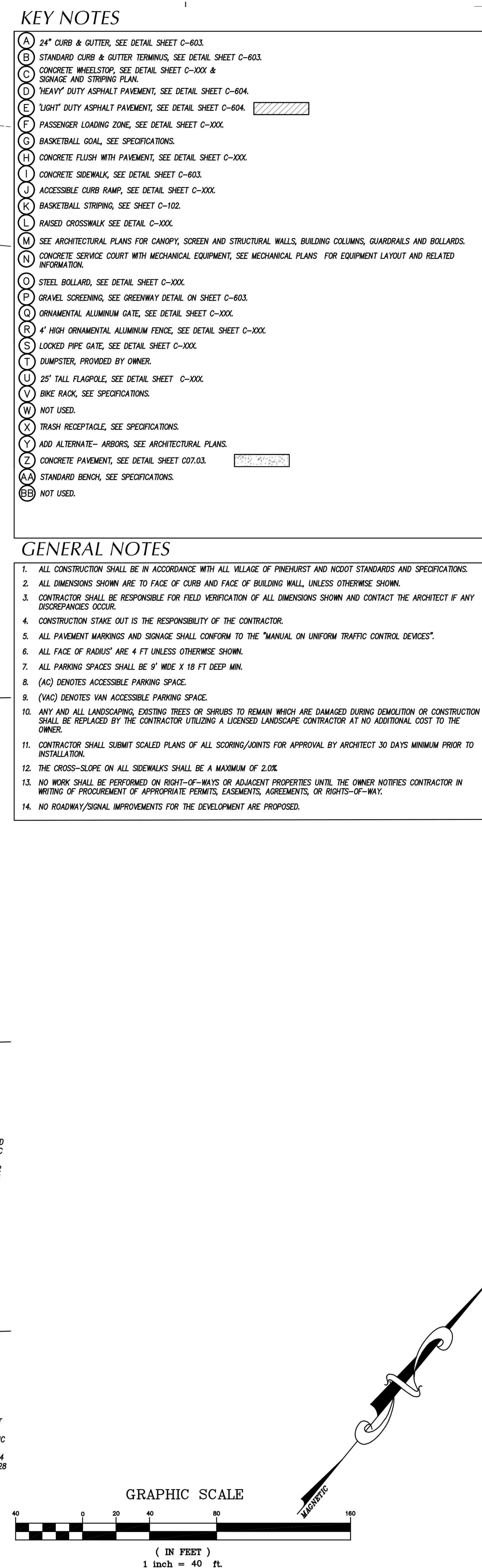




Owner
Moore County Schools
Highway 15-501 South
Carthage, NC 28327
910-947-2976

Architect
RATIO Architects, Inc.
227 Fayetteville Street, Suite 301
Raleigh, NC 27601

Structural Engineer
LHC Structural Engineers
1331 Sunday Dr
Raleigh, NC 27607
919-832-5587

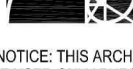
Mechanical / Electrical Engineer
Dewberry Engineers, Inc.
2610 Wycliff Road, Suite 400
Raleigh, NC 27607
919-881-9939

Civil Engineer
CLH Design, P.A.
400 Regency Forest Dr
Cary, NC 27518
919-319-6716

Roof Consultant
Rick Nuhn Engineering
13 Thayer Circle
Greensboro, NC 27407
336-855-1182

Food Service
FooDesign Associates, Inc.
5828 Oak Drive
Charlotte, NC 28227
704-545-6151

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CONSTRUCTION**



RATIO

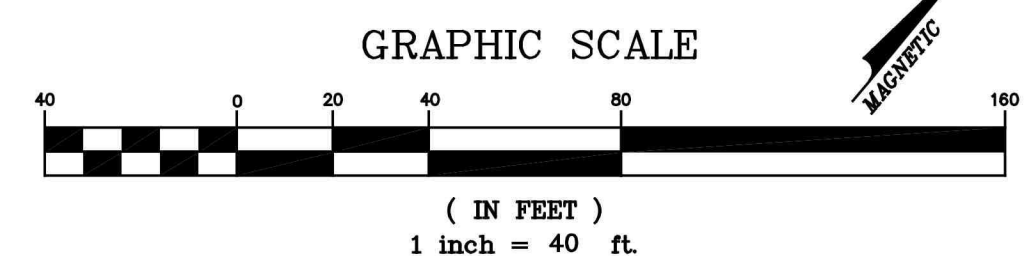
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PROJECT NO.	02000.000
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SHEET TITLE

