX 91727
 RALEIGH, NORTH CAROLINA 27675
 PHONE: 919.610.1051
 FIRM NC LICENSE NUMBER C-4222



REVISION HISTORY

REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/23/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
 DO NOT USE FOR CONSTRUCTION

SCALE ADJUSTMENT
 THIS SHEET IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

IF IT IS NOT 1 INCH ON THIS SHEET, ADJUST YOUR SCALE ACCORDINGLY.

SITE PLANS
 ROLESVILLE CROSSFIT
 850 GRANITE FALLS BLVD
 ROLESVILLE, NC 27571

MCARN REALTY LLC

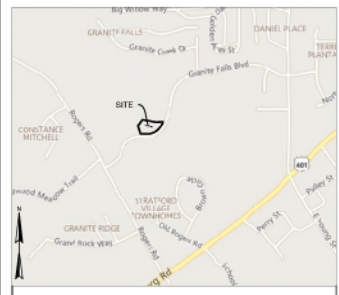
DATE:	10-29-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

COVER
C-1
 SHEET 1 OF 18

SITE PLANS FOR ROLESVILLE CROSSFIT

**850 GRANITE FALLS BLVD
 ROLESVILLE, NORTH CAROLINA
 PIN: 1759-82-2247**

SHEET	TITLE
C-1	COVER
C-2	CALCULATIONS
C-3	EXISTING CONDITIONS
C-4	SITE PLAN
C-5	UTILITY PLAN
C-6	GRADING & STORM DRAINAGE PLAN
C-7	STORMWATER WETLAND DETAILS
C-8	EROSION & SEDIMENT CONTROL PLAN - PHASE 1
C-9	EROSION & SEDIMENT CONTROL PLAN - PHASE 2
C-10	LANDSCAPING PLAN
C-11	LIGHTING PLAN
C-12	SITE DETAILS
C-13	SITE DETAILS
C-14	STORM DRAINAGE DETAILS
C-15	EROSION & SEDIMENT CONTROL DETAILS
C-16	EROSION & SEDIMENT CONTROL DETAILS
C-17	WATER DETAILS
C-18	SEWER DETAILS



VICINITY MAP
 1" = 1000'

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 UTILITIES DEPARTMENT AT (919) 996-4849 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 FINE AND POSSIBLE EXCLUSION FROM FUTURE WORK IN THE CITY OF RALEIGH.

DEVELOPER:

MCARN REALTY, LLC
 CONTACT: MARK MCARN
 403 N CHEATHAM ST
 FRANKLINTON, NC 27525
 919.632.5374
 MCARN@BRASSFIELDCOMMERCIAL.COM

ENGINEER OF RECORD:

FLM ENGINEERING, INC
 CONTACT: JON FRAZIER, PE
 PO BOX 91727
 RALEIGH, NC 27675
 919.610.1051
 JFRAZIER@FLMENGINEERING.COM

PROPOSED INFRASTRUCTURE QUANTITIES			
ITEM	OWNERSHIP	DIAMETER / MATERIAL	LENGTH
WATER	PRIVATE	1.5" TYPE K' SOFT COPPER	67'
SEWER	PRIVATE	4" SCHED 40 PVC	59'
STORM DRAIN	PRIVATE	8" HDPE	196'
STORM DRAIN	PRIVATE	12" HDPE	274'
STORM DRAIN	PRIVATE	15" HDPE	24'
CURB & GUTTER	PRIVATE	24"	638'
SIDEWALK	PRIVATE	VARIES	473'

CALL 48 HOURS BEFORE YOU DIG

NORTH CAROLINA ONE-CALL CENTER
 1-800-632-4949

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ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS



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PHONE: 919.910.1051
FIRM NC LICENSE NUMBER C-4222



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SITE PLANS
ROLESVILLE CROSSFIT
850 GRANITE FALLS BLVD
ROLESVILLE, NC 27571

MCARN REALTY LLC

DATE:	10-28-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

CALCULATIONS

C-2
SHEET 2 OF 18

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS

**WETLAND 1
EMERGENCY SPILLWAY DESIGN AND LINING**

UPPER INVERT (ft)	371.00
LOWER INVERT (ft)	367.20
LENGTH (ft)	8.00
CHANNEL SLOPE (ft/ft)	0.500
CHANNEL SECTION	TRIANGULAR
AVG SIDE SLOPE (Z:1)	2.00
BOTTOM WIDTH (ft)	29.00
TOTAL DEPTH (ft)	1.00
WETTED PERIMETER (ft)	20.31
CROSS SECTIONAL AREA (ft²)	1.41
100-YEAR(24-HOUR DESIGN FLOW (cfs)	6.73
NORMAL DEPTH (ft)	0.07
AVG VELOCITY (ft/sec)	4.77
SHEAR STRESS (lb/ft²)	2.18
LINER	NAG P300
PERMISSIBLE SHEAR STRESS (lb/ft²)	8.00
MANING COEFFICIENT (n)	0.034

**BOUYANCY CALCULATIONS
WETLAND**

TOP OF OUTLET STRUCTURE =	370.50	ft
BOTTOM =	366.00	ft
HEIGHT OF RISER =	5.50	ft
ASSUME 6" WALL THICKNESS		
WEIGHT CALCULATIONS		
Wbase = 0' x 0' x 0' =	0.00	cf
Wbase = 0' x 150' b/cf =	0.00	lbs
Wump = 4' x 4' x 2' =	32.00	cf
Wump = 48' x 150' b/cf =	4800.00	lbs
Wwtuc = (5 x 5 x 5.5)/(4 x 4 x 6) x 150' b/cf =	8625.00	lbs
TOTAL WEIGHT =	13425.00	lbs
BOUYANCY CALCULATIONS		
Bbase = 0' x 62.4' b/cf =	0.00	lbs
Bwtuc = (5 x 5 x 5.5) x 62.4' b/cf	8580.00	lbs
TOTAL BOUYANCY =	8580.00	lbs
FACTOR OF SAFETY =	1.56	

STORM DRAINAGE CALCULATIONS																	
STRUCTURE NUMBER	Cc	I	A	A	Tc	Q	Q	SLOPE	Dtheo	SIZE	Vtull	PIPE LENGTH	UPPER INVERT	LOWER INVERT	HIGHEST ELEVATION	PIPE MATERIAL**	
FROM	TO	RUNOFF COEFFICIENT	10-YEAR INTENSITY (in/hr)	DRAINAGE AREA (sf)	DRAINAGE AREA (ac)	TIME OF CONCENTRATION (min)	FLOW (cfs)	TOTAL FLOW (cfs)	(ft/ft)	(in)	(ft/sec)	(ft)	(ft)	(ft)	(ft)		
CB-1	Y1-2	0.90	7.22	4800	0.11	5.0	0.72	0.72	0.0103	6.5	12	5.0	78.00	374.00	373.20	377.50	HDPE
Y1-2	CB-3	0.90	7.22	6800	0.16	5.0	1.01	1.73	0.0103	9.1	12	5.0	126.00	373.20	371.90	378.25	HDPE
CB-3	CB-4	0.90	7.22	3700	0.08	5.0	0.55	2.28	0.0103	10.1	12	5.0	58.00	371.90	371.30	378.35	HDPE
CB-4	FES-6	0.90	7.22	3800	0.09	5.0	0.57	2.85	0.0417	8.4	12	10.0	12.00	368.00	367.50	378.80	HDPE
J8-6	J8-9	0.90	7.22	6200	0.14	5.0	0.92	0.92	0.0204	6.3	8	5.4	98.00	377.00	375.00	379.85	HDPE
Y1-7	Y1-8	0.90	7.22	1900	0.02	5.0	0.15	0.15	0.0118	3.5	8	4.0	43.00	376.50	376.00	379.25	HDPE
Y1-8	J8-9	0.90	7.22	1900	0.02	5.0	0.15	0.30	0.0323	3.8	8	6.7	31.00	376.00	375.00	379.25	HDPE
J8-9	OUTLET-10	-	-	-	-	-	-	1.22	0.2895	4.3	8	29.1	29.00	375.00	367.50	379.65	HDPE

*LENGTHS ARE OF THE PIPE ONLY AND DO NOT INCLUDE FLARED END SECTIONS OR OTHER END TREATMENT
**DOUBLE WALL HDPE PIPE (SHALL MEET NC PLUMBING CODE, CHAPTER 11 STORM DRAINAGE, LATEST EDITION)

SKIMMER SEDIMENT BASIN DESIGN CALCULATIONS

SKIMMER SEDIMENT BASIN DESIGN				SKIMMER SEDIMENT BASIN EFFICIENCY				SKIMMER***							
BASIN NUMBER	DRAINAGE AREA (ac)	DISTURBED AREA (ac)	REQUIRED VOLUME 1680 CF/AC (cf)	DEPTH (ft)	WIDTH (ft)**	LENGTH (ft)**	VOLUME PROVIDED (cf)**	RUNOFF COEFFICIENT	10-YEAR RAINFALL INTENSITY (in/hr)	FLOW Q10 (cfs)	REQUIRED SURFACE AREA 435 SF/CF5 (sf)	AREA PROVIDED (sf)**	SIZE (in)	ORIFICE RADIUS (in)	ORIFICE DIAMETER (in)
SK-1	0.73	0.67	1206	2	-	-	2508	0.5	7.22	2.64	1146	1548	1.5	0.4	0.7

*DEPTH FROM BOTTOM OF BASIN TO EMERGENCY SPILLWAY ELEVATION
**BASIN SHAPE IS IRREGULAR, VOLUME AND SURFACE AREA TAKEN FROM HYDROCAD MODEL
***SKIMMER SIZED PER SISING CALCULATOR AT WWW.FAIRG.DTHSKIMMER.COM AT A REQUIRED VOLUME DRAWDOWN RATE OF 72 HOURS

TEMPORARY DIVERSION DITCH DESIGN

DITCH NUMBER	RUNOFF COEFFICIENT	10-YEAR RAINFALL INTENSITY (in/hr)	DRAINAGE AREA (acres)	Q (cfs)	LENGTH (ft)	CHANNEL SECTION	BOTTOM WIDTH (ft)	LEFT SIDE SLOPE Z:1 (ft)	RIGHT SIDE SLOPE Z:1 (ft)	CHANNEL DEPTH (ft)	CHANNEL SLOPE (ft/ft)	NORMAL DEPTH (ft)	FREEBOARD (ft)	SHEAR STRESS (lb/ft²)	VELOCITY (ft/s)	MANING'S n-VALUE	TEMPORARY LINER
TD-1	0.50	7.22	0.48	1.75	172.00	TRIANGULAR	-	2.00	2.00	1.00	0.047	0.50	0.50	1.45	3.46	0.033	STRAW WITH NET
TD-2	0.50	7.22	0.11	0.40	78.00	TRIANGULAR	-	2.00	2.00	1.00	0.066	0.27	0.73	1.11	2.74	0.033	STRAW WITH NET

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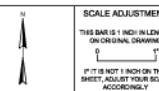


REVISION HISTORY

REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/23/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
 DO NOT USE FOR CONSTRUCTION



SITE PLANS

ROLESVILLE CROSSFIT
 850 GRANITE FALLS BLVD
 ROLESVILLE, NC 27571

MCARN REALTY LLC

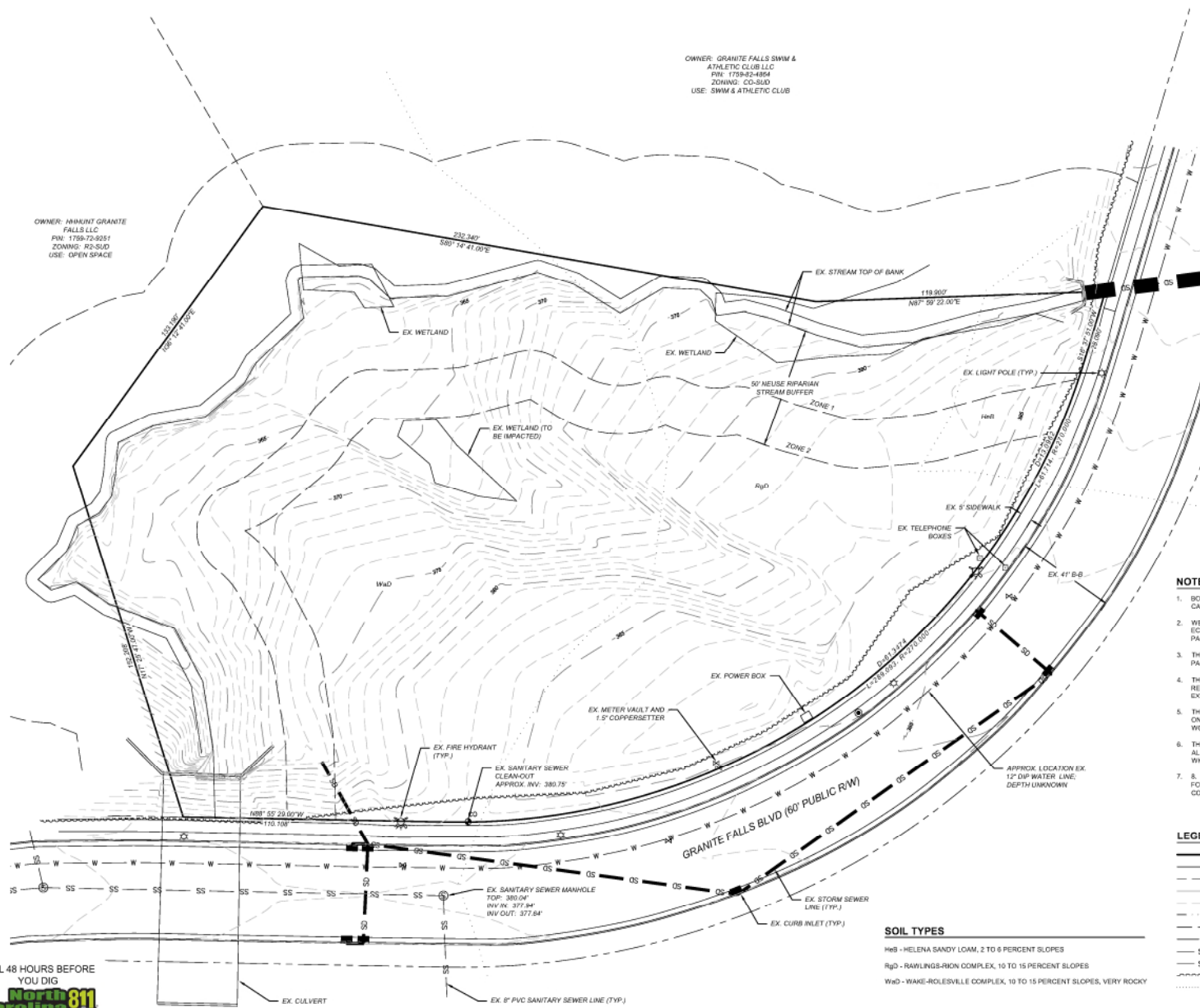
DATE:	10-26-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

EXISTING CONDITIONS

C-3
 SHEET 3 OF 18

OWNER: GRANITE FALLS SWM & ATHLETIC CLUB LLC
 FIRM: 1708-2-4884
 ZONING: CO-SUD
 USE: SWM & ATHLETIC CLUB

OWNER: ANIKUNT GRANITE FALLS LLC
 FIRM: 1709-72-9251
 ZONING: R2-SUD
 USE: OPEN SPACE



NOTES

- BOUNDARY AND TOPOGRAPHIC SURVEY DATA PROVIDED BY CAWTHORNE, MOSS & PANCERA, PC ON JUNE 26, 2019.
- WETLANDS AND STREAMS SHOWN DELINEATED BY CAROLINA ECOSYSTEMS, INC. AND LOCATED BY CAWTHORNE, MOSS & PANCERA, PC. JURISDICTIONAL DETERMINATION PENDING.
- THERE ARE NO FLOOD PRONE AREAS PRESENT PER FEMA FIRM PANEL NO. 3720175000J, EFFECTIVE MAY 2, 2006.
- THE UTILITIES SHOWN ARE NOT GUARANTEED TO BE A REPRESENTATION OF ALL UTILITIES WITHIN THE PROJECT EXTENT.
- THE CONTRACTOR SHALL CALL THE NORTH CAROLINA ONE-CALL CENTER AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL VERIFY DEPTHS AND LOCATIONS OF ALL UTILITIES PRIOR TO BEGINNING WORK AND SHALL USE CARE WHEN OPERATING AROUND EXISTING UTILITIES.
- & THE CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR THE REPAIR OF ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.

