

INDEX TO DRAWINGS		
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1 of 1.	TRUCK TURN EXHIBIT	
	BUILDING ELEVATIONS (BY OTHERS)	

PERMITS & APPROVALS		
TYPE	PERMIT NUMBER	APPROVED
NHDES ALTERATION OF TERRAIN	AOT-1238	4/12/17
	AOT-1740	1/26/20
NHDES SEWER EXTENSION	D2017-0301	4/3/17

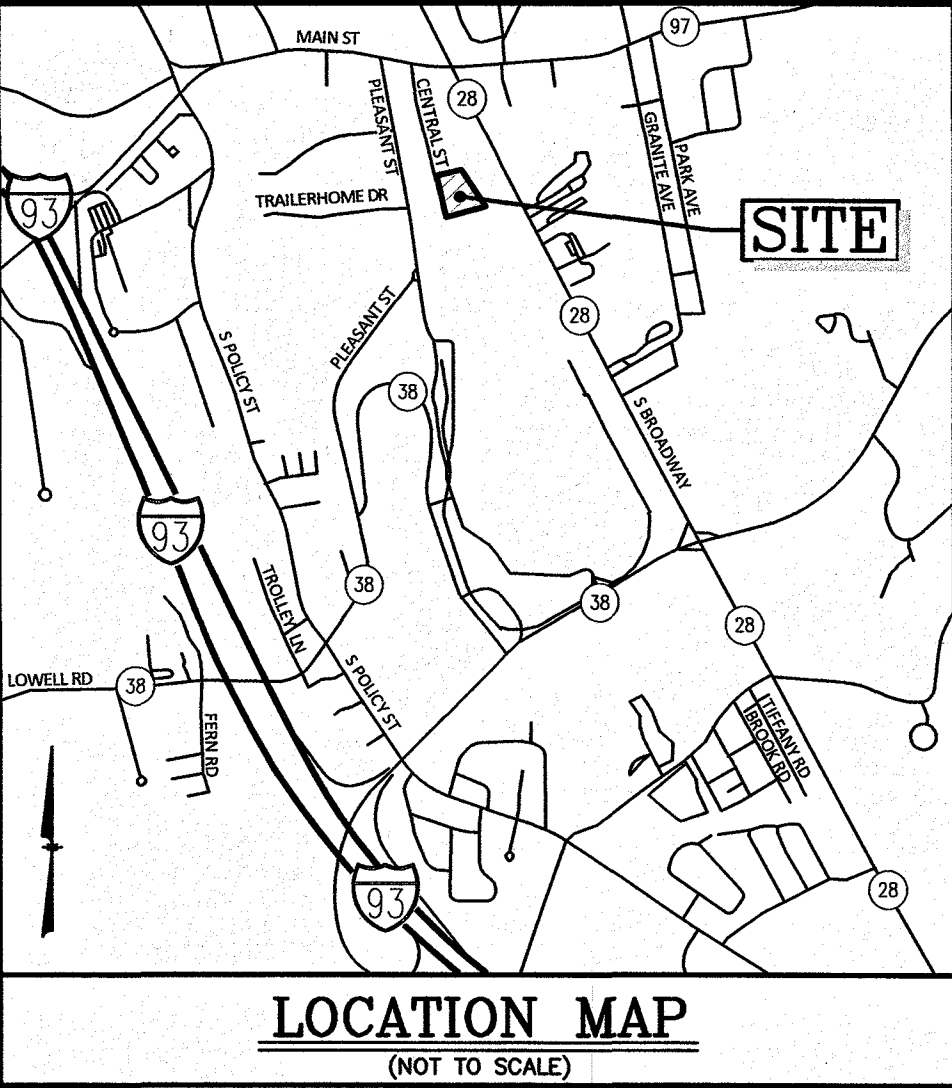
WAIVERS & VARIANCES		
1)	SEE VARIANCE GRANTED BY THE SALEM ZONING BOARD OF ADJUSTMENT ON SEPTEMBER 6, 2016, PETITION #8, TO ALLOW THE PROVISIONS OF THE LARGE SCALE REDEVELOPMENT ORDINANCE (SECTION 490-710, SUBSECTIONS A THROUGH E) TO APPLY TO THE PORTION OF MAP 98 LOT 12502 THAT IS IN THE RESIDENTIAL DISTRICT. (NOTE: MAP 98 LOT 12502 HAS SINCE BEEN SUBDIVIDED.)	

SALEM PLANNING BOARD		
1)	ON MARCH 9, 2017 THE SALEM PLANNING BOARD GRANTED THE FOLLOWING CONDITIONAL USE PERMITS: A) 490-501 B. USE - RESIDENTIAL USE IS NOT ALLOWED IN THE COMMERCIAL-INDUSTRIAL C DISTRICT B) 490-501 C. BUILDING SETBACK - THE MINIMUM PROPOSED BUILDING SETBACKS ARE 10' FRONT, 10' SIDE AND 10' REAR. C) 490-501 C. BUILDING HEIGHT - 3 STORY BUILDINGS ARE PROPOSED IN THE RESIDENTIAL DISTRICT WHERE 2½ STORIES ARE ALLOWED.	
2)	ON MARCH 9, 2017 THE SALEM PLANNING BOARD VOTED TO APPROVE THE VILLAS AT NORTH TUSCAN VILLAGE SITE PLAN SUBJECT TO THE FOLLOWING CONDITIONS: PRIOR TO BUILDING PERMIT: 1. PAY FOR OUTSIDE INSPECTIONS PER DIRECTION OF ENGINEERING DEPT.; 2. SUBMIT STATE PERMITS/APPROVALS (SEWER EXTENSION, ALTERATION OF TERRAIN); 3. COMPLY WITH LOCAL FLOODPLAIN DEVELOPMENT REGULATIONS; 4. NOTE CONDITIONAL USE PERMITS ON PLAN; 5. SUBMIT CONSTRUCTION ACCESS PLAN; 6. NOTE NO USE OF CENTRAL STREET (BEYOND EXISTING LIMIT) UNTIL CENTRAL STREET/MAIN STREET IMPROVEMENT IS COMPLETED; 7. INSTALL WELL FOR IRRIGATION AND NOTE ON PLAN; 8. SUBMIT APPROVAL FROM ENGINEERING DIVISION PER 3/9/17 MEMO; 9. SUBMIT APPROVAL FROM ROCKINGHAM COUNTY CONSERVATION DISTRICT; 10. SUBMIT APPROVAL FROM DESIGN GUIDELINES CONSULTANT; 11. NOTE NO MORE THAN 50 UNITS TO BE BUILT PER YEAR; 12. ADD REVISED ELEVATION DRAWINGS TO PLANS; PRIOR TO OCCUPANCY: 13. PAY IMPACT FEES - \$4577/UNIT; 14. CONSTRUCT ALL SITE IMPROVEMENTS (INCLUDING BUILDING LOCATION, DIMENSIONS, SETBACKS, SITE GRADING, UTILITIES, DRAINAGE, LANDSCAPING, LIGHTING, PARKING SPACES) IN ACCORDANCE TO APPROVED PLAN; 15. PROVIDE CERTIFIED AS-BUILT SITE PLAN; 16. COMPLETE IMPROVEMENTS NOTED IN TRAFFIC MITIGATION TABLE; OTHER: 17. ALL REPRESENTATIONS MADE BY APPLICANT OR AGENTS AND ALL NOTES ON PLANS ARE INCORPORATED AS PART OF APPROVAL	
3)	ON NOVEMBER 26, 2019 THE SALEM PLANNING BOARD GRANTED THE FOLLOWING WAIVER FOR PHASE 2: A) 490-501 C. BUILDING SETBACK - THE MINIMUM PROPOSED BUILDING SETBACKS ARE 13' FRONT, 10' SIDE, 18' REAR (BUILDING) AND 12' REAR (BULKHEAD).	
4)	ON NOVEMBER 26, 2019 THE SALEM PLANNING BOARD VOTED TO APPROVE THE AMENDED PHASE 2 SITE PLAN SUBJECT TO THE FOLLOWING CONDITIONS: PRIOR TO BUILDING PERMIT: 1. SUBMIT APPROVAL FROM ENGINEERING DIV. PER 11/26/19 MEMO; 2. SUBMIT APPROVAL FROM DESIGN REVIEW CONSULTANT; 3. PAY FOR OUTSIDE INSPECTIONS PER DIRECTION OF ENGINEERING DIV.; 4. SUBMIT STATE PERMITS (SEWER EXTENSION, ALTERATION OF TERRAIN); 5. NOTE CONDITIONAL USE PERMIT FOR REDUCED BUILDING SETBACKS ON PLAN; 6. SUBMIT APPROVAL FROM ABUTTER FOR PLANTINGS OVER LOT LINE; PRIOR TO OCCUPANCY: 7. PAY IMPACT FEES - \$5,749 PER UNIT; 8. RECORD EASEMENT FOR DRIVEWAY ON LOT 1101; 9. CONSTRUCT ALL SITE IMPROVEMENTS (INCLUDING BUILDING LOCATIONS, DIMENSIONS, AND SETBACKS, SITE GRADING, UTILITIES, DRAINAGE, LANDSCAPING, LIGHTING, PARKING SPACES) IN ACCORDANCE WITH APPROVED PLAN; 10. PROVIDE CERTIFIED AS-BUILT SITE PLAN FOR EVERY 10 UNITS; OTHER: 11. ALL REPRESENTATIONS MADE BY APPLICANT OR AGENTS AND ALL NOTES ON PLANS ARE INCORPORATED AS PART OF APPROVAL	

AMENDED SITE DEVELOPMENT PLANS
THE VILLAS AT
NORTH TUSCAN VILLAGE
PHASE 2
SALEM PROPERTY MAP 98 LOT 12542
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE



Prepared for:
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MASSACHUSETTS 01748



8	REVISE SHEETS 12 & 13	DRJ	2/3/20
7	ADD AOT APPROVAL TO COVER	PWM	1/27/20
6	REVISE SHEET 16	DRJ	1/22/20
5	REVISE SHEETS 6-7, 9-10, 15 & 18	DRJ	1/13/20
4	REVISE SHEETS 2-12, 16 & 18	DRJ	1/7/20
3	ADD CONDITIONS OF APPROVAL, REVISE ALL SHEETS	DRJ	12/16/19
2	REVISIONS PER REVIEW COMMENTS	DRJ	11/8/19
1	REVISE SHEETS 5-7 & 12	PWM	10/24/19
NO.	DESCRIPTION	BY	DATE
REVISIONS			
TITLE SHEET			
THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2 11 CENTRAL STREET SALEM, NEW HAMPSHIRE SALEM PROPERTY MAP 98 LOT 12542 BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC			
GPI 603.893.0720		Formerly MHF Design Consultants, Inc. Greenman-Pedersen, Inc. 44 Stiles Road Suite One Salem, NH 03079	
SCALE: NONE		DATE: OCTOBER 1, 2019	
		PREPARED FOR BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC 17 MAIN STREET HOPKINTON, MA 01748 BOOK 5810-PAGE 1414 ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL	
DESIGNED BY: DRJ		DRAWN/CHECKED CCC/DRJ	
DWG. NAME 4214TH.DWG		PROJECT No. 421417	
		SHEET No. 1 OF 18	

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KEY TO HIGH INTENSITY
SOIL TYPES

THE SOIL TYPES ARE DEFINED BY SOIL CHARACTERISTICS;
AND DESIGNATED WITH A FIVE PART SYMBOL.

Parent Material
Drainage Class
Restrictive Feature
Slope
Map Intensity

Symbol A - drainage class
1 - excessively drained
2 - well drained
3 - moderately well drained
4 - somewhat poorly drained
5 - poorly drained
6 - very poorly drained
7 - not determinable (to be used only with Symbol B-6)

Symbol B - parent material
1 - Glaciofluvial Deposits (outwash/terraces)
2 - Glacial Till Material
3 - Very fine sand and silt deposits
4 - Loamy/sandy over silt/clay deposits
5 - Silt and clay deposits
6 - Excavated, regraded or filled
7 - Alluvial Deposits
8 - Organic Materials - Fresh Water
9 - Organic Materials - Tidal Marsh

Symbol C - restrictive feature (if more than one applies, the
most restrictive is listed)
1 - none
2 - bouldery, with more than 15% of the surface covered
with boulders
3 - mineral restrictive layer(s) are present in the soil
profile less than 40 inches below the soil surface -
such as hard pan, platy structure, clayey texture
4 - bedrock present in the soil profile 0 to 20 inches
below the soil surface (bedrock is either a lithic
or paralithic contact)
5 - subject to flooding
6 - does not meet fill standards (only used with
Symbol B-6)
X - areas where depth to bedrock is so variable that
a single soil type cannot be applied will be
mapped as a complex of soil types and will have
Symbol C of X

Symbol D - slope class
B - 0 to 8%
C - 8 to 15%
D - 15 to 25%
E - 25% +

Symbol E - high intensity soil map identifier - H
preliminary soil map identifier - P

LEGEND

- IRON PIN FOUND
- CONCRETE BOUND FOUND
- RAILROAD SPIKE FOUND
- DRILL HOLE FOUND
- VERTICAL GRANITE CURB
- BITUMINOUS CONCRETE LIP CURBING
- SLOPED GRANITE CURB
- OVERHEAD SERVICE WIRES
- DOUBLE SOLID YELLOW LINE
- SINGLE SOLID WHITE LINE
- BROKEN WHITE LINE
- SIGN
- OBSERVATION WELL
- TEST PIT
- TEST BORING
- PERCOLATION TEST
- TREELINE
- UTILITY POLE
- DRAIN MANHOLE
- SEWER MANHOLE
- TELEPHONE MANHOLE
- CATCH BASIN
- WATER LINE
- WATER VALVE
- ENTRY
- FIRE HYDRANT
- GAS VALVE
- GAS LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND ELECTRIC AND TELEPHONE
- WETLAND LINE
- SPOT ELEVATION
- CONTOUR ELEVATION

ACCESS & UTILITY
EASEMENT
AND POSSIBLE FUTURE
EASEMENT TO THE
TOWN OF SALEM FOR
PUBLIC ACCESS
BOOK 5810 PAGE 1195

766BH
(313)

MAP 98
LOT 12542
402,970 Sq.Ft.
9.251 Ac.±

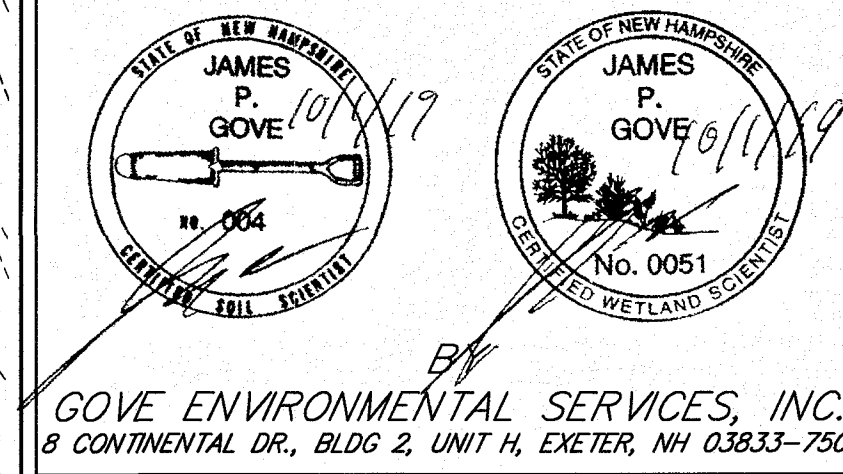
BRUNELLO ROAD

ACCESS & UTILITY EASEMENT
AND POSSIBLE FUTURE EASEMENT TO THE
TOWN OF SALEM FOR PUBLIC ACCESS
BOOK 5810 PAGE 1195

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

SOIL SURVEY PERFORMED



SOIL MAPPING NOTES

- HIGH INTENSITY SOIL MAPPING WAS PERFORMED TO THE STANDARDS
OF THE SOCIETY OF SOIL SCIENTISTS OF NORTHERN NEW ENGLAND
SPECIAL PUBLICATION NUMBER 1, HIGH INTENSITY SOIL MAPS FOR NEW
HAMPSHIRE, STANDARDS, APRIL 2008.
- SITE SPECIFIC SOIL MAPPING WAS PERFORMED TO THE SITE-SPECIFIC
SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT.
SSSNE SPECIAL PUBLICATION NO. 3, VERSION 2.0, JANUARY 1999.

KEY TO SITE SPECIFIC SOIL TYPES

SYMBOL SOIL TAXONOMIC NAME HYDROLOGIC
313 DEERFIELD SOIL GROUP
799 UDORTHENTS B
N/A

SOIL LEGEND

766BH HIGH INTENSITY SOIL TYPE DESIGNATION
..... SOIL BOUNDARY
(313) SITE SPECIFIC SOIL TYPE DESIGNATION

LOCATION MAP
(NOT TO SCALE)

NOTES:

- THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF A
PORTION OF MAP 98 LOT 12542.
- OWNER OF RECORD:
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
DEED REFERENCE TO PARCEL IS BOOK 5810 PAGE 1414
AREA OF PARCEL = 402,970 S.F.± OR 9.251 ACRES±
- THE INFORMATION SHOWN ON THIS PLAN IS BASED IN PART ON SURVEY WORK
PERFORMED BY MHF DESIGN CONSULTANTS, INC. ALONG WITH INFORMATION
FROM RECORD PLANS AND AERIAL MAPPING.
- EXAMINATION OF THE FLOOD INSURANCE RATE MAP FOR ROCKINGHAM COUNTY,
NEW HAMPSHIRE, MAP NUMBER 3301500563E, EFFECTIVE DATE: MAY 17, 2005,
INDICATES THAT THIS PORTION OF THE SUBJECT PARCEL IS NOT LOCATED
WITHIN A FLOOD HAZARD AREA.
- BENCHMARK: RM 15 - DISK STAMPED "F-2" LOCATED IN THE WEST END OF
THE NORTH ABUTMENT OF THE BOSTON & MAINE RAILROAD BRIDGE OVER
POLY BROOK NEAR ROCKINGHAM PARK. ELEVATION = 124.12 (NGVD29).
- CURRENT ZONING IS COMMERCIAL INDUSTRIAL 'C' & RESIDENTIAL. BUILDING
SETBACKS ARE AS FOLLOWS: G-C 30' FRONT, 20' SIDE, 20' REAR,
RESIDENTIAL 30' FRONT, 15' SIDE, 30' REAR.
- EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE
WHICH WERE FOUND DURING RESEARCH COMPLETED AT THE ROCKINGHAM
COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, RESTRICTIONS AND EASEMENTS
MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PARCEL(S) WOULD
DETERMINE.
- LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE ONLY. ONLY
ADDITIONAL UNDERGROUND UTILITIES OTHER THAN THOSE SHOWN MAY BE
ENCOUNTERED.
- SEE DECLARATION OF RECIPROCAL EASEMENTS RECORDED AT RORD IN BOOK
5763, PAGE 59 AND FIRST AMENDMENT TO DELINEATION OF RECIPROCAL
EASEMENTS RECORDED AT RORD IN BOOK 5810, PAGE 1195.
- SEE SHEET 13 FOR TEST PIT LOGS.

EXISTING CONDITIONS PLAN

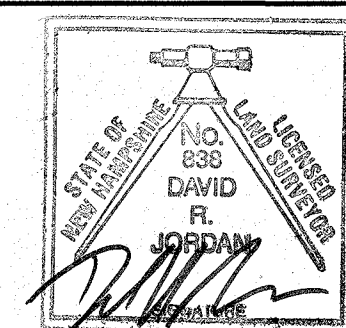
THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC

GPI Formerly
MHF Design Consultants, Inc.
603.893.0720 GPINET.COM

Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

SCALE: 1" = 30'

DATE: OCTOBER 1, 2019

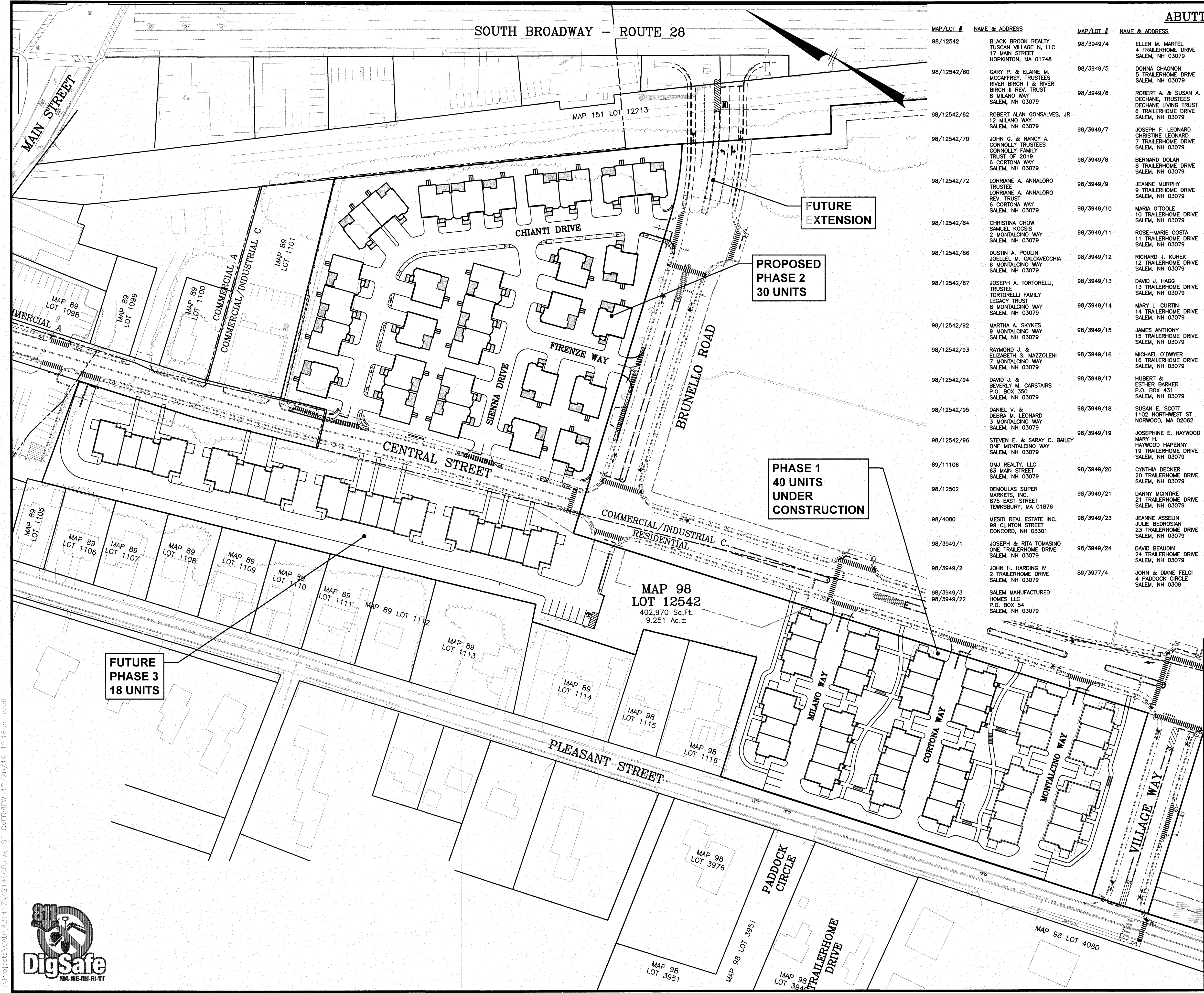


PREPARED FOR
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810-PAGE 1414

SALEM PLANNING BOARD
APPROVAL

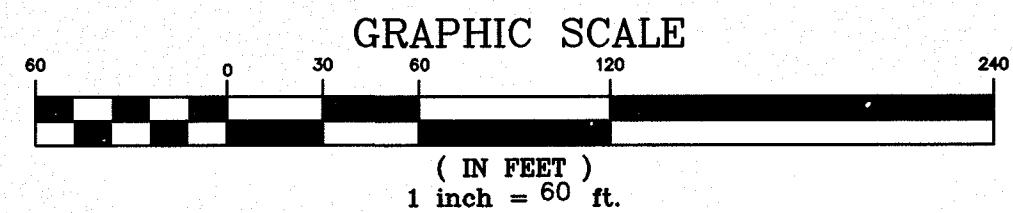
ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL

DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CCC/DRJ	4214ECP.dwg	421417	2 OF 18



ABUTTERS

MAP/LOT #	NAME & ADDRESS	MAP/LOT #	NAME & ADDRESS	MAP/LOT #	NAME & ADDRESS	MAP/LOT #	NAME & ADDRESS
98/12542	BLACK BROOK REALTY TUSCAN VILLAGE N, LLC 17 MAIN STREET HOPKINTON, MA 01748	98/3949/4	ELLEN M. MARTEL 4 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/6	THOMAS R. & BETTE BISSONNETTE TRUSTEES T. & B. BISSONNETTE REALTY TRUST 6 PADDOCK CIRCLE SALEM, NH 03079	98/1116	M20 REAL ESTATE HOLDINGS, LLC 11 BEECHWOOD COURT ATKINSON, NH 03811
98/12542/60	GARY P. & ELAINE M. MCCAFREY, TRUSTEES RIVER BIRCH I & RIVER BIRCH II REV. TRUST 8 MILANO WAY SALEM, NH 03079	98/3949/5	DONNA CHAGNON 5 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/7	PADDOCK HOMES OF SALEM, LLC 99 MEADOW CREEK DR SALEM, NH 03079	98/1115	RONALD R. KIMBALL 27 PLEASANT STREET SALEM, NH 03079
98/12542/62	ROBERT ALAN GONSALVES, JR 12 MILANO WAY SALEM, NH 03079	98/3949/6	ROBERT A. & SUSAN A. DECHANE, TRUSTEES DECHANE LIVING TRUST 6 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/8	JOSEPH J. & RITA GOLEC 8 PADDOCK CIRCLE SALEM, NH 03079	89/1114	MARK J. & TAMMY D. DUFRESNE 25 PLEASANT STREET SALEM, NH 03079
98/12542/70	JOHN G. & NANCY A. CONNOLLY TRUSTEES CONNOLLY FAMILY TRUST OF 2019 6 CORTONA WAY SALEM, NH 03079	98/3949/7	JOSEPH F. LEONARD CHRISTINE LEONARD 7 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/10	DANIEL J. & SUSAN C. KIRKLAND 10 PADDOCK CIRCLE SALEM, NH 03079	89/1113	MARK C. DELUCA, TRUSTEE DELUCA 2013 IRREVOCABLE TRUST 26 HAWKINS GLEN DRIVE SALEM, NH 03079
98/12542/72	LORRIANE A. ANNALORO TRUSTEE LORRIANE A. ANNALORO REV. TRUST 6 CORTONA WAY SALEM, NH 03079	98/3949/8	BERNARD DOLAN 8 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/12	SUSAN A. & EUGENE PIACENTINI TRUSTEES SUSAN A. PIACENTINI - 1989 P.O. BOX 145 N. ANDOVER, MA 01845	89/1112	ANDREW BURGOS STAGIE LEVESQUE 21 PLEASANT STREET SALEM, NH 03079
98/12542/84	CHRISTINA CHOW SAMUEL KOCIS 2 MONTALCINO WAY SALEM, NH 03079	98/3949/9	JEANNE MURPHY 9 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/14	KASE BLANCHETTE TRUSTEE BLANCHETTE FAMILY REALTY TRUST 14 PADDOCK CIRCLE SALEM, NH 03079	89/1111	CHRISTINE S. MCCARTHY 19 PLEASANT STREET SALEM, NH 03079
98/12542/86	DUSTIN A. POULIN JOELLE M. CALCAVECCHIA 6 MONTALCINO WAY SALEM, NH 03079	98/3949/10	MARIA O'TOOLE 10 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/15	WARREN T. & VIRGINIA A. MORRISON TRUSTEES WARREN T. MORRISON FAMILY TRUST 15 PADDOCK CIRCLE SALEM, NH 03079	89/1110	JAMES & JENNI FENNELLY 17 PLEASANT STREET SLAEM, NH 03079
98/12542/87	JOSEPH A. TORTORELLI, TRUSTEE TORTORELLI FAMILY LEGACY TRUST 8 MONTALCINO WAY SALEM, NH 03079	98/3949/11	ROSE-MARIE COSTA 11 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/16	JOYCE E. DADDY-LERIBIN 16 PADDOCK CIRCLE SALEM, NH 03079	89/1109	MARY MCDONOUGH 15 PLEASANT STREET SALEM, NH 03079
98/12542/92	MARTHA A. SKYKES 9 MONTALCINO WAY SALEM, NH 03079	98/3949/12	RICHARD J. KUREK 12 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/17	JOHN E. & TOOMEY 17 PADDOCK CIRCLE SALEM, NH 03079	89/1108	COLLIN PATRICK SULLIVAN MARJORIE SULLIVAN FAMILY TRUST 13 PLEASANT STREET SALEM, NH 03079
98/12542/93	RAYMOND J. & ELIZABETH S. MAZZOLENI 7 MONTALCINO WAY SALEM, NH 03079	98/3949/13	DAVID J. HAGG 13 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/18	JOHN E. & TOOMEY 17 PADDOCK CIRCLE SALEM, NH 03079	89/1107	WALTER A. & GERALDINE POWELL 11 PLEASANT STREET SALEM, NH 03079
98/12542/94	DAVID J. & BEVERLY M. CARSTAIRS P.O. BOX 350 SALEM, NH 03079	98/3949/14	MARY L. CURTIN 14 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/19	JOHN E. & TOOMEY 17 PADDOCK CIRCLE SALEM, NH 03079	89/1106	THOMAS J. SANTOS 26A CLINTON STREET SALEM, NH 03079
98/12542/95	DANIEL V. & DEBRA M. LEONARD 3 MONTALCINO WAY SALEM, NH 03079	98/3949/15	JAMES ANTHONY 15 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/20	JOHN E. & TOOMEY 17 PADDOCK CIRCLE SALEM, NH 03079	89/1105	EDWARD & LINDA GOODWIN TRUSTEES EDWARD & LINDA GOODWIN FAMILY TRUST 5 PLEASANT STREET SALEM, NH 03079
98/12542/96	STEVEN E. & SARAY C. BAILEY ONE MONTALCINO WAY SALEM, NH 03079	98/3949/16	MICHAEL O'DWYER 16 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/21	JOHN E. & TOOMEY 17 PADDOCK CIRCLE SALEM, NH 03079	89/1099	GRANITE STATE ELECTRIC COMPANY LIBERTY UTILITIES ATTN ACCOUNTS PAYABLE DEPARTMENT 15 BUTTRICK ROAD LONDONDERRY, NH 03053
89/11106	OMJ REALTY, LLC 63 MAIN STREET SALEM, NH 03079	98/3949/17	HUBERT & ESTHER BARKER P.O. BOX 431 SALEM, NH 03079	89/3977/22	JOHN E. & TOOMEY 17 PADDOCK CIRCLE SALEM, NH 03079	89/1100	JOSEPH & JANIS CHABOT TRUSTEES 7 CENTRAL STREET REALLY TRUST 7 CENTRAL STREET SALEM, NH 03079
98/12502	DEMOULAS SUPER MARKETS, INC. 875 EAST STREET TEWKSBURY, MA 01876	98/3949/18	SUSAN E. SCOTT 1102 WEST ST NORWOOD, MA 02062	89/3977/23	JOHN E. & TOOMEY 17 PADDOCK CIRCLE SALEM, NH 03079	89/1101/1	JANICE L. HALE 9 CENTRAL STREET UNIT A SALEM, NH 03079
98/4080	MESITI REAL ESTATE INC. 99 CLINTON STREET CONCORD, NH 03301	98/3949/19	JOSEPHINE E. HAYWOOD MAY H. HAYWOOD HAPENNY 19 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/24	JOHN E. & TOOMEY 17 PADDOCK CIRCLE SALEM, NH 03079	89/1101/2, 3, 4, 5, 7	9 CENTRAL STREET LLC P.O. BOX 1195 SALEM, NH 03079
98/3949/1	JOSEPH & RITA TOMASINO ONE TRAILERHOME DRIVE SALEM, NH 03079	98/3949/20	CYNTHIA DECKER 20 TRAILERHOME DRIVE SALEM, NH 03079	89/3977/25	JOHN E. & TOOMEY 17 PADDOCK CIRCLE SALEM, NH 03079	89/1101/6	PAULA N. ANDERSON P.O. BOX 1012 SALEM, NH 03079
98/3949/2	JOHN H. HARDING IV 2 TRAILERHOME DRIVE SALEM, NH 03079	98/3949/21	DANNY MCINTIRE 21 TRAILERHOME DRIVE SALEM, NH 03079	89/3944/23	LOUIS & KATHERINE SCIBELLI 23 PADDOCK CIRCLE SALEM, NH 03079	151/12213	STATE OF NH DOT JOHN O'MORTON BUILDING ONE HAZEN DRIVE CONCORD, NH 03302
98/3949/3	SALEM MANUFACTURED HOMES LLC P.O. BOX 54 SALEM, NH 03079	98/3949/22	JEANNE ASSELIN JULIE BEDROSIAN 23 TRAILERHOME DRIVE SALEM, NH 03079	98/3976	DAVID BEAUDIN 24 TRAILERHOME DRIVE SALEM, NH 03079		



NO.	DESCRIPTION	BY	DATE
2	MISC. REVISIONS	DRJ	12/16/19
1	REVISE PHASE 2 LAYOUT	DRJ	11/8/19
	REVISIONS		

SITE OVERVIEW PLAN

THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC

44 Shiles Road, Suite One
Salem, New Hampshire 03079
(603) 893-0720
ENGINEERS • PLANNERS • SURVEYORS
www.mhfdesign.com

SCALE: 1" = 60' DATE: OCTOBER 1, 2019

DAVID R. JORDAN
No. 7778
12/20/19

PREPARED FOR
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810-PAGE 1414

SALEM PLANNING BOARD
APPROVAL

ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL

DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CCC/DRJ	4214SP.DWG	421417	3 OF 18



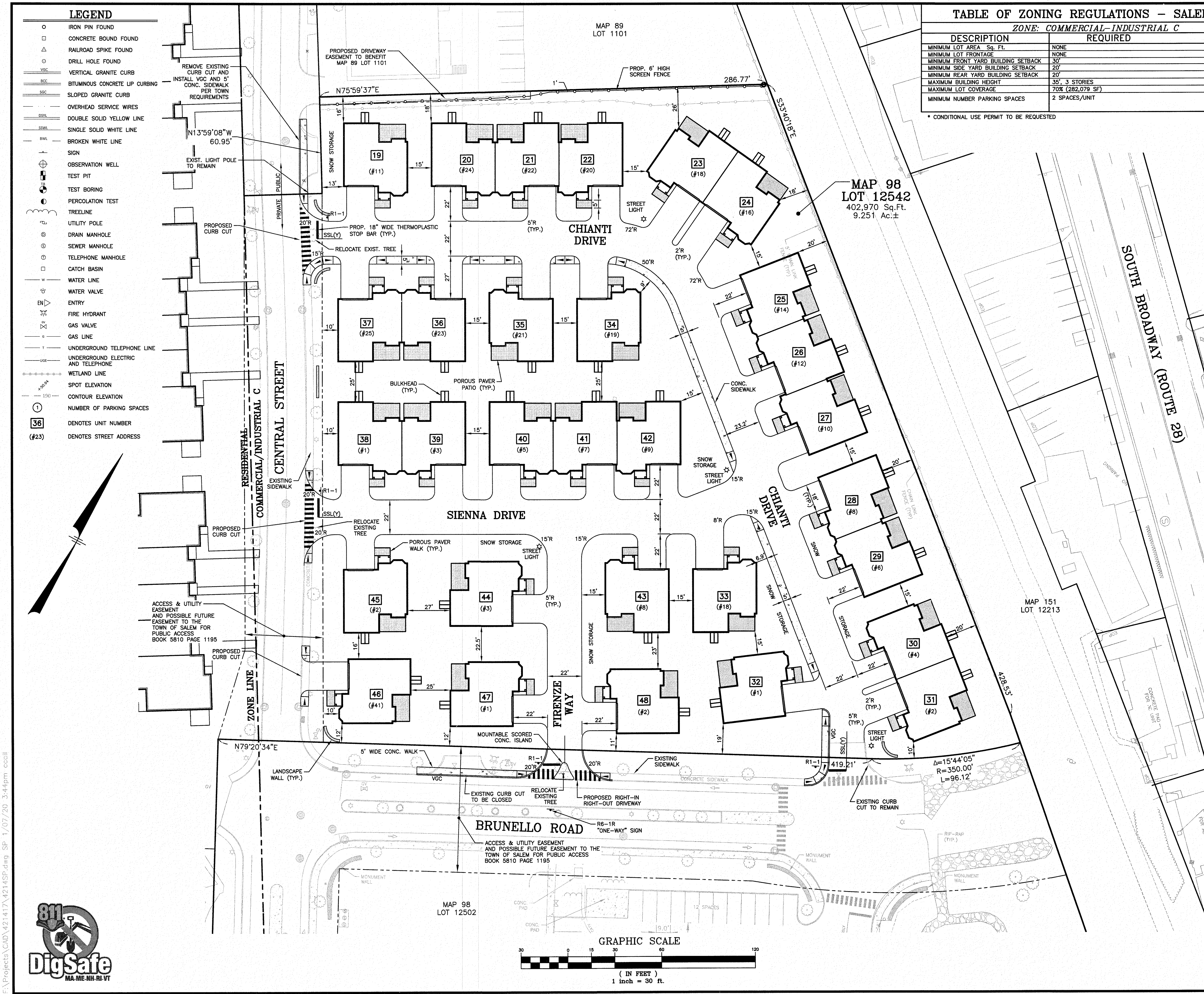
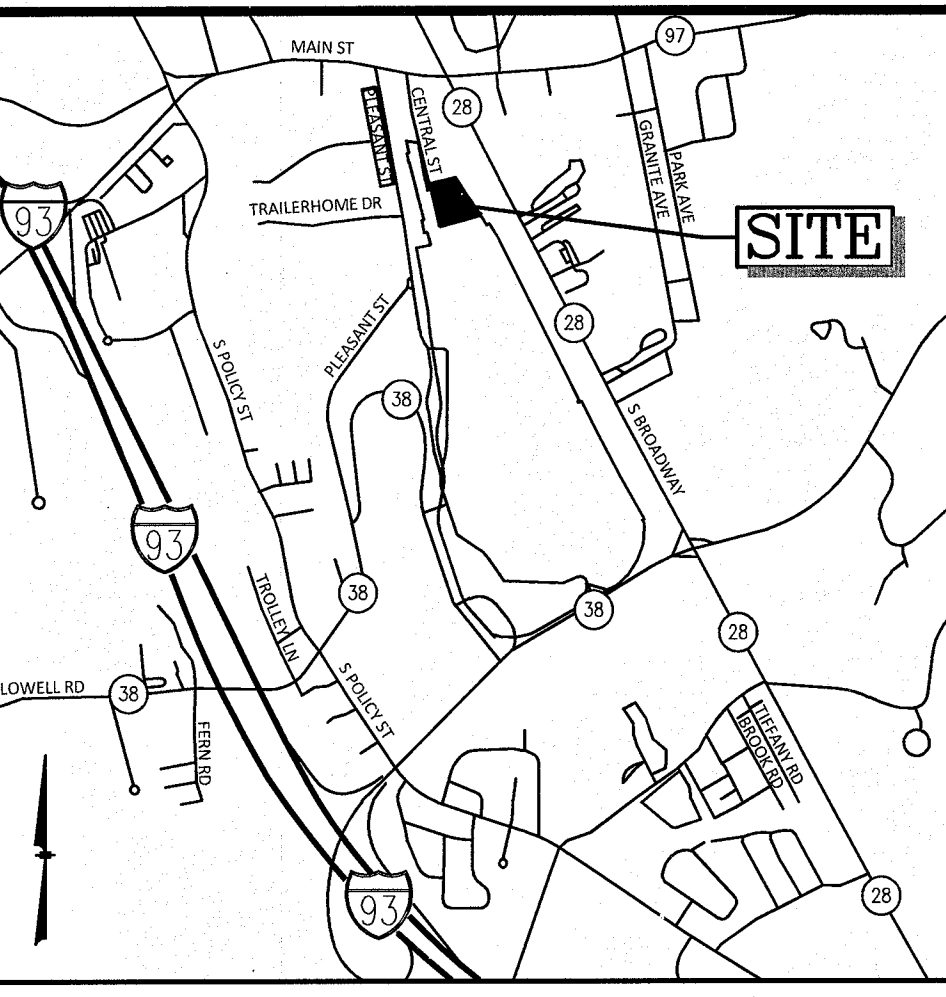


TABLE OF ZONING REGULATIONS – SALEM, NH		
ZONE: COMMERCIAL-INDUSTRIAL C		
DESCRIPTION	REQUIRED	PROVIDED
MINIMUM LOT AREA Sq. Ft.	NONE	402,970 Sq. Ft.
MINIMUM LOT FRONTAGE	NONE	384'
MINIMUM FRONT YARD BUILDING SETBACK	30'	6"
MINIMUM SIDE YARD BUILDING SETBACK	20'	10"
MINIMUM REAR YARD BUILDING SETBACK	20'	18"
MAXIMUM BUILDING HEIGHT	35', 3 STORIES	2 STORIES, 31'-0"
MAXIMUM LOT COVERAGE	70% (282,079 SF)	57.9% (233,360 SF)
MINIMUM NUMBER PARKING SPACES	2 SPACES/UNIT	2 GARAGE SPACES PLUS 2 DRIVEWAY SPACES/UNIT



- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO AMEND THE PHASE 2 LAYOUT TO PROVIDE 30 UNITS (ALL 2-BEDROOM UNITS WITH FULL BASEMENTS) WHERE 38 UNITS (20 3-BEDROOM & 18 2-BEDROOM) WERE PREVIOUSLY APPROVED UNDER THE PROVISIONS OF THE LARGE-SCALE REDEVELOPMENT PROJECTS, SECTION 490-710 OF THE SALEM ZONING ORDINANCE.
 - THE INFORMATION SHOWN ON THIS PLAN IS BASED IN PART ON SURVEY WORK PERFORMED BY MHF DESIGN CONSULTANTS, INC. ALONG WITH INFORMATION FROM RECORD PLANS AND AERIAL MAPPING.
 - ALL WALKS, STAIRS AND LANDINGS TO BE CEMENT CONCRETE. CONTRACTOR SHALL ENSURE ADA COMPLIANCE AS APPROPRIATE.
 - ALL WORK SHALL CONFORM TO THE TOWN OF SALEM, NHDES AND NHDOT STANDARDS.
 - WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
 - PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONFIRM WITH THE ENGINEER THAT HE HAS THE MOST RECENT SET OF PLANS. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY SHEET. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
 - REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS.
 - CONTRACTOR TO CONFIRM BENCHMARKS PRIOR TO COMMENCEMENT OF WORK.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" (888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY DIGGING.
 - ALL PAVEMENT MARKINGS SHALL CONFORM TO THE MUTCD, LATEST EDITION.
 - SNOW STORAGE WILL BE PROVIDED ALONG ROAD OUTSIDE OF RAIN GARDENS. ANY EXCESS SNOW SHALL BE TRUCKED OFF-SITE AND DISPOSED OF IN ACCORDANCE WITH THE TOWN OF SALEM AND NHDES REQUIREMENTS.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY MHF DESIGN CONSULTANTS, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR AND/OR ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE AND/OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REQUIREMENTS.
 - ANY ROOFTOP OR GROUND LEVEL MECHANICAL UNITS SHALL BE SCREENED FROM PUBLIC VIEW.
 - TRASH DISPOSAL SHALL BE INTERNAL TO EACH UNIT.
 - THE CONDOMINIUM ASSOCIATION SHALL BE RESPONSIBLE FOR SNOW REMOVAL AND TRASH DISPOSAL.