STAKING PLAN

SHEET NUMBER	C-100
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EXISTING CONTOURS
 FINAL CONTOURS
 270.4' +
 EXISTING SURFACE SPOT ELEVATION
 270.507
 PROPOSED TOP OF CURB SPOT ELEVATION
 270.50
 PROPOSED GROUND/PAVEMENT ELEVATION
 270.507W
 PROPOSED FINISHED GRADE AT TOP OF WALL ELEVATION
 270.507W
 PROPOSED FINISHED GRADE AT BOTTOM OF WALL ELEVATION
 (A4)
 STORM STRUCTURE NUMBER
 EXISTING STORM DRAIN PIPE
 PROPOSED STORM DRAIN PIPE
 FD
 PROPOSED EXHAUSTION DRAIN DISCHARGE LINE (SEE APP. F)
 RD
 PROPOSED ROOF DRAIN
 TREE PROTECTION FENCE

- | | | | | | | | |
|---|---|--|---|---|---|---|--|
| PINEHURST
ELEMENTARY
100 Dundee Road
Pinehurst, NC 28374 | Owner
Moore County Schools
Highway 15-501 South
Carthage, NC 28327
910-947-2976 | Architect
RATIO Architects, Inc.
227 Fayetteville Street, Suite 301
Raleigh, NC 27601 | Structural Engineer
LHC Structural Engineers
1331 Sandley Dr
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13 Thayer Circle
Pinebluff, NC 27407
336-655-1182 | Food Service
FoodDesign Associates, Inc.
5828 Oak Drive
Charlotte, NC 28227
704-545-6151 |
|---|---|--|---|---|---|---|--|

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CONSTRUCTION**

[illegible]

