

# BIBBO ASSOCIATES, L.L.P.

*Consulting Engineers*

Timothy S. Allen, P.E.  
Nicholas Gaboury, P.E.  
Matthew J. Gironda, P.E.

December 21, 2021

Town of North Castle  
Residential Project Review Committee  
17 Bedford Road  
Armonk, NY 10504-1898

ATTN: Mr. Adam Kaufman, Chairman

RE: Site Plan  
Abramo Residence  
163 Hickory Kingdom Road

Dear Members of the Committee:

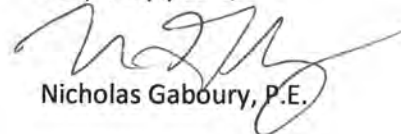
Please find attached the following materials in support of the Building Permit Application for the above referenced project:

- 1 copy – R.P.R.C. Checklist
- 1 copy – R.P.R.C. Application (w/ scan of check)
- 1 copy – Site Plan (4 Sheets)
- 1 copy – Floor Plans, prepared by William Bateman, RA
- 1 copy – Drainage Calculations
- 1 copy – Aerial Map
- 1 copy – Gross Land Coverage Worksheet (w/ graphical plan)
- 1 copy – Gross Floor Area Worksheet (w/ graphical plan)

Our client is proposing to construct a new five bedroom residence with an in-ground pool and pool house located at the above-referenced address. The proposed house will be served by a new onsite septic system and new drilled well. Please note, access to the site will be provided by the existing paved common driveway which connects to Hickory Kingdom Road.

We respectfully request this matter be placed on your next available meeting agenda for your review. Please feel free to contact us with any questions or comments you may have.

Very truly yours,



Nicholas Gaboury, P.E.

cc: M. Abramo, owner

*Site Design ♦ Environmental*

---

Mill Pond Offices • 293 Route 100 • Suite 203 • Somers, New York 10589  
Phone: 914.277.5805 • Fax: 914.277.8210  
Website: [www.bibboassociates.com](http://www.bibboassociates.com) • E-mail: [bibbo@bibboassociates.com](mailto:bibbo@bibboassociates.com)



# TOWN OF NORTH CASTLE

WESTCHESTER COUNTY  
17 Bedford Road  
Armonk, New York 10504-1898

RESIDENTIAL PROJECT  
REVIEW COMMITTEE  
Adam R. Kaufman AICP, Chair

Telephone: (914) 273-3000 x 43  
Fax: (914) 273-3554  
www.nortcastleny.com

## RESIDENTIAL PROJECT REVIEW COMMITTEE (RPRC) APPLICATION

### Section I- PROJECT

ADDRESS: 163 Hickory Kingdom Road

### Section III- DESCRIPTION OF WORK:

Construction of new single family residence (5 bedrooms), in-ground pool, and a pool house with associated drainage systems, septic system, and drilled well.

### Section III- CONTACT INFORMATION:

APPLICANT: Matt Abramo

ADDRESS: 530W 30th ST. Apt 23A, New York, NY 10001

PHONE: \_\_\_\_\_ MOBILE: 645-417-0435 EMAIL: jkabramo@gmail.com

PROPERTY OWNER:

SAME AS ABOVE

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ MOBILE: 645-417-0435 EMAIL: jkabramo@gmail.com

PROFESSIONAL: Bibbo Associates, LLP

ADDRESS: 293 Route 100, Suite 203 Somers, NY 10589

PHONE: (914) 277-5805 MOBILE: \_\_\_\_\_

EMAIL: ngaboury@bibboassociates.com

### Section IV- PROPERTY INFORMATION:

Zone: R-4A Tax ID (lot designation) 95.04-2-3



**Town of North Castle**  
**Residential Project Review Committee**  
17 Bedford Road Armonk, New York 10504  
(914) 273-3542 (914) 273-3554 (fax)

**RPRC COMPLETENESS REVIEW FORM**

*This form represents the standard requirements for a completeness review for all Residential Project Review Committee submissions. Failure to provide all of the information requested will result in a determination that the application is incomplete.*

Project Name on Plan: Abramo

Initial Submittal  Revised Preliminary

Street Location: 163 Hickory Kingdom Road

Zoning District: R-4A Property Acreage: 6.01 ± Tax Map Parcel ID: 95.04-2-3

Date: 12-21-2021

**DEPARTMENTAL USE ONLY**

Date Filed: \_\_\_\_\_ Staff Name: \_\_\_\_\_

**Preliminary Plan Completeness Review Checklist**

Items marked with a  are complete, items left blank  are incomplete and must be completed, "NA" means not applicable.

1. Plan prepared by a registered architect or professional engineer
2. Aerial photo (Google Earth) showing the applicant's entire property and adjacent properties and streets
3. Map showing the applicant's entire property and adjacent properties and streets
4. A locator map at a convenient scale
5. The proposed location, use and design of all buildings and structures
6. Existing topography and proposed grade elevations
7. Location of drives
8. Location of all existing and proposed site improvements, including drains, culverts, retaining walls and fences

**RPRC COMPLETENESS REVIEW FORM**

Page 2

- 9. Description of method of water supply and sewage disposal and location of such facilities
- 10. The name and address of the applicant, property owner(s) if other than the applicant and of the planner, engineer, architect, surveyor and/or other professionals engaged to work
- 11. Submission of a Zoning Conformance Table depicting the plan's compliance with the minimum requirements of the Zoning District
- 12. If a tree removal permit is being sought, submission of a plan depicting the location and graphical removal status of all Town-regulated trees within the proposed area of disturbance. In addition, the tree plan shall be accompanied by a tree inventory includes a unique ID number, the species, size, health condition and removal status of each tree.
- 13. If a wetlands permit is being sought, identification of the wetland and the 100-foot wetland buffer.

More information about the items required herein can be obtained from the North Castle Planning Department. A copy of the Town Code can be obtained from Town Clerk or on the North Castle homepage: <http://www.northcastleny.com/townhall.html>

\_\_\_\_\_ On this date, all items necessary for a technical review of the proposed site plan have been submitted and constitute a COMPLETE APPLICATION.

MATTHEW ABRAMO  
MERCEDES ABRAMO  
37 RUNNYMEDE RD.  
CHATHAM, NJ 07928-1331

1-2  
292  
210

2652

DATE 8/4/21

PAY TO THE ORDER OF TOWN OF NEW CASTLE \$ 1875.00

ONE THOUSAND EIGHT HUNDRED SEVENTY FIVE & 00/100 DOLLARS

**CHASE**  
JPMorgan Chase Bank, N.A.  
www.Chase.com

MEMO 163HK (RPRC)

Matthew Abramo






⑆021000021⑆ 292012812865⑈2652



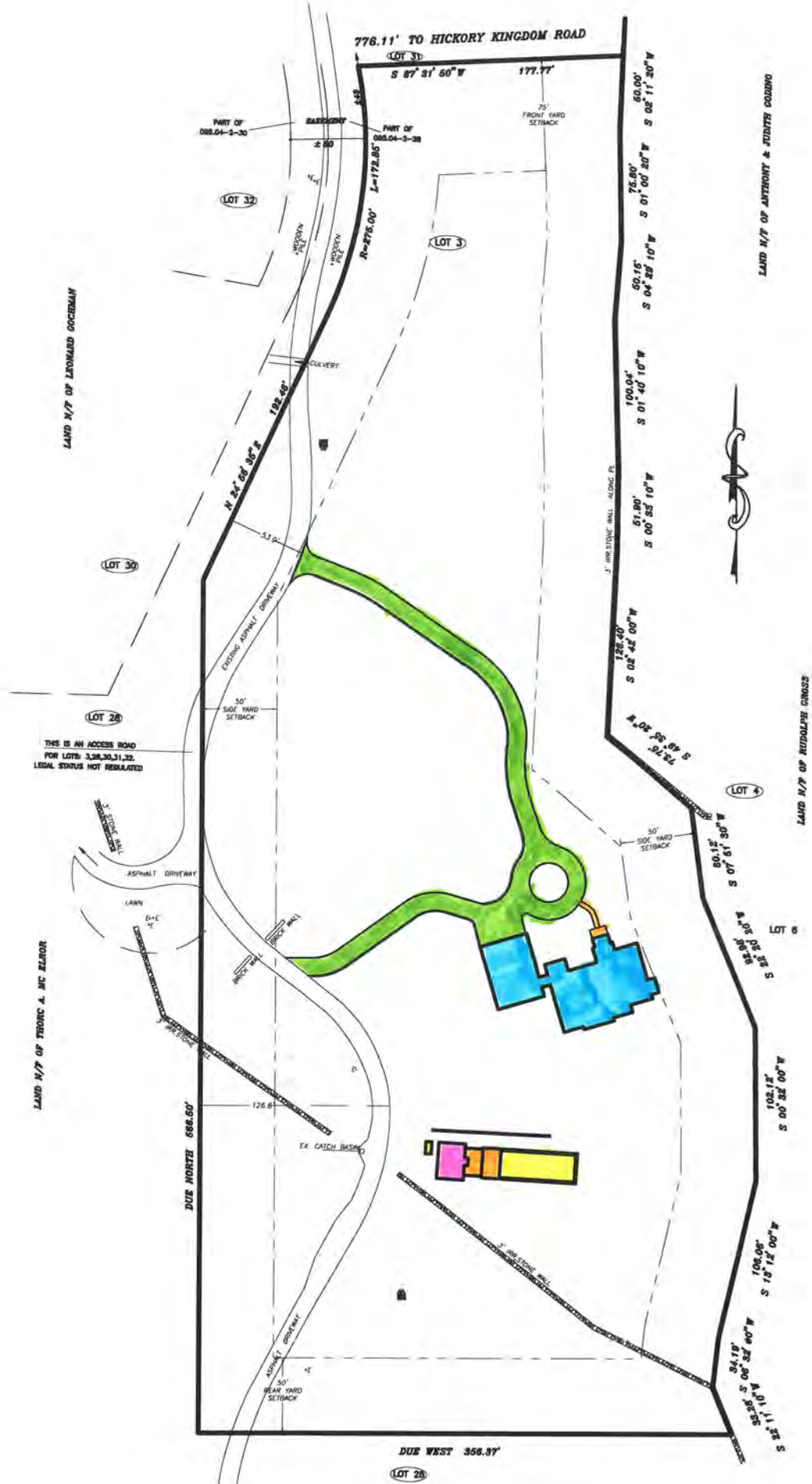


Project Abramo Residence - 163 Hickory Kingdom Road

Gross Land Coverage Breakdown

| Legend  |                             | Existing (SF) | Proposed (SF) | Area (SF) |
|---|-----------------------------|---------------|---------------|-----------|
|  | Principal Building          | 0             | 4282          | 4,282     |
|  | Driveway                    | 0             | 7252          | 7,252     |
|  | Pool and Pool Equipment Pad | 0             | 900           | 900       |
|  | Terraces and Patios         | 0             | 559           | 559       |
|  | Pool House                  | 0             | 441           | 441       |
|   | Total                       | 0             | 13,434        | 13,434    |





**INSET MAP**

1" = 100'





TOWN OF NORTH CASTLE  
WESTCHESTER COUNTY  
17 Bedford Road  
Armonk, New York 10504-1898

PLANNING DEPARTMENT  
Adam R. Kaufman, AICP  
Director of Planning

Telephone: (914) 273-3542  
Fax: (914) 273-3554  
[www.northcastleny.com](http://www.northcastleny.com)

## FLOOR AREA CALCULATIONS WORKSHEET

Application Name or Identifying Title: Abramo Residence Date: 12/16/21

Tax Map Designation or Proposed Lot No.: Map 95.04 / Block 2 / Lot 3 - 163 Hickory Kingdom Road

### Floor Area

- |     |   |                               |
|-----|---|-------------------------------|
| 1.  | Total Lot Area (Net Lot Area for Lots Created After 12/13/06):  | <u>6.015 AC / 262031.4 SF</u> |
| 2.  | <b>Maximum</b> permitted floor area (per Section 355-26.B(4)):  | <u>16,240 SF</u>              |
| 3.  | Amount of floor area contained within first floor:<br>_____ existing + <u>2,905 SF</u> proposed =                               | <u>2,905 SF</u>               |
| 4.  | Amount of floor area contained within second floor:<br>_____ existing + <u>683 SF</u> proposed =                                | <u>683 SF</u>                 |
| 5.  | Amount of floor area contained within garage:<br>_____ existing + <u>840 SF</u> proposed =                                      | <u>840 SF</u>                 |
| 6.  | Amount of floor area contained within porches capable of being enclosed:<br>_____ existing + <u>293 SF</u> proposed =           | <u>293 SF</u>                 |
| 7.  | Amount of floor area contained within basement (if applicable – see definition):<br>_____ existing + <u>1,752 SF</u> proposed = | <u>1,752 SF</u>               |
| 8.  | Amount of floor area contained within attic (if applicable – see definition):<br>_____ existing + <u>N/A</u> proposed =         | <u>N/A</u>                    |
| 9.  | Amount of floor area contained within all accessory buildings:<br>_____ existing + <u>864 SF</u> proposed =                     | <u>864 SF</u>                 |
| 10. | <b>Proposed floor area:</b> Total of Lines 3 – 9 =  | <u>7,337 SF</u>               |

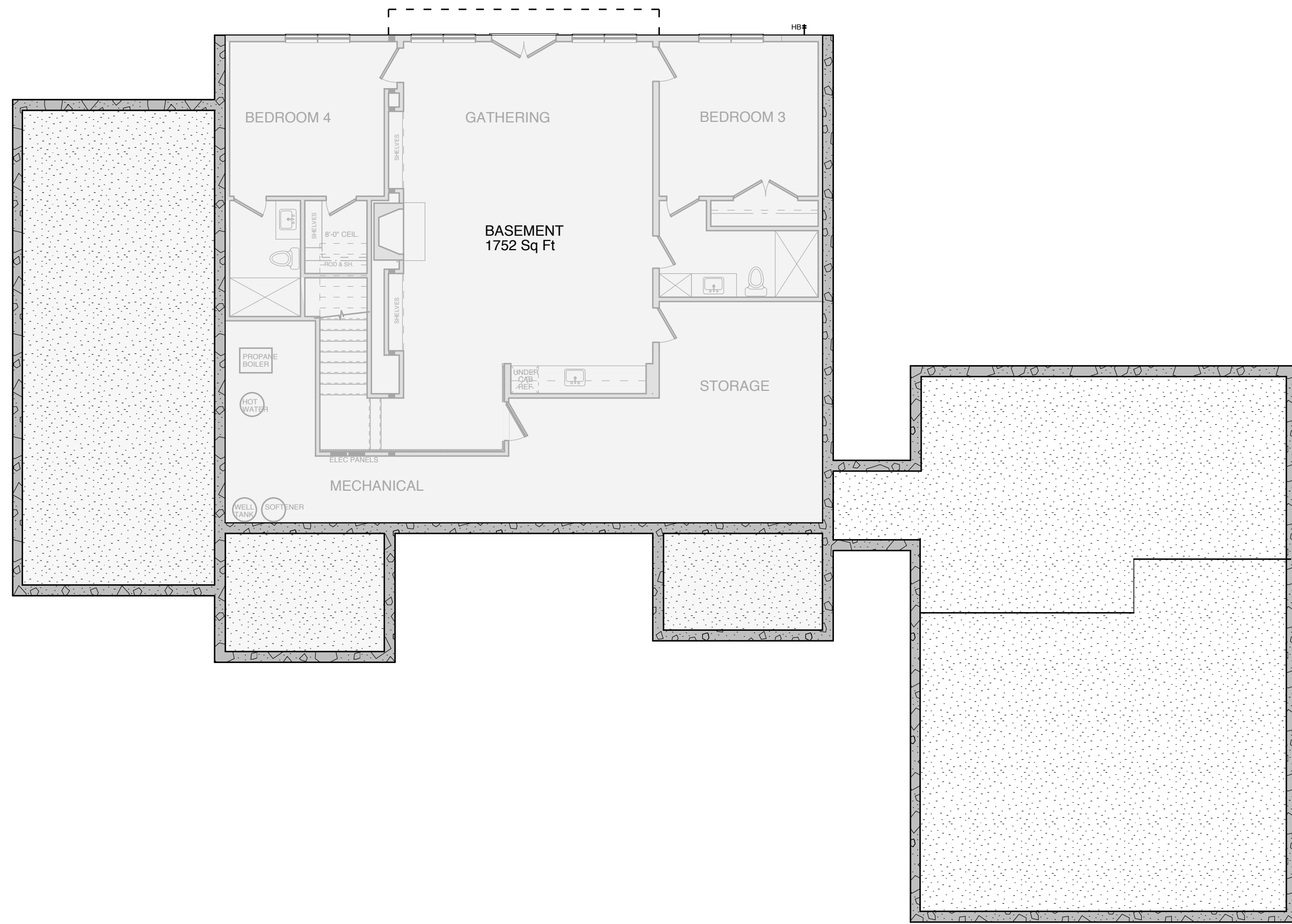
If Line 10 is less than or equal to Line 2, your proposal **complies** with the Town's maximum floor area regulations and the project may proceed to the Residential Project Review Committee for review. If Line 10 is greater than Line 2 your proposal does not comply with the Town's regulations.

Signature and Seal of Professional Preparing Worksheet

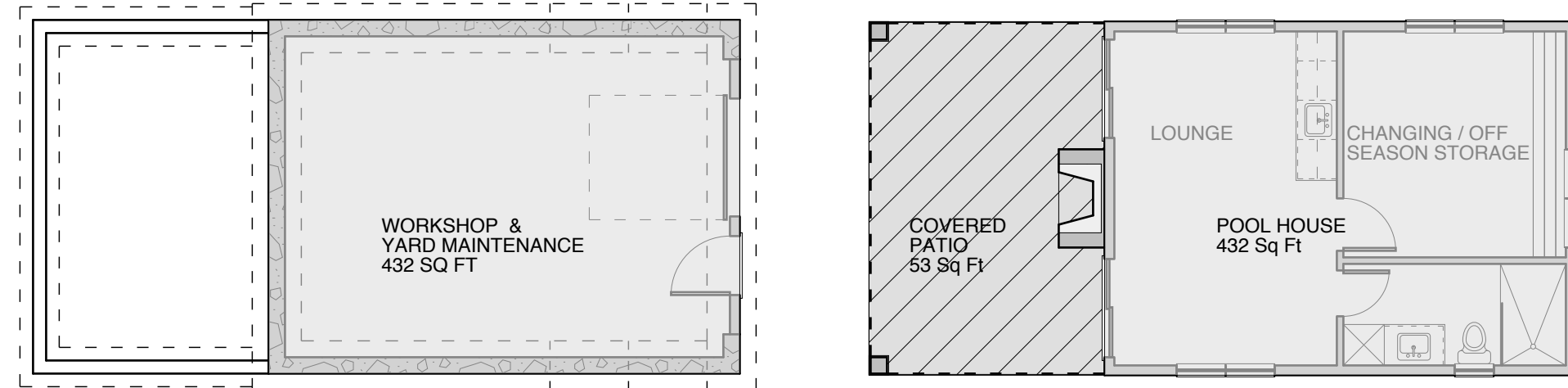
12/16/21

Date

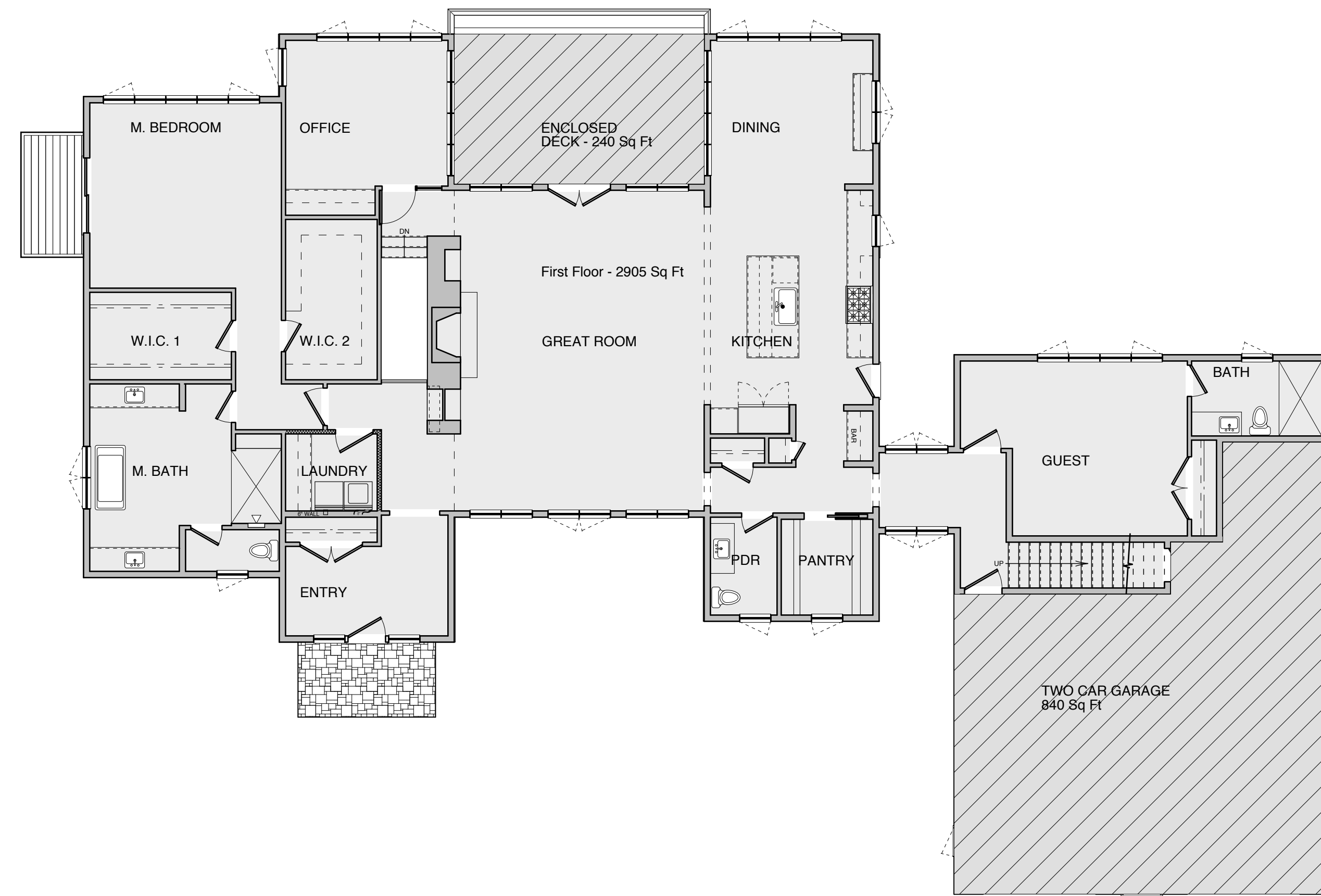




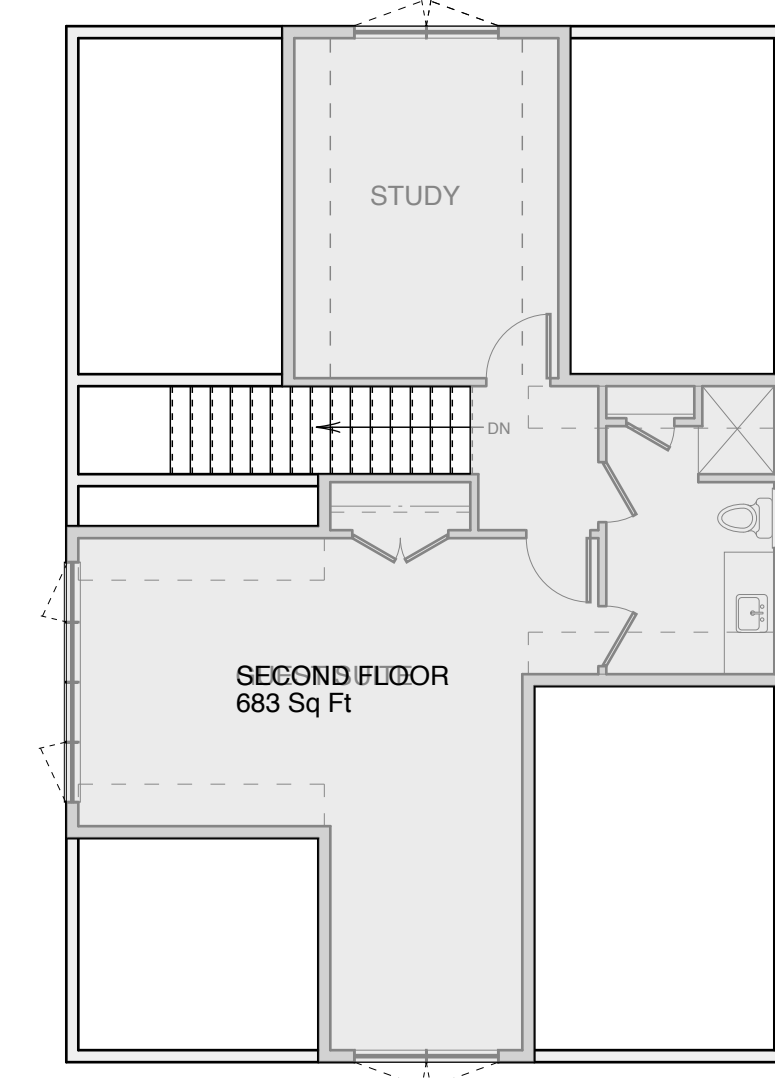
BASEMENT PLAN



POOL HOUSE PLANS



FIRST FLOOR PLAN



GUEST SUITE OVER GARAGE

SQUARE FOOTAGE CALCULATION PLANS



IMPORTANT NOTE:  
THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION OF THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE INTERPRETED AS SHOWN AT ANY DISCRETION.

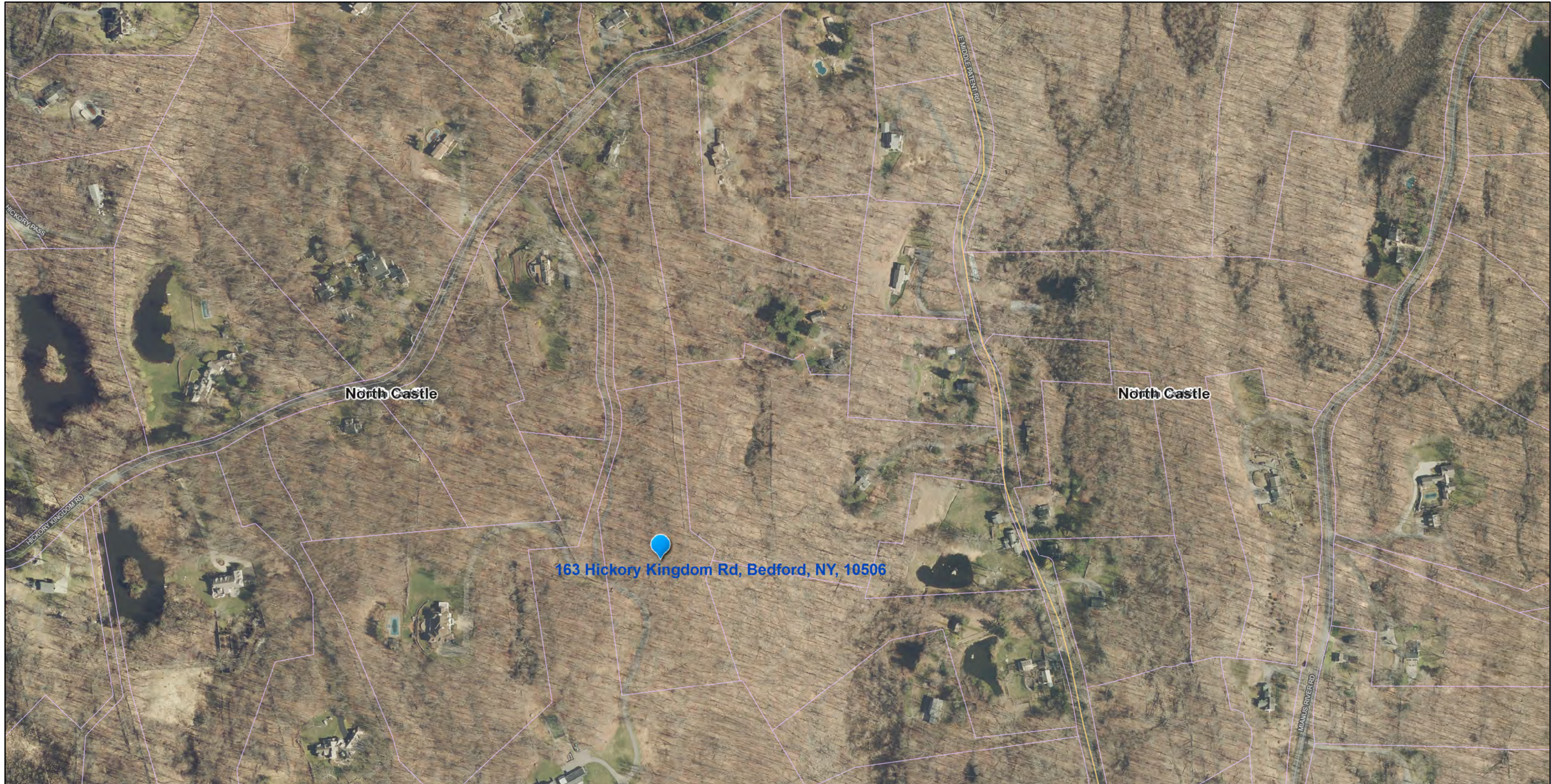
PREPARED BY  
**WILLIAM BATEMAN, ARCHITECT, AIA**  
DISTINCTIVE RESIDENTIAL ARCHITECTURE  
INFO@WILLIAMBATEMAN.COM 518 788-7561  
NEW YORK SOUTH CAROLINA

PROJECT TITLE  
**THE ABRAMO RESIDENCE**  
163 HICKORY KINGDOM ROAD  
NORTH CASTLE, NY

RELEASE  
 FOR REVIEW  
 FOR PERMITTING  
 FOR CONSTRUCTION  
 AS BUILT  
DATE PRINTED  
Thu, Dec 16, 2021  
SHEET NO.