NO.	DESCRIPTION	BY	DATE
3	REVISIONS PER TOWN COMMENTS	DRJ	1/7/20
2	MISC. REVISIONS	DRJ	12/16/19
1	REVISIONS PER REVIEW COMMENTS	DRJ	11/8/19

SITE PLAN

THE VILLAS AT NORTH TUSCAN VILLAGE – PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC

GPI Formerly MHF Design Consultants, Inc.
603.893.0720 GPINET.COM

Greenman-Pedersen, Inc.
44 Stiles Road
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SCALE: 1" = 30' DATE: OCTOBER 1, 2019

PREPARED FOR
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810-PAGE 1414

SALEM PLANNING BOARD
APPROVAL

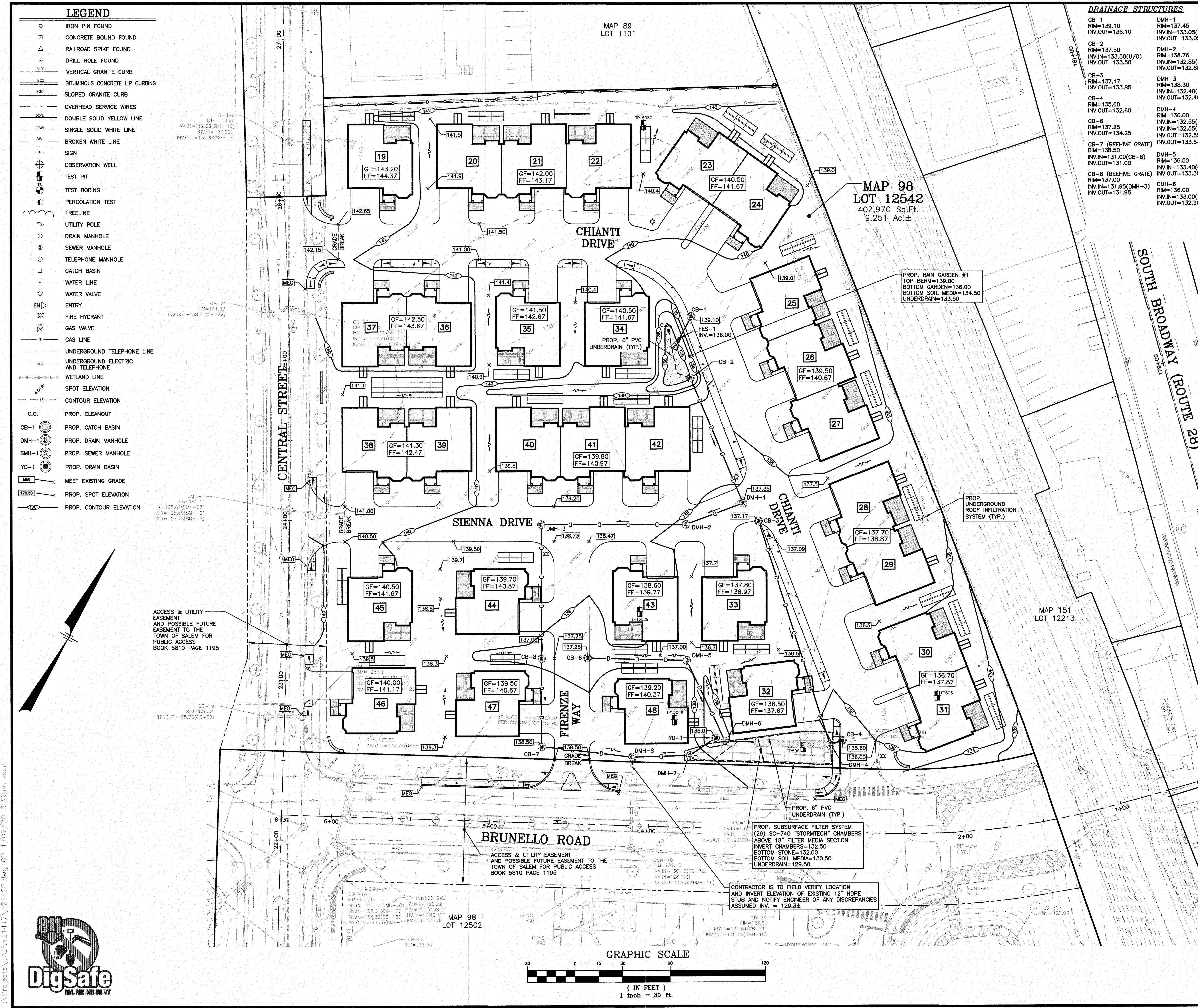
DAVID R. JORDAN
No. 7778
LICENSED PROFESSIONAL ENGINEER

ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL

DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CCC/DRJ	4214SP.dwg	421417	4 OF 18

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- LEGEND**
- IRON PIN FOUND
 - CONCRETE BOUND FOUND
 - △ RAILROAD SPIKE FOUND
 - ◇ DRILL HOLE FOUND
 - VSC — VERTICAL GRANITE CURB
 - BSC — BITUMINOUS CONCRETE LIP CURBING
 - SSC — SLOPED GRANITE CURB
 - — OVERHEAD SERVICE WIRES
 - DSYL — DOUBLE SOLID YELLOW LINE
 - SWL — SINGLE SOLID WHITE LINE
 - BWL — BROKEN WHITE LINE
 - — SIGN
 - — OBSERVATION WELL
 - — TEST PIT
 - — TEST BORING
 - — PERCOLATION TEST
 - — TREELINE
 - — UTILITY POLE
 - — DRAIN MANHOLE
 - — SEWER MANHOLE
 - — TELEPHONE MANHOLE
 - — CATCH BASIN
 - — WATER LINE
 - — WATER VALVE
 - — ENTRY
 - — FIRE HYDRANT
 - — GAS VALVE
 - — UNDERGROUND TELEPHONE LINE
 - — UNDERGROUND ELECTRIC AND TELEPHONE
 - — WETLAND LINE
 - — SPOT ELEVATION
 - — CONTOUR ELEVATION
 - — C.O. — PROP. CLEANOUT
 - — CB-1 — PROP. CATCH BASIN
 - — DMH-1 — PROP. DRAIN MANHOLE
 - — SMH-1 — PROP. SEWER MANHOLE
 - — YD-1 — PROP. DRAIN BASIN
 - — ME0 — MEET EXISTING GRADE
 - — 170.30 — PROP. SPOT ELEVATION
 - — 170 — PROP. CONTOUR ELEVATION

DRAINAGE STRUCTURES

CB-1 RIM=139.10 INV.OUT=136.10	DMH-1 RIM=137.45 INV.IN=133.05(CB-2) INV.OUT=133.05	DMH-7 RIM=138.50 INV.IN=131.50(YD-1) INV.IN=133.45(12"HD) INV.IN=129.50(6"U/D) INV.OUT=129.50
CB-2 RIM=137.50 INV.IN=133.50(U/D) INV.OUT=133.50	DMH-2 RIM=138.78 INV.IN=132.85(DMH-1) INV.OUT=132.85	DMH-8 RIM=138.80 INV.IN=129.50(OCS-1) INV.IN=129.55(CB-7) INV.OUT=129.50
CB-3 RIM=137.17 INV.IN=133.85	DMH-3 RIM=138.30 INV.IN=132.40(DMH-2) INV.OUT=132.40	YD-1 RIM=135.00 INV.OUT=132.00
CB-4 RIM=135.60 INV.OUT=132.60	DMH-4 RIM=136.00 INV.IN=132.55(CB-4) INV.IN=132.55(CB-3) INV.OUT=132.55(24" LOW)	
CB-6 RIM=137.25 INV.OUT=134.25	DMH-5 RIM=136.50 INV.IN=133.40(CB-6) INV.OUT=133.30	
CB-7 (BEEHIVE GRATE) RIM=138.50 INV.IN=131.00(CB-8) INV.OUT=131.00	DMH-6 RIM=136.00 INV.IN=133.00(DMH-5) INV.OUT=132.90	
CB-8 (BEEHIVE GRATE) RIM=137.00 INV.IN=131.95(DMH-3) INV.OUT=131.95		

DRAINAGE PIPE SCHEDULE					
FROM: STRUCTURE NUMBER	PIPE SIZE (INCHES)	TYPE OF PIPE	APPROX. PIPE LENGTH (FEET)	SLOPE OF PIPE (FT./FT.)	TO: STRUCTURE NUMBER
CB-1	12	HDPE	16	0.032	FES-1
CB-2	12	HDPE	85	0.005	DMH-1
CB-3	12	HDPE	147	0.009	DMH-4
CB-4	12	HDPE	8	0.006	DMH-4
CB-6	12	HDPE	63	0.014	DMH-5
CB-7	12	HDPE	57	0.025	DMH-8
CB-8	12	HDPE	55	0.017	CB-7
DMH-1	12	HDPE	38	0.005	DMH-2
DMH-2	12	HDPE	91	0.005	DMH-3
DMH-3	12	HDPE	84	0.005	CB-8
DMH-5	12	HDPE	56	0.005	DMH-6
DMH-6	12	HDPE	18	0.016	U/G SYS
DMH-7	12	HDPE	36	0.005	DMH-8
DMH-8	16	HDPE	5	0.000	EXIST. 15" STUB
U/G SYS	12	HDPE	5	0.019	DMH-7
YD-1	8	HDPE	20	0.026	DMH-7

NOTES

- ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF SALEM, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE WITH THE OWNER OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
- ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN IN THE PLANS THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THE DETAILS PROVIDED SERVE AS A GUIDE ONLY. ADDITIONAL MEASURES MAY NEED TO BE EMPLOYED DURING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION. ELEVATIONS ARE BASED ON NGVD 1929 DATUM.
- THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
- THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS PRIOR TO DIRECTING STORMWATER RUN-OFF TO THEM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIG SAFE" (1-888-344-7235) AT LEAST 72 HOURS BEFORE DIGGING.
- CONTRACTOR SHALL DISPOSE OF ANY UNSUITABLE MATERIAL FOUND ONSITE (I.E. TRASH, STUMPS, ETC.) IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. CONTRACTOR SHALL COORDINATE ALL WORK WITH SUBCONTRACTORS, UTILITY COMPANIES, AND THE TOWN OF SALEM, AND SHALL BE RESPONSIBLE FOR COORDINATION OF ALL PERMITS, INSPECTIONS, AND MAINTENANCE AND PROTECTION OF ALL TRAFFIC AND PEDESTRIANS. ANY DISCREPANCIES FOUND OR SHOWN SHALL BE RESOLVED BY THE CONTRACTOR.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONFIRM WITH THE ENGINEER THAT HE HAS THE MOST RECENT SET OF PLANS. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
- CONTRACTOR SHALL CONFIRM WITH ENGINEER ALL LAYOUT ITEMS NOT SHOWN OR ANNOTATED. THE LOCATION OF ALL STRUCTURES AND UTILITIES SHALL BE CONFIRMED PRIOR TO LAYOUT OF PAVED AREAS. EXACT LOCATION OF PAVEMENT SHALL BE CONFIRMED WITH ENGINEER PRIOR TO PLACEMENT OF BINDER COURSE PAVEMENT.
- SEE CONSTRUCTION DETAIL SHEETS FOR ADDITIONAL INFORMATION.
- ALL UTILITIES SHALL BE UNDERGROUND, PER TOWN OF SALEM AND UTILITY COMPANY STANDARDS.
- ALL DRAINAGE PIPE DATA CALCULATED TO STRUCTURE CENTERS, TYP.
- ALL DRAINAGE PIPE SHALL CONFORM TO ADS N12 MINIMUM STANDARDS (OR EQUAL).
- ALL YARD DRAINS SHALL BE 24" NYLOPLAST DRAIN BASINS WITH DOMED GRATE AS MANUFACTURED BY ADS, INC. (OR EQUAL).
- AN OPERATION AND MAINTENANCE MANUAL HAS BEEN PREPARED FOR THE ON-SITE STORMWATER MANAGEMENT SYSTEMS AND IS CONSIDERED PART OF THIS PLAN SET. THE PROPERTY OWNER SHALL COMPLY WITH THE INSPECTION AND MAINTENANCE SCHEDULE AND RECORD KEEPING REQUIREMENTS CONTAINED THEREIN.
- ALL BUILDING ROOFTOPS SHALL BE CONNECTED TO UNDERGROUND ROOF INFILTRATION SYSTEMS (STORMTECH SC-310 OR APPROVED EQUAL). (6) SC-310 CHAMBERS REQUIRED PER UNIT. SEE DETAIL SHEET FOR ADDITIONAL INFORMATION.

NO.	DESCRIPTION	BY	DATE
4	REVISIONS PER TOWN COMMENTS	DRJ	1/7/20
3	MISC. REVISIONS	DRJ	12/16/19
2	REVISE PER TOWN COMMENTS	DRJ	11/8/19
1	REVISE UNDERGROUND INFILTRATION SYSTEMS	PWM	10/24/19

GRADING & DRAINAGE PLAN

THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC

GPI Formerly MHF Design Consultants, Inc.
603.893.0720 GPINET.COM

Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
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SCALE: 1" = 30' DATE: OCTOBER 1, 2019

DESIGNED BY: DRJ
DRAWN/CHECKED: CCC/DRJ
DWG. NAME: 4214SP.dwg
PROJECT No.: 421417
SHEET No.: 5 OF 18

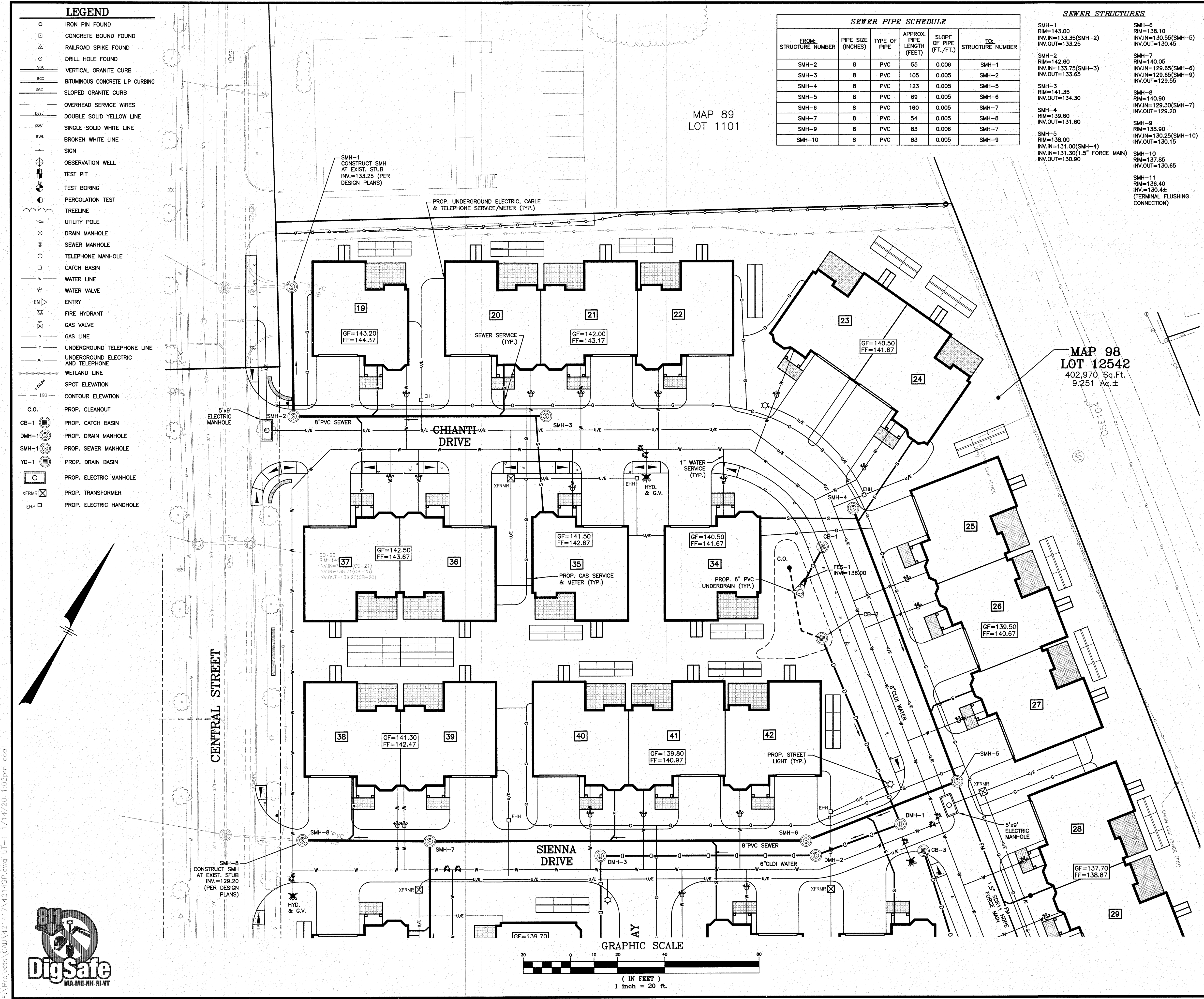
PREPARED FOR:
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810-PAGE 1414

SALEM PLANNING BOARD
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ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL

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MAP 89
LOT 1101

SEWER PIPE SCHEDULE					
FROM: STRUCTURE NUMBER	PIPE SIZE (INCHES)	TYPE OF PIPE	APPROX. PIPE LENGTH (FEET)	SLOPE OF PIPE (FT./FT.)	TO: STRUCTURE NUMBER
SMH-2	8	PVC	55	0.006	SMH-1
SMH-3	8	PVC	105	0.005	SMH-2
SMH-4	8	PVC	123	0.005	SMH-5
SMH-5	8	PVC	69	0.005	SMH-6
SMH-6	8	PVC	160	0.005	SMH-7
SMH-7	8	PVC	54	0.005	SMH-8
SMH-9	8	PVC	83	0.006	SMH-7
SMH-10	8	PVC	83	0.005	SMH-9

SEWER STRUCTURES

SMH-1 RIM=143.00 INV.IN=133.35(SMH-2) INV.OUT=133.25	SMH-6 RIM=138.10 INV.IN=130.55(SMH-5) INV.OUT=130.45
SMH-2 RIM=142.60 INV.IN=133.75(SMH-3) INV.OUT=133.65	SMH-7 RIM=140.05 INV.IN=129.65(SMH-6) INV.IN=129.65(SMH-9) INV.OUT=129.55
SMH-3 RIM=141.35 INV.OUT=134.30	SMH-8 RIM=140.90 INV.IN=129.30(SMH-7) INV.OUT=129.20
SMH-4 RIM=139.60 INV.OUT=131.60	SMH-9 RIM=138.80 INV.IN=130.25(SMH-10) INV.OUT=130.15
SMH-5 RIM=138.00 INV.IN=131.00(SMH-4) INV.IN=131.30(1.5" FORCE MAIN) INV.OUT=130.90	SMH-10 RIM=137.85 INV.OUT=130.65
	SMH-11 RIM=136.40 INV.=130.4± (TERMINAL FLUSHING CONNECTION)

NOTES:

- ALL SITE DRAINAGE PIPE SHALL BE CORRUGATED HIGH-DENSITY POLYETHYLENE PIPE WITH STANDARD JOINTS, DUAL-WALL, SMOOTH INTERIOR AS MANUFACTURED BY ADS, INC., OR APPROVED EQUAL, UNLESS OTHERWISE NOTED ON PLAN.
- ALL ROOF DRAIN PIPE (RD) SHALL BE 6" HDPE. INFORMATION SHOWN IS SCHEMATIC ONLY. SEE ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS.
- ALL SANITARY SEWER PIPE SHALL BE PVC (SDR-35), UNLESS OTHERWISE NOTED.
- ALL WATER MAIN SHALL BE CEMENT LINED DUCTILE IRON, UNLESS OTHERWISE NOTED. ALL WATER SERVICES SHALL BE COPPER.
- ELEVATIONS ARE BASED ON NGVD 1929 DATUM.
- ALL PROPOSED ELEVATIONS AS SHOWN ARE BOTTOM OF CURB ELEVATIONS, UNLESS OTHERWISE NOTED.
- ANY UTILITY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE LOCAL AUTHORITIES AND THE DEVELOPER PRIOR TO INSTALLATION.
- THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR IS TO VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE TOWN, STATE AND FEDERAL STANDARDS.
- THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIG-SAFE (1-888-344-7233) PRIOR TO COMMENCING ANY EXCAVATION.
- ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM TO APPLICABLE MUNICIPAL SERVICES DEPARTMENT AND NHDES SPECIFICATIONS.
- ALL ELECTRIC, TELEPHONE AND CABLE TV LINES ARE TO BE INSTALLED IN CONFORMANCE WITH APPLICABLE UTILITY CO. SPECIFICATIONS.
- ANY UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY UTILITY COMPANY AND LOCAL MSD AND REMOVED.
- ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO NHDOT AND SALEM MUNICIPAL SERVICES DEPARTMENT, SHALL BE EMPLOYED DURING OPERATIONS WITHIN THE PUBLIC RIGHT-OF-WAY.
- THE LOCATION AND ELEVATION OF ALL PROPOSED BUILDING UTILITY CONNECTIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS.
- SEWERS SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAINS.

SALEM MUNICIPAL SERVICES DEPARTMENT NOTES:

- REQUIRED METERING AND BACKFLOW PREVENTION DEVICES WILL BE INSTALLED ON WATER SERVICES. THESE DEVICES WILL BE LOCATED AT THE POINT SERVICE LINES ENTER THE BUILDING. SERVICE LINES ARE NOT ALLOWED TO RUN THROUGH THE BUILDING, UNDER FLOORS, OVERHEAD OR OTHERWISE.
- ALL EXISTING WATER AND SEWER SERVICES FOR BUILDINGS TO BE RAZED MUST BE CUT AND CAPPED PRIOR TO A RAZE PERMIT BEING ISSUED.
- DOMESTIC WATER SERVICES MAY BE TAPPED OFF FIRE SPRINKLER SERVICES, PROVIDED THE DOMESTIC SERVICE IS TAPPED A MINIMUM OF TEN FEET OUTSIDE THE BUILDING. VALVES ARE REQUIRED ON BOTH SERVICE LINES, WITH A VALVE IN THE FIRE SERVICE DOWNSIDE OF THE DOMESTIC SERVICE TAP. THESE VALVES SHOULD BE LOCATED A MINIMUM FIVE FEET FROM THE BUILDING.

SALEM FIRE DEPARTMENT NOTES:

- BUILDINGS SHALL BE PROVIDED WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13D AND SALEM FIRE/UTILITIES REGULATIONS.
- ALL SITE AND CONSTRUCTION PLANS MAY BE REVIEWED BY A THIRD PARTY CONSULTANT OF THE TOWNS CHOOSING. ALL COST ASSOCIATED WITH THIRD PARTY REVIEWS AND INSPECTION SHALL BE PAID BY THE DEVELOPER.
- UNDERGROUND WATER MAINS AND HYDRANTS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL FIRE CODE 2000 EDITION, APPENDIX B AND C, AND SALEM WATER DEPARTMENT REGULATIONS. FLOW CALCULATIONS AND BUILDING CONSTRUCTION CLASSIFICATION SHALL BE INCLUDED WITH THE SITE PLAN.
- PLANS FOR CONSTRUCTION OF BUILDINGS AND FIRE PROTECTION SYSTEMS SHALL BE SUBMITTED TO THE SALEM FIRE DEPARTMENT AND RELEASED FOR CONSTRUCTION PRIOR TO STARTING WORK. ALL CONTRACTORS INSTALLING FIRE PROTECTION SYSTEMS SHALL HOLD A CERTIFICATE OF FITNESS FROM THE SALEM FIRE DEPARTMENT.
- ALL UNDERGROUND WATER MAINS SERVING SPRINKLER OR STANDPIPE SYSTEM SHALL BE FLUSHED IN ACCORDANCE WITH NFPA 24 AND SHALL BE WITNESSED BY SALEM FIRE DEPARTMENT PERSONNEL.
- ALL BUILDINGS THREE OR MORE STORIES IN HEIGHT ABOVE THE LEVEL OF FIRE DEPARTMENT ACCESS AS DETERMINED BY THE FIRE DEPARTMENT SHALL BE PROVIDED WITH CLASS I STANDPIPES DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 14, 2003 EDITION.

ESTIMATE OF PROPOSED WATER USAGE:

30 2-BEDROOM UNITS x 150 GPD/BEDROOM = 9,000 GPD

5	REVISIONS PER DES COMMENTS	DRJ	1/13/20
4	REVISIONS PER TOWN COMMENTS	DRJ	1/7/20
3	MISC. REVISIONS	DRJ	12/16/19
2	REVISIONS PER REVIEW COMMENTS	DRJ	11/8/19
1	REVISE UNDERGROUND INFILTRATION SYSTEMS	PWM	10/24/19
NO.	DESCRIPTION	BY	DATE
REVISIONS			

UTILITY PLAN

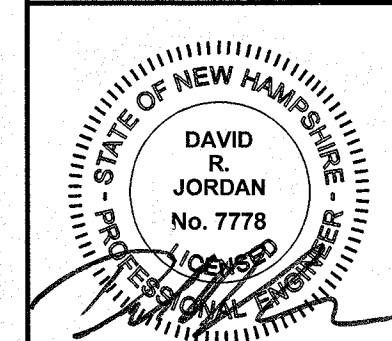
THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC



Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

SCALE: 1" = 20'

DATE: OCTOBER 1, 2019



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TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
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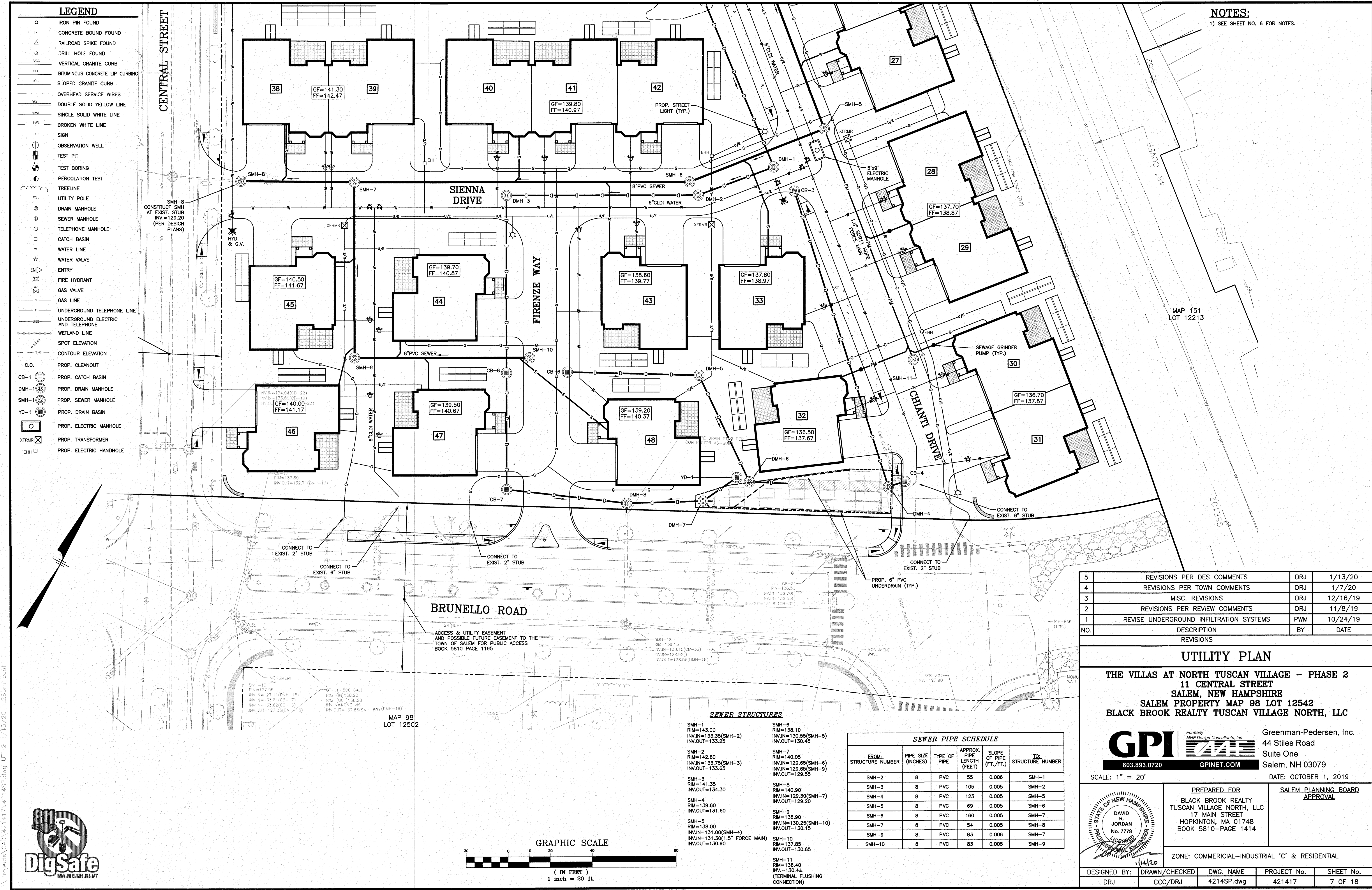
SALEM PLANNING BOARD
APPROVAL

ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL

DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CCC/DRJ	4214SP.dwg	421417	6 OF 18

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NOTES:
1) SEE SHEET NO. 6 FOR NOTES.

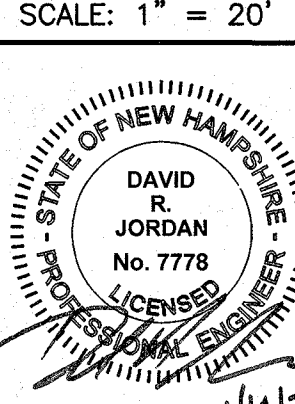
5	REVISIONS PER DES COMMENTS	DRJ	1/13/20
4	REVISIONS PER TOWN COMMENTS	DRJ	1/7/20
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2	REVISIONS PER REVIEW COMMENTS	DRJ	11/8/19
1	REVISE UNDERGROUND INFILTRATION SYSTEMS	PWM	10/24/19
NO.	DESCRIPTION	BY	DATE
REVISIONS			

UTILITY PLAN

THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC



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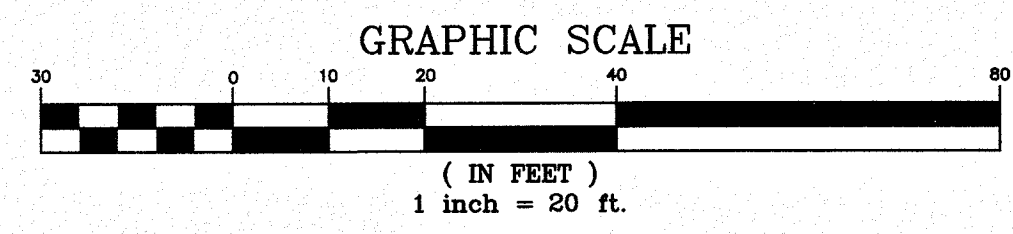
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DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CCC/DRJ	4214SP.dwg	421417	7 OF 18

SEWER PIPE SCHEDULE					
FROM: STRUCTURE NUMBER	PIPE SIZE (INCHES)	TYPE OF PIPE	APPROX. PIPE LENGTH (FEET)	SLOPE OF PIPE (FT./FT.)	TO: STRUCTURE NUMBER
SMH-2	8	PVC	55	0.006	SMH-1
SMH-3	8	PVC	105	0.005	SMH-2
SMH-4	8	PVC	123	0.005	SMH-5
SMH-5	8	PVC	69	0.005	SMH-6
SMH-6	8	PVC	160	0.005	SMH-7
SMH-7	8	PVC	54	0.005	SMH-8
SMH-9	8	PVC	83	0.006	SMH-7
SMH-10	8	PVC	83	0.005	SMH-9

SEWER STRUCTURES

SMH-1 RIM=143.00 INV.IN=133.35(SMH-2) INV.OUT=133.25	SMH-6 RIM=138.10 INV.IN=130.55(SMH-5) INV.OUT=130.45
SMH-2 RIM=142.60 INV.IN=133.75(SMH-3) INV.OUT=133.65	SMH-7 RIM=140.05 INV.IN=129.65(SMH-6) INV.IN=129.65(SMH-9) INV.OUT=129.55
SMH-3 RIM=141.35 INV.OUT=134.30	SMH-8 RIM=140.90 INV.IN=129.30(SMH-7) INV.OUT=129.20
SMH-4 RIM=139.60 INV.OUT=131.60	SMH-9 RIM=138.90 INV.IN=130.25(SMH-10) INV.OUT=130.15
SMH-5 RIM=138.00 INV.IN=131.00(SMH-4) INV.IN=131.30(1.5" FORCE MAIN) INV.OUT=130.90	SMH-10 RIM=137.85 INV.OUT=130.65
	SMH-11 RIM=136.40 INV.=130.44 (TERMINAL FLUSHING CONNECTION)



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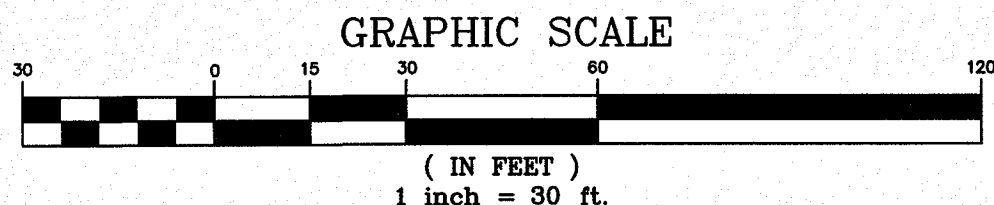
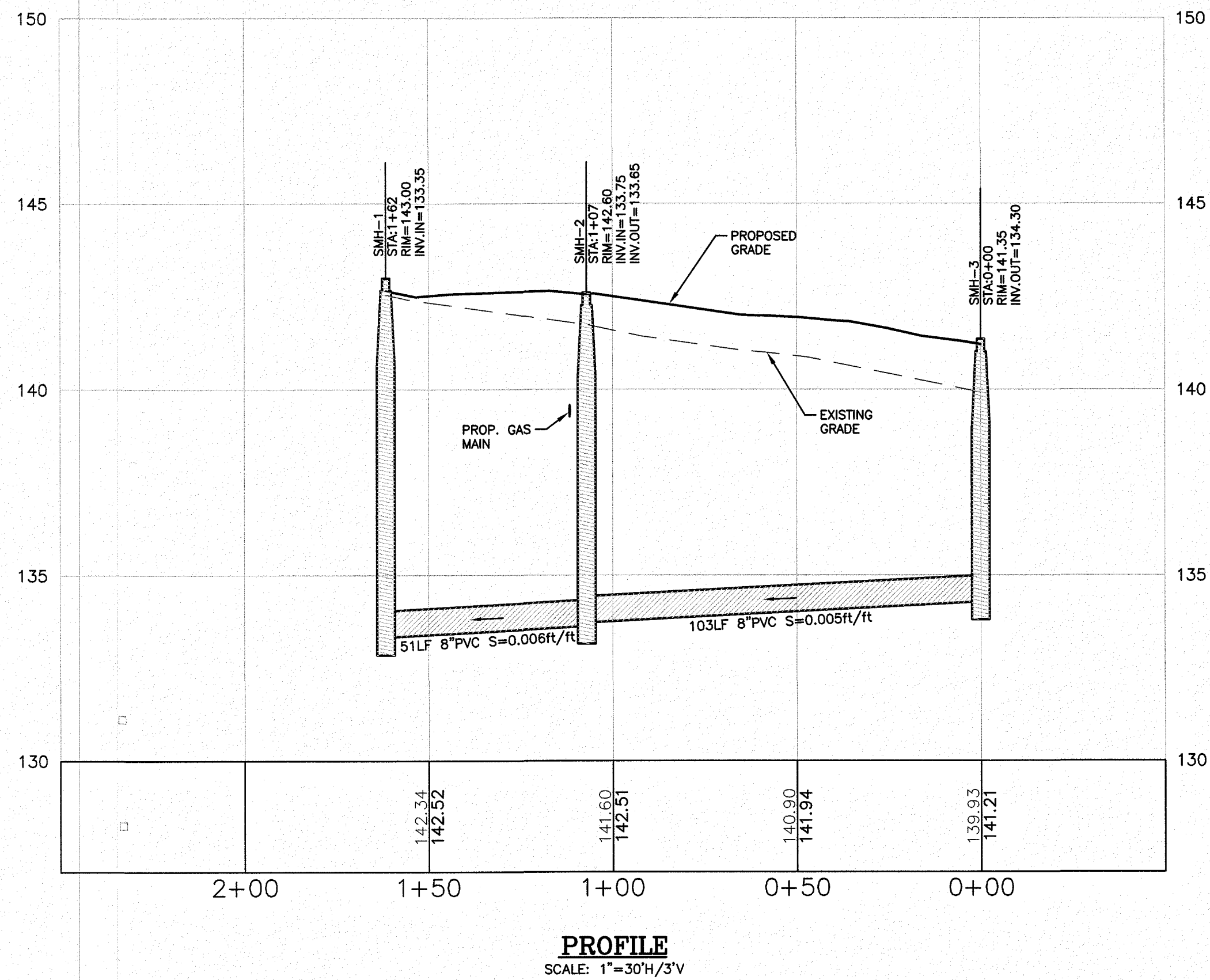
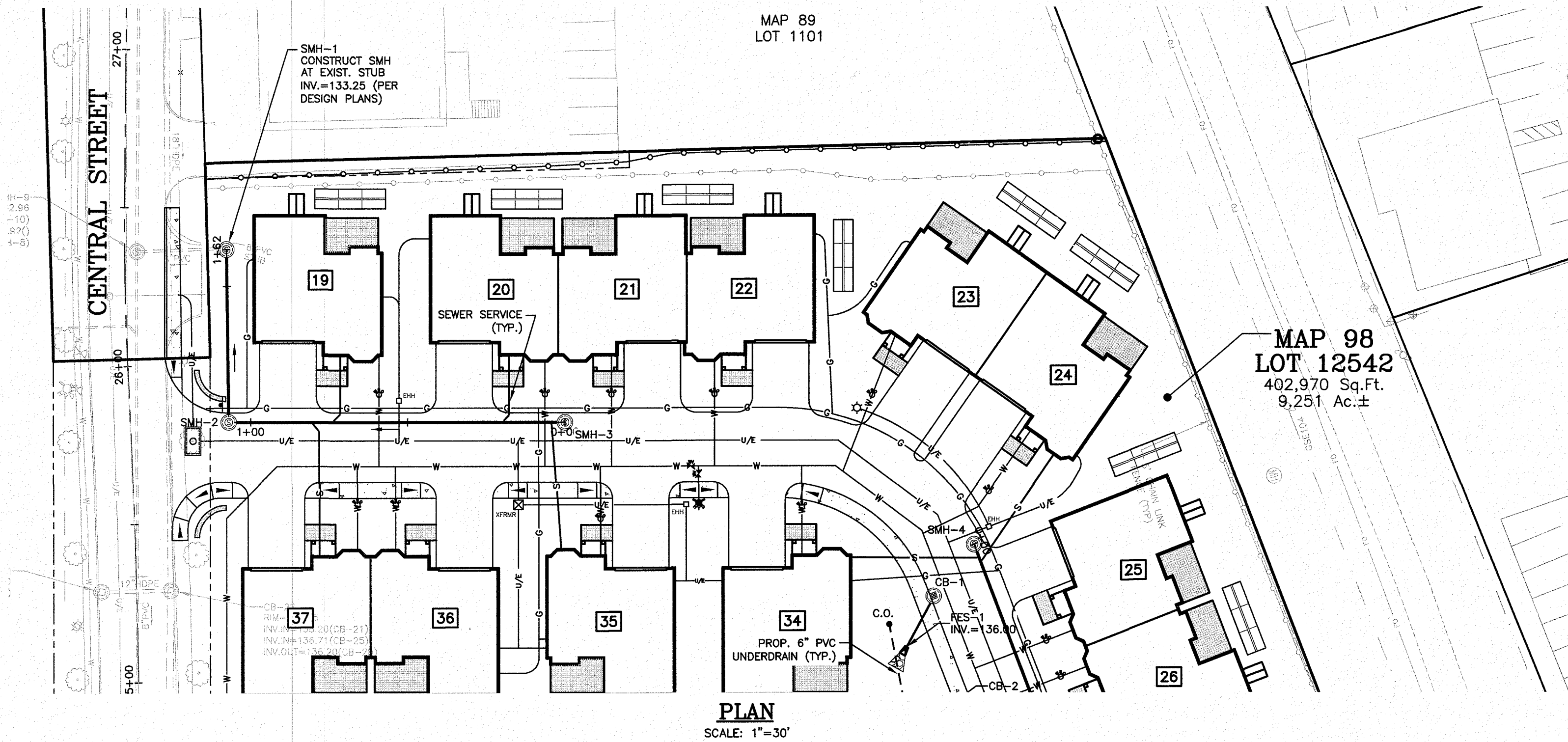


