

133 Court Street
(603) 433-2335

Portsmouth, NH 03801
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ISSUED FOR: REVIEW

ISSUE DATE: JULY 23, 2025

REVISIONS
NO. DESCRIPTION BY DATE
0 REVIEW EBS 06/23/25

DRAWN BY: EBS
APPROVED BY: EBS
DRAWING FILE: 5440-SITE.dwg

SCALE:
24" x 36" - 1" = 80'
11" x 17" - 1" = NTS

OWNER:
RIVERWOODS DURHAM
14 STONE QUARRY DRIVE
DURHAM, NH 03824

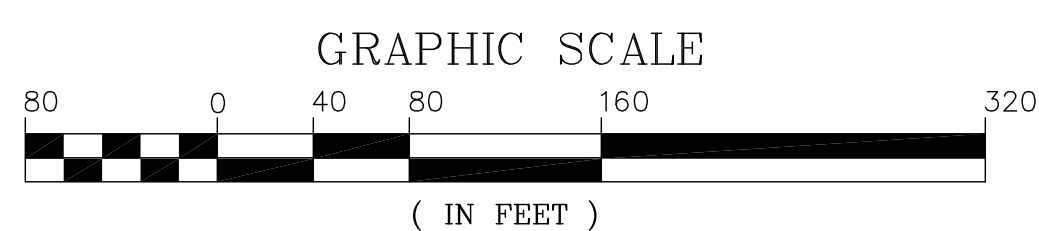
APPLICANT:
RIVERWOODS DURHAM
14 STONE QUARRY DRIVE
DURHAM, NH 03824

PROJECT:
**RIVERWOODS
DURHAM PHASE II**
TAX MAP 209 LOT 33
STONE QUARRY DRIVE
& DOVER ROAD (NH 108)
DURHAM, NH

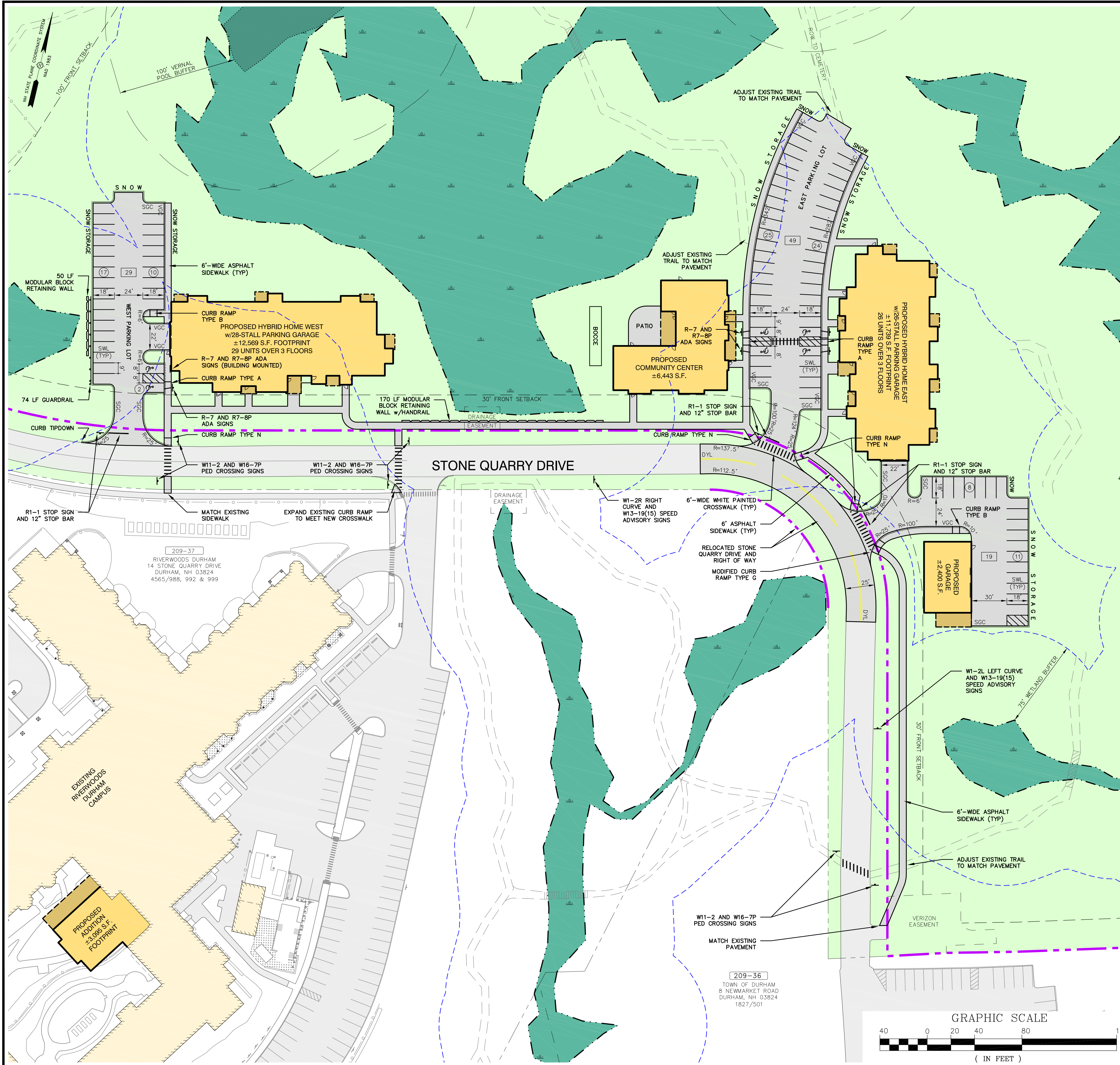
TITLE:

OVERALL
SITE PLAN

SHEET NUMBER:
C-2



P5440



SITE NOTES

- DESIGN INTENT - THIS PLAN SET IS INTENDED TO DEPICT THE DEVELOPMENT OF THE SITE FOR AN EXPANSION OF THE EXISTING RIVERWOODS CONTINUING CARE RETIREMENT COMMUNITY TO INCLUDE NEW INDEPENDENT LIVING UNITS, A COMMUNITY CENTER, A MAINTENANCE GARAGE TOGETHER WITH ASSOCIATED ACCESSWAYS AND PARKING.
- APPROXIMATE LOT AREA (AFTER LOT LINE ADJUSTMENT): 985,948 S.F. (±22.63 AC.)
- REFERENCE DEED: STRAFFORD COUNTY REGISTRY OF DEED BOOK 4465 PAGE 0988
- ZONE: OFFICE RESEARCH-RT 108 (OR)
- DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA:	40,000 S.F. (80,000 MULTI-UNIT OR NON-RES.)
DENSITY:	1 UNIT/4,200 S.F.
MIN. STREET FRONTAGE:	200' (ARTERIAL), 100' (COLLECTOR), 50' (MINOR)
FRONT SETBACK:	100' +2' PER 1' OF BLDG. HEIGHT OVER 25' (ARTERIAL)
	30' (PER PROPOSED ZONING CHANGE)
SIDE SETBACK:	25'
REAR SETBACK:	25'
MAX. BUILDING HEIGHT:	50' (75' BY SPECIAL EXCEPTION)
MAX. IMPERVIOUS COVER:	50%
WETLAND BUFFERS:	75' (POORLY DRAINED, NATURAL WETLANDS >3,000 S.F.)
	100' (VERNAL POOL)
SIDE PARKING SETBACK:	10'
REAR PARKING SETBACK:	SAME AS REAR BUILDING SETBACK
FRONT LANDSCAPE STRIP:	50' (ON ROUTE 108 ONLY)
DENSITY (RESIDENTIAL):	4,200 S.F. NON-ISOLATED UPLAND/RESIDENTIAL UNIT
DENSITY (SENIOR RES.):	1 BEDROOM/STUDIO SENIOR = 0.33 RESIDENTIAL UNITS
	2-3 BEDROOM SENIOR = 0.50 RESIDENTIAL UNITS
	4 BEDROOM SENIOR = 1.00 RESIDENTIAL UNITS
- DENSITY CALCULATIONS:

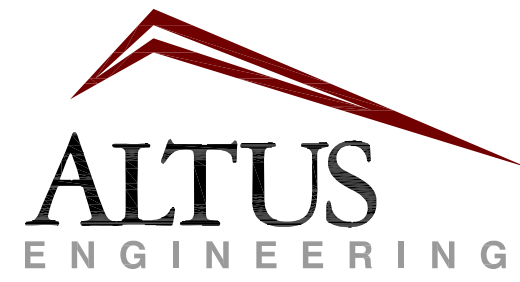
VPD, PD AND SPD SOILS	708,212 S.F.
FLOODPLAIN AND FLOODWAY	0
LEDGE 0'-20" (IF SEPTIC)	0
50% LEDGE 20'-40" (IF SEPTIC)	0
SLOPES >25%	0
50% SLOPES 15'-24%	13,013 S.F.
ROWs AND EASEMENTS	3,423 S.F.
STREAMS	0
ISOLATED LAND <5,000 S.F.	0
TOTAL	724,648 S.F. UNSUITABLE LAND

985,948 S.F. LOT AREA - 724,648 S.F. UNSUITABLE LAND = 261,300 S.F. USEABLE LAND
261,300 S.F. / 4,200 S.F. = 62 RESIDENTIAL (NON-SENIOR) UNITS PERMITTED
62 RES. UNITS / 0.33 = 187 1 BED/STUDIO SENIOR RES. UNITS PERMITTED
62 RES. UNITS / 0.50 = 124 2 BED SENIOR RES. UNITS PERMITTED
62 RES. UNITS / 1.00 = 62 4 BED SENIOR RES. UNITS PERMITTED
(55 SENIOR UNITS PROPOSED)
- PARKING REQUIREMENTS (PER DURHAM REGULATIONS):

SENIOR HOUSING: 1 SPACE/UNIT PLUS 1 SPACE/STAFF	
MULTI-UNIT DWELLING: 2 SPACE/UNIT	
SENIOR HOUSING UNITS: 55 UNITS x 1	= 55 SPACES REQUIRED
STAFF AT MAX. SHIFT: 17 STAFF x 17	= 17 SPACES REQUIRED (MAINTENANCE)
TOTAL PARKING REQUIRED	= 72 SPACES
TOTAL PARKING PROVIDED	= 151 SPACES (54 GARAGE, 97 SURFACE)
SURPLUS/DEFICIT	= +79 SPACES
- PARKING DEMAND (PER APPLICANT PROJECTIONS):

SENIOR HOUSING: 55 UNITS x 2 SPACES/UNIT	= 110 SPACES
COMMUNITY CENTER: 20 SPACES	= 20 SPACES
MAINTENANCE GARAGE: 17 SPACES	= 17 SPACES
TOTAL PARKING DEMAND	= 147 SPACES
TOTAL PARKING PROVIDED	= 151 SPACES
SURPLUS/DEFICIT	= +4 SPACES
- OVERALL CONTIGUOUS AREA OF DISTURBANCE OVER 100,000 S.F., NHDES ALTERATION OF TERRAIN PERMIT REQUIRED.
- AREA OF DISTURBANCE OVER 43,560 SF, COVERAGE UNDER EPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT REQUIRED (NOI% TO BE PREPARED AND SUBMITTED BY CONTRACTOR, SWPPP AND INSPECTIONS TO BE PREPARED AND PERFORMED BY CONTRACTOR).
- NHDOT DRIVEWAY PERMIT REQUIRED.
- TOWN OF DURHAM SIGN PERMIT REQUIRED FOR ALL BUSINESS SIGNS.
- CONDITIONAL USE PERMIT UNDER ZONING SECTION 175.61 REQUIRED FOR SITE DEVELOPMENT IN THE WETLANDS CONSERVATION OVERLAY DISTRICT.
- SITE IS NOT IN A SPECIAL FLOOD HAZARD ZONE PER FIRM PANEL #33017C0318E PANEL 318 OF 405, SEPTEMBER 30, 2015.
- ALL BONDS AND FEES SHALL BE PAID/POSTED PRIOR TO INITIATING CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE ONSTRUCTION" AND WITH THE REGULATIONS AND STANDARD SPECIFICATIONS OF THE TOWN OF DURHAM, LATEST EDITIONS. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LOCATION, INSTALLATION AND ORIENTATION OF ALL SIGNS.
- PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC DEVICES," "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AND THE AMERICANS WITH DISABILITIES ACT (ADA), LATEST EDITIONS.
- PAVEMENT MARKINGS SHALL BE CONSTRUCTED USING WHITE, YELLOW OR BLUE TRAFFIC PAINT (WHERE SPECIFIED) MEETING THE REQUIREMENTS OF AASHTO M248, TYPE F OR EQUAL. PAINTED ISLANDS AND LOADING ZONES SHALL BE 4'-WIDE DIAGONAL WHITE LINES 3'-0" O.C. BORDERED BY 4'-WIDE WHITE LINES. PARKING STALLS SHALL BE SEPARATED BY 4'-WIDE WHITE LINES. SEE DETAILS FOR HANDICAP SYMBOLS, SIGNS AND SIGN DETAILS.
- PAVEMENT MARKING ABBREVIATIONS:

SWL: SINGLE WHITE LINE (4" SOLID LINE)
DYL: DOUBLE YELLOW LINE (2 x 4" SOLID LINES SEPARATED BY 4")
- CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAWCUT LINES WITH RS-1 IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
- UNLESS OTHERWISE NOTED, ALL NEW CURBING SHALL BE SLOPED GRANITE ("SGC") OR VERTICAL GRANITE ("VGC") WITH A MINIMUM RADIUS OF 4'.
- ALL CURB RAMPs AND SIDEWALKS AT CROSSWALKS SHALL BE EQUIPPED WITH ADA-COMPLIANT DETECTABLE WARNING PANELS.
- SNOW SHALL BE STORED AT THE EDGE OF PAVEMENT AND IN AREAS SHOWN HEREON AS APPROPRIATE. NO SNOW SHALL BE STORED DIRECTLY IN ANY STORMWATER POND.
- BUILDING AREA AND DIMENSIONS SHOWN ARE BASED ON MEASUREMENTS TO THE EXTERIOR FACE. ACTUAL DIMENSIONS TO FOUNDATION AND INTERIOR SPACE WILL DIFFER. THE CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR ALL NECESSARY COORDINATION BETWEEN CIVIL AND ARCHITECTURAL PLANS TO ENSURE THE DESIGN INTENT IS MET. ALL DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER FOR RESOLUTION.
- THIS SITE PLAN IS DESIGNED IN COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED BUILDING IS DESIGNED IN COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY REGULATIONS INCLUDING NH RSA 155-A:5-a-bb, THE IBC AND ANSI 117.1.
- AT THE CONCLUSION OF THE PROJECT, THE CONTRACTOR SHALL PREPARE AN AS-BUILT SITE AND UTILITY PLAN STAMPED BY A NH LICENSED LAND SURVEYOR (LLS) & PROVIDE DIGITAL COPIES IN PDF AND CAD FORMAT TO THE ENGINEER.
- THE TOWN OF DURHAM SHALL HAVE AN EASEMENT THROUGH THE EAST PARKING LOT TO ACCESS THE EXISTING RIGHT OF WAY TO THE ADJUTING CEMETERIES ON TAX MAP 209 LOTS 34 AND 35.
- SEE DETAIL SHEETS FOR LEGEND.