LEGEND

---	EX. PROPERTY LINE
- - - -	EX. RIGHT-OF-WAY
- . - . - .	EX. ADJACENT OWNERS
- - - - 300 - - - -	EX. MAJOR CONTOUR (5')
- - - - 10 - - - -	EX. MINOR CONTOUR (1')
- . - . - .	EX. CHANNEL/STREAM
- - - -	EX. STREAM BUFFER
- - - -	EX. WATER LINE
- - - -	EX. SANITARY SEWER
- - - -	EX. STORM SEWER
- - - -	EX. TREE LINE
.....	EX. SOIL LINE

SOIL TYPES

HeB - HELENA SANDY LOAM, 2 TO 6 PERCENT SLOPES
 RpD - RAWLINGS-RON COMPLEX, 10 TO 15 PERCENT SLOPES
 WvD - WAKE-ROLESVILLE COMPLEX, 10 TO 15 PERCENT SLOPES, VERY ROCKY

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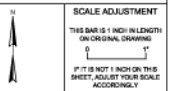


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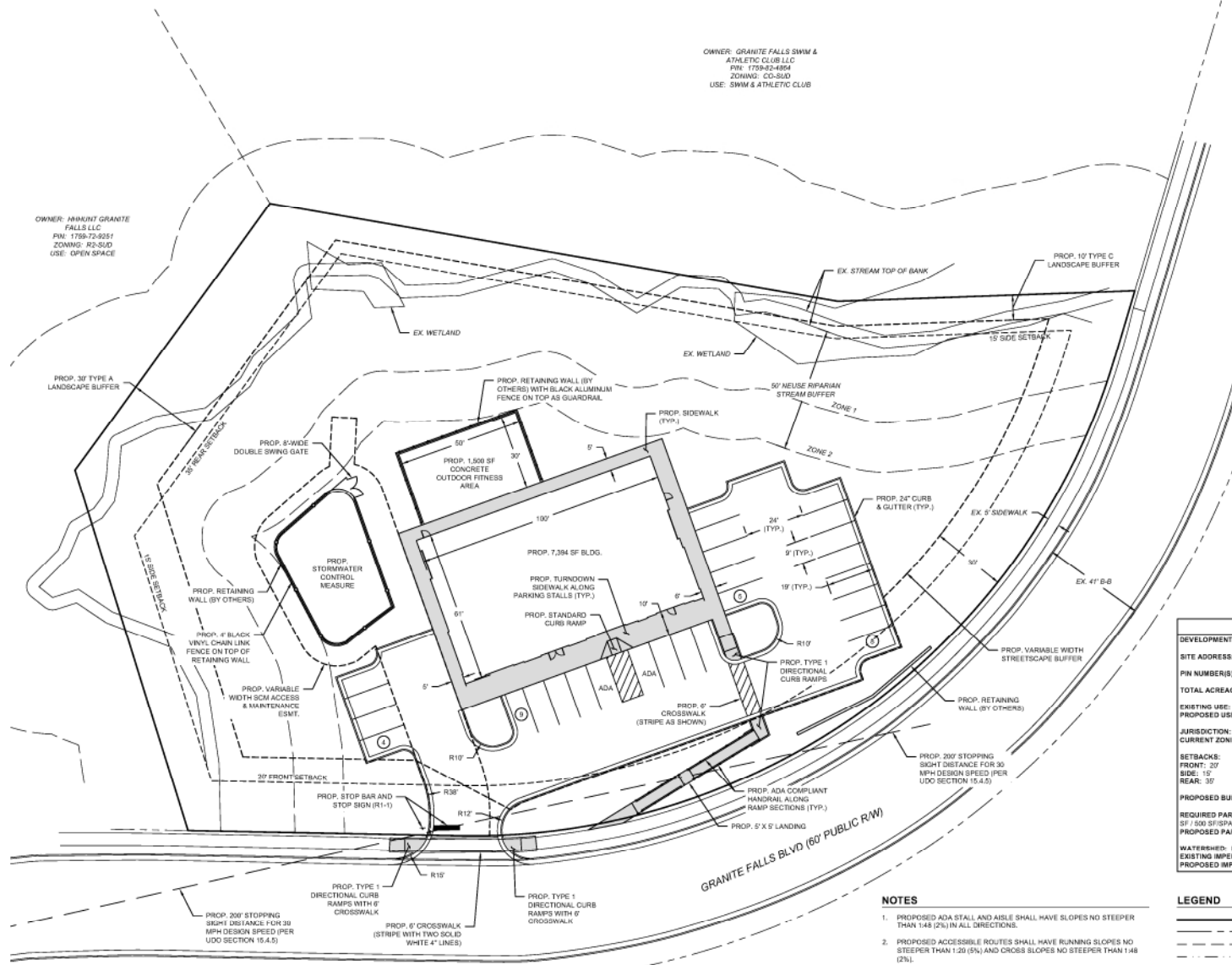
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PROJECT NO.:	19036

SITE PLAN

C-4
SHEET 4 OF 18

OWNER: GRANITE FALLS SWM & ATHLETIC CLUB LLC
PIN: 1759-02-2247
ZONING: CO-SUD
USE: SWM & ATHLETIC CLUB

OWNER: HIKKUNT GRANITE FALLS LLC
PIN: 1759-72-9251
ZONING: RD-SUD
USE: OPEN SPACE



SUMMARY INFORMATION

DEVELOPMENT NAME: ROLESVILLE CROSSFIT
 SITE ADDRESS: 850 GRANITE FALLS BLVD, ROLESVILLE, NC 27571
 PIN NUMBER(S): 1759-02-2247
 TOTAL ACREAGE: 1.78 AC
 EXISTING USE: VACANT
 PROPOSED USE: GYM
 JURISDICTION: TOWN OF ROLESVILLE
 CURRENT ZONING DISTRICT: CO-SUD

SETBACKS:
 FRONT: 30'
 SIDE: 10'
 REAR: 30'

PROPOSED BUILDING AREA: 7,394 SF
 REQUIRED PARKING: 1 SPACE PER 500 SF (LOW GENERATOR RETAIL) = 7,394 SF / 500 SF SPACE = 15 SPACES
 PROPOSED PARKING: 28 SPACES (2 ADA, 2 VAN ACCESSIBLE)

WATERSHED: LOWER NEUSE RIVER
 EXISTING IMPERVIOUS AREA: 0 SF (0.00 AC) OR 0%
 PROPOSED IMPERVIOUS AREA: 22,658 SF (0.53 AC) OR 29.8%

- NOTES**
- PROPOSED ADA STALL AND AISLE SHALL HAVE SLOPES NO STEEPER THAN 1:48 (2%) IN ALL DIRECTIONS.
 - PROPOSED ACCESSIBLE ROUTES SHALL HAVE RUNNING SLOPES NO STEEPER THAN 1:20 (5%) AND CROSS SLOPES NO STEEPER THAN 1:48 (2%).
 - DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 - RADS ARE 0' UNLESS OTHERWISE NOTED.
 - ADA PARKING SIGNS (R7-B & R7-BA) SHALL BE PLACED ON BUILDING IN FRONT OF EACH ADA PARKING STALL.
 - STRIPING FOR PARKING STALLS AND CROSSWALK SHALL BE AS SHOWN.
 - SOLID WASTE COLLECTION SHALL BE BY ROLL-OUT CARTS CONTRACTED PRIVATELY. ROLL-OUT CARTS WILL BE COLLECTED ONSITE AND NOT AT THE ROAD.

LEGEND

---	EX. PROPERTY LINE
---	EX. RIGHT-OF-WAY
---	EX. ADJACENT OWNERS
---	EX. CHANNEL/STREAM
---	EX. STREAM BUFFER
---	PROP. SETBACK LINE
---	PROP. EASEMENT/BUFFER
---	PROP. CHAINLINK FENCE
---	PROP. ADA HANDRAIL/GUARDRAIL

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OWNER: GRANITE FALLS SWM & ATHLETIC CLUB LLC
 F/W: 1789-72-051
 ZONING: R2-SU2
 USE: SWM & ATHLETIC CLUB

UTILITY NOTES

1. WATER AND SANITARY SEWER SERVICES TO BE COORDINATED WITH THE PLUMBING PLANS.
2. ALL CLEAN-OUTS IN PAVEMENT SHALL BE TRAFFIC-BEARING.
3. THE UTILITIES SHOWN ARE NOT GUARANTEED TO BE A REPRESENTATION OF ALL UTILITIES WITHIN THE PROJECT EXTENT.
4. THE CONTRACTOR SHALL CALL THE NORTH CAROLINA ONE-CALL-CENTER AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
5. THE CONTRACTOR SHALL VERIFY DEPTHS AND LOCATIONS OF ALL UTILITIES PRIOR TO BEGINNING WORK AND SHALL USE CARE WHEN OPERATING AROUND EXISTING UTILITIES.
6. THE CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR THE REPAIR OF ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
7. OTHER UTILITIES SUCH AS ELECTRIC AND GAS SHALL BE BY OTHERS.

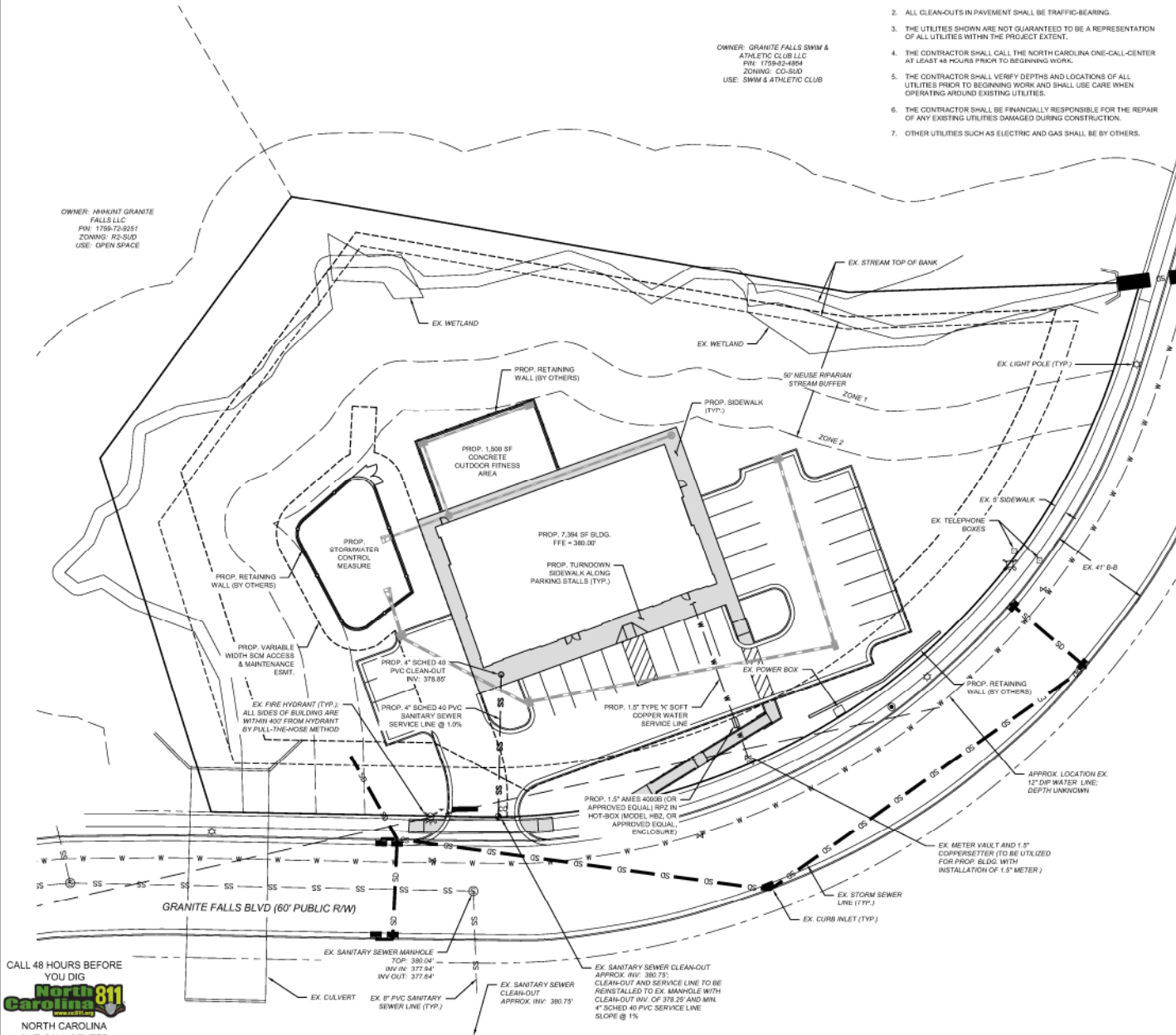
CITY OF RALEIGH UTILITY NOTES

1. 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 IN THE WATER MAIN OR 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, DP MATERIALS OR STEEL ENCASUREMENT EXTENDED TO 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 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS, WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DP MATERIALS & A CONCRETE CRADLE HAVING 5" MIN. CLEARANCE (PER CORPUD DETAILS W-1 & S-9).
 - 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. 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.
5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
6. 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.
7. INSTALL COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2' X 2' 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.
8. INSTALL PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEAN-OUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI. BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAWS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWR, USACE & OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND & OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
11. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
12. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919) 996-2334 OR timothy.beasley@raleighnc.gov FOR MORE INFORMATION.
13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. 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 JOANNE HARTLEY AT (919) 996-5923 OR joanne.hartley@raleighnc.gov FOR MORE INFORMATION.

LEGEND

---	EX. PROPERTY LINE
- - - -	EX. RIGHT-OF-WAY
- - - -	EX. ADJACENT OWNERS
- - - -	EX. CHANNEL/STREAM
- - - -	EX. STREAM BUFFER
W	EX. WATER LINE
SS	EX. SANITARY SEWER
SD	EX. STORM SEWER
- - - -	PROP. SETBACK LINE
- - - -	PROP. EASEMENT/BUFFER
- - - -	PROP. CHAIN LINK FENCE
- - - -	PROP. ADA HANDRAIL/GUARDRAIL
W	PROP. WATER LINE
SS	PROP. SANITARY SEWER
SS	PROP. STORM SEWER

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS



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 PHONE: 919.910.1051
 FIRM NO. LICENSE NUMBER C-4222

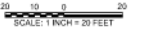


REVISION HISTORY

REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/23/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
 DO NOT USE FOR CONSTRUCTION



SCALE ADJUSTMENT
 THIS SCALE IS 1"=20 FEET ON ORIGINAL DRAWING
 IF IT IS NOT 1"=20 FEET, ADJUST YOUR SCALE ACCORDINGLY.