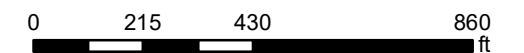
**A**

# Mapping Westchester County



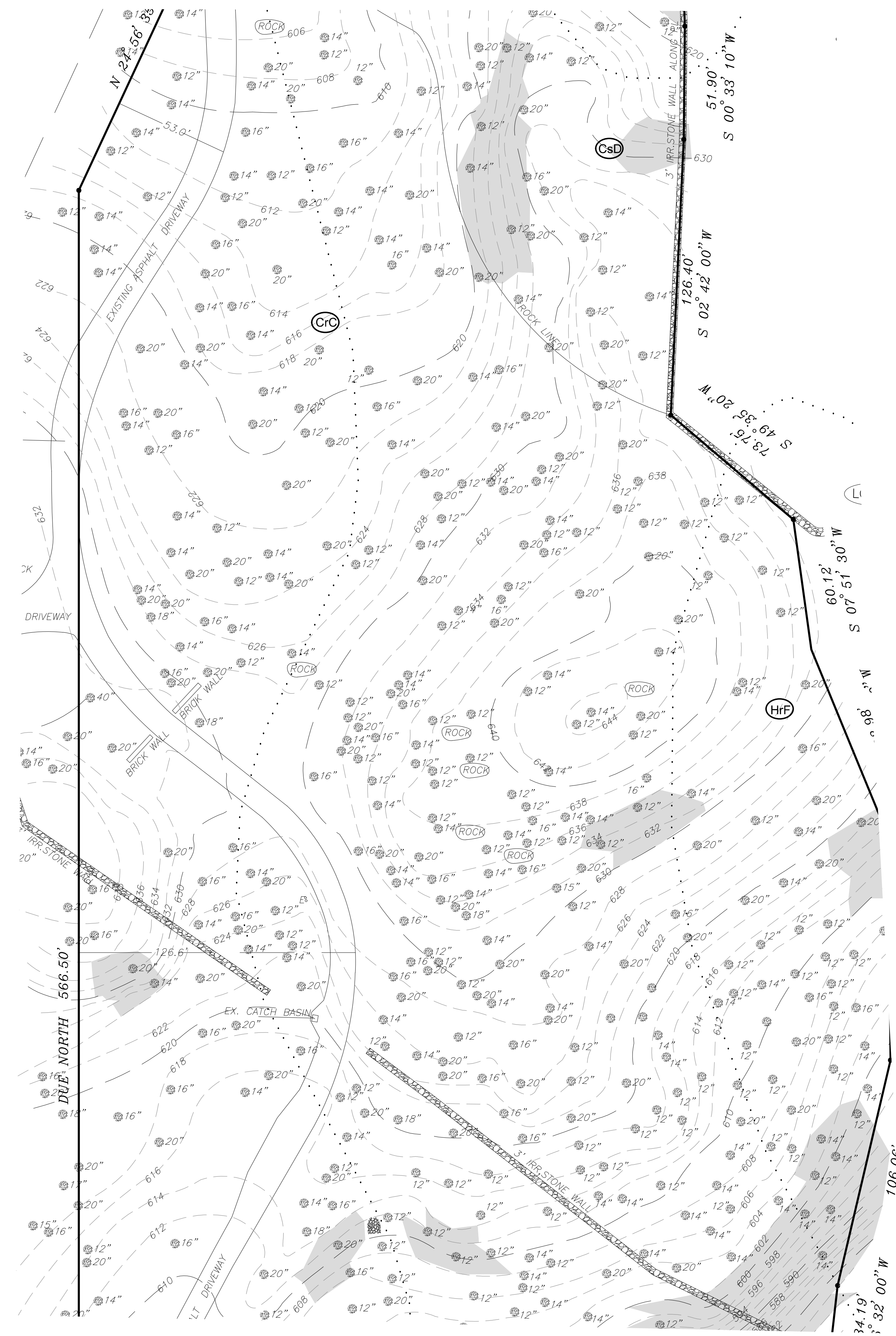
7/16/2021, 11:49:28 AM  
: : Municipal Boundaries

1:4,514





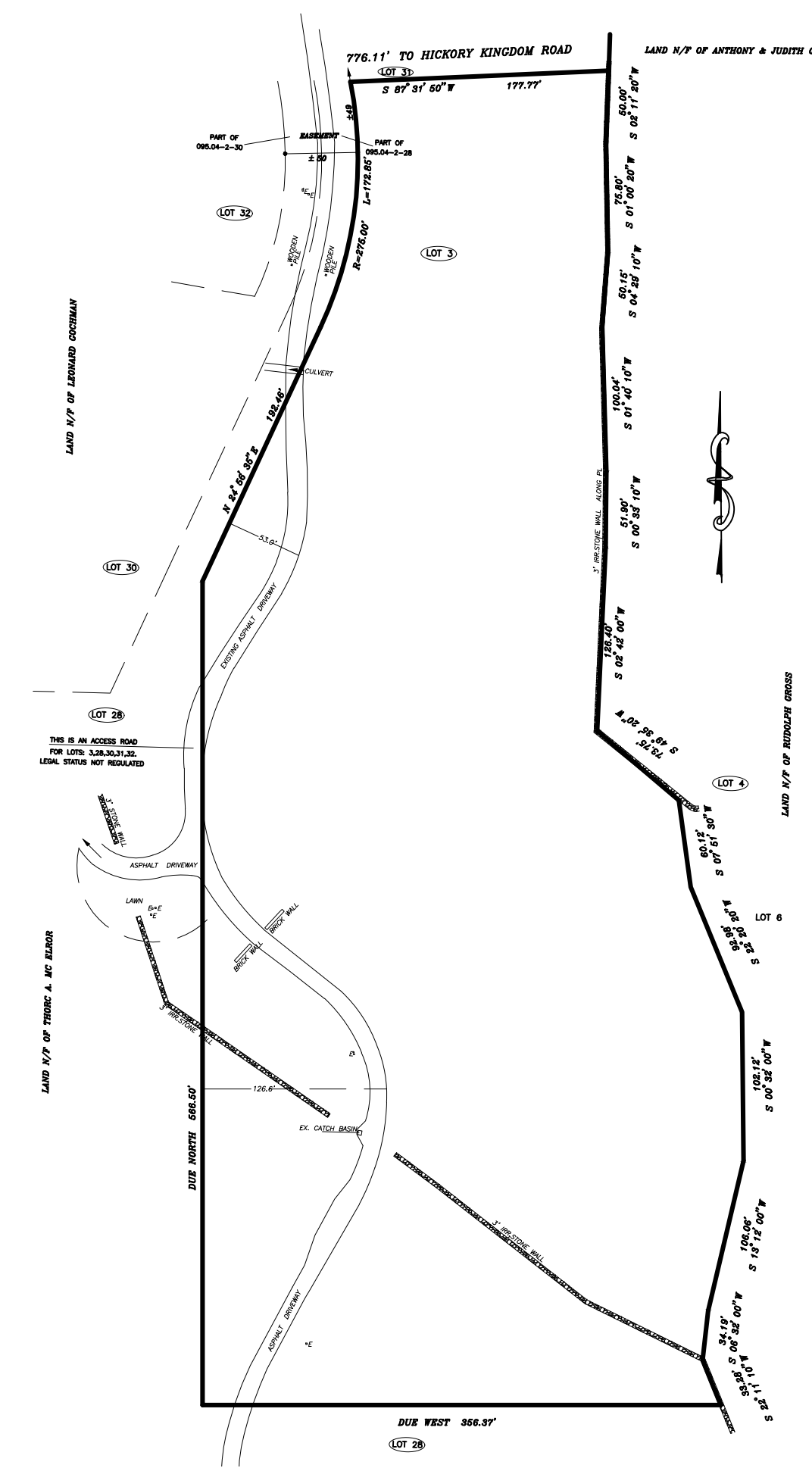
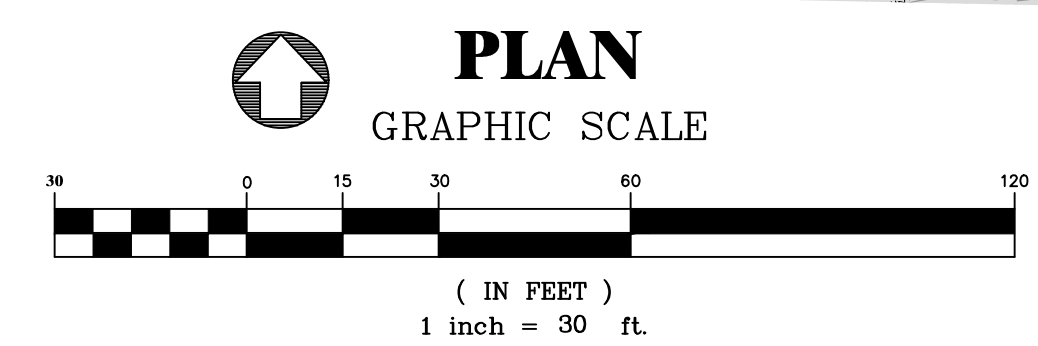
**LOCATION MAP**  
1" = 1600'



- LEGEND**
- EXISTING PROPERTY LINE
  - EXISTING STONE WALL
  - - - EXISTING 2' CONTOUR
  - - - EXISTING 10' CONTOUR
  - ⊙ 14" EXISTING TREE
  - ..... SOIL BOUNDARY LINE

UNAUTHORIZED ALTERATIONS AND ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 2209 (2) OF THE NEW YORK STATE EDUCATION LAW.

COPYRIGHT © 2021 BIBBO ASSOCIATES, LLP. ALL RIGHTS RESERVED. UNAUTHORIZED REPRODUCTION IS A VIOLATION OF APPLICABLE LAWS.



**INSET MAP**  
1" = 100'

**CONTACT INFO:**  
MATTHEW ABRAMO  
530 W 30TH ST APT 23A  
NEW YORK, NY 10001

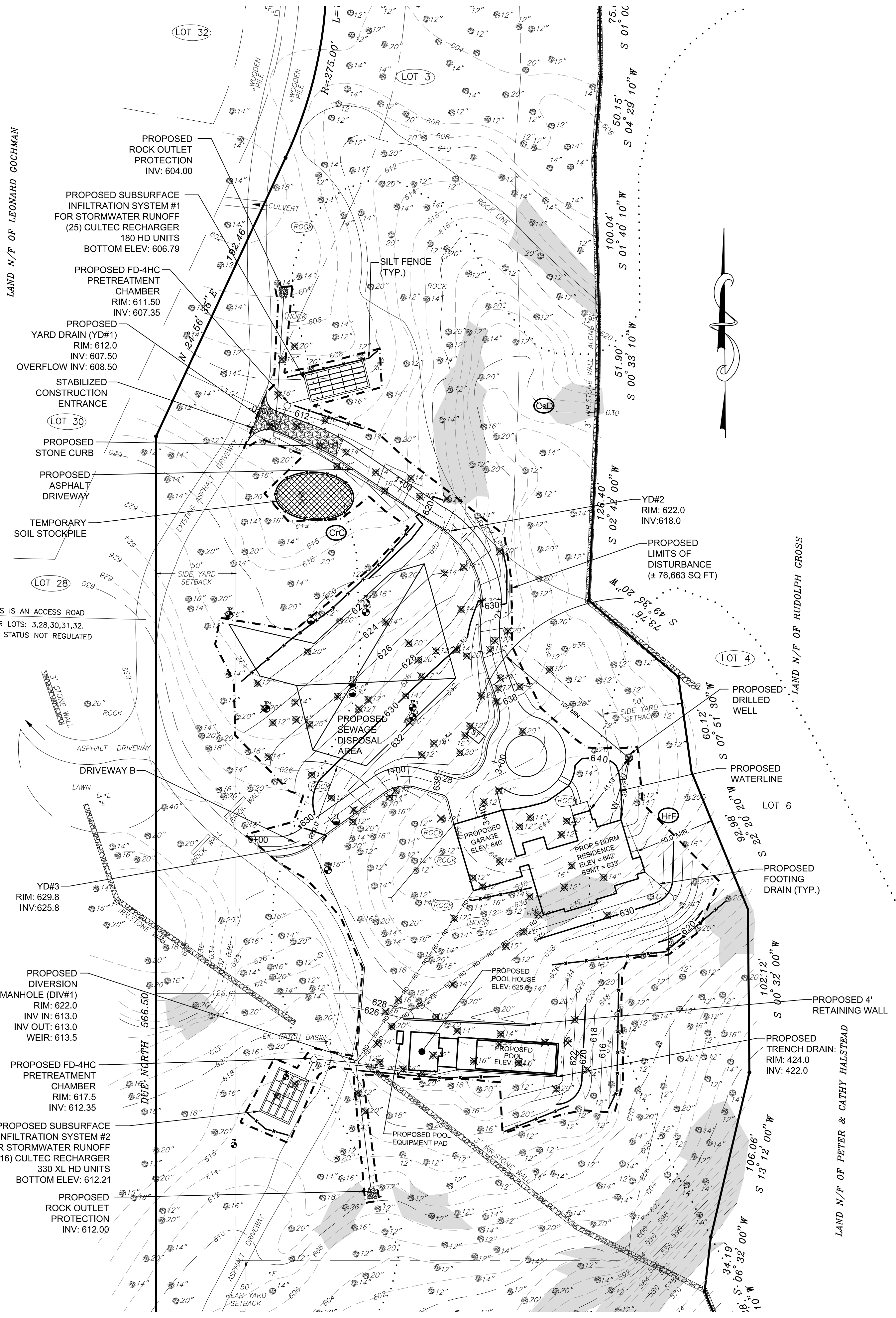
OLD BIBBO PROJECT NO. 2715  
OLD WCDH PERMIT NO. N0C2000-11  
P/O LEONARD GOCHMAN SUBDIVISION, MAP# 21099, DATE 7/30/82, R.S. LOT NO: 2  
SEC NO: 95.04 BLOCK NO: 2 LOT NO: 3

| REVISIONS | DATE | DESCRIPTION | BY/CK | DATE | DESCRIPTION | BY/CK |
|-----------|------|-------------|-------|------|-------------|-------|
|           |      |             |       |      |             |       |

|  |  |                  |
|--|--|------------------|
|  | <b>EXISTING CONDITIONS</b>                         | DATE: 12-20-2021 |
|  | <b>ABRAMO - RESIDENCE</b>                          | SCALE: AS SHOWN  |
|  | 163 HICKORY KINGDOM ROAD                           | FILE: LL-1       |
|  | TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NY 10504 | DSGN / CHK: NG   |
|  | DRN. BY: AW/NM                                     | SHT NO. 1 OF 4   |
|  | DWG NO. <b>EX-1</b>                                |                  |

| ZONING DATA                |                               |                    |
|----------------------------|-------------------------------|--------------------|
| TAX MAP DESIGNATION        | SECTION 95.04, BLOCK 2, LOT 3 |                    |
| ZONING DISTRICT            | R-4A - RESIDENTIAL            |                    |
|                            | MINIMUM REQUIREMENTS          | PROVIDED           |
| LOT AREA (ACRES)           | 4.0                           | 6.015 (261,998 sf) |
| WIDTH (FT)                 | 250                           | 276.1              |
| DEPTH (FT)                 | 150                           | 914.6              |
| FRONT YARD (FT)            | 75                            | 581.8              |
| SIDE YARD (FT)             | 50                            | 186.6 / 50.0       |
| REAR YARD (FT)             | 50                            | 266.6 / 168.4      |
| MAXIMUM BLDG. COVERAGE (%) | 6%                            | 1.8%               |
| MAX. GROSS LAND COV.       | 31,408 S.F.                   | 13,434 S.F.        |

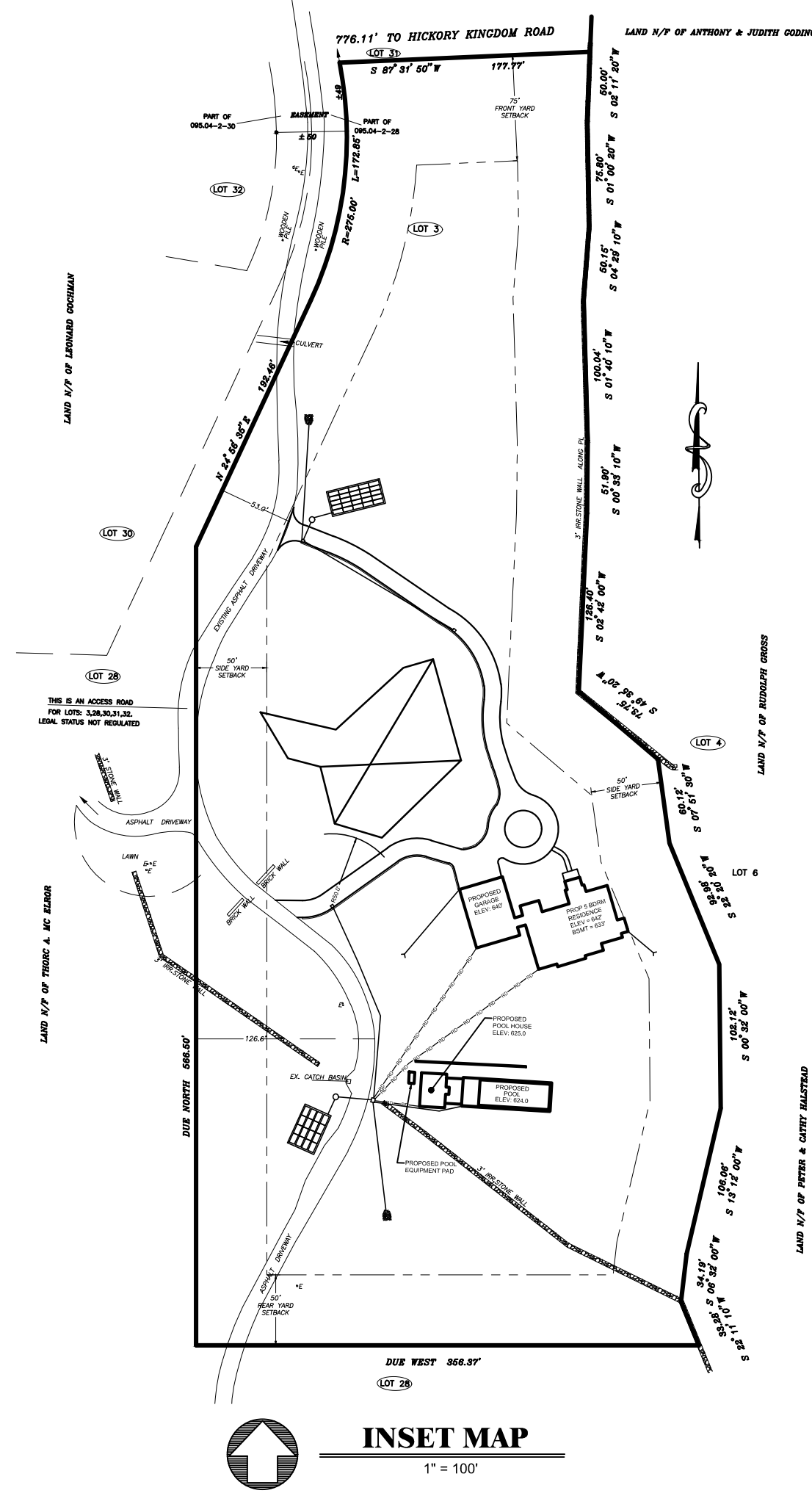
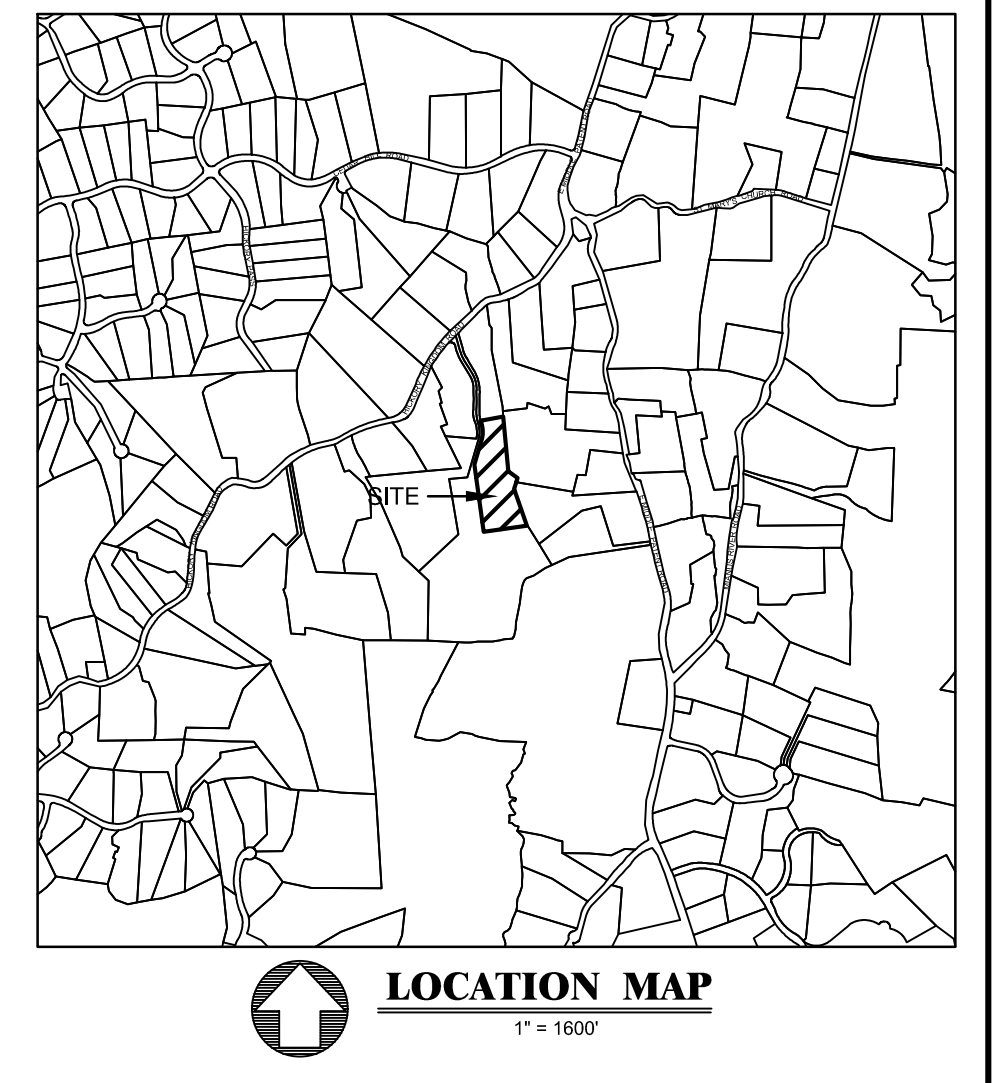
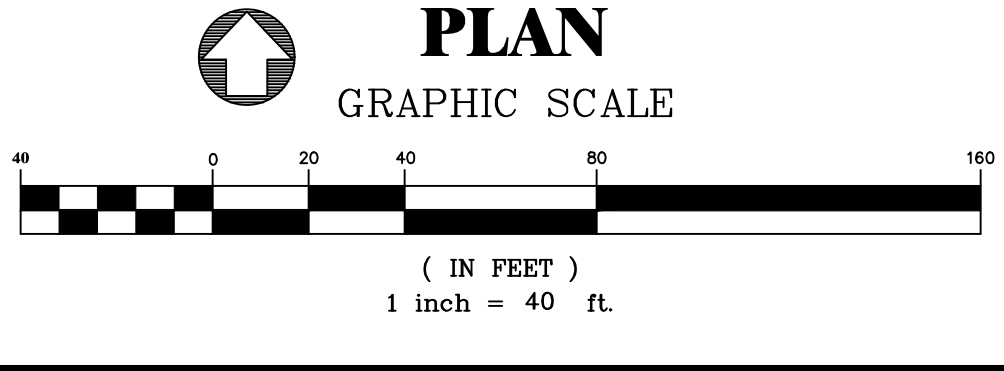


**LEGEND**

|  |  |
|--|--|
|  | EXISTING PROPERTY LINE                     |
|  | EXISTING STONE WALL                        |
|  | EXISTING 2' CONTOUR                        |
|  | EXISTING 10' CONTOUR                       |
|  | SOIL TEST LOCATION                         |
|  | EXISTING TREE                              |
|  | EXISTING TREE TO BE REMOVED                |
|  | PROPOSED 10' CONTOUR                       |
|  | PROPOSED 2' CONTOUR                        |
|  | PROPOSED WATER LINE                        |
|  | SOIL BOUNDARY LINE                         |
|  | TEMPORARY STABILIZED CONSTRUCTION ENTRANCE |
|  | PROPOSED TEMPORARY SOIL STOCKPILE          |
|  | PROPOSED SILT FENCE                        |
|  | LIMIT OF DISTURBANCE                       |
|  | PROPOSED ROOF DRAINS                       |
|  | PROPOSED SEPTIC TANK                       |

UNAUTHORIZED ALTERATIONS AND ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.

COPYRIGHT © 2011 BIBBO ASSOCIATES, LLP ALL RIGHTS RESERVED. UNAUTHORIZED REPRODUCTION IS A VIOLATION OF APPLICABLE LAWS.



**CONTACT INFO:**  
MATTHEW ABRAMO  
530 W 30TH ST APT 23A  
NEW YORK, NY 10001

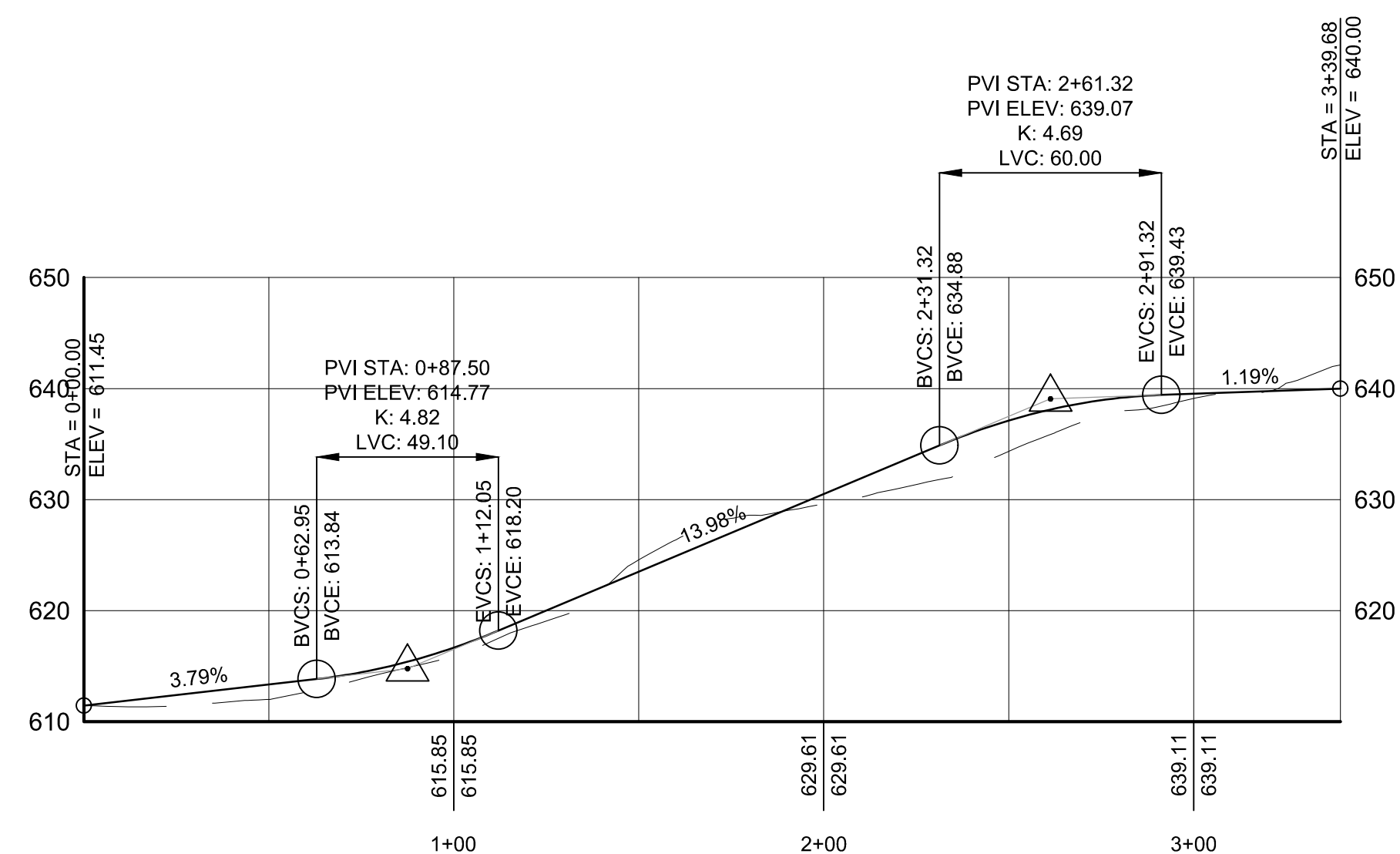
OLD BIBBO PROJECT NO. 2715  
OLD WCDH PERMIT NO. N0C2000-11  
P/O LEONARD GOCHMAN SUBDIVISION, MAP# 21099, DATE 7/30/82, R.S. LOT NO: 3  
SEC NO: 95.04 BLOCK NO: 2 LOT NO: 2

| REVISIONS | DATE | DESCRIPTION | BY/CK | DATE | DESCRIPTION | BY/CK |
|-----------|------|-------------|-------|------|-------------|-------|
|           |      |             |       |      |             |       |

|  |  |                  |
|--|--|------------------|
| <b>SITE PLAN</b>                                   |  | DATE: 12-20-2021 |
| <b>ABRAMO - RESIDENCE</b>                          |  | SCALE: AS SHOWN  |
| 163 HICKORY KINGDOM ROAD                           |  | FILE: LL-1       |
| TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NY 10504 |  | DSGN / CHK: NG   |
| DRN. BY: AW/NM                                     |  | SHT NO. 4 OF 4   |
| DWG NO. <b>SP-1</b>                                |  |                  |

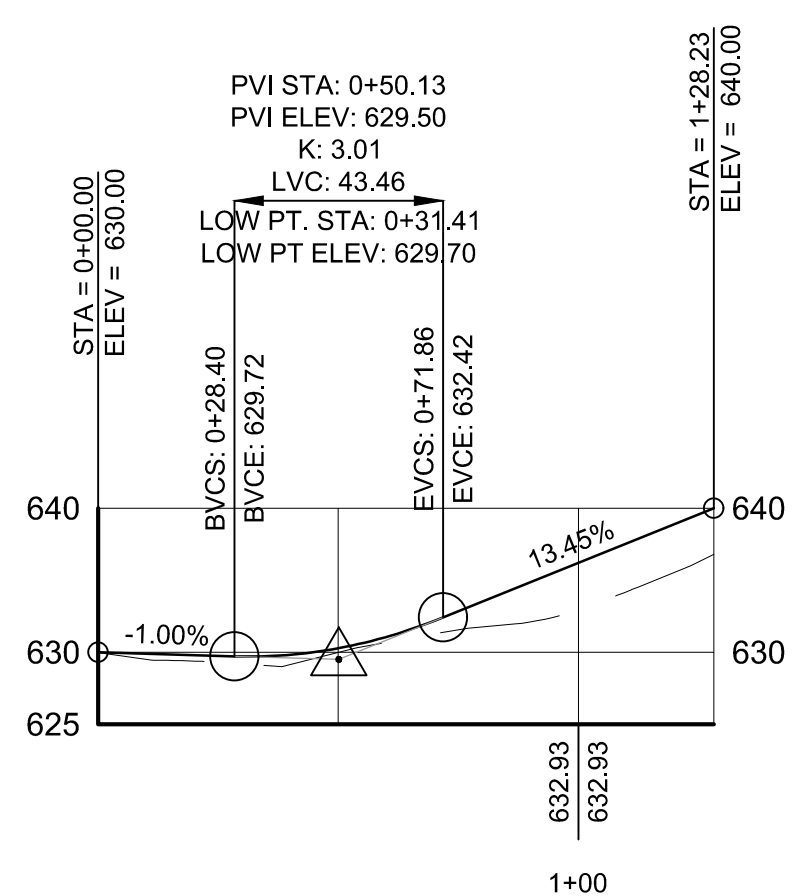
**BIBBO ASSOCIATES, LLP**  
293 ROUTE 100 SUITE 203  
SOMERS, NEW YORK 10589  
TEL. 914-277-5805

NICHOLAS GABOURY P.E.