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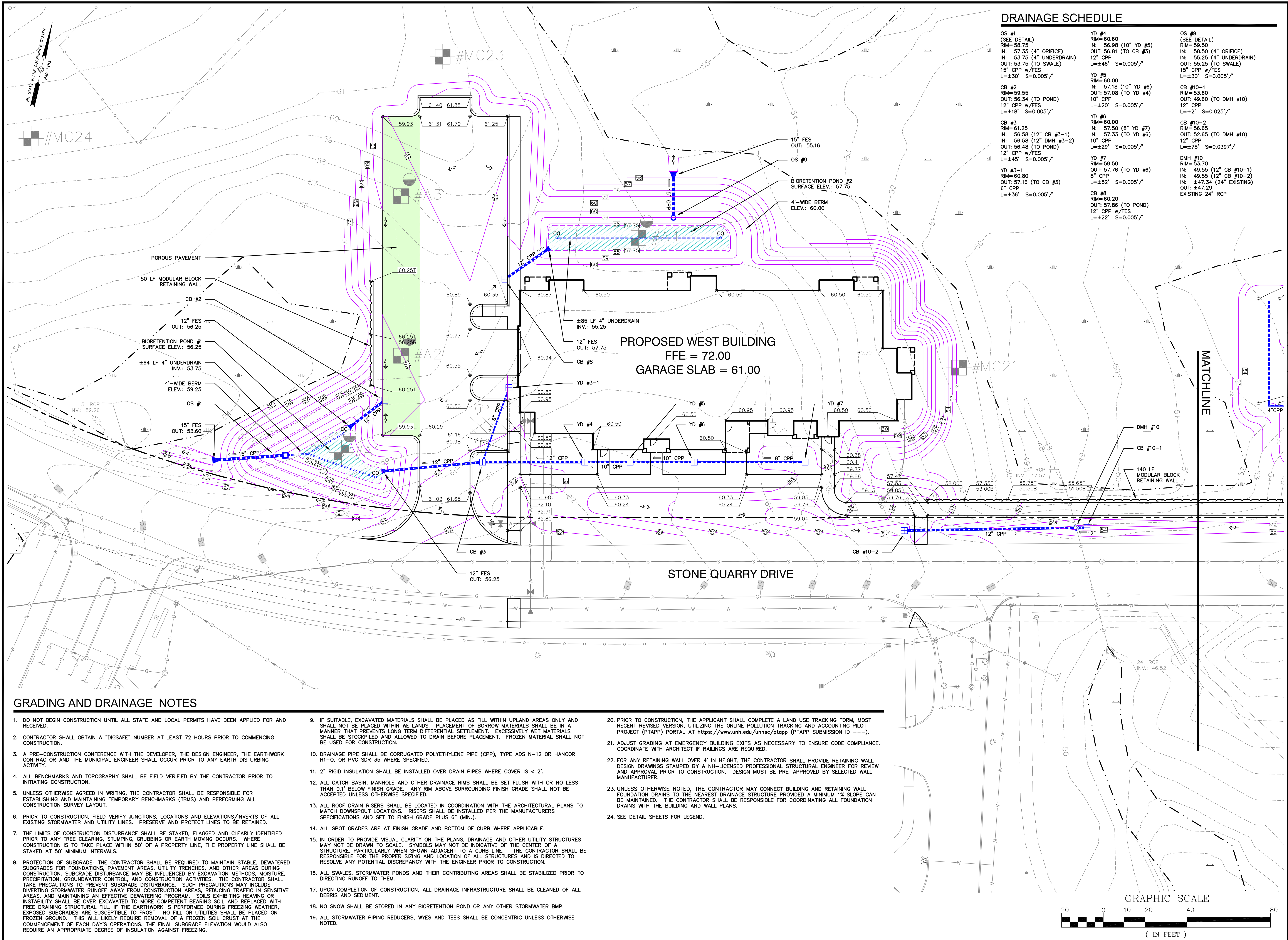
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TAX MAP 209 LOT 33
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SITE PLAN

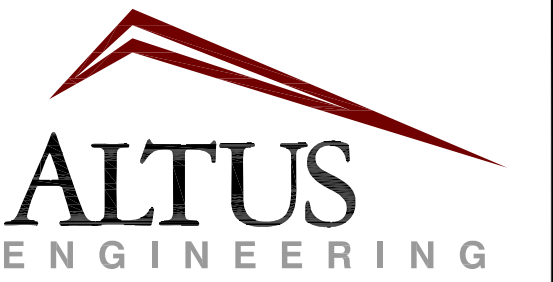
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C-3



