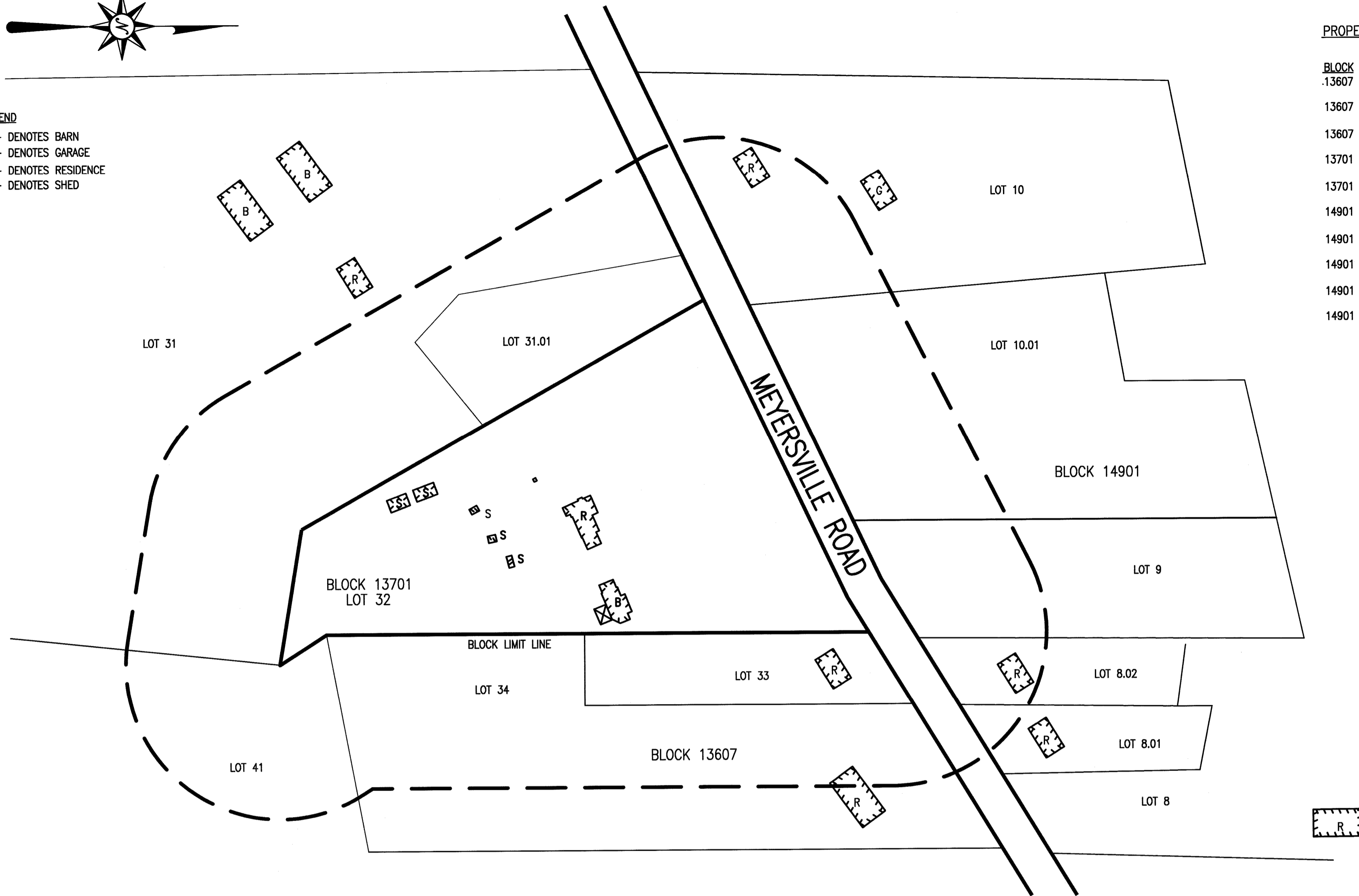
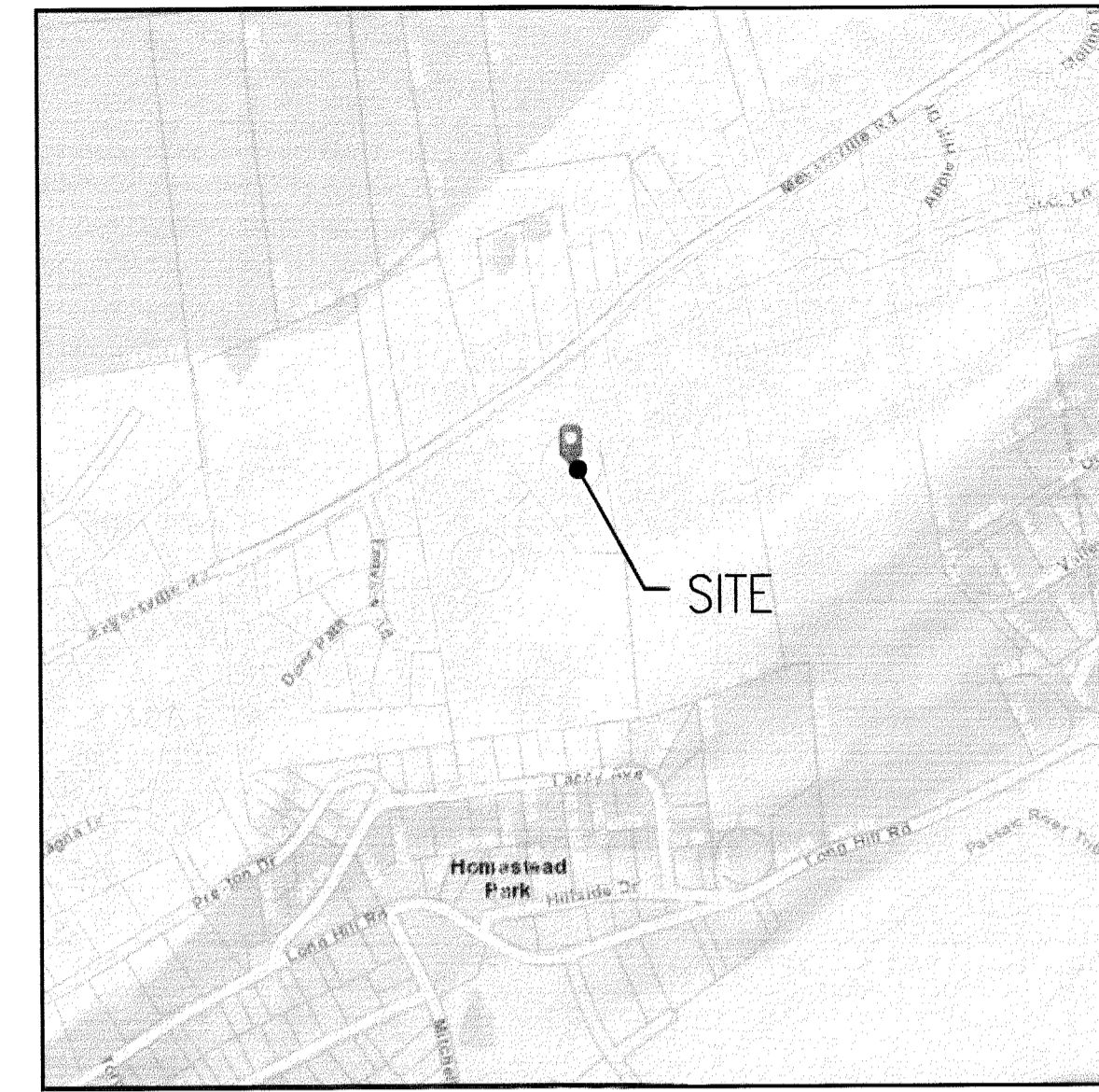


LEGEND
 B - DENOTES BARN
 G - DENOTES GARAGE
 R - DENOTES RESIDENCE
 S - DENOTES SHED



PROPERTY OWNERS WITHIN 200 FEET

BLOCK	LOT	OWNER
.13607	33	ATKINSON, BENJAMIN C. 159 MEYERSVILLE ROAD, GILLETTE, NJ 07933
13607	34	MEHLER/ASKEY, NICHOLAS/JOANNA L. 147 MEYERSVILLE ROAD, GILLETTE, NJ 07933
13607	41	KIELBLOCK, ELEANOR Z. 233 MEYERSVILLE ROAD, GILLETTE, NJ 07933
13701	31,31.01	KIELBLOCK, ELEANOR Z. 233 MEYERSVILLE ROAD, GILLETTE, NJ 07933
13701	32	KIELBLOCK, FRITZ & ROSEMARIE 183 MEYERSVILLE ROAD, GILLETTE, NJ 07933
14901	10	TOPOR, DAVID M. 208 MEYERSVILLE ROAD, GILLETTE, NJ 07933
14901	10.01	KIELBLOCK, ELEANOR Z. 233 MEYERSVILLE ROAD, GILLETTE, NJ 07933
14901	8.01	TUNISON, JANET Z. 154 MEYERSVILLE ROAD, GILLETTE, NJ 07933
14901	8.02	SHIELDS, FRANCIS II 146 MEYERSVILLE ROAD, GILLETTE, NJ 07933
14901	9	MILLS, JAY A. & DEBORAH A. 170 MEYERSVILLE ROAD, GILLETTE, NJ 07933



KEY MAP
 SCALE: 1"=500'

I CONSENT TO THE FILING OF THIS SITE PLAN WITH THE PLANNING BOARD IN LONG HILL TOWNSHIP.