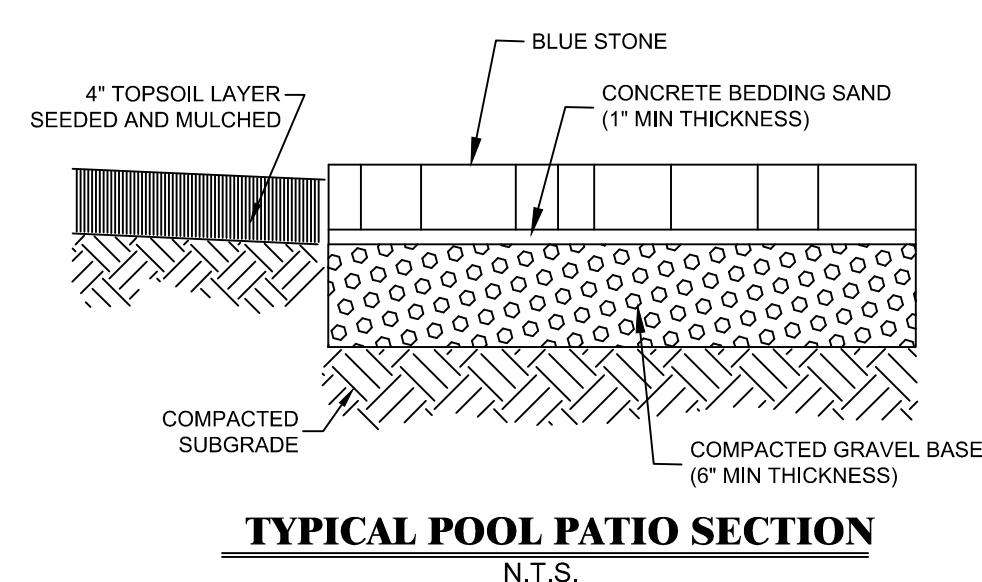
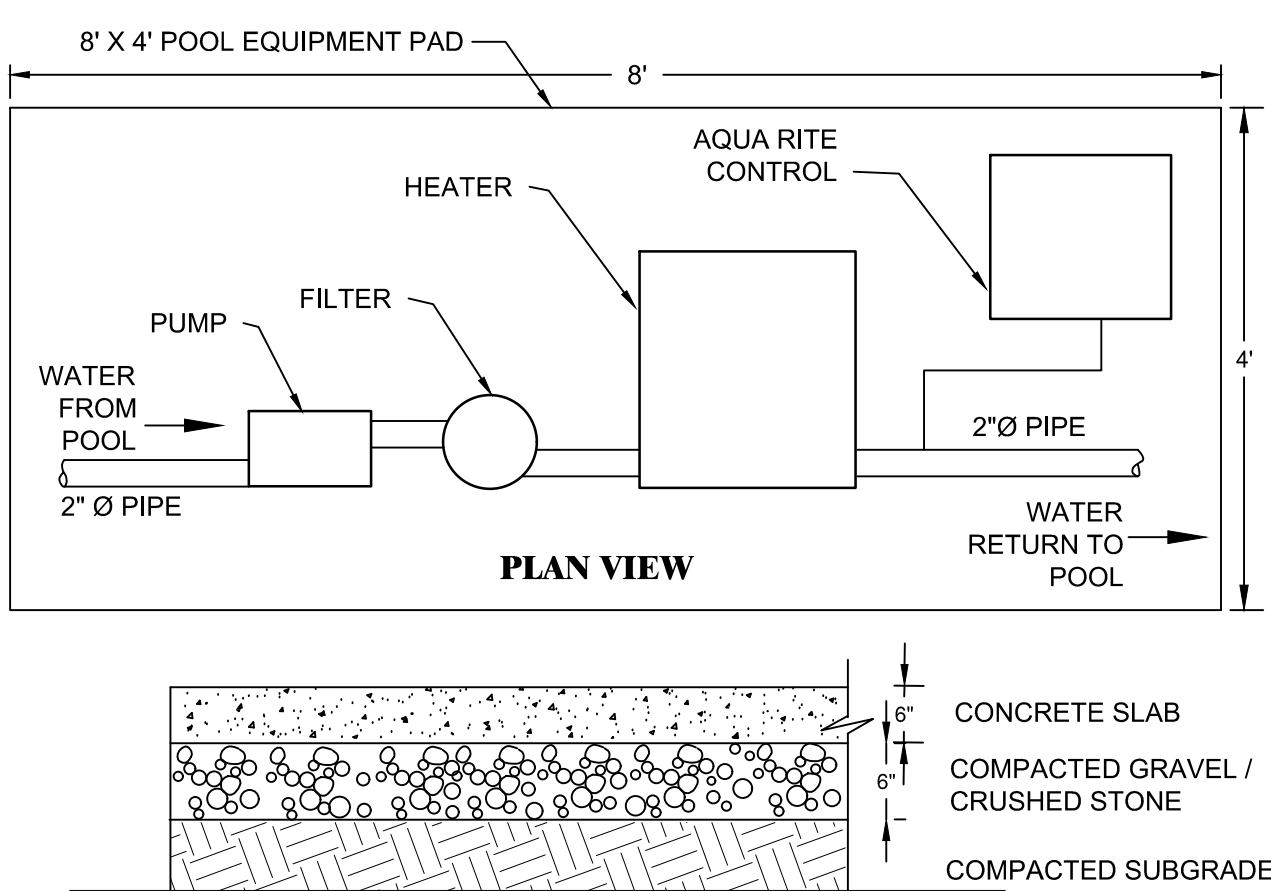
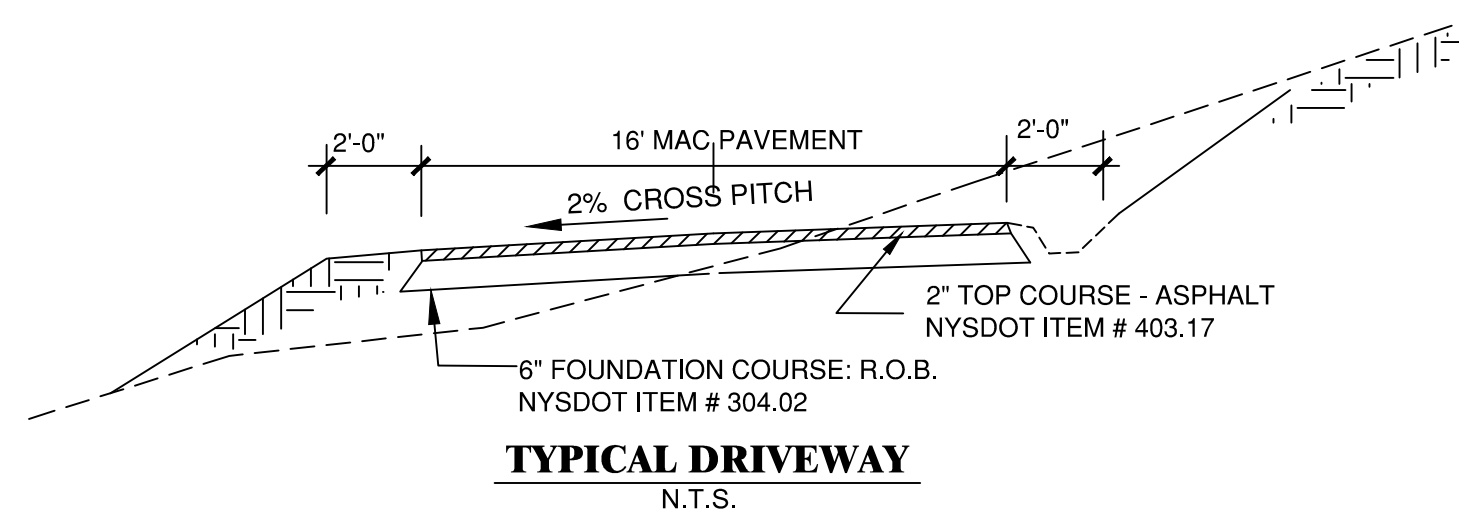
**DRIVEWAY PROFILE**

VERTICAL SCALE: 1" = 10'  
HORIZONTAL SCALE: 1" = 40'

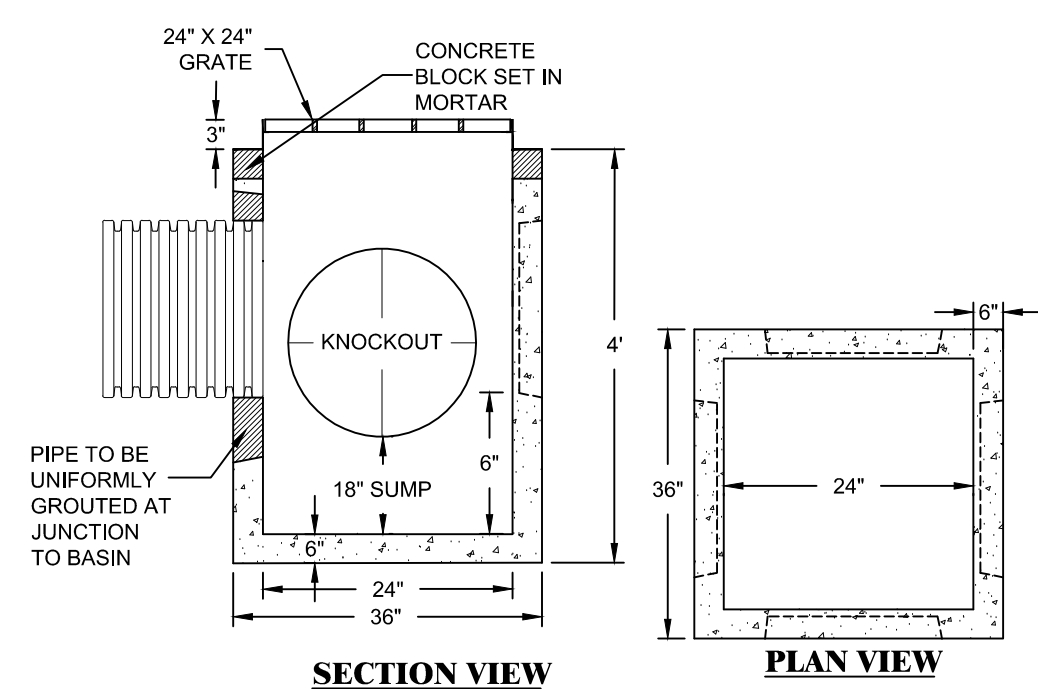


**DRIVEWAY B PROFILE**

VERTICAL SCALE: 1" = 10'  
HORIZONTAL SCALE: 1" = 40'



**POOL EQUIPMENT & CONC. PAD DETAIL**



**YARD DRAIN DETAIL**

N.T.S.  
(RESIDENTIAL DRAIN AS MANUFACTURED BY CONNECTICUT PRECAST CO. 14-20 LOADING REQUIRED)

UNAUTHORIZED ALTERATIONS AND ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 2309 (2) OF THE NEW YORK STATE EDUCATION LAW.  
COPYRIGHT © 2011 BIBBO ASSOCIATES, LLP ALL RIGHTS RESERVED. UNAUTHORIZED REPRODUCTION IS A VIOLATION OF APPLICABLE LAWS.

CONTACT INFO:  
MATTHEW ABRAMO  
530 W 30TH ST APT 23A  
NEW YORK, NY 10001

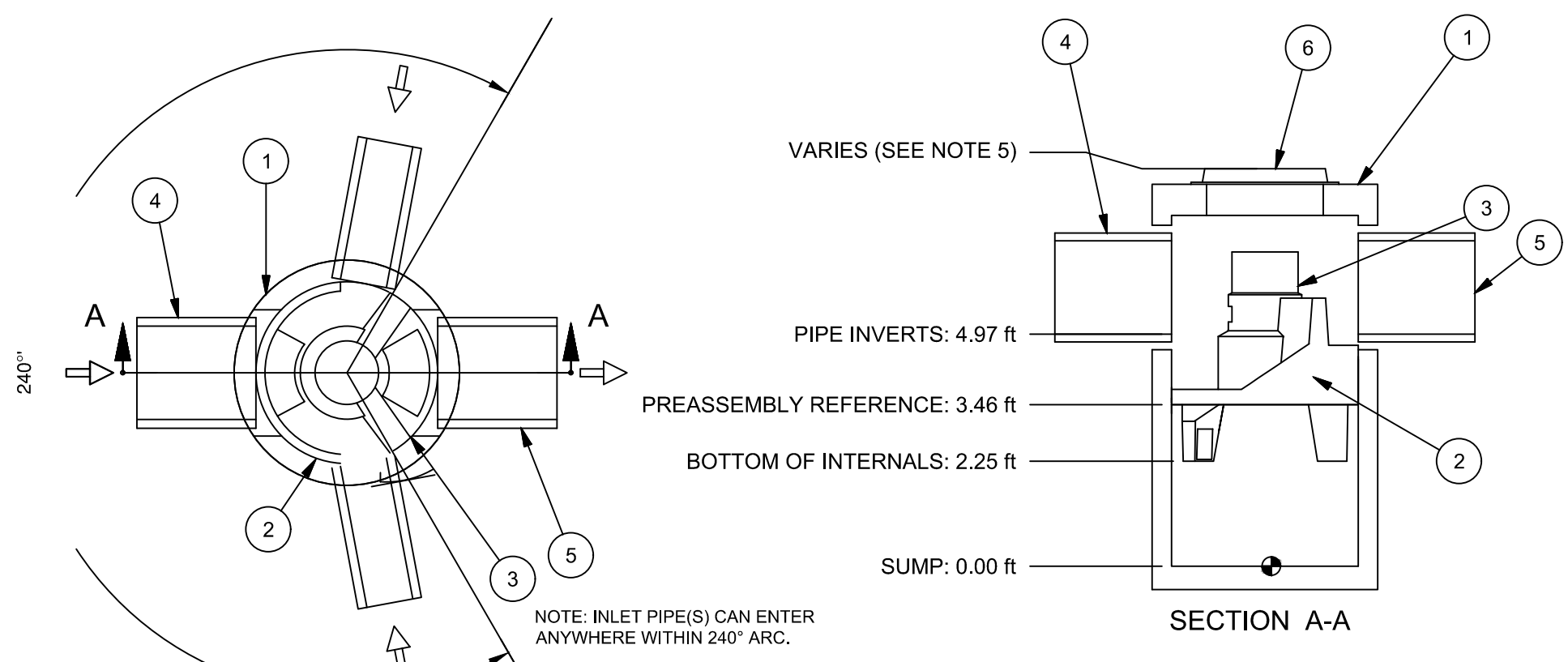
OLD BIBBO PROJECT NO. 2715  
OLD WCDH PERMIT NO. N0C2000-11

P/O LEONARD GOCHMAN SUBDIVISION, MAP# 21099, DATE 7/30/82, R.S. LOT NO: 2  
SEC NO: 95.04 BLOCK NO: 2 LOT NO: 3

| DATE: | DESCRIPTION | BY/CK | DATE: | DESCRIPTION | BY/CK |
|-------|-------------|-------|-------|-------------|-------|
|       |             |       |       |             |       |

|  |  |   |
|--|--|---|
|  | <p><b>DETAILS</b></p> <p><b>ABRAMO - RESIDENCE</b><br/>163 HICKORY KINGDOM ROAD<br/>TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NY 10504</p> | <p>DATE: 12-20-2021<br/>SCALE: AS SHOWN<br/>FILE: LL-1<br/>DSGN / CHK: NG<br/>DRN. BY: AW/NM<br/>SHT NO. 3 OF 4</p> |
|  | <p><b>BIBBO ASSOCIATES, LLP</b><br/>293 ROUTE 100 SUITE 203<br/>SOMERS, NEW YORK 10589<br/>TEL. 914-277-5805</p>                           | <p>DWG NO. <b>D-1</b></p>   |

P:\Projects\POCANTICO-ARTISTES-ABRAMO\DWG\ABRAMO BASE MAP - 12-20-21.dwg 12/20/2021 4:05:10 PM, A\Witkowski, 11



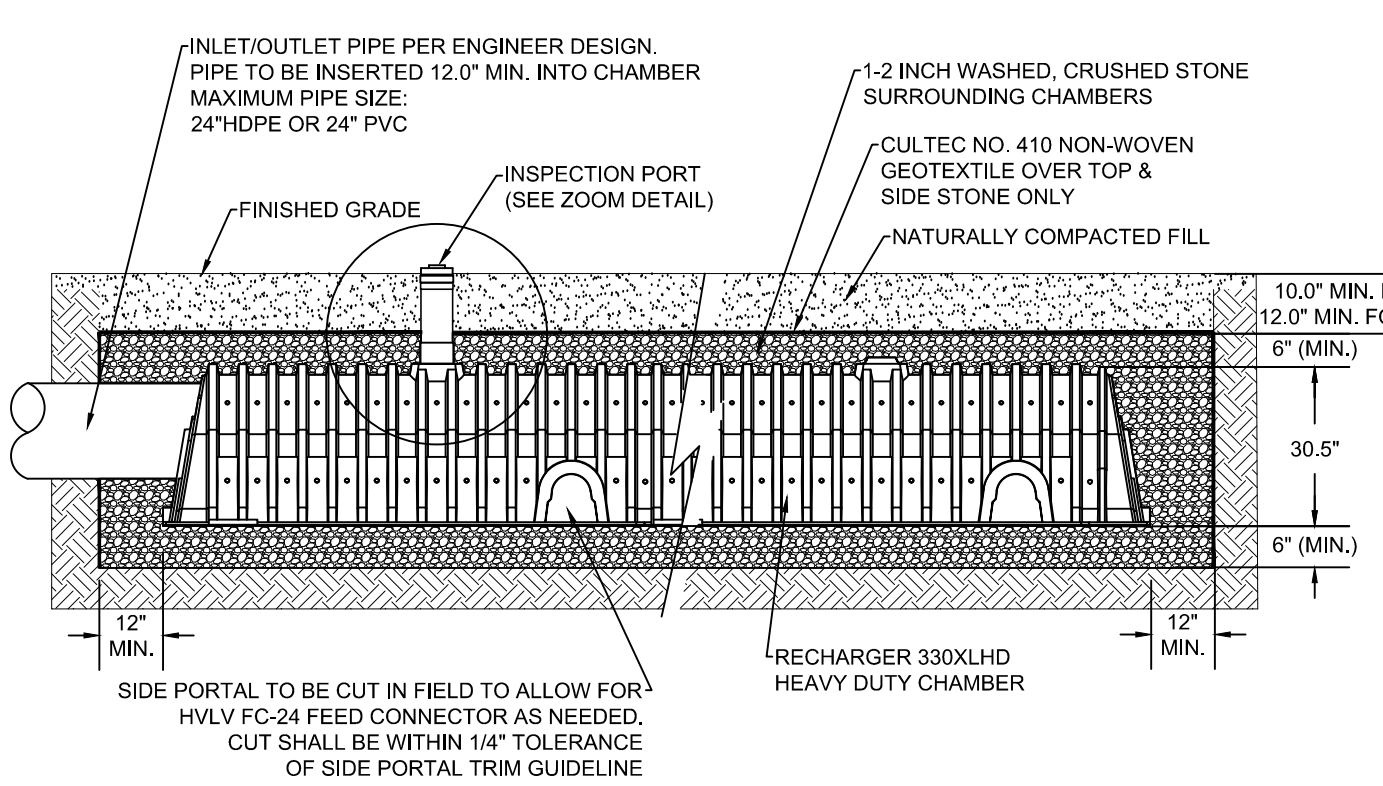
GENERAL NOTES:  
 1. General Arrangement drawings only. Contact Hydro International for site specific fabrication drawings.  
 2. The diameter of the inlet & outlet pipes may be no more than 24".  
 3. Multiple inlet pipes possible (refer to project plans).  
 4. Inlet/outlet pipe angle can vary to align with drainage network (refer to project plans).  
 5. Peak flow rate and minimum height limited by available cover and pipe diameter.  
 6. Larger sediment storage capacity may be provided with a deeper sump depth.

PRODUCT SPECIFICATIONS:  
 A. The treatment system shall use an induced vortex to separate pollutants from stormwater runoff.  
 B. The treatment system shall fit within the limits of excavation (area and depth) as shown in the project plans and will not exceed the dimensions for the design flow rates specified herein.  
 C. The treatment system shall remove greater than or equal to 90% of TSS based on the Target Particle Size (TPS) of 106 microns and/or 90% of TSS based on the TPS of 250 microns at 0.7 cfs and 1.2 cfs, respectively.  
 D. The treatment system shall convey the Peak On-Line Flow Rates of up to 18 cfs without causing upstream surcharge conditions. Full-scale independent laboratory scour testing shall demonstrate effluent control of less than or equal to 5 mg/L for all flows up to 200% of MFR-106.  
 E. The treatment system shall be capable of capturing and retaining fine silt and sand size particles. Analysis of captured sediment from full-scale field installations shall demonstrate particle sizes predominantly in the 20-micron range.

- CAPACITIES:
1. PEAK HYDRAULIC FLOW: 15.0 cfs
  2. TREATMENT FLOW: 1.5 cfs (INDEP. CERTIFIED)
  3. SEDIMENT STORAGE CAPACITY: 0.7 cu. yd.
  4. OIL STORAGE CAPACITY: 191 gal.
  5. MAXIMUM INLET/OUTLET PIPE DIAMETERS: 24 in.

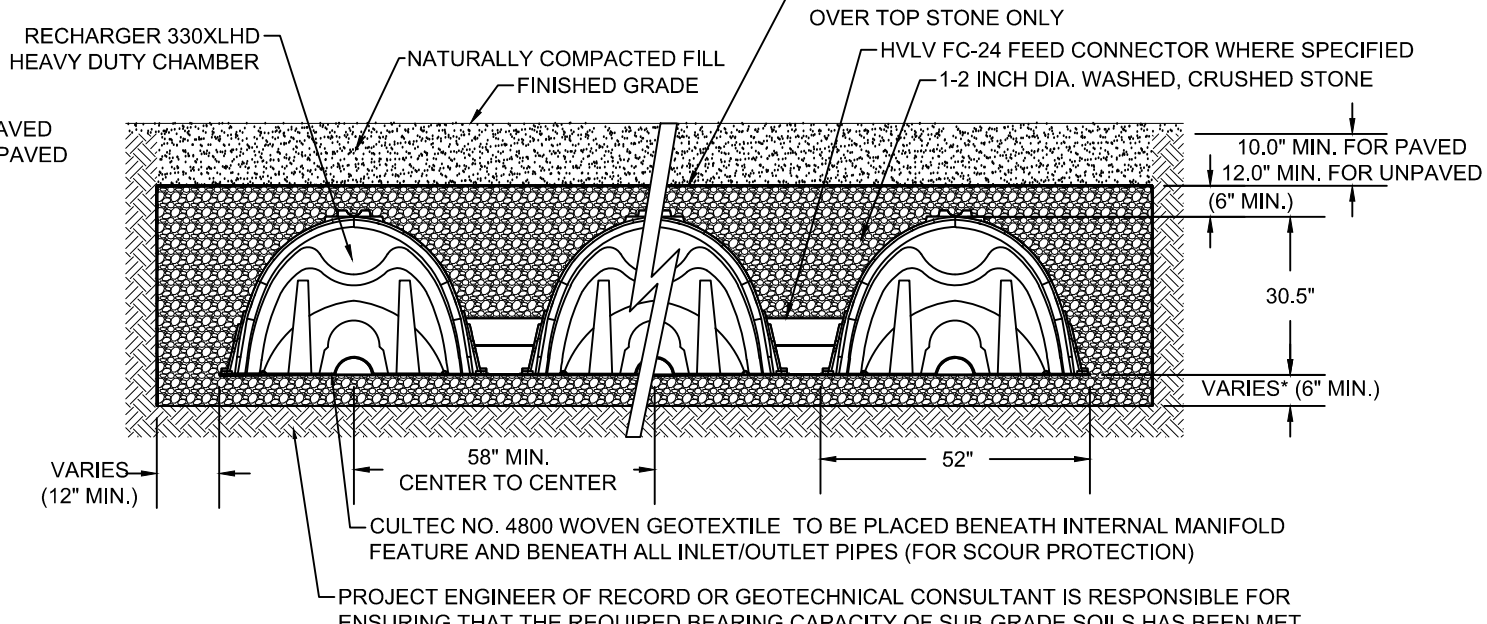
| Parts List |           |                                    |
|------------|-----------|------------------------------------|
| ITEM       | SIZE (in) | DESCRIPTION                        |
| 1          | 48        | I.D. PRECAST MANHOLE               |
| 2          |           | LEDGER SUPPORT                     |
| 3          |           | SEPARATION MODULE                  |
| 4          |           | INLET PIPE (BY OTHERS)             |
| 5          |           | OUTLET PIPE (BY OTHERS)            |
| 6          | 30        | FRAME AND COVER (OR GRATE) (ROUND) |

**HYDRODYNAMIC SEPARATOR DETAIL**  
**HYDRO INTERNATIONAL - FIRST DEFENSE MODEL FD-4HC**  
 N.T.S.

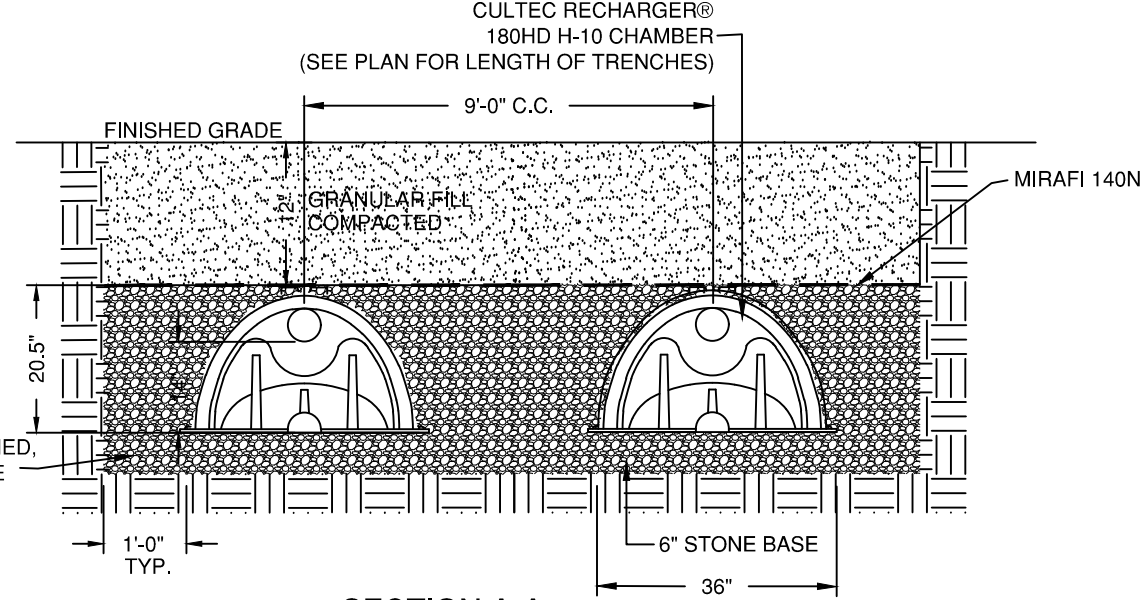


**CULTEC, Inc.**  
 Subsurface Stormwater Management Systems  
 P.O. Box 280  
 878 Federal Road  
 Brookfield, CT 06804  
 www.cultec.com

**CULTEC RECHARGER 330XLHD**  
 (N.T.S.)

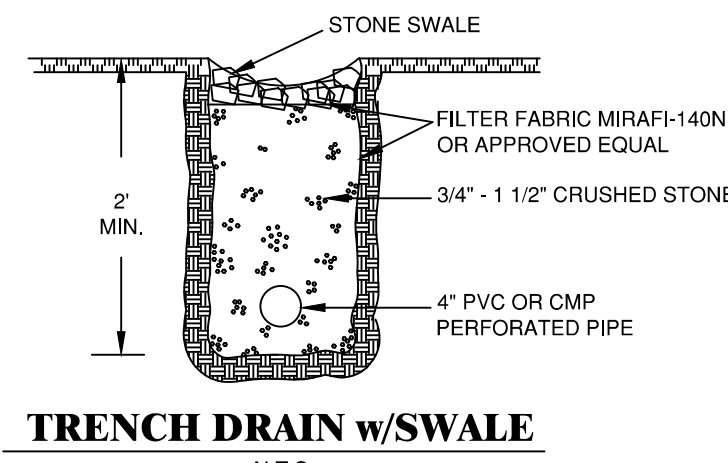


GENERAL NOTES:  
 RECHARGER 330XL HD BY CULTEC, INC. OF BROOKFIELD, CT.  
 REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.  
 THE CHAMBER WILL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.  
 ALL RECHARGER 330XL HD HEAVY DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.  
 ALL RECHARGER 330XL HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