PROJECT NO.	02000.000
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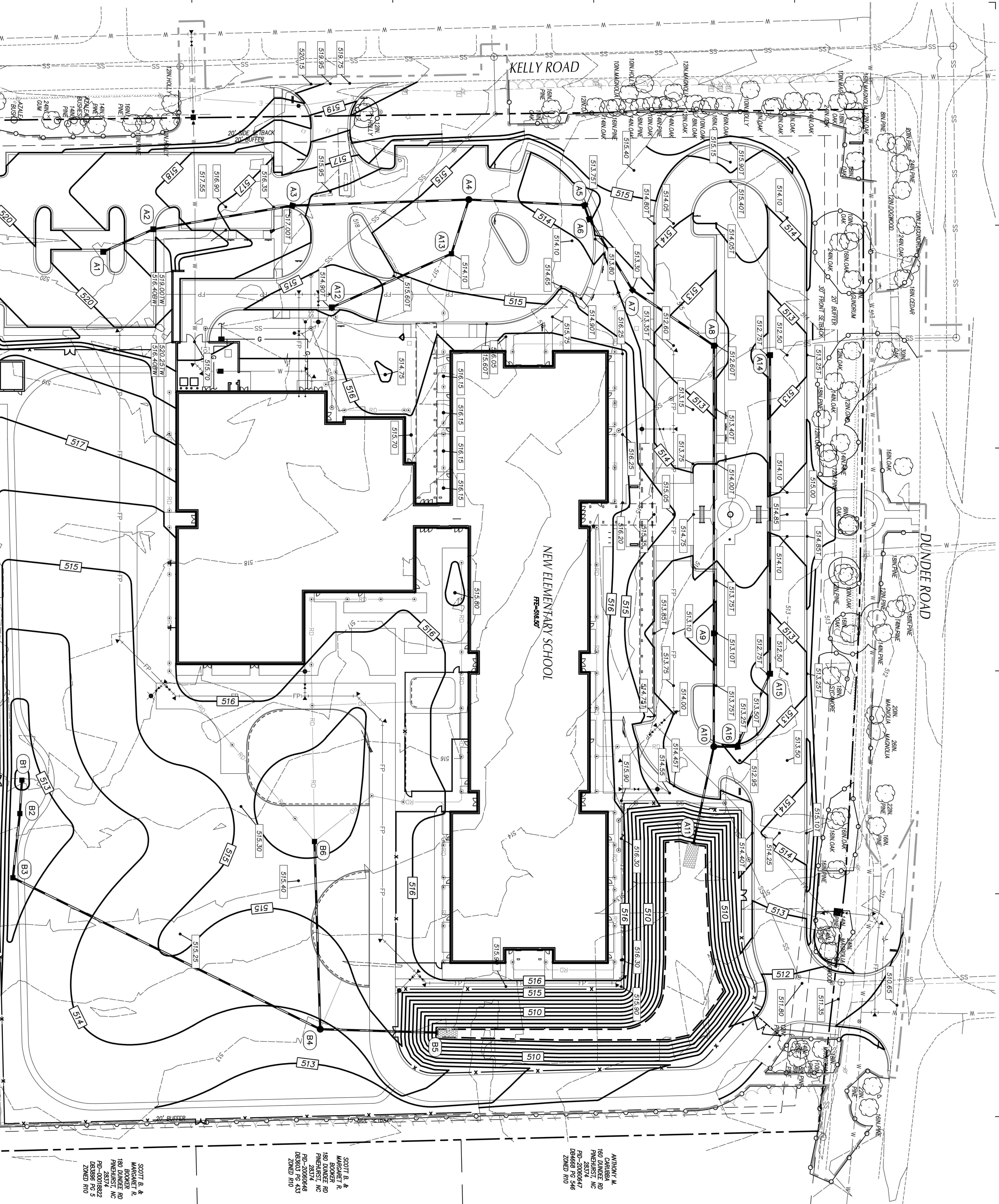
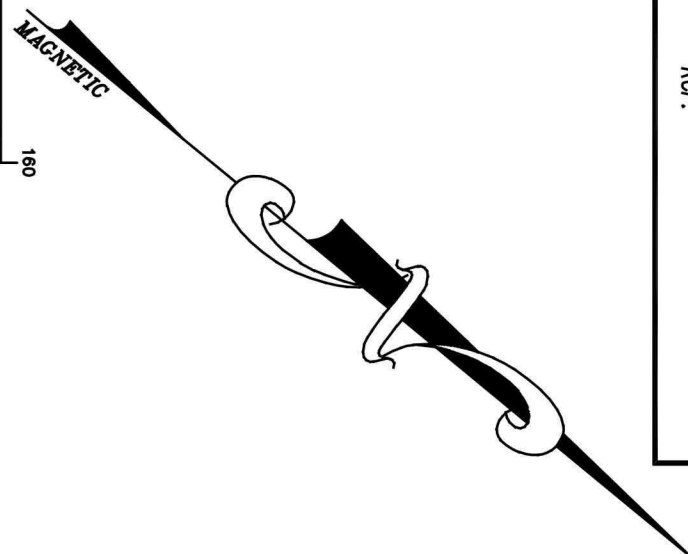
PROJECT NO.	02000.000
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SHEET NUMBER

