McGOEY, HAUSER and EDSALL
CONSULTING ENGINEERS D.P.C.

MARK J. EDSALL, P.E., P.P. (NY, NJ & PA)
MICHAEL W. WEEKS, P.E. (NY, NJ & PA)
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Principal Emeritus:
RICHARD D. McGOEY, P.E. (NY & PA)
WILLIAM J. HAUSER, P.E. (NY, NJ & PA)

TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS

PROJECT:	**MAVIS TIRE/MIXED USE (RHINEBECK REALTY LLC)**
PROJECT NO.:	**15-03**
PROJECT LOCATION:	**SECTION 60, BLOCK 3, LOT 40.2**
REVIEW DATE:	**29 APRIL 2016**
MEETING DATE:	**5 MAY 2016**
REPRESENTATIVE:	**BOHLER ENGINEERING**

1. Confirmation of a receipt of a City of Newburgh Flow of Acceptance Letter should be received. (unable to locate in MH&E file)

2. Building footprints have been slightly modified. Based on the location of the buildings at the front and side yard setbacks it is recommended that a note be added to the plans that a surveyed plot plan be provided to the Building Inspector's Office prior to issuance of a building permit in order to avoid any zoning issues with the building construction of the office and service building.

3. The Planning Board attention is called to the 2 Phased plan which is identified.

4. The access drive has been revised per NYSDOT comments. Information pertaining to the NYSDOT approval of the access drive should be submitted for the Boards use.

5. Plans continue to contain thrust box for the water lines. Town of Newburgh requires restraint joint pipes. Restraint joint pipe schedule should be provided with thrust box removed from the plan sheets and details.

6. Water lines have been revised to utilize existing service stub to property. Adequate flow for fire suppression system must be documented to code enforcement based on 6 inch mains identified. Health Department approval of the water service with hydrants is required. Modifications to the water lines have been incorporated into the plans utilizing existing 6 inch stub to property line. Adequate water supply for fire suppression systems must be documented to code enforcement prior to Building permit. Orange County Health Department approval of the water system is required due to the presence of hydrants. Backflow prevention devices will be required.

7. Stormwater facilities maintenance agreement will be required.

8. Bonding and inspection fees for landscaping and Stormwater Management will be required.

9. Sanitary sewer pump station design and details must be submitted.

10. It is recommended that the Applicant enter into agreements with all users on the site for the operation and maintenance of the Sanitary Sewer Pump Station. Details of the force main discharge to the Towns Sanitary Collection System should be identified.

11. Proposed electric system to the restaurant appears to cross over a grease trap. This should be revised.

12. Details of forced main clean out should be provided. It is recommended a forced main clean out be provided as currently as none is shown.

13. Sanitary sewer manhole detail should be added to the plans.

14. 20 foot high light poles are identified on the site plan. These appear appropriate based on the scale of the project.

15. Planning Board should discuss landscaping at the property frontage. Previous discussions involved berms and/or stone walls which appear to have been removed from the plans.

Respectfully submitted,

McGoey, Hauser & Edsall
Consulting Engineers, D.P.C.

_____
Patrick J. Hines
Principal

BOHLER™
ENGINEERING

17 Computer Drive West
Albany, NY 12205
PHONE 518.438.9900
FAX 518.438.0900

Via Overnight Delivery

April 15, 2016

Town of Newburgh Planning Board
308 Gardnertown Road
Newburgh, New York 12550

APR 1 2016

Attn: Mr. John P. Ewasutyn, Planning Board Chairman

Re: Proposed Redevelopment Project
1413 Union Ave
Newburgh, New York 12550
Newburgh Planning Board File No. 2015-03

Dear Chairman Ewasutyn and Members of the Planning Board:

On behalf of our client, Rhinebeck Realty, LLC, we are pleased to submit an update to the Town of Newburgh Planning Board for the above referenced project. As part of this submission, enclosed please find the following items for the Planning Board's consideration at their next available meeting:

A. Thirteen (13) copies of the Architectural Review Forms, signed and dated April 15, 2016, consisting of six (6) sheets total (two each for the Tire Center, Office and Restaurant buildings).

B. Thirteen (13) 24"x36" copies of a set of plans entitled "Site Development Plans", consisting of fifteen (15) sheets, dated January 27, 2015, revised through April 14, 2016, prepared by Bohler Engineering.