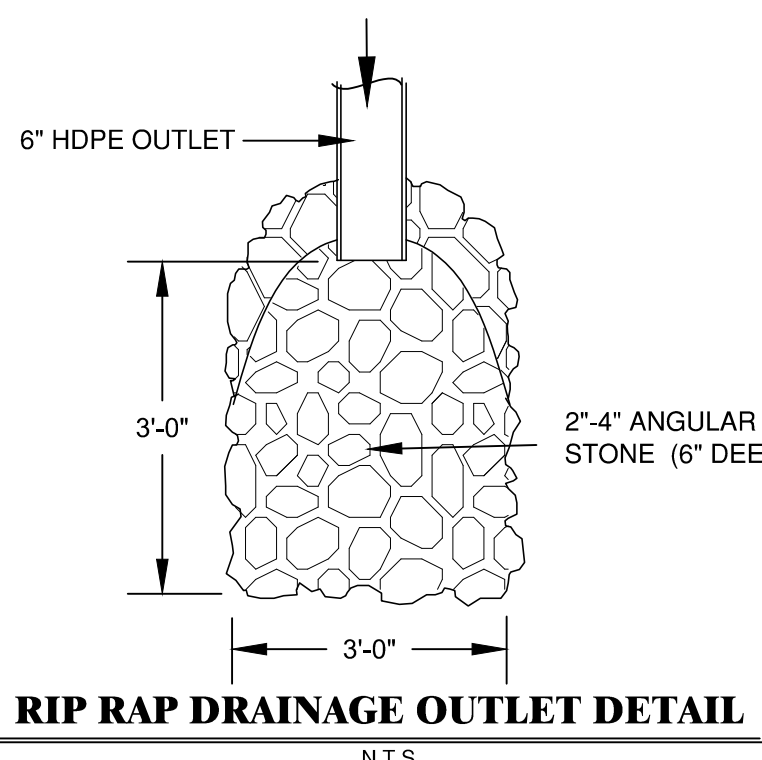
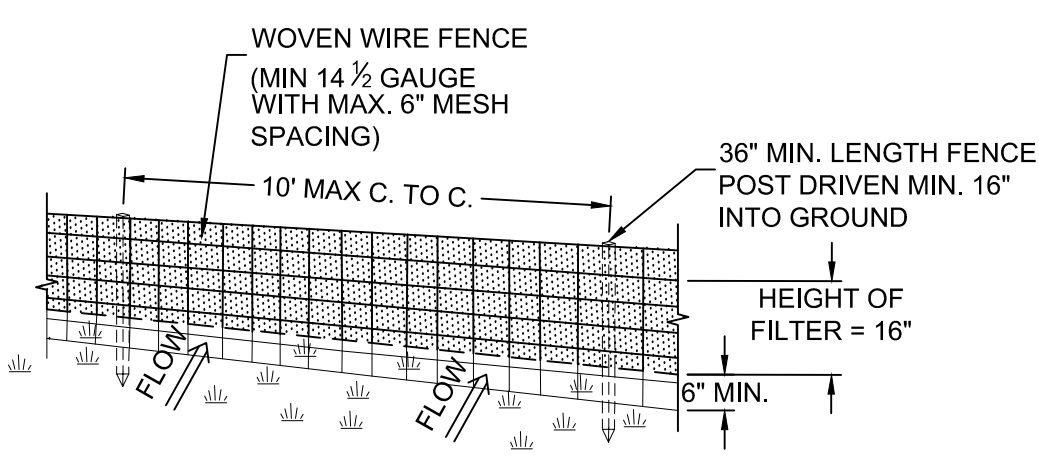


**TYPICAL CROSS SECTION RECHARGER® 180HD**  
**STANDARD H-10 CULTEC CHAMBER SYSTEM**  
 N.T.S.

MANUFACTURER:  
 CULTEC INC.  
 878 FEDERAL ROAD  
 BROOKFIELD, CT 06804  
 (202) 775-4416



**TRENCH DRAIN w/SWALE**  
 N.T.S.



**RIP RAP DRAINAGE OUTLET DETAIL**  
 N.T.S.

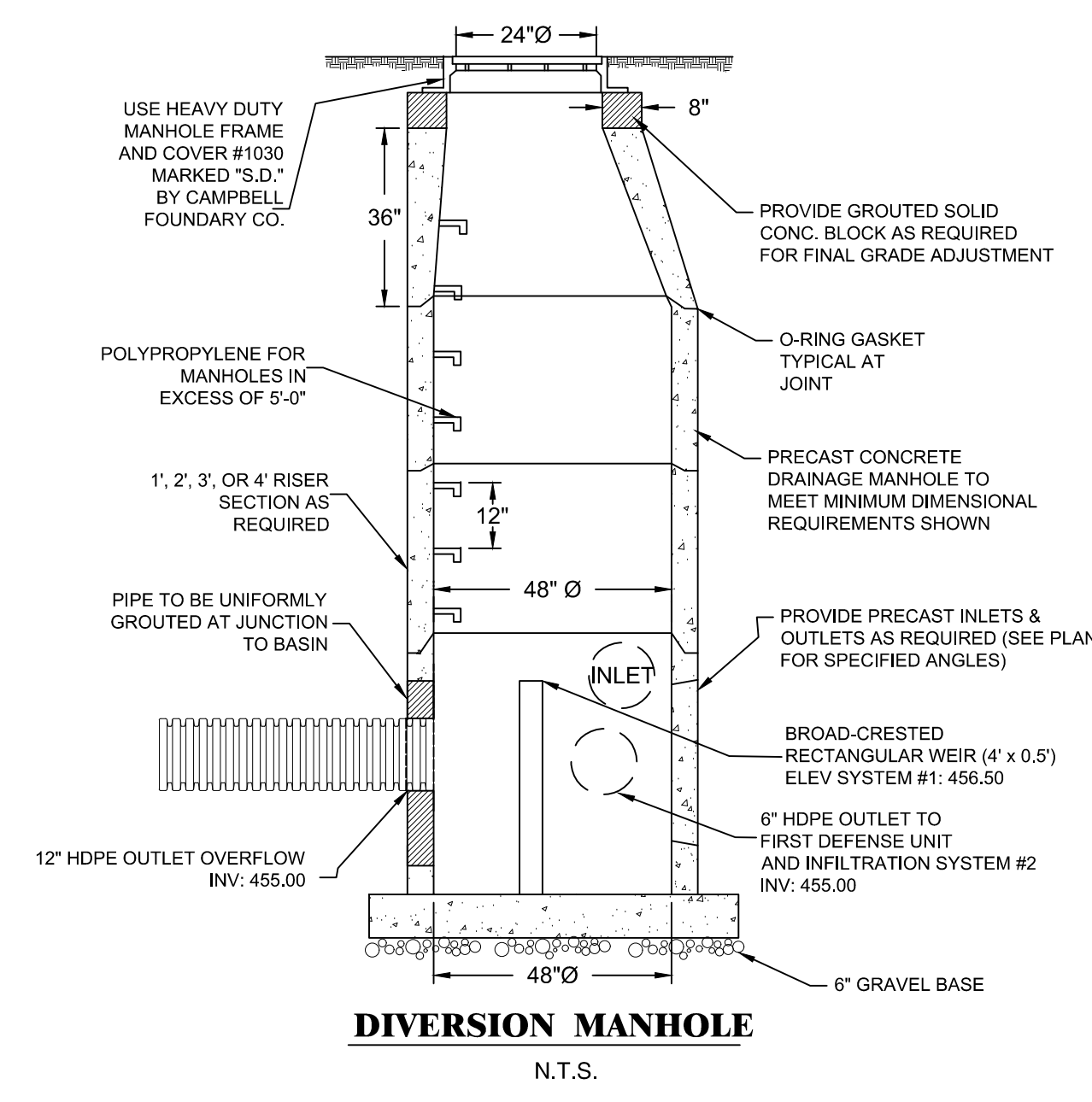
**EROSION CONTROL PROGRAM:**

PURPOSE:  
 ALL CONSTRUCTION ACTIVITIES INVOLVING THE REMOVAL OR DEPOSITION OF SOILS ARE TO BE PROVIDED WITH APPROPRIATE PROTECTIVE MEASURES TO INHIBIT EROSION AND TO CONTAIN SEDIMENT DEPOSITION WITHIN THE AREA UNDER DEVELOPMENT. THOSE MEASURES DEEMED HIGHLY EFFECTIVE ARE DESCRIBED BELOW AND SHOWN ON THIS DRAWING.

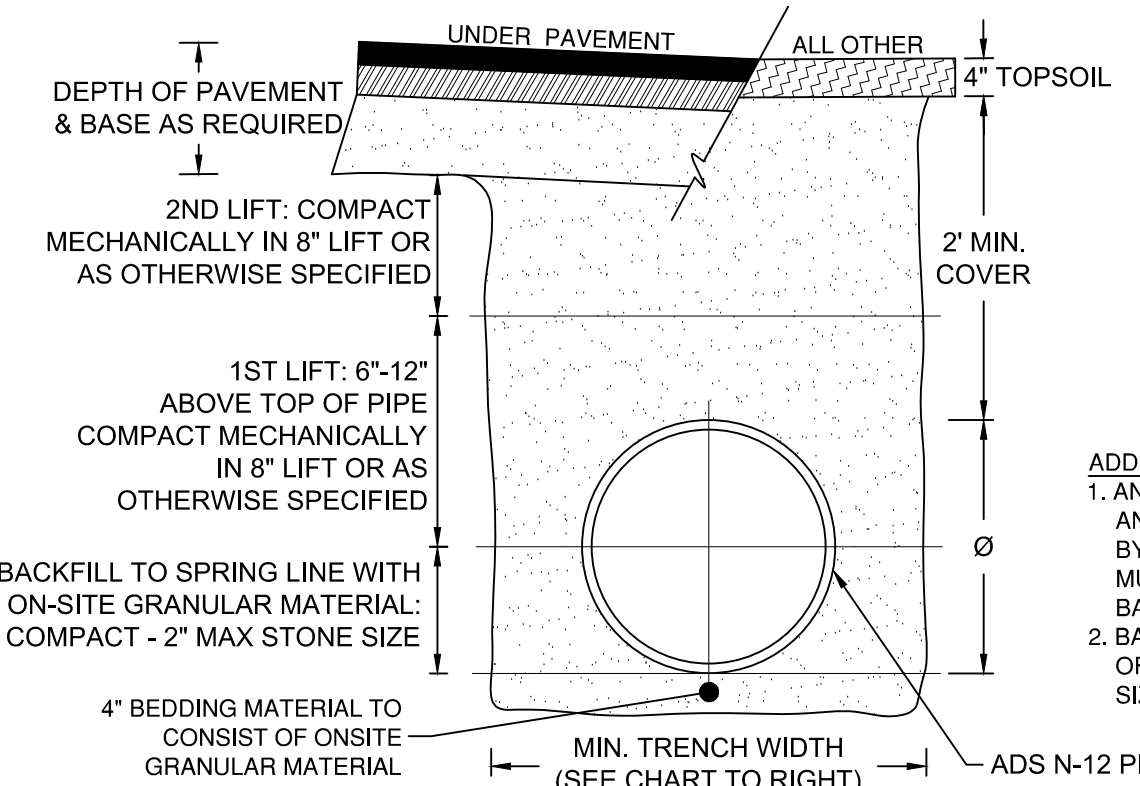
REQUIRED PROCEDURES:  
 1. PRIOR TO THE START OF SITE CONSTRUCTION ALL CONSTRUCTION ENTRANCES TO THE SITE SHALL BE INSTALLED AND STABILIZED, AND ALL TEMPORARY SILT TRAPS AND/OR OTHER APPROVED SEDIMENT CONTROL MEASURES SHALL BE IN PLACE WHERE MOST EFFECTIVE.  
 2. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL REMAIN IN PLACE, MAINTAINED REGULARLY IN PROPER FUNCTIONING CONDITION UNTIL ALL AREAS EXPOSED DURING SITE CONSTRUCTION HAVE BEEN SUITABLY STABILIZED WITH PAVEMENT, PERMANENT STRUCTURES AND/OR FINAL VEGETATIVE COVER.

CONSTRUCTION GUIDELINES:  
 1. WHEREVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED BY FLAGGING OR OTHER EFFECTIVE MEANS.  
 2. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION.  
 3. SITE CONSTRUCTION ACTIVITIES SHALL START WHENEVER POSSIBLE AT THE NEAREST POINT UPSTREAM OF THE SILT TRAPS AND PROCEED TO ACTIVITIES FURTHER UPSTREAM.  
 4. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE PERIOD OF EXPOSURE SHALL BE KEPT TO A MINIMUM. INSTALLING PERMANENT AND FINAL VEGETATION, PAVING, STRUCTURES, ETC., AT THE EARLIEST POSSIBLE OPPORTUNITY.  
 5. EROSION CONTROL MEASURES SHOWN ON THIS PLAN REPRESENT MINIMUM REQUIREMENTS FOR SITE EROSION CONTROL. FURTHER MEASURES MAY BE REQUIRED BY THE DESIGN ENGINEER DURING CONSTRUCTION BASED UPON SITE CONDITIONS.

6. NOTES ON STABILIZATION:  
 A. ALL TOPSOIL TO BE STRIPPED FROM THE AREA BEING DEVELOPED, SHALL BE STOCKPILED NOT LESS THAN 150 FEET FROM ANY BODY OF SURFACE WATER AND SHALL BE IMMEDIATELY SEED AS SPECIFIED IN ITEM D BELOW.  
 B. ON ALL EMBANKMENT HILL SLOPES, TOPSOIL SHALL BE STRIPPED AT LEAST FIVE (5) FEET WIDER THAN REQUIRED FOR THE EMBANKMENT TOE OF SLOPE. A PROTECTIVE BERM OF TOPSOIL SHALL BE LEFT IN THIS AREA RUNNING PARALLEL TO THE CONTOURS FOR THE PURPOSE OF RESTRICTING DRAINAGE RUNOFF. THE TOPSOIL BERM SHALL BE SEED AS REQUIRED FOR STOCKPILES.  
 C. FURTHER EROSION AND SILTATION CONTROL MEASURES WHICH SHALL CONFORM TO THE STANDARDS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION & SEDIMENT CONTROL SHALL ALSO BE EMPLOYED WHERE NECESSARY FOR SUPPLEMENTARY EROSION CONTROL MEASURES.  
 D. ALL CUT SLOPES AND EMBANKMENT FILLS ARE TO BE IMMEDIATELY LAID BACK AND STABILIZED AS FOLLOWS:  
 1. GRADED TO FINISHED SLOPES  
 2. SCARIFIED  
 3. TOPSOILED WITH NOT LESS THAN FOUR (4) INCHES OF SUITABLE TOPSOIL MATERIAL  
 4. SEED WITH THE FOLLOWING GRASS MIXTURE BY WEIGHT (OR APPROVED EQUAL):  
 50% KENTUCKY BLUE GRASS  
 50% PERENNIAL RYE GRASS  
 (SEED SHALL BE APPLIED AT THE RATE OF NOT LESS THAN 3-4 POUNDS PER 1000 S.F.)  
 5. MULCHED WITH STRAW AT TWO (2) TONS/ACRE AND ANCHORED IN A SUITABLE MANNER. WHERE SLOPES EXCEED 3:1, SUITABLY ANCHORED NETTING SUCH AS TENEX N030 OR APPROVED EQUAL SHALL BE UTILIZED.

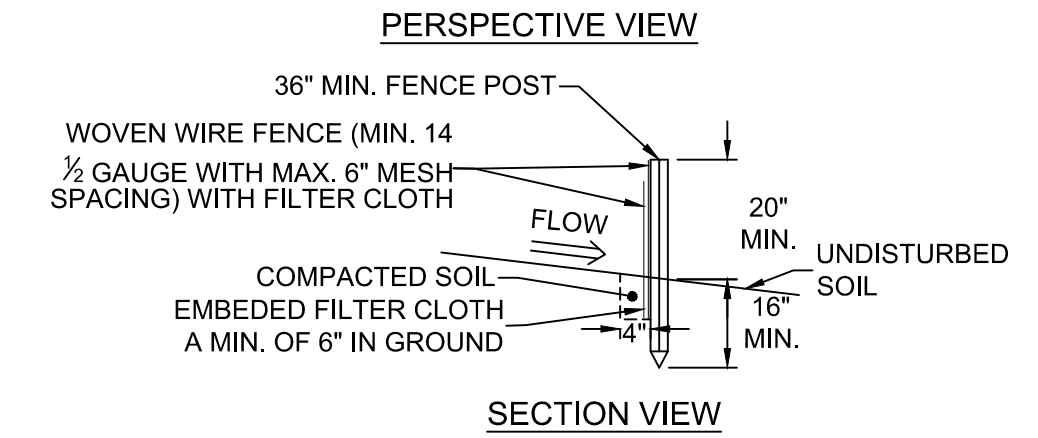


**DIVERSION MANHOLE**  
 N.T.S.



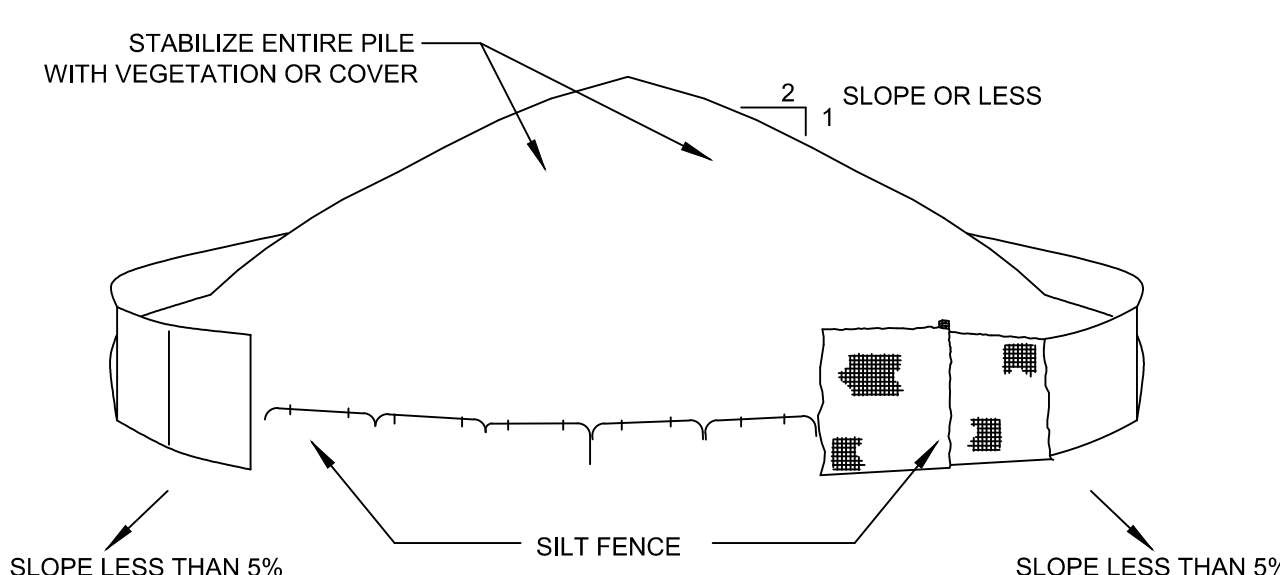
**DRAINAGE PIPE INSTALLATION**  
 N.T.S.

ADDITIONAL NOTES:  
 1. ANY ADDITIONAL REQUIREMENTS AND SPECIFICATIONS SET FORTH BY THE PIPE MANUFACTURER MUST BE FOLLOWED FOR BACKFILLING.  
 2. BACK FILL MATERIAL TO BE FREE OF FROST & STONES OVER 8" IN SIZE & COMPACTED AS REQUIRED



**SILT FENCE DETAIL**  
 N.T.S.

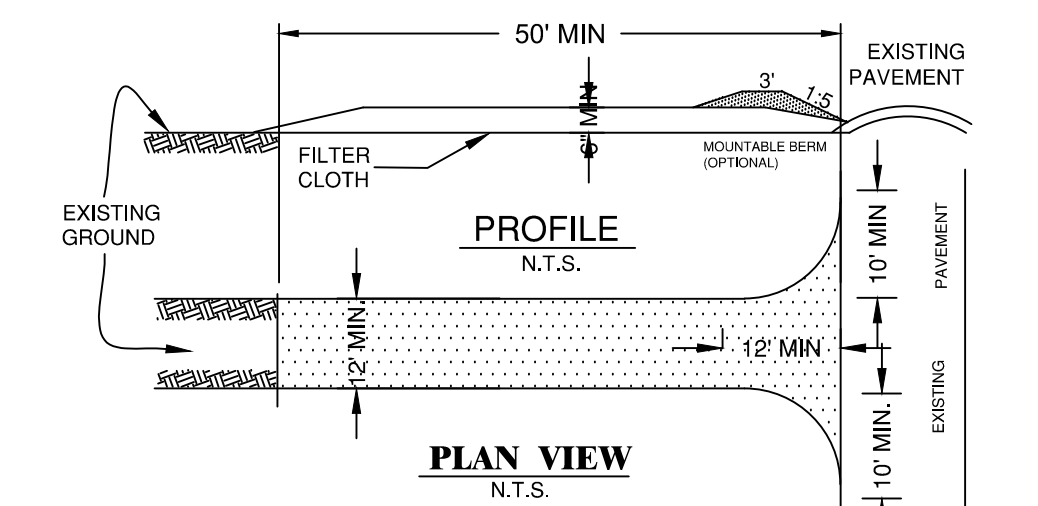
CONSTRUCTION SPECIFICATIONS:  
 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL WITH "T" OR "U" TYPE OR HARDWOOD  
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.  
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.  
 4. PREFABRICATED UNITS SHALL BE GEOTAF, ENVIROFENCE, OR APPROVED EQUIVALENT.  
 5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



**SOIL STOCKPILE DETAIL**  
 N. T. S.

INSTALLATION NOTES:  
 1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE  
 2. MAXIMUM SLOPE OF STOCKPILING SHALL BE 1:2  
 3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.  
 4. SEE SILTATION FENCE DETAIL.

**STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
 N. T. S.

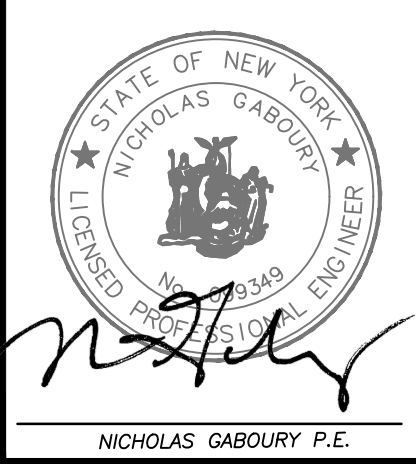


CONSTRUCTION SPECIFICATION:  
 1) STONE SIZE- USE 2" STONE, OR RECYCLED CONCRETE EQUIVALENT.  
 2) LENGTH LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.)  
 3) THICKNESS- NOT LESS THAN SIX (6) INCHES.  
 4) WIDTH- TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.  
 5) FILTER CLOTH- WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.  
 6) SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.  
 7) MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.  
 8) WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE & WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.  
 9) PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

CONTACT INFO:  
 MATTHEW ABRAMO  
 530 W 30TH ST APT 23A  
 NEW YORK, NY 10001

P/O LEONARD GOCHMAN SUBDIVISION, MAP# 21099, DATE 7/30/82, R.S. LOT NO: 2

| REVISIONS | DATE | DESCRIPTION | BY/CK | DATE | DESCRIPTION | BY/CK |
|-----------|------|-------------|-------|------|-------------|-------|
|           |      |             |       |      |             |       |



**DETAILS**  
**ABRAMO - RESIDENCE**  
 163 HICKORY KINGDOM ROAD  
 TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NY 10504

**BIBBO ASSOCIATES, LLP**  
 293 ROUTE 100 SUITE 203  
 SOMERS, NEW YORK 10589  
 TEL. 914 277 5805

DATE: 12-20-2021  
 SCALE: AS SHOWN  
 FILE: LL-1  
 DSGN / CHK: NG  
 DRN. BY: AW/WM  
 SHT NO. 4 OF 4  
 DWG NO. **D-2**



**Drainage Calculations**

**Abramo Residence**  
**163 Hickory Kingdom Road**

**Prepared By:**



Rev.  
Date: 12/20/2021

**Nicholas Gaboury, P.E.**  
N.Y.S. License #: 099349





Enclosed herewith are stormwater calculations for the proposed site improvements at 163 Hickory Kingdom Road, located in the Town of North Castle.

The site is currently vacant with a common driveway along the west side of the property. The residence will be served by a proposed onsite sewage disposal system and a proposed drilled well. The property drains towards the northern and southern property line due to a high point in the center of the property. The property is located in the Long Island Sound Basin and the total area of disturbance is 1.76 Acres. Soils identified within the area of disturbance consist of Charlton-Chatfield, Chatfield-Charlton, and Hollis-Rock outcrop complex. Charlton-Chatfield and Chatfield-Charlton belong to hydrologic group B. Hollis-Rock outcrop complex belongs to hydrologic group D. A soil map has been provided herewith.

The applicant is proposing to construct a single-family residence, driveway, and pool. The project will result in an addition of 13,434 sqft. of impervious coverage on the site. In order to mitigate the additional impervious surfaces, a stormwater management system has been designed for the site. Runoff will be collected from the new impervious areas with proposed yard drains and a trench drain. The stormwater enters a yard drain which then conveys it to underground infiltration systems. Infiltration system #1 consists of 16 (4x4) Cultec Recharger 180HD units. Infiltration system #2 consists of 16 (4x4) Cultec Recharger 330XL HD units. The infiltration systems will be provided pretreatment by the First Defense Unit capable of providing treatment to flows up to 1.50 cfs. Overflow from the infiltration systems will be diverted to proposed rock outlet protections. All proposed stormwater conveyance piping shall be high density polyethylene pipe (HDPE) unless otherwise noted.

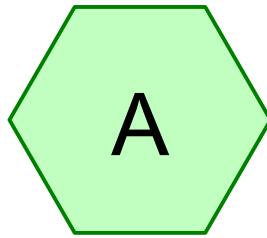
The proposed infiltration systems have been sized to attenuate the post-development peak discharge from the 25-year storm to predevelopment rates, as required by the North Castle Town Code. In order to analyze the impact of the proposed construction, a stormwater model of the pool area was developed for both pre-development and post-development conditions. Design Point A was selected on the north west property line and Design Line B was taken along the 610 contour on the southern portion of the property. Please see the Watershed Map attached with this report.



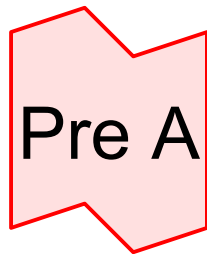
HydroCAD v. 10.0, a computer-modeling program based upon TR-20, was used to generate peak flows from the subcatchments. In the program, the user inputs various characteristics for each subcatchment including a curve number and time of concentration. These two parameters relate runoff to the specific land characteristics of the subcatchment. Based upon the inputted data, peak flows are generated for the 25-year storm events for the pre-development and post-development subcatchments. HydroCAD output reports are located at the end of this report. The HydroCAD reports demonstrate that the stormwater management design will result in reduced peak flows from the project site under the post-construction conditions.