C-300



GRAPHIC SCALE



DRAINAGE STRUCTURE SPECIFICATIONS												
STRUCTURE NO.		PIPE	PIPE	PIPE	PIPE	UPPER	LOWER	TOP ELEV.		UPSTREAM STRUCTURE DATA		
OF STRAIN	DOWNSTREAM	IS/ODE	DEPTH (IN)	LENGTH (FT)	MANHOLE	INLET (FT)	OUTLET (FT)	INLET (FT)	OUTLET (FT)	TYPE	NOTES	
A1	A2	1.8%	15	43	RCP	515.35	514.50	518.75	518.00	4.40	CB	
A2	A3	1.8%	15	109	RCP	514.50	512.50	518.00	517.00	4.40	CB	
A3	A4	1.8%	15	80	RCP	512.50	510.50	517.00	515.50	4.80	CB	
A4	A5	1.44%	24	90	RCP	510.50	508.70	515.50	514.50	4.80	MH	
A5	A6	0.83%	24	12	RCP	508.70	508.60	513.75	513.75	5.05	CB	
A6	A7	0.59%	24	74	RCP	508.60	507.90	514.00	514.00	5.40	CB	
A7	A8	1.03%	24	18	RCP	507.90	507.50	513.50	513.50	5.40	DI	
A8	A9	0.51%	36	78	RCP	507.50	506.35	513.00	513.00	6.75	CB	
A9	A10	0.51%	36	78	RCP	506.35	505.90	512.40	512.40	6.75	CB	
A10	A11	0.51%	36	78	RCP	505.90	505.50	512.00	512.00		MH	
A12	A13	0.64%	15	102	RCP	511.20	510.55	514.90	514.90	3.70	CB	
A13	A4	1.25%	18	44	RCP	510.55	510.00	514.10	513.55		DI	
A14	A15	0.61%	15	62	RCP	509.35	507.10	512.75	512.75	4.60	CB	
A15	A16	1.13%	15	47	RCP	507.10	506.40	512.50	512.50	5.60	CB	
A16	A10	2.78%	15	18	RCP	506.40	505.90	512.25	512.25	6.65	CB	
B1	B2	0.64%	18	38	RCP	507.75	507.00	511.65	511.65	4.10	DI	
B2	B3	0.60%	18	50	RCP	507.00	506.35	511.00	511.00	4.40	DI	
B3	B4	0.51%	18	266	RCP	507.35	506.00	510.00	510.00	4.65	DI	
B4	B5	0.55%	30	91	RCP	506.00	505.00	510.80	510.80	7.50	MH	
B6	B4	1.55%	24	181	RCP	508.80	506.00	514.00	514.00		DI	