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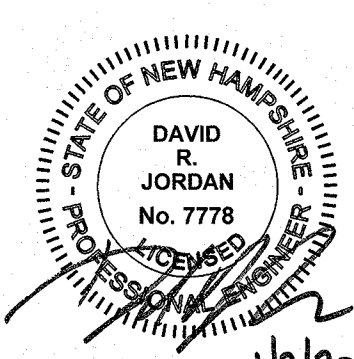
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LEGEND	
	IRON PIN FOUND
	CONCRETE BOUND FOUND
	RAILROAD SPIKE FOUND
	DRILL HOLE FOUND
	VERTICAL GRANITE CURB
	BITUMINOUS CONCRETE LIP CURB
	SLOPED GRANITE CURB
	OVERHEAD SERVICE WIRES
	DOUBLE SOLID YELLOW LINE
	SINGLE SOLID WHITE LINE
	BROKEN WHITE LINE
	SIGN
	OBSERVATION WELL
	TEST PIT
	TEST BORING
	PERCOLATION TEST
	TREELINE
	UTILITY POLE
	DRAIN MANHOLE
	SEWER MANHOLE
	TELEPHONE MANHOLE
	CATCH BASIN
	WATER LINE
	WATER VALVE
	ENTRY
	FIRE HYDRANT
	GAS VALVE
	GAS LINE
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND ELECTRIC AND TELEPHONE
	WETLAND LINE
	SPOT ELEVATION
	CONTOUR ELEVATION
	PROP. CLEANOUT
	PROP. CATCH BASIN
	PROP. DRAIN MANHOLE
	PROP. SEWER MANHOLE
	PROP. DRAIN BASIN
	MEET EXISTING GRADE
	PROP. SPOT ELEVATION
	PROP. CONTOUR ELEVATION
	PROP. ELECTRIC HANDHOLE
	PROP. TRANSFORMER



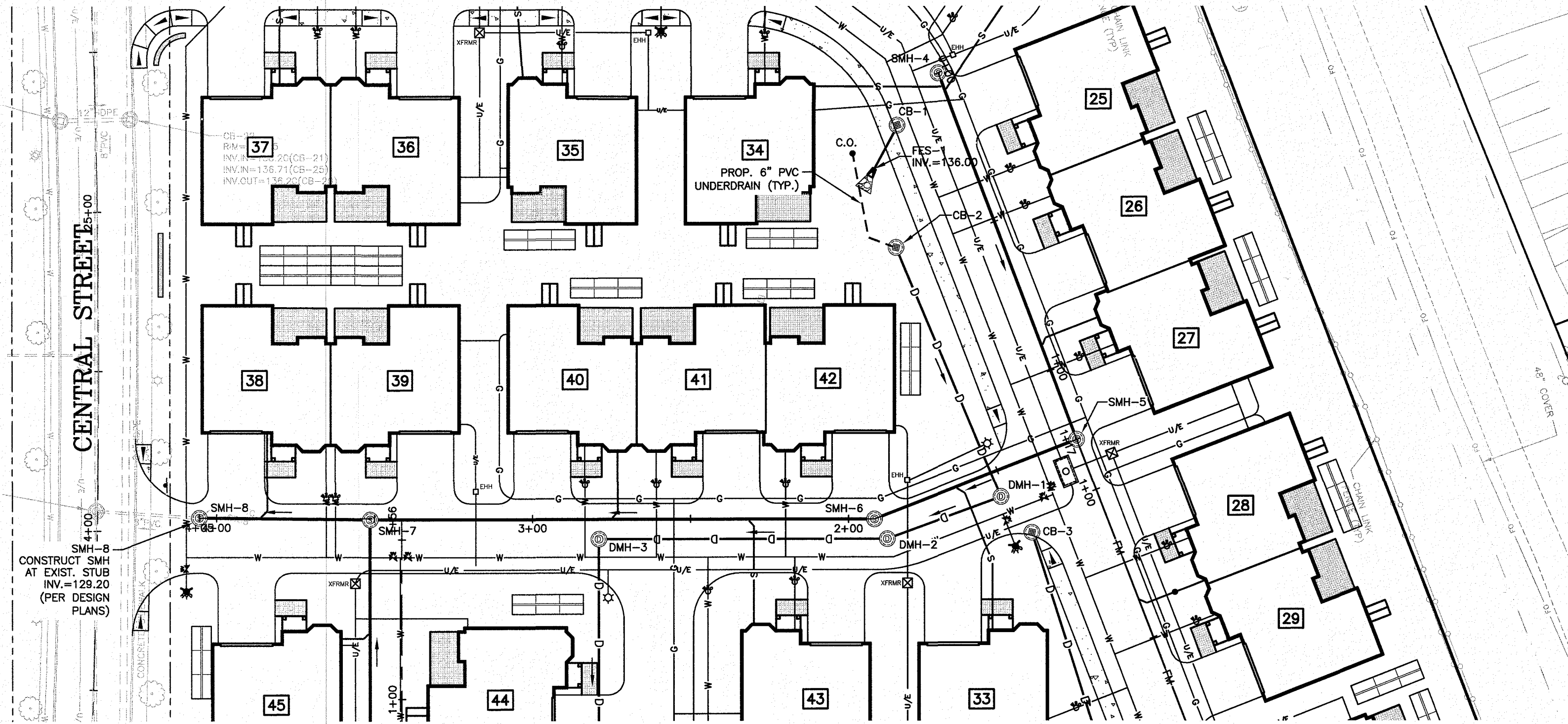
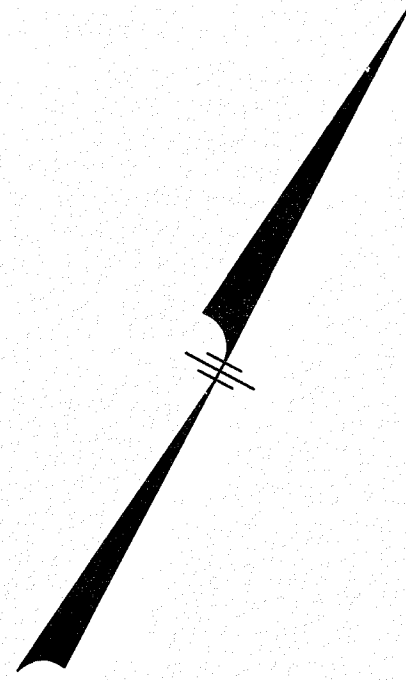
NOTES:

- 1) THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIG SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE DIGGING.
- 2) CONTRACTOR SHALL COORDINATE ALL WORK WITH SUBCONTRACTORS, UTILITY COMPANIES, AND THE TOWN OF SALEM, AND SHALL BE RESPONSIBLE FOR COORDINATION OF ALL PERMITS, INSPECTIONS, AND MAINTENANCE AND PROTECTION OF ALL TRAFFIC AND PEDESTRIANS. ANY DISCREPANCIES FOUND OR SHOWN SHALL BE RESOLVED BY THE CONTRACTOR.
- 3) ALL WORK SHALL CONFORM TO THE TOWN OF SALEM AND NHDOT STANDARDS.
- 4) WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
- 5) CONTRACTOR SHALL CONFIRM WITH ENGINEER ALL LAYOUT ITEMS NOT SHOWN OR ANNOTATED. THE LOCATION OF ALL STRUCTURES AND UTILITIES SHALL BE CONFIRMED PRIOR TO LAYOUT OF PAVED AREAS. EXACT LOCATION OF PAVEMENT SHALL BE CONFIRMED WITH ENGINEER PRIOR TO PLACEMENT OF BINDER COURSE PAVEMENT.
- 6) PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONFIRM WITH THE ENGINEER THAT HE HAS THE MOST RECENT SET OF PLANS. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
- 7) THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND SHALL ARRANGE FOR ALL INSPECTIONS.
- 8) IF DURING CONSTRUCTION IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE CONTRACTOR SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE TOWN.
- 9) ALL SEWER PIPE DATA CALCULATED TO STRUCTURE CENTERS, TYP.
- 10) SEE SHEET 15 FOR SEWER DETAILS.
- 11) ALL SANITARY SEWER PIPE SHALL BE PVC (SDR-35), UNLESS OTHERWISE NOTED.
- 12) ELEVATIONS SHOWN ARE NGVD29 DATUM. CONTRACTOR TO CONFIRM BENCHMARKS PRIOR TO COMMENCEMENT OF WORK.
- 13) ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM TO MUNICIPAL SERVICES DEPARTMENT SPECIFICATIONS.
- 14) ANY UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY UTILITY COMPANY AND SALEM MUNICIPAL SERVICES DEPARTMENT.
- 15) WHERE SEWER SERVICE/MAIN CROSSES WATER MAIN/SERVICE, 18" VERTICAL CLEARANCE BETWEEN THE UTILITIES SHALL BE PROVIDED WITH WATER OVER THE SEWER.

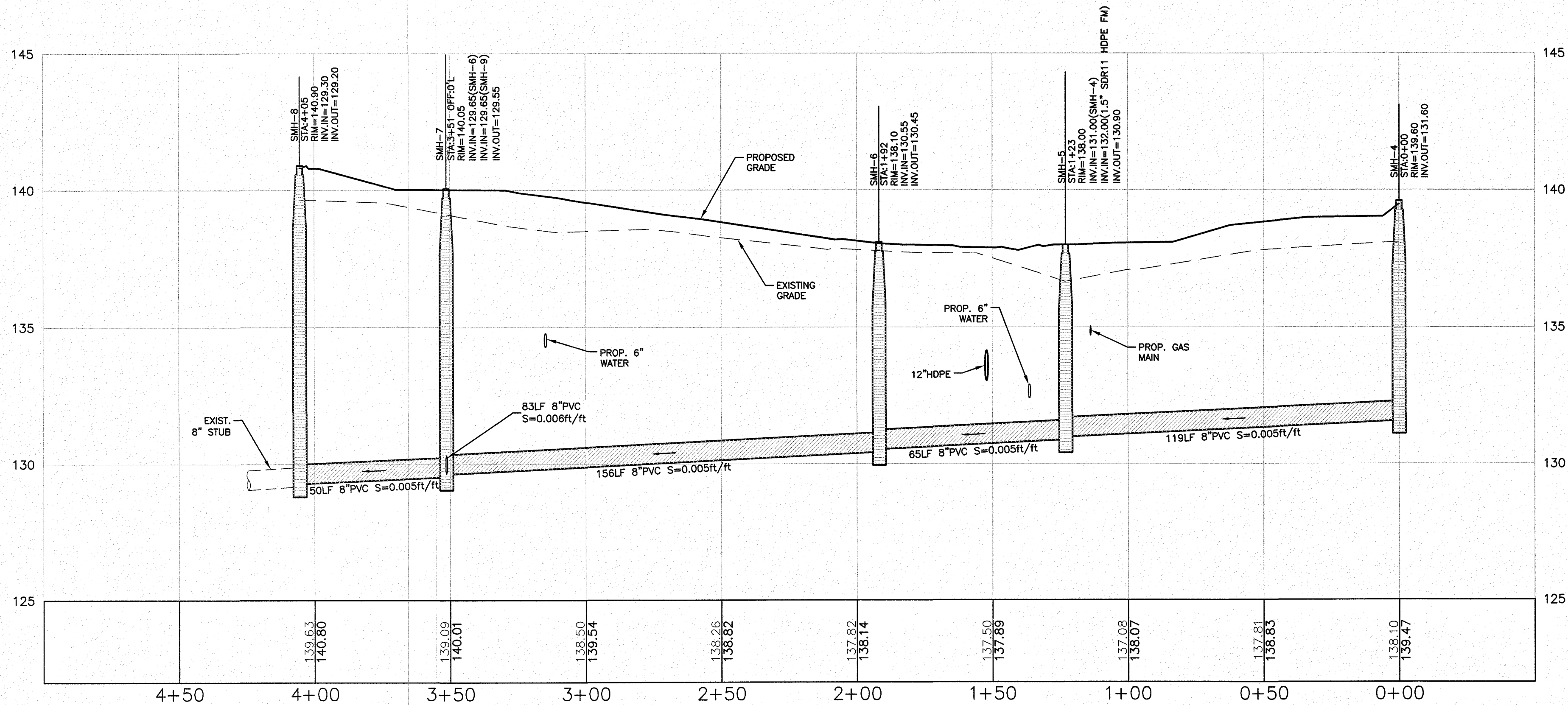
2	REVISIONS PER TOWN COMMENTS	DRJ	1/7/20
1	MISC. REVISIONS	DRJ	12/16/19
NO.	DESCRIPTION	BY	DATE
REVISIONS			
SEWER PLAN & PROFILE			
THE VILLAS AT NORTH TUSCAN VILLAGE – PHASE 2 11 CENTRAL STREET SALEM, NEW HAMPSHIRE SALEM PROPERTY MAP 98 LOT 12542 BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC			
 603.893.0720		Formerly MHF Design Consultants, Inc.  Greenman-Pedersen, Inc. 44 Stiles Road Suite One Salem, NH 03079	
SCALE: 1" = 30'		DATE: OCTOBER 8, 2019	
 1/1/20	PREPARED FOR BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC 17 MAIN STREET HOPKINTON, MA 01748 BOOK 5810–PAGE 1414		SALEM PLANNING BOARD APPROVAL
	ZONE: COMMERCIAL–INDUSTRIAL 'C' & RESIDENTIAL		
DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.
DRJ	CCC/DRJ	4214SP.dwg	421417
			SHEET No. 8 OF 18

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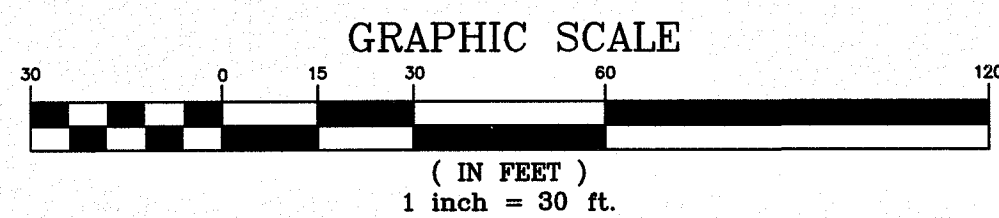
LEGEND	
	IRON PIN FOUND
	CONCRETE BOUND FOUND
	RAILROAD SPIKE FOUND
	DRILL HOLE FOUND
	VERTICAL GRANITE CURB
	BITUMINOUS CONCRETE LIP CURBING
	SLOPED GRANITE CURB
	OVERHEAD SERVICE WIRES
	DOUBLE SOLID YELLOW LINE
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	BROKEN WHITE LINE
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	OBSERVATION WELL
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	TREELINE
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	DRAIN MANHOLE
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	PROP. ELECTRIC HANDHOLE
	PROP. TRANSFORMER


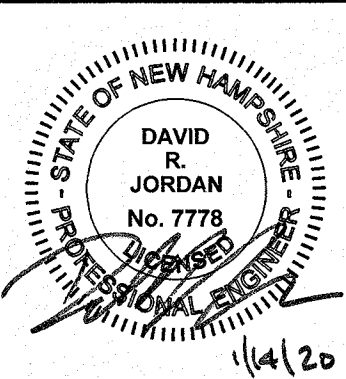


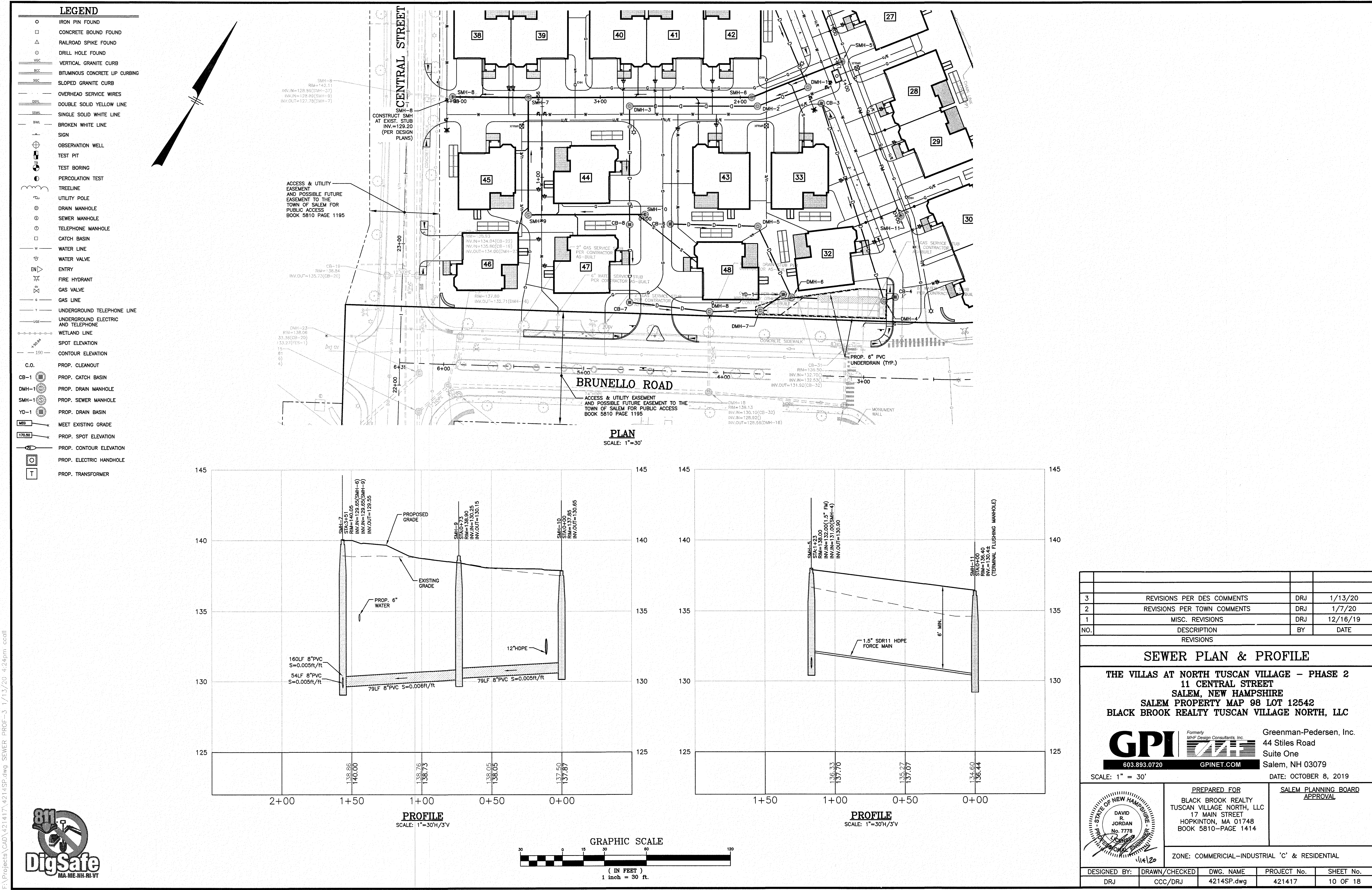
PLAN
SCALE: 1"=30'



PROFILE
SCALE: 1"=30'H/3'V



3	REVISIONS PER DES COMMENTS	DRJ	1/13/20
2	REVISIONS PER TOWN COMMENTS	DRJ	1/7/20
1	MISC. REVISIONS	DRJ	12/16/19
NO.	DESCRIPTION	BY	DATE
REVISIONS			
SEWER PLAN & PROFILE			
THE VILLAS AT NORTH TUSCAN VILLAGE – PHASE 2 11 CENTRAL STREET SALEM, NEW HAMPSHIRE SALEM PROPERTY MAP 98 LOT 12542 BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC			
		Formerly MHF Design Consultants, Inc.	
603.893.0720		Greenman-Pedersen, Inc. 44 Stiles Road Suite One Salem, NH 03079	
GPINET.COM			
SCALE: 1" = 30'		DATE: OCTOBER 8, 2019	
	PREPARED FOR BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC 17 MAIN STREET HOPKINTON, MA 01748 BOOK 5810–PAGE 1414		SALEM PLANNING BOARD APPROVAL
	ZONE: COMMERCIAL–INDUSTRIAL 'C' & RESIDENTIAL		
DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.
DRJ	CCC/DRJ	4214SP.dwg	421417
			SHEET No.
			9 OF 18



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REFER TO DETAIL SHEETS FOR ADDITIONAL
EROSION CONTROL NOTES & DETAILS

NO.	DESCRIPTION	BY	DATE
4	REVISIONS PER TOWN COMMENTS	DRJ	1/7/20
3	MISC. REVISIONS	DRJ	12/16/19
2	REVISIONS PER REVIEW COMMENTS	DRJ	11/8/19
1	REVISE UNDERGROUND INFILTRATION SYSTEMS	PWM	10/24/19

EROSION CONTROL PLAN

THE VILLAS AT NORTH TUSCAN VILLAGE – PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC



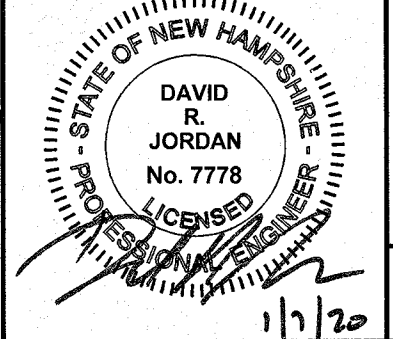
603.893.0720
GPINET.COM

Formerly
MHF Design Consultants, Inc.

Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

SCALE: 1" = 30'

DATE: OCTOBER 1, 2019



DAVID R. JORDAN
No. 7778
COMMISSIONER

PREPARED FOR
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810–PAGE 1414

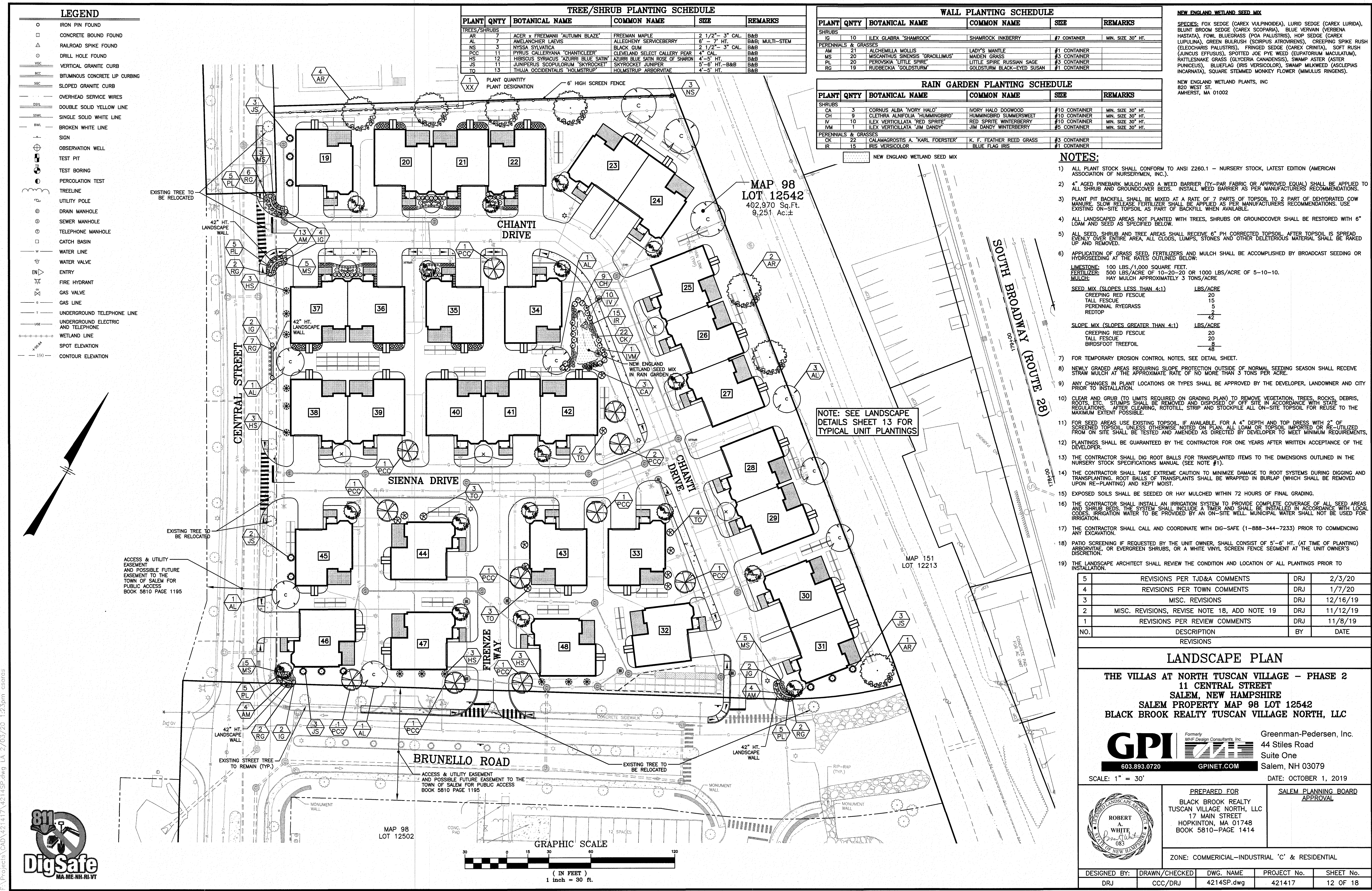
SALEM PLANNING BOARD
APPROVAL

ZONE: COMMERCIAL–INDUSTRIAL 'C' & RESIDENTIAL

DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CCC/DRJ	4214SP.dwg	421417	11 OF 18

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LEGEND

- IRON PIN FOUND
- CONCRETE BOUND FOUND
- RAILROAD SPIKE FOUND
- DRILL HOLE FOUND
- VERTICAL GRANITE CURB
- BITUMINOUS CONCRETE UP CURBING
- SLOPED GRANITE CURB
- OVERHEAD SERVICE WIRES
- DOUBLE SOLID YELLOW LINE
- SINGLE SOLID WHITE LINE
- BROKEN WHITE LINE
- SIGN
- OBSERVATION WELL
- TEST PIT
- TEST BORING
- PERCOLATION TEST
- TREELINE
- UTILITY POLE
- DRAIN MANHOLE
- SEWER MANHOLE
- TELEPHONE MANHOLE
- CATCH BASIN
- WATER LINE
- WATER VALVE
- ENTRY
- FIRE HYDRANT
- GAS VALVE
- GAS LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND ELECTRIC AND TELEPHONE
- WETLAND LINE
- SPOT ELEVATION
- CONTOUR ELEVATION

TREE/SHRUB PLANTING SCHEDULE

PLANT	QNTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
AR	7	ACER x FREEMANII 'AUTUMN BLAZE'	FREEMAN MAPLE	2 1/2" - 3" CAL.	B&B
AL	7	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	6" - 7" HT.	B&B; MULTI-STEM
NS	3	NYSSA SYLVIATICA	BLACK GUM	2 1/2" - 3" CAL.	B&B
PCC	11	PIRUS CALLERYANA 'CHANTICLEER'	CLEVELAND SELECT CALLERY PEAR	4" CAL.	B&B
HS	12	HIBISCUS SYRIACUS 'AZURRI BLUE SATIN'	AZURRI BLUE SATIN ROSE OF SHARON	4"-5" HT.	B&B
JS	11	JUNIPERUS SCOPULORUM 'SKYROCKET'	SKYROCKET JUNIPER	5'-6" HT. - B&B	B&B
TQ	13	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE	4'-5" HT.	B&B

WALL PLANTING SCHEDULE

PLANT	QNTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
IG	10	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	#7 CONTAINER	MIN. SIZE 30" HT.
PERENNIALS & GRASSES					
AM	21	ALCHEMILLA MOLLIS	LADY'S MANTLE	#1 CONTAINER	
MS	20	MISCANTHUS SINENSIS 'GRACILLIMUS'	MAIDEN GRASS	#3 CONTAINER	
PL	20	PEROVSKIA 'LITTLE SPIRE'	LITTLE SPIRE RUSSIAN SAGE	#3 CONTAINER	
RG	19	RUDBECKIA 'GOLDSTURM'	GOLDSTURM BLACK-EYED SUSAN	#1 CONTAINER	

RAIN GARDEN PLANTING SCHEDULE

PLANT	QNTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SHRUBS					
CA	3	CORNUS ALBA 'IVORY HALO'	IVORY HALO DOGWOOD	#10 CONTAINER	MIN. SIZE 30" HT.
CH	9	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET	#10 CONTAINER	MIN. SIZE 30" HT.
IV	10	ILEX VERTICILLATA 'RED SPIRIT'	RED SPIRIT WINTERBERRY	#10 CONTAINER	MIN. SIZE 30" HT.
LV	1	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY	#5 CONTAINER	MIN. SIZE 30" HT.
PERENNIALS & GRASSES					
CK	22	CALAMAGROSTIS A. 'KARL FOERSTER'	K. F. FEATHER REED GRASS	#3 CONTAINER	
IR	15	IRIS VERSICOLOR	BLUE FLAG IRIS	#1 CONTAINER	

NEW ENGLAND WETLAND SEED MIX

SPECIES: FOX SEDGE (CAREX VULPINOIDEA), LURID SEDGE (CAREX LURIDA), BLUNT BROOM SEDGE (CAREX SCOPARIA), BLUE VERVAIN (VERBENA HASTATA), FOWL BLUEGRASS (POA PALUSTRIS), HOP SEDGE (CAREX LUPULINA), GREEN BULRUSH (SCIRPUS ATROVIRENS), CREEPING SPIKE RUSH (ELEOCHARIS PALUSTRIS), FRINGED SEDGE (CAREX CRINITA), SOFT RUSH (JUNCUS EFFUSUS), SPOTTED JOE PYE WEEED (EUPATORIUM MACULATUM), RATTLESNAKE GRASS (GLYCERIA CANADENSIS), SWAMP ASTER (ASTER PUNICEUS), BLUEFLAG (IRIS VERSICOLOR), SWAMP MILKWEED (ASCLEPIAS INCARNATA), SQUARE STEMMED MONKEY FLOWER (MIMULUS RINGENS).

NEW ENGLAND WETLAND PLANTS, INC.
820 WEST ST.
AMHERST, MA 01002

NOTES:

- ALL PLANT STOCK SHALL CONFORM TO ANSI Z260.1 - NURSERY STOCK, LATEST EDITION (AMERICAN ASSOCIATION OF NURSERYMEN, INC.).
- 4" AGED PINEBARK MULCH AND A WEED BARRIER (TY-PAR FABRIC OR APPROVED EQUAL) SHALL BE APPLIED TO ALL SHRUB AND GROUND COVER BEDS. INSTALL WEED BARRIER AS PER MANUFACTURERS RECOMMENDATIONS.
- PLANT PIT BACKFILL SHALL BE MIXED AT A RATE OF 7 PARTS OF TOPSOIL TO 2 PARTS OF DEHYDRATED COW MANURE. SLOW RELEASE FERTILIZER SHALL BE APPLIED AS PER MANUFACTURERS RECOMMENDATIONS. USE EXISTING ON-SITE TOPSOIL AS PART OF BACKFILL WHEN AVAILABLE.
- ALL LANDSCAPED AREAS NOT PLANTED WITH TREES, SHRUBS OR GROUND COVER SHALL BE RESTORED WITH 6" LOAM AND SEED AS SPECIFIED BELOW.
- ALL SEED, SHRUB AND TREE AREAS SHALL RECEIVE 6" PH CORRECTED TOPSOIL. AFTER TOPSOIL IS SPREAD, EVENLY OVER THE ENTIRE AREA, ALL CLOUDS, LUMPS, STONES AND OTHER DELETERIOUS MATERIAL SHALL BE RAKED UP AND REMOVED.
- APPLICATION OF GRASS SEED, FERTILIZERS AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:
LIMESTONE: 100 LBS./1,000 SQUARE FEET.
FERTILIZER: 500 LBS./ACRE OF 10-20-20 OR 1000 LBS./ACRE OF 5-10-10.
MULCH: HAY MULCH APPROXIMATELY 3 TONS/ACRE
SEED MIX (SLOPES LESS THAN 4:1) LBS./ACRE
CREEPING RED FESCUE 20
TALL FESCUE 15
PERENNIAL RYEGRASS 5
REDS TOP 42
SLOPE MIX (SLOPES GREATER THAN 4:1) LBS./ACRE
CREEPING RED FESCUE 20
TALL FESCUE 20
BIRDSFOOT TREEFOIL 48
- FOR TEMPORARY EROSION CONTROL NOTES, SEE DETAIL SHEET.
- NEWLY GRADED AREAS REQUIRING SLOPE PROTECTION OUTSIDE OF NORMAL SEEDING SEASON SHALL RECEIVE STRAW MULCH AT THE APPROXIMATE RATE OF NO MORE THAN 3 TONS PER ACRE.
- ANY CHANGES IN PLANT LOCATIONS OR TYPES SHALL BE APPROVED BY THE DEVELOPER, LANDOWNER AND CITY PRIOR TO INSTALLATION.
- CLEAR AND GRUB (TO LIMITS REQUIRED ON GRADING PLAN) TO REMOVE VEGETATION, TREES, ROCKS, DEBRIS, ROOTS, ETC. STUMPS SHALL BE REMOVED AND DISPOSED OF OFF SITE IN ACCORDANCE WITH STATE REGULATIONS. AFTER CLEARING, ROTOTILL, STRIP AND STOCKPILE ALL ON-SITE TOPSOIL FOR REUSE TO THE MAXIMUM EXTENT POSSIBLE.
- FOR SEED AREAS USE EXISTING TOPSOIL, IF AVAILABLE, FOR A 4" DEPTH AND TOP DRESS WITH 2" OF SCREENED TOPSOIL. UNLESS OTHERWISE NOTED ON PLAN, ALL LOAM OR TOPSOIL IMPORTED OR RE-UTILIZED FROM ON SITE SHALL BE TESTED AND AMENDED AS DIRECTED BY DEVELOPER TO MEET MINIMUM REQUIREMENTS.
- PLANTINGS SHALL BE GUARANTEED BY THE CONTRACTOR FOR ONE YEARS AFTER WRITTEN ACCEPTANCE OF THE DEVELOPER.
- THE CONTRACTOR SHALL DIG ROOT BALLS FOR TRANSPLANTED ITEMS TO THE DIMENSIONS OUTLINED IN THE NURSERY STOCK SPECIFICATIONS MANUAL (SEE NOTE #1).
- THE CONTRACTOR SHALL TAKE EXTREME CAUTION TO MINIMIZE DAMAGE TO ROOT SYSTEMS DURING DIGGING AND TRANSPLANTING. ROOT BALLS OF TRANSPLANTS SHALL BE WRAPPED IN BURLAP (WHICH SHALL BE REMOVED UPON RE-PLANTING) AND KEPT MOIST.
- EXPOSED SOILS SHALL BE SEEDDED OR HAY MULCHED WITHIN 72 HOURS OF FINAL GRADING.
- THE CONTRACTOR SHALL INSTALL AN IRRIGATION SYSTEM TO PROVIDE COMPLETE COVERAGE OF ALL SEED AREAS AND SHRUB BEDS. THE SYSTEM SHALL INCLUDE A TIMER AND SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES. IRRIGATION WATER TO BE PROVIDED BY AN ON-SITE WELL. MUNICIPAL WATER SHALL NOT BE USED FOR IRRIGATION.
- THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIG-SAFE (1-888-344-7233) PRIOR TO COMMENCING ANY EXCAVATION.
- PATIO SCREENING IF REQUESTED BY THE UNIT OWNER, SHALL CONSIST OF 5'-6" HT. (AT TIME OF PLANTING) ARBORVITAE OR EVERGREEN SHRUBS, OR A WHITE VINYL SCREEN FENCE SEGMENT AT THE UNIT OWNER'S DISCRETION.
- THE LANDSCAPE ARCHITECT SHALL REVIEW THE CONDITION AND LOCATION OF ALL PLANTINGS PRIOR TO INSTALLATION.

5	REVISIONS PER TJD&A COMMENTS	DRJ	2/3/20
4	REVISIONS PER TOWN COMMENTS	DRJ	1/7/20
3	MISC. REVISIONS	DRJ	12/16/19
2	MISC. REVISIONS, REVISE NOTE 18, ADD NOTE 19	DRJ	11/12/19
1	REVISIONS PER REVIEW COMMENTS	DRJ	11/8/19
NO.	DESCRIPTION	BY	DATE

LANDSCAPE PLAN

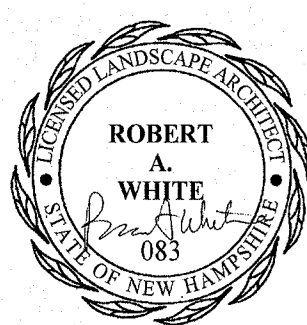
THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC



Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

SCALE: 1" = 30'

DATE: OCTOBER 1, 2019



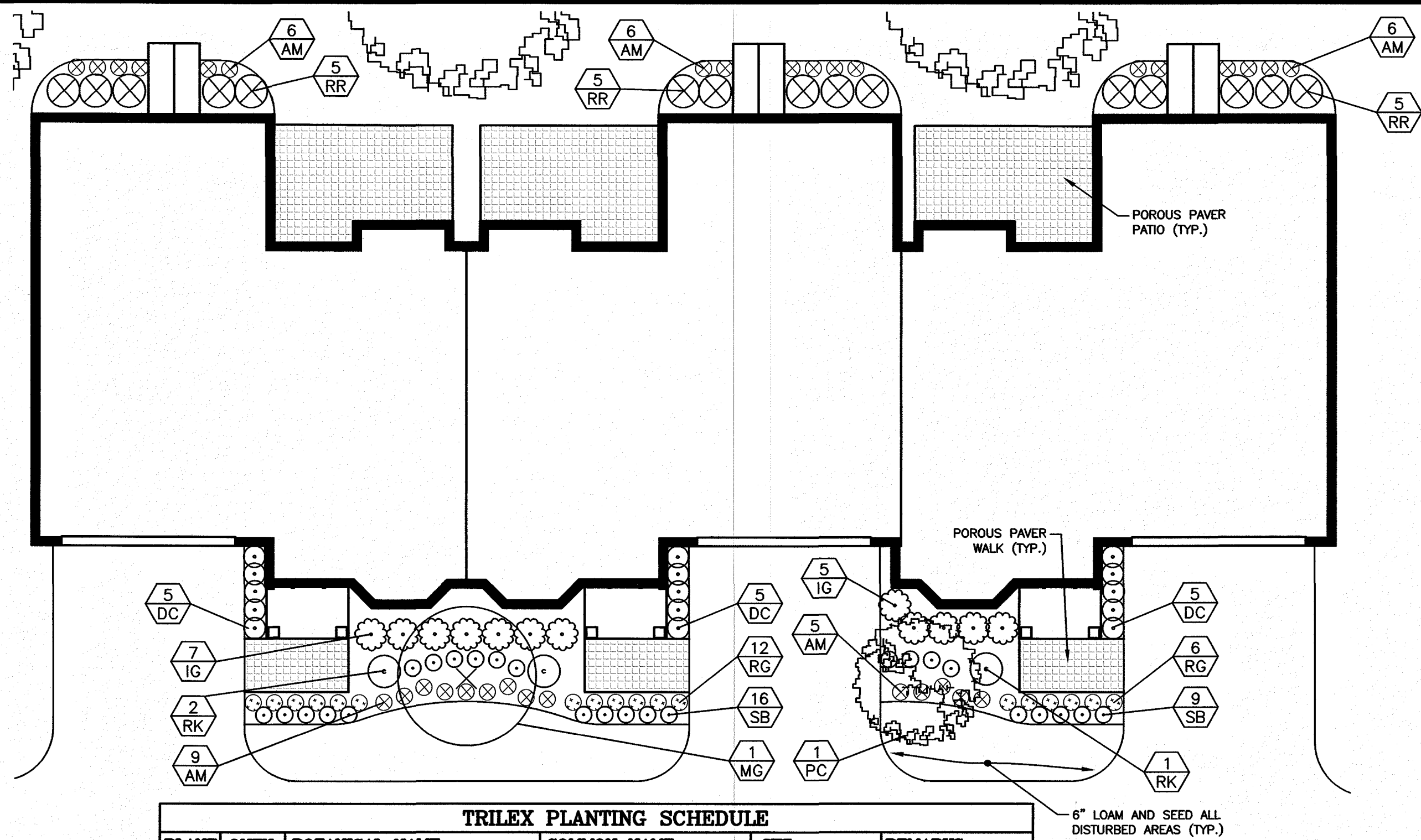
PREPARED FOR
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810-PAGE 1414