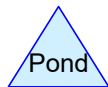
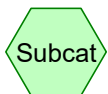
**HydroCAD Output Reports**



Pre A



Design Point A



**Drainage Analysis 9-24-21**

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 2

**Summary for Subcatchment A: Pre A**

Runoff = 3.84 cfs @ 12.10 hrs, Volume= 12,984 cf, Depth= 1.68"

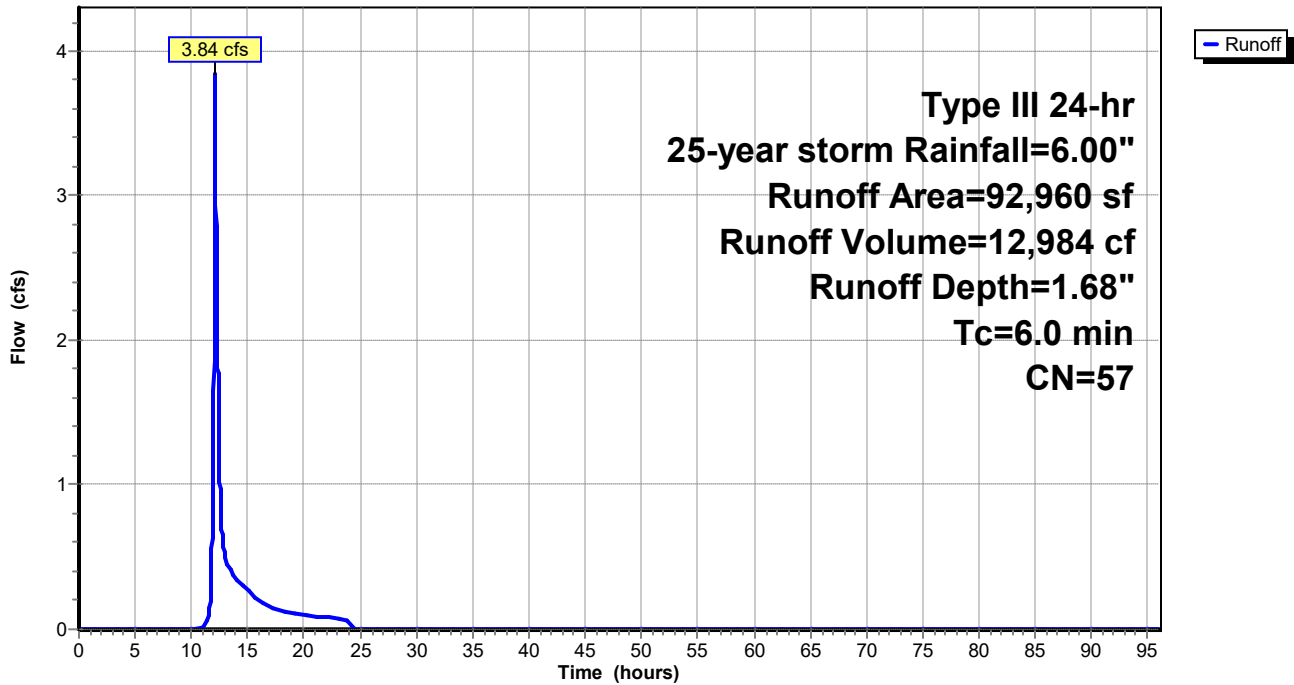
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs  
 Type III 24-hr 25-year storm Rainfall=6.00"

|   | Area (sf) | CN | Description                   |
|---|-----------|----|-------------------------------|
| * | 3,482     | 98 | Common Dirve                  |
|   | 2,494     | 61 | >75% Grass cover, Good, HSG B |
|   | 86,984    | 55 | Woods, Good, HSG B            |
|   | 92,960    | 57 | Weighted Average              |
|   | 89,478    |    | 96.25% Pervious Area          |
|   | 3,482     |    | 3.75% Impervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment A: Pre A**

Hydrograph



**Drainage Analysis 9-24-21**

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 3

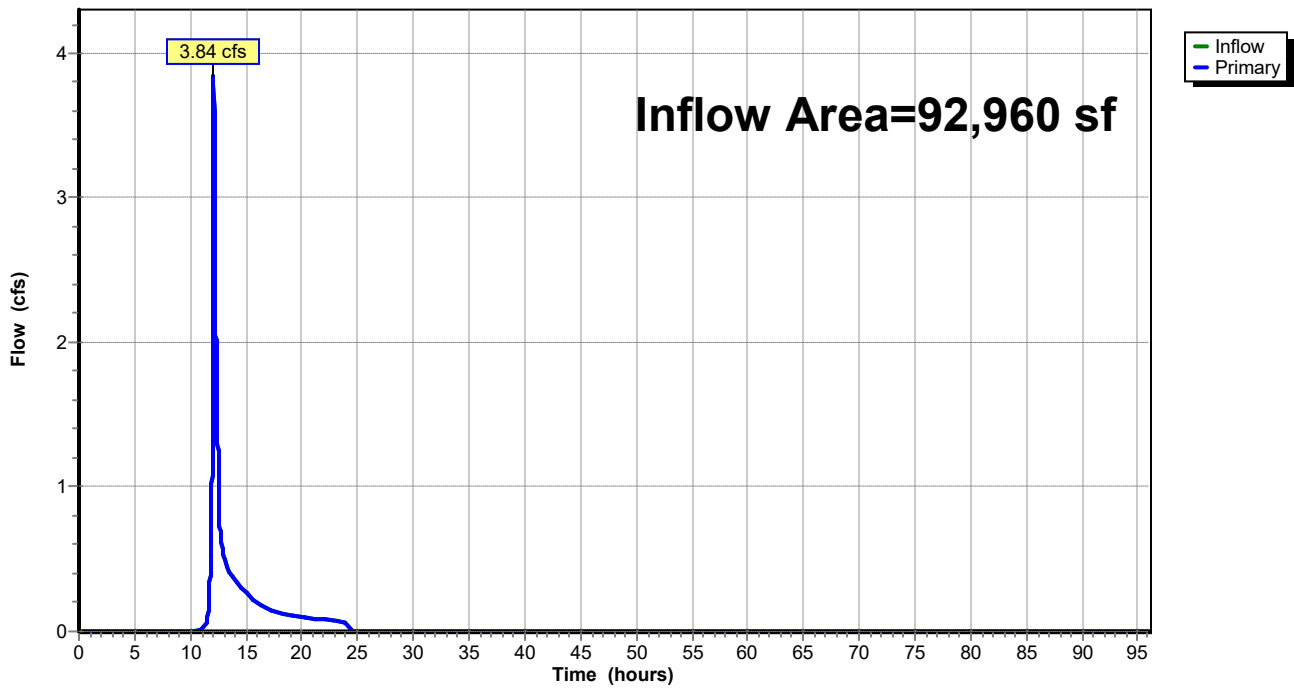
**Summary for Link Pre A: Design Point A**

Inflow Area = 92,960 sf, 3.75% Impervious, Inflow Depth = 1.68" for 25-year storm event  
Inflow = 3.84 cfs @ 12.10 hrs, Volume= 12,984 cf  
Primary = 3.84 cfs @ 12.10 hrs, Volume= 12,984 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

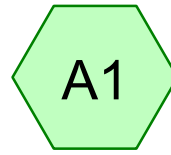
**Link Pre A: Design Point A**

Hydrograph

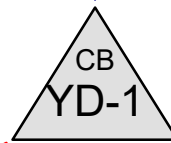




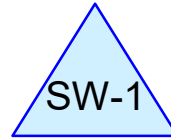
Bypass



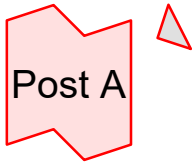
DRIVEWAY



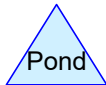
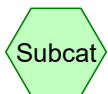
YD-1



SW-1



Design Point A



Routing Diagram for Drainage Analysis 9-24-21  
Prepared by Bibbo Associates, Printed 12/20/2021  
HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

# Drainage Analysis 9-24-21

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 2

## Summary for Subcatchment A1: DRIVEWAY

Runoff = 1.20 cfs @ 12.09 hrs, Volume= 3,722 cf, Depth= 2.81"

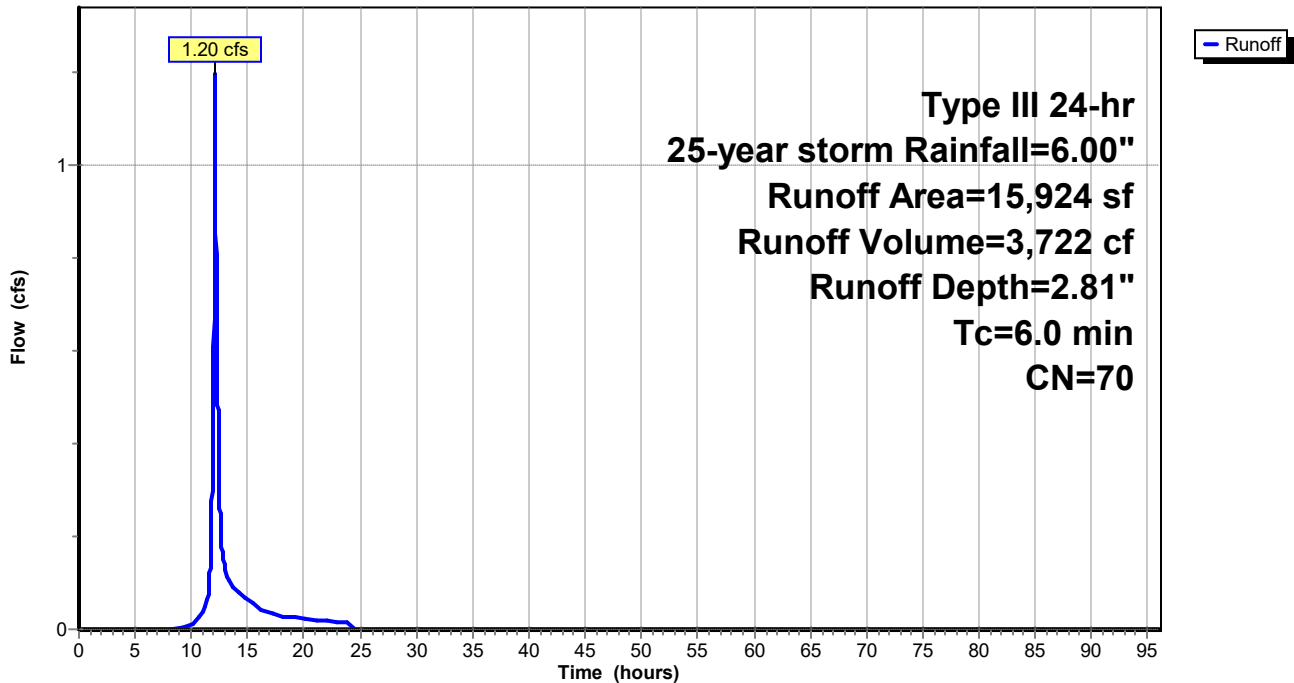
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs  
Type III 24-hr 25-year storm Rainfall=6.00"

|   | Area (sf) | CN | Description                   |
|---|-----------|----|-------------------------------|
| * | 4,870     | 98 | Driveway                      |
|   | 3,956     | 61 | >75% Grass cover, Good, HSG B |
|   | 7,098     | 55 | Woods, Good, HSG B            |
|   | 15,924    | 70 | Weighted Average              |
|   | 11,054    |    | 69.42% Pervious Area          |
|   | 4,870     |    | 30.58% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

## Subcatchment A1: DRIVEWAY

Hydrograph





# Drainage Analysis 9-24-21

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 3

## Summary for Subcatchment A2: Bypass

Runoff = 3.28 cfs @ 12.10 hrs, Volume= 10,959 cf, Depth= 1.76"

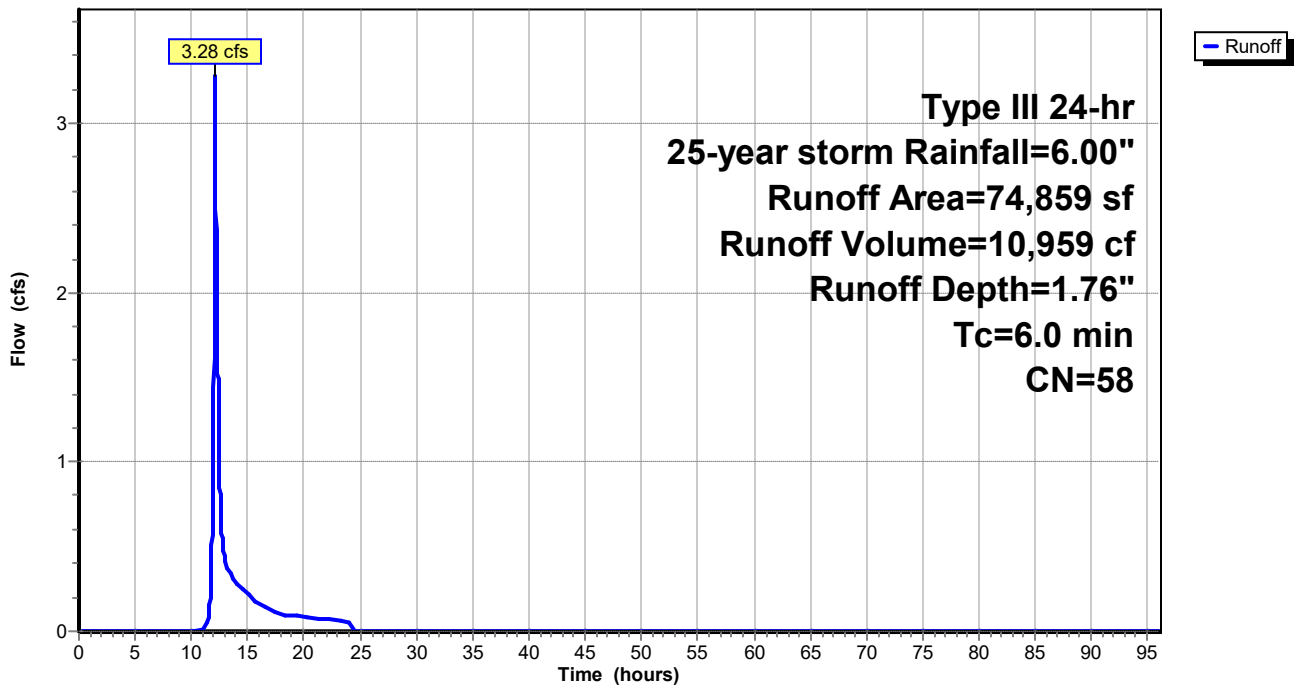
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs  
Type III 24-hr 25-year storm Rainfall=6.00"

|   | Area (sf) | CN | Description                   |
|---|-----------|----|-------------------------------|
| * | 3,790     | 98 | Driveway                      |
|   | 11,459    | 61 | >75% Grass cover, Good, HSG B |
|   | 59,610    | 55 | Woods, Good, HSG B            |
|   | 74,859    | 58 | Weighted Average              |
|   | 71,069    |    | 94.94% Pervious Area          |
|   | 3,790     |    | 5.06% Impervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

## Subcatchment A2: Bypass

Hydrograph



# Drainage Analysis 9-24-21

Type III 24-hr 25-year storm Rainfall=6.00"

Prepared by Bibbo Associates

Printed 12/20/2021

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Page 4

## Summary for Pond SW-1: SW-1

Inflow Area = 15,924 sf, 30.58% Impervious, Inflow Depth = 2.15" for 25-year storm event  
 Inflow = 1.20 cfs @ 12.09 hrs, Volume= 2,853 cf  
 Outflow = 0.09 cfs @ 11.65 hrs, Volume= 2,853 cf, Atten= 93%, Lag= 0.0 min  
 Discarded = 0.09 cfs @ 11.65 hrs, Volume= 2,853 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs  
 Peak Elev= 608.90' @ 12.21 hrs Surf.Area= 624 sf Storage= 861 cf

Plug-Flow detention time= 79.8 min calculated for 2,853 cf (100% of inflow)  
 Center-of-Mass det. time= 79.8 min ( 944.9 - 865.1 )

| Volume | Invert  | Avail.Storage | Storage Description  |
|--------|---------|---------------|--|
| #1A    | 606.79' | 451 cf        | <b>18.00'W x 34.65'L x 2.71'H Field A</b><br>1,689 cf Overall - 561 cf Embedded = 1,128 cf x 40.0% Voids   |
| #2A    | 607.29' | 561 cf        | <b>Cultec R-180</b> x 25 Inside #1<br>Effective Size= 33.6"W x 20.0"H => 3.44 sf x 6.33'L = 21.8 cf<br>Overall Size= 36.0"W x 20.5"H x 7.33'L with 1.00' Overlap<br>Row Length Adjustment= +1.00' x 3.44 sf x 5 rows |
|        |         | 1,013 cf      | Total Available Storage  |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert  | Outlet Devices   |
|--------|-----------|---------|--|
| #1     | Discarded | 606.79' | <b>6.000 in/hr Exfiltration over Horizontal area</b> Phase-In= 0.10' |

**Discarded OutFlow** Max=0.09 cfs @ 11.65 hrs HW=606.90' (Free Discharge)  
 ↑**1=Exfiltration** (Exfiltration Controls 0.09 cfs)

**Drainage Analysis 9-24-21**

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 5

**Pond SW-1: SW-1 - Chamber Wizard Field A**

**Chamber Model = Cultec R-180 (Cultec Recharger® 180HD - DISCONTINUED, Not for new designs)**

Effective Size= 33.6"W x 20.0"H => 3.44 sf x 6.33'L = 21.8 cf

Overall Size= 36.0"W x 20.5"H x 7.33'L with 1.00' Overlap

Row Length Adjustment= +1.00' x 3.44 sf x 5 rows

36.0" Wide + 3.0" Spacing = 39.0" C-C Row Spacing

5 Chambers/Row x 6.33' Long +1.00' Row Adjustment = 32.65' Row Length +12.0" End Stone x 2 = 34.65' Base Length

5 Rows x 36.0" Wide + 3.0" Spacing x 4 + 12.0" Side Stone x 2 = 18.00' Base Width

6.0" Base + 20.5" Chamber Height + 6.0" Cover = 2.71' Field Height

25 Chambers x 21.8 cf +1.00' Row Adjustment x 3.44 sf x 5 Rows = 561.5 cf Chamber Storage

1,689.2 cf Field - 561.5 cf Chambers = 1,127.7 cf Stone x 40.0% Voids = 451.1 cf Stone Storage

Chamber Storage + Stone Storage = 1,012.6 cf = 0.023 af

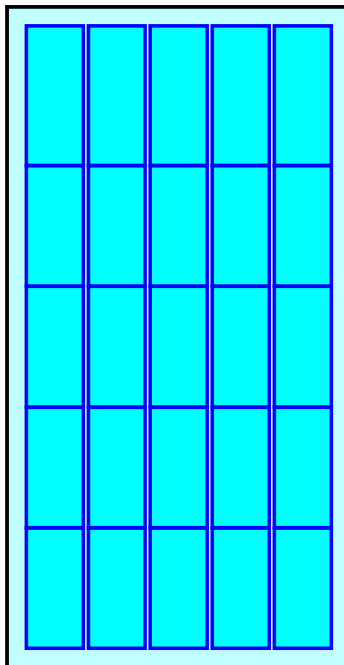
Overall Storage Efficiency = 59.9%

Overall System Size = 34.65' x 18.00' x 2.71'

25 Chambers

62.6 cy Field

41.8 cy Stone



**Drainage Analysis 9-24-21**

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

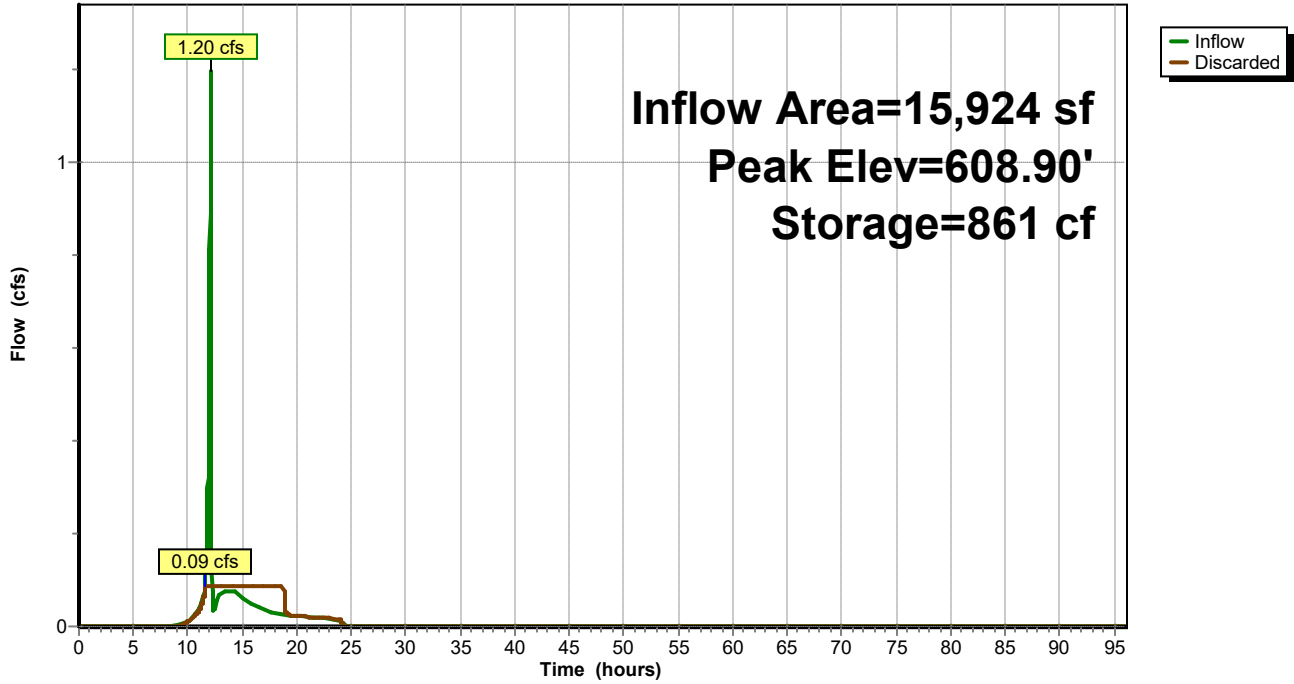
Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 6

**Pond SW-1: SW-1**

Hydrograph



# Drainage Analysis 9-24-21

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 7

## Summary for Pond YD-1: YD-1

Inflow Area = 15,924 sf, 30.58% Impervious, Inflow Depth = 2.81" for 25-year storm event  
Inflow = 1.20 cfs @ 12.09 hrs, Volume= 3,722 cf  
Outflow = 1.20 cfs @ 12.09 hrs, Volume= 3,722 cf, Atten= 0%, Lag= 0.0 min  
Primary = 1.20 cfs @ 12.09 hrs, Volume= 2,853 cf  
Secondary = 0.63 cfs @ 12.22 hrs, Volume= 870 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Peak Elev= 608.90' @ 12.22 hrs

Flood Elev= 374.75'

| Device | Routing   | Invert  | Outlet Devices  |
|--------|-----------|---------|---|
| #1     | Primary   | 607.50' | <b>10.0" Round Primary</b><br>L= 27.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 607.50' / 607.21' S= 0.0107 '/' Cc= 0.900<br>n= 0.012, Flow Area= 0.55 sf   |
| #2     | Secondary | 608.50' | <b>12.0" Round Secondary</b><br>L= 83.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 608.50' / 604.00' S= 0.0542 '/' Cc= 0.900<br>n= 0.012, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.95 cfs @ 12.09 hrs HW=608.39' TW=608.25' (Dynamic Tailwater)

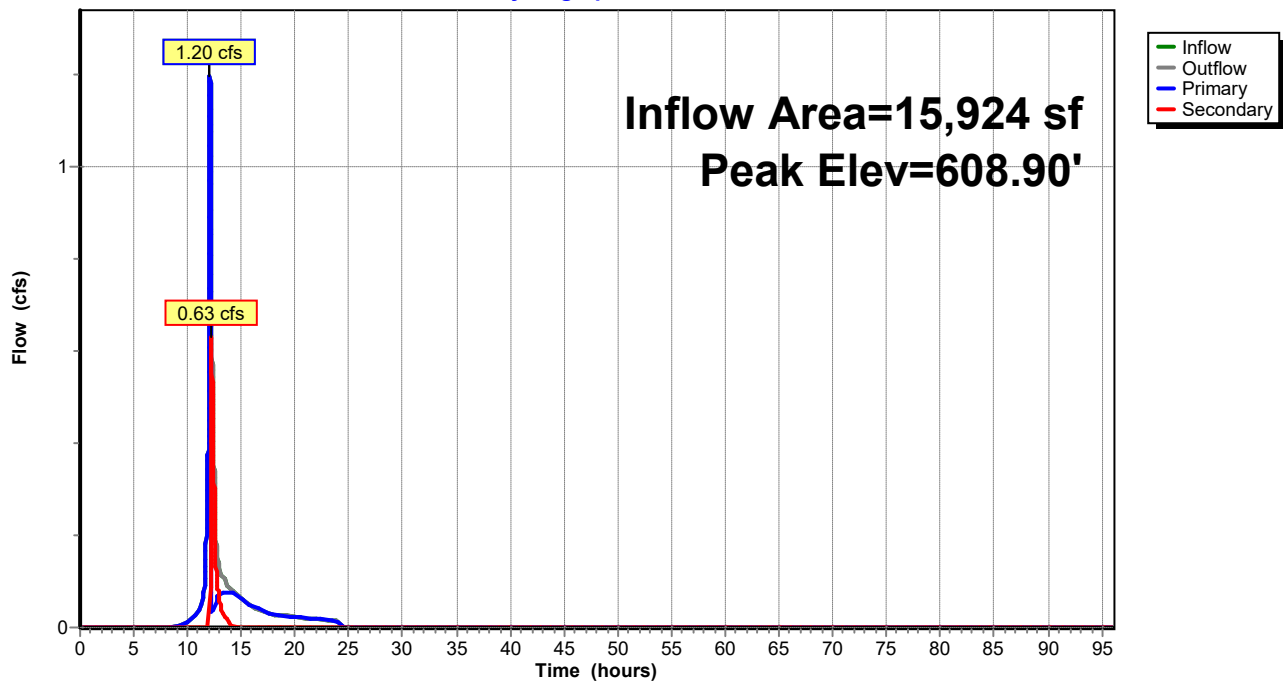
↳1=Primary (Outlet Controls 0.95 cfs @ 2.03 fps)

**Secondary OutFlow** Max=0.63 cfs @ 12.22 hrs HW=608.90' TW=0.00' (Dynamic Tailwater)

↳2=Secondary (Inlet Controls 0.63 cfs @ 2.15 fps)

## Pond YD-1: YD-1

Hydrograph



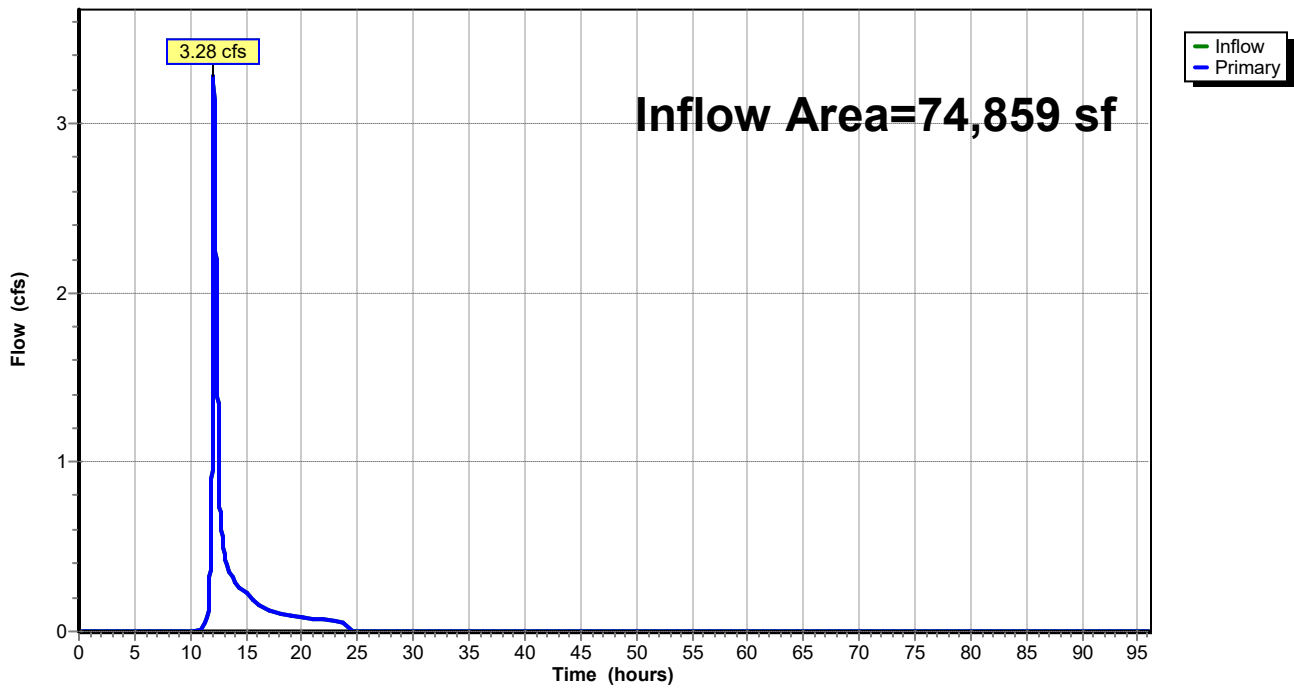
**Summary for Link Post A: Design Point A**

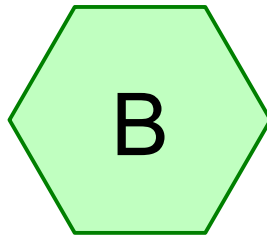
Inflow Area = 74,859 sf, 5.06% Impervious, Inflow Depth = 1.90" for 25-year storm event  
Inflow = 3.28 cfs @ 12.10 hrs, Volume= 11,829 cf  
Primary = 3.28 cfs @ 12.10 hrs, Volume= 11,829 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

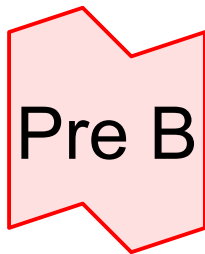
**Link Post A: Design Point A**

Hydrograph

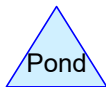
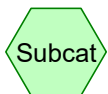




Pre B



Design Line B



**Drainage Analysis 9-24-21**

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 2

**Summary for Subcatchment B: Pre B**

Runoff = 3.55 cfs @ 12.10 hrs, Volume= 11,513 cf, Depth= 2.01"

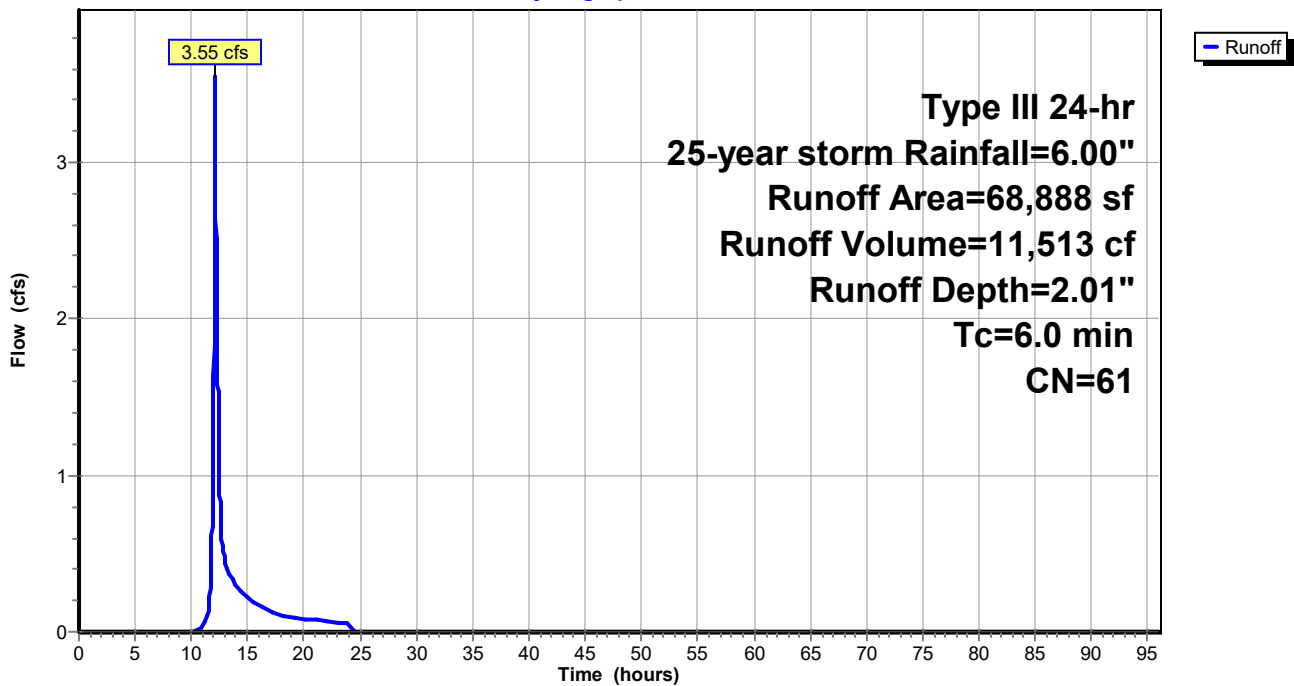
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs  
 Type III 24-hr 25-year storm Rainfall=6.00"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| * 3,400   | 98 | Common Drive                  |
| 9,172     | 61 | >75% Grass cover, Good, HSG B |
| 9,214     | 77 | Woods, Good, HSG D            |
| 47,102    | 55 | Woods, Good, HSG B            |
| 68,888    | 61 | Weighted Average              |
| 65,488    |    | 95.06% Pervious Area          |
| 3,400     |    | 4.94% Impervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment B: Pre B**