LEGEND

CB CATCH BASIN, SEE DETAIL SHEET C03X4

MH MANHOLE, SEE DETAIL SHEET C03X4

DI DROP INLET, SEE DETAIL SHEET C03X4

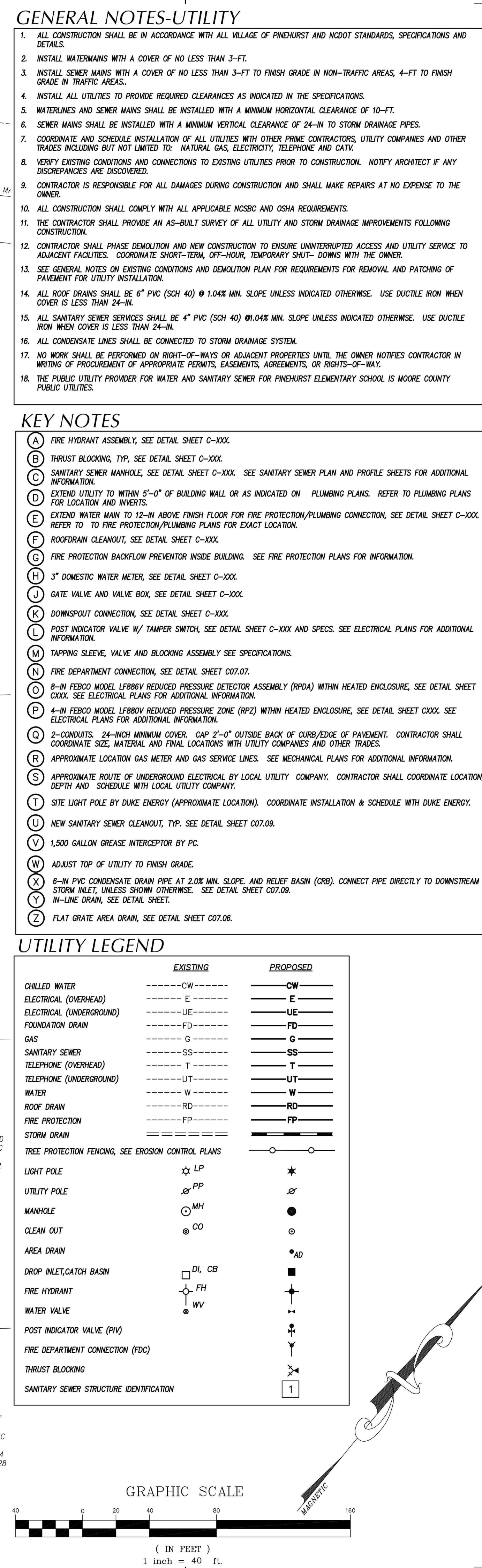
DI TRAPED BEGINNING STRUCTURE, SEE DETAIL SHEET C03X4

DI STRUCTURE, DI NUMBER

NOTES

1. TOP ELEVATION IS TOP OF RAIL FOR MANHOLE, TOP OF GATE FOR TRAPED BEGINNING

2. ALL FES INLETS & OUTLETS SHALL BE 60"



The image shows the top portion of a technical drawing. On the left is the logo for RATIO ARCHITECTS, INC., which consists of a square divided into four quadrants by a stylized 'X' shape. To the right of the logo, the word 'RATIO' is written in a large, bold, sans-serif font, with 'ARCHITECTS, INC.' in a smaller font below it. Below the logo and company name is a block of text: 'COPYRIGHT NOTICE: THIS ARCHITECTURAL AND ENGINEERING DRAWINGS IS GIVEN IN CONFIDENCE AND SHALL BE USED ONLY PURSUANT TO THE AGREEMENT WITH RATIO ARCHITECTS, INC. NO OTHER REPRODUCTION OR DUPLICATION MAY BE MADE WITHOUT THEIR WRITTEN CONSENT OF RATIO ARCHITECTS, INC. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIALLY RESERVED.' Below this text is a horizontal line. Under the line, on the left, is the text 'PROJECT NO.' followed by a blank space. On the right, below the line, is the text '02000.000'. Below the horizontal line, the text 'SHEET TITLE' is followed by a large, bold, sans-serif font reading 'UTILITY PLAN'. Below this, the text 'SHEET NUMBER' is followed by a large, bold, sans-serif font reading 'C-500'.

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

BRICK TYPE LEGEND

- BRICK MASONRY
TYPE - BR1
(RUNNING BOND)
- BRICK MASONRY
TYPE - BR2
(ENGLISH BOND)

KEYNOTE LEGEND

00 10 00

KEYNOTE LEGEND - ACTION

00 10 00

GLAZING SCHEDULE

- GL-01 CLEAR INSULATING GLASS, LOW-E COATED - EXTERIOR APPLICATIONS
- GL-11 CLEAR TEMPERED GLASS - INTERIOR APPLICATIONS, WINDOWS AND DOORS

GENERAL EXTERIOR GLAZING NOTES

- A ALL EXTERIOR GLAZING TO BE TYPE GL-01, U.N.O.
- B REFER TO PLANS FOR WINDOW TYPE DESIGNATIONS AND THE A-06 SERIES FOR WINDOW TYPE ELEVATIONS

PINEHURST
ELEMENTARY
SCHOOL

100 Dundee Road
Pinehurst, NC 28374

Owner

Moore County Schools
Highway 15-501 South
Carthage, NC 28327
910-947-2976

Architect/Landscape Architect

RATIO
227 Fayetteville Street, Suite 301
Raleigh, North Carolina 27601
919-821-0805

Structural Engineer

LHC Structural Engineers
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Raleigh, NC 27607
919-832-5587

Mechanical / Electrical Engineer

Dewberry Engineers, Inc.
2610 Wycliff Road, Suite 400
Raleigh, NC 27607
919-881-9939

Civil Engineer/Landscape Architect

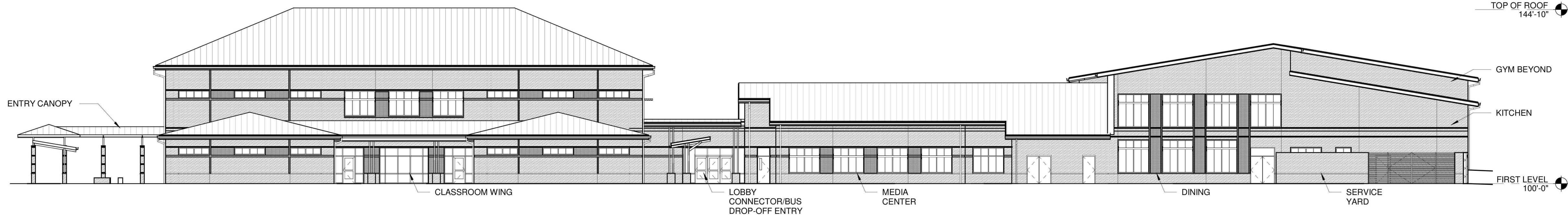
CLH Design
400 Regency Forest Dr #120
Cary, NC 27518
919-319-6716