C. Thirteen (13) 24"x36" copies of the survey entitled "1413 Union Avenue, ALTA/ACSM Land Title Survey of the Lands to be Conveyed to Mavis Tire Supply, LLC", dated June 20, 2014, revised through June 12, 2015 (included in the site plan set).

D. Thirteen (13) 24"x36" black and white copies of a set of plans entitled "Preliminary Exterior Elevations", consisting of three (3) sheets, Drawing Nos. A-200, A-201 and A-202, each revised through April 13, 2016, prepared by DCAK MSA Architecture and Engineering.

E. Thirteen (13) 11"x17" color copies of a set of plans entitled "Preliminary Exterior Elevations", consisting of three (3) sheets, Drawing Nos. A-200, A-201 and A-202, each revised through April 13, 2016, prepared by DCAK MSA Architecture and Engineering.

The enclosed materials have been updated to primarily reflect the following:

- The access configuration to Union Avenue has been revised to eliminate the two egress lanes based on comments from NYSDOT.

BOHLER™
ENGINEERING

Town of Newburgh Planning Board
308 Gardnertown Road
Newburgh, New York 12550

- The Tire Center building entrance has been relocated to the east side of the building to face Union Avenue.
- The restaurant building footprint has been slightly adjusted to provide a covered patio and additional egress doors around the facility.
- The office building footprint has been slightly adjusted from 3,200sf to 3,500sf to accommodate tenant needs; associated parking changes were also incorporated to accommodate the building changes.
- The pedestrian access to the parcel to the north has been revised to move it away from the dumpster.
- Updated building elevations for each of the three (3) buildings have been provided for consideration by the Architectural Review Board.
- The proposed water service size and connection has been adjusted to reflect discussions with the Town of Newburgh Department of Public Works.

We look forward to appearing at the next available Planning Board meeting to review the project with the Planning Board and the Architectural Review Board. Should you have any questions or any additional needs please do not hesitate to contact us at (518) 438-9900.

Sincerely,

BOHLER ENGINEERING MA, LLC

Robert W. Osterhoudt

Robert W. Osterhoudt, P.E.

Enclosures
cc: Michael Manes (via email w/ enclosures)
Kenneth W. Wersted, Creighton Manning (via overnight delivery w/ 1 copy of enclosures)
Patrick J. Hines, McGoey, Hauser and Edsall (via overnight delivery w/ 1 copy of enclosures)
Michael H. Donnelly, Dickover, Donnelly & Donovan (via overnight delivery w/ 1 copy of enclosures)

MAVIS

ARCHITECTURAL REVIEW FORM

TOWN OF NEWBURGH PLANNING BOARD

APR 1 2016

DATE: 4/15/16

NAME OF PROJECT: 1413 UNION AVE. - MAVIS DISCOUNT TIRE

The applicant is to submit in writing the following items prior to signing of the site plans.

EXTERIOR FINISH (skin of the building):

Type (steel, wood, block, split block, etc.)

CLAPBOARD - NAVAJO WHITE & CMU - NAVAJO WHITE, STONE VENEER BASE, METAL FASCIA.

COLOR OF THE EXTERIOR OF BUILDING:

NAVAJO WHITE W/ TEAL METAL FASCIA

ACCENT TRIM:

Location: CORNICE, ACCENT BAND

Color: ALABASTER WHITE

Type (material): EIFS

PARAPET (all roof top mechanicals are to be screened on all four sides):

YES, EXCEPT REAR. WILL PROVIDE SEPARATE MECHANICAL SCREEN IF VISIBLE.

ROOF:

Type (gabled, flat, etc.): FLAT

Material (shingles, metal, tar & sand, etc.): TPO

Color: WHITE

WINDOWS/SHUTTERS:

Color (also trim if different): CLEAR ANODIZED

Type: ALUMINUM STOREFRONT

DOORS:

Color: CLAR ANODIZED

Type (if different than standard door entrée): GLASS & ALUM.

SIGN:

Color: WHITE ENCLOSURE, TEAL, YELLOW & BLACK

Material: POLYCARBONATE

Square footage of signage of site: 210 SF FOR MAVIS BLDG.

MAVIS MONUMENT SIGN IS: 14.2 SF

MICHAEL MANESS, DIR. RE DEV. MAVIS

Please print name and title (owner, agent, builder, superintendent of job, etc.)