Hydrograph





**Drainage Analysis 9-24-21**

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 3

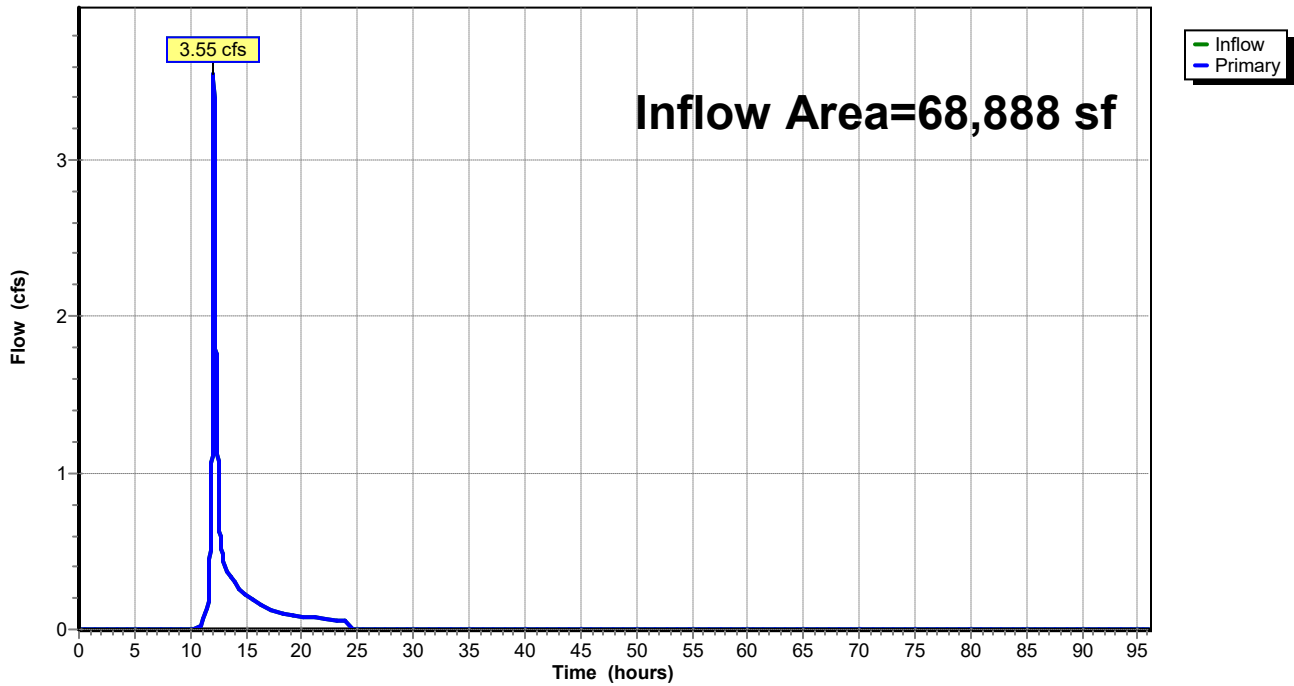
**Summary for Link Pre B: Design Line B**

Inflow Area = 68,888 sf, 4.94% Impervious, Inflow Depth = 2.01" for 25-year storm event  
Inflow = 3.55 cfs @ 12.10 hrs, Volume= 11,513 cf  
Primary = 3.55 cfs @ 12.10 hrs, Volume= 11,513 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

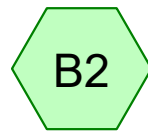
**Link Pre B: Design Line B**

Hydrograph

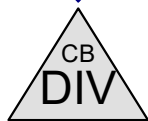




House/Pool/Drive B



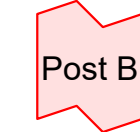
Bypass



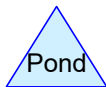
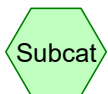
DIV-1



SW-2



Design Line B



Routing Diagram for Drainage Analysis 9-24-21  
Prepared by Bibbo Associates, Printed 12/20/2021  
HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

**Drainage Analysis 9-24-21**

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 2

**Summary for Subcatchment B1: House/Pool/Drive B**

Runoff = 1.23 cfs @ 12.08 hrs, Volume= 4,178 cf, Depth= 5.41"

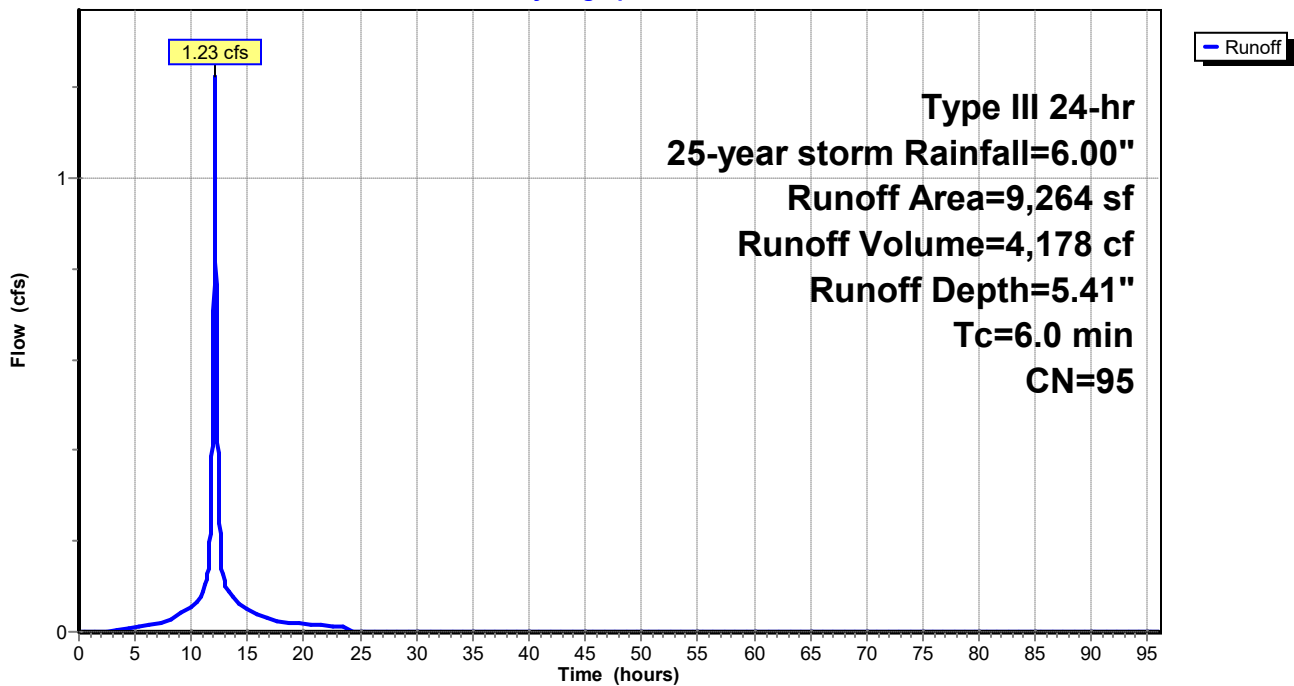
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs  
 Type III 24-hr 25-year storm Rainfall=6.00"

|       | Area (sf) | CN | Description                   |
|-------|-----------|----|-------------------------------|
| *     | 4,282     | 98 | House                         |
| *     | 1,900     | 98 | Pool/Patio/Pool House         |
|       | 700       | 61 | >75% Grass cover, Good, HSG B |
| *     | 2,382     | 98 | Driveway B                    |
| <hr/> |           |    |                               |
|       | 9,264     | 95 | Weighted Average              |
|       | 700       |    | 7.56% Pervious Area           |
|       | 8,564     |    | 92.44% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment B1: House/Pool/Drive B**

Hydrograph



# Drainage Analysis 9-24-21

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 3

## Summary for Subcatchment B2: Bypass

Runoff = 3.18 cfs @ 12.10 hrs, Volume= 10,329 cf, Depth= 2.01"

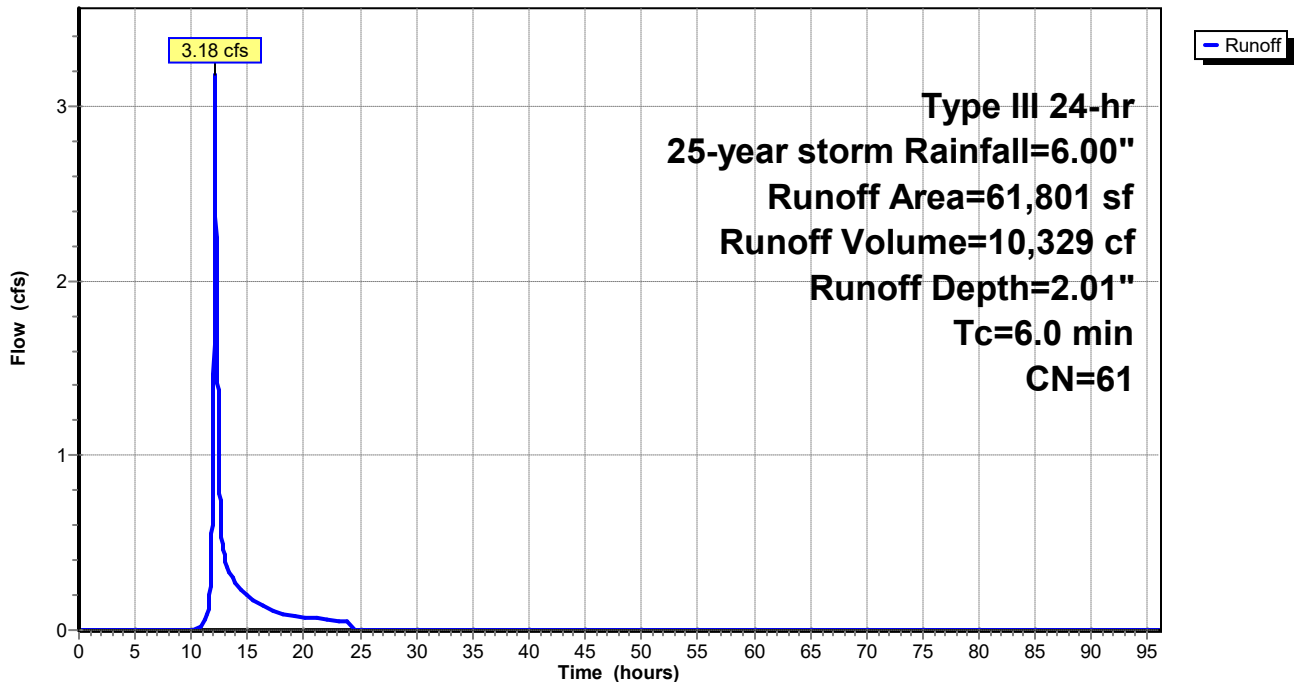
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs  
Type III 24-hr 25-year storm Rainfall=6.00"

|       | Area (sf) | CN | Description                   |
|-------|-----------|----|-------------------------------|
| *     | 3,400     | 98 | Common Drive                  |
|       | 1,494     | 80 | >75% Grass cover, Good, HSG D |
|       | 11,414    | 61 | >75% Grass cover, Good, HSG B |
|       | 6,782     | 77 | Woods, Good, HSG D            |
|       | 38,711    | 55 | Woods, Good, HSG B            |
| <hr/> |           |    |                               |
|       | 61,801    | 61 | Weighted Average              |
|       | 58,401    |    | 94.50% Pervious Area          |
|       | 3,400     |    | 5.50% Impervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

## Subcatchment B2: Bypass

Hydrograph



# Drainage Analysis 9-24-21

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 4

## Summary for Pond DIV: DIV-1

Inflow Area = 9,264 sf, 92.44% Impervious, Inflow Depth = 5.41" for 25-year storm event  
 Inflow = 1.23 cfs @ 12.08 hrs, Volume= 4,178 cf  
 Outflow = 1.23 cfs @ 12.08 hrs, Volume= 4,178 cf, Atten= 0%, Lag= 0.0 min  
 Primary = 1.02 cfs @ 12.08 hrs, Volume= 3,692 cf  
 Secondary = 0.36 cfs @ 12.27 hrs, Volume= 486 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Peak Elev= 613.60' @ 12.27 hrs

Flood Elev= 374.75'

| Device | Routing   | Invert  | Outlet Devices  |
|--------|-----------|---------|---|
| #1     | Primary   | 613.00' | <b>10.0" Round Primary</b><br>L= 35.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 613.00' / 612.21' S= 0.0226 '/' Cc= 0.900<br>n= 0.012, Flow Area= 0.55 sf   |
| #2     | Secondary | 613.00' | <b>18.0" Round Secondary</b><br>L= 78.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 613.00' / 612.00' S= 0.0128 '/' Cc= 0.900<br>n= 0.012, Flow Area= 1.77 sf |
| #3     | Device 2  | 613.50' | <b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32                                |

**Primary OutFlow** Max=1.00 cfs @ 12.08 hrs HW=613.57' TW=613.04' (Dynamic Tailwater)

↑**1=Primary** (Outlet Controls 1.00 cfs @ 3.57 fps)

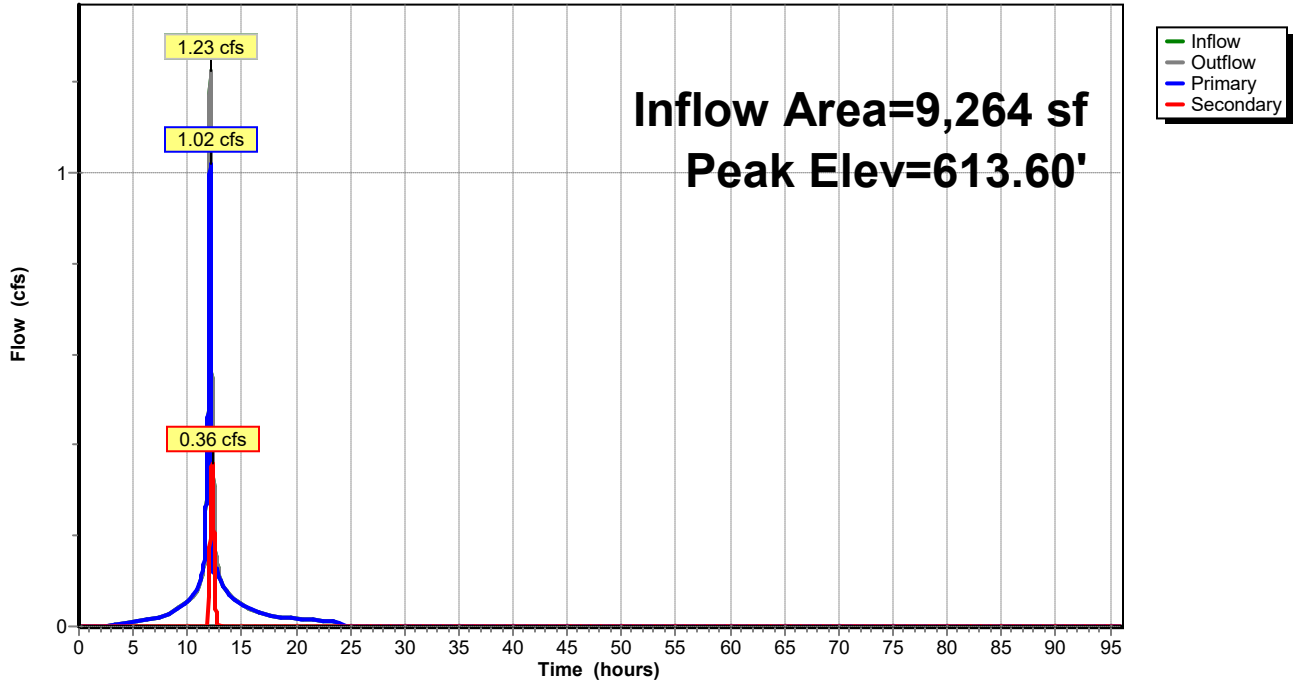
**Secondary OutFlow** Max=0.36 cfs @ 12.27 hrs HW=613.60' TW=0.00' (Dynamic Tailwater)

↑**2=Secondary** (Passes 0.36 cfs of 1.75 cfs potential flow)

↑**3=Broad-Crested Rectangular Weir** (Weir Controls 0.36 cfs @ 0.89 fps)

**Pond DIV: DIV-1**

Hydrograph



# Drainage Analysis 9-24-21

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 6

## Summary for Pond SW-2: SW-2

Inflow Area = 9,264 sf, 92.44% Impervious, Inflow Depth = 4.78" for 25-year storm event  
 Inflow = 1.02 cfs @ 12.08 hrs, Volume= 3,692 cf  
 Outflow = 0.15 cfs @ 11.63 hrs, Volume= 3,692 cf, Atten= 85%, Lag= 0.0 min  
 Discarded = 0.15 cfs @ 11.63 hrs, Volume= 3,692 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs  
 Peak Elev= 613.59' @ 12.28 hrs Surf.Area= 656 sf Storage= 857 cf

Plug-Flow detention time= 31.9 min calculated for 3,691 cf (100% of inflow)  
 Center-of-Mass det. time= 31.9 min ( 798.9 - 767.1 )

| Volume | Invert  | Avail.Storage | Storage Description  |
|--------|---------|---------------|--|
| #1A    | 611.71' | 578 cf        | <b>20.83'W x 31.50'L x 3.54'H Field A</b><br>2,324 cf Overall - 879 cf Embedded = 1,445 cf x 40.0% Voids   |
| #2A    | 612.21' | 879 cf        | <b>Cultec R-330XLHD x 16 Inside #1</b><br>Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf<br>Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap<br>Row Length Adjustment= +1.50' x 7.45 sf x 4 rows |
|        |         | 1,457 cf      | Total Available Storage  |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert  | Outlet Devices  |
|--------|-----------|---------|---|
| #1     | Discarded | 611.71' | <b>10.000 in/hr Exfiltration over Horizontal area</b> Phase-In= 0.10' |

**Discarded OutFlow** Max=0.15 cfs @ 11.63 hrs HW=611.82' (Free Discharge)  
 ↑**1=Exfiltration** (Exfiltration Controls 0.15 cfs)

**Drainage Analysis 9-24-21**

Prepared by Bibbo Associates

HydroCAD® 10.00-20 s/n 02226 © 2017 HydroCAD Software Solutions LLC

Type III 24-hr 25-year storm Rainfall=6.00"

Printed 12/20/2021

Page 7

**Pond SW-2: SW-2 - Chamber Wizard Field A**

**Chamber Model = Cultec R-330XLHD (Cultec Recharger® 330XLHD)**

Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf

Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap

Row Length Adjustment= +1.50' x 7.45 sf x 4 rows

52.0" Wide + 6.0" Spacing = 58.0" C-C Row Spacing

4 Chambers/Row x 7.00' Long +1.50' Row Adjustment = 29.50' Row Length +12.0" End Stone x 2 = 31.50' Base Length

4 Rows x 52.0" Wide + 6.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.83' Base Width

6.0" Base + 30.5" Chamber Height + 6.0" Cover = 3.54' Field Height

16 Chambers x 52.2 cf +1.50' Row Adjustment x 7.45 sf x 4 Rows = 879.2 cf Chamber Storage

2,324.2 cf Field - 879.2 cf Chambers = 1,445.0 cf Stone x 40.0% Voids = 578.0 cf Stone Storage

Chamber Storage + Stone Storage = 1,457.2 cf = 0.033 af

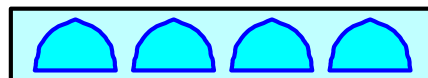
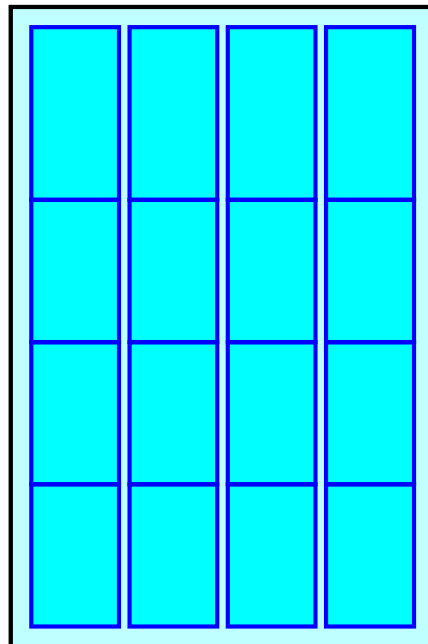
Overall Storage Efficiency = 62.7%

Overall System Size = 31.50' x 20.83' x 3.54'

16 Chambers

86.1 cy Field

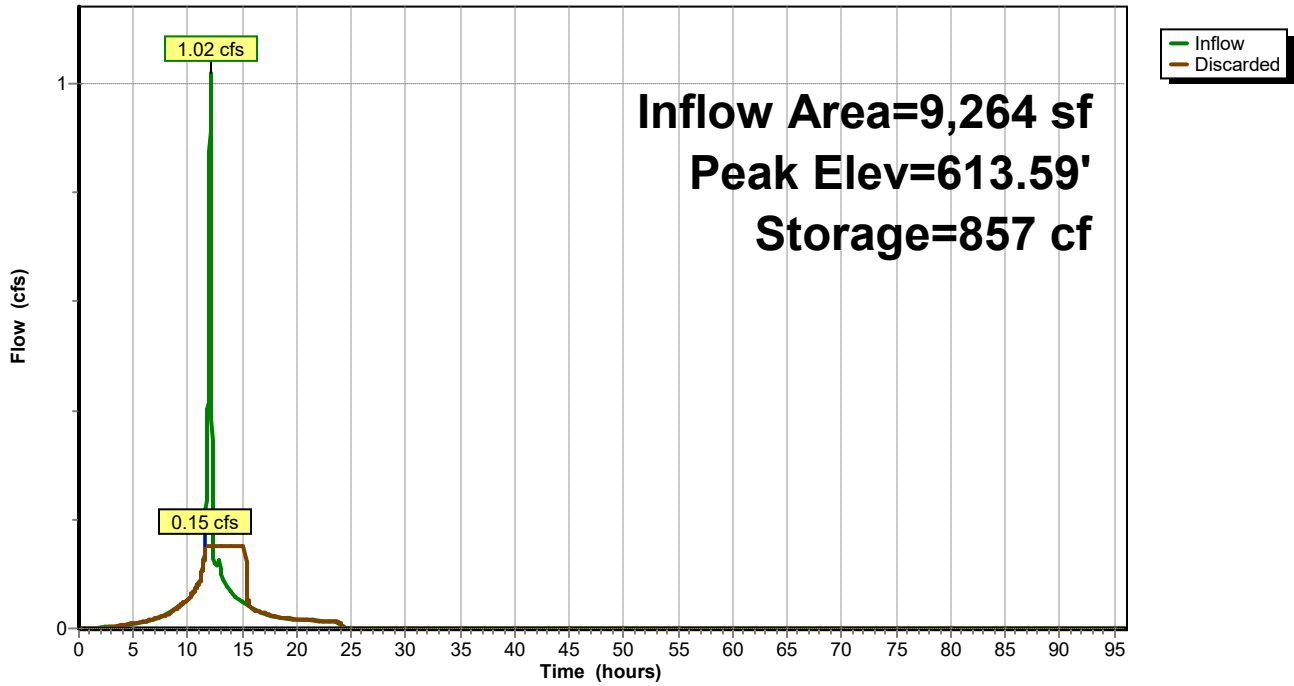
53.5 cy Stone





**Pond SW-2: SW-2**

Hydrograph



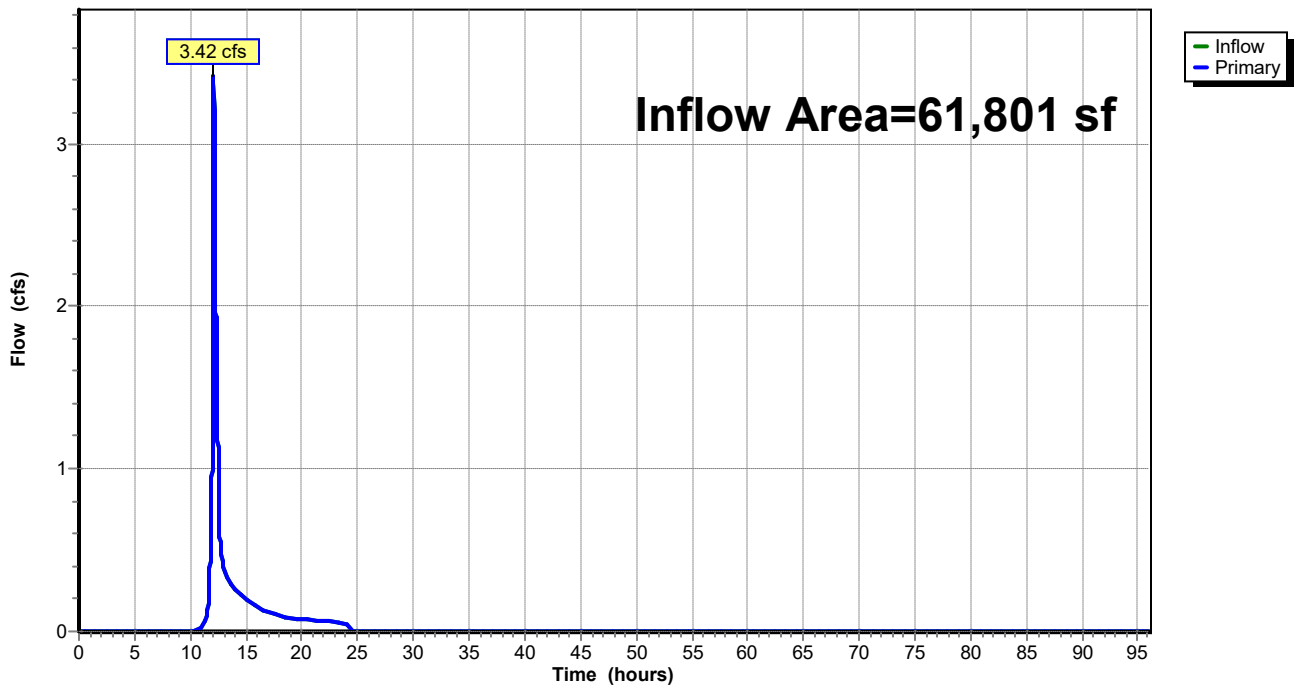
**Summary for Link Post B: Design Line B**

Inflow Area = 61,801 sf, 5.50% Impervious, Inflow Depth = 2.10" for 25-year storm event  
Inflow = 3.42 cfs @ 12.10 hrs, Volume= 10,815 cf  
Primary = 3.42 cfs @ 12.10 hrs, Volume= 10,815 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

**Link Post B: Design Line B**

Hydrograph



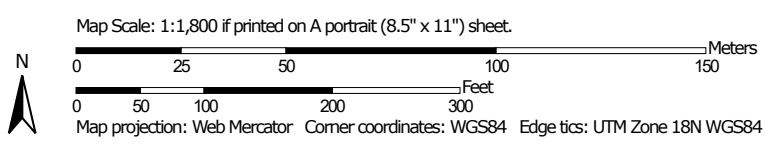


**Soil Map**

Hydrologic Soil Group—Westchester County, New York




Soil Map may not be valid at this scale.



### MAP LEGEND

**Area of Interest (AOI)**









 Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**





-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

**Soil Rating Lines**

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

**Soil Rating Points**


-  A
-  A/D
-  B
-  B/D

-  C
-  C/D
-  D
-  Not rated or not available


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York  
 Survey Area Data: Version 17, Sep 1, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 16, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydrologic Soil Group

| Map unit symbol                    | Map unit name   | Rating | Acres in AOI | Percent of AOI |
|------------------------------------|---|--------|--------------|----------------|
| CrC                                | Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky  | B      | 5.0          | 44.2%          |
| CsD                                | Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky | B      | 4.8          | 42.1%          |
| HrF                                | Hollis-Rock outcrop complex, 35 to 60 percent slopes            | D      | 1.6          | 13.8%          |
| <b>Totals for Area of Interest</b> |   |        | <b>11.3</b>  | <b>100.0%</b>  |

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

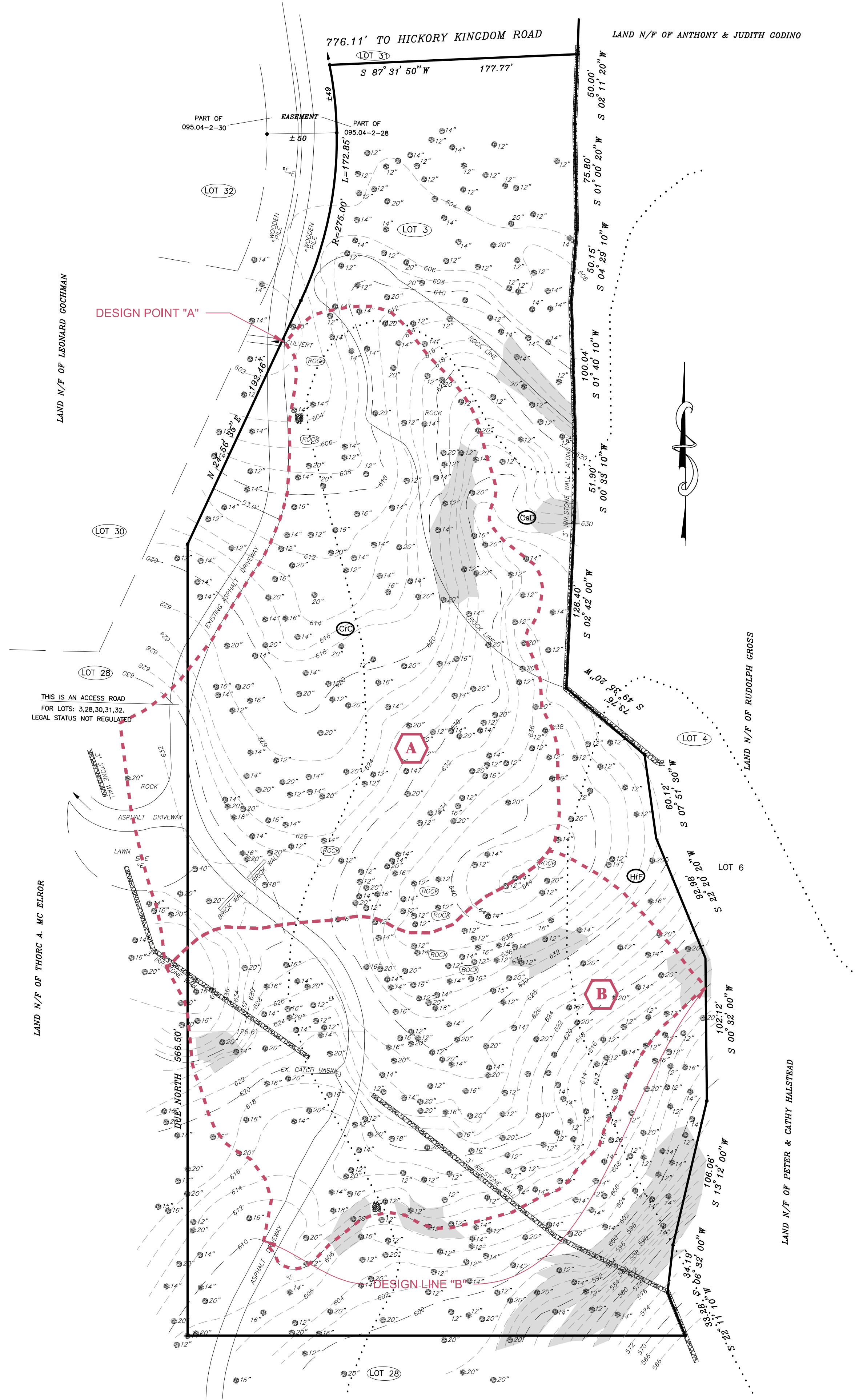
*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher



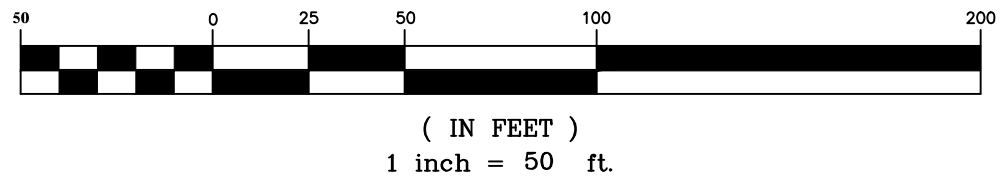
**Watershed Map**





- LEGEND**
- EXISTING PROPERTY LINE
  - EXISTING STONE WALL
  - EXISTING 2' CONTOUR
  - EXISTING 10' CONTOUR
  - EXISTING TREE
  - WATERSHED BOUNDARY LINE
  - WATERSHED IDENTIFICATION
  - SOIL BOUNDARY LINE
  - USGS SOIL CLASSIFICATION

**PLAN**  
GRAPHIC SCALE



UNAUTHORIZED ALTERATIONS AND ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 2009 (2) OF THE NEW YORK STATE EDUCATION LAW.  
 COPYRIGHT © 2011 BIBBO ASSOCIATES, LLP ALL RIGHTS RESERVED. UNAUTHORIZED REPRODUCTION IS A VIOLATION OF APPLICABLE LAWS.