Roofing Consultant

Rick Nuhn Engineering
13 Thayer Circle
Greensboro, NC 27407
336-855-1182

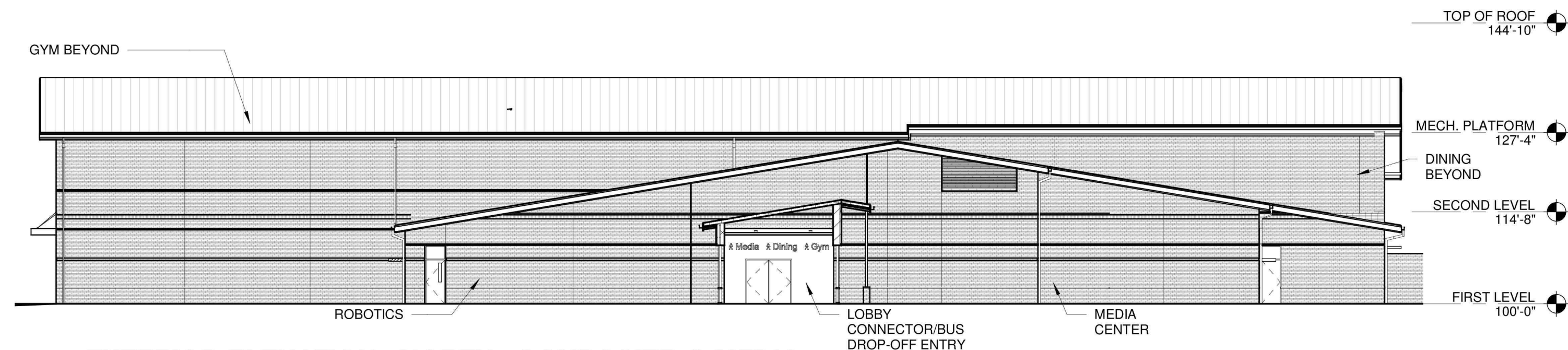
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FoodDesign Associates, Inc.
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704-545-6151



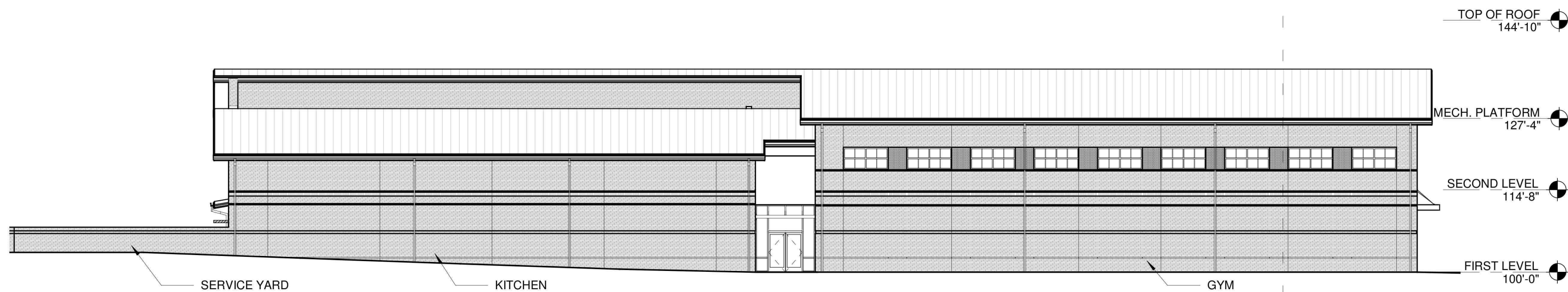
E1
A-201
EXTERIOR ELEVATION - WEST - COMPOSITE

1/16" = 1'-0"



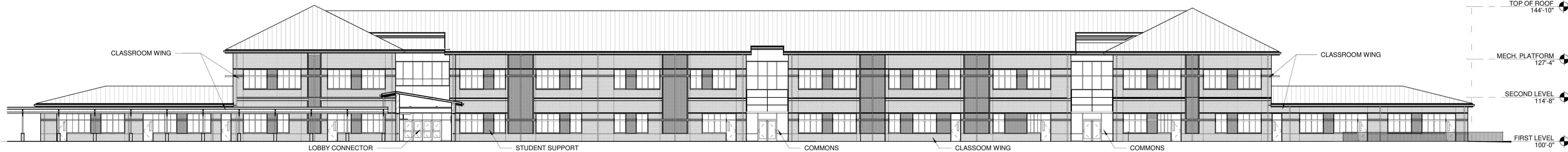
D1
A-201
EXTERIOR ELEVATION - NORTH - COMPOSITE @ MEDIA CENTER

1/16" = 1'-0"