Signature

PROF. OFF.

ARCHITECTURAL REVIEW FORM

TOWN OF NEWBURGH PLANNING BOARD

DATE: 4/15/16

NAME OF PROJECT: 1413 UNION AVE. - PROFESSIONAL OFF.

The applicant is to submit in writing the following items prior to signing of the site plans.

EXTERIOR FINISH (skin of the building):

Type (steel, wood, block, split block, etc.)

CLAPBOARD, EIFS, STONE VENEER BASE, METAL FASCIA

COLOR OF THE EXTERIOR OF BUILDING:

NAVAJO WHITE (CLAPBOARD); CLOVER & VAN DYKE (EIFS); ELECTRIC BLUE (FASCIA);

ACCENT TRIM:

Location: CORNICE & ACCENT BAND

Color: ALABASTER WHITE

Type (material): EIFS

PARAPET (all roof top mechanicals are to be screened on all four sides):

YES

ROOF:

Type (gabled, flat, etc.): FLAT

Material (shingles, metal, tar & sand, etc.): TPO

Color: WHITE

PROF. OFF.

WINDOWS/SHUTTERS:

Color (also trim if different): CLEAR ANODIZED

Type: ALUM. STOREFRONT

DOORS:

Color: ALUM. & GLASS - CLEAR ANODIZED

Type (if different than standard door entrée): _____

SIGN:

Color: BLUE & WHITE

Material: POLYCARBONATE FACE, METAL CABINET

Square footage of signage of site: 231.17 PROF'L OFF. BLDG. SIGNS.

MONUMENT SIGN FOR THIS TENANT IS: 14.2 SF

MICHAEL MANTAS, DIR. RE. DEV. MAUS

Please print name and title (owner, agent, builder, superintendent of job, etc.)

Signature

BWW

ARCHITECTURAL REVIEW FORM

TOWN OF NEWBURGH PLANNING BOARD

DATE: 4/15/16

NAME OF PROJECT: 1413 UNION AVE. - BUFFALO WILD WINGS

The applicant is to submit in writing the following items prior to signing of the site plans.

EXTERIOR FINISH (skin of the building):

Type (steel, wood, block, split block, etc.)

BRICK VENEER, STONE BASE, EIFS

COLOR OF THE EXTERIOR OF BUILDING:

RED BRICK, YELLOW, BLACK, BEIGE

ACCENT TRIM:

Location: CORNICE

Color: ALABASTER WHITE

Type (material): EIFS

PARAPET (all roof top mechanicals are to be screened on all four sides):

YES

ROOF:

Type (gabled, flat, etc.): FLAT

Material (shingles, metal, tar & sand, etc.): EPDM

Color: WHITE

BWW

WINDOWS/SHUTTERS:

Color (also trim if different): CLEAR ANODIZED

Type: ALUMINUM

DOORS:

Color: CLEAR ANODIZED

Type (if different than standard door entrée): ALUM. & GLASS

SIGN:

Color: YELLOW & BLACK

Material: METAL & POLYCARBONATE FACES

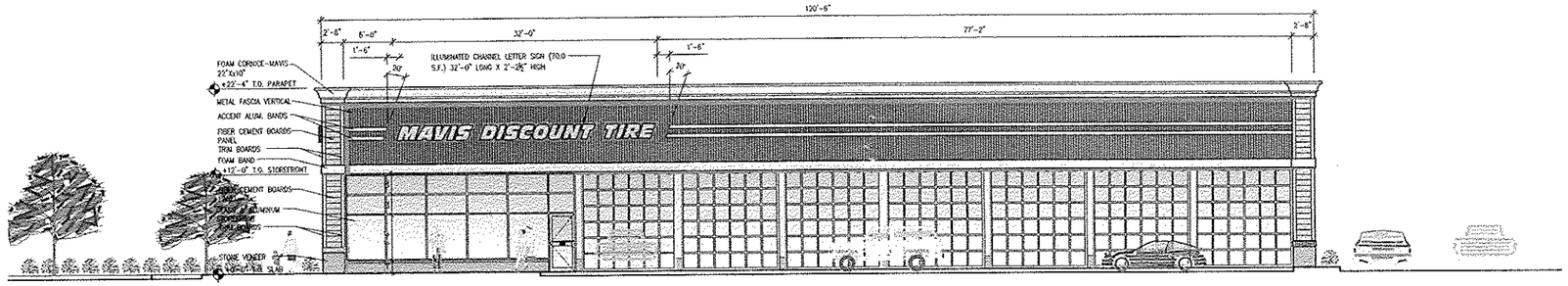
Square footage of signage of site: 231.67 BUFFALO BLDG. SIGNS

MONUMENT SIGN PANEL FOR BUFFALO IS 20.4 SF.