CONTACT INFO:  
 MATTHEW ABRAMO  
 530 W 30TH ST APT 23A  
 NEW YORK, NY 10001

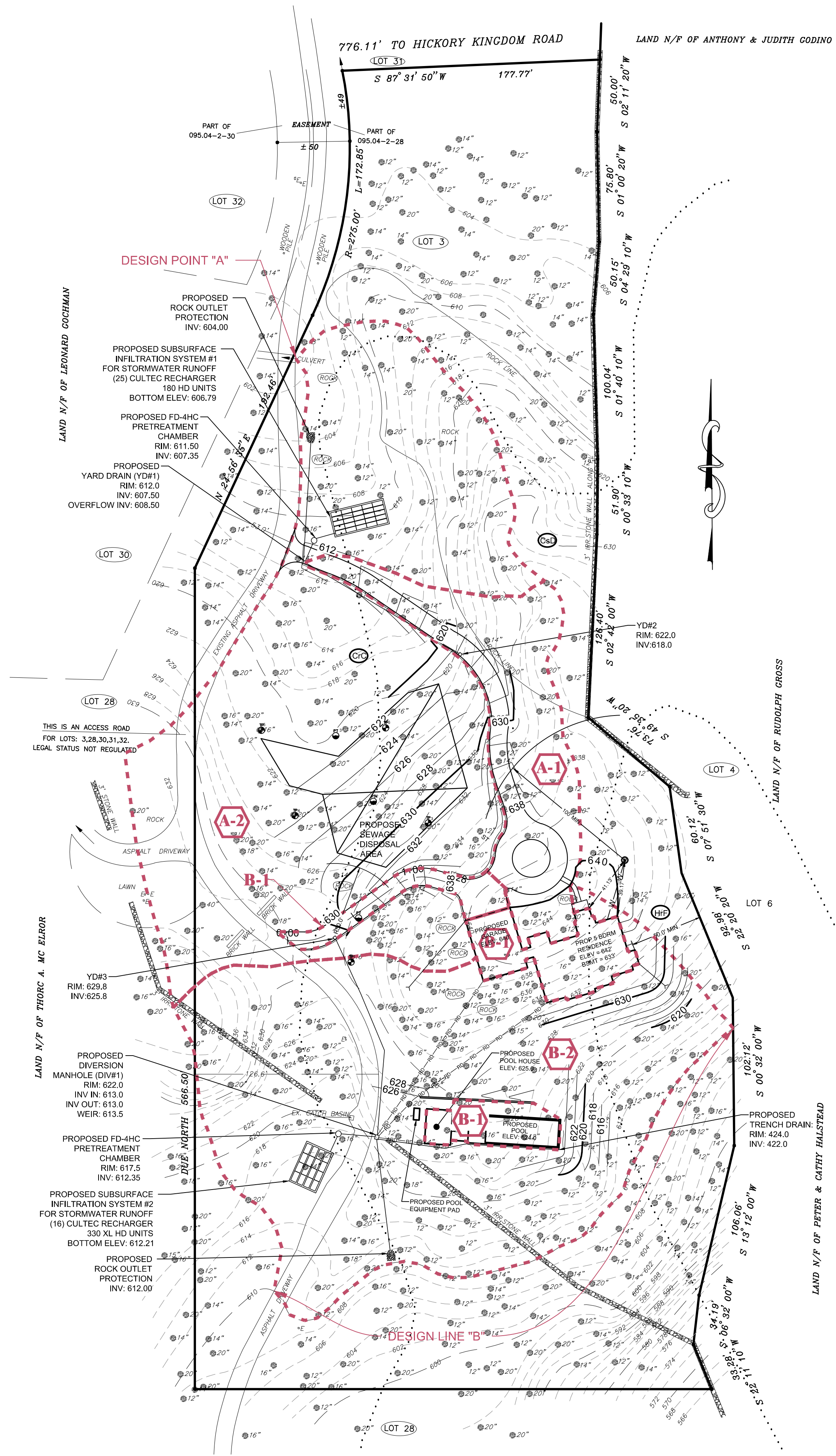
OLD BIBBO PROJECT NO. 2715  
 OLD WCDH PERMIT NO. N0C2000-11  
 P/O LEONARD GOCHMAN SUBDIVISION, MAP# 21099, DATE 7/30/82, R.S. LOT NO: 2  
 SEC NO: 95.04 BLOCK NO: 2 LOT NO: 3

| REVISIONS |  |  | DATE: DESCRIPTION BY/CK |  |  |
|-----------|--|--|-------------------------|--|--|
|           |  |  |                         |  |  |
|           |  |  |                         |  |  |

|  |  |                  |
|--|--|------------------|
| <b>PRE-DEVELOPMENT</b>                             |  | DATE: 12-20-2021 |
| ABRAMO - RESIDENCE                                 |  | SCALE: 1" = 40'  |
| 163 HICKORY KINGDOM ROAD                           |  | FILE: LL-1       |
| TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NY 10504 |  | DSGN / CHK: NG   |
| DRN. BY: NMIAW                                     |  | SHT NO: 1 OF 2   |
| DWG NO. <b>PRE</b>                                 |  |                  |

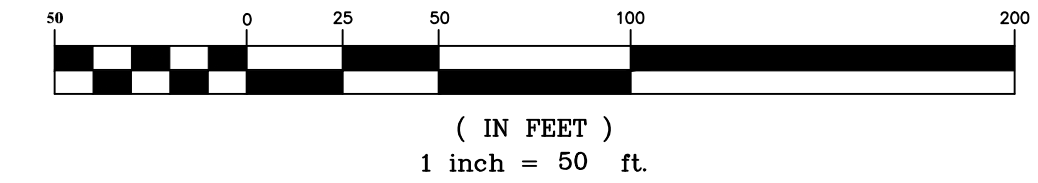
**BIBBO ASSOCIATES, LLP**  
 293 ROUTE 100 SUITE 203  
 SOMERS, NEW YORK 10589  
 TEL. 914-277-5805



**LEGEND**

- EXISTING PROPERTY LINE
- EXISTING STONE WALL
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- SOIL TEST LOCATION
- EXISTING TREE
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- WATERSHED BOUNDARY LINE
- WATERSHED IDENTIFICATION
- SOIL BOUNDARY LINE
- USGS SOIL CLASSIFICATION
- PROPOSED ROOF AND FOOTING DRAINS

**PLAN**  
GRAPHIC SCALE



UNAUTHORIZED ALTERATIONS AND ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.  
 COPYRIGHT © 2021 BIBBO ASSOCIATES, LLP. ALL RIGHTS RESERVED. UNAUTHORIZED REPRODUCTION IS A VIOLATION OF APPLICABLE LAWS.

CONTACT INFO:  
 MATTHEW ABRAMO  
 530 W 30TH ST APT 23A  
 NEW YORK, NY 10001

OLD BIBBO PROJECT NO. 2715  
 OLD WCDH PERMIT NO. N0C2000-11  
 P/O LEONARD GOCHMAN SUBDIVISION, MAP# 21099, DATE 7/30/82, R.S. LOT NO: 2  
 SEC NO: 95.04      BLOCK NO: 2      LOT NO: 2

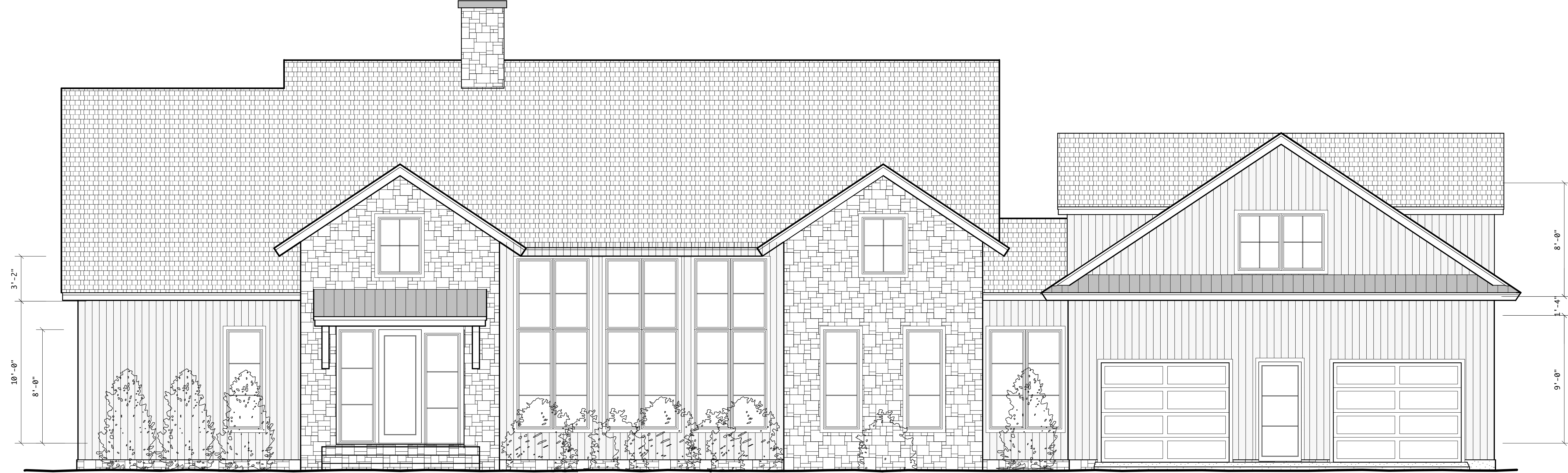
| DATE: | DESCRIPTION | BY/CK | DATE: | DESCRIPTION | BY/CK |
|-------|-------------|-------|-------|-------------|-------|
|       |             |       |       |             |       |

**POST DEVELOPMENT**

**ABRAMO - RESIDENCE**  
 163 HICKORY KINGDOM ROAD  
 TOWN OF NORTH CASTLE, WESTCHESTER COUNTY, NY 10504

**BIBBO ASSOCIATES, LLP**  
 293 ROUTE 100 SUITE 203  
 SOMERS, NEW YORK 10589  
 TEL. 914-277-5805

DATE: 12-20-2021  
 SCALE: 1" = 40'  
 FILE: LL-1  
 DSGN / CHK: NG  
 DRN. BY: NMIAW  
 SHT NO. 2 OF 2  
 DWG NO. **POST**



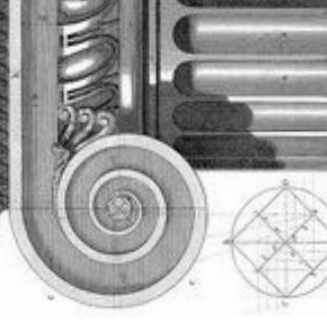
NORTH / FRONT ELEVATION

IMPORTANT NOTE:  
 THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE SUBCONTRACTORS OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE CONSIDERED AS PART OF ANY DISCREPANCIES IMMEDIATELY TO THE ARCHITECT.

PREPARED BY

WILLIAM BATEMAN, ARCHITECT, AIA  
 DISTINCTIVE RESIDENTIAL ARCHITECTURE  
 INFO@WILLIAMBATEMAN.COM  
 518 788-7581  
 SOUTH CAROLINA  
 NEW YORK

PROJECT TITLE



THE ABRAMO RESIDENCE  
 163 HICKORY KINGDOM ROAD  
 NORTH CASTLE, NY

RELEASE

- FOR REVIEW
- FOR PERMITTING
- FOR CONSTRUCTION
- AS BUILT

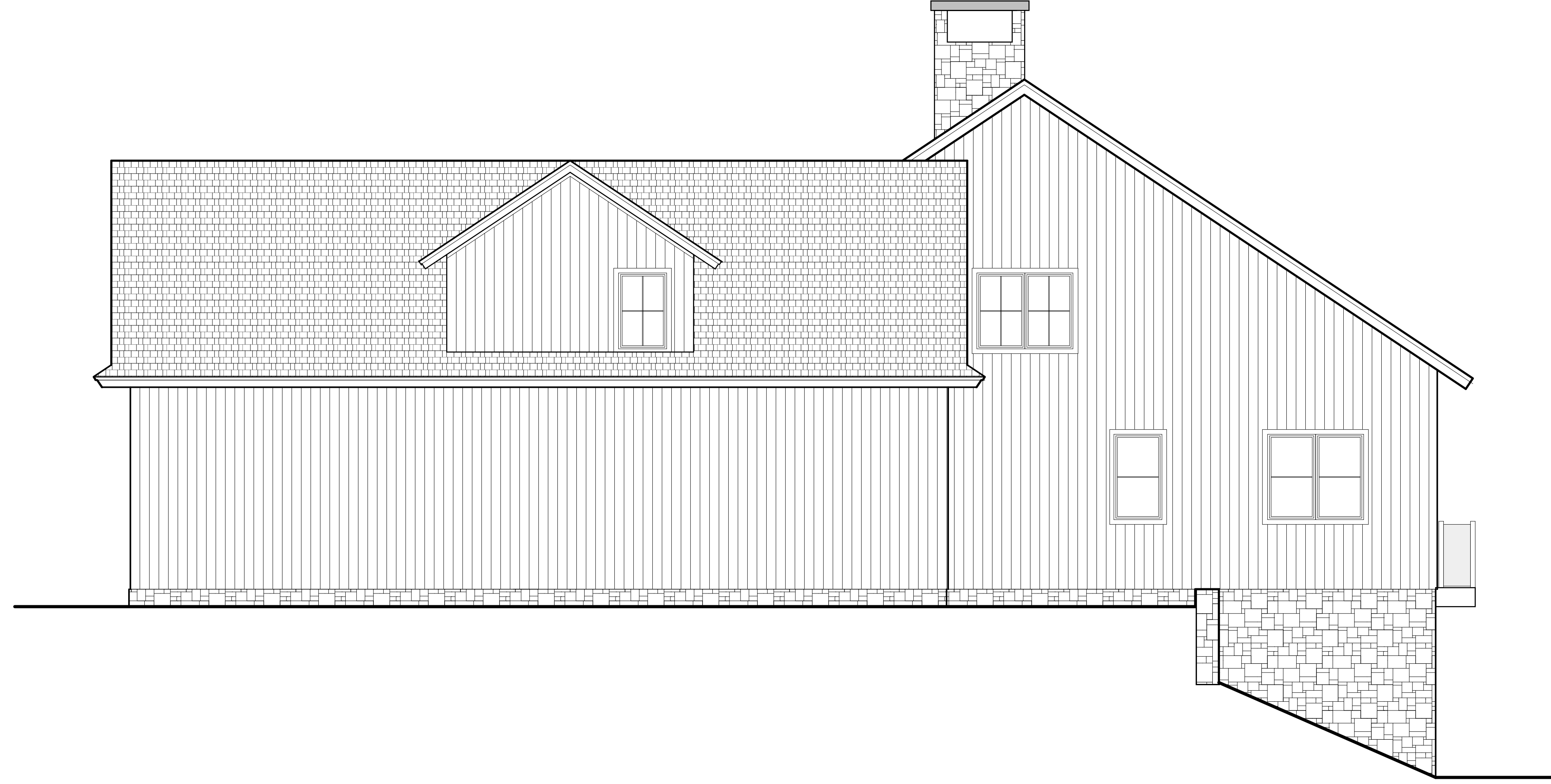
DATE PRINTED

9/13/21

SHEET NO.

A-04

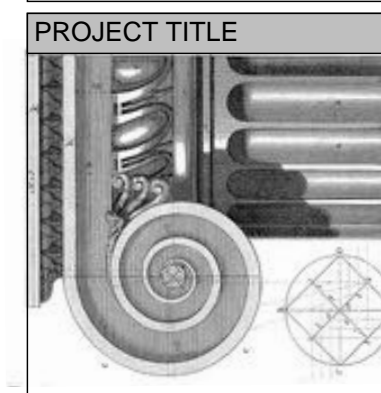
THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE DESIGN OF THE WORK AND THE FAILURE OF ANY OTHER PERSONS PERFORMING ANY OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE CONSIDERED AS PART OF ANY DISCREPANCIES IMMEDIATELY TO THE ARCHITECT.



WEST / RIGHT ELEVATION

THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE DESIGN OF THE WORK AND THE FAILURE OF ANY OTHER PERSONS PERFORMING ANY OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE CONSIDERED AS PART OF ANY DISCREPANCIES IMMEDIATELY TO THE ARCHITECT.

PREPARED BY  
**WILLIAM BATEMAN, ARCHITECT, AIA**  
DISTINCTIVE RESIDENTIAL ARCHITECTURE  
INFO@WILLIAMBATEMAN.COM  
NEW YORK 518 788-7581 SOUTH CAROLINA



PROJECT TITLE  
**THE ABRAMO RESIDENCE**  
163 HICKORY KINGDOM ROAD  
NORTH CASTLE, NY

RELEASE  
 FOR REVIEW  
 FOR PERMITTING  
 FOR CONSTRUCTION  
 AS BUILT

DATE PRINTED  
9/13/21

SHEET NO.  
**A-05**



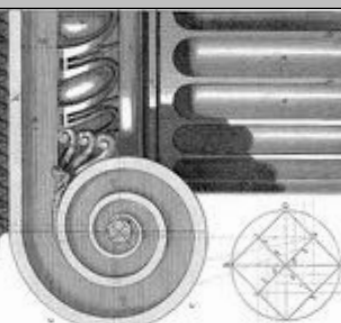
SOUTH / REAR ELEVATION

IMPORTANT NOTE:  
THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION OF THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE IMMEDIATELY TO THE ARCHITECT.

PREPARED BY

WILLIAM BATEMAN, ARCHITECT, AIA  
DISTINCTIVE RESIDENTIAL ARCHITECTURE  
INFO@WILLIAMBATEMAN.COM  
518 788-7581  
SOUTH CAROLINA  
NEW YORK

PROJECT TITLE



THE ABRAMO RESIDENCE  
163 HICKORY KINGDOM ROAD  
NORTH CASTLE, NY

RELEASE

- FOR REVIEW
- FOR PERMITTING
- FOR CONSTRUCTION
- AS BUILT

DATE PRINTED

9/13/21

SHEET NO.

A-06



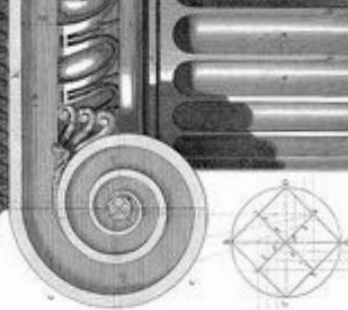
EAST / LEFT SIDE ELEVATION

IMPORTANT NOTE:  
 THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE SUBCONTRACTORS OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE CONSIDERED AS A CONTRACT DOCUMENT. ANY DISCREPANCIES IMMEDIATELY TO THE ARCHITECT.

PREPARED BY

WILLIAM BATEMAN, ARCHITECT, AIA  
 DISTINCTIVE RESIDENTIAL ARCHITECTURE  
 INFO@WILLIAMBATEMAN.COM  
 518 788-7561  
 SOUTH CAROLINA  
 NEW YORK

PROJECT TITLE



THE ABRAMO RESIDENCE  
 163 HICKORY KINGDOM ROAD  
 NORTH CASTLE, NY

RELEASE

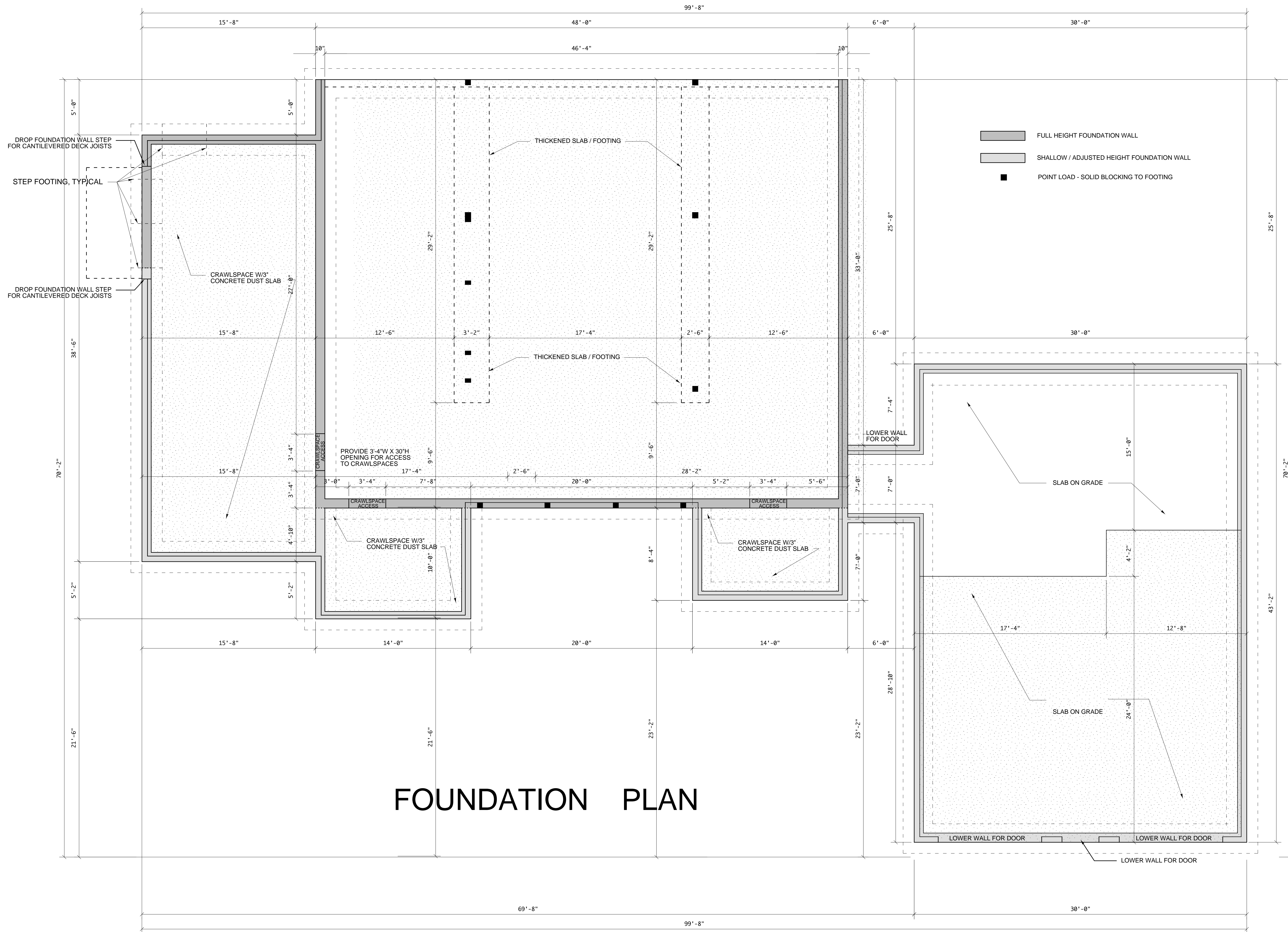
- FOR REVIEW
- FOR PERMITTING
- FOR CONSTRUCTION
- AS BUILT

DATE PRINTED

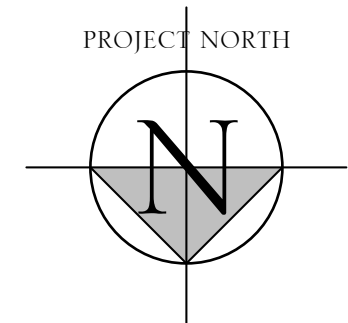
9/13/21

SHEET NO.

A-07



# FOUNDATION PLAN

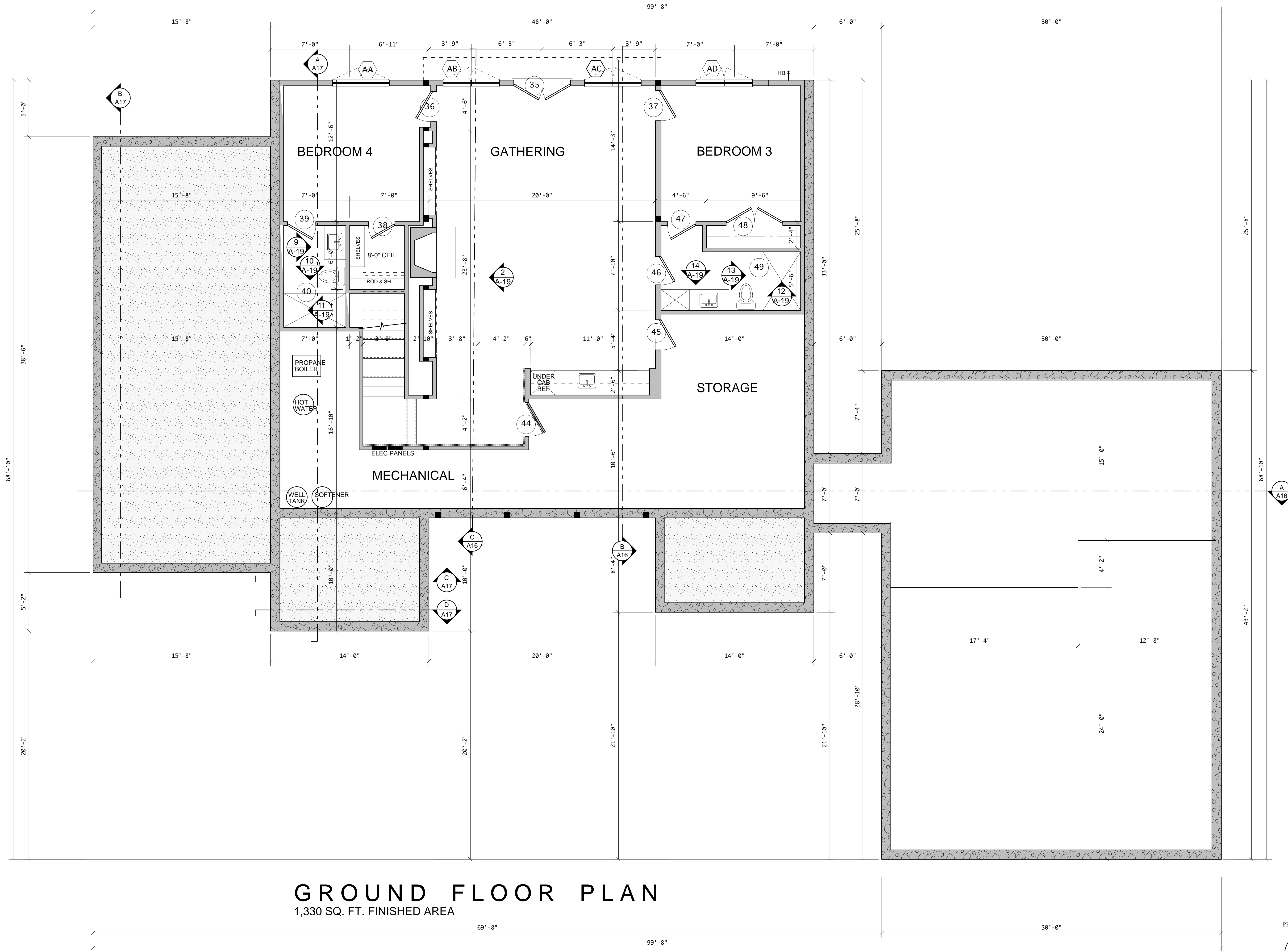


THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, OR FOR THE FAILURE OF ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE IMMEDIATELY TO THE ARCHITECT.