SITE PLANS
 ROLESVILLE CROSSFIT
 850 GRANITE FALLS BLVD
 ROLESVILLE, NC 27571

MCARN REALTY LLC

DATE:	10-26-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

UTILITY PLAN

C-5
 SHEET 5 OF 19



REVISION HISTORY

REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/23/2019	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
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SCALE ADJUSTMENT
THIS SCALE IS 1"=10' IN LENGTH ON ORIGINAL DRAWING
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SITE PLANS

ROLESVILLE CROSSFIT
850 GRANITE FALLS BLVD
ROLESVILLE, NC 27571

MCARN REALTY LLC

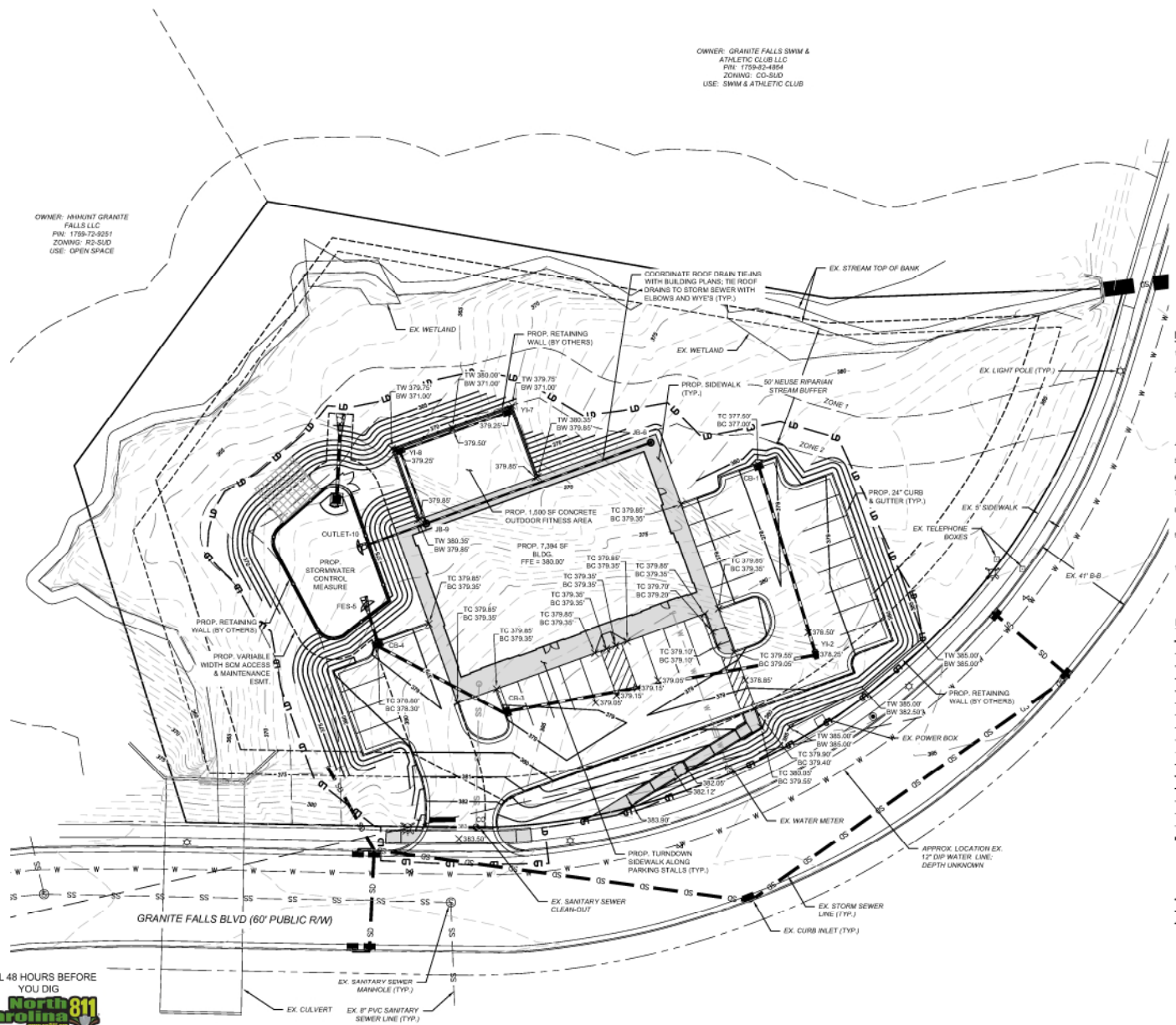
DATE:	10-25-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

GRADING & STORM DRAINAGE PLAN

C-6
SHEET 6 OF 19

OWNER: GRANITE FALLS SWM & ATHLETIC CLUB LLC
FW: 1759-72-9251
ZONING: RD-SUD
USE: SWM & ATHLETIC CLUB

OWNER: ANIKUNT GRANITE FALLS LLC
FW: 1759-72-9251
ZONING: RD-SUD
USE: OPEN SPACE



NOTES

- PROPOSED CONTOURS REPRESENT FINISH GRADES.
- PROPOSED ADA STALL AND ABLE SHALL HAVE SLOPES NO STEEPER THAN 1:48 (2%) IN ALL DIRECTIONS.
- PROPOSED ACCESSIBLE ROUTES SHALL HAVE RUNNING SLOPES NO STEEPER THAN 1:20 (5%) AND CROSS SLOPES NO STEEPER THAN 1:48 (2%). PROPOSED ACCESSIBLE RAMP SECTIONS SHALL HAVE RUNNING SLOPES NO STEEPER THAN 1:12 (8.33%) AND CROSS SLOPES TO STEEPER THAN 1:48 (2%) WITH LANDINGS EVERY 2.0' OF ELEVATION CHANGE.
- SLOPES ARE 2H:1V UNLESS OTHERWISE NOTED.
- RETAINING WALLS SHOWN SHALL BE DESIGNED BY OTHERS.
- SEE SHEET C-2 FOR PIPE TABLE.
- ALL HOPE SHALL BE DOUBLE WALL.
- ALL HOPE PIPE AND ROOF DRAIN CONNECTIONS SHALL MEET NC PLUMBING CODE CHAPTER 11 STORM DRAINAGE, LATEST EDITION.
- JUNCTION BOXES JB-4 AND JB-9 SHALL BE ADS NYLOPLAST 24" DRAM BASINS, OR APPROVED EQUAL, WITH SOLID COVER AND CONCRETE POURED IN BOTTOM TO ELIMINATE SLUMP.
- YARD INLETS Y1-7 AND Y18 SHALL BE ADS NYLOPLAST 31" DRAM BASINS, OR APPROVED EQUAL, WITH 24" DROP-IN GRATE AND CONCRETE POURED IN BOTTOM TO ELIMINATE SLUMP.

LEGEND

- EX. PROPERTY LINE
- EX. RIGHT-OF-WAY
- EX. ADJACENT OWNERS
- EX. CHANNEL/STREAM
- EX. STREAM BUFFER
- W — W — EX. WATER LINE
- SS — SS — EX. SANITARY SEWER
- SD — SD — EX. STORM SEWER
- -325 — EX. MAJOR CONTOUR (5')
- -325 — EX. MINOR CONTOUR (1')
- PROP. SETBACK LINE
- PROP. EASEMENT/BUFFER
- PROP. CHAINLINK FENCE
- PROP. ADA HANDRAIL/GUARDRAIL
- W — W — PROP. WATER LINE
- SS — SS — PROP. SANITARY SEWER
- PROP. STORM SEWER
- PROP. CURB INLET (CB)
- PROP. YARD INLET
- PROP. FLARED END SECTION
- PROP. JUNCTION BOX
- PROP. LIMIT OF DISTURBANCE
- PROP. MAJOR CONTOUR (5')
- PROP. MINOR CONTOUR (1')
- X TC — TOP OF CURB ELEVATION
- X BC — BOTTOM OF CURB ELEVATION
- X TW — TOP OF WALL ELEVATION
- X BW — BOTTOM OF WALL ELEVATION
- X ELEV — SPOT ELEVATION

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS

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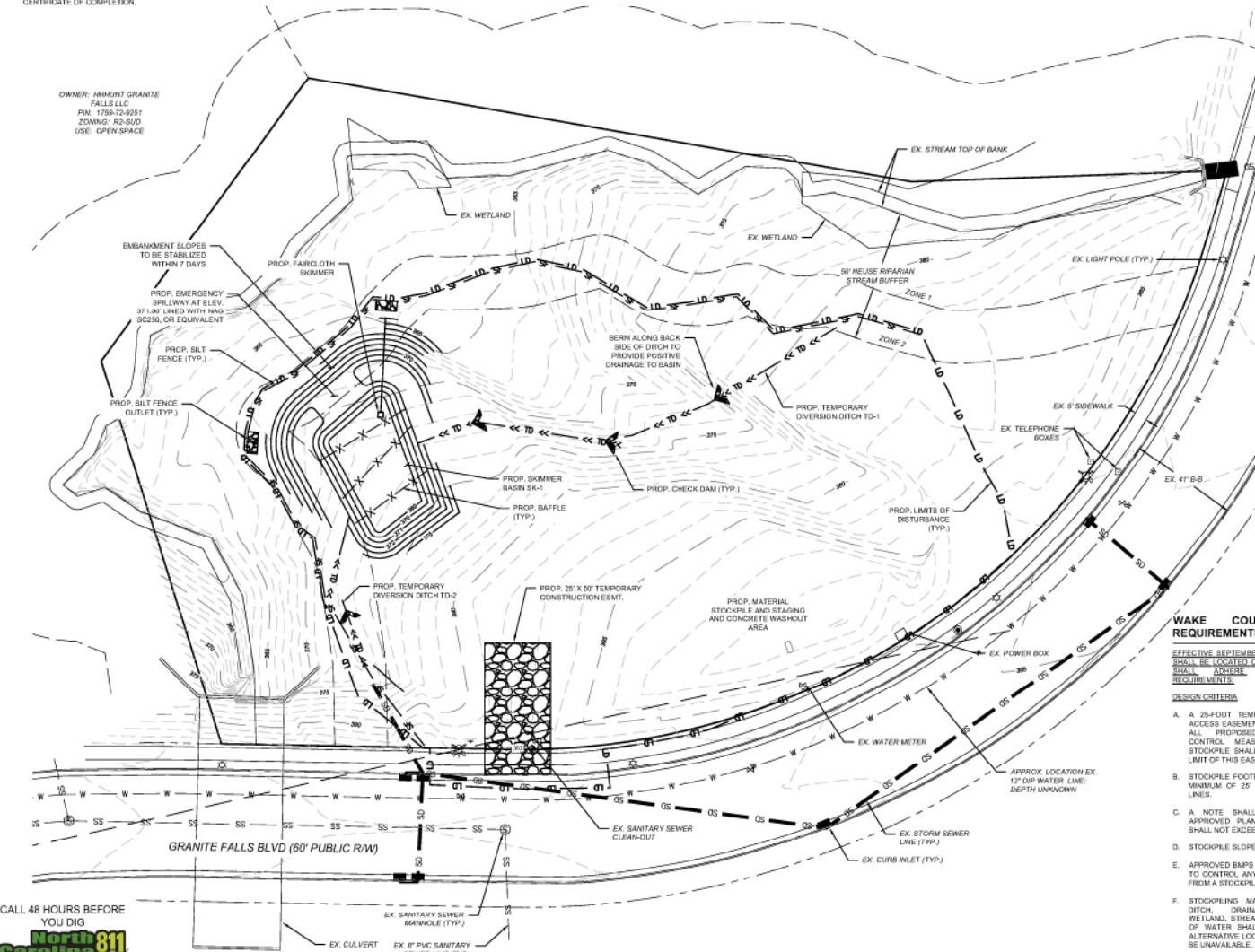
BASIN CONVERSION SEQUENCE:

- SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL ENGINEER / CONSULTANT TO DETERMINE IF A BASIN CAN BE CONVERTED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO CONVERSION OF THE BASIN.
- DEWATER BASIN(S) VIA SILT BAG. REMOVE ACCUMULATED SEDIMENT. FINE GRADE WETLAND IN PREPARATION FOR PLANTING.
- PERFORM PLANTING PREPARATION. PLANT SEED, MULCH AND ASPHALT TACK ANY REVEALING BARE AREAS IMMEDIATELY.
- INSTALL VELOCITY DISSIPATORS AS REQUIRED ON THE EROSION CONTROL PLAN.
- WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL ENGINEER / CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVISE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION.

LEGEND

- | | | | |
|-----|------------------------|-----|---------------------------------|
| --- | EX. PROPERTY LINE | --- | PROP. LIMIT OF DISTURBANCE |
| --- | EX. RIGHT-OF-WAY | --- | PROP. MAJOR CONTOUR (5') |
| --- | EX. ADJACENT OWNERS | --- | PROP. MINOR CONTOUR (1') |
| --- | EX. CHANNEL/STREAM | --- | PROP. SILT FENCE |
| --- | EX. SHREAM BUFFER | --- | PROP. FAIRCLOTH SKIMMER |
| --- | EX. WATER LINE | --- | PROP. SLOPE PROTECTION |
| --- | EX. SANITARY SEWER | --- | PROP. CONSTRUCTION ENTRANCE |
| --- | EX. STORM SEWER | --- | PROP. SILT FENCE OUTLET |
| --- | EX. MAJOR CONTOUR (5') | --- | PROP. TEMPORARY DIVERSION DITCH |
| --- | EX. MINOR CONTOUR (1') | --- | PROP. BAFFLE |

OWNER: GRANITE FALLS SWIM & ATHLETIC CLUB LLC
 P.O. 1799-72-0514
 ZONING: CO-SUD
 USE: SWIM & ATHLETIC CLUB



WAKE COUNTY CONSTRUCTION SEQUENCE

- PHASE 1**
- SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL CONSULTANT. OBTAIN A LAND-DISTURBING PERMIT.
 - INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SKIMMER SEDIMENT BASIN OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS AND BASIN IMMEDIATELY AFTER CONSTRUCTION.
 - CALL WAKE COUNTY FOR AN ONSITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT TO OBTAIN A CERTIFICATE OF COMPLIANCE.
 - BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED.
 - BEGIN ROUGH GRADING.
- PHASE 2**
- INSTALL STORM SEWER AND PROTECT INLETS WITH INLET PROTECTION, OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN.
 - STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, ETC. SEED AND MULCH EXPOSED AREAS PER GROUND STABILIZATION TIME FRAMES.
 - WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL WAKE COUNTY FOR AN INSPECTION BY THE ENVIRONMENTAL CONSULTANT.
 - IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, ETC., AND SEED OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
 - UPON STABILIZATION OF THE ENTIRE DISTURBED AREA, CONVERT SKIMMER BASIN TO STORMWATER WETLAND AS SHOWN ON THE APPROVED PLANS.
 - WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT. OBTAIN A CERTIFICATE OF COMPLETION.

EROSION CONTROL NOTES

- ALL LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH WAKE COUNTY AND NCDDE STANDARDS.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED IN PROPER WORKING CONDITION DURING THE PERIOD OF CONSTRUCTION.
- ADDITIONAL EROSION CONTROL MEASURES AND/OR MODIFICATIONS TO PROPOSED MEASURES MAY BE NECESSARY DEPENDING ON ACTUAL SITE CONDITIONS.
- THE TOTAL DISTURBED AREA IS 0.93 ACRE.
- SILT FENCE OUTLETS TO BE PLACED AS SHOWN AND AT LOW POINTS ALONG SILT FENCE AS NECESSARY.
- SEE EROSION CONTROL CALCULATIONS ON SHEET C-2.
- SKIMMER BASIN GRADES SHOWN ARE 2H:1V UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL ESTABLISH GROUND COVER IMMEDIATELY AFTER DISTURBANCE DURING CONSTRUCTION OF PERMANENT SWALES.
- PROVIDE STABLE TRANSITION AT TEMPORARY DIVERSION ENTRANCES TO BASIN - LINE SLOPE AT ENTRANCE WITH 12" ROCK RIPRAP.
- RECAP ENERGY DISSIPATOR DIMENSIONS SHOWN ON DETAIL SHEET C-14.
- DISTURBED AREAS TO BE STABILIZED AND GROUND COVER SHOULD BE ACHIEVED WITHIN 7 WORKING DAYS FOLLOWING COMPLETION OF DEVELOPMENT, PER THE WAKE COUNTY CONSTRUCTION STORMWATER GENERAL PERMIT.
- SEE DETAIL SHEETS C-15 AND C-16 FOR EROSION AND SEDIMENT CONTROL MAINTENANCE REQUIREMENTS.
- TREE CLEARING BEYOND THE LIMITS OF DISTURBANCE IS NOT PROPOSED.

WAKE COUNTY STOCKPILE REQUIREMENTS

- EFFECTIVE SEPTEMBER 1, 2008 - SOIL STOCKPILES SHALL BE LOCATED ON THE APPROVED PLAN AND SHALL ADHERE TO THE FOLLOWING REQUIREMENTS:
- DESIGN CRITERIA**
- A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
 - STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
 - A NOTE SHALL BE PROVIDED ON THE APPROVED PLAN THAT STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
 - STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
 - APPROVED BMPs SHALL BE SHOWN ON A PLAN TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM A STOCKPILE.
 - STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATER COURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
 - ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.

- OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY LDD 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-ENHANCEMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-192 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).
- MAINTENANCE REQUIREMENTS TO BE NOTED ON THE PLAN**
- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEPT IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
- IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDINGS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
- THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
- ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS



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 RALEIGH, NORTH CAROLINA 27675
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 FIRM NO. LICENSE NUMBER C-4222

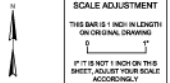
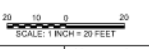


REVISION HISTORY

REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/23/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
 DO NOT USE FOR CONSTRUCTION



SITE PLANS

ROLESVILLE CROSSFIT
 850 GRANITE FALLS BLVD
 ROLESVILLE, NC 27571

MCARN REALTY LLC

DATE:	10-25-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

EROSION & SEDIMENT CONTROL PLAN - PHASE 1

C-8
 SHEET 8 OF 19

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BASIN CONVERSION SEQUENCE:

- SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL ENGINEER / CONSULTANT TO DETERMINE IF A BASIN CAN BE CONVERTED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO CONVERSION OF THE BASIN.
- DEWATER BASINS VIA SILT BAGS. REMOVE ACCUMULATED SEDIMENT. FINE GRADE WETLAND IN PREPARATION FOR PLANTING.
- PERFORM PLANTING PREPARATION, PLANT/SEED, MULCH AND ASPHALT TACK ANY RESULTING BARE AREAS IMMEDIATELY.
- INSTALL VELOCITY DISSIPATORS AS REQUIRED ON THE EROSION CONTROL PLAN.
- WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL ENGINEER / CONSULTANT FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVISE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION.