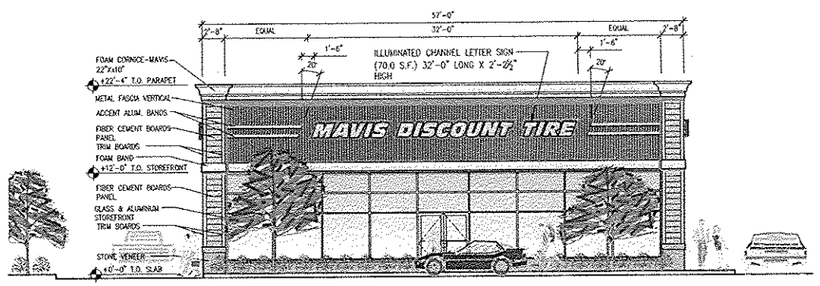
MICHAEL MANES, DIR. R.E. DEV, MAUS

Please print name and title (owner, agent, builder, superintendent of job, etc.)

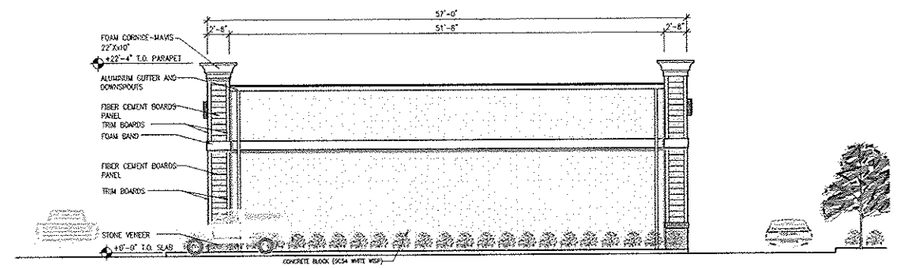
Signature



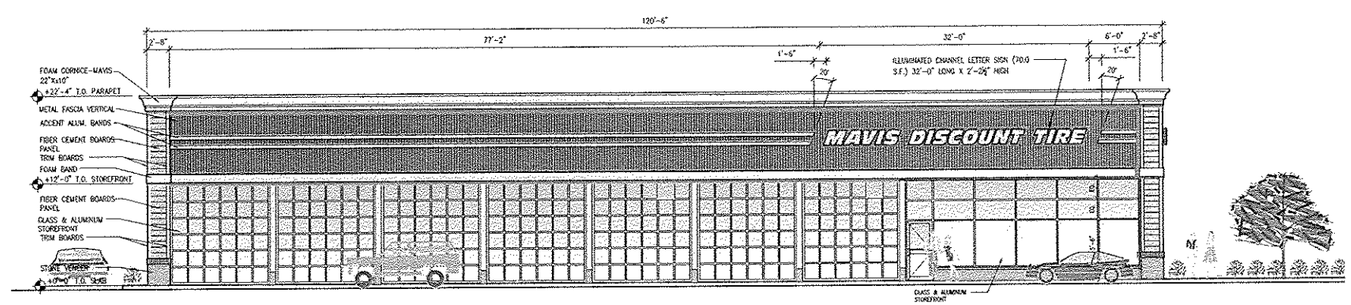
1 A-200 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



2 A-200 EAST ELEVATION
SCALE: 1/8" = 1'-0"



3 A-200 WEST ELEVATION
SCALE: 1/8" = 1'-0"



4 A-200 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

MATERIAL COLOR LEGEND

- CLEAR ANODIZED (STOREFRONT)
- CORNICE AND BAND – COLOR (ALABASTER WHITE SW7008)
- TRIM BOARDS COLOR (JAMES HARDIE ARTIC WHITE)
- HORIZONTAL CEMENT BOARD SIDING COLOR – (JAMES HARDI NAVAJO BEIGE)
- CONCRETE BLOCK COLOR – (NAVAJO WHITE OC95)
- NATURAL STONE VENEER (KKmason Stone – NOBLE HILL ASHLER)
- ATAS VERTICAL PANELS (TEAL)