PREPARED BY  
**WILLIAM BATEMAN, ARCHITECT, AIA**  
 DISTINCTIVE RESIDENTIAL ARCHITECTURE  
 INFO@WILLIAMBATEMAN.COM SOUTH CAROLINA  
 NEW YORK 518 788-7561

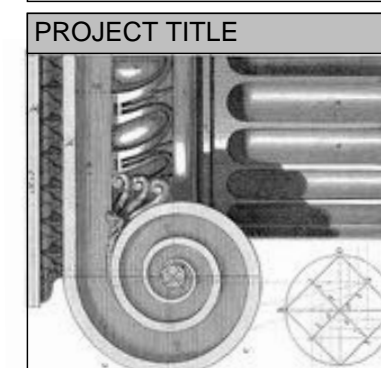
PROJECT TITLE  
**THE ABRAMO RESIDENCE**  
 163 HICKORY KINGDOM ROAD  
 NORTH CASTLE, NY

RELEASE  
 FOR REVIEW  
 FOR PERMITTING  
 FOR CONSTRUCTION  
 AS BUILT  
 DATE PRINTED  
 9/13/21  
 SHEET NO.  
**A-08**



IMPORTANT NOTE:  
 THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE SUBCONTRACTORS OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE INTERPRETED AS A CONTRACT DOCUMENT. IMMEDIATELY TO THE ARCHITECT.

PREPARED BY  
**WILLIAM BATEMAN, ARCHITECT, AIA**  
 DISTINCTIVE RESIDENTIAL ARCHITECTURE  
 INFO@WILLIAMBATEMAN.COM  
 NEW YORK SOUTH CAROLINA  
 518 788-7581

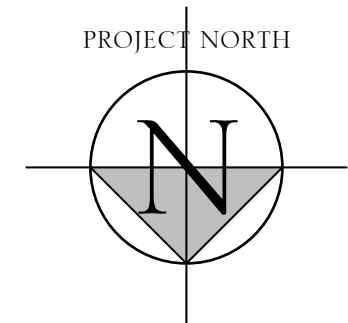


**THE ABRAMO RESIDENCE**  
 163 HICKORY KINGDOM ROAD  
 NORTH CASTLE, NY

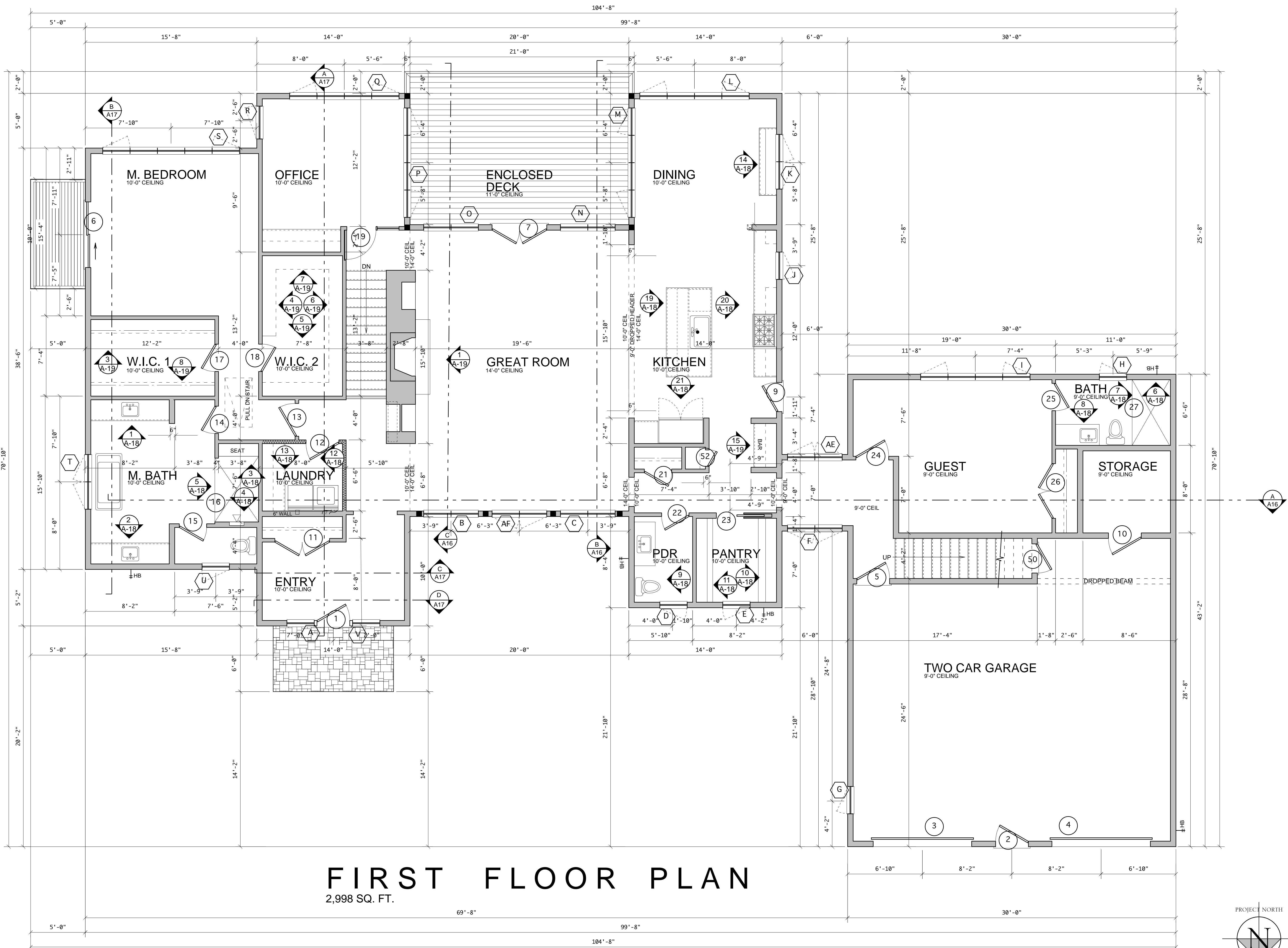
RELEASE  
 FOR REVIEW  
 FOR PERMITTING  
 FOR CONSTRUCTION  
 AS BUILT

DATE PRINTED  
 9/13/21

SHEET NO.  
**A-09**

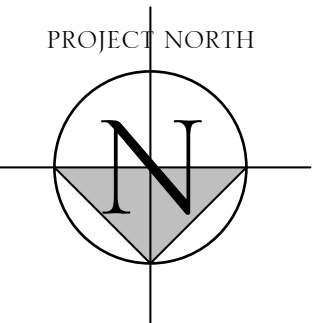






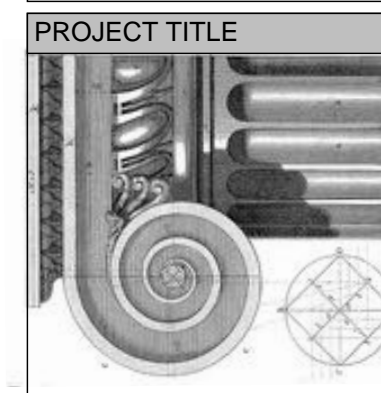
# FIRST FLOOR PLAN

2,998 SQ. FT.



IMPORTANT NOTE:  
 THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE WORK OF THE ARCHITECT AS SHOWN IN THESE DRAWINGS. THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR THE FAILURE OF ANY OTHER PERSONS PERFORMING ANY OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE IMMEDIATELY TO THE ARCHITECT.

PREPARED BY  
**WILLIAM BATEMAN, ARCHITECT, AIA**  
 DISTINCTIVE RESIDENTIAL ARCHITECTURE  
 INFO@WILLIAMBATEMAN.COM  
 SOUTH CAROLINA  
 NEW YORK  
 518 788-7561

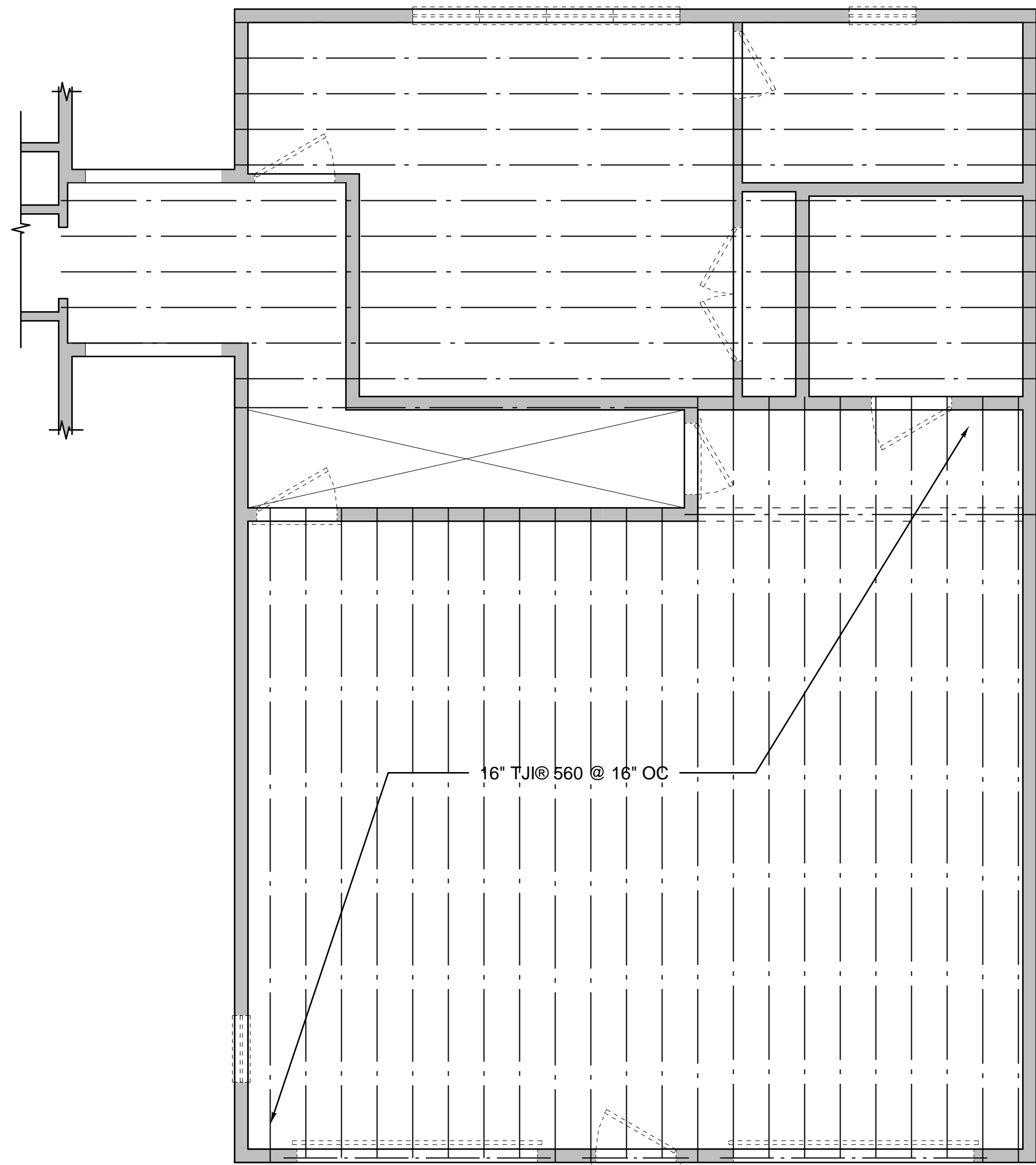


PROJECT TITLE  
**THE ABRAMO RESIDENCE**  
 163 HICKORY KINGDOM ROAD  
 NORTH CASTLE, NY

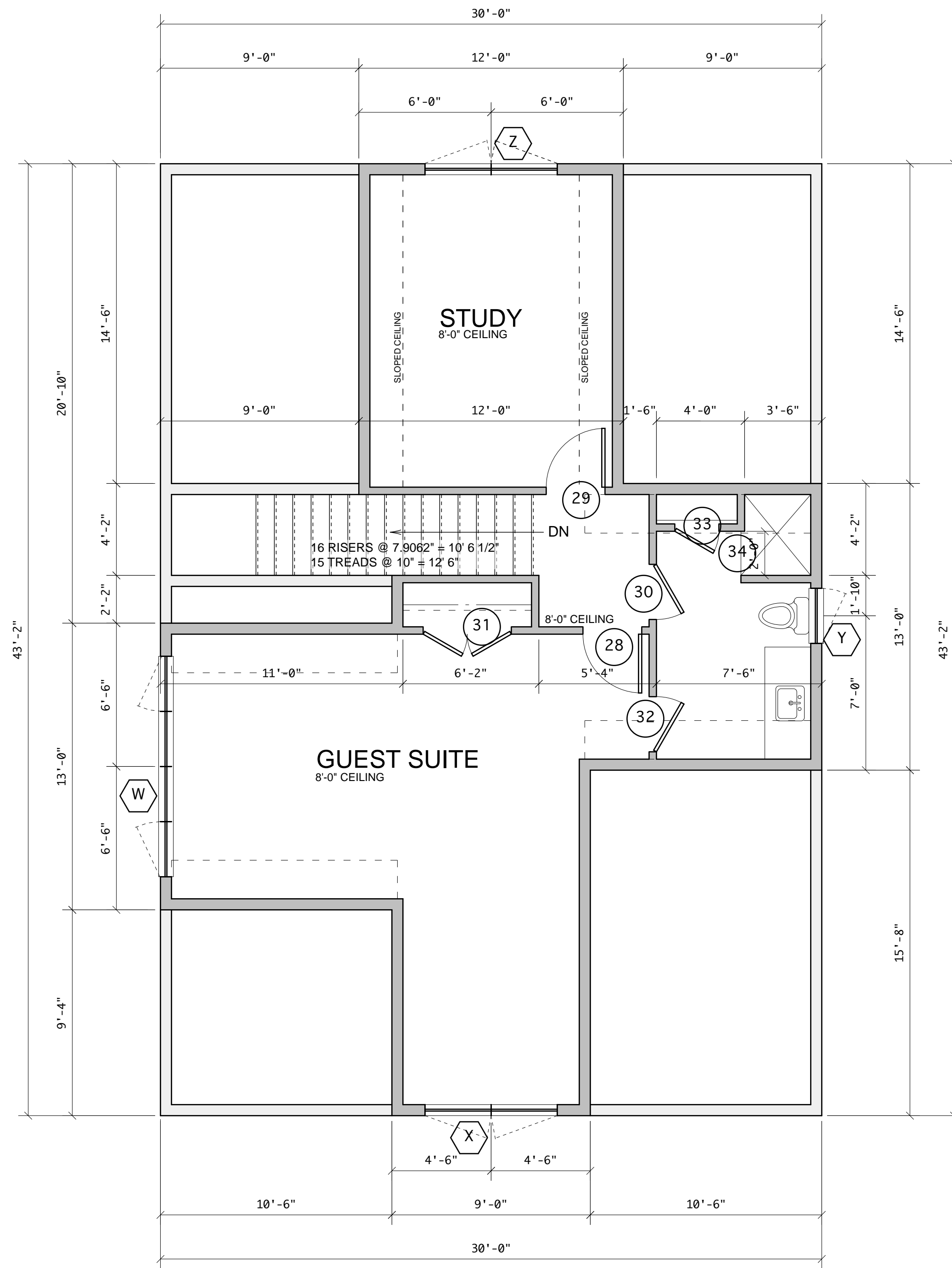
RELEASE  
 FOR REVIEW  
 FOR PERMITTING  
 FOR CONSTRUCTION  
 AS BUILT

DATE PRINTED  
 9/13/21

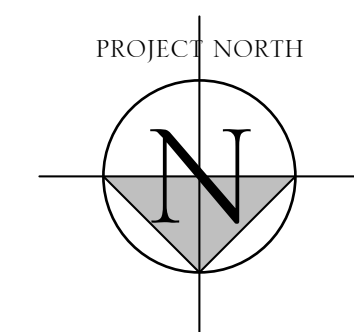
SHEET NO.  
**A-11**



GUEST SUITE OVER GARAGE FRAMING PLAN

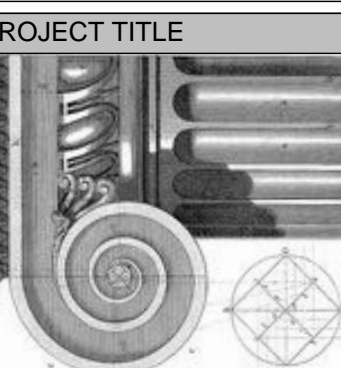


GUEST SUITE OVER GARAGE  
596 SQ. FT.



IMPORTANT NOTE:  
THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE SUBCONTRACTOR OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE IMMEDIATELY TO THE ARCHITECT.

PREPARED BY  
**WILLIAM BATEMAN, ARCHITECT, AIA**  
DISTINCTIVE RESIDENTIAL ARCHITECTURE  
INFO@WILLIAMBATEMAN.COM  
518 788-7561  
SOUTH CAROLINA  
NEW YORK



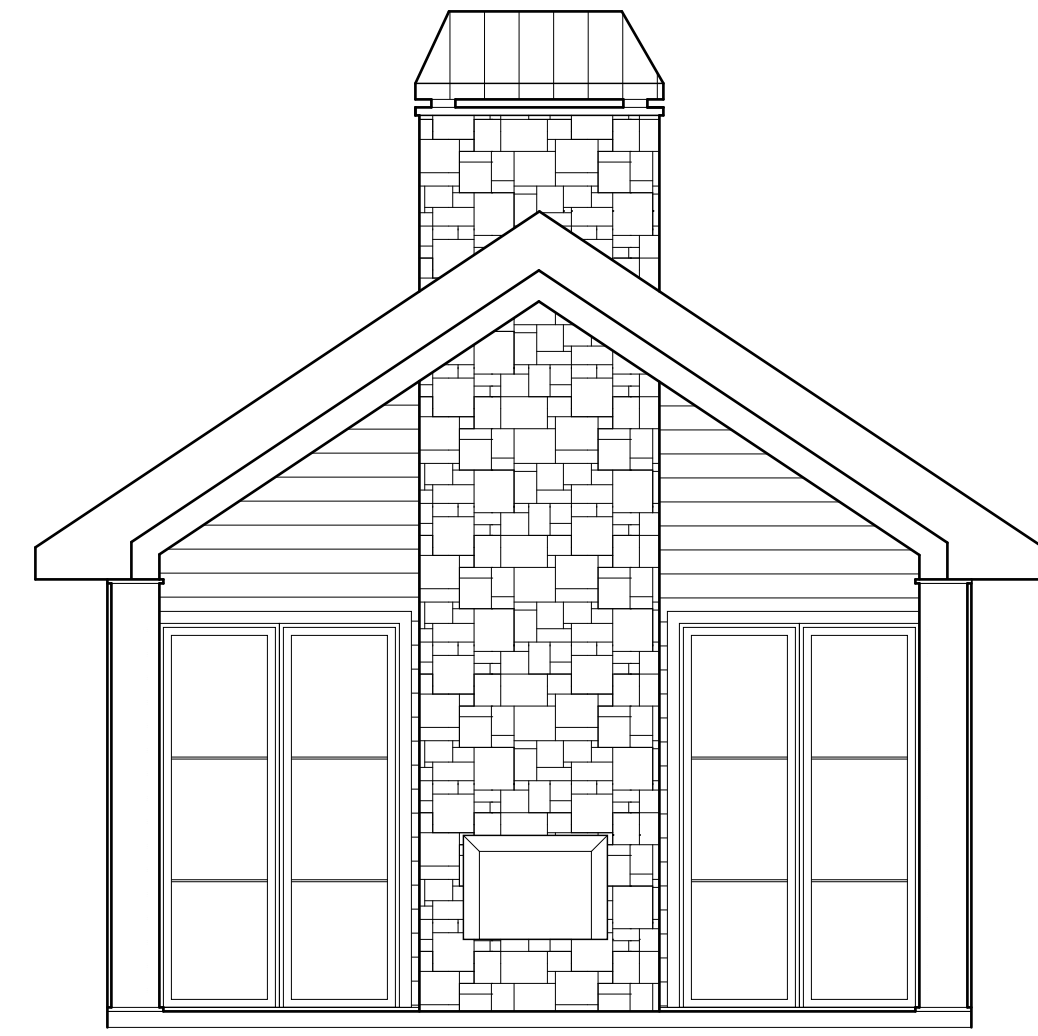
**THE ABRAMO RESIDENCE**  
163 HICKORY KINGDOM ROAD  
NORTH CASTLE, NY

RELEASE  
 FOR REVIEW  
 FOR PERMITTING  
 FOR CONSTRUCTION  
 AS BUILT

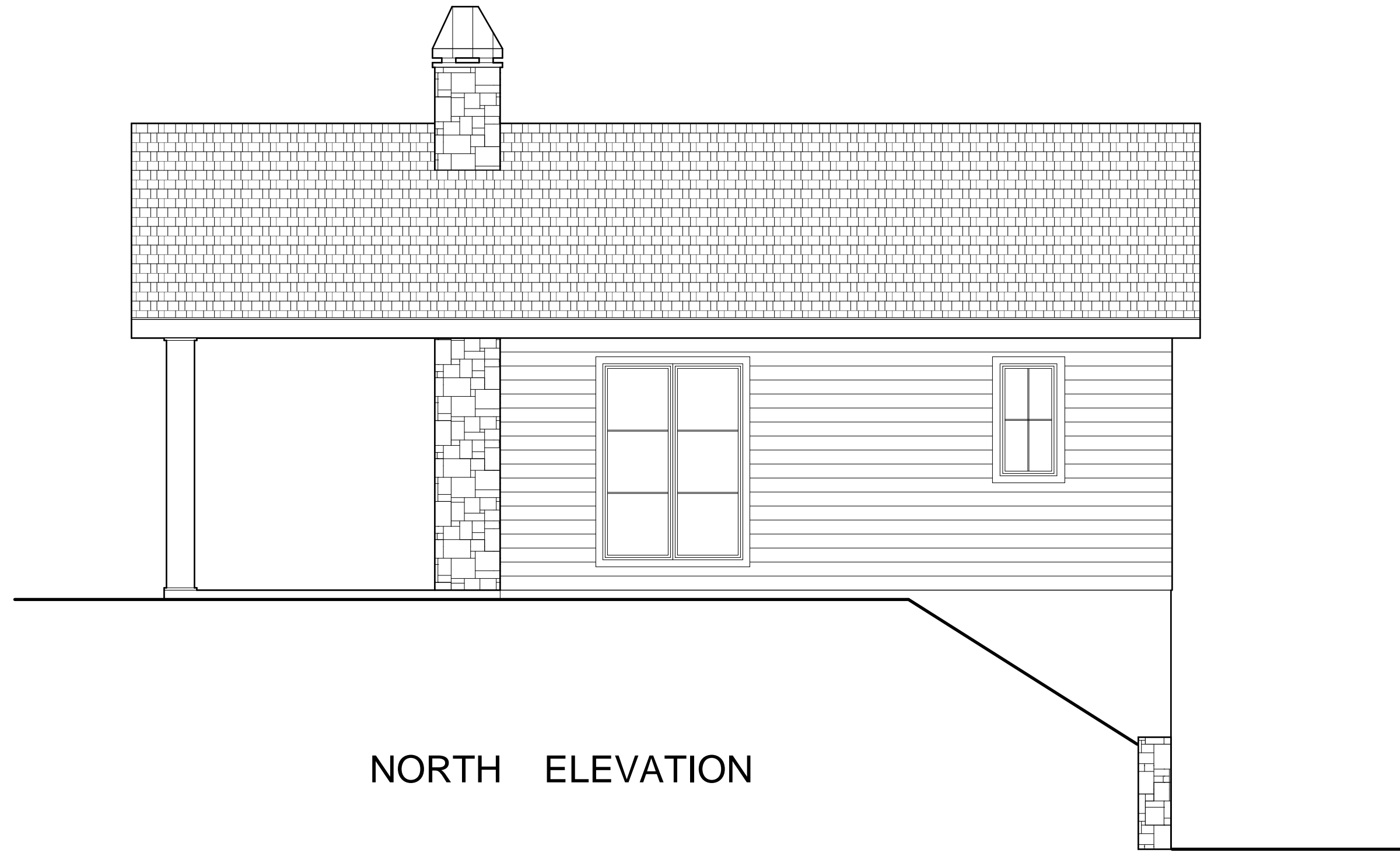
DATE PRINTED  
9/13/21

SHEET NO.

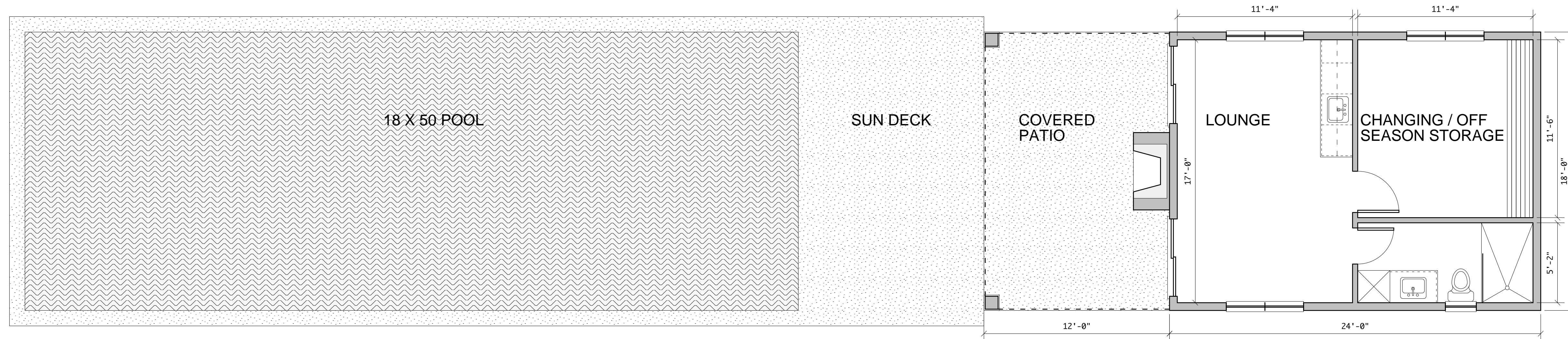
**A-12**



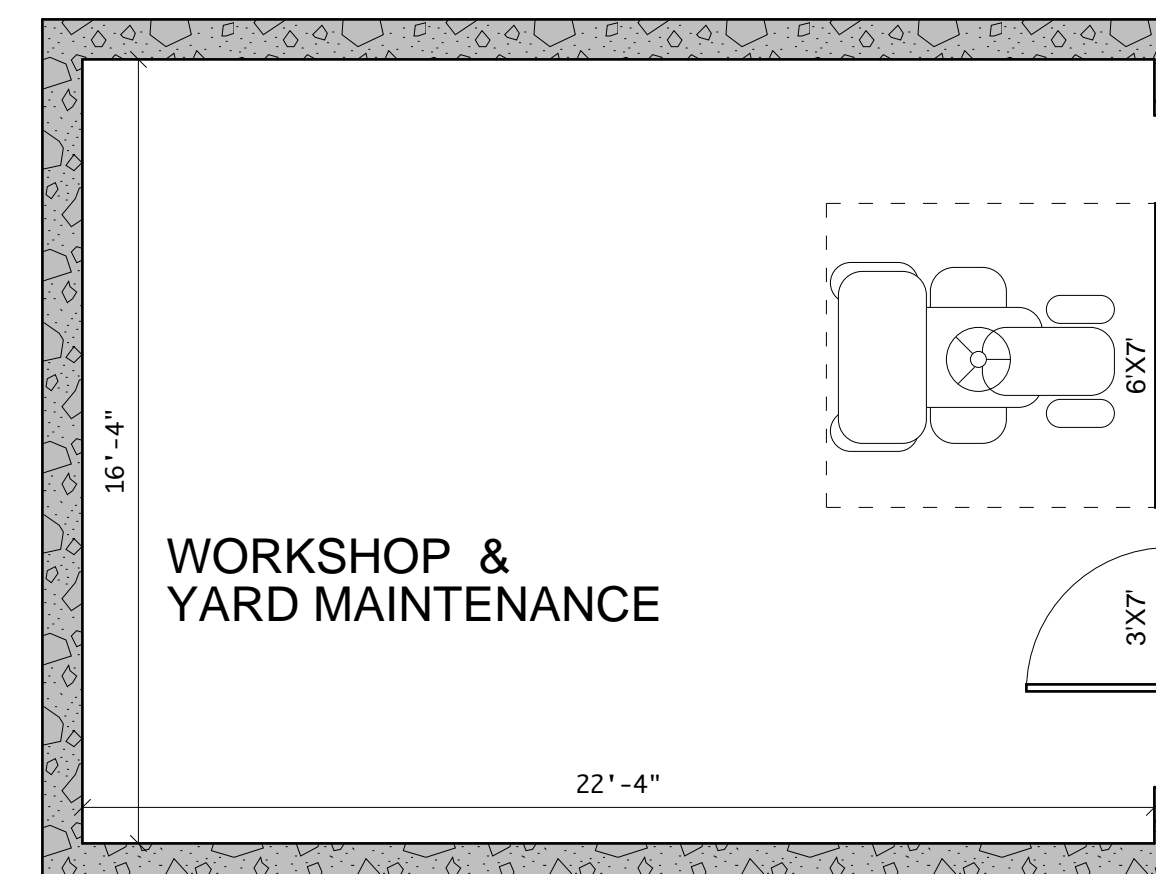
EAST ELEVATION



NORTH ELEVATION



POOL HOUSE PLAN



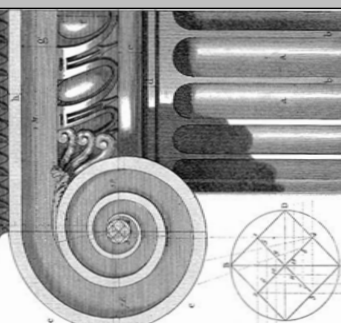
WORKSHOP PLAN

IMPORTANT NOTE:  
 THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, SEQUENCES, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE WORK OF THE ARCHITECT AND ANY OTHER PERSONS PERFORMING ANY OF THE WORK. OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE CONSIDERED AS SHOWN. DRAWINGS ARE NOT TO BE IMMEDIATELY TO THE ARCHITECT.

PREPARED BY

WILLIAM BATEMAN, ARCHITECT, AIA  
 DISTINCTIVE RESIDENTIAL ARCHITECTURE  
 INFO@WILLIAMBATEMAN.COM  
 518 788-7581  
 SOUTH CAROLINA  
 NEW YORK

PROJECT TITLE



THE ABRAMO RESIDENCE  
 163 HICKORY KINGDOM ROAD  
 NORTH CASTLE, NY

RELEASE

- FOR REVIEW
- FOR PERMITTING
- FOR CONSTRUCTION
- AS BUILT

DATE PRINTED

Fri, May 7, 2021

SHEET NO.

A