OWNER _____ DATE _____
 ADDRESS _____

SITE PLAN OF:
 LOT 32 BLOCK 13701 TAX MAP .37
 DATE FEBRUARY 27, 2020 SCALE AS SHOWN
 APPLICANT FRITZ & ROSEMARIE KIELBLOCK
 ADDRESS 183 MEYERSVILLE ROAD
 GILLETTE, NJ 07933
 (908) 507-4434

I HEREBY CERTIFY THAT I HAVE PREPARED THIS SITE PLAN AND THAT ALL DIMENSIONS AND INFORMATION ARE CORRECT.

William G. Hollows
 WILLIAM G. HOLLOWES, P.E. & P.L.S. #27473 DATE _____

APPROVED BY THE PLANNING BOARD OF THE TOWNSHIP OF LONG HILL

SECRETARY _____ DATE _____
 BOARD CHAIR _____ DATE _____

ON THE RECOMMENDATION OF THE TOWNSHIP ENGINEER, I HEREBY CERTIFY THAT ALL REQUIRED IMPROVEMENTS HAVE BEEN INSTALLED OR THAT A PERFORMANCE GUARANTY HAS BEEN POSTED IN ACCORDANCE WITH APPLICABLE CODES AND ORDINANCES:

TOWNSHIP CLERK _____ DATE _____

APPROVALS FOR THIS SITE PLAN ARE REQUIRED FROM THE FOLLOWING:

- TOWNSHIP OF LONG HILL PLANNING BOARD
- MORRIS COUNTY PLANNING BOARD

- GENERAL NOTES**
- SUBJECT PROPERTY KNOWN AS LOT 32 BLOCK 13701 AS SHOWN ON THE TOWNSHIP OF LONG HILL TAX MAP SHEET NO. 37
 - AREA OF LOT 32 BLOCK 13701 206,476 SF; 4.74 AC. TO CENTERLINE
 - OWNER/APPLICANT:
FRITZ & ROSEMARIE KIELBLOCK
183 MEYERSVILLE ROAD
GILLETTE, NJ 07933
908.507.4434
 - ATTORNEY:
FREDERICK ZELLEY, ESQ.
BISOGNO, LOEFFLER & ZELLEY
PO BOX 408
BASKING RIDGE, NJ 07920
908.766.6666
 - TOPOGRAPHY HAS BEEN FIELD VERIFIED AND IS BASED ON N.G.V.D. DATUM OF 1929.
 - CRITICAL AREA ON LOT 32: 88,564 SF
NON-CRITICAL AREA ON LOT 32: 101,845 SF (EXCLUDING R.O.W.)

PROPOSED LOT 32
CRITICAL AREA: 65,435 SF
NON-CRITICAL AREA: 63,187 SF

PROPOSED LOT 32.01
CRITICAL AREA: 23,129 SF
NON-CRITICAL AREA: 38,659 SF

ZONING SCHEDULE:

THIS PARCEL IS LOCATED IN THE R-2 (RESIDENTIAL ZONE)

REQUIREMENT	REQUIRED/ALLOWED	EXISTING	PROPOSED LOT 32	PROPOSED LOT 32.01
MIN. LOT AREA	45,000 SF	206,473 SF TO CL 190,419 SF TO SL 477.58 FT	128,622 SF	61,788 SF
MIN. LOT WIDTH	150 FT	477.58 FT	267.58 FT	210.0 FT
MIN. FRONT YARD	75 FT	235.3 FT	373.6 FT	253.2 FT
MIN. SIDE YARD	25 FT	109.0 FT	55.2 FT	28.0 FT
MIN. COMBINED SIDE YARD	30% LOT WIDTH	252.4 FT; 57.3%	117.7 FT	58.0 L.W.
MIN. REAR YARD	50 FT	339.9 FT	207.3 FT	74.0 FT
MAX. LOT COVERAGE	20%	6.4%	7.7%	9.4%
MAX. LOT COVERAGE OF NON-CRITICAL AREA	70%	11.9%	23.6%(INCLUDES COMMON DRIVE)	15.0%
MIN. FRONT SETBACK FROM CRITICAL AREA	50 FT	0 FT*	0 FT**	0 FT**
MIN. SIDE SETBACK FROM CRITICAL AREA	25 FT	0 FT*	19.9 FT**	0 FT**
MIN. REAR SETBACK FROM CRITICAL AREA	50 FT	0 FT*	15.9 FT**	0 FT**
MAX. BUILDING HEIGHT	2 1/2 STY/35 FT	-	28± FT	>35 FT**
MIN. ACCESSORY FRONT YARD	75 FT	244.4 FT BARN	244.4 FT BARN	NA
MIN. ACCESSORY SIDE YARD	10 FT	13.4 FT BARN	13.4 FT BARN	NA
MIN. ACCESSORY REAR YARD	10 FT	153.1 FT SHED	>10 FT	

* EXISTING NON-CONFORMING CONDITION
 ** PROPOSED NON-CONFORMING CONDITION

COVERAGE CALCULATIONS

EXISTING

HOUSE	1734 SF
PORCH	140 SF
PATIO	93 SF
BARN	1654 SF
SHEDS	1085 SF
COOP	94 SF
WALKS	108 SF
PAVED DRIVE	3870 SF
GRAVEL DRIVE	2886 SF
POOL DECK	465 SF
TOTAL	12,128 SF

PROPOSED LOT 32

HOUSE	1876 SF
PORCH	811 SF
WALK	211 SF
BARN	1654 SF
SHEDS	992 SF
COOP	94 SF
DRIVE	4212 SF
TOTAL	9850 SF

PROPOSED LOT 32

HOUSE	3261 SF
PORCH	248 SF
WALK	116 SF
TERRACE	921 SF
DRIVE	1272 SF
TOTAL	5816 SF

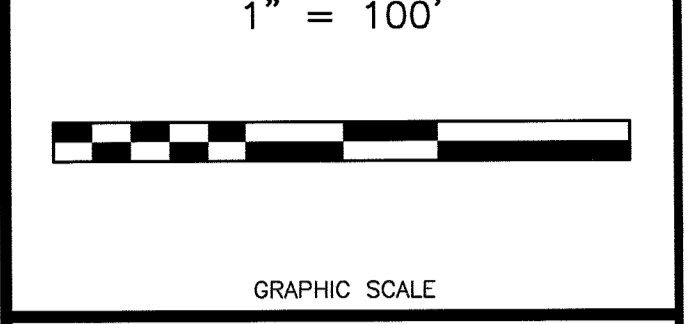
COMMON DRIVE
 DRIVE 5070 SF

DRAWN BY: SP CHECKED BY: WGH

JOB No. 19-087

BOOK

SCALE 1" = 100'



DATE NOVEMBER 16, 2020

REVISIONS

CERTIFICATE OF AUTHORIZATION No. 24GA27959700

NOTES

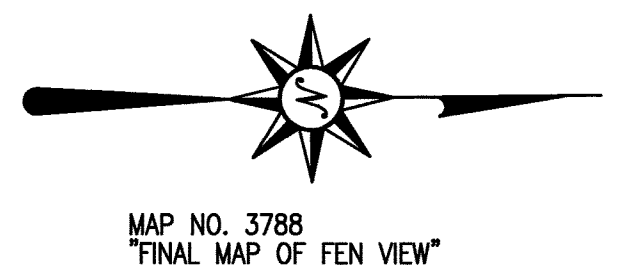
Murphy & Hollows Associates LLC
 CIVIL ENGINEERING AND SURVEYING
 192 CENTRAL AVENUE, STIRLING, NJ 07980
 908.560.1255 murphyhollows@gmail.com

MINOR SUBDIVISION
 PLAN FOR
 LOT 32
 BLOCK 13701
 183 MEYERSVILLE ROAD
 TOWNSHIP OF
 LONG HILL
 MORRIS COUNTY
 NEW JERSEY
 AREA MAP