DCAK - MSA
ARCHITECTURE AND ENGINEERING

53 HUDSON AVENUE
NYACK, NEW YORK 10960

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Tel 845-353-1300 Fax 845-353-1614

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Project Name:
Mavis Discount Tires
Newburgh Store

Project Address:
1413 Union Avenue
Newburgh, New York

Consultants

APR 18 2016

Seal:

REVISIONS

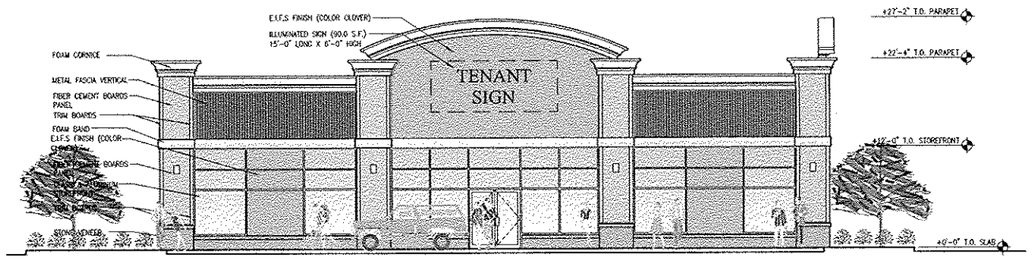
No:	Date:	Description:	Responsible Party:
-	05.26.15	Issued to Client	TW/JK
	04.13.16	Mod per Client	TW/JK

Drawing:
Preliminary Exterior Elevations

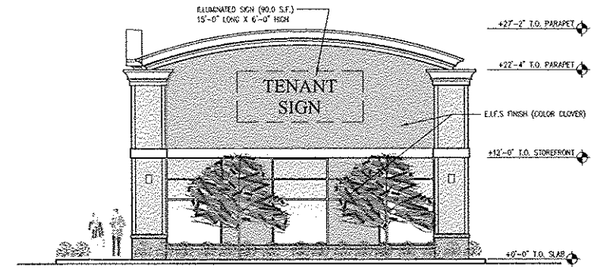
Project Number:	Responsible Party:	Reviewed By:
15030	TW	JK

Scale:
SCALE: AS NOTED

Drawing Number:
A-200



1 A-201 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



2 A-201 EAST ELEVATION
SCALE: 1/8" = 1'-0" REFER TO 1/A-201 FOR NOTS AND DIMS. U.O.N.

MATERIAL COLOR LEGEND

CLEAR ANODIZED (STOREFRONT)

CORNICE AND BAND – COLOR (ALABASTER WHITE SW7008)

TRIM BOARDS COLOR (JAMES HARDIE ARTIC WHITE)

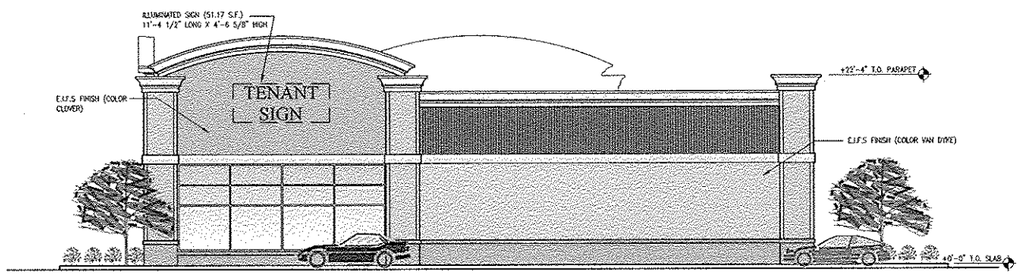
E.I.F.S FINISH – COLOR DRYVIT COLOR "CLOVER"

HORIZONTAL CEMENT BOARD SIDING COLOR – (HARDI PLANK – NAVAJO BEIGE)

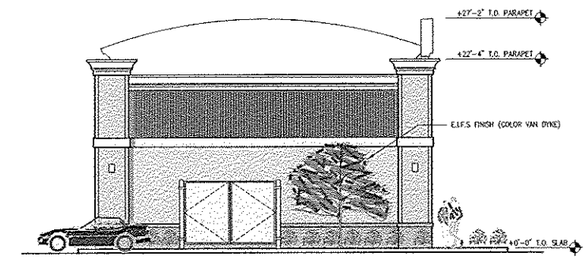
CONCRETE BLOCK TO MATCH DRYVIT COLOR "NAVAJO WHITE OC95"