LEGEND

- | | | | |
|-------|------------------------|-----|------------------------------|
| --- | EX. PROPERTY LINE | --- | PROP. RETRACK LINE |
| --- | EX. RIGHT-OF-WAY | --- | PROP. EASEMENT/BUFFER |
| --- | EX. ADJACENT OWNERS | --- | PROP. CHAINLINK FENCE |
| --- | EX. CHANNEL/STREAM | --- | PROP. ADA HANDRAIL/GUARDRAIL |
| --- | EX. STREAM BUFFER | --- | PROP. WATER LINE |
| W W | EX. WATER LINE | --- | PROP. SANITARY SEWER |
| SS SS | EX. SANITARY SEWER | --- | PROP. STORM SEWER |
| SD SD | EX. STORM SEWER | --- | PROP. CURB INLET (CBI) |
| --- | EX. MAJOR CONTOUR (5') | --- | PROP. YARD INLET |
| --- | EX. MINOR CONTOUR (1') | --- | PROP. FLARED END SECTION |
| | | --- | PROP. JUNCTION BOX |
| | | --- | PROP. LIMIT OF DISTURBANCE |
| | | --- | PROP. MAJOR CONTOUR (5') |
| | | --- | PROP. MINOR CONTOUR (1') |
| | | --- | PROP. SILT FENCE |
| | | --- | PROP. FAIRCLOTH SKIMMER |
| | | --- | PROP. SLOPE PROTECTION |
| | | --- | PROP. CONSTRUCTION ENTRANCE |
| | | --- | PROP. SILT FENCE OUTLET |
| | | --- | PROP. INLET PROTECTION |
| | | --- | PROP. BAFFLE |

OWNER: GRANITE FALLS SWIM & ATHLETIC CLUB LLC
 P.O. 1798-CE-4884
 ZONING: CC-SUD
 USE: SWIM & ATHLETIC CLUB

WAKE COUNTY CONSTRUCTION SEQUENCE

- SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL CONSULTANT. OBTAIN A LAND-DISTURBING PERMIT.
- INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SKIMMER SEDIMENT BASIN OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. REED TEMPORARY DIVERSIONS AND BASIN IMMEDIATELY AFTER CONSTRUCTION.
- CALL WAKE COUNTY FOR AN ONSITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT TO OBTAIN A CERTIFICATE OF COMPLIANCE.
- BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED.
- BEGIN ROUGH GRADING.
- INSTALL STORM SEWER AND PROTECT INLETS WITH INLET PROTECTION, OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, ETC. SEED AND MULCH DESIGNATED AREAS PER GROUND STABILIZATION TIME FRAMES.
- WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL WAKE COUNTY FOR AN INSPECTION BY THE ENVIRONMENTAL CONSULTANT.
- IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, ETC., AND SEED OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
- UPON STABILIZATION OF THE ENTIRE DISTURBED AREA, CONVERT SKIMMER BASIN TO STORMWATER WETLAND AS SHOWN ON THE APPROVED PLANS.
- WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT. OBTAIN A CERTIFICATE OF COMPLETION.

EROSION CONTROL NOTES

- ALL LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH WAKE COUNTY AND NCDDE STANDARDS.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED IN PROPER WORKING CONDITION DURING THE PERIOD OF CONSTRUCTION.
- ADDITIONAL EROSION CONTROL MEASURES AND/OR MODIFICATIONS TO PROPOSED MEASURES MAY BE NECESSARY DEPENDING ON ACTUAL SITE CONDITIONS.
- THE TOTAL DISTURBED AREA IS 9.93 ACRE.
- SILT FENCE OUTLETS TO BE PLACED AS SHOWN AND AT LOW POINTS ALONG SILT FENCE AS NECESSARY.
- SEE EROSION CONTROL CALCULATIONS ON SHEET C-2.
- SKIMMER BASIN GRADES SHOWN ARE 2H:1V UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL ESTABLISH GROUND COVER IMMEDIATELY AFTER DISTURBANCE DURING CONSTRUCTION OF PERMANENT SWALES.
- PROVIDE STABLE TRANSITION AT TEMPORARY DIVERSION ENTRANCES TO BASIN - LINE SLOPE AT ENTRANCE WITH 12" ROCK RIPRAP.
- RE/RAP ENERGY DISSIPATOR DIMENSIONS SHOWN ON DETAIL SHEET C-14.
- DISTURBED AREAS TO BE STABILIZED AND GROUND COVER SHOULD BE ACHIEVED WITHIN 7 WORKING DAYS FOLLOWING COMPLETION OF DEVELOPMENT, PER THE WAKE COUNTY CONSTRUCTION STORMWATER GENERAL PERMIT.
- SEE DETAIL SHEETS C-15 AND C-16 FOR EROSION AND SEDIMENT CONTROL MAINTENANCE REQUIREMENTS.
- TREE CLEARING BEYOND THE LIMITS OF DISTURBANCE IS NOT PROPOSED.

WAKE COUNTY STOCKPILE REQUIREMENTS

EFFECTIVE SEPTEMBER 1, 2008 - SOIL STOCKPILES SHALL BE LOCATED ON THE APPROVED PLAN AND SHALL ADHERE TO THE FOLLOWING REQUIREMENTS:

DESIGN CRITERIA

- A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
- STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
- A NOTE SHALL BE PROVIDED ON THE APPROVED PLAN THAT STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
- STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
- APPROVED BMPs SHALL BE SHOWN ON A PLAN TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM A STOCKPILE.
- STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATER COURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
- ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.

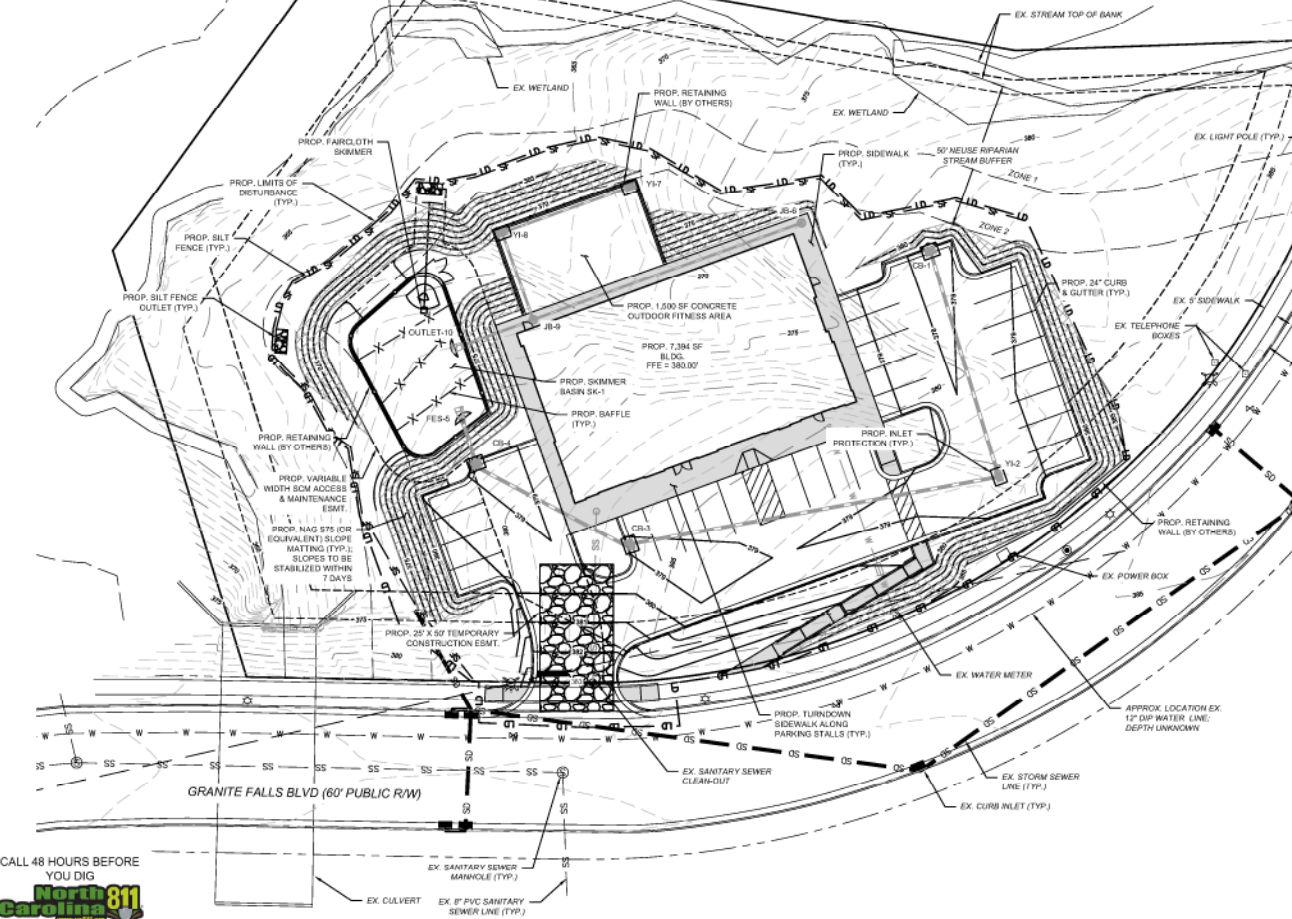
- OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY LDD AND STATE REGULATIONS. ALL SPOIL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN. DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL. PRIOR TO DISPOSAL, FILL OF FEMA FLOODWAYS AND FURNISHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-192 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).

MAINTENANCE REQUIREMENTS TO BE NOTED ON THE PLAN

- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEPT IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
- IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDINGS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
- THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
- ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS

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 P.O. 1799-72-9251
 ZONING: RD-SUD
 USE: OPEN SPACE



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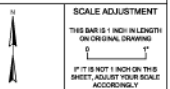
REVISION HISTORY

REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/23/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
 DO NOT USE FOR CONSTRUCTION

SCALE: 1" = 20 FEET



SITE PLANS

ROLESVILLE CROSSBIT
 850 GRANITE FALLS BLVD
 ROLESVILLE, NC 27571

MCARN REALTY LLC

DATE:	10-25-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

EROSION & SEDIMENT CONTROL PLAN - PHASE 2

C-9
 SHEET 9 OF 19

PLANT LIST					
REV	SCIENTIFIC NAME	COMMON NAME	QUAN	CAL	HT
CANOPY TREES					
LM	ULMUS PARVIFOLIA	CHINESE ELM	5	2.6"	10'
QR	QUERCUS RUBRA	RED OAK	4	2.6"	10'
UNDERSTORY TREES					
CF	CORNUS FLORIDA	NATIVE DOGWOOD	9	1.5"	8'
CC	CERISIA CANADENSIS	REDBUD	9	1.5"	8'
SHRUBS					
IC	ILEX CORNUTA	CAROLINA HOLLY	80	3 GAL.	24"

OWNER: GRANITE FALLS SWIM & ATHLETIC CLUB LLC
 PIN: 1759-82-4084
 ZONING: CO-SUD
 USE: SWIM & ATHLETIC CLUB

OWNER: HIKKUNT GRANITE FALLS LLC
 PIN: 1759-72-9251
 ZONING: RD-SUD
 USE: OPEN SPACE

LANDSCAPING REQUIREMENTS

VEHICULAR USE AREAS ONLY:

- NO PORTION OF THE VUA SHALL BE FURTHER THAN 80' FROM THE TRUNK OF A LARGE TREE
- ALL VUA MUST BE SCREENED FROM THE OFF-SITE VIEW WITH A CONTINUOUS EVERGREEN HEDGE

STREETSCAPE:

- ONE (1) CANOPY TREE AND TWO (2) UNDERSTORY TREES PER 40 LF OF FRONTAGE
- 325 LF OF FRONTAGE TO BE REVEGETATED - 8 CANOPY TREES AND 16 UNDERSTORY TREES REQUIRED
- 8 CANOPY TREES AND 16 UNDERSTORY TREES PROVIDED

LEGEND

- EX. PROPERTY LINE
- EX. RIGHT-OF-WAY
- EX. ADJACENT OWNERS
- EX. CHANNEL/STREAM
- EX. STREAM BUFFER
- W W EX. WATER LINE
- SS SS EX. SANITARY SEWER
- SD SD EX. STORM SEWER
- EX. TREE LINE
- PROP. SETBACK LINE
- PROP. EASEMENT/BUFFER
- PROP. ADA HANDRAIL/GUARDRAIL
- PROP. WATER LINE
- SS SS PROP. SANITARY SEWER
- PROP. STORM SEWER
- PROP. TREE LINE

- PROP. CANOPY TREE (LM)
- PROP. CANOPY TREE (QR)
- PROP. UNDERSTORY TREE (CF)
- PROP. UNDERSTORY TREE (CC)
- PROP. EVERGREEN SHRUB (IC)
- PROP. SITE LIGHTING LUMINAIRE

NOTES

- ALL NEW PLANTINGS SHALL MEET THE REQUIREMENTS OF THE TOWN OF ROLESVILLE LIMITED DEVELOPMENT ORDINANCE (LDO) ARTICLE 14, LANDSCAPE AND APPEARANCE STANDARDS.
- ALL DISTURBED AREAS NOT OCCUPIED BY STRUCTURES, PAVING OR PLANTINGS SHALL BE GRADED AND SEED/AS AS INDICATED IN SPECIFICATIONS.
- ALL TREE PLANTINGS SHALL BE MULCHED WITH 4" CLEAN, PINE STRAW MULCH.
- ALL PLANT BEDS TO BE EDGED WITH TYPICAL "V"-CHANNEL EDGE.
- A MINIMUM OF FOUR INDIVIDUAL SOIL SAMPLES SHALL BE TAKEN THROUGHOUT THE SITE FOR OVERALL SOIL ANALYSIS.
- CONTRACTOR TO UTILIZE ALL ON-SITE TOPSOIL. CONTRACTOR SHALL SUPPLY ADDITIONAL TOPSOIL AT NO ADDITIONAL COST TO OWNER IF EXISTING TOPSOIL IS NOT SUFFICIENT TO MEET THE NEEDS OF THIS PROJECT.
- ALL PLANTING AREAS TO RECEIVE 1 CY OF SOIL CONDITIONER FOR EACH 75 SF OF PLANT BED AREA. ACCEPTABLE SOIL CONDITIONERS SHALL BE PULVERIZED PINE BARK, PEAT MOSS OR SHREDDED COMPOSTED LEAVES.
- CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING UTILITIES BEFORE BEGINNING OF GRADING AND LANDSCAPE INSTALLATION.
- CONTRACTOR TO VERIFY QUANTITIES OF PLANTINGS AS SHOWN. PLANTINGS INDICATED ON PLANS SHALL PREVAIL OVER QUANTITIES INDICATED IN PLANT LIST IF DISCREPANCIES ARISE.
- ALL PLANTS ARE TO BE THOROUGHLY WATERED IN THE SAME DAY AS PLANTED.
- THE PLANT HOLE WIDTH SHALL BE A MINIMUM THREE TIMES THE DIAMETER OF THE ROOT BALL.
- REMOVE ALL STRAPPING AND TWINE FROM ROOT BALL. REMOVE WIRE BASKET AND BURLAP FROM TOP 10' OF ROOT BALL BEFORE BACKFILL AROUND BALL IS COMPLETED.
- ALL TREES WHICH ARE SMOOTH BARKED AT THE TIME OF PLANTING AND HAVE MORE THAN 2" OF ALL TREE WRAPPING SHALL EXTEND FROM THE TOP OF THE BACKFILL TO THE LOWEST BRANCHES.
- ALL TREES, WHEN PLANTED, SHALL HAVE THE SAME RELATIONSHIP TO FINISHED GRADE AS TO THE GRADING PLAN.
- LANDSCAPING SHOWN MEETS QUANTITY REQUIREMENTS. ALL INSTALLATION AND MAINTENANCE SHALL BE PER TOWN OF ROLESVILLE LDO.
- ALL ADDITIONAL LANDSCAPING SHALL BE PER OWNER.
- ALL TREES SHALL BE LOCATED A MINIMUM OF 15' FROM SITE LIGHTING LUMINAIRES.
- TREE CLEARING BEYOND THE LIMITS OF DISTURBANCE IS NOT PROPOSED.
- WHERE PROPOSED VEGETATION IS NOT SHOWN IN BUFFER AREAS, EXISTING VEGETATION SHALL REMAIN AND SHALL BE USED TO MEET BUFFER PLANTING REQUIREMENTS. IF, UPON INSPECTION BY THE TOWN OF ROLESVILLE, THE EXISTING VEGETATION DOES NOT MEET THE BUFFER PLANTING REQUIREMENTS, ADDITIONAL VEGETATION SHALL BE PLANTED TO MEET THE REQUIREMENTS.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS



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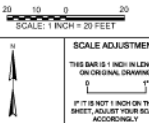