SALEM PLANNING BOARD
APPROVAL

ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL

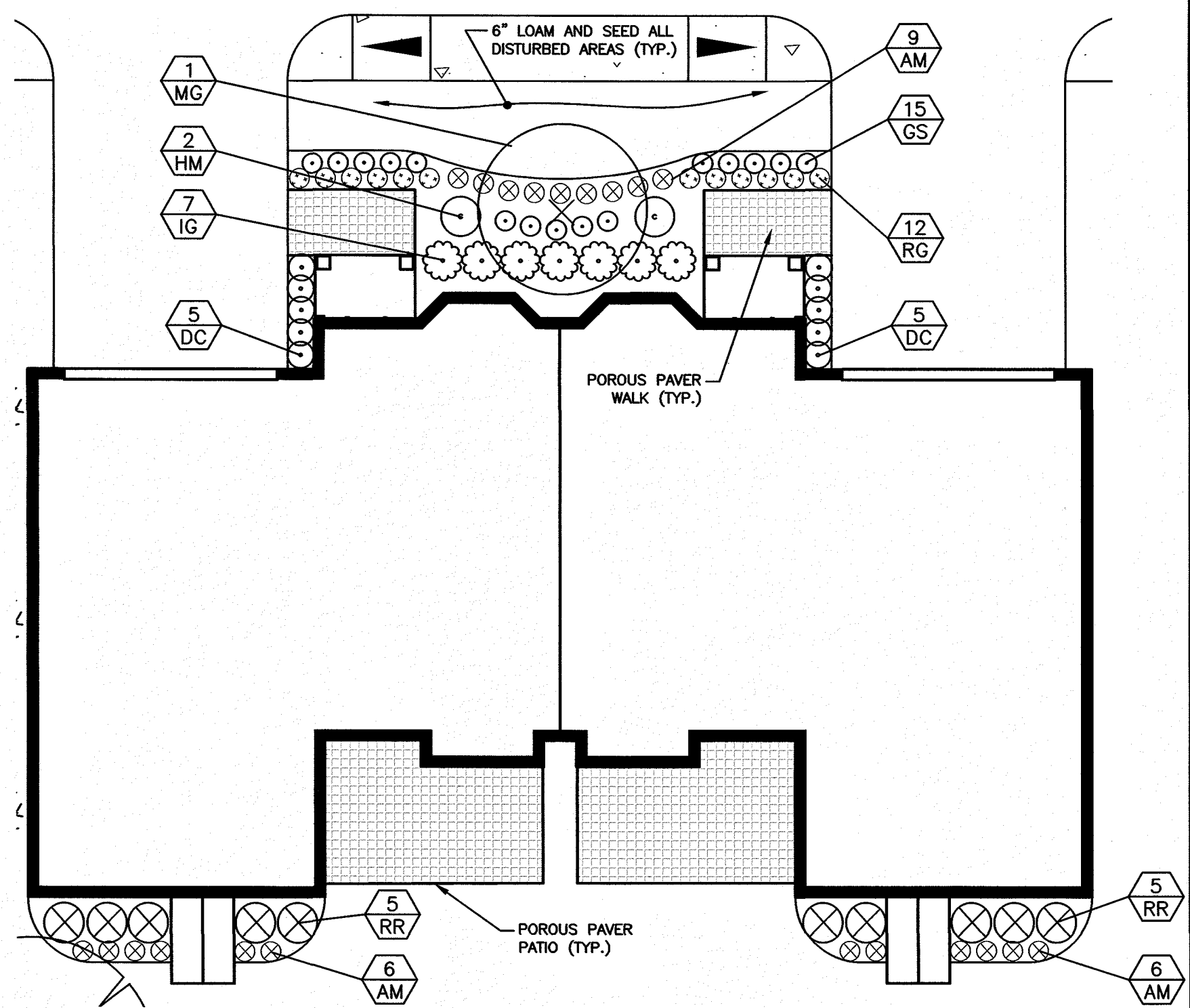
DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CCC/DRJ	4214SP.dwg	421417	12 OF 18





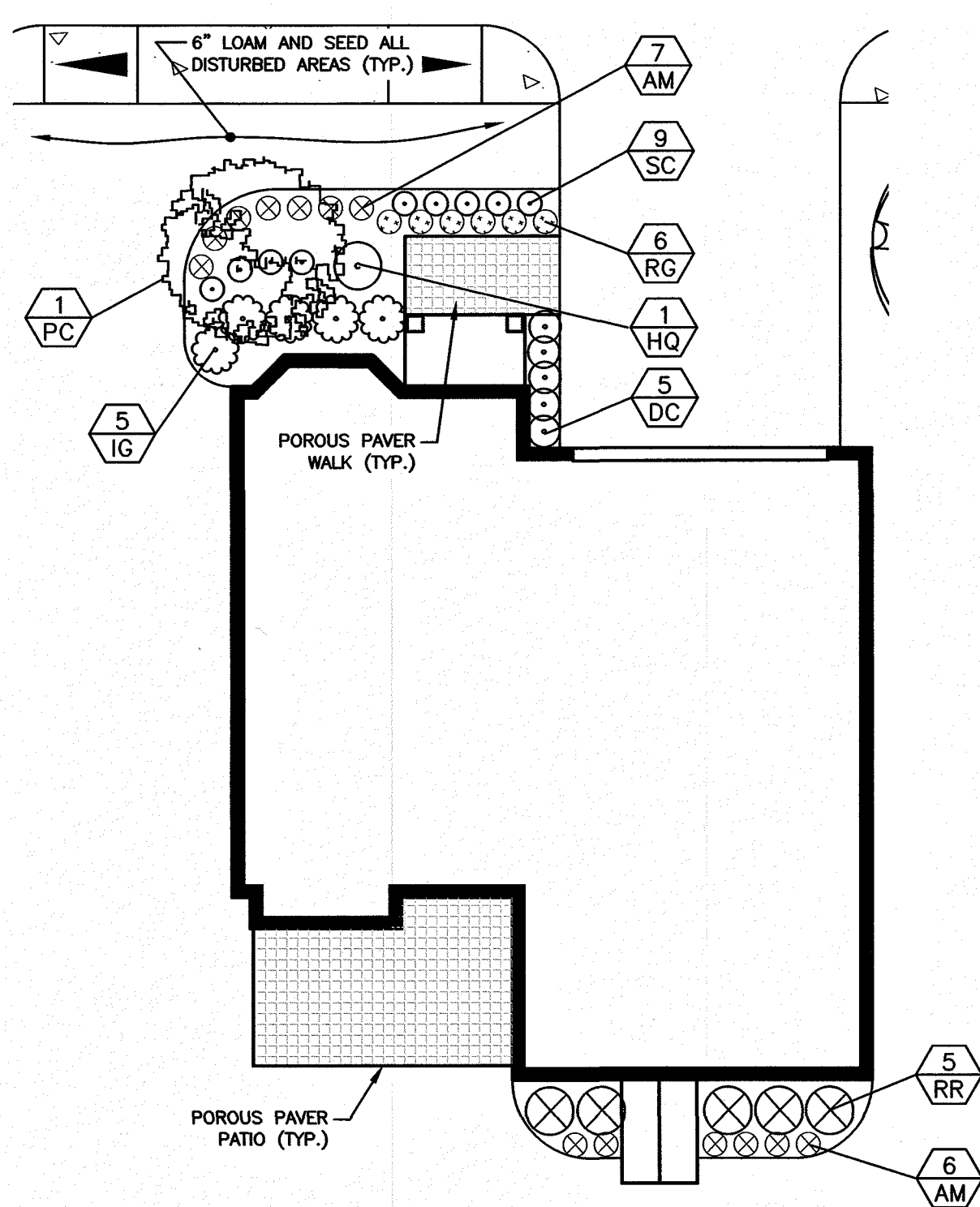
TRILEX PLANTING SCHEDULE					
PLANT	QNTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
PC	1	PRUNUS SARGENTII 'COLUMNARIS'	COLUMNAR SARGENT CHERRY	2"- 2 1/2" CAL.	B&B
MG	1	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2 1/2"- 3" CAL.	B&B
SHRUBS					
IG	12	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	#7 CONTAINER	MIN. SIZE 30" HT.
RR	15	RHODODENDRON x 'RAMAPO'	RAMAPO RHODODENDRON	#7 CONTAINER	MIN. SIZE 30" HT.
RK	3	ROSA 'KNOCK OUT'	KNOCK OUT ROSE	#7 CONTAINER	MIN. SIZE 30" HT.
PERENNIALS & GRASSES					
AM	32	ALCHEMILLA MOLLIS	LADY'S MANTLE	#1 CONTAINER	12"-24" SPACING
SB	25	STACHYS BYZANTINA	LAMB'S EAR	#1 CONTAINER	12"-24" SPACING
RG	18	RUBROCKIA 'GOLDSTURM'	GOLDSTURM BLACK-EYED SUSAN	#1 CONTAINER	12"-24" SPACING
DC	15	DESCHAMPSIA CESPITOSA 'GOLD TAU'	TUFTED HAIR GRASS	#2 CONTAINER	12"-24" SPACING

1 PLANT QUANTITY
XX PLANT DESIGNATION
TYPICAL TRILEX PLANTING
SCALE: 1"=10'



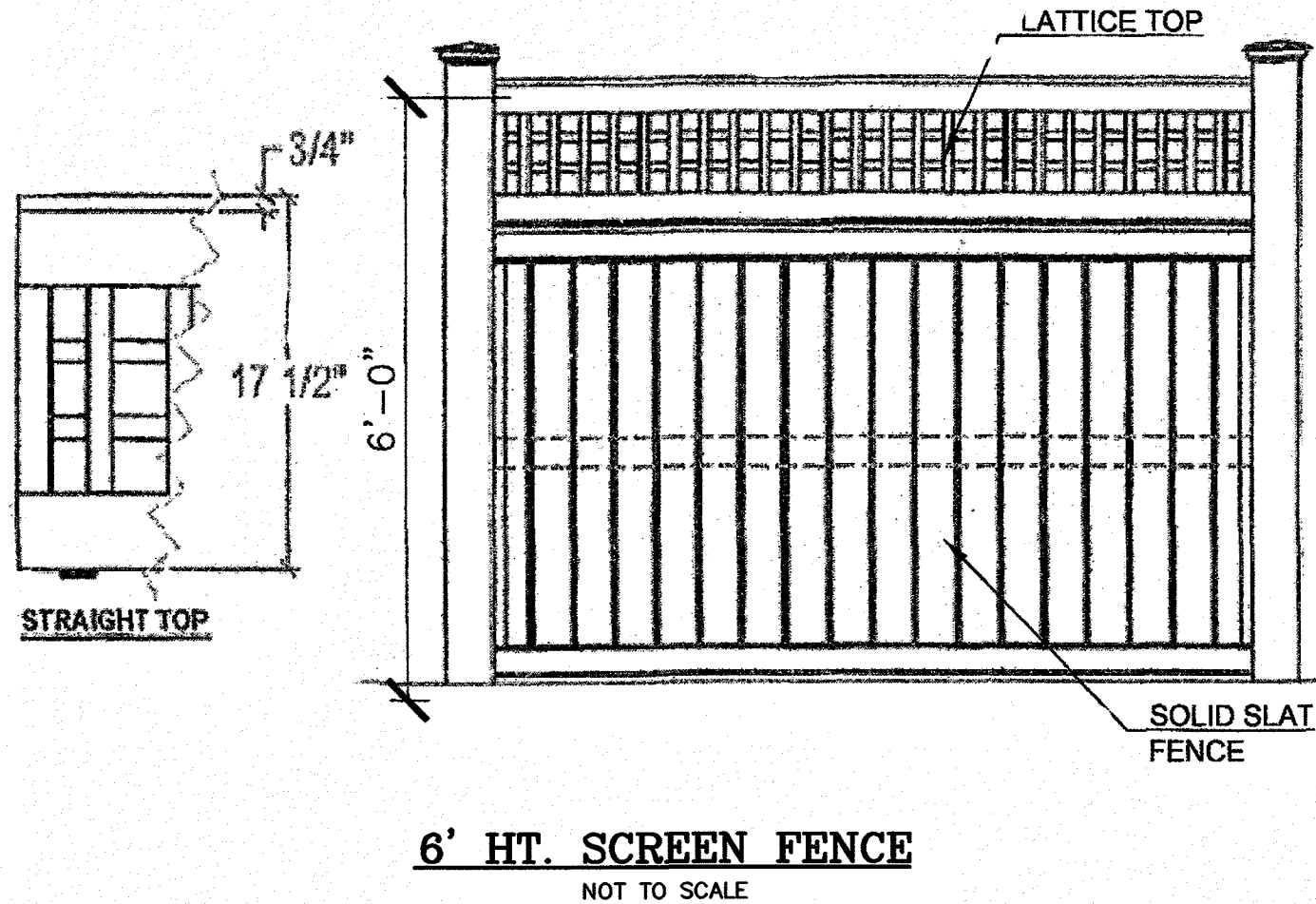
DUPEX PLANTING SCHEDULE					
PLANT	QNTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
MG	1	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2 1/2"- 3" CAL.	B&B
SHRUBS					
IG	7	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	#7 CONTAINER	MIN. SIZE 30" HT.
RR	10	RHODODENDRON x 'RAMAPO'	RAMAPO RHODODENDRON	#7 CONTAINER	MIN. SIZE 30" HT.
HM	2	HYDRANGEA MACROPHYLLA 'TWIST & SHOUT'	TWIST & SHOUT HYDRANGEA	#7 CONTAINER	MIN. SIZE 30" HT.
PERENNIALS & GRASSES					
AM	21	ALCHEMILLA MOLLIS	LADY'S MANTLE	#1 CONTAINER	12"-24" SPACING
GS	15	GERANIUM SANGUINEUM 'NH PURPLE'	GRANESBILL	#1 CONTAINER	12"-24" SPACING
RG	12	RUBROCKIA 'GOLDSTURM'	GOLDSTURM BLACK-EYED SUSAN	#1 CONTAINER	12"-24" SPACING
DC	10	DESCHAMPSIA CESPITOSA 'GOLD TAU'	TUFTED HAIR GRASS	#2 CONTAINER	12"-24" SPACING

1 PLANT QUANTITY
XX PLANT DESIGNATION
TYPICAL DUPEX PLANTING
SCALE: 1"=10'

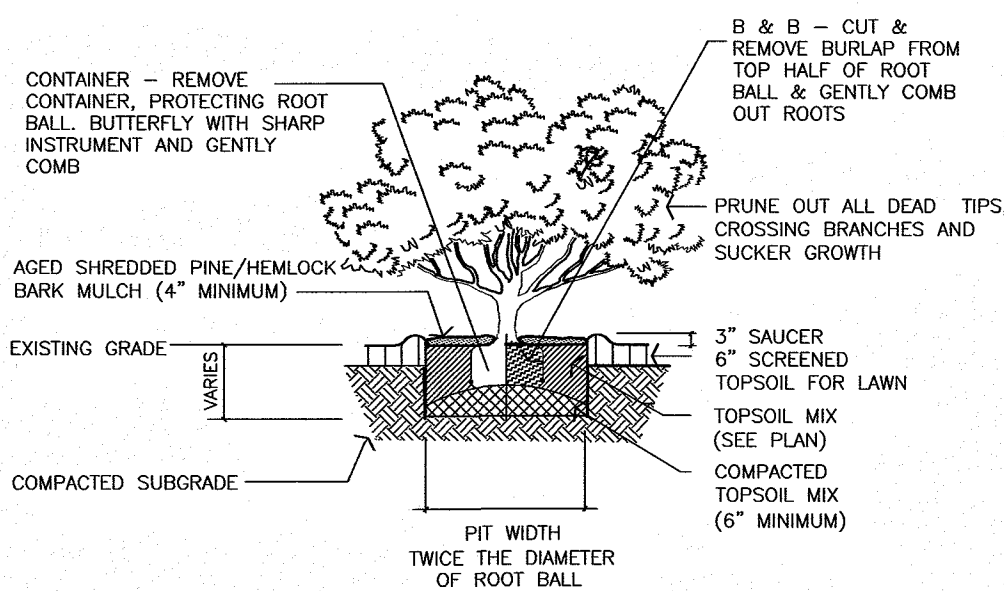


SINGLE UNIT PLANTING SCHEDULE					
PLANT	QNTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
PC	1	PRUNUS SARGENTII 'COLUMNARIS'	COLUMNAR SARGENT CHERRY	2"- 2 1/2" CAL.	B&B
SHRUBS					
IG	5	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	#7 CONTAINER	MIN. SIZE 30" HT.
RR	5	RHODODENDRON x 'RAMAPO'	RAMAPO RHODODENDRON	#7 CONTAINER	MIN. SIZE 30" HT.
HQ	1	HYDRANGEA QUERCIFOLIA 'PEE WEE'	OAK-LEAF HYDRANGEA	#7 CONTAINER	MIN. SIZE 30" HT.
PERENNIALS & GRASSES					
AM	13	ALCHEMILLA MOLLIS	LADY'S MANTLE	#1 CONTAINER	12"-24" SPACING
SC	9	SALVIA NEMOROSA 'CARDONNA'	SALVIA	#1 CONTAINER	12"-24" SPACING
RG	6	RUBROCKIA 'GOLDSTURM'	GOLDSTURM BLACK-EYED SUSAN	#1 CONTAINER	12"-24" SPACING
DC	5	DESCHAMPSIA CESPITOSA 'GOLD TAU'	TUFTED HAIR GRASS	#2 CONTAINER	12"-24" SPACING

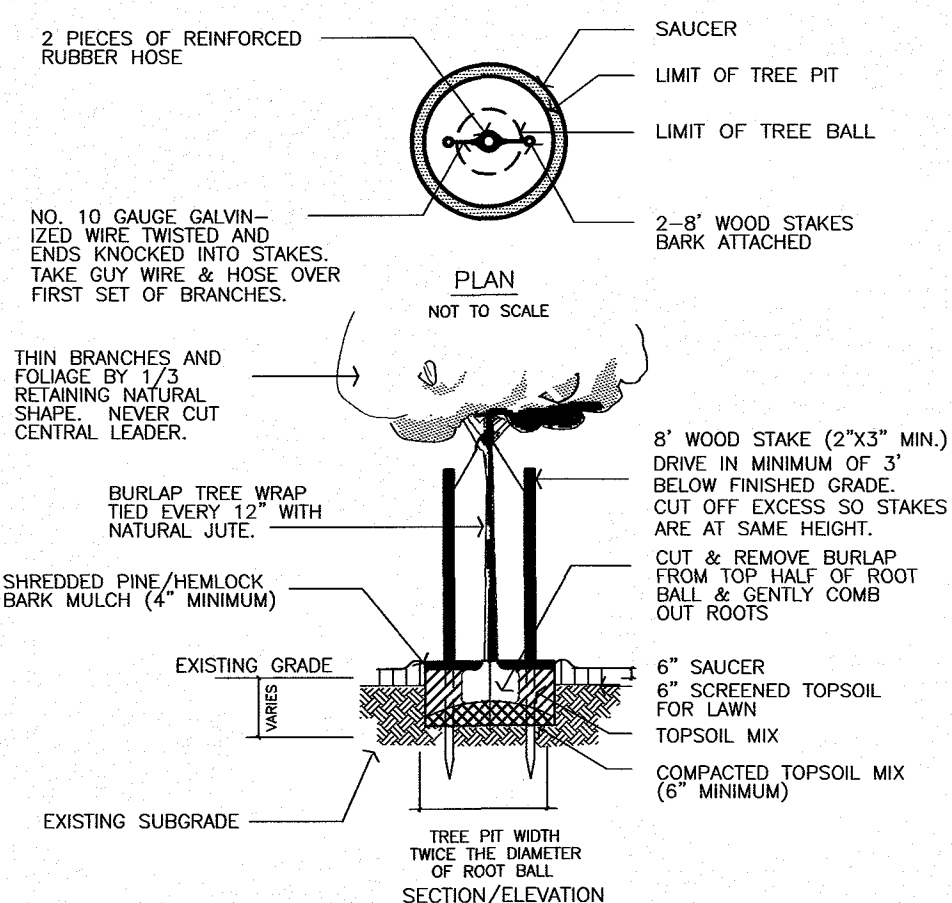
1 PLANT QUANTITY
XX PLANT DESIGNATION
TYPICAL SINGLE UNIT PLANTING
SCALE: 1"=10'



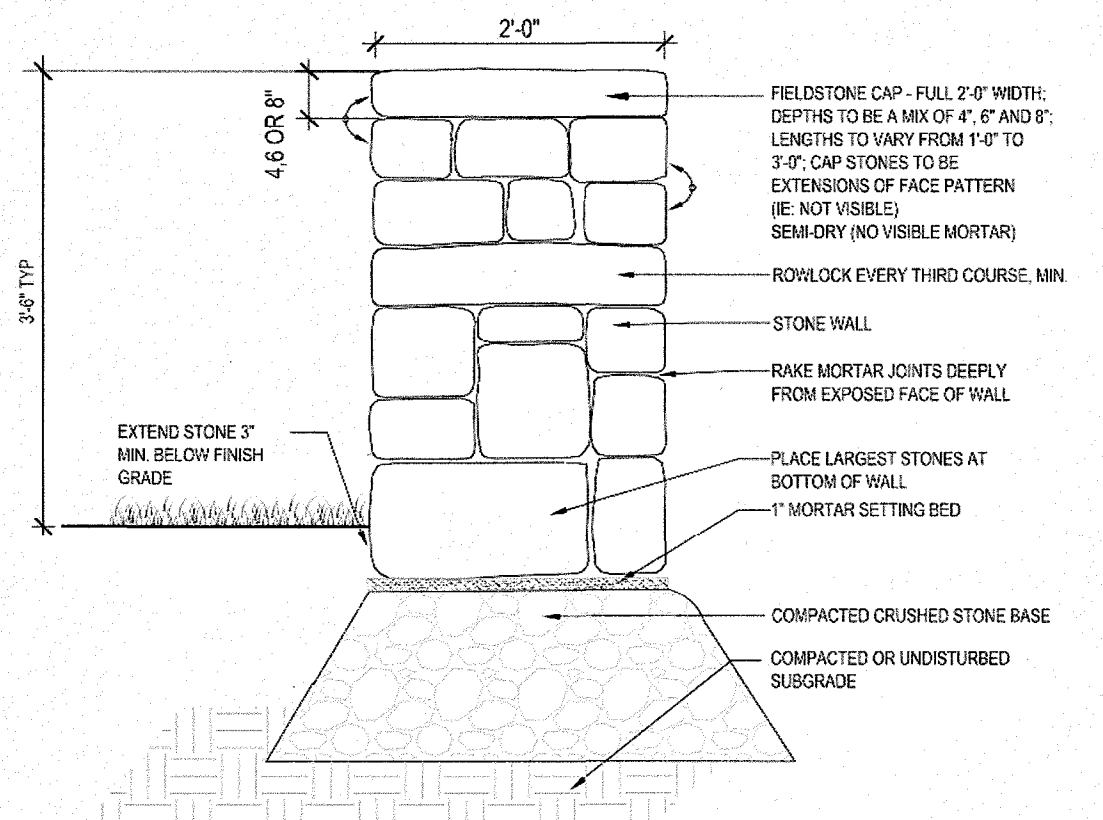
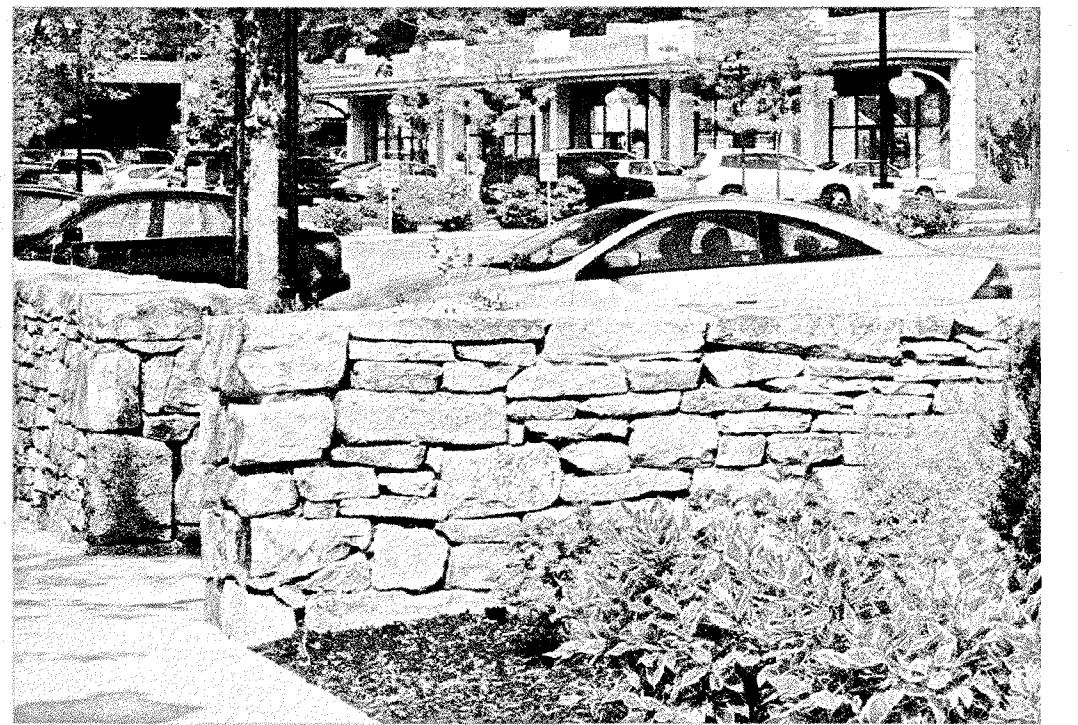
6' HT. SCREEN FENCE
NOT TO SCALE



TYPICAL SHRUB PLANTING
NOT TO SCALE



TYPICAL TREE PLANTING
NOT TO SCALE



STONE WALL
NOT TO SCALE

NO.	DESCRIPTION	BY	DATE
4	REVISIONS PER TJD&A COMMENTS	DRJ	2/3/20
3	MISC. REVISIONS	DRJ	12/16/19
2	REVISE PERENNIAL PALNTING SPECS., TYPICAL PLANTING DETAILS	DRJ	11/12/19
1	REVISIONS PER REVIEW COMMENTS	DRJ	11/8/19

LANDSCAPE DETAILS

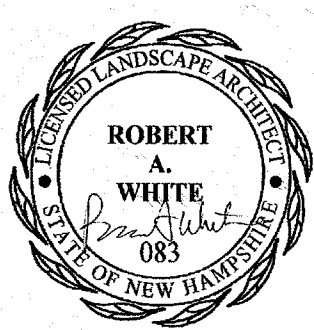
THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC

GPI Formerly MHF Design Consultants, Inc.
603.893.0720 GPINET.COM

Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

SCALE: 1" = 30'

DATE: OCTOBER 1, 2019



PREPARED FOR
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810-PAGE 1414

SALEM PLANNING BOARD
APPROVAL

ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL

DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CCC/DRJ	4214SP.dwg	421417	13 OF 18

NOTES

1. MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE 4 INCHES.

2. BISE AND JOINT MATERIALS

A. VITRIFIED CLAY PIPE

1. PIPE AND FITTINGS SHALL BE EXTRA STRENGTH CLAY PIPE CONFORMING TO THE REQUIREMENTS OF ASTM C-700.

2. JOINTS SHALL BE MADE WITH OIL RESISTANT GASKETS IN ACCORDANCE WITH ASTM C-425 TYPE I MANUFACTURERS INSTRUCTIONS FOR INSTALLATION SHALL BE FOLLOWED.

B. ASBESTOS-CEMENT-IRON-PRESSURE SEWER PIPE

1. PIPE AND FITTINGS SHALL CONFORM TO ASTM TENTATIVE SPECIFICATIONS C64 TYPE 8.

2. JOINTS SHALL BE OF THE SLAVE-COUPLING TYPE CONFORMING TO ASTM SPECIFICATIONS C64 TYPE 8. COMPRESSION RINGS SHALL BE OF OIL RESISTANT RUBBER TYPE OR ELASTOMERIC MATERIAL AND SHALL CONFORM TO ASTM SPECIFICATION D1855. MANUFACTURERS INSTRUCTIONS SHALL BE FOLLOWED FOR INSTALLATION.

C. CAST IRON PIPE FITTINGS AND JOINTS

1. CAST IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN NATIONAL STANDARDS INSTITUTE:

A21.1 THICKNESS DESIGN OF CAST IRON PIPE

A21.6 CAST IRON PIPE CENTRICALLY CAST IN METAL MOLDS OR SAND LINED MOLDS FOR WATER OR OTHER LIQUIDS.

A21.8 CAST IRON PIPE CENTRICALLY CAST IN SAND LINED MOLDS FOR WATER OR OTHER LIQUIDS.

A21.10 CAST IRON PIPE FITTINGS, 2 INCHES THROUGH 48 INCHES SHALL CONFORM TO WATER AND OTHER LIQUIDS.

2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH ON TYPE JOINTS AND GASKETS SHALL CONFORM TO:

A21.11 RUBBER GASKET JOINTS FOR CAST IRON PRESSURE PIPE AND FITTINGS.

D. DUCTILE IRON PIPE FITTINGS AND JOINTS

1. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE STANDARDS OF THE UNITED STATES OF AMERICA:

A21.50 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A536 DUCTILE IRON CASTINGS.

A21.51 DUCTILE IRON PIPE CENTRICALLY CAST IN METAL MOLDS OR SAND LINED MOLDS FOR WATER OR OTHER LIQUIDS.

2. JOINTS SHALL BE AS SPECIFIED IN C2 ABOVE, CAST IRON PIPE JOINTS.

3. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

4. JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER-TIGHTNESS. ALL JOINTS SHALL BE PROPERLY GASKETED WITH THE FOLLOWING MATERIALS:

A. AT THE FOUNDATION MANHOLES, ADAPTERS SHALL BE USED. THE JOINT SHALL BE MADE WITH A 1" OR 1 1/2" (SEE NOTE 12) CLAMPED OR EPDM CEMENTED SADDLE TAPPED INTO A SMOOTH DRILLED OR SAWN ORIFICE. THE PRACTICE OF RESINING AN OPENING WITH A SLIDE HAMMER, STUFFING CLOTH (OR OTHER SUCH MATERIAL) AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE TOLERATED. THE CONNECTION SHALL BE CONCRETE AND AS SHOWN IN THE DETAIL, 10" TO AND INCLUDING 12" DIAMETERS.

5. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION. AT A GRADE OF NOT LESS THAN 1/8 INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DRY THE TRENCH.

6. TESTING THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANHOLES (PRIOR TO BACKFILLING):

A. AN OBSERVATION "T" SHALL BE INSTALLED AS SHOWN. WHEN READY TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE "T". AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.

B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS. IF THE TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANOUT WITH A FLASHLIGHT.

* DOES NOT APPLY TO INSTALLATIONS WHERE "12" AND "14" ARE USED

C. FLOURESCENT DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER. IF THE TRENCH IS WET, THE PIPE SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST MANHOLE DOWNSTREAM. LEAKAGE OBSERVED IN ANY OF THE ABOVE, ALTER-NATE TESTS SHALL CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE OUP UP, IF NECESSARY, AND RELAY SO AS TO ASSURE WATER-TIGHTNESS.

7. HOUSE WATER SERVICE SHOULD NOT BE LAID IN THE SAME TRENCH AS THE SEWER SERVICE, BUT WHEN NECESSARY, SHALL BE PLACED ABOVE AND TO ONE SIDE OF THE HOUSE SEWER AS SHOWN.

8. BEHIND SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33-67.

100-100-PASSING 1 INCH SCREEN 50-100-PASSING 3/4 INCH SCREEN 0-50-PASSING #8 SIEVE

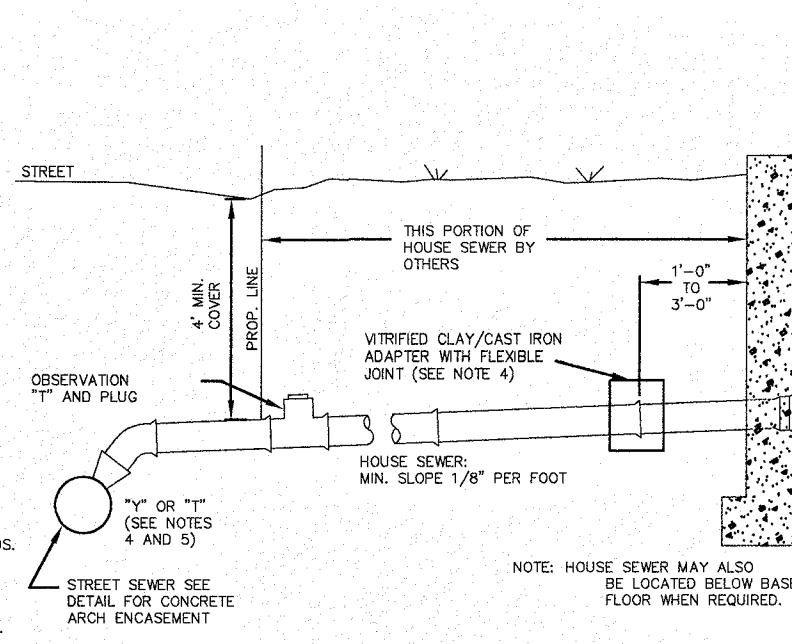
WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE (1-1/2 TO 1-1/2 INCH) SHALL BE USED.

9. LOCATION OF THE LOCATION OF THE "T" OR "Y" SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERRUGINOUS METAL ROD OR PIPE SHALL BE PLACED OVER THE "T" OR "Y", AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL TO 40 IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.

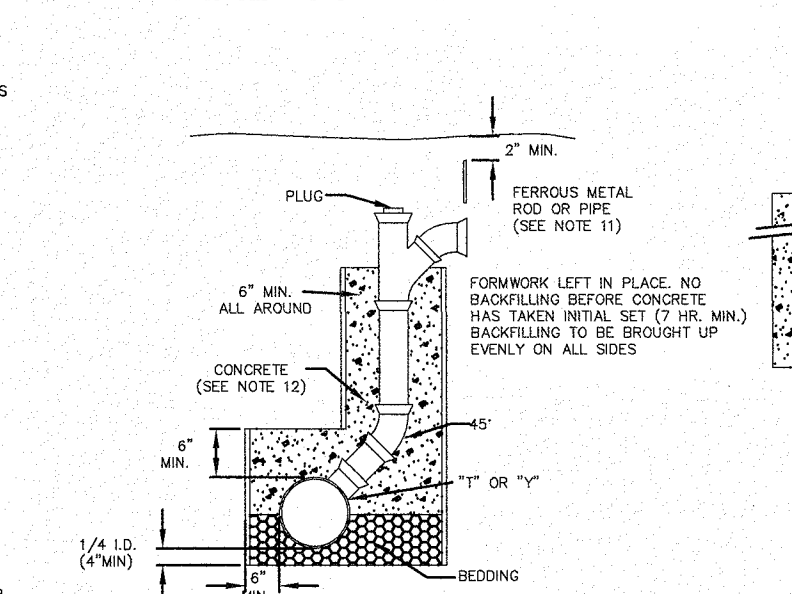
10. CONCRETE SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE N.H. DEPT. OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATIONS AS FOLLOWS:

CEMENT: 6.0 BAGS/C.Y. WATER: 5.75 GALS./BAD CEMENT AGGREGATE: 1-1/2 TO 2" MAX.

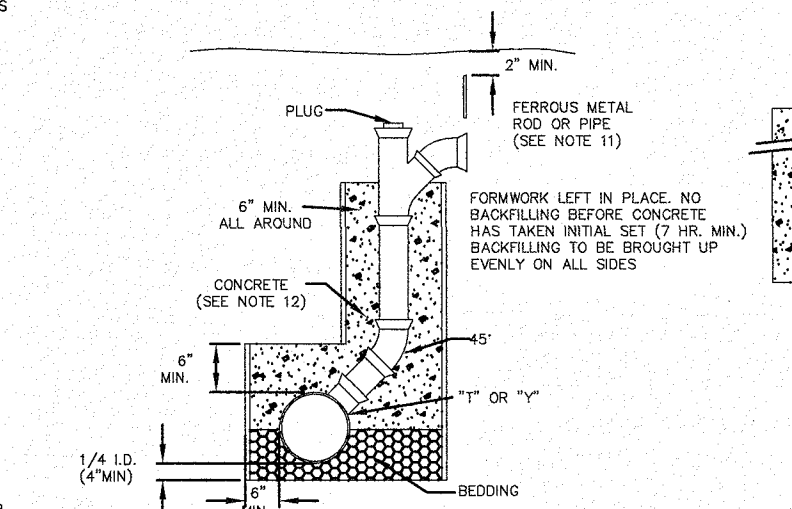
11. CHIMNEYS IF VERTICAL DROP INTO THE SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION.