AIDAN T. MURPHY
 N.J. LIC. PROFESSIONAL ENGINEER #21319
 1973-2016

William G. Hollows
WILLIAM G. HOLLOWES
 N.J. LIC. PROFESSIONAL ENGINEER & LAND SURVEYOR #27473
 N.J. PROFESSIONAL PLANNER #2530

FILE LF19-087 SHEET 1 OF 8



MAP NO. 3788
"FINAL MAP OF FEN VIEW"

DRAWN BY: SP	CHECKED BY: WGH
JOB No. 19-087	
BOOK	
SCALE 1" = 30'	
DATE NOVEMBER 16, 2020	
REVISIONS	
CERTIFICATE OF AUTHORIZATION No. 24GA27959700	
NOTES	
<p>Murphy & Hollows Associates LLC <small>CIVIL ENGINEERING AND SURVEYING 192 CENTRAL AVENUE, STIRLING, NJ 07980 908.580.1255 murphyhollows@gmail.com</small></p>	
MINOR SUBDIVISION PLAN FOR LOT 32 BLOCK 13701 183 MEYERSVILLE ROAD TOWNSHIP OF LONG HILL MORRIS COUNTY NEW JERSEY EXISTING CONDITIONS	
AIDAN T. MURPHY <small>N.J. LIC. PROFESSIONAL ENGINEER #21319 1973-2016</small>	
<p>WILLIAM G. HOLLOWES <small>N.J. LIC. PROFESSIONAL ENGINEER & LAND SURVEYOR #27473 N.J. PROFESSIONAL PLANNER #2530</small></p>	
FILE LF19-087	SHEET 2 OF 8

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JOB No.	19-087		
BOOK			
SCALE	1" = 30'		
DATE	NOVEMBER 16, 2020		
REVISIONS			

CERTIFICATE OF AUTHORIZATION
No. 24GA27959700

NOTES

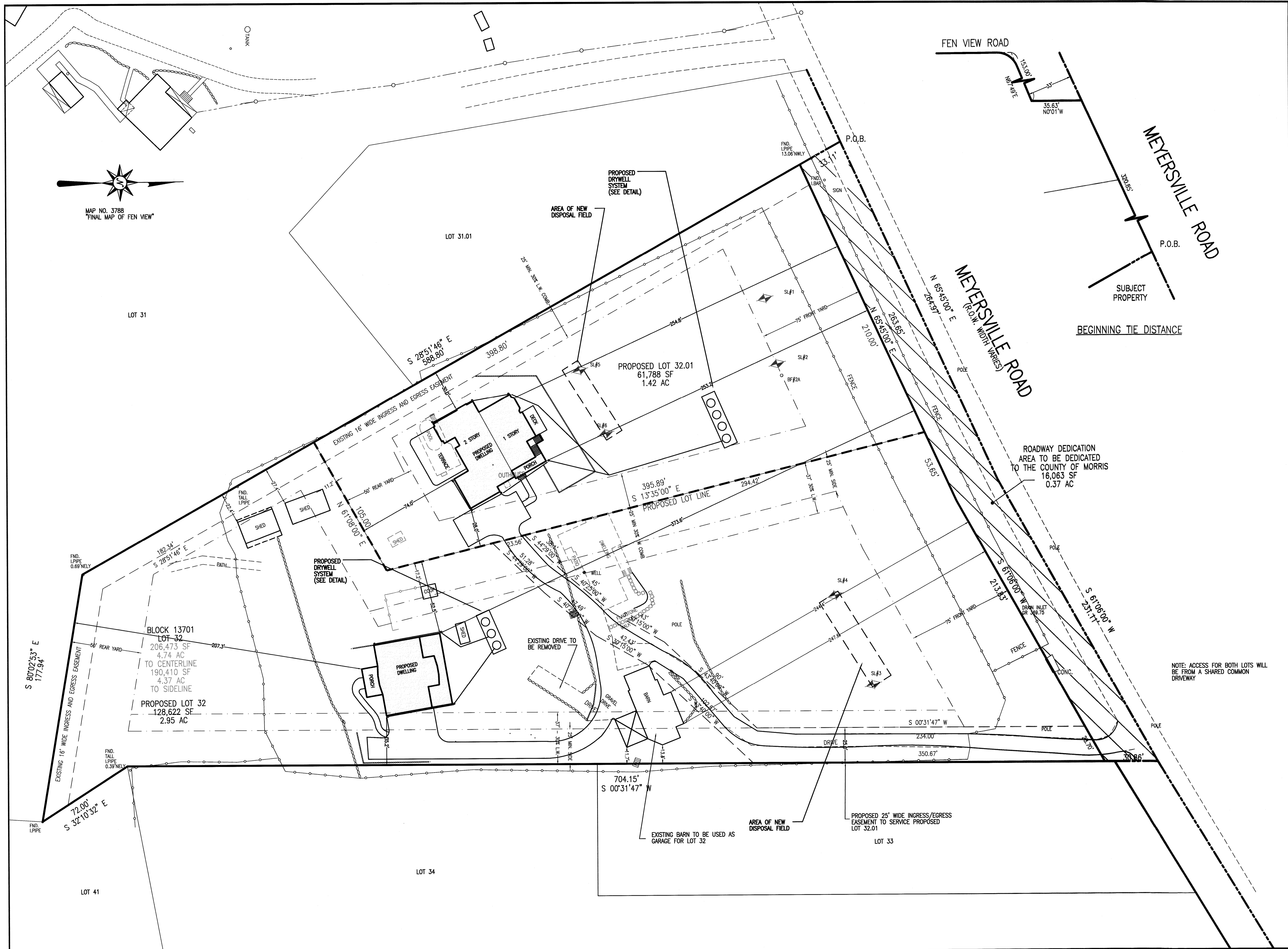
Murphy & Hollows Associates LLC
 CIVIL ENGINEERING AND SURVEYING
 192 CENTRAL AVENUE, STIRLING, NJ 07980
 908.580.1255 murphyhollows@gmail.com

MINOR SUBDIVISION
 PLAN FOR
 LOT 32
 BLOCK 13701
 183 MEYERSVILLE ROAD
 TOWNSHIP OF
 LONG HILL
 MORRIS COUNTY
 NEW JERSEY
 LAYOUT PLAN

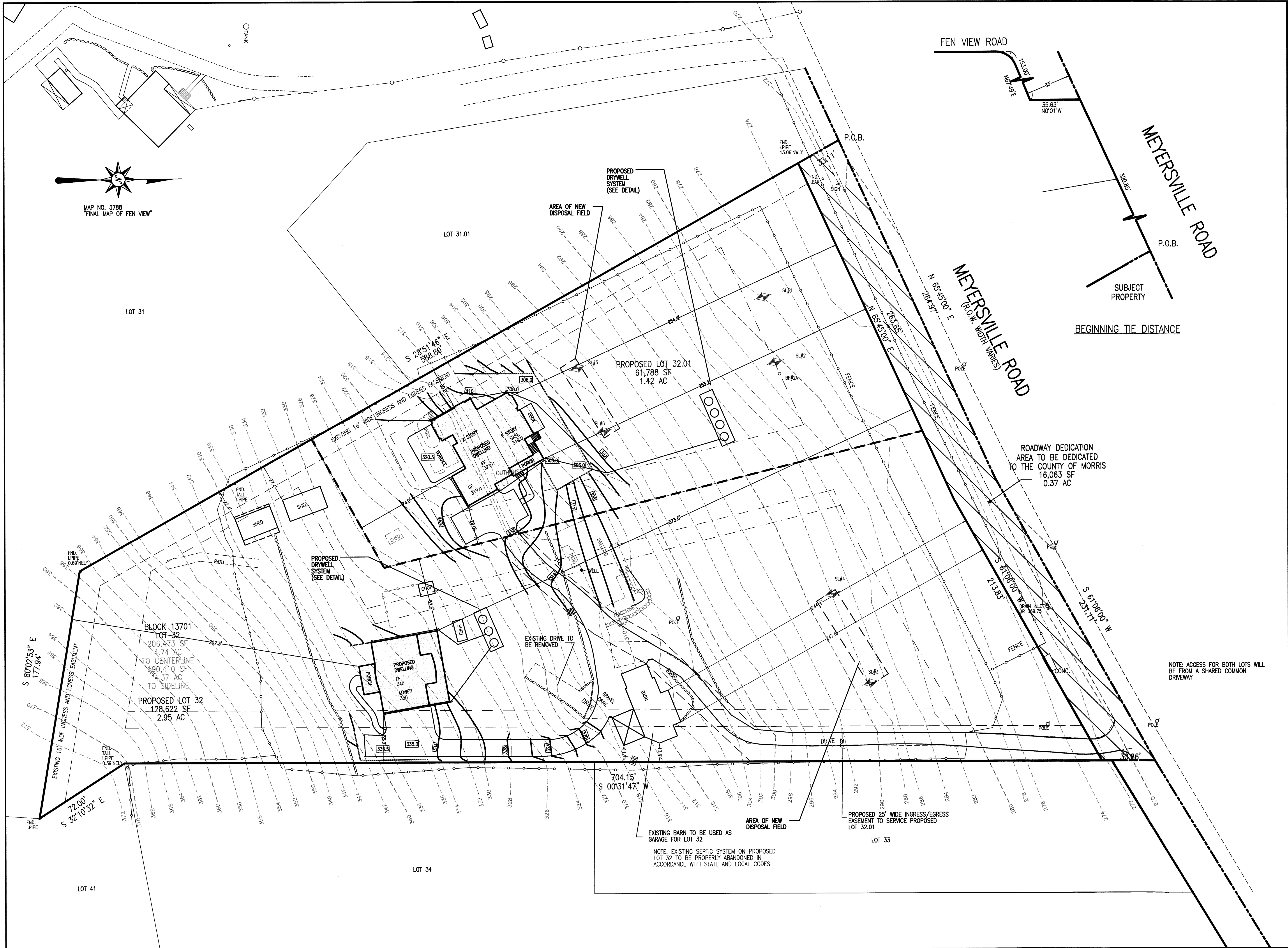
AIDAN T. MURPHY
 N.J. LIC. PROFESSIONAL ENGINEER #21319
 1973-2016