REVISION HISTORY

REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/23/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
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SITE PLANS

ROLESVILLE CROSSFIT
 850 GRANITE FALLS BLVD
 ROLESVILLE, NC 27571

MCARN REALTY LLC

DATE:	10-25-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

LANDSCAPING PLAN

C-10
 SHEET 10 OF 18

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LUMINAIRE SCHEDULE				
SYMBOL	DESCRIPTION*	LAMP	HEIGHT (FT)**	QUANTITY
—	AMERICAN ELECTRIC® (1) ATR2 SERIES 91W LED 700MA	(1) LED	18	4
D	WSR LED ARCHITECTURAL WALL SCOOGE	(1) LED	14	5

CALCULATION SUMMARY				
PARKING AREAS	AVERAGE	MAX	MIN	AVG/WM
	2.18	5.01	0.62	3.52

LEGEND

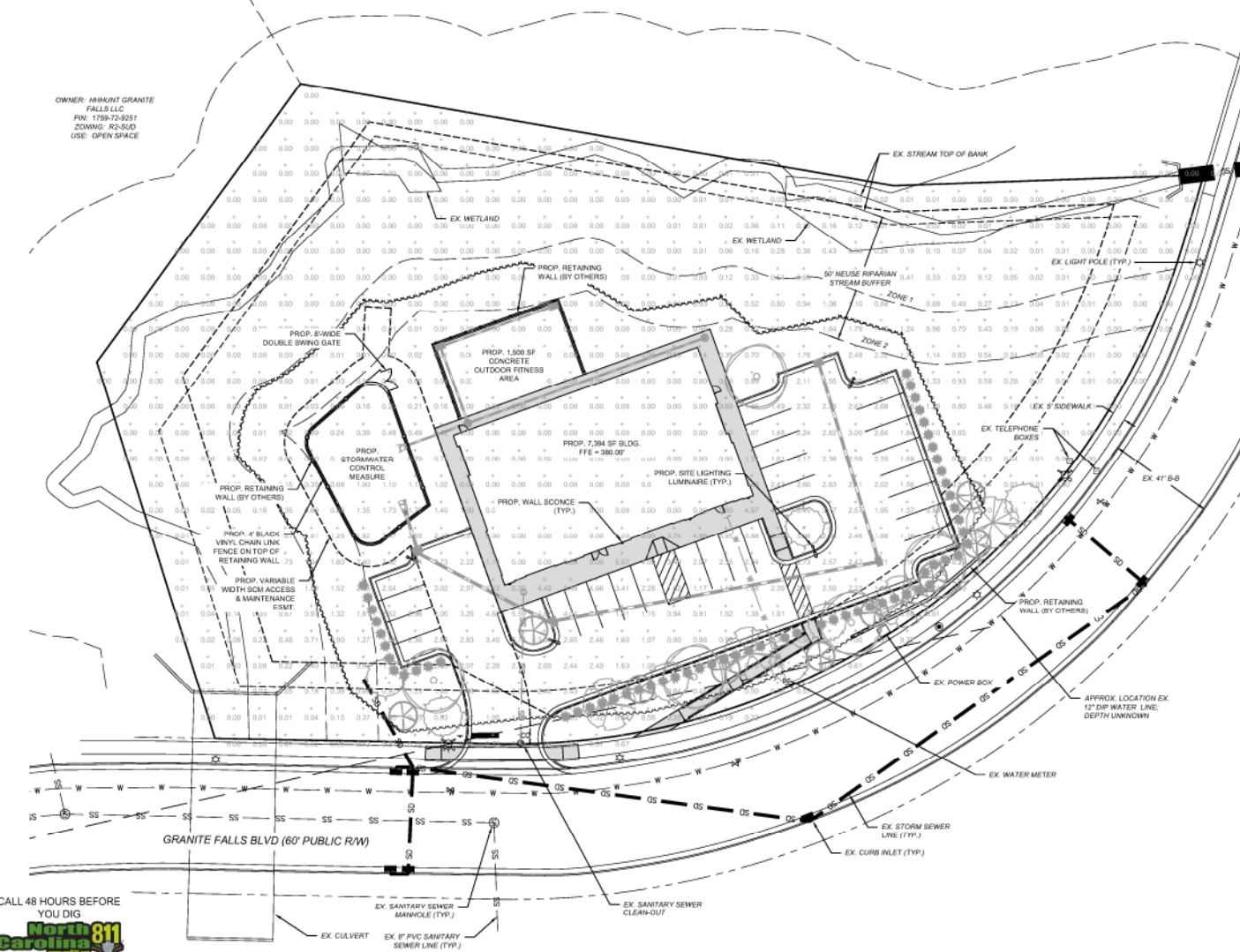
---	EX. PROPERTY LINE
---	EX. RIGHT-OF-WAY
---	EX. ADJACENT OWNERS
---	EX. CHANNEL/STREAM
---	EX. STREAM BUFFER
---	EX. WATER LINE
SS	EX. SANITARY SEWER
SD	EX. STORM SEWER
---	PROP. SETBACK LINE
---	PROP. EASEMENT/BUFFER
---	PROP. CHAINLINK FENCE
---	PROP. ADA HANDRAIL/GUARDRAIL
---	PROP. WATER LINE
SS	PROP. SANITARY SEWER
SD	PROP. STORM SEWER
---	PROP. SITE LIGHTING LUMINAIRE
---	PROP. FOOT CANDLES

NOTES

1. ALL SITE LIGHTING SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN OF ROLESVILLE UNIFIED DEVELOPMENT ORDINANCE (UDO) ARTICLE 14, SECTION 14.8, EXTERIOR LIGHTING.
2. THE PARKING AREA SHALL HAVE A MINIMUM LIGHT LEVEL OF 0.2 FOOT CANDLE, A MAXIMUM LIGHT LEVEL OF 9 FOOT CANDLES, AN AVERAGE OF 1.9 - 2.9 FOOT CANDLES, AND A MAXIMUM AVGMIN UNIFORMITY OF 6 PER THE "MEDIUM" HORIZONTAL ILLUMINATION STANDARDS FOR GENERAL PARKING AND PEDESTRIAN AREAS.
3. THE MAXIMUM LIGHT LEVEL AT ANY RESIDENTIAL PROPERTY LINE SHALL BE 0.3 MAINTAINED FOOT CANDLE AND AT ANY COMMERCIAL PROPERTY LINE SHALL BE 1.0 MAINTAINED FOOT CANDLE.
4. THE INTENT OF THIS DRAWING IS TO SHOW FOOT CANDLE LEVELS BASED ON FIXTURES SHOWN. LIGHT LEVELS MAY VARY BASED ON ACTUAL FIXTURES INSTALLED.
5. THIS IS A SITE LIGHTING CALCULATION PLAN ONLY AND DOES NOT PROVIDE ELECTRICAL CONNECTIONS FOR FIXTURES SHOWN. SITE DEVELOPERS, OWNERS, BUILDERS, AND GENERAL CONTRACTORS ARE RESPONSIBLE FOR COORDINATING WITH ELECTRICAL CONTRACTOR OR POWER COMPANY FOR POWER CONNECTIONS FOR ALL FIXTURES.
6. ALL OTHER LIGHTING SHALL BE BY OWNER.
7. LIGHT POLES SHALL BE BLACK FIBERGLASS AND FIXTURES SHALL BE BLACK AND AS NOTED IN THE LUMINAIRE SCHEDULE AND THE DETAIL ON SHEET C-12.

OWNER: GRANITE FALLS SWIM & ATHLETIC CLUB LLC
 P/N: 1759-82-4084
 ZONING: CO-SUD
 USE: SWIM & ATHLETIC CLUB

OWNER: INKUNT GRANITE FALLS LLC
 P/N: 1759-72-9251
 ZONING: RD-SUD
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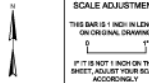
REVISION HISTORY

REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/23/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
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SCALE: 1" INCH = 20 FEET



SITE PLANS
 ROLESVILLE CROSSFIT
 850 GRANITE FALLS BLVD
 ROLESVILLE, NC 27571

MCARN REALTY LLC

DATE:	10-28-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

LIGHTING PLAN

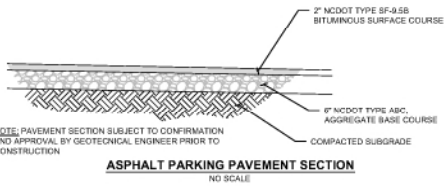
C-11
 SHEET 11 OF 18

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS

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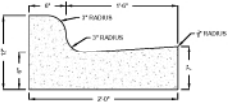
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ASPHALT PARKING PAVEMENT SECTION
NO SCALE

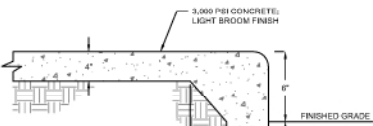
NOTE: PAVEMENT SECTION SUBJECT TO CONFIRMATION AND APPROVAL BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION



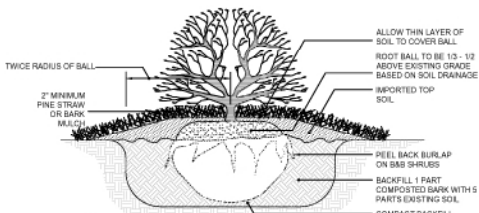
STANDARD 24\"/>

- NOTES:**
1. CONCRETE SHALL BE 3000 PSI.
 2. CONTRACTION JOINTS SHALL BE SPACED AT 10' INTERVALS OR 15' INTERVALS WHEN A MACHINE IS USED.
 3. EXPANSION JOINTS SHALL BE SPACED AT 50' INTERVALS.
 4. FINISH ALL CONCRETE WITH CURING COMPOUND.
 5. FOLLOW ALL APPLICABLE A.C.I. REQUIREMENTS.
 6. VALLEY CURB SHALL ONLY BE USED FOR APPROVED APPLICATIONS.

24\"/>

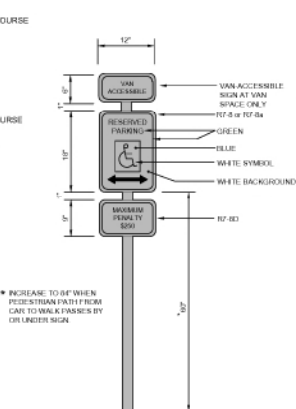


TURNDOWN SIDEWALK
NO SCALE



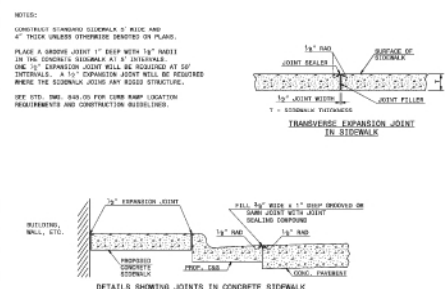
- NOTES:**
1. ALL SHRUB/EVERGREEN BEDS SHALL BE RAISED 6\"/>
 2. ALL SHRUB/EVERGREEN BEDS IN PARKING ISLANDS ONLY SHALL BE RAISED 12\"/>

TYP. SHRUB/EVERGREEN PLANTING DETAIL
NO SCALE

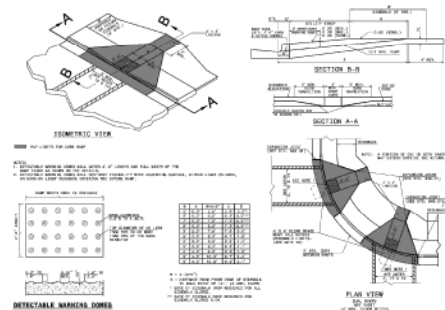


ADA SIGN AND POST
NO SCALE

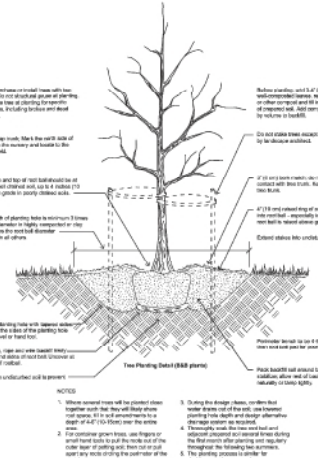
* INCREASE TO 10\"/>



DETAILS SHOWING JOINTS IN CONCRETE SIDEWALKS



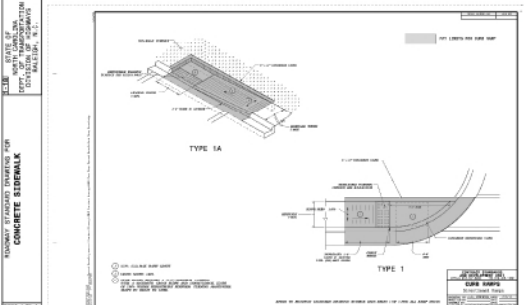
SYMMETRIC STRIP
DETECTABLE WARNING DOMES



TREE PLANTING DETAIL
NO SCALE

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CONCRETE SIDEWALK



CURB RAMP

- NOTES:**
1. CONTRACT THE CURB RAMP TO BE 4\"/>
 2. LOCATE CURB RAMP AND PLACE PROTECTIVE CURBSIDE MARKING AS SHOWN IN THE PAVEMENT MARKING PLAN. CURB RAMP AND PROTECTIVE CURBSIDE MARKING SHALL BE SPACED AT 50' INTERVALS.
 3. CONCRETE THE CURB RAMP AND THE PROTECTIVE CURBSIDE MARKING ON A 4\"/>
 4. SET BACK EXTERIOR FROM INSIDE SIDEWALK TO MAXIMUM SIDE OF TRAVEL LANE BY 4' MINIMUM.
 5. REFER TO THE PAVEMENT MARKING PLAN FOR CURB RAMP LOCATIONS OF SIGNALIZED INTERSECTIONS. IF A PROTECTIVE MARKING PLAN IS NOT PROVIDED, CONTACT THE SIGNAL ENGINEER SECTION FOR THE TOWN FOR LOCATIONS OR LOCATE AS DIRECTED BY THE ENGINEER.
 6. TERMINATE PAVING A MINIMUM OF 2' BACK OF A PEDESTRIAN CROSSWALK.
 7. CONSTRUCT CURB RAMP A MINIMUM OF 4' WIDE.
 8. CONSTRUCT THE MINIMUM SLOPE OF THE RAMP 1:50 MAXIMUM.
 9. ALLOWABLE CROSS SLOPE IN SIDEWALK AND CURB RAMP SHALL BE 2% MAXIMUM.
 10. CONSTRUCT THE SIDE FLARE ALONG A MINIMUM OF 15% MEASURED ALONG THE CURB LINE.
 11. CONSTRUCT THE CENTER SLOPE OF THE GUTTER OR STREET AT THE BASE OF THE CURB RAMP A MINIMUM OF 1% AND MAXIMUM 4% CROSS SLOPE.
 12. CONSTRUCT LANDING OR SLOPE OF 4% WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. CONSTRUCT LANDING FOR MINIMUM WIDTH A MINIMUM OF 5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
 13. TO USE A BRIDGE (BUILT AS A PROTECTIVE REFUGE AREA, METEORIC ISLANDS SHALL BE A MINIMUM OF 4' WIDE, CONTACT METEORIC ISLANDS TO PROVIDE MINIMUM ONE (1) FOOT OF CLEARANCE TO THE CURB LINE.
 14. SMALL CONSTRUCTION ISLANDS THAT CAN NOT PROVIDE A 5'0\"/>
 15. CURB RAMP WITH RETURNED CURB MAY BE USED ONLY WHEN PROTECTIVE MARKING IS NORMALLY WALK AWAY FROM THE RAMP. THE ALIGNMENT SHOULD BE PLANNED ON THE SIDE-WALK SURFACE ON THE SIDE APPROACH TO SUBSTANTIALLY DISTANTLY.
 16. PLACE A 1/2\"/>
 17. PLACE ALL PROTECTIVE PAINT AUTOMATICALLY APPLIED STRIPES AS SHOWN IN THE PLAN OR AS SHOWN TO BE NEEDED.
 18. CURB RAMP THROUGH METEORIC ISLANDS, SIGNAL ISLANDS AT SIGNAL LOCATIONS, SHALL BE RAISED BY SPECIAL DETAILS. CONTACT THE CONTRACT ENGINEER AND DEVELOPMENT DEPT FOR THE DETAILS OF THIS SPECIAL DETAIL.

WSR LED Architectural Wall Sconce

Specifications:
Luminaire: WSR LED
Height: 12.5\"/>

Example: WSR LED 12.5\"/>

Item	Quantity	Unit Price	Total Price
WSR LED 12.5\"/>			

Emergency Battery Operation

The WSR LED sconce is designed to operate in emergency mode for up to 24 hours. The sconce is designed to operate in emergency mode for up to 24 hours. The sconce is designed to operate in emergency mode for up to 24 hours.