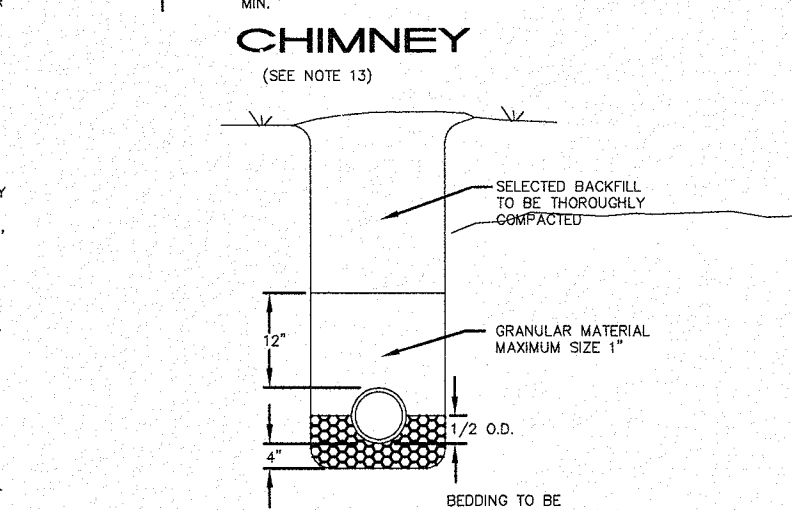
VITRIFIED CLAY SEWER AND HOUSE SEWER



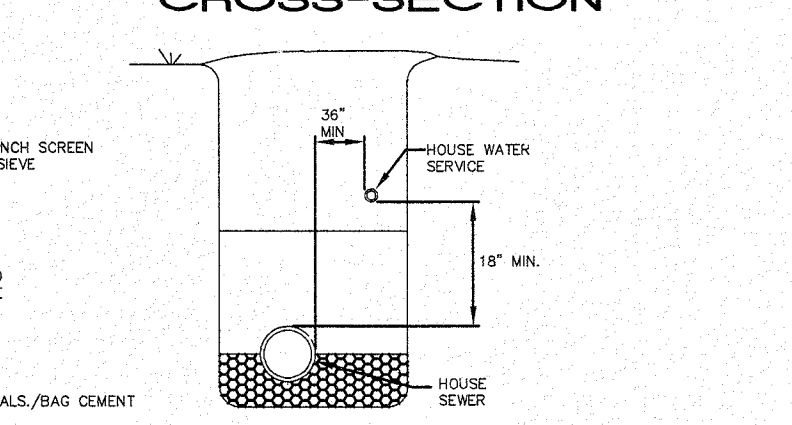
ASBESTOS CEMENT SEWER AND HOUSE SEWER



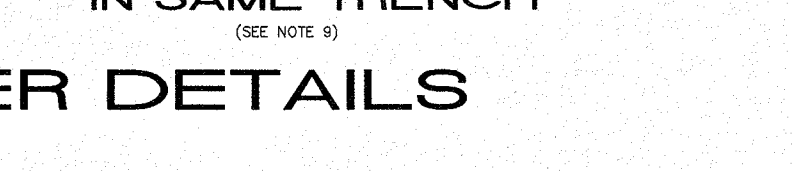
CONCRETE FULL ENCASMENT



CHIMNEY

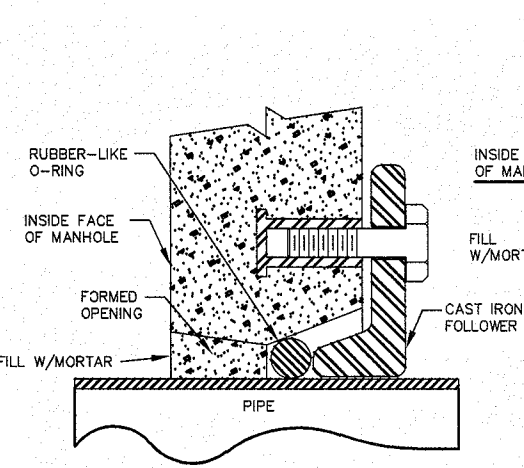


TRENCH CROSS-SECTION

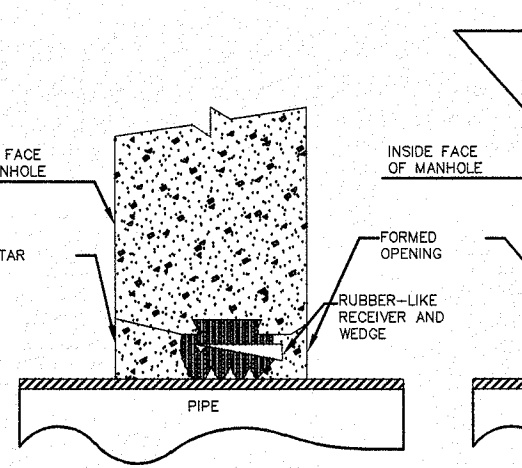


WATER AND SEWER IN SAME TRENCH

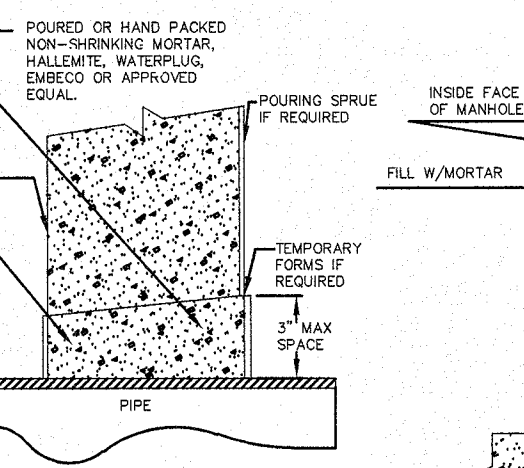
HOUSE SEWER DETAILS



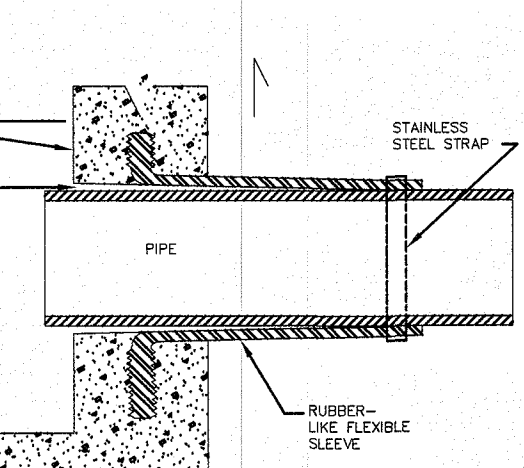
RES-SEAL



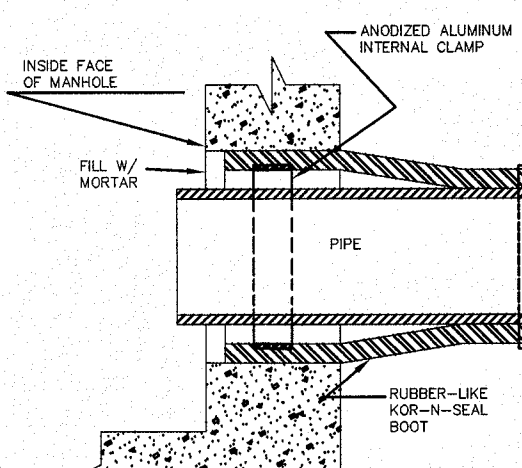
PRESS-WEDGE II



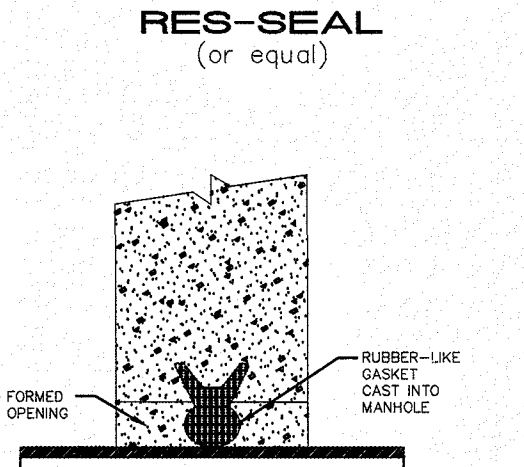
NON-SHRINKING MORTAR



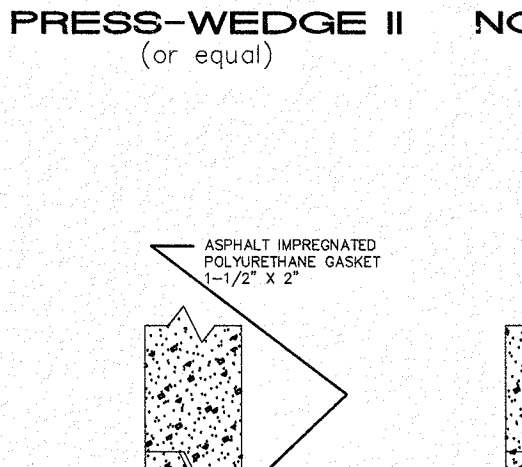
LOCK-JOINT FLEXIBLE MANHOLE SLEEVE



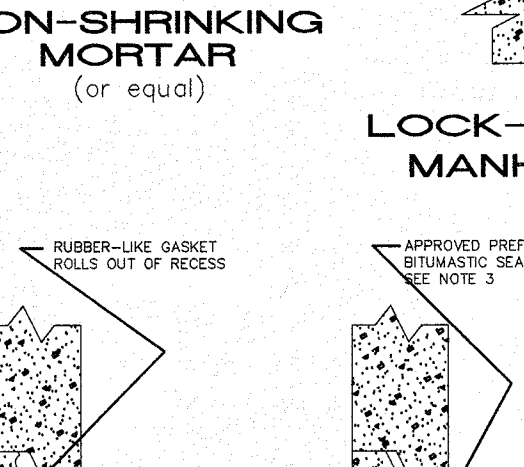
KOR-N-SEAL JOINT SLEEVE



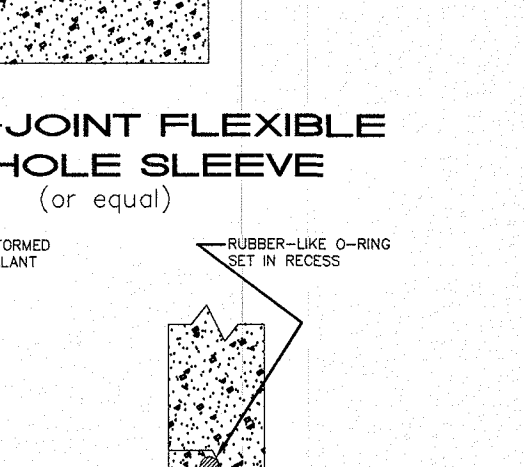
A-LOK



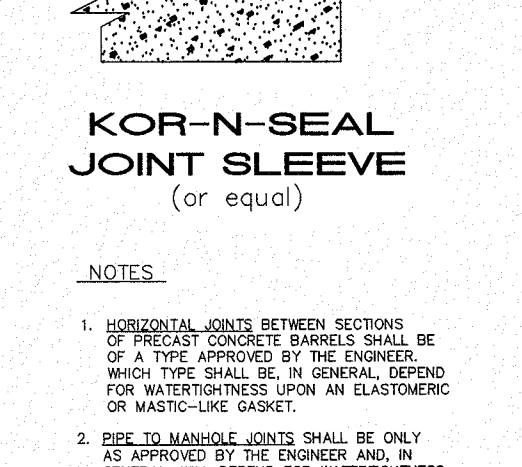
POLYTITE



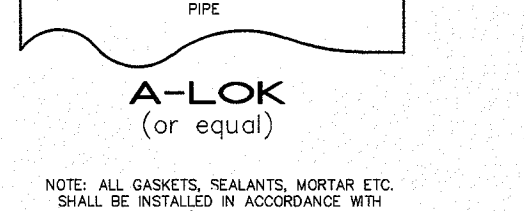
ROLL-N-LOK



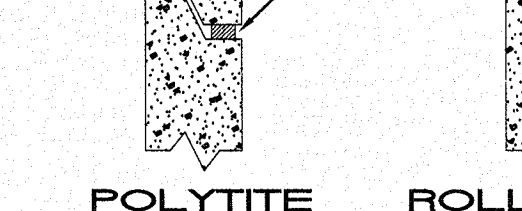
BITUMASTIC



O-RING



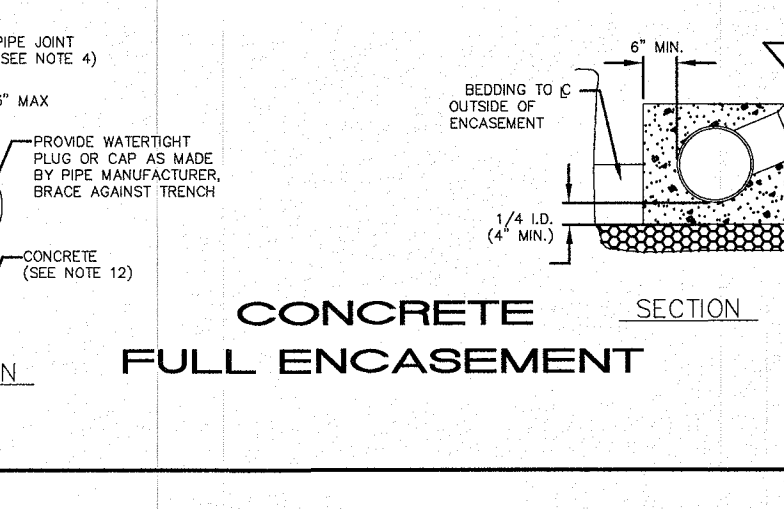
DETAIL A



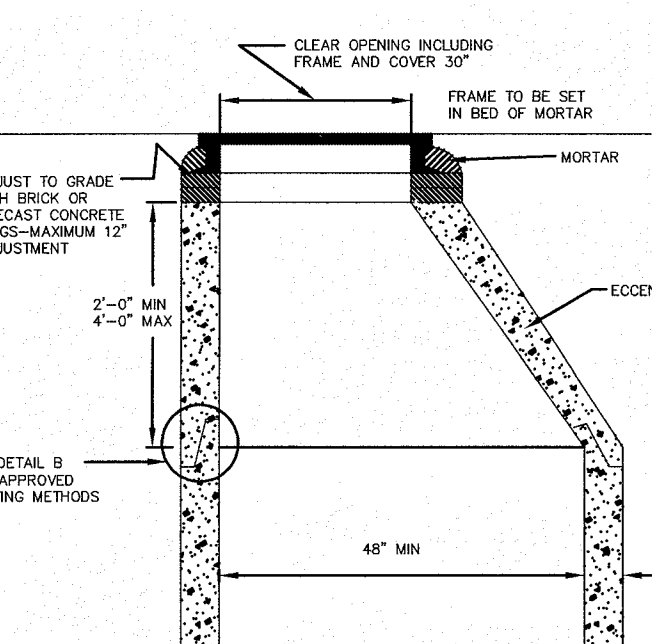
DETAIL B

STANDARD MANHOLE - PART B

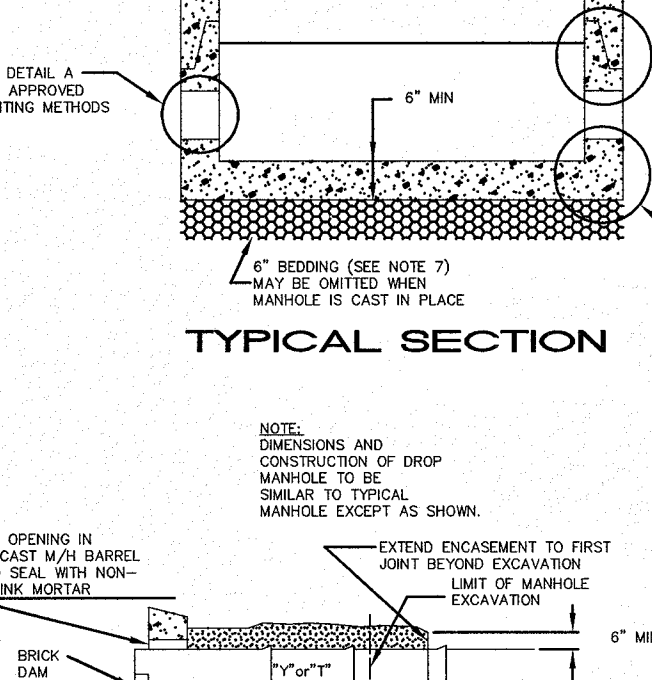
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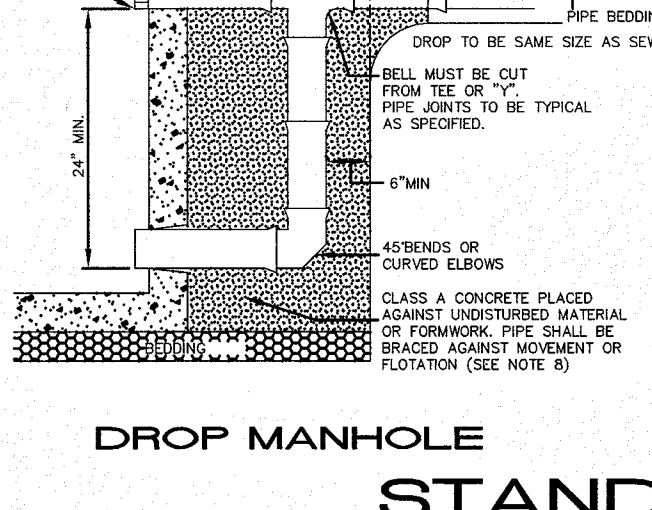
TYPICAL TRENCH SECTION FOR SANITARY SEWER SERVICE



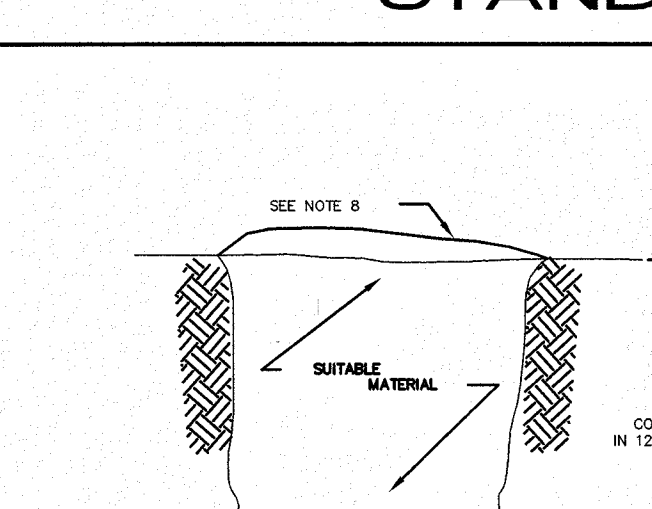
TYPICAL SECTION



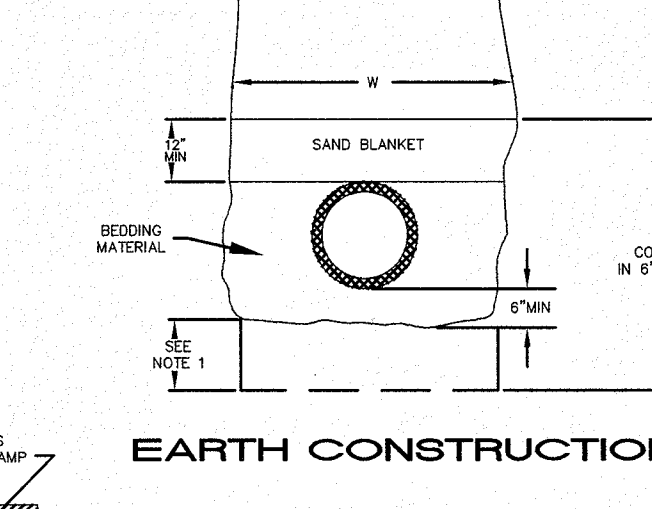
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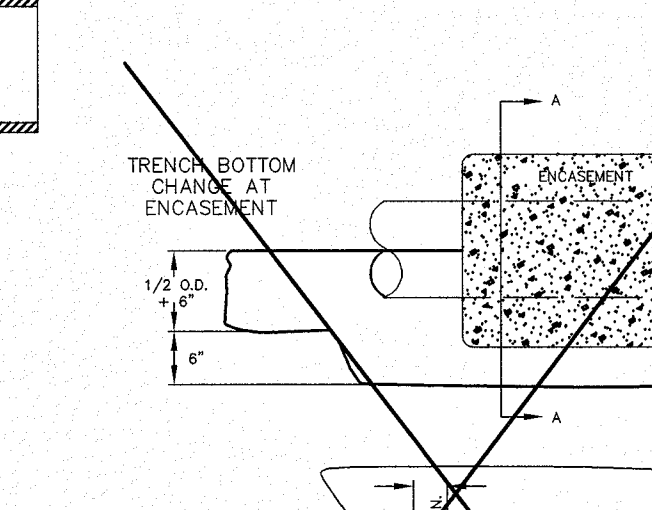
DROP MANHOLE



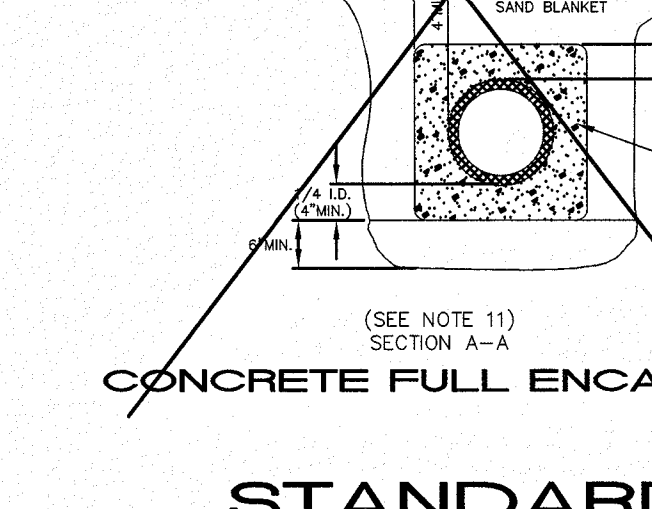
SECTION A-A



SECTION B-B



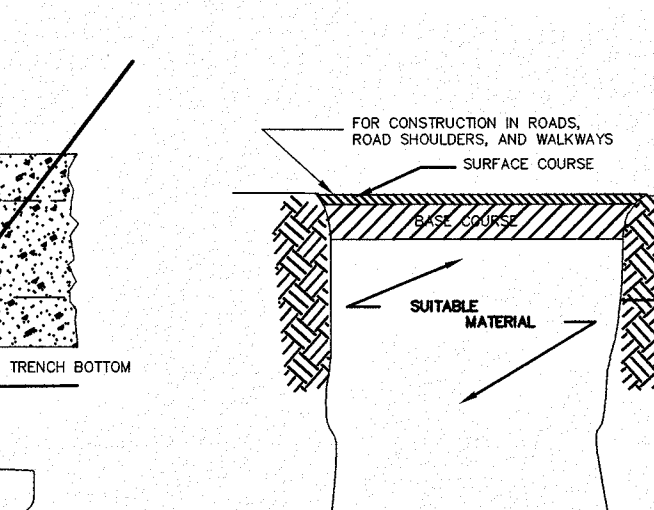
EARTH CONSTRUCTION



EARTH CONSTRUCTION WITH SHEETING



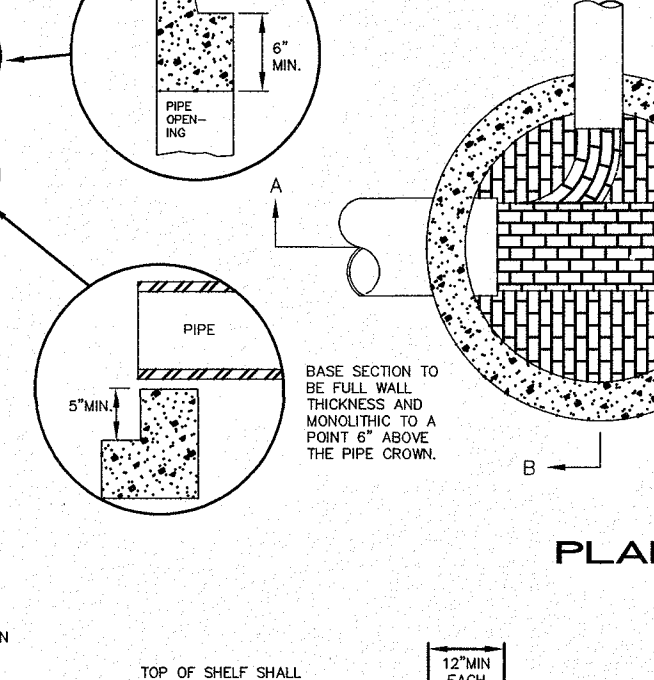
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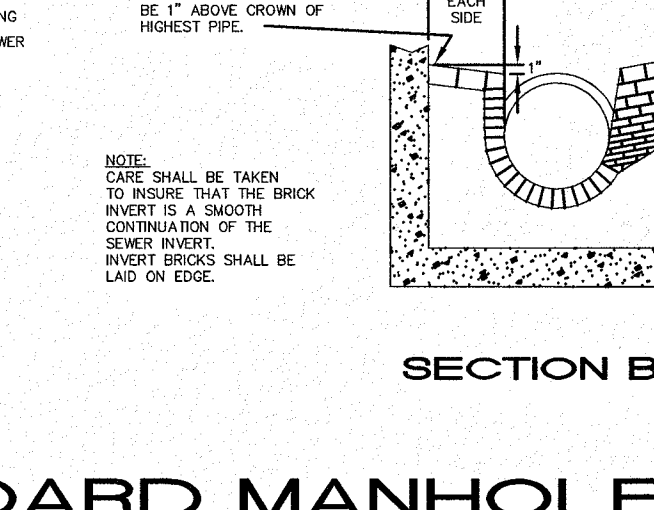
LEDGE CONSTRUCTION



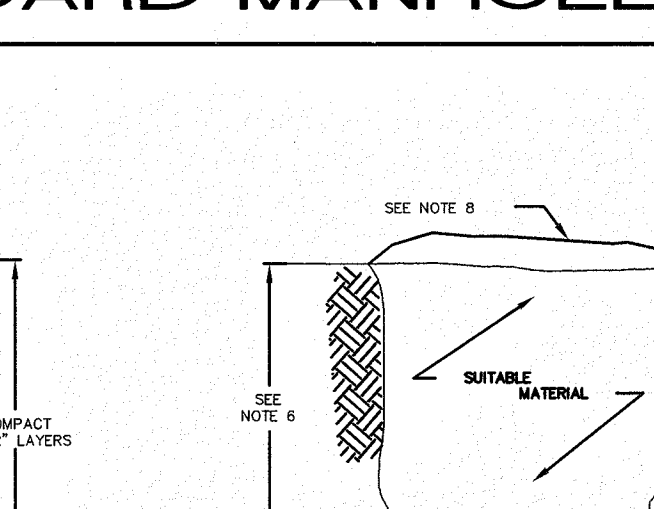
STANDARD TRENCH SECTION



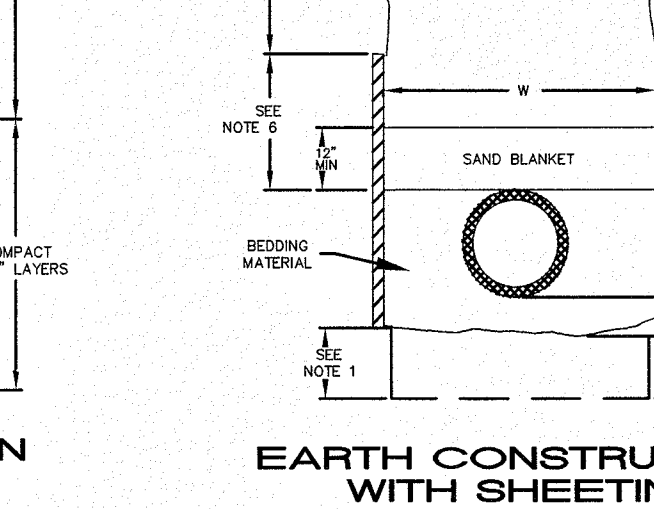
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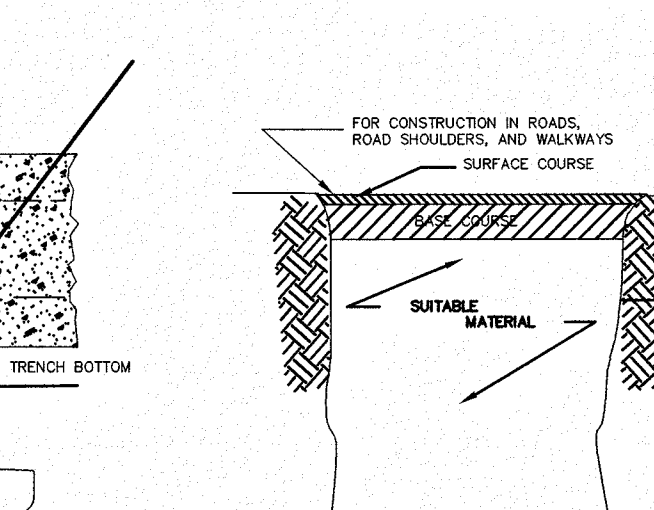
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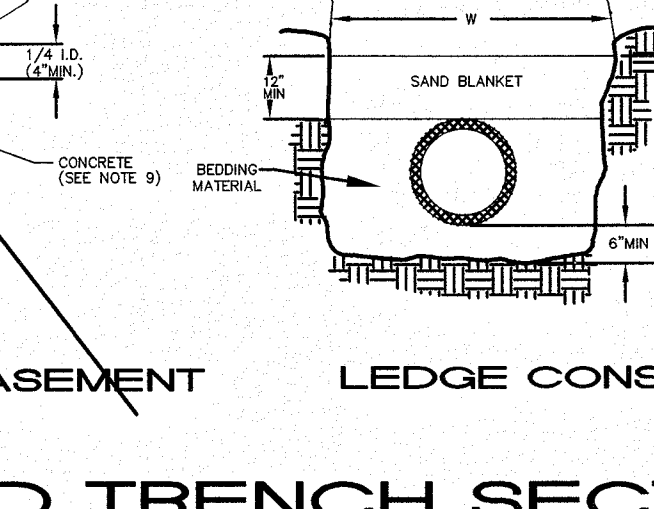
DROP MANHOLE



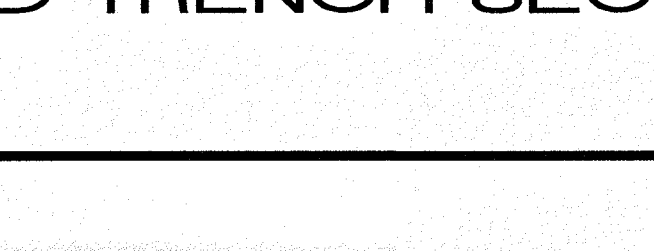
SECTION A-A



SECTION B-B



EARTH CONSTRUCTION

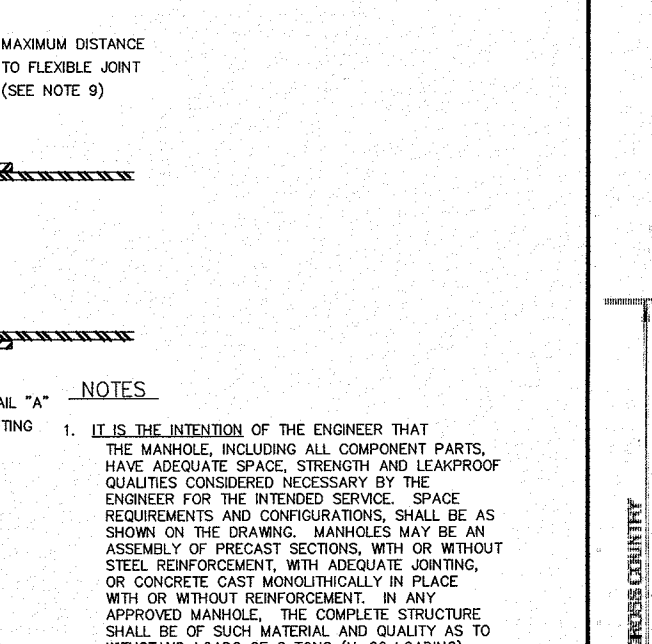


EARTH CONSTRUCTION WITH SHEETING

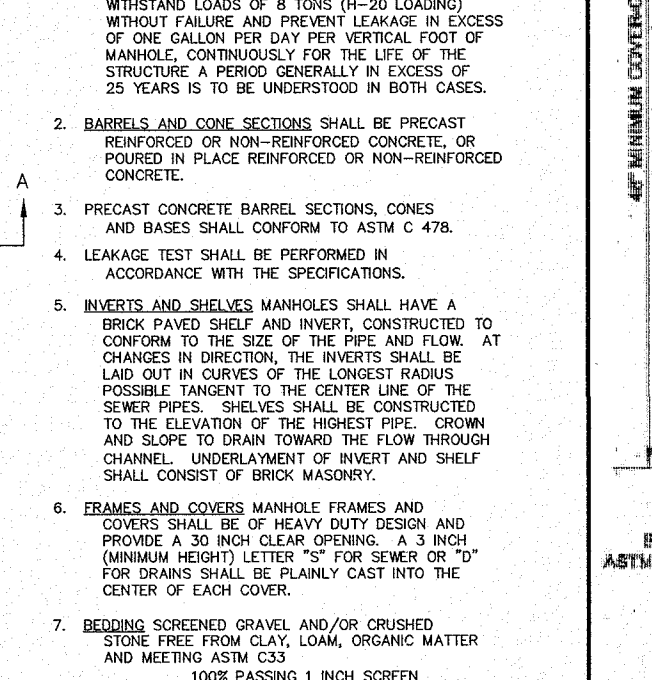
CONCRETE FULL ENCASMENT

LEDGE CONSTRUCTION

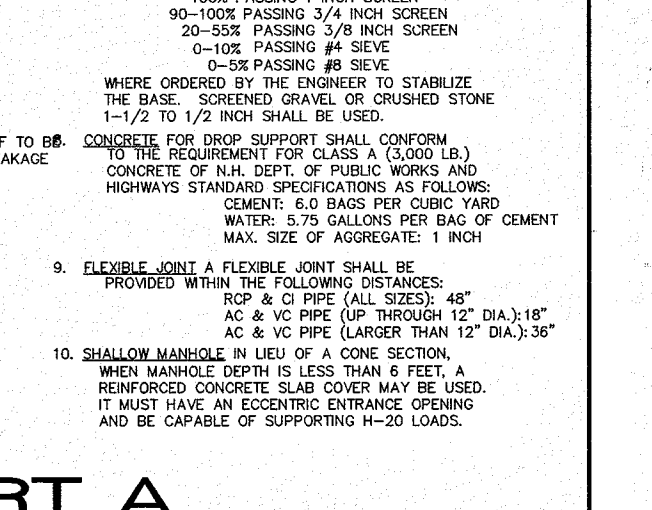
STANDARD TRENCH SECTION



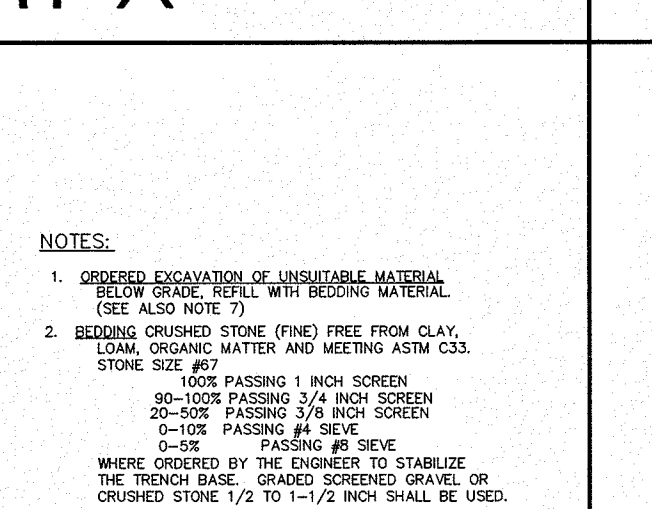
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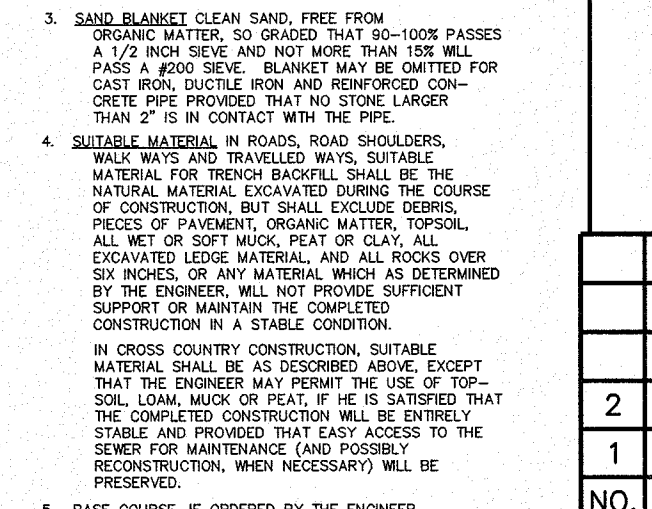
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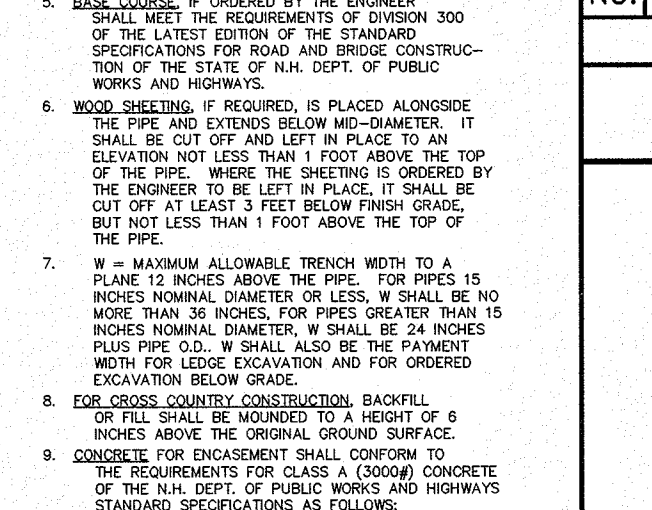
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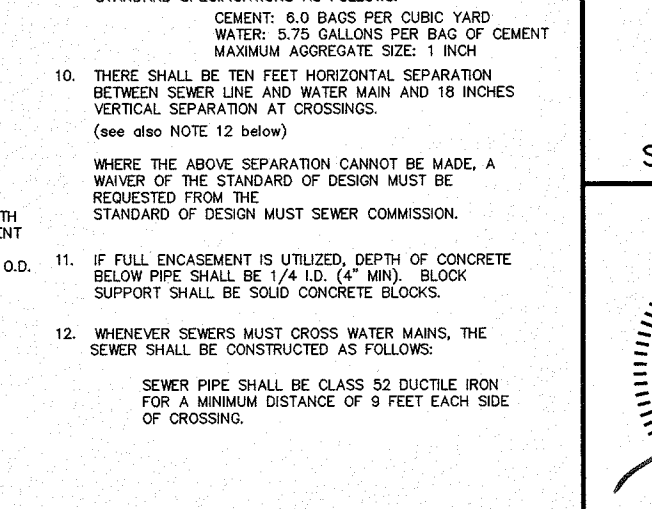
SECTION A-A



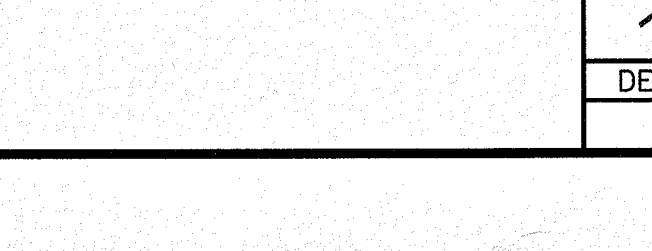
SECTION B-B



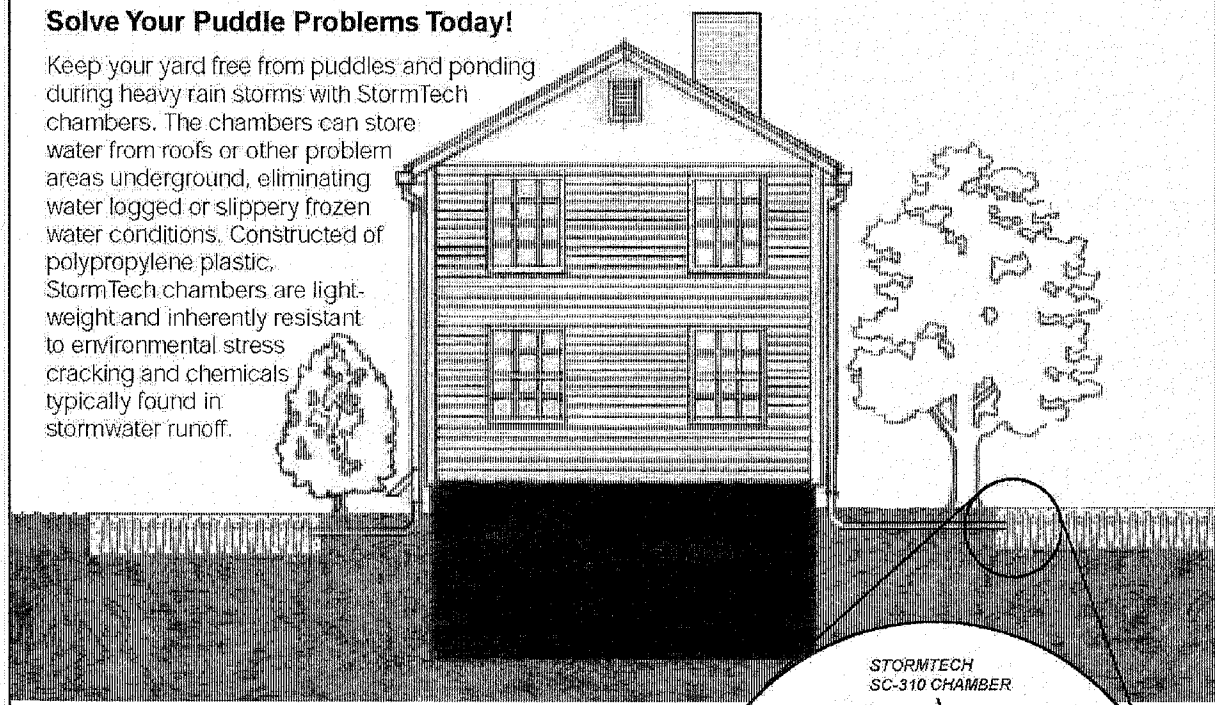
EARTH CONSTRUCTION



EARTH CONSTRUCTION WITH SHEETING



StormTech Chambers
For Residential Downspout
Drainage Systems.



The StormTech Downspout Drainage System.

StormTech offers two chamber sizes to manage water from downspouts or ponded areas. Residential gutters gather rainwater and deliver it to the chambers via the downspout or other inlet pipe. To prevent soil erosion, either a small amount of stone or filter fabric along the bottom of the trench is needed.

StormTech Drainage Benefits.

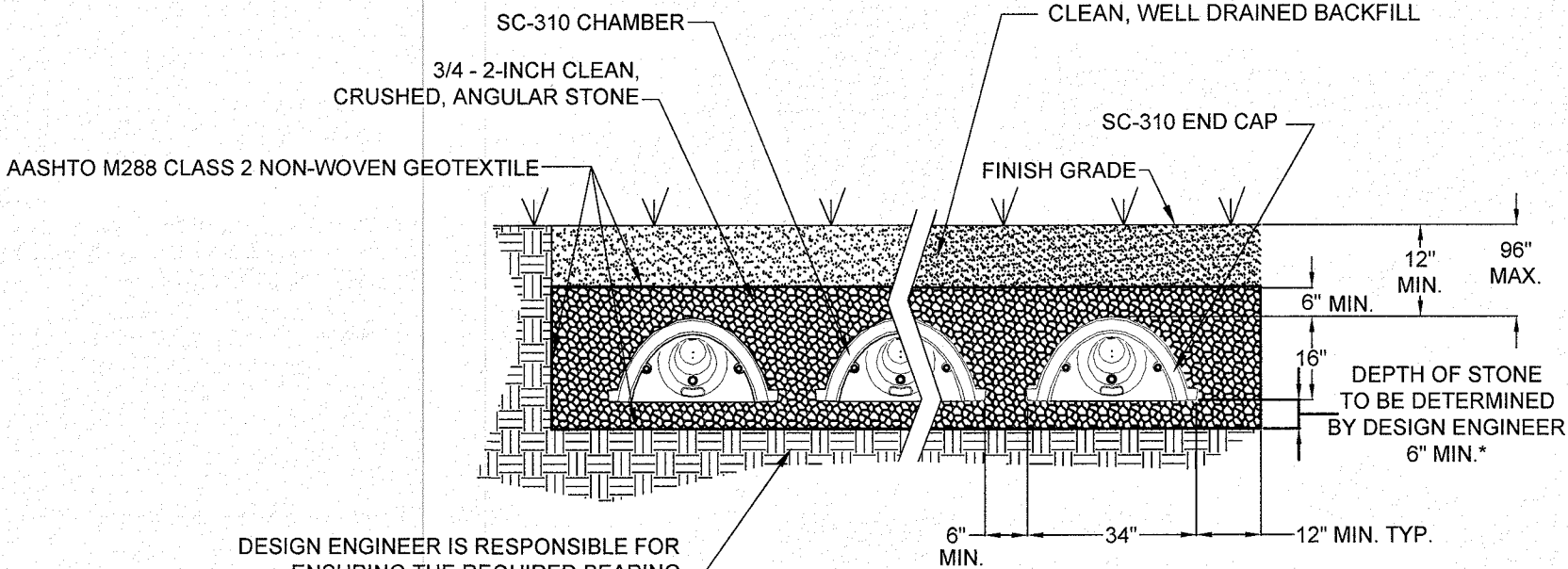
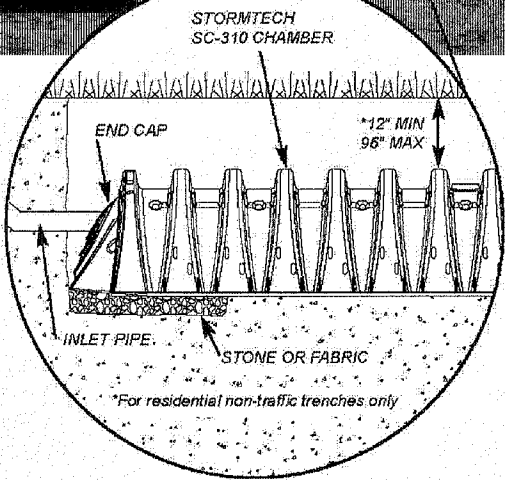
Installation. StormTech chambers can easily be hand-carried into position and installed without the use of heavy construction equipment. StormTech chambers require an excavated area, piping material and filter fabric.

Aesthetics. Runoff can be diverted away and stored safely and neatly underground. No more ponding water, frozen walkways or soil erosion contributing to the negative aesthetics of your yard.

Environmental. The chambers help recharge groundwater resources by replicating nature's own process of infiltration.

Safety. Because the chambers are underground, they eliminate erosion ditches and potential hazards caused by conventional roof drains and ice build-up in the winter.

Versatility. StormTech chambers are ideal for storing water from residential rooftops, driveways, tennis courts or ponded areas in the yard.



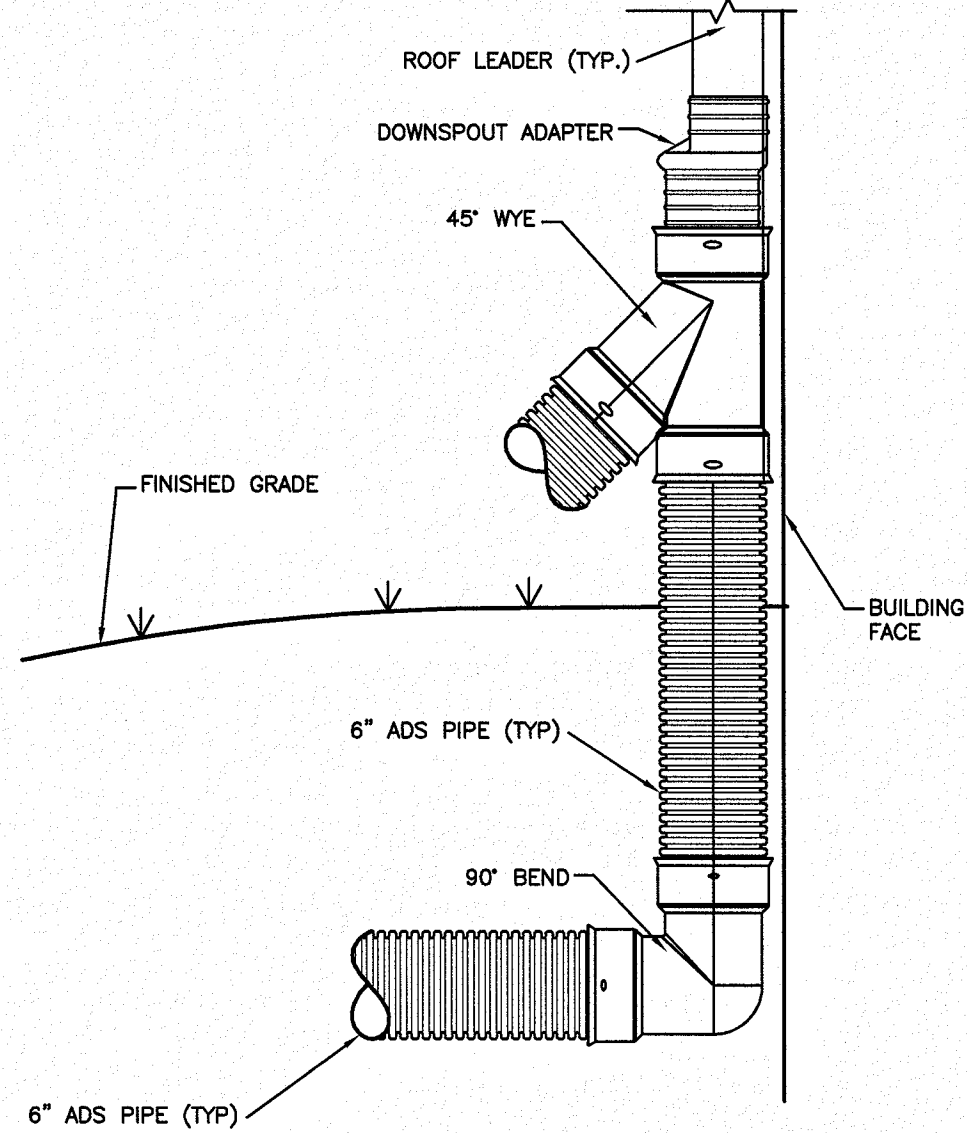
STORMTECH SC-310 CHAMBER SYSTEM
TYPICAL CROSS SECTION DETAIL

NOT TO SCALE

- NOTES:
- 1) PROVIDE SIX STORMTECH SC-310 CHAMBERS PER TOWNHOUSE UNIT.
 - 2) THE INSTALLATION AND MAINTENANCE OF THE ROOF INFILTRATION UNITS IS A REQUIREMENT PURSUANT TO THE ALTERATION OF TERRAIN PERMIT.
 - 3) EACH ROW OF CHAMBERS SHALL BE SET ON A 6 INCH STONE BASE WITH 12 INCHES OF STONE ON ALL SIDES AND 6 INCHES OF STONE OVER THE TOP OF THE CHAMBERS.