NATURAL STONE VENEER (KKmason Stone – NOBLE HILL ASHLER)

ATAS VERTICAL PANELS (ELECTRIC BLUE)



3 A-201 NORTH ELEVATION
SCALE: 1/8" = 1'-0" REFER TO 1/A-201 FOR NOTS AND DIMS. U.O.N.



4 A-201 WEST ELEVATION
SCALE: 1/8" = 1'-0" REFER TO 1/A-201 FOR NOTS AND DIMS. U.O.N.

MAVIS NORTH

RESTAURANT EAST

RETAIL SOUTH

5 A-201 PANORAMIC VIEW FROM INSIDE PLAZA
SCALE: 3/32" = 1'-0"

DCAK · MSA
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53 HUDSON AVENUE
NYACK, NEW YORK 10960
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Project Name:
Mavis Discount Tires
Newburgh Store

Project Address:
1413 Union Avenue
Newburgh, New York

Consultants

Seal:

REVISIONS

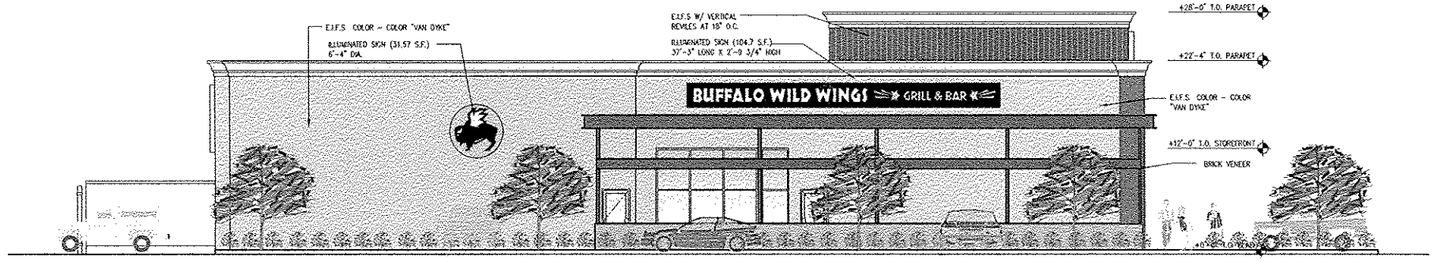
No:	Date:	Description:	Responsible Party:
-	05.26.15	Issued to Client	TW/JK
1	07.22.15	Issued to Client	TW/JK
	04.13.16	Mod per Client	TW/JK

Drawing:
Preliminary Exterior Elevations

Project Number:	Responsible Party:	Reviewed By:
15030	TW	JK

Scale:
SCALE: AS NOTED

Drawing Number:
A-201

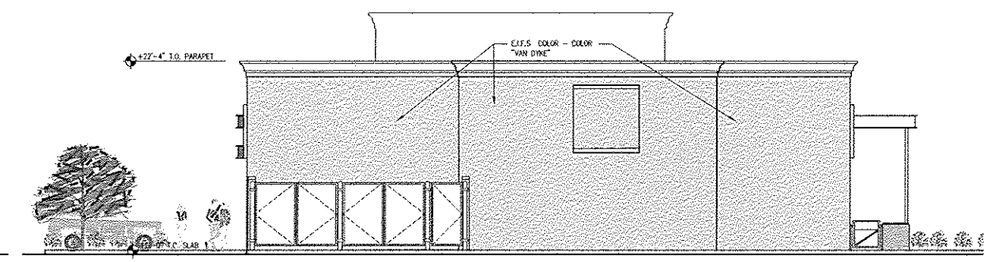


1 A-202 SOUTH ELEVATION

SCALE: 1/8" = 1'-0" REFER TO 2/A-202 FOR NOTS AND DIMS. U.O.N.