WALL SCONCE DETAIL (APPROVED EQUALS ACCEPTED)
NO SCALE

Autobahn Series ATB2 Roadway Lighting

Features:
• High Performance: comparable to 120-180W HPT roadway lighting
• Long Life: 50,000+ hours
• Compact: 12.5\"/>

Applications:
• Roadway
• Parking
• Plaza

LUMINAIRE DETAIL (APPROVED EQUALS ACCEPTED)
NO SCALE

LUMINAIRE DETAIL (APPROVED EQUALS ACCEPTED)
NO SCALE

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1	TOWN OF ROLESVILLE COMMENTS	1/23/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
DO NOT USE FOR CONSTRUCTION

SCALE ADJUSTMENT
THIS SCALE IS INTENDED ONLY FOR ON-SITE DRAWING
IF IT IS NOT 1"=10' ON THIS SHEET, ADJUST YOUR SCALE ACCORDINGLY.

SITE PLANS
ROLESVILLE CROSSFIT
850 GRANITE FALLS BLVD
ROLESVILLE, NC 27571

MCARN REALTY LLC

DATE: 10-25-2019
DESIGNED BY: AS SHOWN
APPROVED BY: FLM
PROJECT NO.: 19036

SITE DETAILS
C-12
SHEET 12 OF 18

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS



REVISION HISTORY

REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/29/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

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SCALE ADJUSTMENT
THIS SHALL BE IN IN LENGTH OR ORIGINAL DRAWING
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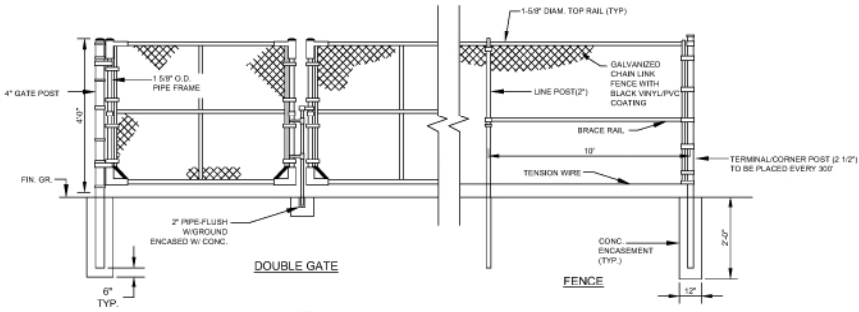
SITE PLANS
ROLESVILLE CROSSFIT
850 GRANITE FALLS BLVD
ROLESVILLE, NC 27571

MCARN REALTY LLC

DATE:	10-25-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

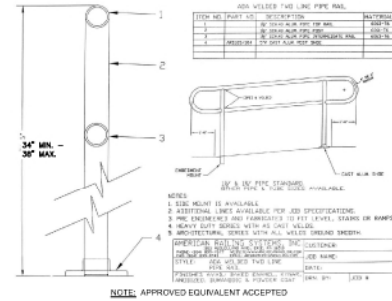
SITE DETAILS

C-13
SHEET 13 OF 18

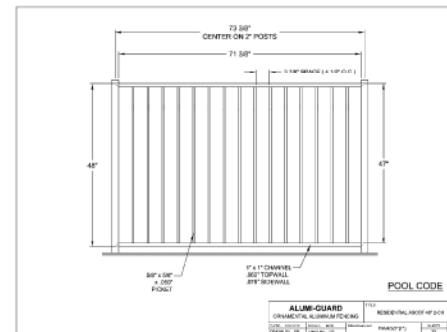


NOTE:
2" (R GA.) MESH FABRIC SHALL BE 1.2 OZ. GALVANIZED
ALL POSTS SHALL BE SCHEDULE 40 GALVANIZED PIPE.

**4" BLACK VINYL CHAIN LINK FENCE AND GATE DETAIL
FOR USE AROUND STORMWATER CONTROL MEASURES**
NO SCALE



**ADA HANDRAIL DETAIL
NOT TO SCALE**



**TYP. BLACK ALUMINUM FENCE FOR
RETAINING WALL FALL PROTECTION**
NO SCALE

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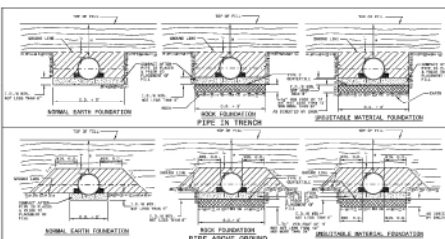
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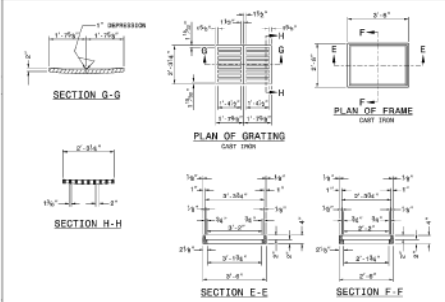
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STORM DRAINAGE DETAILS

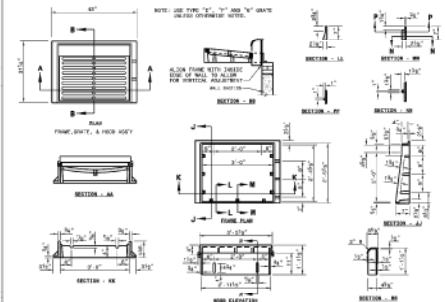
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SHEET 14 OF 18



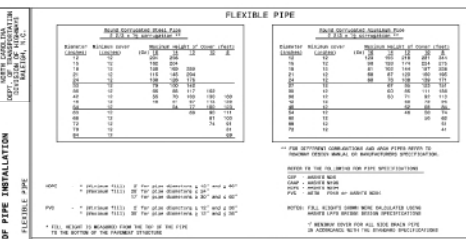
METHOD OF PIPE INSTALLATION
FLEXIBLE PIPE
300.01



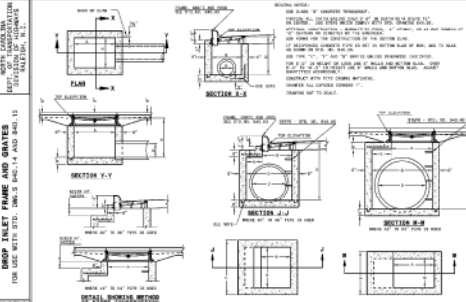
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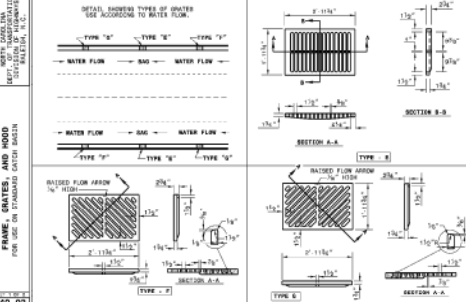
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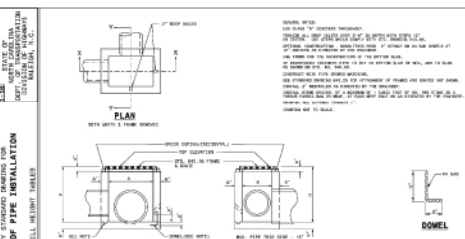
FLEXIBLE PIPE
300.01



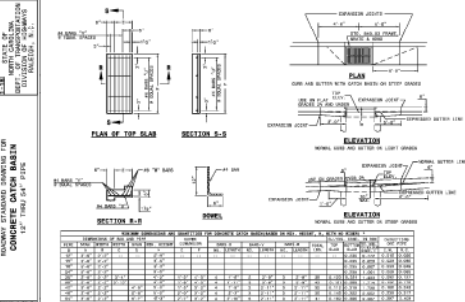
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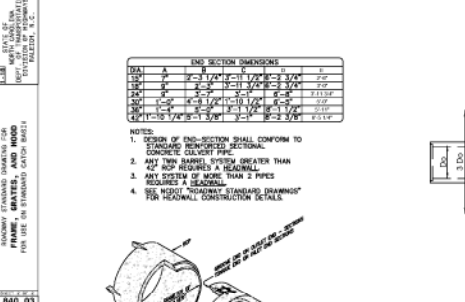
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METHOD OF PIPE INSTALLATION
RIGID PIPE
300.01



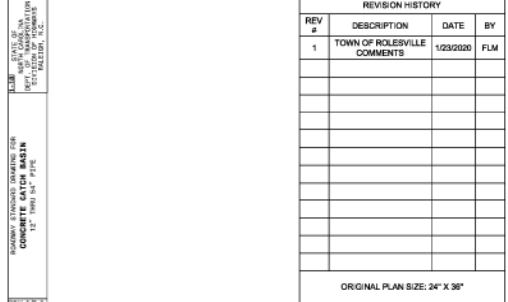
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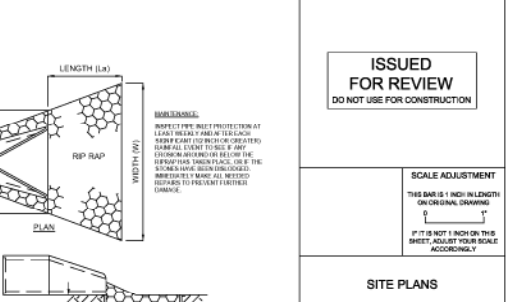
300.03



METHOD OF PIPE INSTALLATION
FLEXIBLE PIPE
300.01



300.02



300.03

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ROLESVILLE, NC 27571

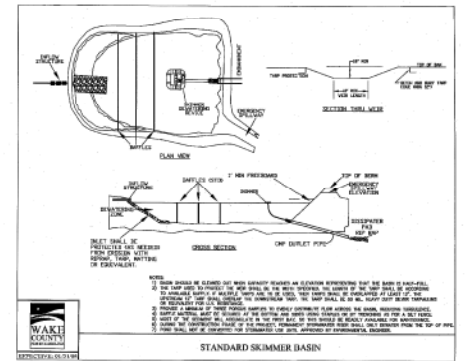
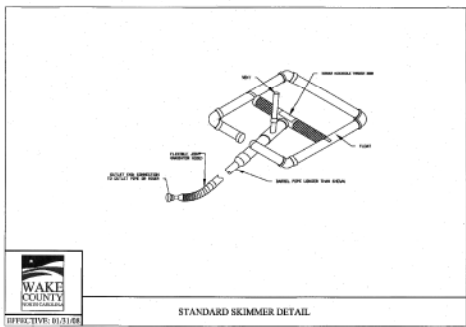
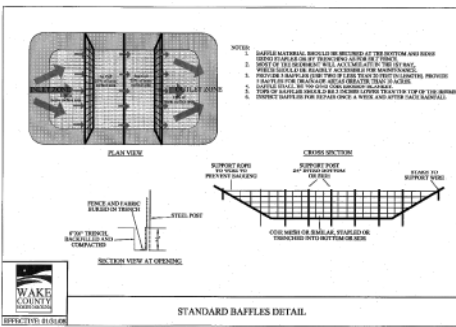
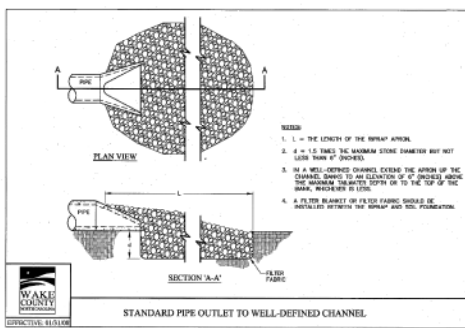
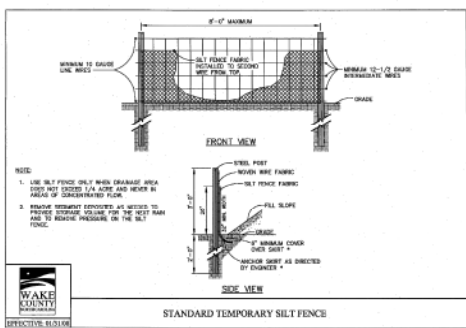
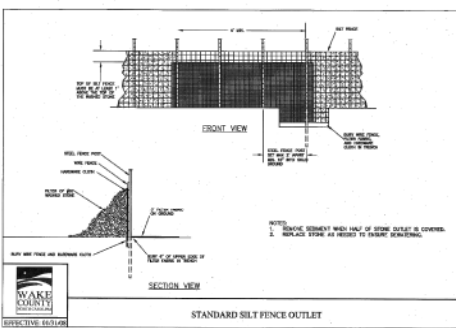
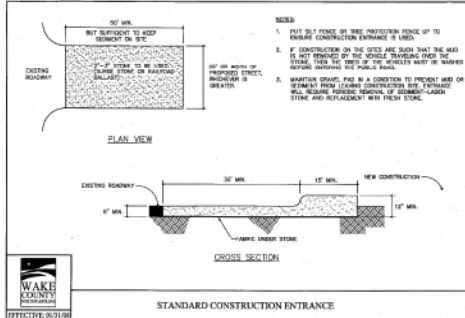
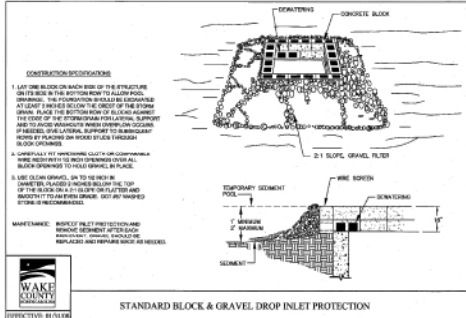
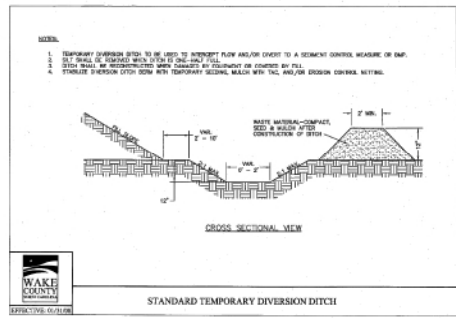
MCARN REALTY LLC

DATE:	10-25-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

EROSION & SEDIMENT CONTROL DETAILS

C-15
SHEET 15 OF 18

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ROLESVILLE, NC 27571

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PROJECT NO.: 19036

EROSION & SEDIMENT CONTROL DETAILS

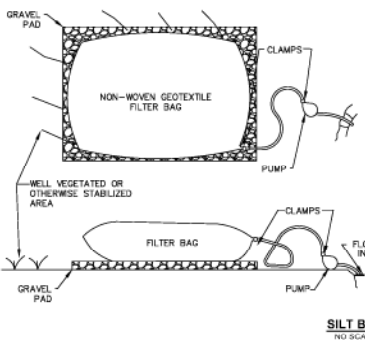
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SHEET 16 OF 18

VEGETATION Stabilization Check Plan for Construction of 14-in. HDPE Pipe

REVISION HISTORY of Energy, Material and Labor Parameters

STABILIZATION TIMEFRAMES (Minimum: 90 Days)		
Soil Area Description	Stabilization	Timeline Expectations
Parameter class, within, ditches, slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	8 weeks min 12" of root in length and min. root length min. 1/4" to 1/8" to 1/16"
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 10° to length.
All other areas with slopes flatter than 4:1	14 days	None, except for parameters and HQW Zones.



FILTER BAGS MAY BE USED TO FILTER WATER PUMPED FROM EXCAVATION TRENCHES TO DRIVING WAYS.

FILTER BAGS SHALL BE MADE FROM NON WOVEN GEOTEXTILE MATERIAL. ACROSS THE TRENCH, DOUBLE STITCHED TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.

THE PUMPING RATE SHALL BE NO GREATER THAN 75% OF THE MAXIMUM SPECIFICATIONS OF THE MAIN ACTUAL, WHENEVER SUCH PUMP RATES SHOULD BE FOLLOWING AND SCHEDULED.

FILTER BAGS SHALL BE LOCATED IN WELL VENTILATED GRASSY AREAS AND DISCHARGED TO A COLLECTION TRENCH. THEY SHALL BE REPLENISHED WHEN THEY BECOME FULL. HOLLOW BAGS OR BAGS WHICH HAVE BEEN RELEASED OR THOSE THAT HAVE FAILED OR ARE 3/4 FULL.

THE MAIN CONSTRUCTION SHOULD BE INSTALLED INTO THIS FILTER BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND RECORDS TO CAPTURE A MAXIMUM AMOUNT OF ACCUMULATED WASTE WHICH MAY BE REQUIRED FOR DISPOSAL. PUMP MOTOR SHALL BE PROVIDED. THE FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME FULL. HOLLOW BAGS OR BAGS WHICH HAVE BEEN RELEASED OR THOSE THAT HAVE FAILED OR ARE 3/4 FULL.