William G. Hollows
WILLIAM G. HOLLOWES
 N.J. LIC. PROFESSIONAL ENGINEER
 & LAND SURVEYOR #27473
 N.J. PROFESSIONAL PLANNER #2530

FILE	SHEET
LF19-087	3 OF 8



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MAP NO. 3788
"FINAL MAP OF FEN VIEW"

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JOB No. 19-087	
BOOK	
SCALE 1" = 30'	
GRAPHIC SCALE	
DATE NOVEMBER 16, 2020	
REVISIONS	
CERTIFICATE OF AUTHORIZATION No. 24GA27959700	
NOTES	
<p>Murphy & Hollows Associates LLC <small>CIVIL ENGINEERING AND SURVEYING</small> <small>192 CENTRAL AVENUE, STIRLING, NJ 07980</small> <small>908.390.1225 murphyhollows@gmail.com</small></p>	
<p>MINOR SUBDIVISION PLAN FOR LOT 32 BLOCK 13701 183 MEYERSVILLE ROAD TOWNSHIP OF LONG HILL MORRIS COUNTY NEW JERSEY GRADING PLAN</p>	
<p>AIDAN T. MURPHY <small>N.J. LIC. PROFESSIONAL ENGINEER #21319</small> <small>1973-2016</small></p>	
<p><i>William G. Hollows</i> WILLIAM G. HOLLOWES <small>N.J. LIC. PROFESSIONAL ENGINEER</small> <small>& LAND SURVEYOR #27473</small> <small>N.J. PROFESSIONAL PLANNER #2530</small></p>	
FILE LF19-087	SHEET 4 OF 8

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SCALE 1" = 30'	
GRAPHIC SCALE	
DATE NOVEMBER 16, 2020	
REVISIONS	

CERTIFICATE OF AUTHORIZATION
No. 24GA27959700

NOTES

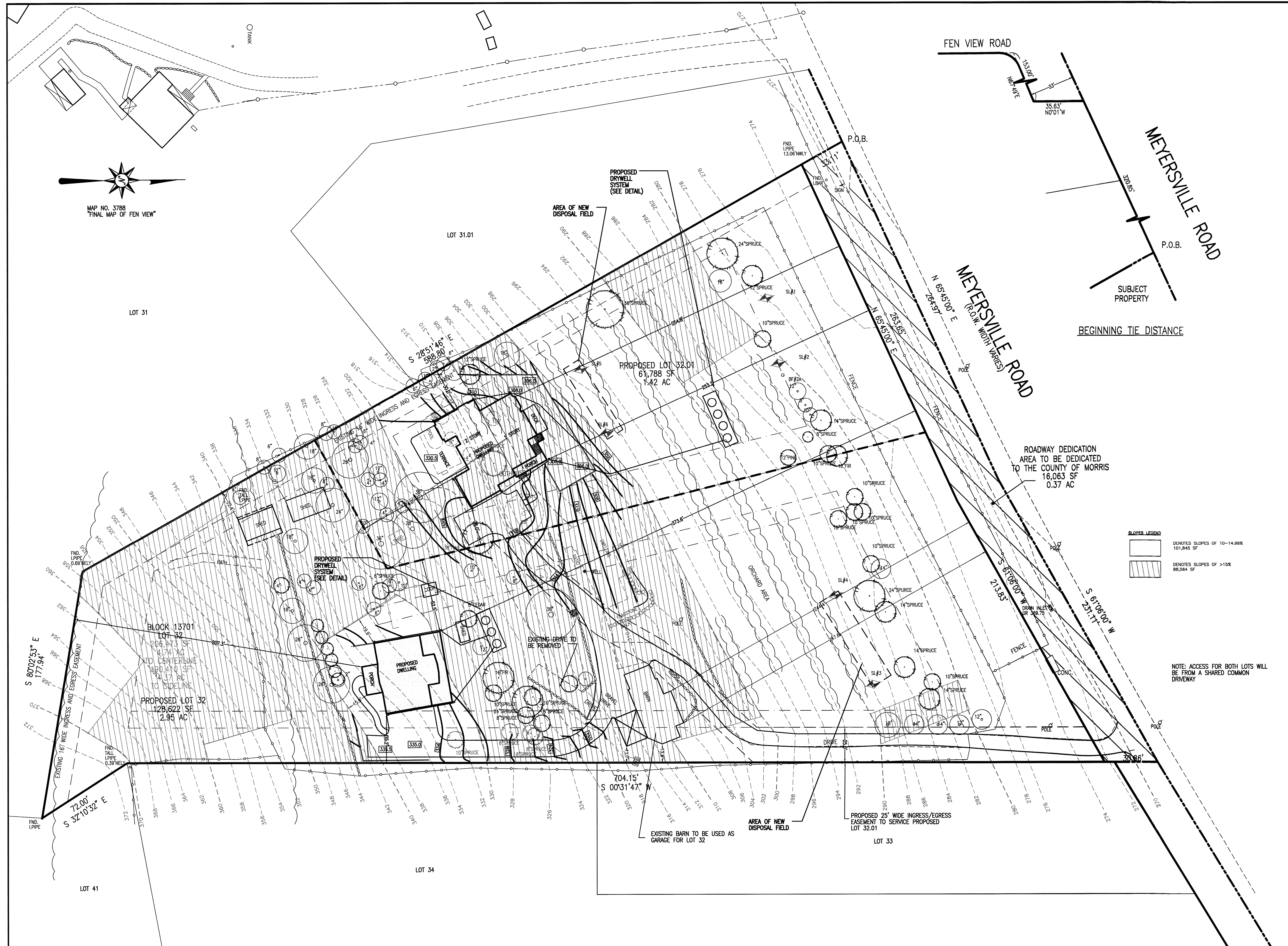
Murphy & Hollows Associates LLC
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 192 CENTRAL AVENUE, STIRLING, NJ 07980
 908.580.1255 murphyhollows@gmail.com

MINOR SUBDIVISION
 PLAN FOR
 LOT 32
 BLOCK 13701
 183 MEYERSVILLE ROAD
 TOWNSHIP OF
 LONG HILL
 MORRIS COUNTY
 NEW JERSEY
 TOPOGRAPHY & SLOPES PLAN

AIDAN T. MURPHY
 N.J. LIC. PROFESSIONAL ENGINEER #21319
 1973-2016

William G. Hollows
WILLIAM G. HOLLOWES
 N.J. LIC. PROFESSIONAL ENGINEER
 & LAND SURVEYOR #27473
 N.J. PROFESSIONAL PLANNER #2530

FILE	SHEET
LF19-087	5 OF 8



MAP NO. 3788
 FINAL MAP OF FEN VIEW



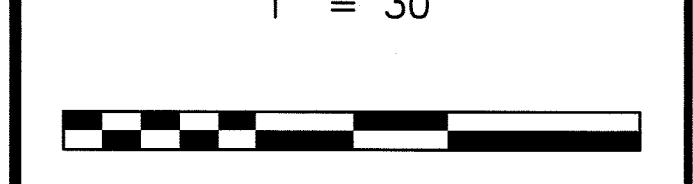
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JOB No. 19-087

BOOK

SCALE 1" = 30'