GRADING AND DRAINAGE NOTES

- DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
- CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE MUNICIPAL ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
- ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION.
- UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBMS) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
- PRIOR TO CONSTRUCTION, FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING STORMWATER AND UTILITY LINES. PRESERVE AND PROTECT LINES TO BE RETAINED.
- THE LIMITS OF CONSTRUCTION DISTURBANCE SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY TREE CLEARING, STUMPING, GRUBBING OR EARTH MOVING OCCURS. WHERE CONSTRUCTION IS TO TAKE PLACE WITHIN 50' OF A PROPERTY LINE, THE PROPERTY LINE SHALL BE STAKED AT 50' MINIMUM INTERVALS.
- PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL. IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.
- IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.
- DRAINAGE PIPE SHALL BE CORRUGATED POLYETHYLENE PIPE (CPP), TYPE ADS N-12 OR HANCOR H1-Q, OR PVC SDR 35 WHERE SPECIFIED.
- 2" RIGID INSULATION SHALL BE INSTALLED OVER DRAIN PIPES WHERE COVER IS < 2'.
- ALL CATCH BASIN, MANHOLE AND OTHER DRAINAGE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISH GRADE. ANY RIM ABOVE SURROUNDING FINISH GRADE SHALL NOT BE ACCEPTED UNLESS OTHERWISE SPECIFIED.
- ALL ROOF DRAIN RISERS SHALL BE LOCATED IN COORDINATION WITH THE ARCHITECTURAL PLANS TO MATCH DOWNSPOUT LOCATIONS. RISERS SHALL BE INSTALLED PER THE MANUFACTURERS SPECIFICATIONS AND SET TO FINISH GRADE PLUS 6" (MIN.).
- ALL SPOT GRADES ARE AT FINISH GRADE AND BOTTOM OF CURB WHERE APPLICABLE.
- IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS, DRAINAGE AND OTHER UTILITY STRUCTURES MAY NOT BE DRAWN TO SCALE. SYMBOLS MAY NOT BE INDICATIVE OF THE CENTER OF A STRUCTURE, PARTICULARLY WHEN SHOWN ADJACENT TO A CURB LINE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SIZING AND LOCATION OF ALL STRUCTURES AND IS DIRECTED TO RESOLVE ANY POTENTIAL DISCREPANCY WITH THE ENGINEER PRIOR TO CONSTRUCTION.
- UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
- NO SNOW SHALL BE STORED IN ANY BIORETENTION POND OR ANY OTHER STORMWATER BMP.
- ALL STORMWATER PIPING REDUCERS, WYES AND TEES SHALL BE CONCENTRIC UNLESS OTHERWISE NOTED.
- PRIOR TO CONSTRUCTION, THE APPLICANT SHALL COMPLETE A LAND USE TRACKING FORM, MOST RECENT REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PILOT PROJECT (PTAPP) PORTAL AT <https://www.unh.edu/unhsc/ptapp> (PTAPP SUBMISSION ID ---).
- ADJUST GRADING AT EMERGENCY BUILDING EXITS AS NECESSARY TO ENSURE CODE COMPLIANCE. COORDINATE WITH ARCHITECT IF RAILINGS ARE REQUIRED.
- FOR ANY RETAINING WALL OVER 4' IN HEIGHT, THE CONTRACTOR SHALL PROVIDE RETAINING WALL DESIGN DRAWINGS STAMPED BY A NH-LICENSED PROFESSIONAL STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. DESIGN MUST BE PRE-APPROVED BY SELECTED WALL MANUFACTURER.
- UNLESS OTHERWISE NOTED, THE CONTRACTOR MAY CONNECT BUILDING AND RETAINING WALL FOUNDATION DRAINS TO THE NEAREST DRAINAGE STRUCTURE PROVIDED A MINIMUM 1% SLOPE CAN BE MAINTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FOUNDATION DRAINS WITH THE BUILDING AND WALL PLANS.
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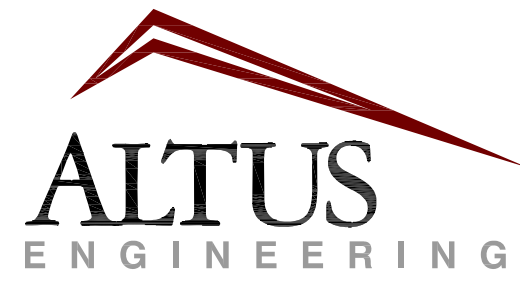
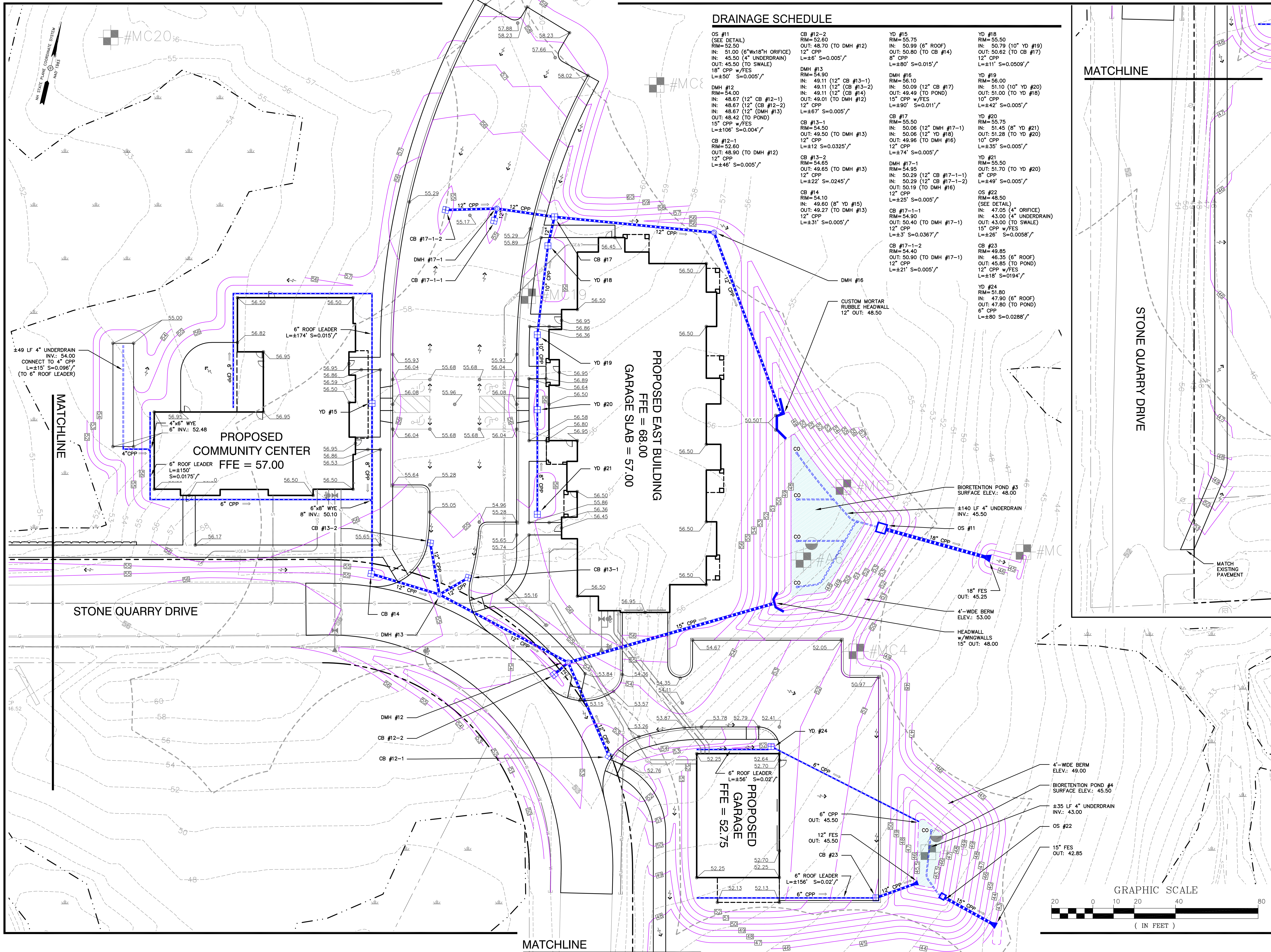
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PROJECT:
**RIVERWOODS
DURHAM PHASE II**
TAX MAP 209 LOT 33
STONE QUARRY DRIVE
& DOVER ROAD (NH 108)
DURHAM, NH

TITLE:
**STORMWATER
MANAGEMENT PLAN**

SHEET NUMBER:
C-5.1



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TITLE:
**STORMWATER
MANAGEMENT PLAN**

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C-5.2