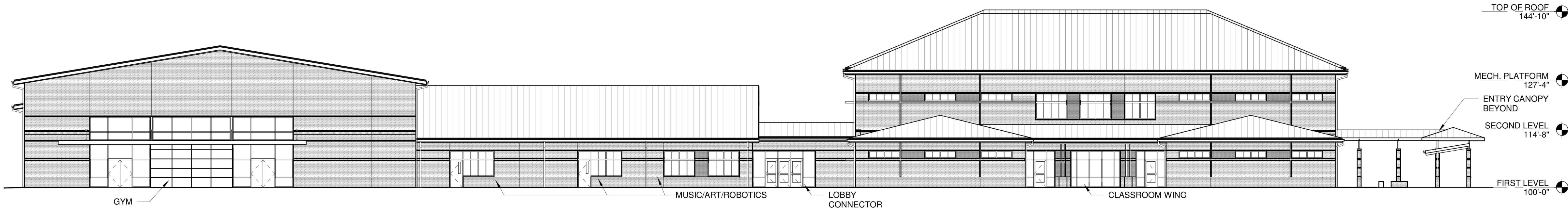
D5
A-201
EXTERIOR ELEVATION - SOUTH - COMPOSITE @ GYM

1/16" = 1'-0"



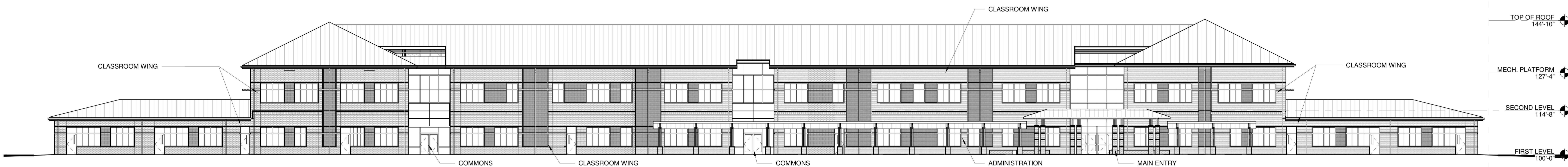
C1
A-201
EXTERIOR ELEVATION - SOUTH - COMPOSITE @ CLASSROOM WING

1/16" = 1'-0"



B1
A-201
EXTERIOR ELEVATION - EAST - COMPOSITE

1/16" = 1'-0"



A1
A-201
EXTERIOR ELEVATION - NORTH - COMPOSITE @ CLASSROOM WING

1/16" = 1'-0"

NOT FOR CONSTRUCTION

SEAL | DATE 05/08/19



SHEET ISSUE

1 GENERAL CONCEPT PLAN RESUBMITTAL 05/08/19



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PROJECT NO. 18031.000

SHEET TITLE
EXTERIOR
ELEVATIONS -
COMPOSITE

SHEET NUMBER

A-201

January 2, 2019

Stephanie Goodrich
Senior Planner
Village of Pinehurst
395 Magnolia Road
Pinehurst, NC 28374
P: 910.295.8659
E: sgoodrich@vopnc.org

Subject: Trip Generation Letter
Pinehurst Elementary School – Pinehurst, NC

Dear Ms. Goodrich:

This letter provides an estimate of the trip generation for the proposed Pinehurst Elementary School to be located along Rassie Wicker Drive in Pinehurst, North Carolina. The existing Pinehurst Elementary School will be demolished, and a new elementary school will be constructed in its place. Based on coordination with Moore County Public Schools, it was determined that the existing elementary school has 612 students, 3 buses, and 63 staff members. With the expansion, the future Pinehurst Elementary School is expected to have 800 students, 6 buses, and 80 staff members. A copy of the preliminary site plan is attached. The purpose of the study is to determine the anticipated trip generation and internal stacking for the proposed school.