GRAPHIC SCALE

DATE NOVEMBER 16, 2020

REVISIONS

CERTIFICATE OF AUTHORIZATION No. 24GA27959700

NOTES

MINOR SUBDIVISION PLAN FOR LOT 32 BLOCK 13701 183 MEYERSVILLE ROAD TOWNSHIP OF LONG HILL MORRIS COUNTY NEW JERSEY SOIL EROSION PLAN

Murphy & Hollows Associates LLC CIVIL ENGINEERING AND SURVEYING 192 CENTRAL AVENUE, STIRLING, NJ 07980 908.560.1255 murphyhollows@gmail.com

MINOR SUBDIVISION PLAN FOR LOT 32 BLOCK 13701 183 MEYERSVILLE ROAD TOWNSHIP OF LONG HILL MORRIS COUNTY NEW JERSEY SOIL EROSION PLAN

AIDAN T. MURPHY N.J. LIC. PROFESSIONAL ENGINEER #21319 1973-2016

WILLIAM G. HOLLOWES N.J. LIC. PROFESSIONAL ENGINEER & LAND SURVEYOR #27473 N.J. PROFESSIONAL PLANNER #2530

FILE LF19-087 SHEET 6 OF 8



MAP NO. 3788 FINAL MAP OF FEN VIEW

LOT 31

TYPICAL STOCKPILE LOCATION WITH SILT FENCE ON ALL SIDES

LIMIT OF DISTURBANCE 58,400±SF

BLOCK 13701 LOT 32 206,473 SF 4.74 AC TO CENTERLINE 890,410 SF 20.37 AC TO SIDELINE

PROPOSED LOT 32 128,622 SF 2.95 AC

704.15' S 00°31'47" W

EXISTING BARN TO BE USED AS GARAGE FOR LOT 32

PROPOSED 25' WIDE INGRESS/EGRESS EASEMENT TO SERVICE PROPOSED LOT 32.01

ROADWAY DEDICATION AREA TO BE DEDICATED TO THE COUNTY OF MORRIS 16,063 SF 0.37 AC

NOTE: ACCESS FOR BOTH LOTS WILL BE FROM A SHARED COMMON DRIVEWAY

INSTALL GRAVEL ANTI-TRACKING PAD IF EXISTING DRIVEWAY IS NOT ADEQUATE

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DUST CONTROL

WHEN REQUIRED ONE OR MORE OF THE FOLLOWING METHODS SHALL BE USED FOR DUST CONTROL:

- MULCHES - SEE NOTES FOR TEMPORARY STABILIZATION
- VEGETATIVE COVER - SEE NOTES FOR TEMPORARY AND PERMANENT STABILIZATION
- SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS) KEEP TRAFFIC OFF THESE AREAS

	WATER DILUTION	TYPE OF NOZZLE	APPLY GAL/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) - SPRAY ON			
POLYACRYLAMIDE (PAM) - DRY SPRAY			
APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD.			
ADDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

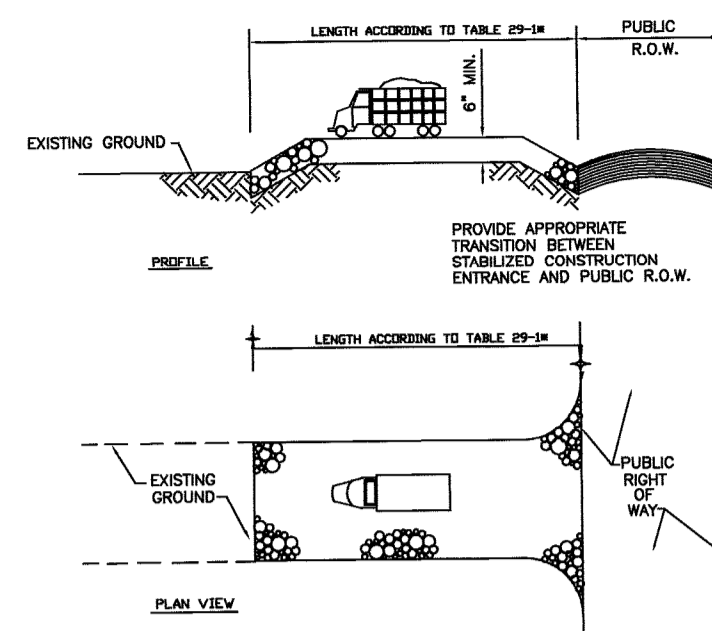
TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACE ABOUT 12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE DESIRED EFFECT.

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AROUND PLANTS.

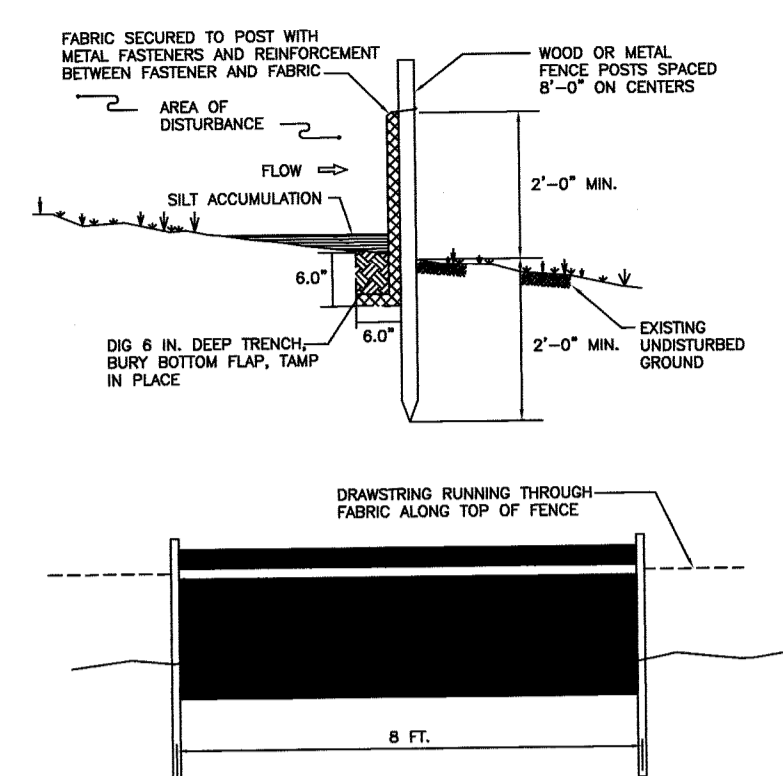
STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.



STABILIZED CONSTRUCTION ACCESS

NOT TO SCALE

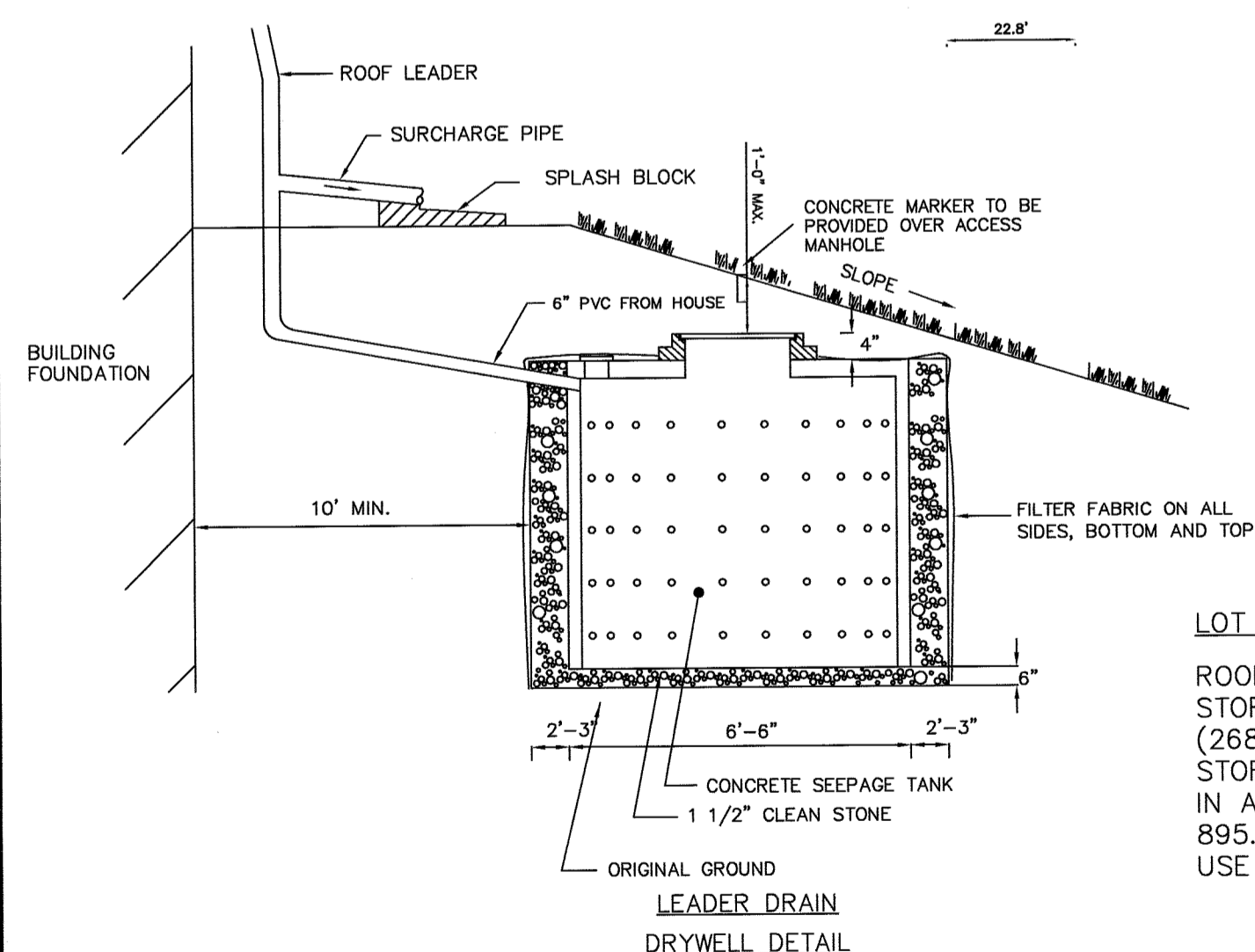
PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0-2%	50 FT.	100 FT.
2-5%	100 FT.	200 FT.
>5%	ENTIRE SURFACE STABILIZED WITH FABR. BASE COURSE	