FILTER BAGS SHALL BE RECHECKED. IF ANY PROBLEM IS DETECTED, PUMPS SHALL CLEAN, MAINTAINED AND RESTART UNTIL THE PROBLEM IS CORRECTED.

FOR SHOULDERS, SIDE DITCHES, SLOPES (MAX 3:1):

DATE	TYPE	PLANTING RATE
APR 1 - JUN 1	FALL FESCUE	200 LBS/ACRE
JULY 1 - SEP 1	FALL FESCUE & BRINDLEWOOD	200 LBS/ACRE
OCT 1 - FEB 1	FALL FESCUE	200 LBS/ACRE
MAR 1 - APR 1	WHEAT / CRACK DOGWOOD	200 LBS/ACRE
MAY 1 - JUN 1	FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1 FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1	200 LBS/ACRE

FOR SHOULDERS, SIDE DITCHES, SLOPES (3:1 TO 2:1):

DATE	TYPE	PLANTING RATE
APR 1 - JUN 1	FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1	200 LBS/ACRE
JULY 1 - SEP 1	FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1	200 LBS/ACRE
OCT 1 - FEB 1	FALL FESCUE	200 LBS/ACRE
MAR 1 - APR 1	WHEAT / CRACK DOGWOOD	200 LBS/ACRE
MAY 1 - JUN 1	FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1	200 LBS/ACRE
JULY 1 - SEP 1	FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1	200 LBS/ACRE

MIXTURE

GRAVEL TANK	2 1/2 TONS PER 1000 YARDS
GRAVEL PAD	3 TONS PER 1000 YARDS
GRAVEL PAD	3 TONS PER 1000 YARDS
GRAVEL PAD	3 TONS PER 1000 YARDS
GRAVEL PAD	3 TONS PER 1000 YARDS

- 1. DRAIN COMPACTED AREA AND SPREAD TOPSOIL. THREE INCHES DEEP COVER AND/OR ROCK COVERS ARE APPLICABLE.
- 2. FILL THE ENTIRE AREA TO SIX INCHES DEEP.
- 3. FURROW ALL GROUES, ROWS, AND OTHER OBSTRUCTIONS LEAVING BARRIERS READILY IDENTIFIED AND SCHEDULED.
- 4. APPLY GRAVEL TANK, LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL. (SEE SCHEDULE)
- 5. CONTINUE FILLING UNTIL A FINISH FURROW IS FURROWED. FURROWED AREAS SHOULD BE SPREAD AND FURROWED AGAIN BEFORE SEED.
- 6. SEED ON A PREPARED SEEDBED AND COVER SOIL USUALLY WITH SEEDING EQUIPMENT OR GRAZING BUCK.
- 7. MASH MANURE AT THE END OF THE ROWS AND BARRIERS.
- 8. RESPECT ALL SEEDING AREAS AND MAINTAIN NECESSARY BARRIERS OR OBSTRUCTIONS WITHIN THE PLANTING SEASON. IF THERE ARE SEEDING AREAS WHICH WERE DAMAGED AS A RESULT OF COVERING THE ORIGINAL 1/4" FURROW BED AND SEEDING BY THE

FOR LATE WINTER AND EARLY SPRING:

PLANTING RATE: 200 LBS/ACRE
PLANTING DATE: APR 1 - JUN 1
FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1
FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1

FOR SUMMER:

PLANTING RATE: 200 LBS/ACRE
PLANTING DATE: JULY 1 - SEP 1
FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1
FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1

FOR FALL:

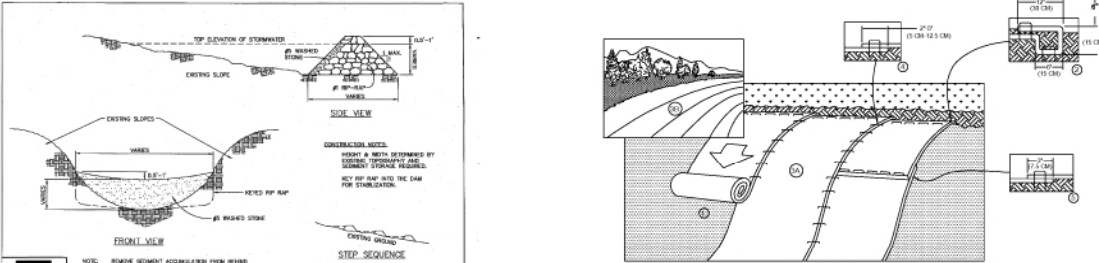
PLANTING RATE: 200 LBS/ACRE
PLANTING DATE: OCT 1 - FEB 1
FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1
FALL FESCUE & BRINDLEWOOD OR ALL FOR SHOULDERS & BRINDLEWOOD ONLY FOR SLOPES > 10:1

TEMPORARY SEEDING SCHEDULE

NO SCALE

PERMANENT SEEDING SCHEDULE

NO SCALE



- 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELLO SEED SO NOT NEARLY PREPARED AREA. CELLO SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 2" x 12" (5 OR 12 CM) DEEP X 10" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES SPACING APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. ANCHOR AND CONNECT THE TRENCH AT THE BLANKET, APPLY SEED TO COMPACTED SOIL, AND COVER WITH ANOTHER 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES SPACING SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
- 3. ROLL THE BLANKET (A DOWN OR B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SEED AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN AN APPROPRIATE LOCATION AS SHOWN IN THE STAPLE PATTERNS GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/TAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERNS.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
- 5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (OR SIDE BY SIDE) WITH AN APPROXIMATE 5" (5 CM) OVERLAP. STAPLE THROUGH OVERLAP AREAS, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH. NOTE: IN SOME SOIL CONDITIONS, THE USE OF STAPLES OR STAPLE LENGTHS GREATER THAN 12 1/2 CM MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

DETAILS AND LANGUAGE PROVIDED BY NORTH AMERICAN GREEN 19/15004
SLOPE INSTALLATION
NO SCALE

ROLLMAX
Turf Reinforcement Mats

Specification Sheet - V-Max SC250* Turf Reinforcement Mat

Property	Test Method	Typical Value
Thickness	ASTM D562	3/16" (1.5625 cm)
Density	ASTM D1555	30.0 lb/ft ² (463 kg/m ²)
Mass	ASTM D1555	30.0 lb/ft ² (463 kg/m ²)
Stitch Spacing	ASTM D562	12" (30.48 cm)
Stitch Width	ASTM D562	1/2" (1.27 cm)
Stitch Strength	ASTM D562	250 lb (113 kg)
Stitch Elongation	ASTM D562	10%
Tensile Strength	ASTM D562	1000 lb (454 kg)
Tensile Elongation	ASTM D562	10%
Tensile Modulus	ASTM D562	1000 lb/in (2200 N/cm)
UV Resistance	ASTM D562	1000 hrs
Water Absorption	ASTM D562	10%
Water Vapor Transmission	ASTM D562	10%
Water Vapor Absorption	ASTM D562	10%

NORTH AMERICAN GREEN SC250
EROSION CONTROL BLANKET
NO SCALE

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WATER DETAILS

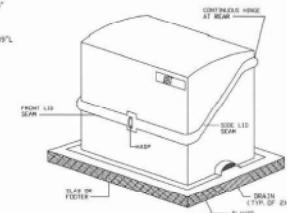
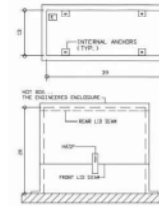
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SHEET 17 OF 18

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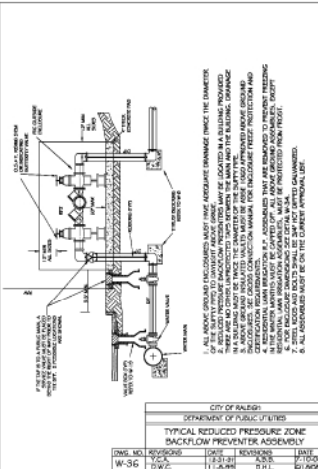
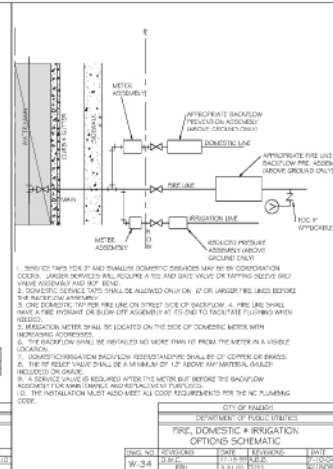
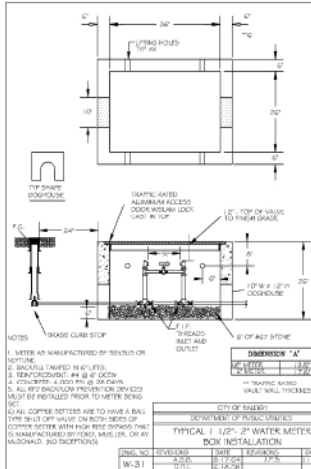
Hot Box® HB2 Enclosures

Specifications

- Recommended slab size is 50" L x 24" W x 4" minimum thickness.
- Feed is provided by a 90w, 120v, single phase heat trace cable.
- The internal dimensions of this model are 39" L x 13" W x 28" H.
- The shipping weight of this unit is 40 lbs.
- This unit is the LB2 model when ordered without heat.

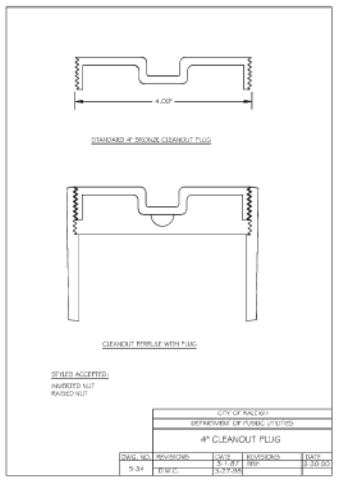
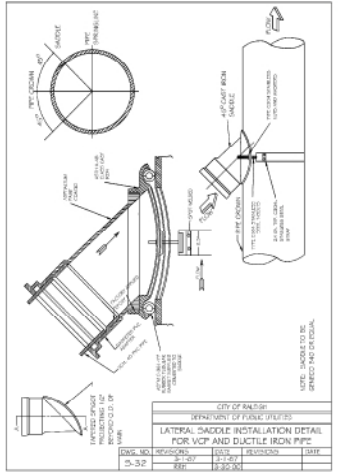
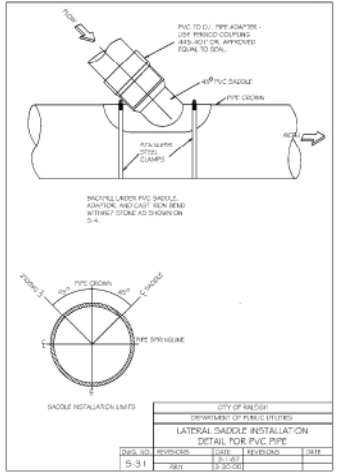
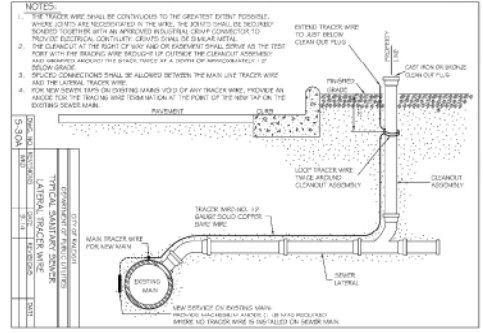
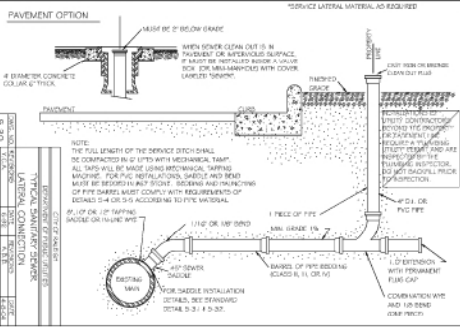


HOT-BOX HB2 DETAIL (APPROVED EQUALS ACCEPTED)
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REVISION HISTORY			
REV #	DESCRIPTION	DATE	BY
1	TOWN OF ROLESVILLE COMMENTS	1/29/2020	FLM

ORIGINAL PLAN SIZE: 24" X 36"

ISSUED FOR REVIEW
 DO NOT USE FOR CONSTRUCTION



SITE PLANS
ROLESVILLE CROSSFIT
 850 GRANITE FALLS BLVD
 ROLESVILLE, NC 27571

MCARN REALTY LLC

DATE:	10-25-2019
SCALE:	AS SHOWN
DESIGNED BY:	FLM
APPROVED BY:	FLM
PROJECT NO.:	19036

SEWER DETAILS

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY STANDARDS AND SPECIFICATIONS

C-18
 SHEET 15 OF 18

FLMENGINEERING

March 6, 2020

Danny Johnson, AICP
Planning Director
Town of Rolesville
502 Southtown Circle
Rolesville, NC 27571

**Reference: Rolesville Crossfit
Trip Generation Estimate**

Dear Mr. Johnson:

Per the Town of Rolesville Unified Development Ordinance (UDO) section 9.11.2 (A), a Traffic Impact Analysis is required at the time of application of any zoning map amendment (rezoning), special use permit, site plan, and/or preliminary subdivision plat if:

- (1) the proposed development, or phase of development, or contiguous tracts under the same ownership, would accommodate or could be expected to generate 100 or more added vehicle trips to or from the site during the peak traffic hour (based on the proposed development or the adjacent roads and intersections); or
- (2) the proposed development, or phases of development, or contiguous tracts under the same ownership, would accommodate or could be expected to generate 1,000 or more added vehicle trips to or from the site during a 24-hour period (based on the proposed development or the adjacent roads and intersections).

The proposed Rolesville Crossfit building is 7,394 square feet. Using the Trip Generation Handbook, 9th Edition, published by the Institute of Transportation Engineers (ITE), the estimated trips produced by Rolesville Crossfit based on the Health/Fitness Club land use are as follows:

AM peak hour = less than 15 trips (refer to the attached data plot)

PM peak hour = less than 40 trips (refer to the attached data plot)

Daily trips = 32.93 trips per 1,000 square feet of gross floor area = 32.93 trips x 7,394 = 243 trips

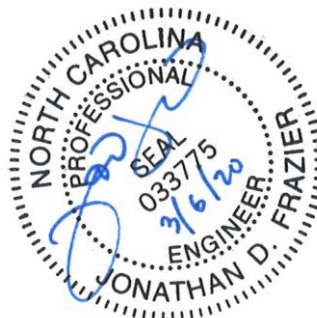
The expected vehicle trips are below the minimum requirements set forth by the Town of Rolesville UDO, and therefore, no traffic impact analysis is required.

Please let me know if you have any questions or need any additional information.