Trip Generation

The daily and peak hour traffic expected to be generated by the proposed school was estimated utilizing the Municipal and School Transportation Assistance (MSTA) Traffic Calculator provided by the Traffic Engineering and Safety Systems Branch of the NCDOT. These calculations are based on the average traffic volumes and vehicle queue data on a typical school day obtained at public elementary schools across the State of North Carolina. The trip estimates do not consider high traffic demand days or special events.

Based on coordination with Moore County Public Schools, it was determined that the existing elementary school has 612 students, 3 buses, and 63 staff members. With the expansion, the future Pinehurst Elementary School is expected to have 800 students, 6 buses, and 80 staff members. Refer to Table 1 for the trip generation summary of the proposed school during the weekday AM and PM peak hours. A copy of the MSTA results is attached for your reference.

Table 1: Trip Generation Summary

LAND USE	TRIP GENERATOR	DAILY TRIPS	SCHOOL AM PEAK HOUR (VPH)		SCHOOL PM PEAK HOUR (VPH)	
			Entering	Exiting	Entering	Exiting
Elementary School (800 Students)	6 Buses	12	6	0	0	6
	80 Staff	160	80	0	0	0
	Parents	848	293	293	131	131
Total Site Trips		1,020	379	293	131	137

It is estimated that the proposed school will generate approximately 1,020 total site trips (510 entering and 510 exiting) during a typical weekday. Of the total, approximately 672 site trips (379 entering and 293 exiting) are expected to occur during the school AM peak hour, while approximately 268 site trips (131 entering and 137 exiting) are expected to occur during the school PM peak hour.

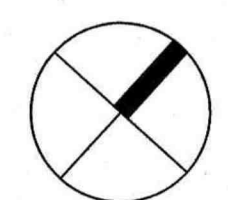
If you should have any questions, please feel free to contact me at (919) 872-5115.

Sincerely,

Joshua Reinke, P.E.
Transportation Manager
Ramey Kemp & Associates, Inc.

NC Corporate License # C-0910

Attachments: Proposed Site Plan
MSTA School Calculator



0 50' 100' 150' 200' feet

1" = 50'

SEPTEMBER 2018

Pinehurst Elementary School **SITE CONCEPT 2E**



RATIO

CLH DESIGN, P.A.
 Regency Park
 400 Regency Forest Drive
 Suite 120
 Cary, North Carolina 27518
 Phone: (919) 319-8718
 Fax: (919) 319-7618

AM and PM Peak Traffic Estimates
(These numbers do not reflect peak hour traffic volumes)

AM Cars / Student	PM Cars / Student	Avg. Car Length	PM At one Time
36.56%	16.31%	22.19	45.50%
34.58%	14.10%	22.70	51.90%
9.20%	4.30%	24.42	55.71%

NOTES

- **Average Queue Length does not** include an alternative traffic pattern required for high traffic demand days which is usually 30% additional length.
- **Average Queue Length does not** include the Student Loading Zone.
- Peak traffic volumes at schools normally occur within a 30-minute time period. (justifying a PHF of 0.5)

School Name:

Type:	Typical Public with buses
-------	---------------------------

Version: 102816

MSTA School Queue Input					Calculations					
Type School	Student Population	Number of Buses	Staff Members	Student Drivers	PM Total Vehicles	PM Peak Vehicles	Average Queue Length	Total AM Trips	Total PM Trips	High Demand Length
Elementary	800	6	80		131	60	1323	671	268	30%
Middle		11	94							
High										
							1323	671	268	1720

	Elementary School Data							
	AM Trips Generated				PM Trips Generated			
Direction	Parents	Buses	Staff	Trips	Parents	Buses	Staff	Trips
IN	293	6	80	379	131			131
OUT	293			293	131	6		137
		AM Elementary Trips		671		PM Elementary Trips		268

	Trips Generated							
	AM Trips Generated				PM Trips Generated			
Direction	Parents	Buses	Staff	Trips	Parents	Buses	Staff	Trips
IN								
OUT								
		AM Middle Trips				PM Middle Trips		

AM Trips Generated											PM Trips Generated				
Direction	Parents	Buses	Staff		Trips	Parents	Buses	Staff		Trips					
IN															
OUT															
AM High Trips						PM High Trips									
All AM TRIPS					In	379	All PM TRIPS					In	131		
					Out	293						Out	137		
					Total	671						Total	268		

[illegible]