REQUIREMENTS FOR SILT FENCE:

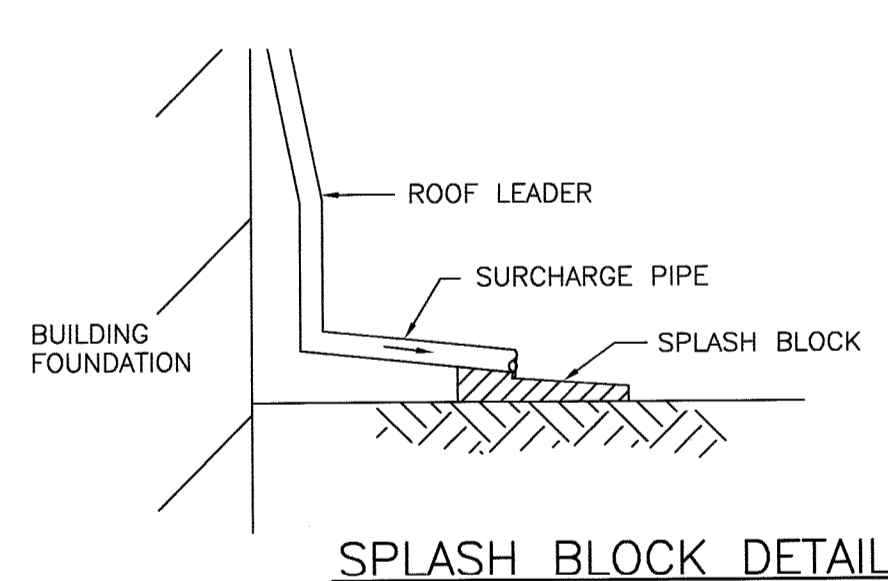
- FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND (FIG. 25-2). POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1 1/2 INCHES.
- A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT LEAST 2 FEET HIGH MAY BE UTILIZED, FASTENED TO THE FENCE POSTS TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC. THESE SPACE FOR OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED.
- A GEOTEXTILE FABRIC, RECOMMENDED FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2 FEET ABOVE THE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (WIRE, GALVANIZED, GALVANNE, WASHERS, ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH.

SILT FENCE



LOT 32

ROOF AREA = 2687 SF
 STORE 4" OF RUNOFF
 $(2687 \text{ SF})(4/12) = 895.7 \text{ CF}$
 STORAGE VOLUME OF A 6' DIA. DRYWELL
 IN A 10'x10' TRENCH = 57 CF/LF
 $895.7 \text{ CF}/57 \text{ CF/LF} = 15.7 \text{ LF}$
 USE 3 6' DIA DRYWELL 6'-0" DEEP IN 10'x30' TRENCH



SPLASH BLOCK DETAIL

LOT 32.01

ROOF AREA = 3507 SF
 STORE 4" OF RUNOFF
 $(3507 \text{ SF})(4/12) = 1169 \text{ CF}$
 STORAGE VOLUME OF A 6' DIA. DRYWELL
 IN A 10'x10' TRENCH = 57 CF/LF
 $1169 \text{ CF}/57 \text{ CF/LF} = 20.5 \text{ LF}$
 USE 4 6' DIA DRYWELL 6'-0" DEEP IN 10'x40' TRENCH

NOTE: THE PROPOSED DRAINAGE IS DEPENDENT UPON THE PERCOLATION RATE OF THE EXISTING SOIL AND WATER TABLE. THE APPLICANT SHALL COMPLETE AN ANALYSIS OF THE SOIL PRIOR TO THE INSTALLATION OF THE SEEPAGE PIT. A COPY OF THE RESULTS SHALL BE FORWARDED TO THE TOWNSHIP ENGINEER'S OFFICE. SHOULD THE EXISTING SOIL BE UNSUITABLE, AN ALTERNATE METHOD SHALL BE DESIGNED AND SUBMITTED TO THE TOWNSHIP ENGINEER'S OFFICE FOR REVIEW AND APPROVAL.

DRAWN BY: SP
 CHECKED BY: WGH
 JOB No. 19-087
 BOOK
 SCALE 1" = 30'
 GRAPHIC SCALE

DATE NOVEMBER 16, 2020

REVISIONS

CERTIFICATE OF AUTHORIZATION
 No. 246A27959700

NOTES

Murphy & Hollows Associates LLC
 CIVIL ENGINEERING AND SURVEYING
 192 CENTRAL AVENUE, STIRLING, NJ 07980
 908.580.1255 murphyhollows@gmail.com

MINOR SUBDIVISION
 PLAN FOR
 LOT 32
 BLOCK 13701
 183 MEYERSVILLE ROAD
 TOWNSHIP OF
 LONG HILL
 MORRIS COUNTY
 NEW JERSEY
 CONSTRUCTION DETAILS

AIDAN T. MURPHY
 N.J. LIC. PROFESSIONAL ENGINEER #21319
 1973-2016

William G. Hollows
WILLIAM G. HOLLOWES
 N.J. LIC. PROFESSIONAL ENGINEER
 & LAND SURVEYOR #27473
 N.J. PROFESSIONAL PLANNER #2530

FILE	SHEET
LF19-087	7
	OF
	8

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**Morris County Soil Conservation District
Soil Erosion and Sediment Control Notes**

- All Soil Erosion and Sediment Control Practices will be installed in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey, and will be in place prior to any major soil disturbance, or in their proper sequence and maintained until permanent protection is established.
- Any disturbed area that will be left exposed for more than thirty (30) days and not subject to construction traffic shall immediately receive a temporary seeding. If the season prohibits temporary seeding, the disturbed areas will be mulched with straw or hay and tacked in accordance with the New Jersey Standards. See Note 21 below.
- Permanent vegetation is to be established on exposed areas within ten (10) days after final grading. Mulch is to be used for protection until vegetation is established. See Note 22 below.
- Immediately following initial disturbance or rough grading. All critical areas (steep slopes, sandy soils, wet conditions) subject to erosion will receive a temporary seeding in accordance with Note 21 below.
- Temporary Diversion Berms are to be installed on all cleared roadways and easement areas. See the Diversion Detail.
- Permanent Seeding and stabilization to be in accordance with the "Standards for Permanent Vegetative Cover for Soil Stabilization Cover". Specified rates and locations shall be on the approved Soil Erosion and Sediment Control Plan.
- The site shall at all times be graded and maintained so that all stormwater runoff is diverted to Soil Erosion and Sediment Control facilities.
- All sedimentation structures (silt fence, inlet filters, and sediment basins) will be inspected and maintained daily.
- Stockpiles shall not be located within 50' of a floodplain, slope, drainage facility, or roadway. All stockpiles bases shall have a silt fence properly entrenched at the toe of slope.
- A Stabilized Construction Access will be installed, whenever an earthen road intersects with a paved road. See the Stabilized Construction Access detail and chart for dimensions.
- All new roadways will be treated with suitable subbase upon establishment of final grade elevations.
- Paved roadways must be kept clean at all times.
- Before discharge points become operational, all storm drainage outlets will be stabilized as required.
- All dewatering operations must be discharged directly into a sediment filter area. The filter should be composed of a fabric or approved material. See the Dewatering detail.
- All sediment basins will be cleaned when the capacity has been reduced by 50%. A clean out elevation will be identified on the plan and a marker installed on the site.