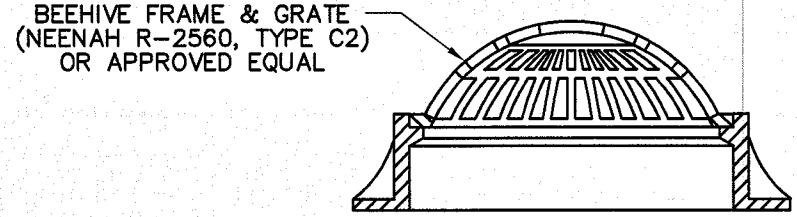
STORMTECH ROOF RECHARGE

NOT TO SCALE



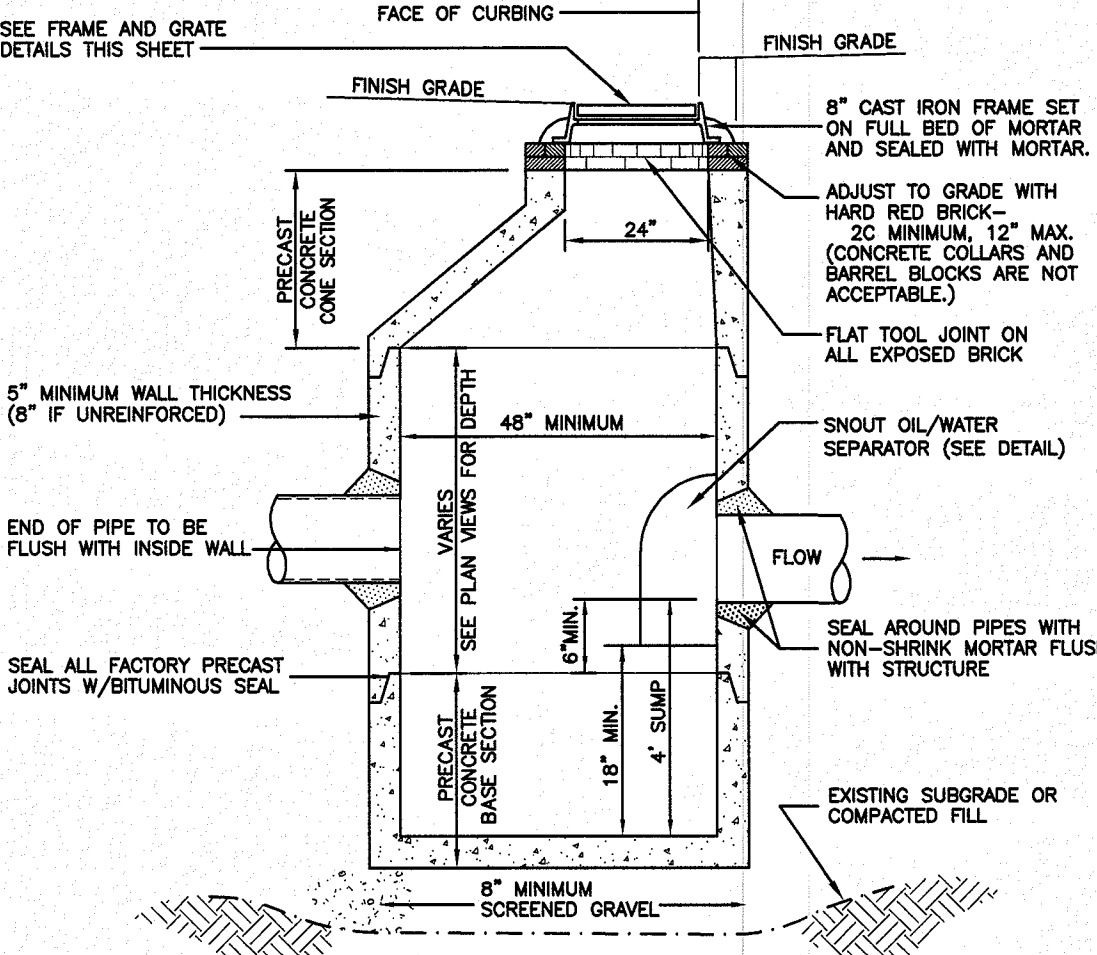
ROOF DRAIN DETAIL WITH OVERFLOW

NOT TO SCALE



BEEHIVE GRATE DETAIL

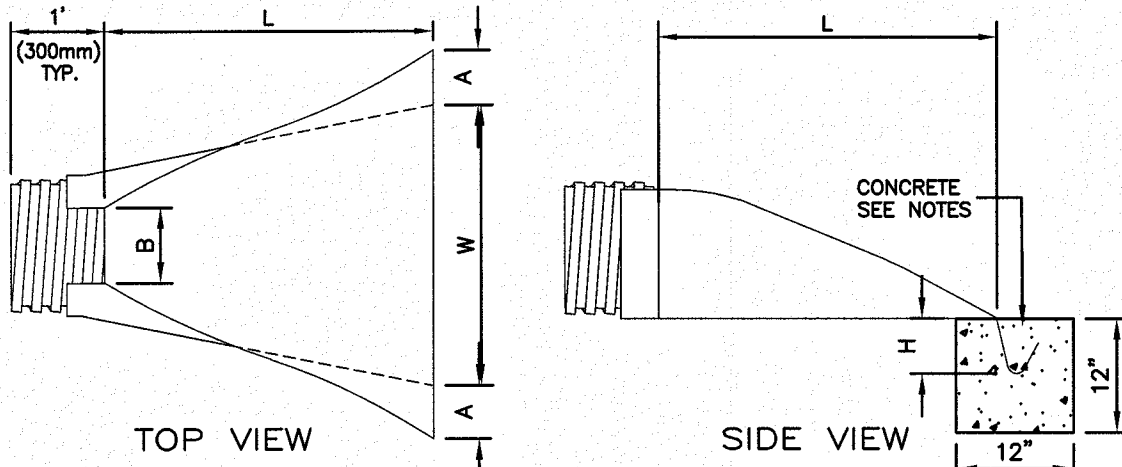
NOT TO SCALE



NOTE: ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C-478

DEEP SUMP CATCH BASIN
ECCENTRIC CONE

(FOR USE IN CURBED AREAS)
N.T.S.



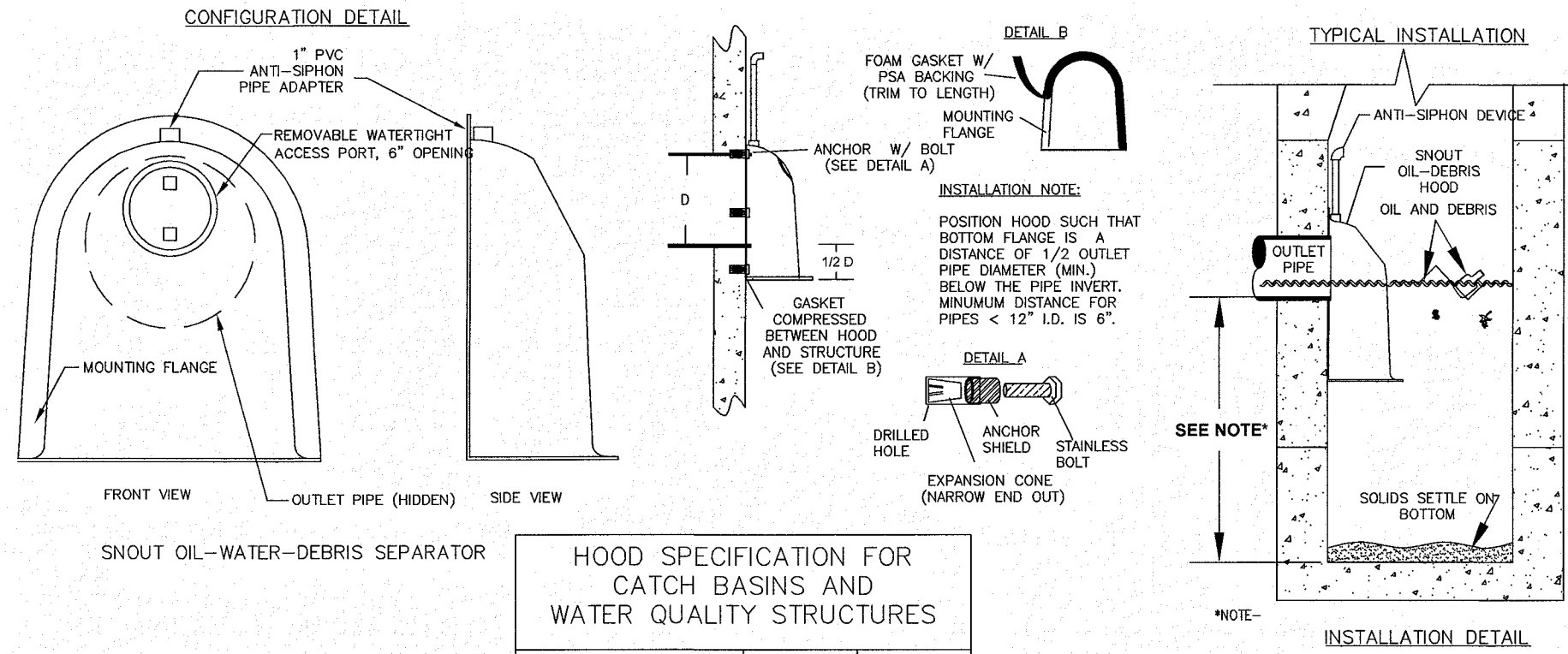
PIPE DIAMETER	PART NO.	DIMENSIONS, INCHES (mm)					
		A, ±1 (25)	B MAX	H, ±1 (25)	L, ±1/2 (13)	W, ±2 (50)	
12", 15" (300,375)	1210 NP	6.5 (165)	10 (254)	6.5 (165)	25 (635)	29 (736)	
18" (450)	1810 NP	7.5 (190)	15 (380)	6.5 (168)	32 (812)	35 (890)	
24" (600)	2410 NP	7.5 (190)	18 (450)	6.5 (165)	36 (900)	45 (1140)	
30" (750)	3010 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)	
36" (900)	3610 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)	

CONSTRUCTION SPECIFICATIONS:

1. PREPARE BEDDING:
BACKFILL MATERIAL AROUND THE END SECTION MAY BE THE SAME AS THE MATERIAL AROUND THE PIPE. PLACE A FEW INCHES OF BACKFILL MATERIAL IN THE TRENCH OR DITCH WHERE THE END SECTION WILL BE PLACED. COMPACT AND CONTOUR THIS BEDDING MATERIAL TO GENERALLY MATCH THE END SECTION. EXCAVATE AN AREA IN THE BEDDING WHERE THE TROUGH WILL BE PLACED SO THAT THE END SECTION WILL BE LEVEL WITH THE BOTTOM OF THE TRENCH OR DITCH IN THE FINISHED INSTALLATION.
 2. PLACE END SECTION OF PIPE:
OPEN THE END SECTION COLLAR AND SEAT IT OVER THE TWO PIPE CONNECTIONS. ONCE THE END SECTION IS POSITIONED, CHECK TO MAKE SURE THAT THE INVERT OF THE END SECTION MATCHES THE INVERT OF THE PIPE AND THAT THE END SECTION IS LEVEL WITH THE TRENCH OR DITCH BOTTOM.
 3. SECURE THE END SECTION:
SLIP THE STAINLESS STEEL ROD THROUGH THE PRE-DRILLED HOLES AT THE TOP OF THE COLLAR. THE ROD SHOULD BE BETWEEN THE CROWNS OF THE TWO PIPE CONNECTIONS. PLACE A WASHER ON EITHER END OF THE ROD. PLACE A NUT ON EITHER END OF THE ROD AND TIGHTEN WITH A WRENCH.
 4. SECURE THE TROUGH:
TO PREVENT WASHOUTS FROM HIGH VELOCITY FLOW, IT IS RECOMMENDED THAT THE TROUGH BE SECURED WITH CONCRETE. POUR CONCRETE IN THE TROUGH UP TO THE LEVEL OF THE TRENCH OR DITCH BOTTOM AND ALONG THE ENTIRE LENGTH OF THE TROUGH.
- FINISH BACKFILL:
SHOVEL BACKFILL AROUND THE END SECTION IN 6 TO 9 INCH LAYERS EQUALLY ON BOTH SIDES, KNIFING IT TO ELIMINATE VOIDS. TAMP WITH A SMALL-FACED COMPACTOR OR OTHER EQUIPMENT SUITABLE FOR SMALL AREAS. CONTINUE PLACING, KNIFING, AND COMPACTING BACKFILL LAYERS TO THE TOP OF THE END SECTION TO SEAT IT WELL INTO THE BACKFILL.

FLARED END SECTION
HIGH DENSITY POLYETHYLENE (HDPE)

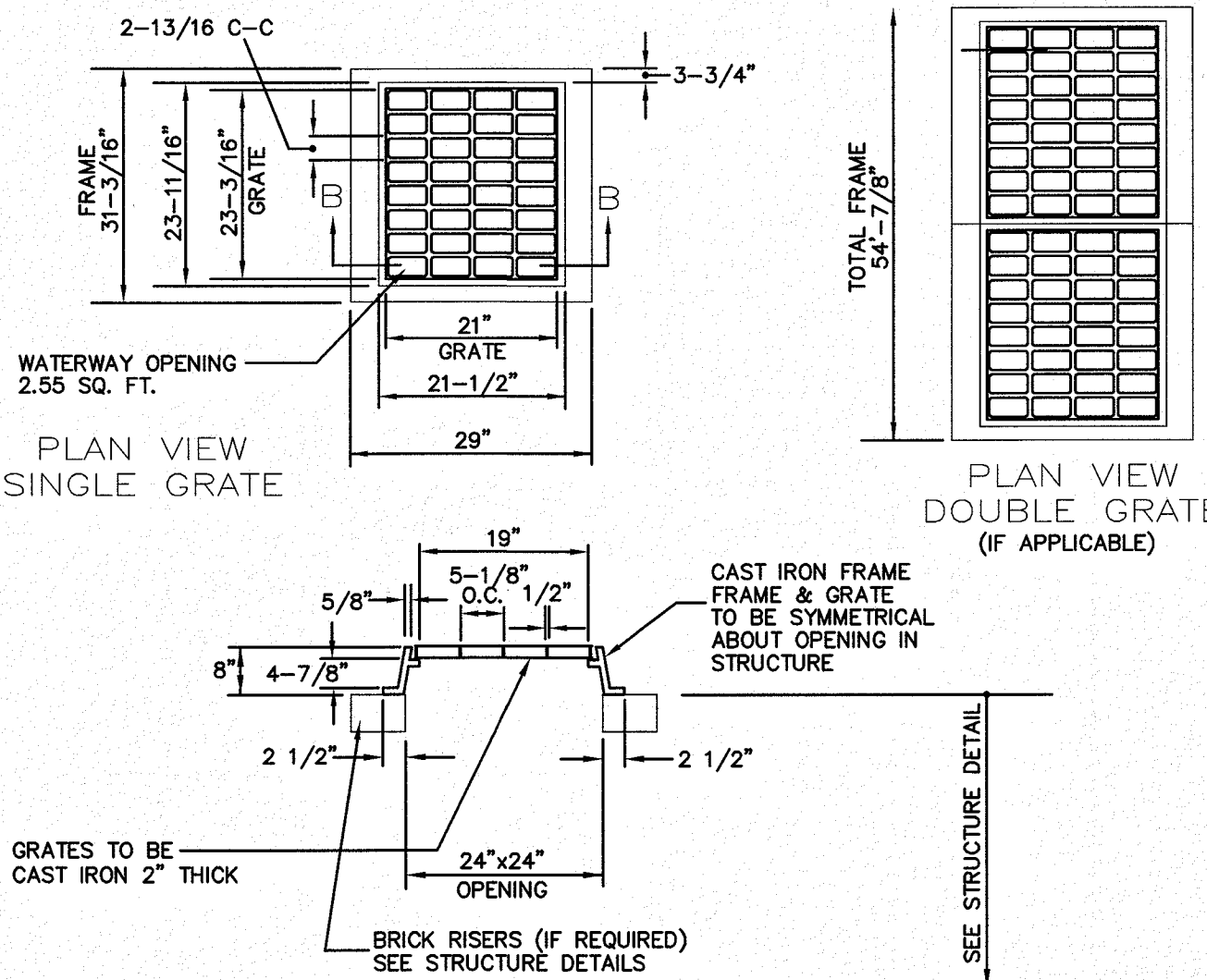
NOT TO SCALE



HOOD SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES		
DESCRIPTION	DATE	SCALE
OIL-DEBRIS HOOD SPECIFICATION AND INSTALLATION (TYPICAL)	9/8/00	NONE
DRAWING NUMBER	SP-SN	

SNOUT OIL/WATER SEPARATOR

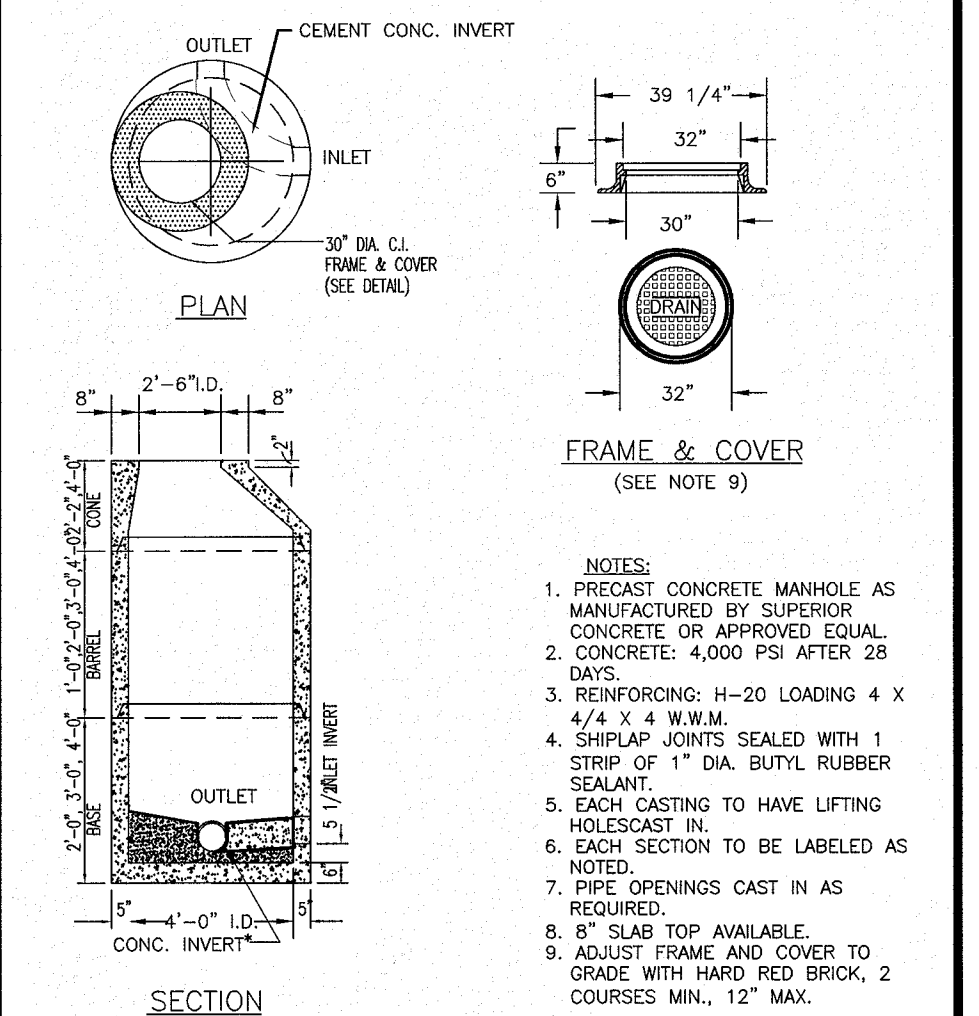
NOT TO SCALE



FRAME AND GRATE - TYPE B

NOT TO SCALE

- NOTES:
1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY: BEST MANAGEMENT PRODUCTS, INC. 53 MT. ARCHER RD. LYME, CT 06371 (860) 434-0277, (860) 434-3195 FAX TOLL FREE: (800) 504-8008 OR (888) 354-7585 WEB SITE: www.bestmfp.com OR PRE-APPROVED EQUAL.
 2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
 3. ALL HOODS SHALL BE EQUIPPED WITH A WATERPROOF ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL).
 4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION.
 5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
 6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 24" ACCORDING TO STRUCTURE CONFIGURATION.
 7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL.
 8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL).
 9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT. INSTALLATION KIT SHALL INCLUDE:
A. INSTALLATION INSTRUCTIONS
B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER
C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
D. 3/8" STAINLESS STEEL BOLTS
E. ANCHOR SHIELDS
- US Patent # 6126817



PRECAST CONCRETE
DRAIN MANHOLE

NOT TO SCALE

5	REVISE STORMTECH ROOF RECHARGE DETAIL PER AOT COMMENTS	DRJ	1/22/20
4	REVISE CB AND DMH DETAILS	DRJ	1/7/20
3	REVISE SHEET NUMBER	DRJ	12/16/19
2	MISC. REVISIONS PER TOWN COMMENTS	DRJ	11/7/19
1	ADD STORMTECH SYSTEM DETAILS	PWM	10/24/19
NO.	DESCRIPTION	BY	DATE

CONSTRUCTION DETAILS

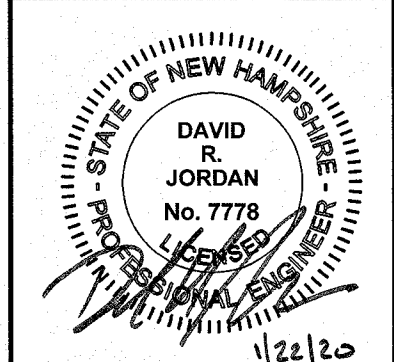
THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC



Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

SCALE: NTS

DATE: OCTOBER 1, 2019



PREPARED FOR
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810-PAGE 1414

SALEM PLANNING BOARD
APPROVAL

ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL

DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CPS/DRJ	4214DET.DWG	421417	16 OF 18



GOVE ENVIRONMENTAL SERVICES, INC.

TEST PIT DATA

Project	Tuscan Village				
Client	OMJ Realty				
GES Project No.	2016157				
MM/DD/YY Staff	01/05/2017				
JP Gove					
Test Pit No.	15028				
ESHW:	34"				
Termination @	73"				
Refusal:	N				
Obs. Water:	N				
Depth	Color	Texture	Structure	Consistence	Mottles: Quantity/Contrast
0-10"	10YR 4/4	LS	PL	FR	NONE
10-34"	10YR 7/3	LS	OM	FR	NONE
34-58"	10YR 7/3	LS	OM	FI	7.5YR 4/6 C/D
58-73"	10YR 3/2	FSL	OM	FR	7.5YR 4/6 C/D
Test Pit No.	15029				
ESHW:	41"				
Termination @	80"				
Refusal:	N				
Obs. Water:	N				
Depth	Color	Texture	Structure	Consistence	Mottles: Quantity/Contrast
0-24"	10YR 7/3	LS	OM	FR	NONE
24-27"	10YR 3/3	FSL	GR	FR	NONE
27-41"	10YR 4/6	FSL	OM	FI	NONE
41-80"	10YR 4/3	GRS	OM	FR	7.5YR 4/6 C/D
Test Pit No.	15030				
ESHW:	52"				
Termination @	88"				
Refusal:	N				
Obs. Water:	N				
Depth	Color	Texture	Structure	Consistence	Mottles: Quantity/Contrast
0-34"	10YR 7/3	S	OM	FR	NONE
34-45"	10YR 4/3	FSL	GR	FR	NONE
45-52"	10YR 4/6	LS	OM	FI	NONE
52-88"	2.5Y 5/3	LS	OM	FR	7.5YR 4/6 C/D

NOTE: ABOVE MEASUREMENT BEGAN BELOW 3 INCHES OF CONCRETE PAD.

TEST PIT LOGS FOR TUSCAN VILLAGE, SALEM, NH, RECORDED BY JAMES GOVE, CSS#004

6-14-2016

#504

0-26 INCHES, FILL, 10YR 3/2, FINE SANDY LOAM, MASSIVE, FRIABLE,
26-36 INCHES, FILL, 10YR 6/3, SAND, MASSIVE, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
36-42 INCHES, Ab, 10YR 3/2, SAND, GRANULAR, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
42-68 INCHES, C, 2.5Y 5/3, SAND, MASSIVE, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
ESHW= 36 INCHES NO REFUSAL OBSERVED WATER= 42 INCHES

#505

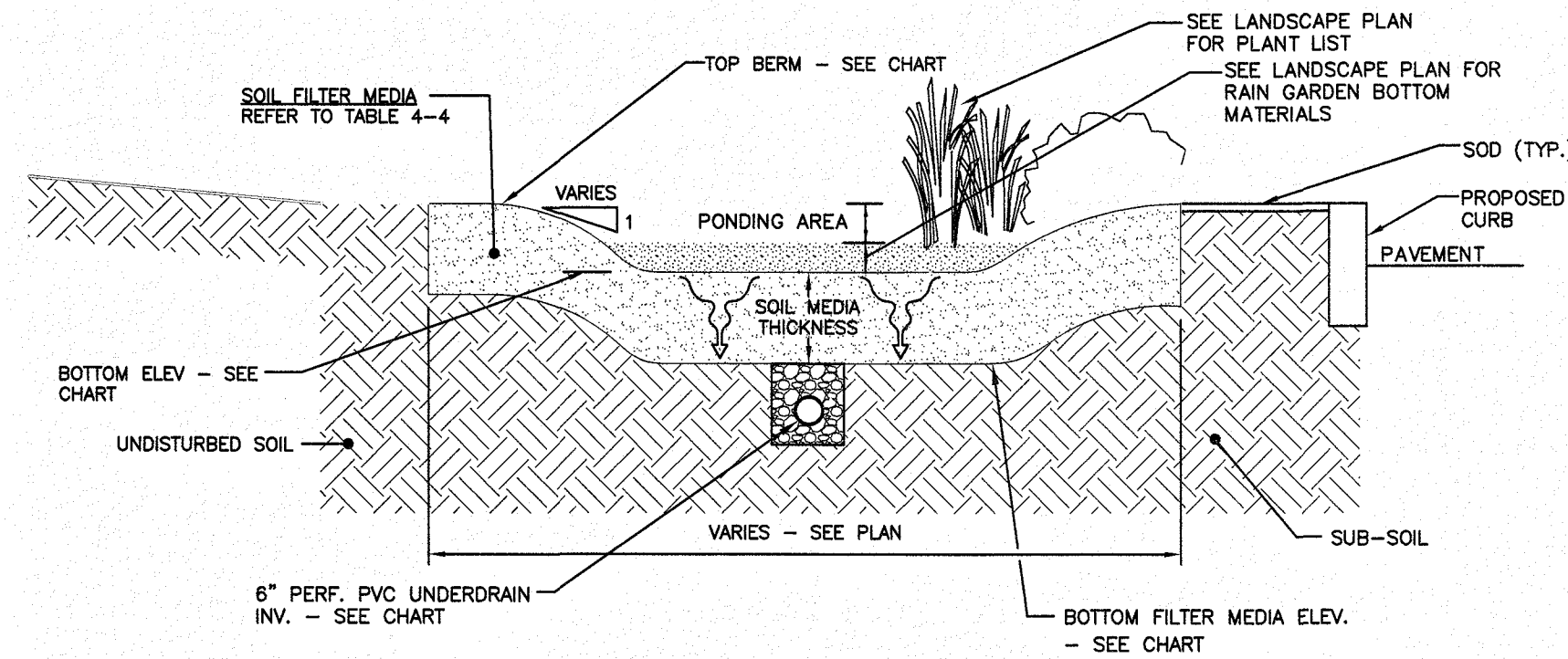
0-39 INCHES, FILL, 10YR 3/2 mixed with 2.5Y/2, FINE SANDY LOAM, massive, friable
39-61 INCHES, FILL, 10YR 3/2, SAND, MASSIVE, FRIABLE, WITH RED REDOX (5YR 5/6) 5%, WITH GREY REDOX (2.5Y 5/1) 10%
61-67 INCHES, Ab, 10YR 3/2, LOAMY SAND, GRANULAR, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
67-75 INCHES, Bwb, 10YR 4/3, LOAMY SAND, MASSIVE, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
ESHW= 39 INCHES NO REFUSAL OBSERVED WATER= 68 INCHES

#506

0-23 INCHES, FILL, 10YR 6/3, SAND, MASSIVE, FRIABLE
23-28 INCHES, FILL, 10YR 6/3, SAND, MASSIVE, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
28-44 INCHES, FILL, 10YR 3/2, FINE SANDY LOAM, MASSIVE, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
44-62 INCHES, Ab, 10YR 3/2, LOAMY SAND, GRANULAR, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
62-67 INCHES, Bwb, 10YR 4/6, LOAMY SAND, GRANULAR, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
67-78 INCHES, C, 2.5Y 5/3, FINE SAND, MASSIVE, FRIABLE, WITH RED REDOX (5YR 5/6) 5%
ESHW= 23 INCHES NO REFUSAL OBSERVED WATER= N/O

#507

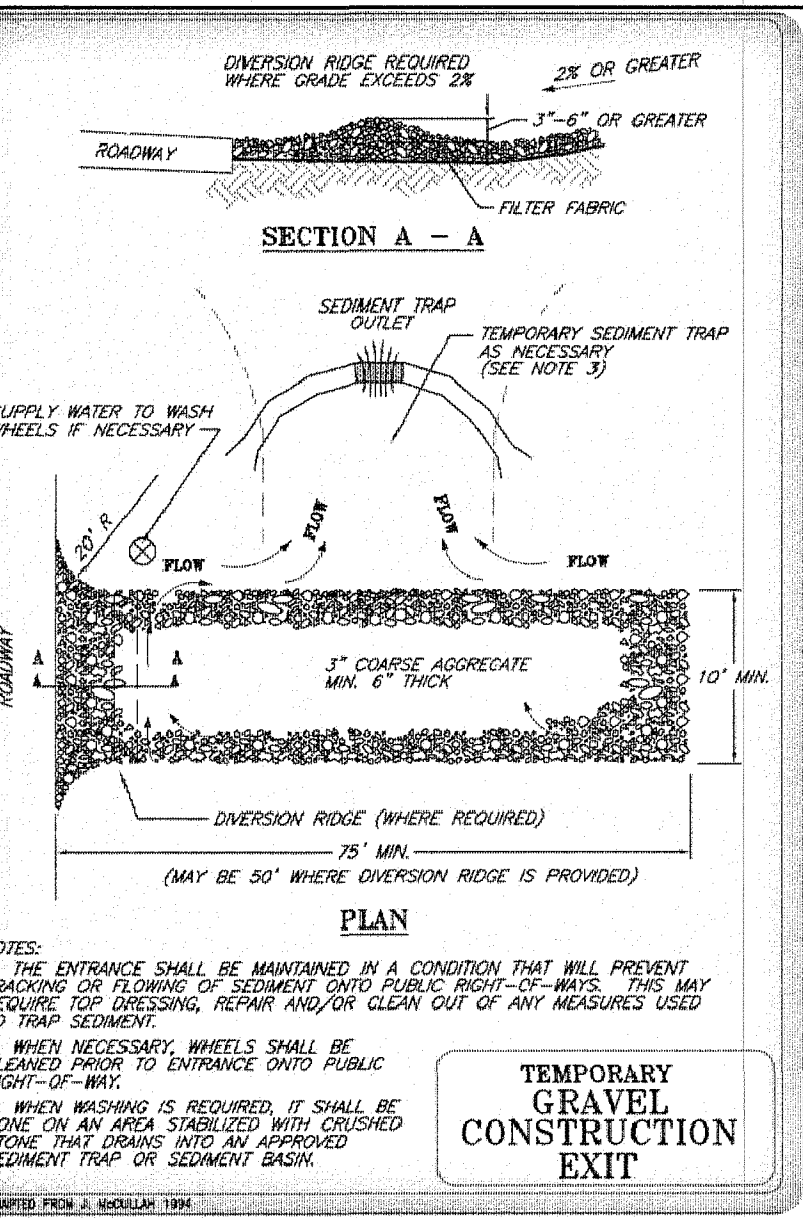
0-40 INCHES, FILL, 10YR 7/3, SAND, MASSIVE, FRIABLE
40-43 INCHES, Ab, 10YR 3/2, SAND, GRANULAR, FRIABLE
43-65 INCHES, Bwb, 10YR 4/6, LOAMY SAND, GRANULAR, FRIABLE
65-88 INCHES, C, 10YR 4/3, SAND, MASSIVE, FRIABLE, WITH RED REDOX (5YR 5/6) 20%
ESHW= 65 INCHES NO REFUSAL OBSERVED WATER= N/O



RAIN GARDEN AREA	TOP BERM ELEVATION	BASEIN BOTTOM ELEVATION	SOIL MEDIA THICKNESS	BOTTOM FILTER MEDIA ELEV.	UNDERDRAIN ELEV.
#1	139.00	136.00	18"	134.50	133.50

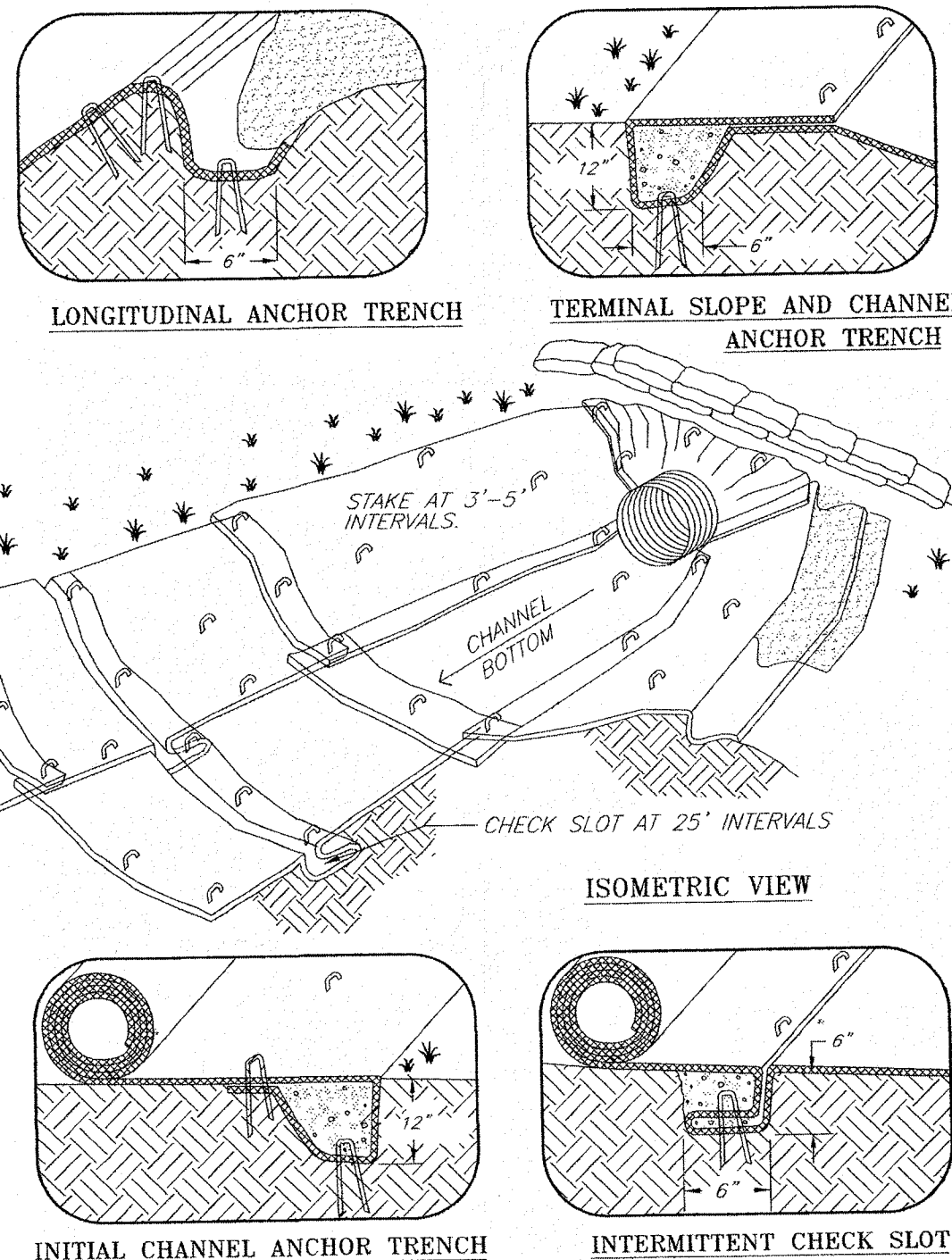
SCHEMATIC RAIN GARDEN DETAIL

NOT TO SCALE



GRAVEL CONSTRUCTION EXIT

NOT TO SCALE

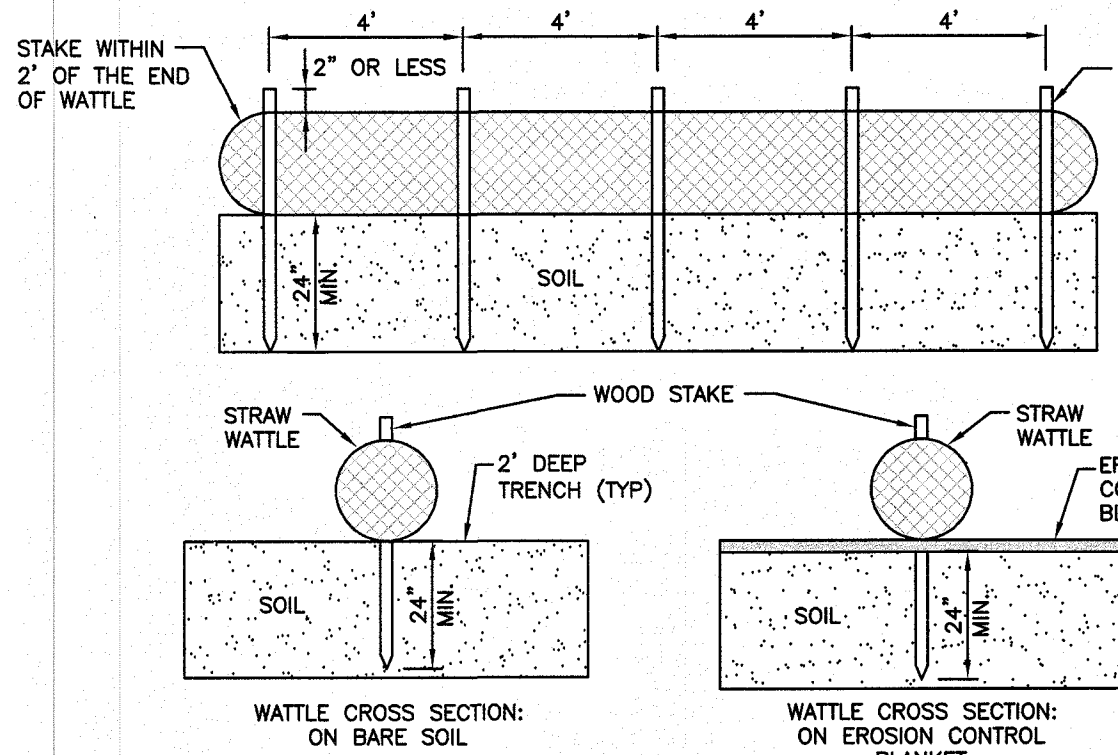


NOTES:

- CHECK SLOTS TO BE CONSTRUCTED PER MANUFACTURER'S SPECIFICATIONS.
- STAKING OR STAPLING LAYOUT PER MANUFACTURER'S SPECIFICATIONS.

BLANKET CHANNEL PROTECTION FOR EROSION CONTROL

NOT TO SCALE



- NOTES:
- ENDS OF WATTLES SHALL BE TURNED SLIGHTLY UP.
 - RECOMMENDED STAKES ARE 1 1/8" WIDE x 1 1/8" THICK x 30" LONG. STAKES SHALL NOT EXCEED ABOVE THE STRAW WATTLE MORE THAN 2".