Sincerely,



Jon D. Frazier, PE, LEED AP
Principal
919.610.1051
jfrazier@flmengineering.com



Attachments: AM and PM peak hour data plots

Health/Fitness Club (492)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

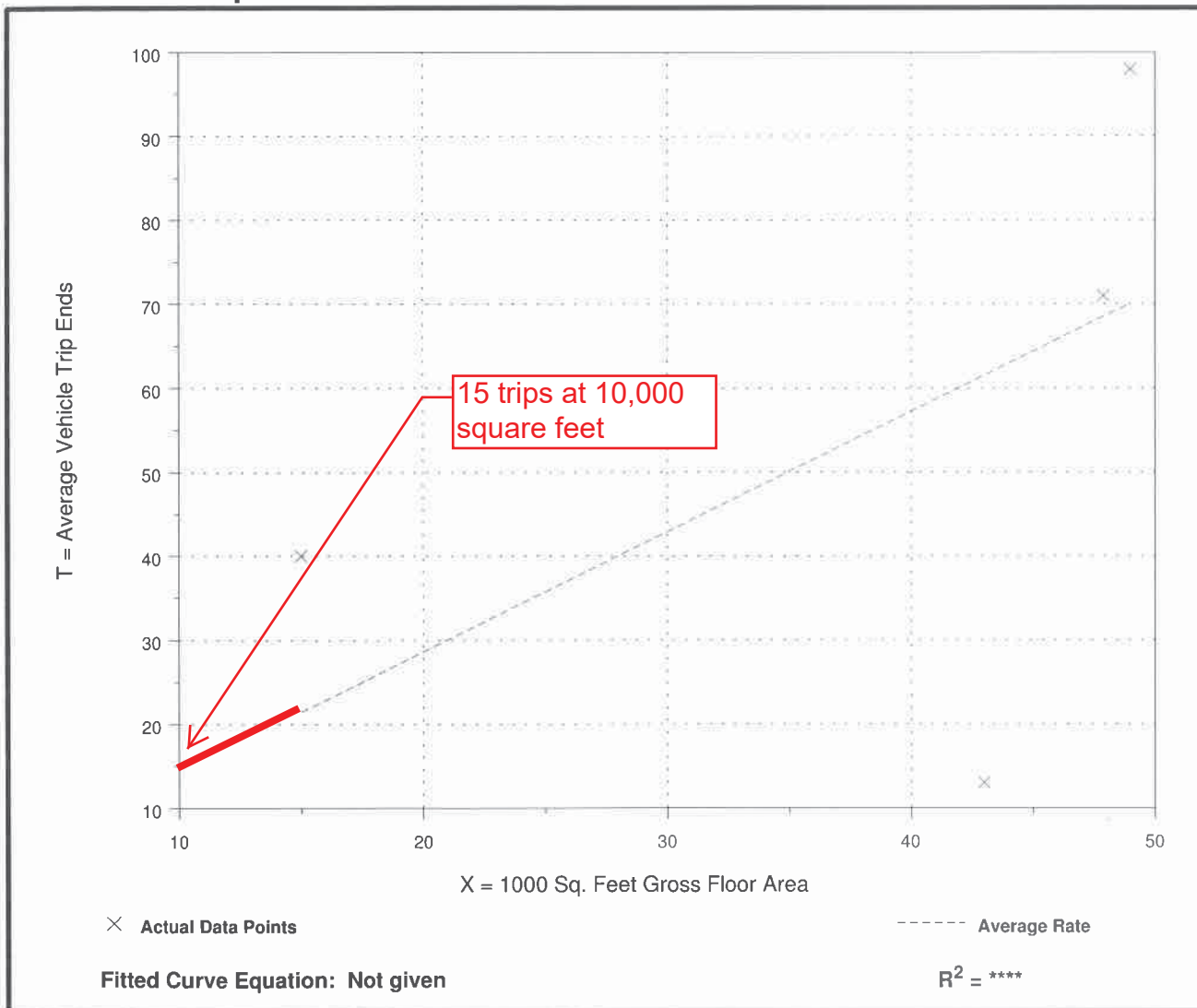
Number of Studies: 4
 Average 1000 Sq. Feet GFA: 39
 Directional Distribution: 47% entering, 53% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
1.43	0.30 - 2.67	1.42

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Health/Fitness Club (492)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

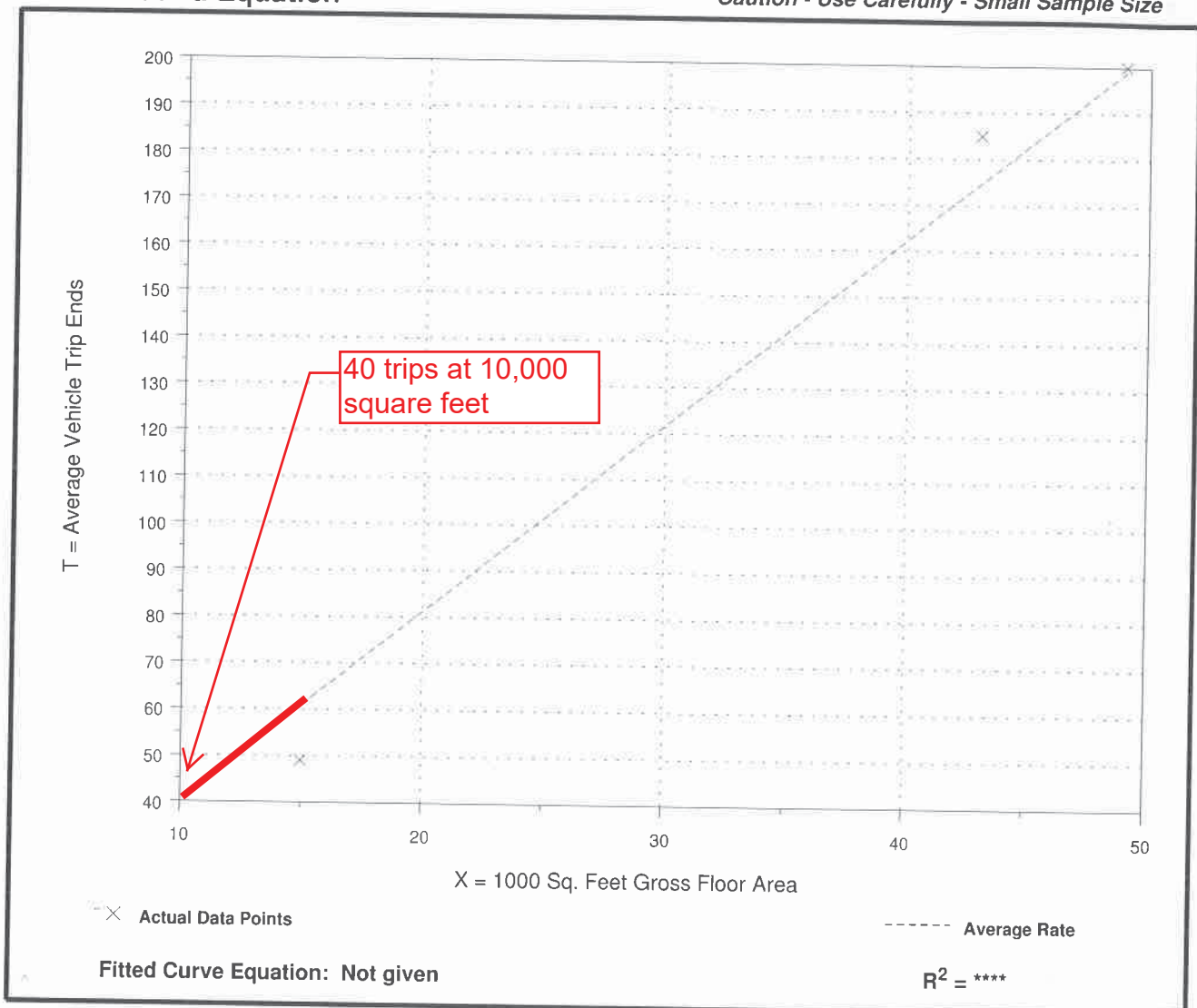
Number of Studies: 3
 Average 1000 Sq. Feet GFA: 36
 Directional Distribution: 51% entering, 49% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
4.06	3.27 - 4.30	2.02

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Rolesville Crossfit Neighborhood Meeting Summary

On Thursday, February 27, 2020, a neighborhood meeting was held to inform neighbors of the proposed Rolesville Crossfit. The notification sent to the neighbors is attached along with the list of neighbors notified. The neighbors that attended the meeting are shown on the attached sign-in sheet. The attendees that represented the development team included: Jon Frazier, FLM Engineering and Mark McArn, McArn Realty.

The questions asked at the meeting along with the development team responses are listed below:

Q: How does the size of the new building compare to the existing location?

A: The existing space is approximately 3,000 square feet. The new building will have more floor space (approximately 4,500 square feet) and more conditioned space (bathrooms and a foyer).

Q: What is the timing for the development?

A: After approvals and permits are obtained, construction will begin.

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February 17, 2020

**Reference: Rolesville CrossFit
Neighborhood Meeting Notification**

Dear Neighbor:

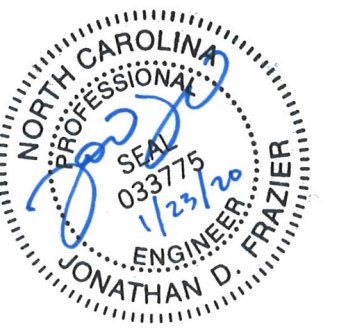
We are writing to notify you of a neighborhood meeting to present and discuss the proposed Rolesville CrossFit to be located at 850 Granite Falls Blvd. The proposed site plan is attached for your reference. The neighborhood meeting will be held on Thursday, February 27th, at 7:00 PM at the current Rolesville CrossFit at 6440 Rogers Rd in Rolesville.

We look forward to your attendance.

Sincerely,



Jon D. Frazier, PE, LEED AP
Principal
919.610.1051
jfrazier@flmengineering.com

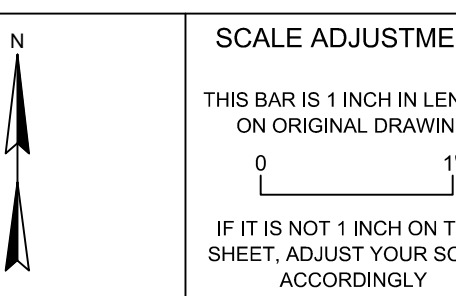
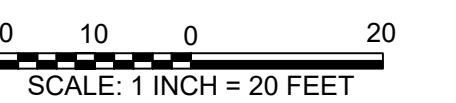


REVISION HISTORY

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SITE PLANS

ROLESVILLE CROSSFIT
850 GRANITE FALLS BLVD
ROLESVILLE, NC 27571

MCARN REALTY LLC

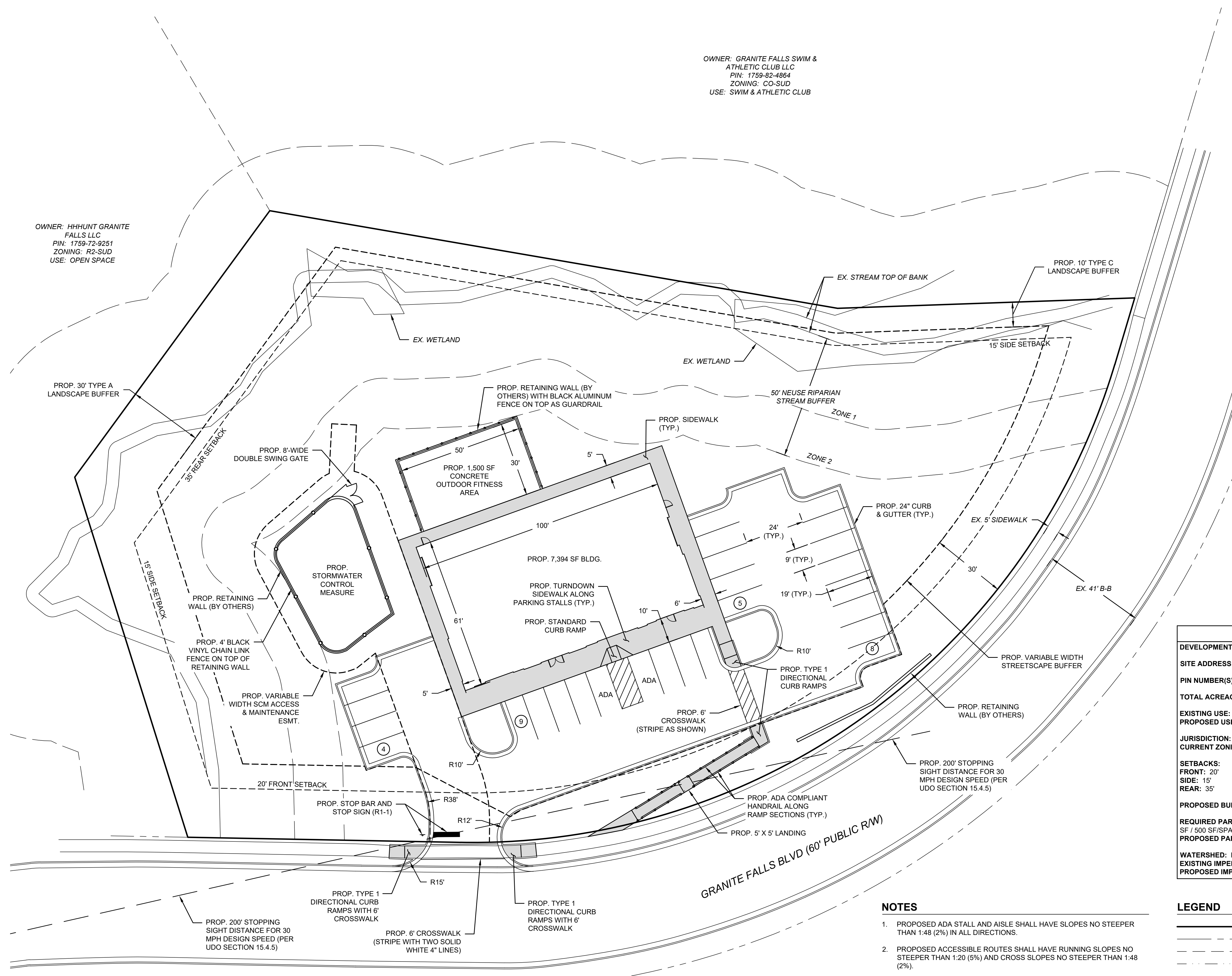
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SITE PLAN

C-4
SHEET 4 OF 18

OWNER: GRANITE FALLS SWIM & ATHLETIC CLUB LLC
PIN: 1759-82-4864
ZONING: CO-SUD
USE: SWIM & ATHLETIC CLUB

OWNER: HHHUNT GRANITE FALLS LLC
PIN: 1759-72-9251
ZONING: R2-SUD
USE: OPEN SPACE



SUMMARY INFORMATION

DEVELOPMENT NAME: ROLESVILLE CROSSFIT
SITE ADDRESS: 850 GRANITE FALLS BLVD, ROLESVILLE, NC 27571
PIN NUMBER(S): 1759-82-2247
TOTAL ACREAGE: 1.78 AC
EXISTING USE: VACANT
PROPOSED USE: GYM
JURISDICTION: TOWN OF ROLESVILLE
CURRENT ZONING DISTRICT: CO-SUD
SETBACKS:
FRONT: 20'
SIDE: 15'
REAR: 35'
PROPOSED BUILDING AREA: 7,394 SF
REQUIRED PARKING: 1 SPACE PER 500 SF (LOW GENERATOR RETAIL) = 7,394 SF / 500 SF/SPACE = 15 SPACES
PROPOSED PARKING: 26 SPACES (2 ADA, 2 VAN ACCESSIBLE)
WATERSHED: LOWER NEUSE RIVER
EXISTING IMPERVIOUS AREA: 0 SF (0.00 AC) OR 0%
PROPOSED IMPERVIOUS AREA: 22,658 SF (0.53 AC) OR 29.8%

NOTES

- PROPOSED ADA STALL AND AISLE SHALL HAVE SLOPES NO STEEPER THAN 1:48 (2%) IN ALL DIRECTIONS.
- PROPOSED ACCESSIBLE ROUTES SHALL HAVE RUNNING SLOPES NO STEEPER THAN 1:20 (5%) AND CROSS SLOPES NO STEEPER THAN 1:48 (2%).
- DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- RADII ARE 5' UNLESS OTHERWISE NOTED.
- ADA PARKING SIGNS (R7-8 & R7-8A) SHALL BE PLACED ON BUILDING IN FRONT OF EACH ADA PARKING STALL.
- STRIPING FOR PARKING STALLS AND CROSSWALK SHALL BE AS SHOWN.
- SOLID WASTE COLLECTION SHALL BE BY ROLL-OUT CARTS CONTRACTED PRIVATELY. ROLL-OUT CARTS WILL BE COLLECTED ONSITE AND NOT AT THE ROAD.

LEGEND

- EX. PROPERTY LINE
- EX. RIGHT-OF-WAY
- EX. ADJACENT OWNERS
- EX. CHANNEL/STREAM
- EX. STREAM BUFFER
- PROP. SETBACK LINE
- PROP. EASEMENT/BUFFER
- PROP. CHAINLINK FENCE
- PROP. ADA HANDRAIL/GUARDRAIL

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CALL 48 HOURS BEFORE YOU DIG
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1759824864
GRANITE FALLS SWIM & ATHLETIC CLUB
LLC
6200 FALLS OF NEUSE RD STE 102
RALEIGH NC 27609-3563

1759812642
BIG BEAR PROPERTIES LLC
1512 OBRIEN CIR
WAKE FOREST NC 27587-3833

1759822247
MCARN REALTY LLC
403 N CHEATHAM ST
FRANKLINTON NC 27525-1104

1759729354
HHHUNT GRANITE FALLS LLC
1401 SUNDAY DR STE 109
RALEIGH NC 27607-5173

1759729251
HHHUNT GRANITE FALLS LLC
1401 SUNDAY DR STE 109
RALEIGH NC 27607-5173

1759729452
HHHUNT HOMES RALEIGH-DURHAM LLC
1401 SUNDAY DR STE 109
RALEIGH NC 27607-5173

Sign-in Sheet
Rolesville Crossfit Neighborhood Meeting

Name	Address	Phone Number	E-mail Address
DENNIS A LEWIS	4027 CLAPTON DR	917-692-9942	BIGMENACE69@AOL.COM
Kew Adria Stevenson-	4000 Granite Falls Blvd	919-562-0895	✓ Kew@granitefallsclub.com
Harriett Lewis	6027 Clapton Dr	917-533-5166	resgldynblu@aol.com