- During and after construction, the applicant will be responsible for the maintenance and upkeep of the drainage structures, vegetation cover, and any other measures deemed appropriate by the District. Said responsibility will end when completed work is approved by the Morris County Soil Conservation District.
- All trees outside the disturbance limit indicated on the subject plan or those trees within the disturbance area which are designated to remain after construction are to be protected with tree protection devices. See the Tree Protection detail.
- The Morris County Soil Conservation District may request additional measures to minimize on site or off site erosion problems during construction.
- The Morris County Soil Conservation District must be notified, in writing, at least 72 hours prior to any land disturbance, and a pre-construction meeting held.
- Contractor to set up a meeting with the inspector for periodic inspections of the Temporary Sediment Basin prior to and during its construction.
- Topsoil Stockpile Protection**
 - Apply Ground Limestone at a rate of 90 lbs per 1000 sq. ft.
 - Apply fertilizer (10-20-10) at a rate of 11 lbs. per 1000 sq. ft.
 - Apply Perennial Ryegrass seed at 1 lb. per 1000 sq. ft. and Annual Ryegrass at 1 lb. per 1000 sq. ft.
 - Mulch stockpile with straw or hay at a rate of 90 lbs. per 1000 sq. ft.
 - Apply a liquid mulch binder or tack to straw or hay mulch.
 - Properly entrench a silt fence at the bottom of the stockpile.
- Temporary Stabilization Specifications**
 - Apply Ground Limestone at a rate of 90 lbs per 1000 sq. ft.
 - Apply fertilizer (10-20-10) at a rate of 11 lbs. per 1000 sq. ft.
 - Apply Perennial Ryegrass seed at 1 lb. per 1000 sq. ft. and Annual Ryegrass at 1 lb. per 1000 sq. ft.
 - Mulch stockpile with straw or hay at a rate of 90 lbs. per 1000 sq. ft.
 - Apply a liquid mulch binder or tack to straw or hay mulch.
- Permanent Stabilization Specifications**
 - Apply topsoil to a depth of 5 inches (unsettled).
 - Apply Ground Limestone at a rate of 90 lbs per 1000 sq. ft. and work four inches into soil.
 - Apply fertilizer (10-20-10) at a rate of 11 lbs. per 1000 sq. ft.
 - Apply Hard Fescue seed at 2.7 lbs. per 1000 sq. ft. and Creeping Red Fescue seed at 0.7 lbs per 1000 sq. ft. and Perennial Ryegrass seed at 0.25 lbs per 1000 sq. ft.
 - Mulch stockpile with straw or hay at a rate of 90 lbs. per 1000 sq. ft.
 - Apply a liquid mulch binder or tack to straw or hay mulch.

*NOTE: 72 HOURS PRIOR TO ANY SOIL DISTURBANCE, NOTICE IN WRITING, SHALL BE GIVEN TO THE MORRIS COUNTY SOIL CONSERVATION DISTRICT AND A PRE-CONSTRUCTION MEETING HELD.

SEQUENCE OF CONSTRUCTION

- INSTALL SILT FENCE ALONG LIMITS OF DISTURBANCE _____ 1 DAY
- STRIP TOPSOIL AND STOCKPILE, INSTALL SILT FENCE ON LOW SIDE AND TEMPORARY SEED _____ 1 DAY
- INSTALL TEMPORARY DRIVEWAY (IF REQUIRED) _____ 1 DAY
- REMOVE EXISTING BUILDINGS _____ 2 DAYS
- BEGIN BUILDING CONSTRUCTION _____ 6 MONTHS
- INSTALL DRAINAGE AND DRYWELL SYSTEM (IF REQUIRED) _____ 5 DAYS
- FINE GRADE SITE _____ 2 DAYS
- REMOVE SILT FENCE AND ANY REMAINING SOIL EROSION AND SEDIMENT CONTROL MEASURES _____ 2 DAYS
- TOPSOIL AND SEED SITE _____ 1 DAY

Soil Management and Preparation

Subgrade soils prior to the application of topsoil shall be free of excessive compaction to a depth of 6.0 inches to enhance the establishment of permanent vegetative cover.

This section of this Standard addresses the potential for excessive soil compaction in light of the intended land use, testing for excessive soil compaction where permanent vegetation is to be established and mitigation of excessive soil compaction when appropriate.

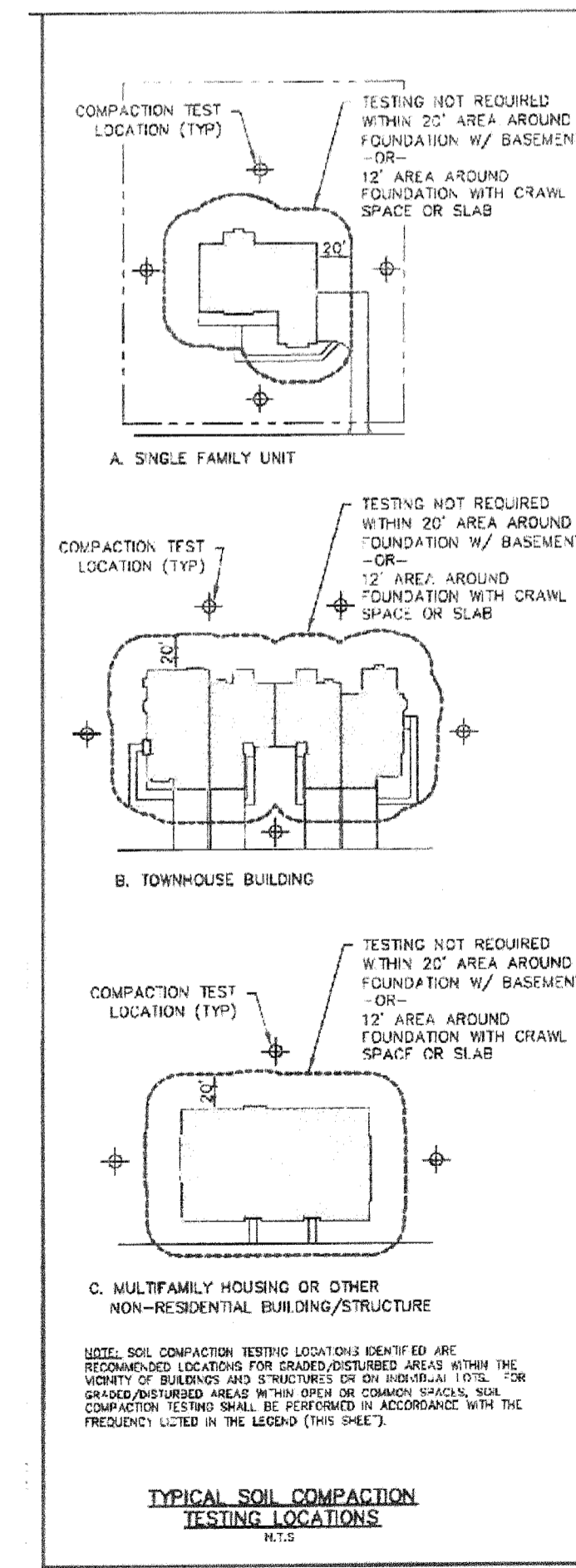
Due to use or setting, certain disturbed areas will not require compaction remediation including, but not limited to the following:

- Within 20 feet of building foundations with basements, 12 feet from slab or crawl space construction.
- Where soils or gravel surfaces will be required to support post-construction vehicular traffic loads such as roads, parking lots and driveways (including gravel surfaces), bicycle paths or pedestrian walkways (sidewalks etc)
- Airports, railways or other transportation facilities
- Areas requiring industry or government specified soil designs, including golf courses, landfills, wetland restoration, septic disposal fields, wetland ponds, etc.
- Areas governed or regulated by other local, state or federal regulations which dictate soil conditions
- Brownfields (capped uses), urban redevelopment areas, in-fill areas, recycling yards, junk yards, quarries and
- Slopes determined to be inappropriate for safe operation of equipment
- Portions of a site where no heavy equipment travel or other disturbance has taken place
- Areas receiving temporary vegetative stabilization in accordance with the Standard.
- Where the area available for remediation practices is 500 square feet or less in size.
- Locations containing shallow (close to the surface) bedrock conditions.

Areas of the site which are subject to compaction testing and/or mitigation shall be graphically denoted on the certified soil erosion control plan.