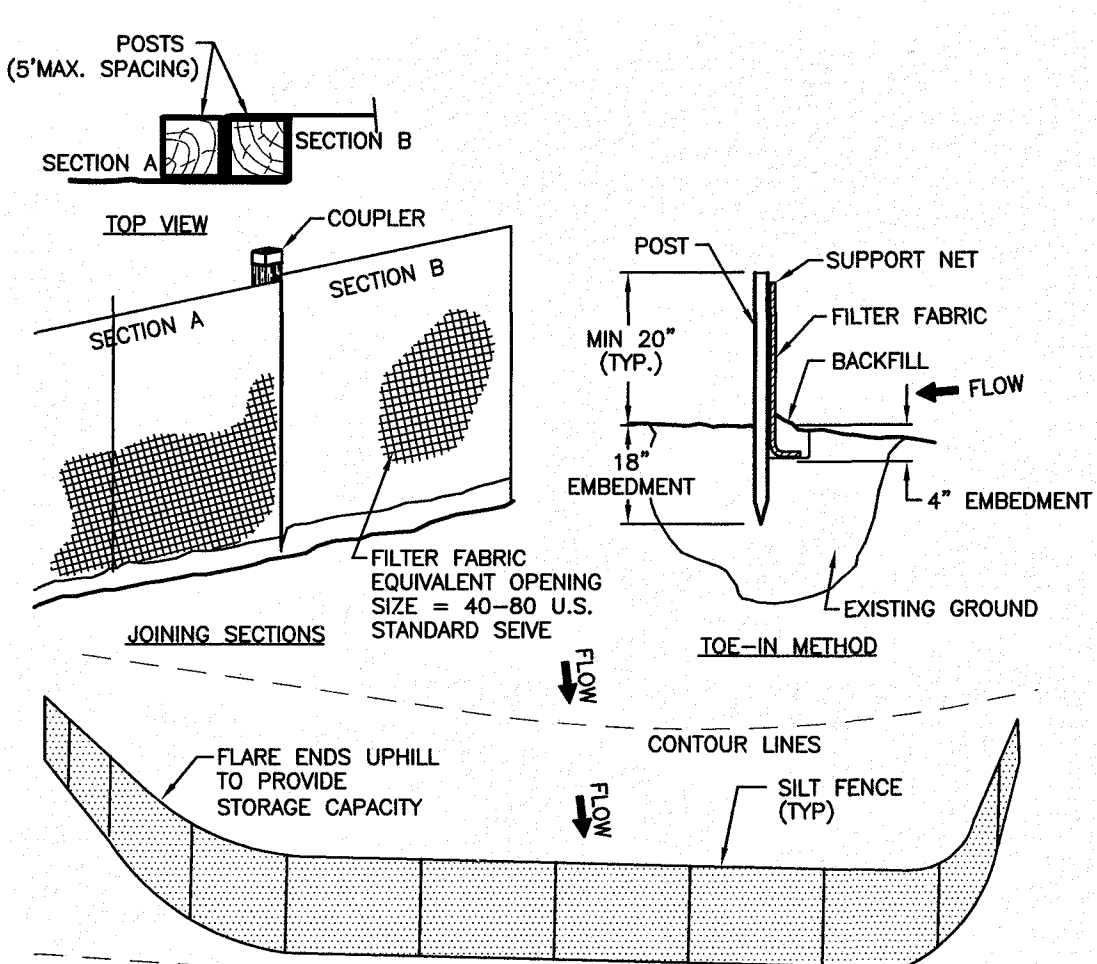
STRAW WATTLE DETAIL

NOT TO SCALE

Component Material	Table 4-4. Bioretention Filter Media	
	Percent of Mixture by Volume	Gradation of Material Percent by Weight Passing Standard Sieve
Filter Media Option A		
ASTM C-33 concrete sand	50 to 55	
Loamy sand topsoil, with fines as indicated	20 to 30	200
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200
Filter Media Option B		
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200
	70 to 80	10
		20
		60
Loamy coarse sand	200	8 to 15

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 2, POST-CONSTRUCTION BEST MANAGEMENT PRACTICES, DECEMBER 2008.



CRITERIA FOR SILT FENCES:

- SILT FENCE FILTER CLOTH: THE FABRIC FOR THE SILT FENCE SHALL MEET THE FOLLOWING SPECIFICATIONS:

FABRIC PROPERTIES:	MINIMUM ACCEPTABLE VALUES	TEST METHOD
GRAB TENSILE STRENGTH (lb/s)	50	ASTM D1682
ELONGATION AT FAILURE (%)	50	ASTM D1682
MULLEN BURST STRENGTH (PSI)	100	ASTM D3786
PUNCTURE STRENGTH (lb/s)	40	ASTM D751
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE

2) FENCE POSTS (FOR FABRICATED UNITS) - THE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG. WOOD POSTS WILL BE OF SOUND QUALITY HARDWOOD WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES. STEEL POSTS WILL BE STANDARD 1 OR 1 1/2 INCHES DIAMETER WITH A MINIMUM OF 1 POUND PER LINEAR FOOT. MAXIMUM SPACING SHALL BE 6 LINEAR FEET.

3) WIRE FENCE (FOR FABRICATED UNITS) - WIRE FENCING SHALL BE A MINIMUM 14.5 GAUGE WITH A MAXIMUM 6 INCH MESH OPENING.

4) PREFABRICATED UNITS - PREFABRICATED UNITS MAY BE USED IN LIEU OF THE ABOVE METHOD PROVIDING: (1) THE FILTER CLOTH AND FENCE POSTS MEET THE ABOVE CRITERIA; AND (2) THE UNIT IS INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

MAINTENANCE:

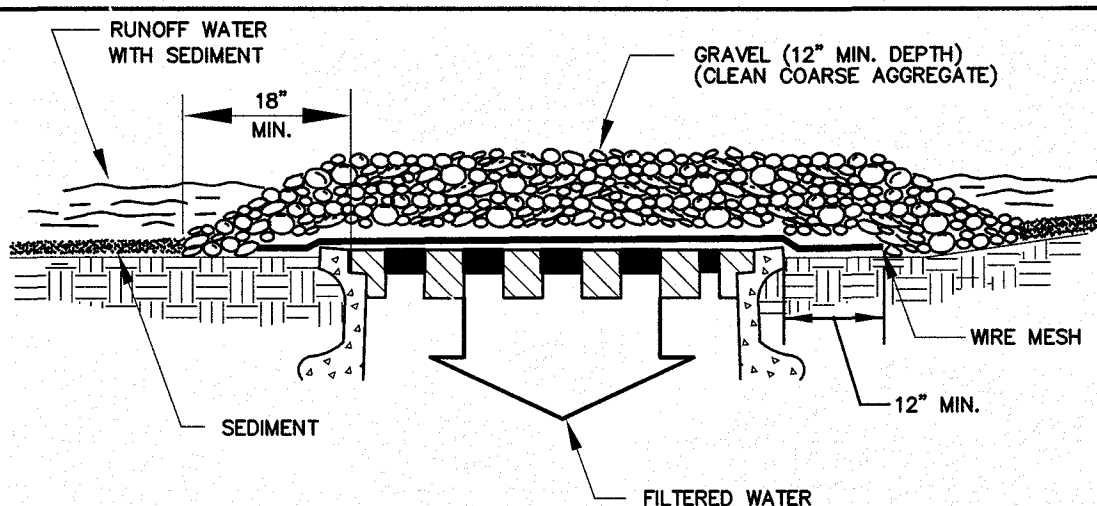
- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

CONSTRUCTION SPECIFICATIONS:

- THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
- THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND (4" DEEP & 4" WIDE) AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
- WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MID-SECTION AND BOTTOM.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES (24" IS PREFERRED), FOLDED, AND STAPLED.
- POSTS TO BE SPACED AT A MAXIMUM OF 6' ON CENTER.

SEDIMENT CONTROL FENCE

NOT TO SCALE

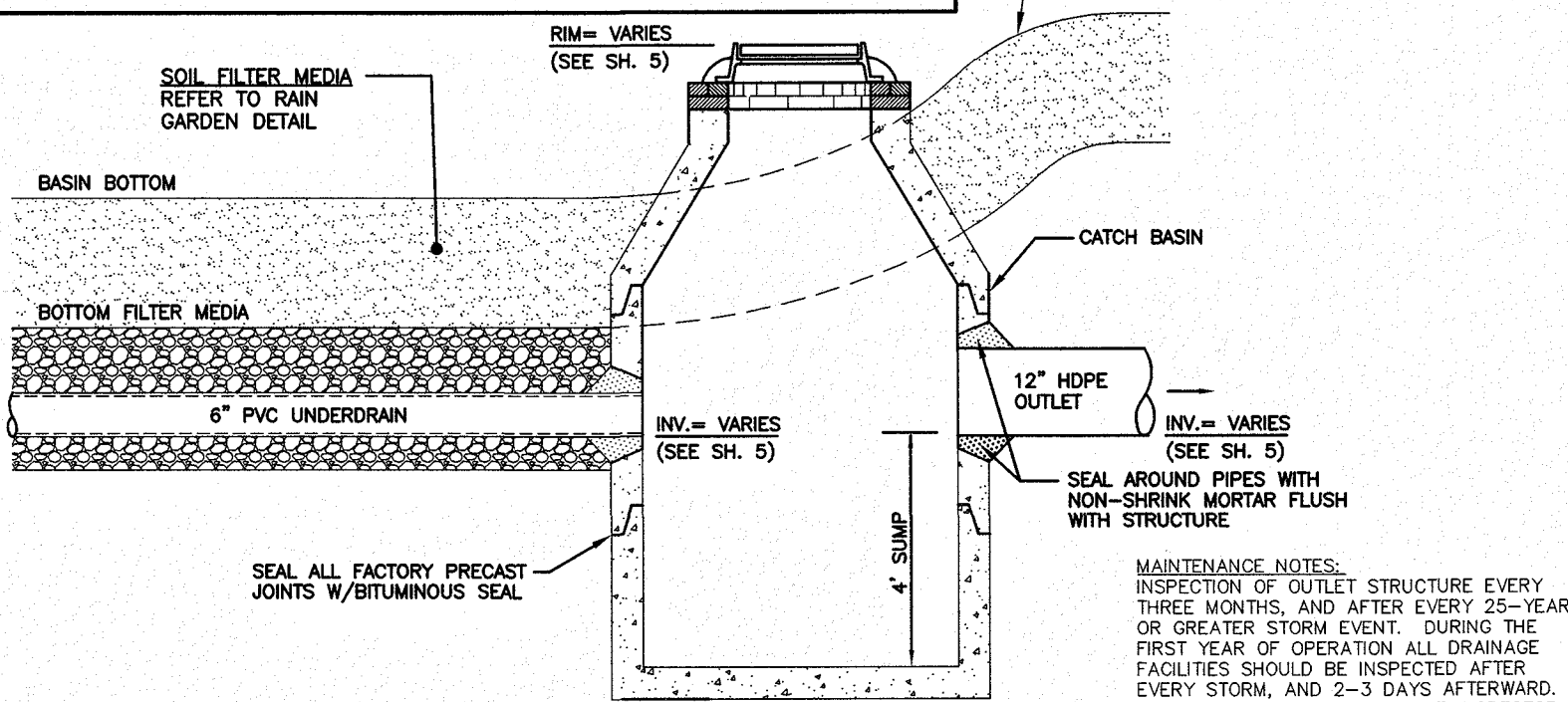


MAINTENANCE:

- ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY.
- SEDIMENT SHOULD BE REMOVED FROM THE TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF OF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS.
- THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.
- ALL STRUCTURES WITH INLET PROTECTION MUST BE CLEANED AT THE END OF CONSTRUCTION AND WHEN THE SITE IS FULLY STABILIZED.

INLET PROTECTION

NOT TO SCALE



RAIN GARDEN #1 OUTLET STRUCTURE DETAIL (CB-2)

NOT TO SCALE

TEMPORARY EROSION CONTROL MEASURES:

- THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- HAY BALE BARRIERS AND SEDIMENT TRAPS SHALL BE INSTALLED AS REQUIRED. BARRIERS AND TRAPS ARE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
- BALED HAY AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE FROM NOXIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY. NO SALT HAY SHALL BE USED.
- FILL MATERIAL SHALL BE FREE FROM STUMPS, WOOD, ROOTS, ETC.
- STOCKPILED MATERIALS SHALL BE PLACED ONLY IN AREAS SHOWN ON THE PLANS. STOCKPILES SHALL BE PROTECTED BY SILTATION FENCE AND SEEDING TO PREVENT EROSION. THESE MEASURES SHALL REMAIN UNTIL ALL MATERIAL HAS BEEN PLACED OR DISPOSED OFF SITE.
- ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDING. A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED AND SEEDING AS SPECIFIED.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED.
- PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- ALL CATCH BASIN INLETS WILL BE PROTECTED WITH LOW POINT SEDIMENTATION BARRIER.
- ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED AND CLEANED AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
- ALL DETERIORATING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FENCE AREA.
- JUTE MATTING OR APPROVED EQUIVALENT SHALL BE PROVIDED ON ALL SLOPES GREATER THAN 3:1.

CONSTRUCTION SEQUENCE NOTES:

- SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY ON-SITE CONSTRUCTION AS SHOWN. ADDITIONAL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICAL.
- CONSTRUCT TEMPORARY STABILIZED CONSTRUCTION ENTRANCE AS SHOWN ON THIS SHEET.
- CUT AND STUMP AREAS OF PROPOSED CONSTRUCTION.
- REMOVE AND STOCKPILE TOPSOIL. STOCKPILE SHALL BE SEEDING TO PREVENT EROSION.
- CONSTRUCT RAIN GARDENS. THE BASES OF THE RAIN GARDENS SHALL BE DEEPLY TILLED TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG. STORMWATER FLOWS ARE NOT TO BE DIRECTED TO THE RAIN GARDENS UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- CONSTRUCT ROADWAYS AND PERFORM SITE GRADING, PLACING HAY BALES AND SILTATION FENCES AS REQUIRED TO CONTROL SOIL EROSION, STABILIZE ROADS, PARKING LOTS AND CUT/FILL SLOPES WITHIN 72-HOURS OF ACHIEVING FINISH GRADES.
- INSTALL UNDERGROUND UTILITIES AND DRAINAGE SYSTEM.
- BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDING OR MULCHED WITHIN 72-HOURS OF ACHIEVING FINISHED GRADES.
- DAILY, OR AS REQUIRED, CONSTRUCT, INSPECT, AND IF NECESSARY, RECONSTRUCT TEMPORARY BARRIERS, DRAINS, DITCHES, SILT FENCES AND SEDIMENT TRAPS INCLUDING MULCHING AND SEEDING. AT A MINIMUM, INSPECT EROSION CONTROLS WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
- BEGIN EXCAVATION FOR CONSTRUCTION OF BUILDINGS.
- FINISH PAVING ALL ROADWAYS AND DRIVEWAYS.
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- AFTER GRASS HAS BEEN FULLY GERMINATED IN ALL SEEDING AREAS, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
- APPLICATION OF GRASS SEED, FERTILIZERS AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:
Limestone: 138 lbs./1,000 square feet.
Fertilizer: 3.8 lbs./1,000 sq. ft.
Mulch: 3.8 lbs./1,000 sq. ft.
hay mulch approximately 3 tons/acre unless erosion control matting is used.
- Permanent Seed Mix:
Creeping Red Fescue 20 LBS./ACRE
Tall Fescue 20 LBS./ACRE
Redtop 2 LBS./ACRE
TOTAL 42 LBS./ACRE
Temporary Seed Mix:
Winter Rye (Aug. 15-Sept. 15) 112 LBS./ACRE
Oats (No later than May 15) 80 LBS./ACRE
- NEWLY GRADED AREAS REQUIRING SLOPE PROTECTION OUTSIDE OF NORMAL SEEDING SEASON SHALL RECEIVE HAY MULCH AT THE APPROXIMATE RATE OF NO MORE THAN 2 TONS PER ACRE.
- THE CONTRACTOR AND DEVELOPER MUST MANAGE THE PROJECT TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- FUGITIVE DUST MUST BE CONTROLLED IN ACCORDANCE WITH ENV-A-1000.

EROSION CONTROL NOTES:

- THE EROSION CONTROL PROCEDURES SHALL CONFORM TO THE NH STORMWATER MANUAL, VOLUME 3, EROSION & SEDIMENT CONTROLS DURING CONSTRUCTION, DECEMBER 2008.
- DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME AS APPROVED BY THE ENGINEER. LAND SHOULD NOT BE LEFT EXPOSED DURING THE WINTER MONTHS.
- LIMIT OF MAXIMUM AREA OF EXPOSED SOIL AT ANY ONE TIME TO LESS THAN 5 ACRES. THE EXPOSED AREA THAT IS BEING ACTIVELY WORKED DURING WINTER IS TO BE LESS THAN 3 ACRES DURING THE WINTER SEASON.
- ALL PERMANENT STORM WATER STRUCTURES SHALL BE STABILIZED PRIOR TO DIRECTING FLOW INTO THEM. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
a) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
b) A MINIMUM OF 85 PERCENT VEGETATED GROWTH HAS BEEN ESTABLISHED.
c) A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED.
d) OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- SILT FENCE SHALL BE INSTALLED AND MAINTAINED DURING AND AFTER DEVELOPMENT TO REMOVE SEDIMENT FROM RUNOFF WATER AND FROM LAND UNDERGOING DEVELOPMENT. WHERE POSSIBLE, NATURAL DRAINAGE CHANNELS SHOULD BE UTILIZED AND LEFT OPEN TO REMOVE EXCESS SURFACE WATER. SILT FENCE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
- ALL DISTURBED AREAS AND SIDE SLOPES WHICH ARE FINISHED GRADED, WITH NO FURTHER CONSTRUCTION TO TAKE PLACE, SHALL BE LOAMED AND SEEDING WITHIN 72 HOURS AFTER FINAL GRADING. A MINIMUM OF 4" OF LOAM SHALL BE INSTALLED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA. THE SEED MIX SHALL BE AS DESIGNATED BELOW.
- ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDING WITH GRASS TO PREVENT EROSION. THE MAXIMUM LENGTH OF THE EXPOSURE OF DISTURBED SOILS SHALL BE 45 DAYS. HAY OR STRAW MULCH SHALL BE APPLIED TO ALL FRESHLY SEED AREAS AT THE RATE OF 2 TONS PER ACRE. BALES SHALL BE UNFOLDED, AIR DRIED, AND FREE FROM WEED, SEEDS AND ANY COARSE MATERIAL.
- DURING GRADING OPERATIONS INSTALL HAY BALE BARRIERS ALONG TOE OF SLOPE OF FILL AREAS WHERE SHOWN. BARRIERS ARE TO BE MAINTAINED UNTIL DISTURBED AREAS ARE PAVED OR GRASSSED.
- THE FILL MATERIAL SHALL BE OF APPROVED SOIL TYPE FREE FROM STUMPS, ROOTS, WOOD, ETC. TO BE PLACED IN 12" LIFTS OR AS SPECIFIED. BULLDOZERS, TRUCKS, TRACTORS, OR ROLLERS MAY BE USED FOR COMPACTION BY ROUTING THE EQUIPMENT TO ALL AREAS OR EACH LAYER.
- AVOID THE USE OF FUTURE OPEN SPACES (LOAM & SEED) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ROADS.

WINTER STABILIZATION NOTES:

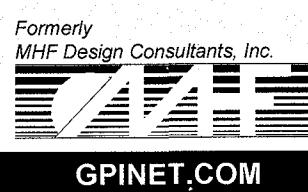
MAINTENANCE REQUIREMENTS:

- Maintenance measures should continue as needed throughout construction, including the over-winter period. After each rainfall, snowstorm, or period of thawing and running the site contractor should conduct an inspection of all installed erosion control measures and perform repairs as needed to insure their continuing function.
- For any area stabilized by temporary or permanent seeding prior to the onset of the winter season, the contractor should conduct an inspection in the spring to ascertain the condition of vegetation cover, and repair any damage areas or bare spots and reseed as required to achieve established vegetation cover (at least 85% of area vegetated with healthy, vigorous grass).
- Stabilization as follows should be completed within a day of establishing the grade that is final or that otherwise will exist for more than 5 days:
- All proposed vegetated areas having a slope of less than 15% which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, should be seeded and covered with 3 to 4 tons of hay or straw mulch per acre secured with anchored straw netting, or 2 inches of erosion control mix (see description of erosion control mix bars for material specification).
 - All proposed vegetated areas having a slope of greater than 15% which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, should be seeded and covered with a properly installed and anchored erosion control blanket or with a minimum 4 inch thickness of erosion control mix, unless otherwise specified by the manufacturer. Note that compost blankets should not exceed 2 inches in thickness or they may overheat.
 - All stone-covered slopes must be constructed and stabilized by October 15.
 - Installation of anchored hay mulch or erosion control mix should not occur over snow of greater than one inch in depth.
 - All mulch applied during winter should be anchored (e.g., by netting, tracking, wood cellulose fiber).
 - Stockpiles of soil materials should be mulched for over winter protection with hay or straw at twice the normal rate or with a four-inch layer of erosion control mix. Mulching should be done within 24 hours of stocking, and re-established prior to any rainfall or snowfall. No soil stockpile should be placed (even covered with mulch) within 100 feet from any wetland or frozen materials, (e.g., frost layer that is removed during winter construction), should be stockpiled separately and in a location that is away from any area needing to be protected. Stockpiles of frost material can melt in the spring and become unworkable and difficult to transport due to the high moisture content in the soil.
 - Installation of erosion control blankets should not occur over snow of greater than one inch in depth or on frozen ground.
 - All grass-lined ditches and channels should be constructed and stabilized by September 1. All ditches or swales should not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, should be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions, as determined by a qualified Professional Engineer or a Certified Professional in Erosion and Sediment Control as certified by the CSPESC Council of EnviroCert International, Inc. If a stone lining is necessary, the contractor may need to re-grade the ditch as required to provide adequate cross-section after allowing for placement of the stone.
 - All stone-lined ditches and channels must be constructed and stabilized by October 15.
 - After November 15, incomplete road or parking surfaces, where work has stopped for the winter season, shall be protected with a minimum of 3 inches of crushed gravel per NHDOT Item 504.3.
 - Sediment barriers that are installed during frozen conditions should consist of erosion control mix bars, or continuous contained berms. Silt fences and hay bales should not be installed when frozen conditions prevent proper embedment of these barriers.

2	MISC. REVISIONS	DRJ	12/16/19
1	ADD RAIN GARDEN FROM SH.12 & ADD R.G. OUTLET DETAIL	DRJ	11/7/19
NO.	DESCRIPTION	BY	DATE
REVISIONS			

CONSTRUCTION DETAILS

THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC



Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

SCALE: NTS

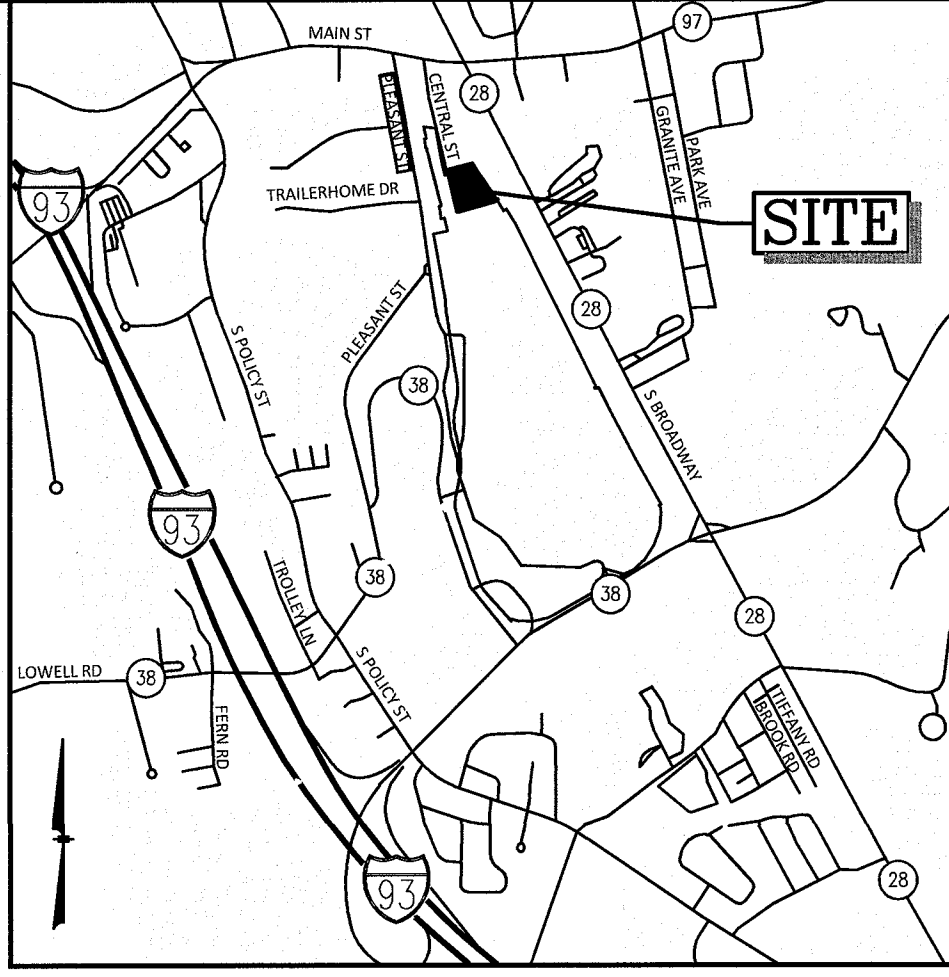
DATE: OCTOBER 1, 2019

DESIGNED BY:		DRAWN/CHECKED:		DWG. NAME:		PROJECT No.		SHEET No.	
DRJ		CPS/DRJ		4214DET.DWG		421417		17 OF 18	

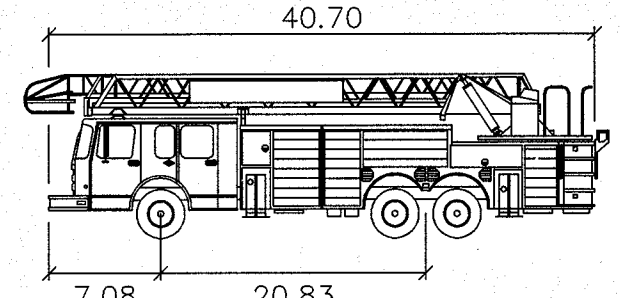
PREPARED FOR
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810-PAGE 1414

SALEM PLANNING BOARD
APPROVAL

ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL



LOCATION MAP
(NOT TO SCALE)



Salem Ladder truck
feet
Width : 8.00
Track : 7.83
Lock to Lock Time : 6.0
Steering Angle : 32.6

NO.	DESCRIPTION	BY	DATE
	REVISIONS		

TRUCK TURN EXHIBIT

THE VILLAS AT NORTH TUSCAN VILLAGE - PHASE 2
11 CENTRAL STREET
SALEM, NEW HAMPSHIRE
SALEM PROPERTY MAP 98 LOT 12542
BLACK BROOK REALTY TUSCAN VILLAGE NORTH, LLC



Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

SCALE: 1" = 30'

DATE: OCTOBER 1, 2019

PREPARED FOR
BLACK BROOK REALTY
TUSCAN VILLAGE NORTH, LLC
17 MAIN STREET
HOPKINTON, MA 01748
BOOK 5810-PAGE 1414

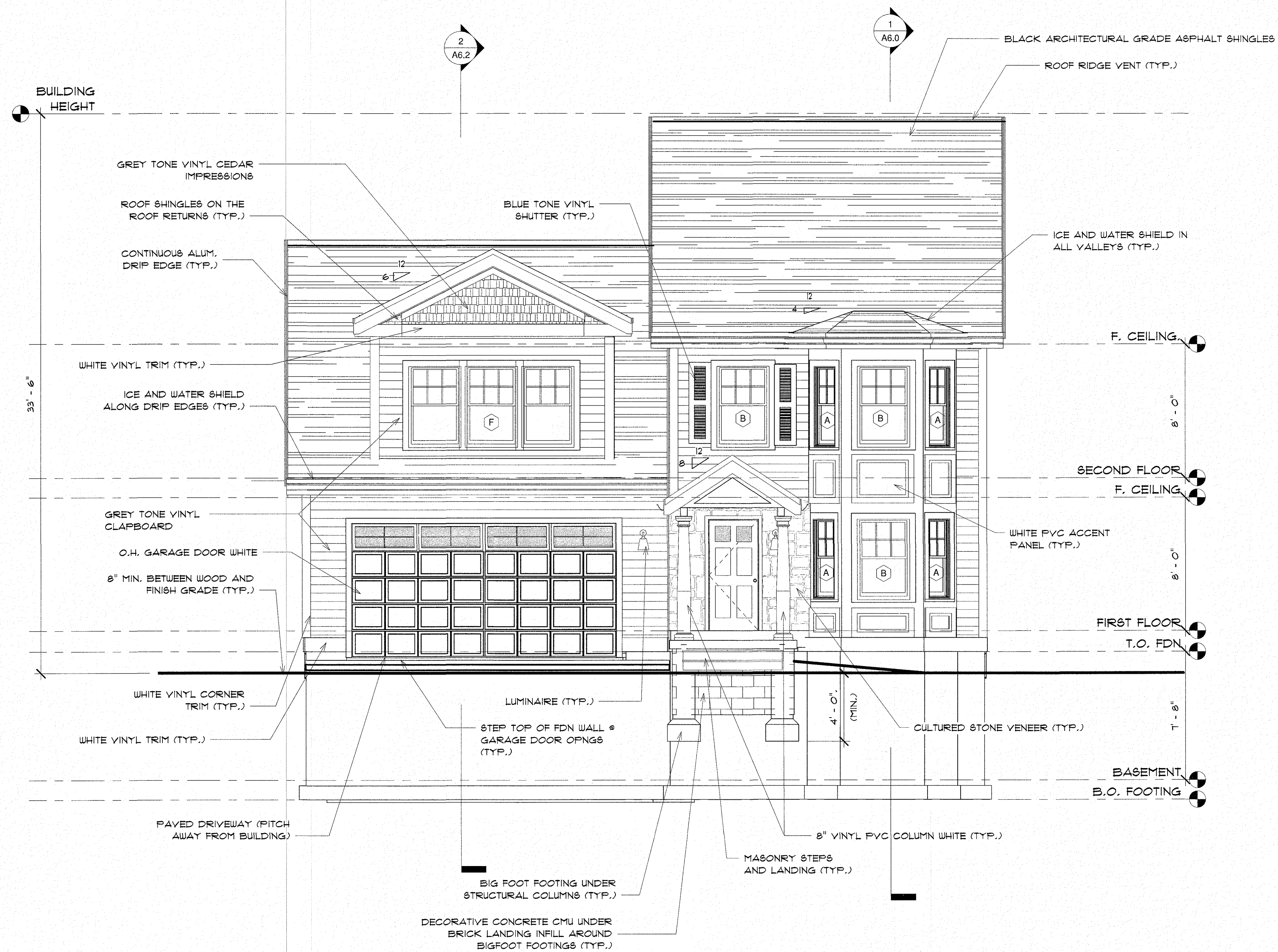
SALEM PLANNING BOARD
APPROVAL

ZONE: COMMERCIAL-INDUSTRIAL 'C' & RESIDENTIAL

DESIGNED BY:	DRAWN/CHECKED	DWG. NAME	PROJECT No.	SHEET No.
DRJ	CCC/DRJ	4214SP.dwg	421417	1 OF 1



F:\Projects\CAD\421417\4214SP.dwg TT 10/02/19 9:20am ccdll



CONTRACTOR TO VERIFY WITH CIVIL
ENGINEER FINAL BASEMENT / GARAGE
SLAB ELEVATIONS. ADJUST ELEVATIONS
AS REQUIRED.

1 FRONT ELEVATION
1/4" = 1'-0"

PROG SET - SINGLE

BUILDING ENVELOPE ASPECTS TO COMPLY WITH
CURRENT ENERGY CODE

IT IS THE CONTRACTOR'S OR OWNER'S RESPONSIBILITY TO EMPLOY GAVIN AND SULLIVAN ARCHITECTS TO PERFORM ON SITE VERIFICATION IF REQUIRED OR DESIRED. IT IS THE OWNER'S OR CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT TIMELY NOTIFICATION OF THE PROJECT PROGRESS IS PROVIDED SO THAT ADEQUATE ON SITE ARCHITECTURAL PRESENCE IS OBTAINED. LIABILITY IS SEVERELY DIMINISHED IF ARCHITECT ON SITE VERIFICATION IS NOT PERFORMED.

ALL HVAC, ELECTRICAL, FIRE ALARM, AUTOMATIC FIRE SPRINKLERS, AND PLUMBING TO BE PERFORMED ON A DESIGN BUILD BASIS WITH REGISTERED ENGINEERS. ENGINEERS SHALL PROVIDE NARRATIVES, AFFIDAVITS, AND STAMPED DRAWINGS. FIRE SPRINKLER AND FIRE ALARM PLANS SHALL BE APPROVED BY THE SALEM FIRE DEPARTMENT.

CONTRACTOR TO FIELD VERIFY ALL DETAILS AND DIMENSIONS BEFORE PROCEEDING WITH THE WORK. NOTES ON THIS CONSTRUCTION DOCUMENT ARE TYPICAL UNLESS OTHERWISE NOTED. IF THE CONTRACTOR SEES AN AREA OF THE BUILDING THAT IS INCOMPLETE AND IS NOT NOTED ON THIS DRAWING SET, HE MUST ALSO INCLUDE THIS AREA IN THIS WORK, MATCHING SIMILAR FINISH AREAS OF THIS BUILDING.

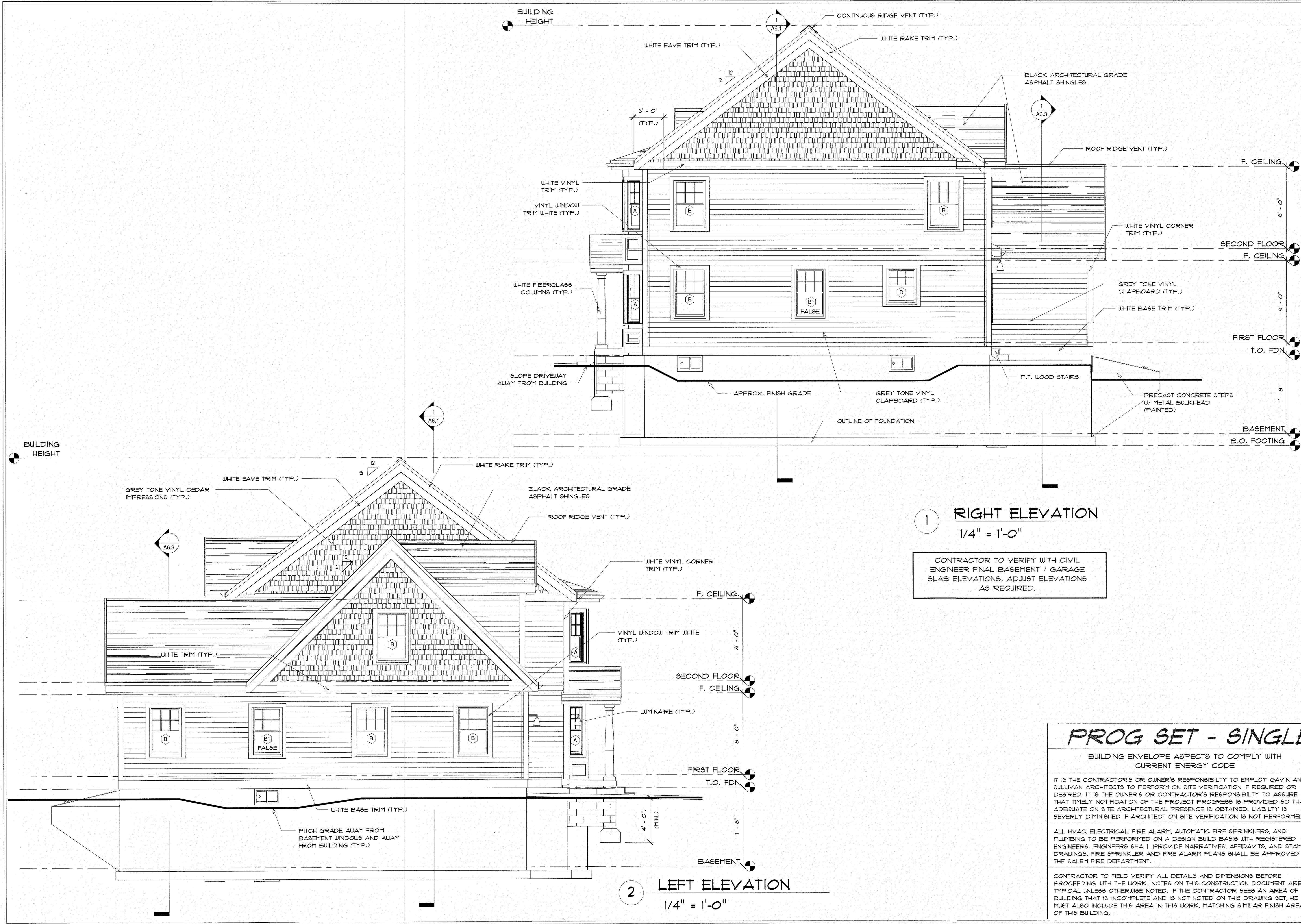
DESIGNED BY:
GAVIN & SULLIVAN ARCHITECTS, INC.
128 WARREN STREET LOVELL, MA.

PROPOSED SINGLE FAMILY FOR:
BLACK BROOK REALTY
NORTH TUSCAN VILLAGE
SALEM, NH

ELEVATIONS

PROJECT: 19-126
DATE: 12-06-2019
SCALE AS NOTED
DRAWN BY: MJJ

A1.0



1 RIGHT ELEVATION
1/4" = 1'-0"

CONTRACTOR TO VERIFY WITH CIVIL ENGINEER FINAL BASEMENT / GARAGE SLAB ELEVATIONS. ADJUST ELEVATIONS AS REQUIRED.

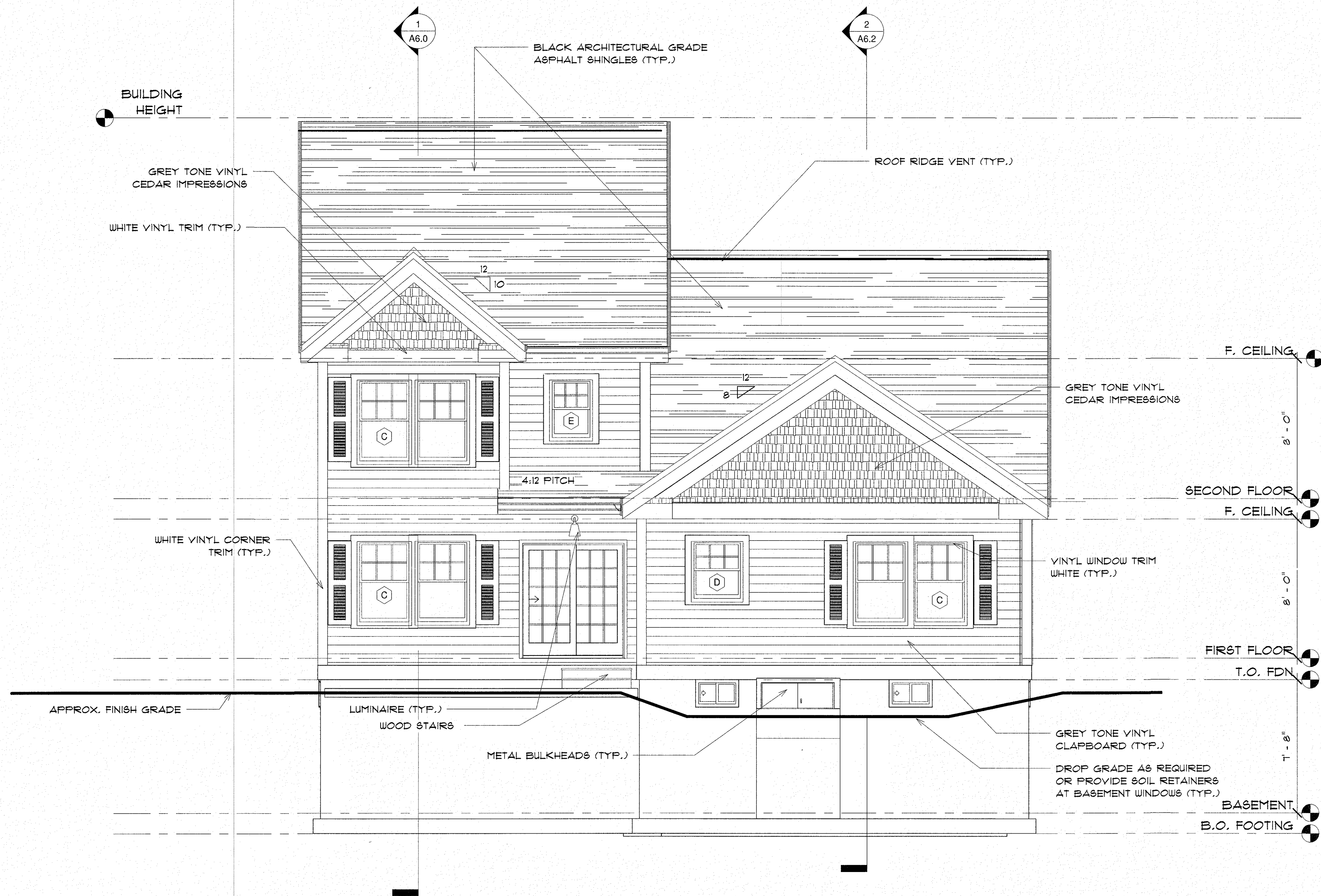
PROG SET - SINGLE

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1 REAR ELEVATION
1/4" = 1'-0"

PROG SET - SINGLE

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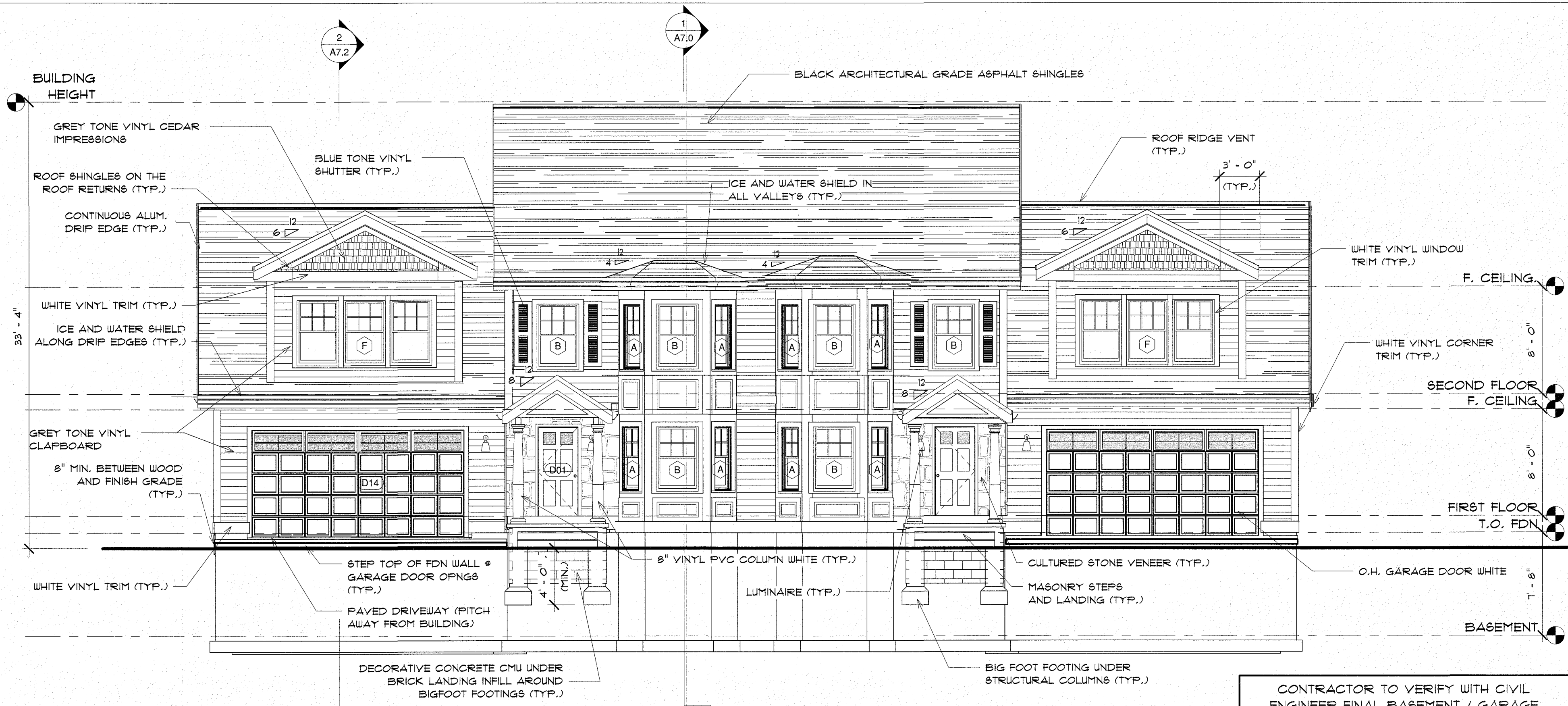
DESIGNED BY:
GAVIN & SULLIVAN ARCHITECTS, INC.
128 WARREN STREET LOVELL, MA.