Soil compaction remediation or testing to prove remediation is not necessary will be required in areas where permanent vegetation is to be established that are not otherwise exempted above. Testing method shall be selected, and soil compaction testing shall be performed by the contractor or other project owner's representative (e.g. engineer). A minimum of two (2) tests shall be performed for projects with an overall limit of disturbance of up to one (1) acre and at a rate of two (2) tests per acre of the overall limit of disturbance for larger areas which shall be evenly distributed over the area of disturbance subject to testing. Tests shall be performed in areas representative of the construction activity prevailing in the area. In the event this testing indicates compaction in excess of the maximum thresholds indicated for the testing method, the contractor/owner shall have the option to perform compaction mitigation over the entire disturbed area (excluding exempt areas) or to perform additional testing to establish the limits of excessive compaction whereupon only the excessively compacted areas would require compaction mitigation.

Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage (6" minimum depth) or similar) is proposed as part of the sequence of construction.



Soil De-compaction and Testing Requirements

Soil Compaction Testing Requirements

- Subgrade soils prior to the application of topsoil (see permanent seeding and stabilization notes for topsoil requirements) shall be free of excessive compaction to a depth of 6.0 inches to enhance the establishment of permanent vegetative cover.
- Areas of the site which are subject to compaction testing and/or mitigation are graphically denoted on the certified soil erosion control plan.
- Compaction testing locations are denoted on the plan. A copy of the plan or portion of the plan shall be used to mark locations of tests, and attached to the compaction remediation form, available from the local soil conservation district. This form must be filled out and submitted prior to receiving a certificate of compliance from the district.
- In the event that testing indicates compaction in excess of the maximum thresholds indicated for the simplified testing methods (see details below), the contractor/owner shall have the option to perform either (1) compaction mitigation over the entire mitigation area denoted on the plan (excluding exempt areas), or (2) perform additional, more detailed testing to establish the limits of excessive compaction whereupon only the excessively compacted areas would require compaction mitigation. Additional detailed testing shall be performed by a trained, licensed professional.

Compaction Testing Methods

- Probing Wire Test (see detail)
- Hand-held Penetrometer Test (see detail)
- Tube Bulk Density Test (licensed professional engineer required)
- Nuclear Density Test (licensed professional engineer required)

Note: Additional testing methods which conform to ASTM standards and specifications, and which produce a dry weight, soil bulk density measurement may be allowed subject to District approval.

Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage (6" minimum depth) or similar) is proposed as part of the sequence of construction.

Procedures for Soil Compaction Mitigation

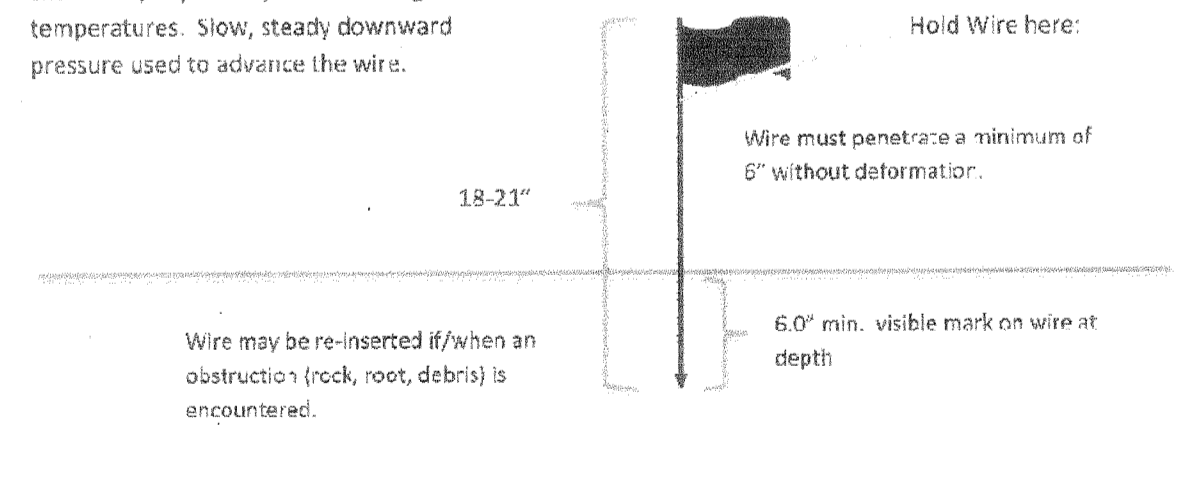
Procedures shall be used to mitigate excessive soil compaction prior to placement of topsoil and establishment of permanent vegetative cover.

Restoration of compacted soils shall be through deep scarification/tillage (6" minimum depth) where there is no danger to underground utilities (cables, irrigation systems, etc.). In the alternative, another method as specified by a New Jersey Licensed Professional Engineer may be substituted subject to District Approval.

Simplified Testing Methods

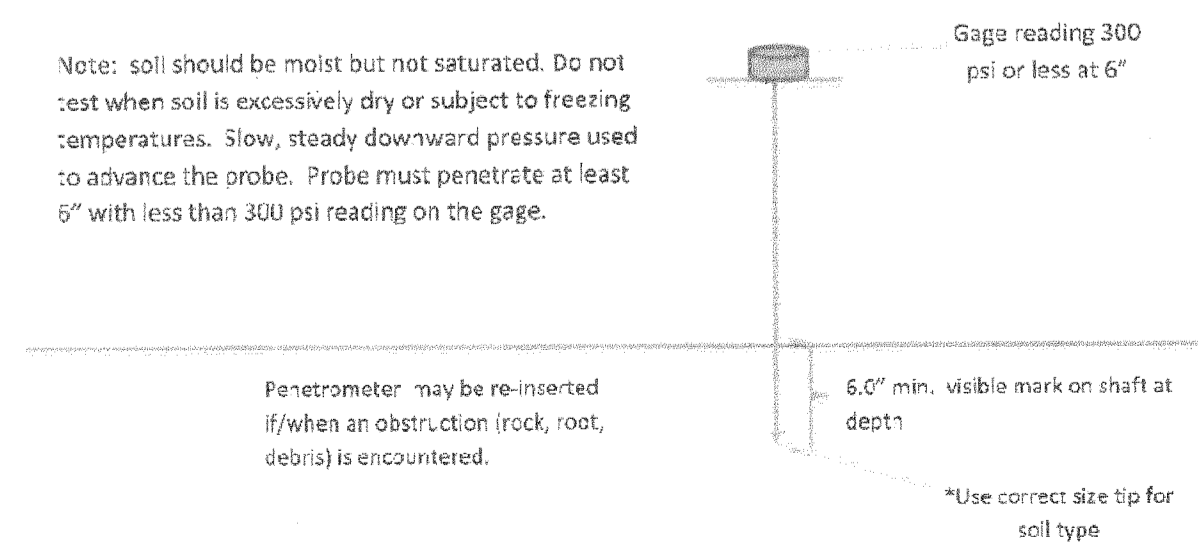
Probing Wire Test: 15.5 ga steel wire (survey flag)

Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the wire.



Handheld Soil Penetrometer Test

Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the probe. Probe must penetrate at least 6 inches with less than 300 psi reading on the gage.

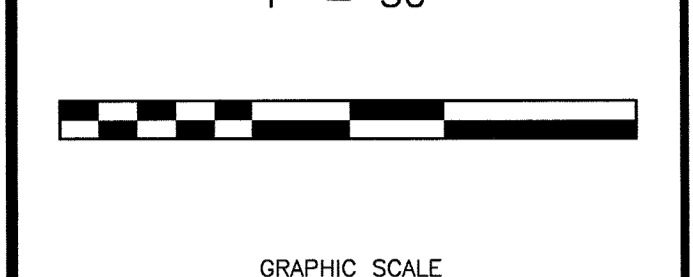


DRAWN BY: SP CHECKED BY: WGH

JOB No. 19-087

BOOK

SCALE 1" = 30'



DATE NOVEMBER 16, 2020

REVISIONS

CERTIFICATE OF AUTHORIZATION No. 24GAZ7959700

NOTES

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MINOR SUBDIVISION
PLAN FOR
LOT 32
BLOCK 13701
183 MEYERSVILLE ROAD
TOWNSHIP OF
LONG HILL
MORRIS COUNTY
NEW JERSEY
CONSTRUCTION DETAILS

AIDAN T. MURPHY
N.J. LIC. PROFESSIONAL ENGINEER #21319
1973-2016

William G. Hollows
WILLIAM G. HOLLOWES
N.J. LIC. PROFESSIONAL ENGINEER & LAND SURVEYOR #27473
N.J. PROFESSIONAL PLANNER #2530

FILE LF19-087 SHEET 8 OF 8