PROPOSED SINGLE FAMILY FOR:
BLACK BROOK REALTY
NORTH TUSCAN VILLAGE
SALEM, NH

ELEVATION

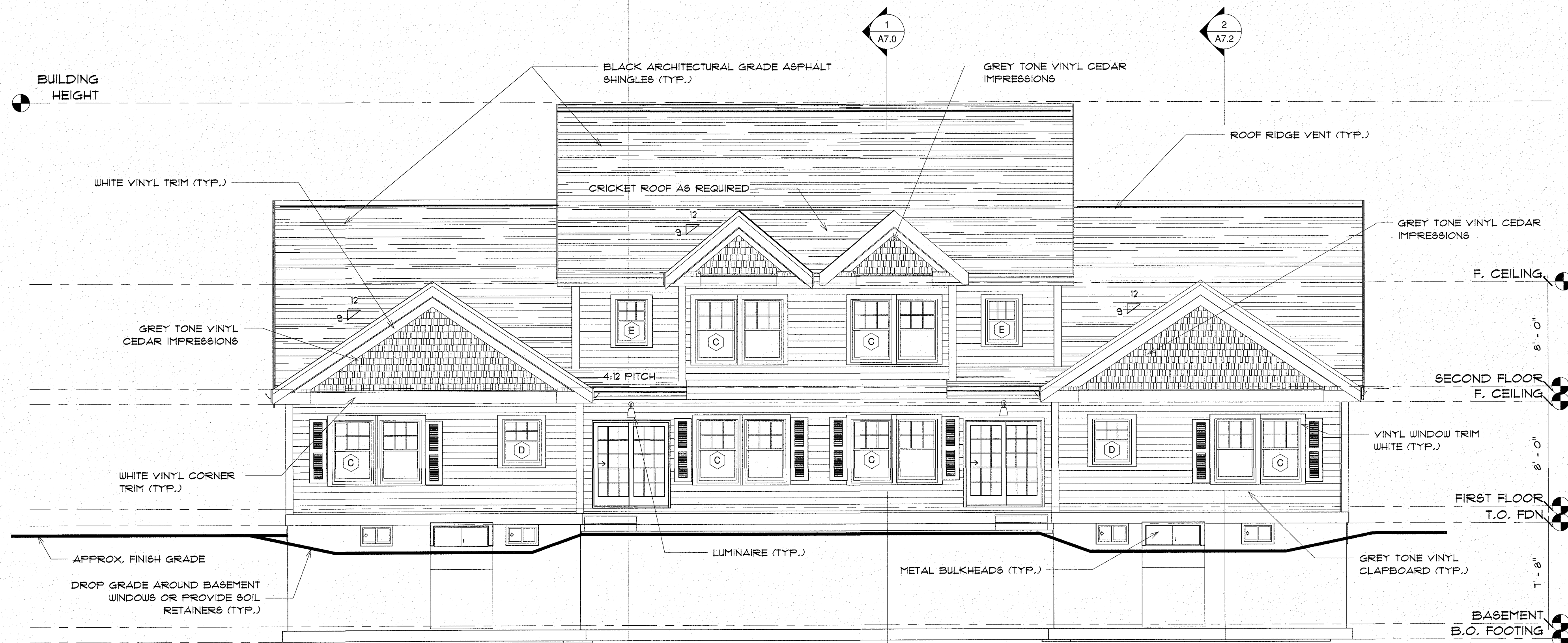
A1.2

PROJECT: 19-126
DATE: 12-06-2019
SCALE AS NOTED
DRAWN BY: MJW



1 FRONT ELEVATION
3/16" = 1'-0"

CONTRACTOR TO VERIFY WITH CIVIL ENGINEER FINAL BASEMENT / GARAGE SLAB ELEVATIONS, ADJUST ELEVATIONS AS REQUIRED.



2 REAR ELEVATION
3/16" = 1'-0"

DUPLEX A - PROGSET

BUILDING ENVELOPE ASPECTS TO COMPLY WITH CURRENT ENERGY CODE

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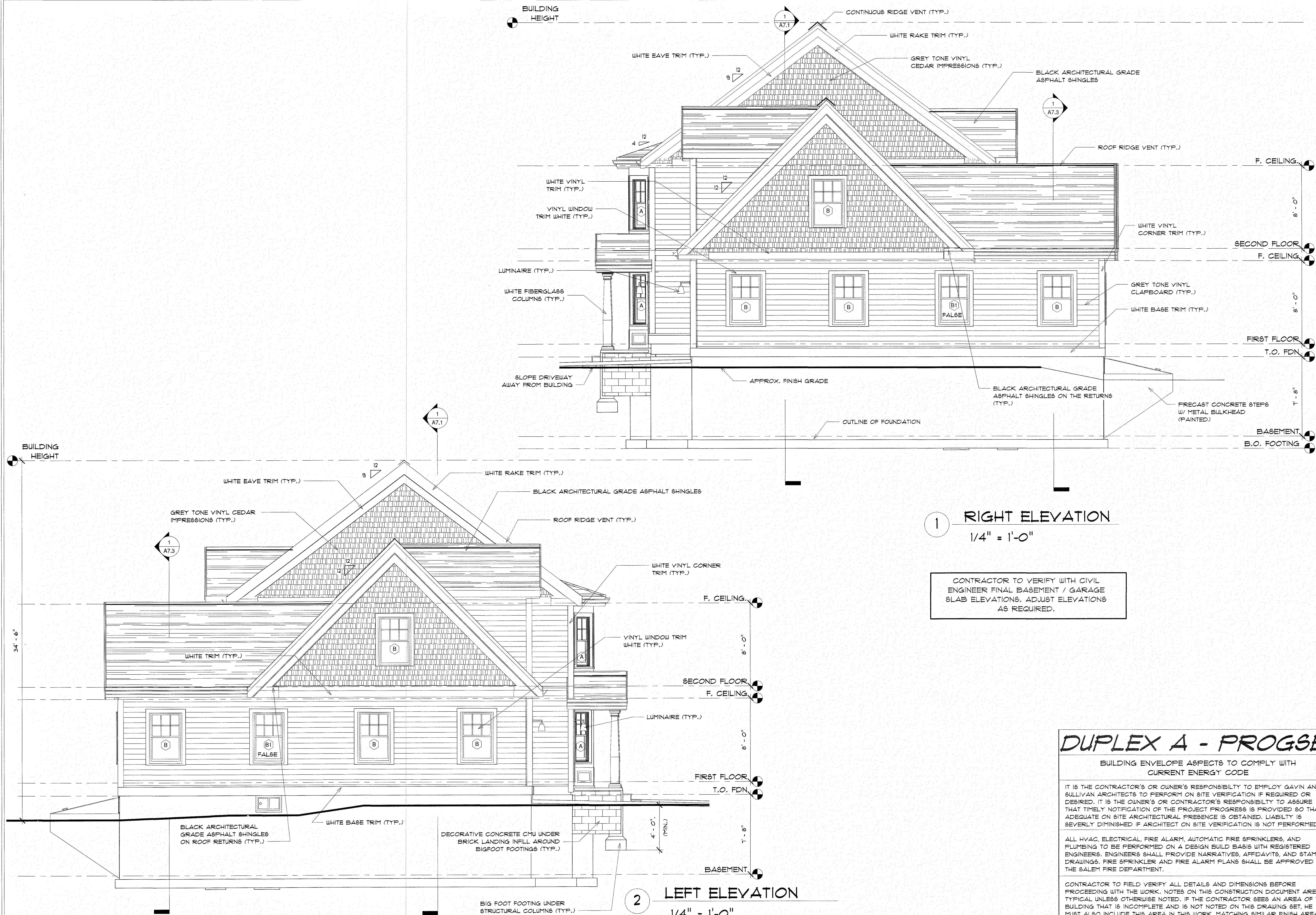
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GAVIN & SULLIVAN ARCHITECTS, INC.
128 WARREN STREET LOVELL, MA.

PROPOSED MULTI-FAMILY FOR:
BLACK BROOK REALTY
NORTH TUSCAN VILLAGE
SALEM, NH

ELEVATIONS

PROJECT: 19-126 SCALE AS NOTED
DATE: 12-06-2019 DRAWN BY: MU

A1.0



1 RIGHT ELEVATION
1/4" = 1'-0"

CONTRACTOR TO VERIFY WITH CIVIL ENGINEER FINAL BASEMENT / GARAGE SLAB ELEVATIONS. ADJUST ELEVATIONS AS REQUIRED.

DUPLEX A - PROGET

BUILDING ENVELOPE ASPECTS TO COMPLY WITH CURRENT ENERGY CODE

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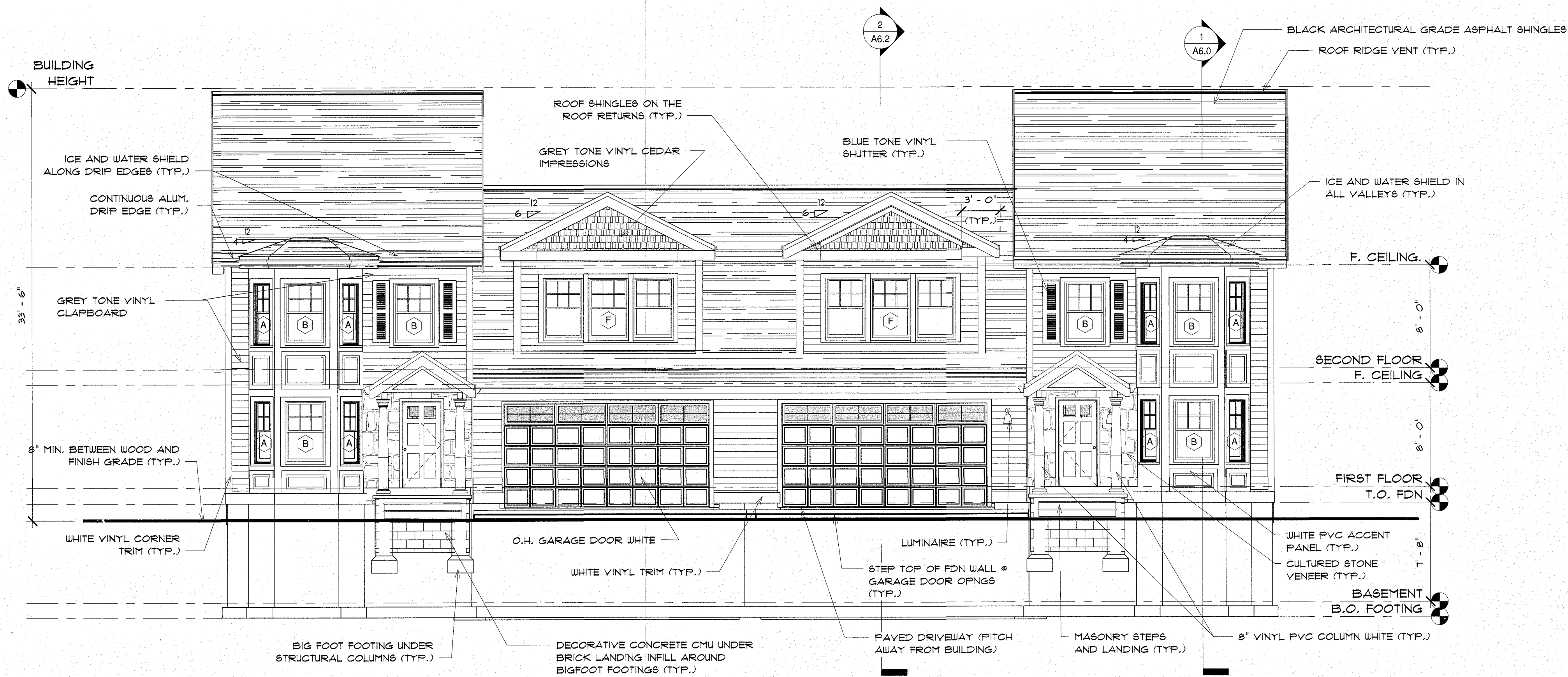
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GAVIN & SULLIVAN ARCHITECTS, INC.
 128 WARREN STREET LOWELL, MA.

PROPOSED MULTI-FAMILY FOR:
BLACK BROOK REALTY
NORTH TUSCAN VILLAGE
 SALEM, NH

ELEVATIONS

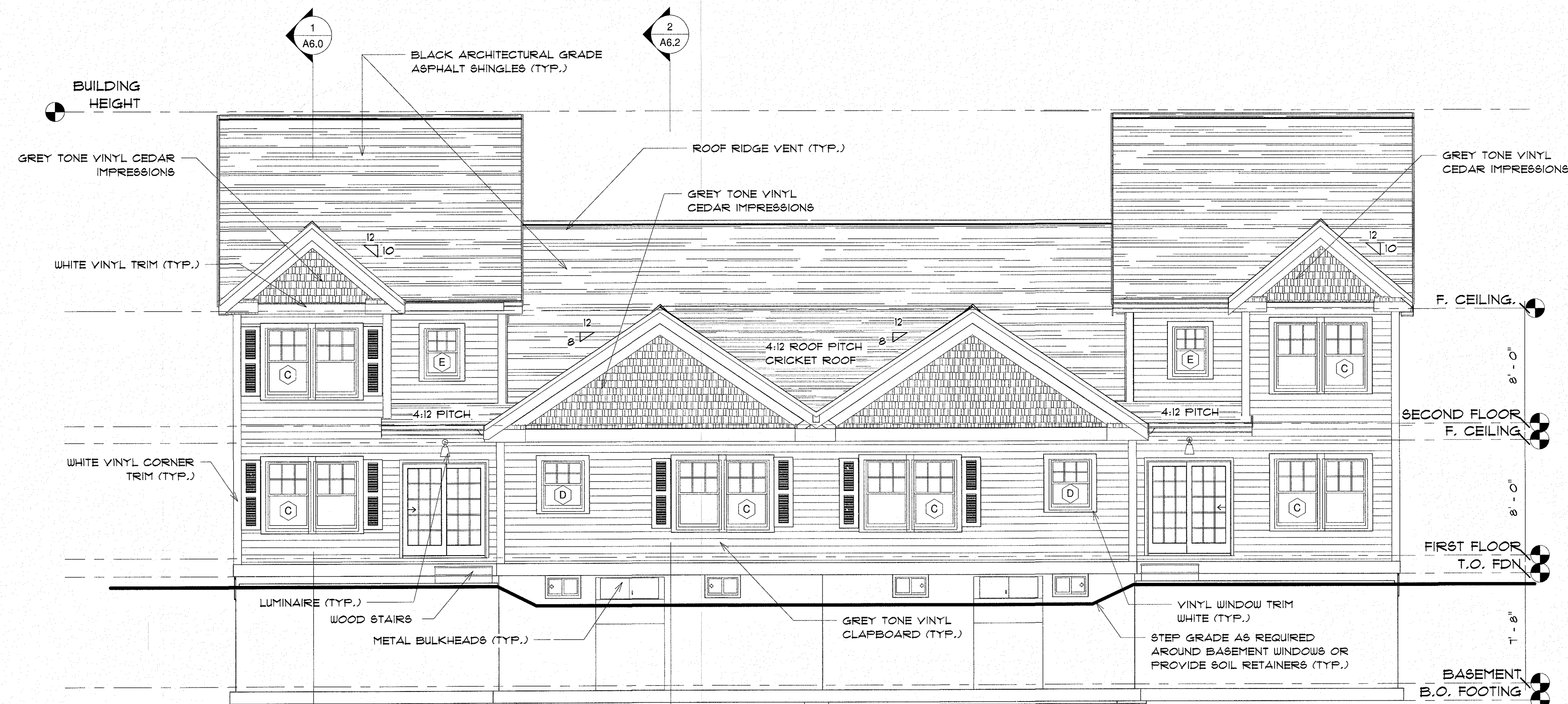
A1.1

PROJECT: 19-126 SCALE AS NOTED
 DATE: 12-06-2019 DRAWN BY: MU



1 FRONT ELEVATION
3/16" = 1'-0"

CONTRACTOR TO VERIFY WITH CIVIL ENGINEER FINAL BASEMENT / GARAGE SLAB ELEVATIONS. ADJUST ELEVATIONS AS REQUIRED.



2 REAR ELEVATION
3/16" = 1'-0"

PROGSET-DUPLEX B

BUILDING ENVELOPE ASPECTS TO COMPLY WITH CURRENT ENERGY CODE

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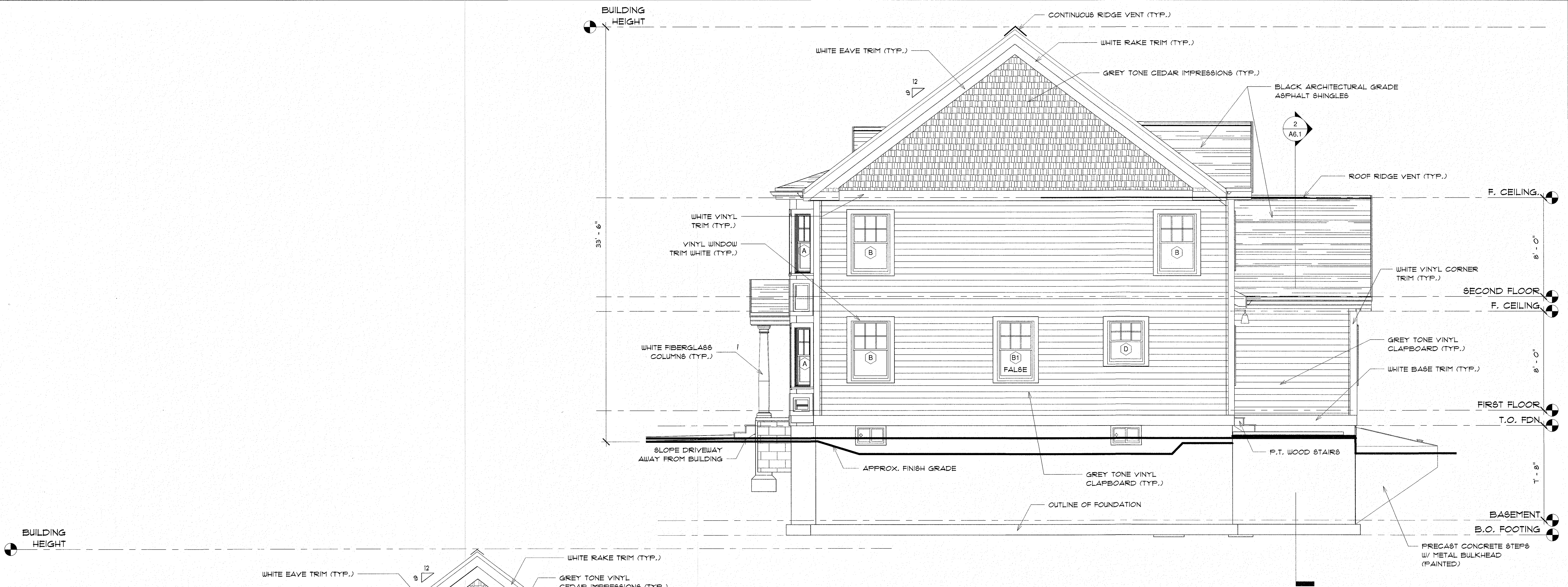
DESIGNED BY:
GAVIN & SULLIVAN ARCHITECTS, INC.
128 WARREN STREET LOWELL, MA.

PROPOSED MULTI-FAMILY FOR:
BLACK BROOK REALTY
NORTH TUSCAN VILLAGE
SALEM, NH

ELEVATIONS

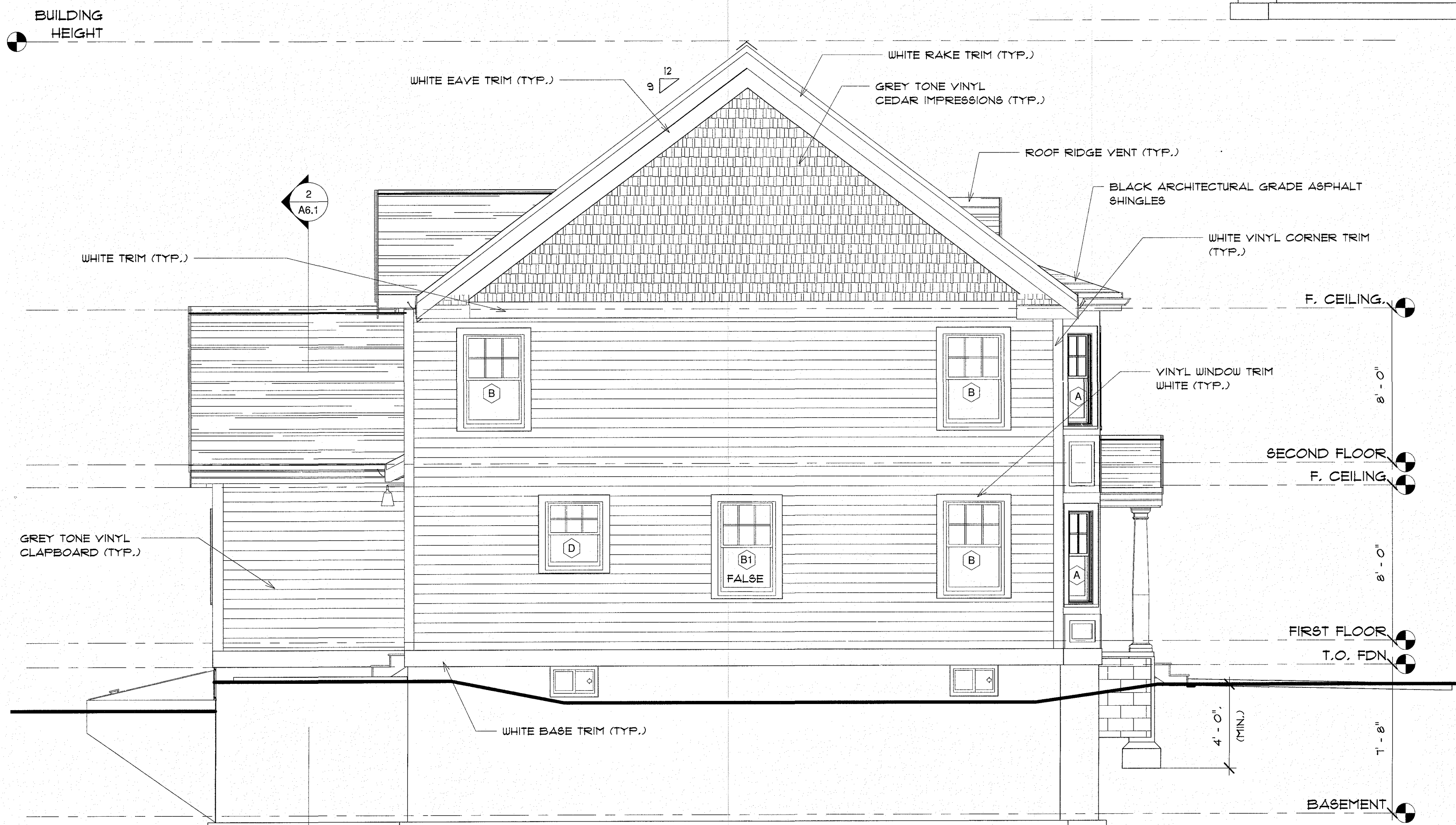
PROJECT: 19-126 SCALE AS NOTED
DATE: 12-03-2019 DRAWN BY: MW

A1.0



1 RIGHT ELEVATION
1/4" = 1'-0"

CONTRACTOR TO VERIFY WITH CIVIL
ENGINEER FINAL BASEMENT / GARAGE
SLAB ELEVATIONS. ADJUST ELEVATIONS
AS REQUIRED.



2 LEFT ELEVATION
1/4" = 1'-0"

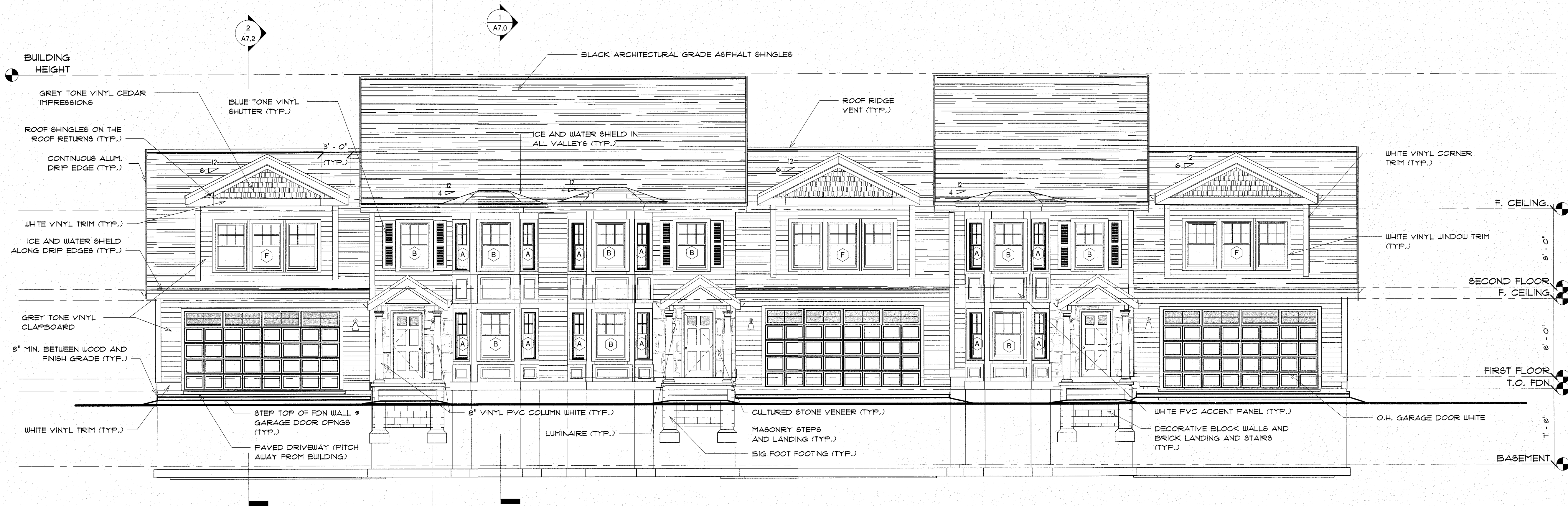
PROGSET-DUPLEX B

BUILDING ENVELOPE ASPECTS TO COMPLY WITH
CURRENT ENERGY CODE

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ALL HVAC, ELECTRICAL, FIRE ALARM, AUTOMATIC FIRE SPRINKLERS, AND PLUMBING TO BE PERFORMED ON A DESIGN BUILD BASIS WITH REGISTERED ENGINEERS. ENGINEERS SHALL PROVIDE NARRATIVES, AFFIDAVITS, AND STAMPED DRAWINGS. FIRE SPRINKLER AND FIRE ALARM PLANS SHALL BE APPROVED BY THE SALEM FIRE DEPARTMENT.

CONTRACTOR TO FIELD VERIFY ALL DETAILS AND DIMENSIONS BEFORE PROCEEDING WITH THE WORK. NOTES ON THIS CONSTRUCTION DOCUMENT ARE TYPICAL UNLESS OTHERWISE NOTED. IF THE CONTRACTOR SEES AN AREA OF THE BUILDING THAT IS INCOMPLETE AND IS NOT NOTED ON THIS DRAWING SET, HE MUST ALSO INCLUDE THIS AREA IN THIS WORK, MATCHING SIMILAR FINISH AREAS OF THIS BUILDING.



CONTRACTOR TO VERIFY WITH CIVIL
ENGINEER FINAL BASEMENT / GARAGE
SLAB ELEVATIONS. ADJUST ELEVATIONS
AS REQUIRED.

1 FRONT ELEVATION
3/16" = 1'-0"

TRIPLEX - PROGDWG

BUILDING ENVELOPE ASPECTS TO COMPLY WITH
CURRENT ENERGY CODE

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DESIGNED BY:
GAVIN & SULLIVAN ARCHITECTS, INC.
128 WARREN STREET LOWELL, MA.

PROPOSED MULTI-FAMILY FOR:
BLACK BROOK REALTY
NORTH TUSCAN VILLAGE
SALEM, NH

ELEVATION

A1.0

PROJECT: 19-126
DATE: 12-03-2019
SCALE AS NOTED
DRAWN BY: MW

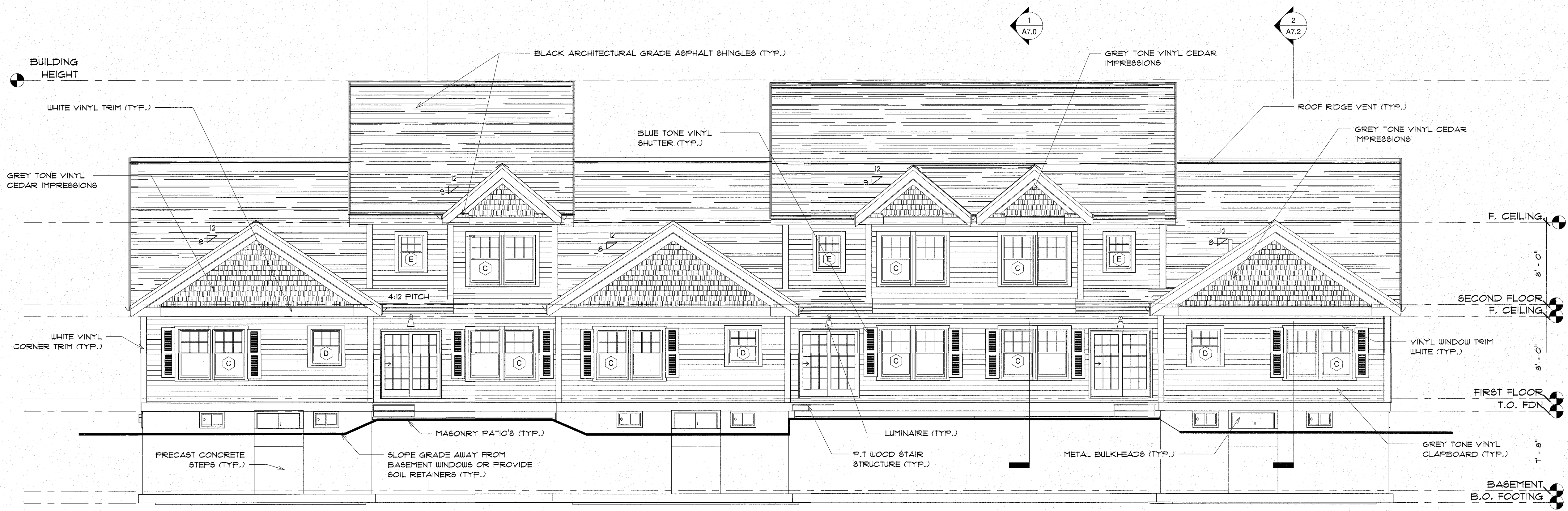
DESIGNED BY:
GAVIN & SULLIVAN ARCHITECTS, INC.
128 WARREN STREET LOWELL, MA.

PROPOSED MULTI - FAMILY FOR:
BLACK BROOK REALTY
NORTH TUSCAN VILLAGE
SALEM, NH

ELEVATION

A1.1

PROJECT: 19-126
DATE: 12-09-2019
SCALE AS NOTED
DRAWN BY: MU



CONTRACTOR TO VERIFY WITH CIVIL
ENGINEER FINAL BASEMENT / GARAGE
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AS REQUIRED.

1 REAR ELEVATION
3/16" = 1'-0"

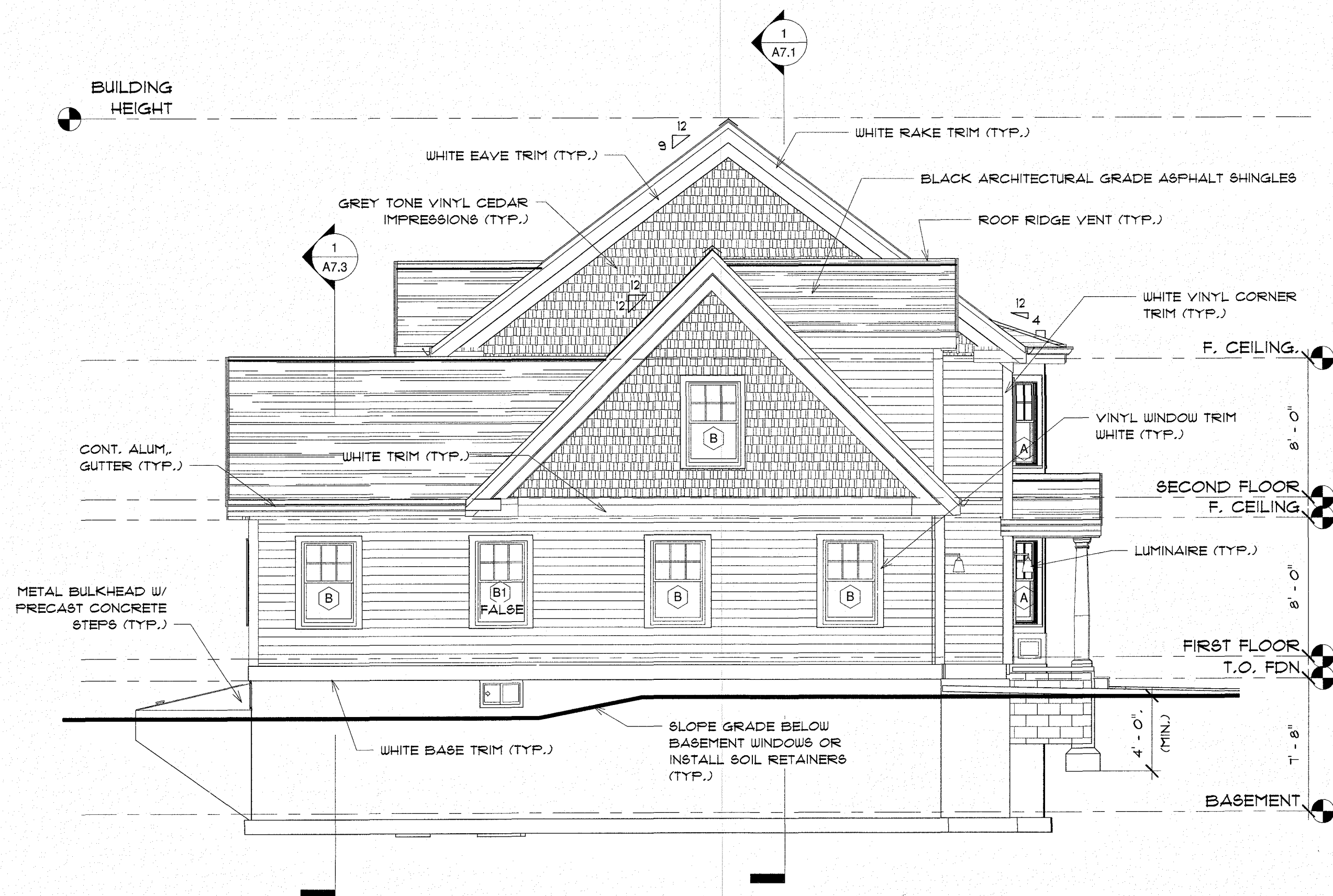
TRIPLEX - PROGDWUG

BUILDING ENVELOPE ASPECTS TO COMPLY WITH
CURRENT ENERGY CODE

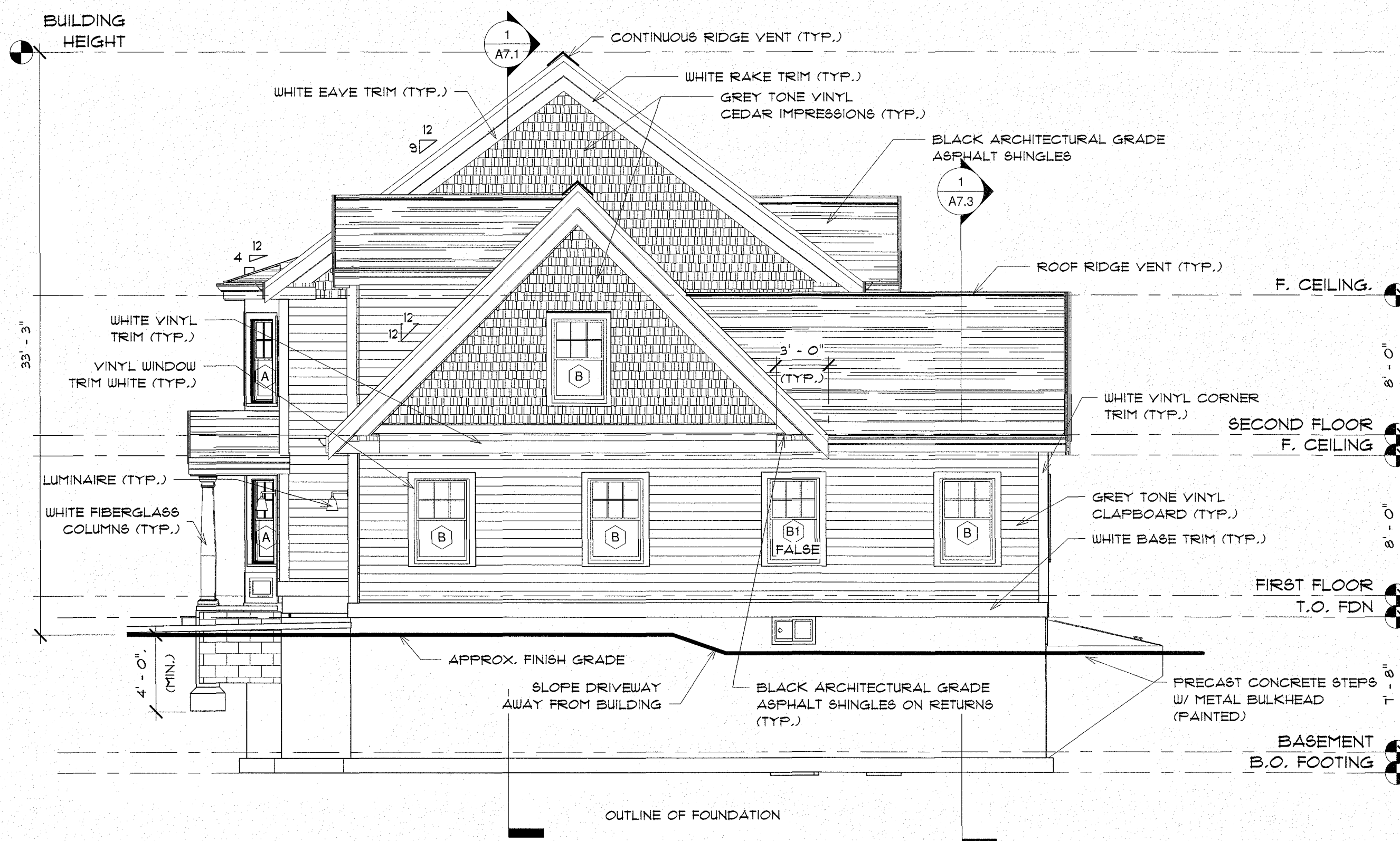
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2 LEFT ELEVATION
3/16" = 1'-0"



1 RIGHT ELEVATION
3/16" = 1'-0"

CONTRACTOR TO VERIFY WITH CIVIL
ENGINEER FINAL BASEMENT / GARAGE
SLAB ELEVATIONS, ADJUST ELEVATIONS
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TRIPLEX - PROGDWUG

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PROPOSED MULTI - FAMILY FOR:
BLACK BROOK REALTY
NORTH TUSCAN VILLAGE
SALEM, NH

ELEVATIONS

A1.2

PROJECT: 19-126 SCALE AS NOTED
DATE: 12-09-2019 DRAWN BY: MJU