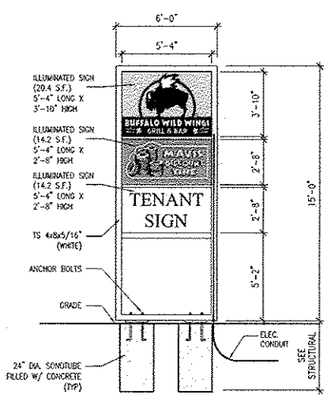
2 A-202 EAST ELEVATION

SCALE: 1/8" = 1'-0"



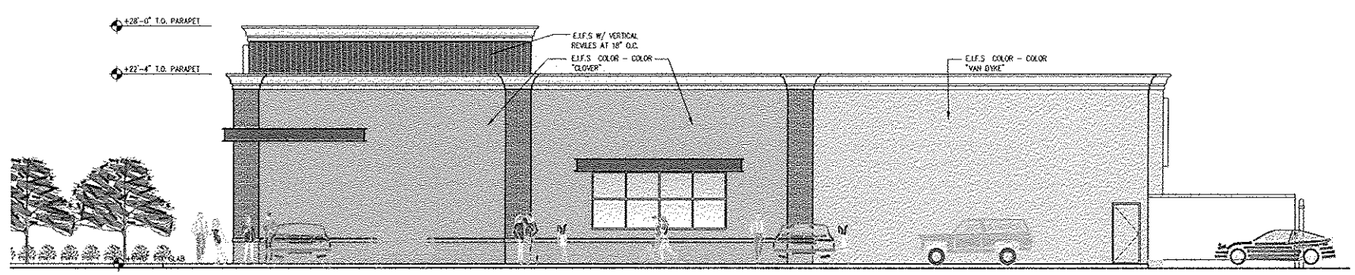
3 A-202 WEST ELEVATION

SCALE: 1/8" = 1'-0" REFER TO 2/A-202 FOR NOTS AND DIMS. U.O.N.



12 A-800 MONUMENT SIGN DETAIL

SCALE: N.T.S.



4 A-202 NORTH ELEVATION

SCALE: 1/8" = 1'-0" REFER TO 2/A-202 FOR NOTS AND DIMS. U.O.N.

MATERIAL COLOR LEGEND

- CLEAR ANODIZED (STOREFRONT)
- TRIM, CORNICE AND E.I.F.S. BAND TO MATCH DRYVIT COLOR "ALABASTER WHITE SW7008"
- E.I.F.S FINISH – COLOR DRYVIT COLOR "VAN DYKE"
- E.I.F.S FINISH – COLOR DRYVIT COLOR "CLOVER"
- E.I.F.S W/ VERTICAL REVILES AT 18" O.C. COLOR –(GRAPHITE BM 1602)
- E.I.F. FINISH (CITRUS SW-6906)
- NATURAL STONE VENEER (KKmason Stone – NOBLE HILL ASHLER)
- NICHIHA –ARCHITECTURAL WALL PANELS – BRICK SERIES – VINTAGE BRICK COLOR–(ALEXANDRIA BUFF)
- STEEL BEAMS AND COLUMNS (GRAPHITE BM 1602)

DCAK · MSA
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REVISIONS

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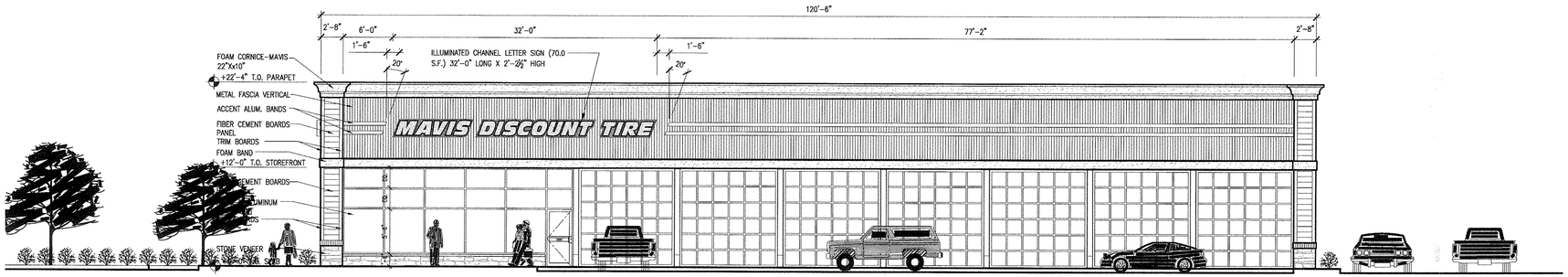
	04.13.16	Mod per Client	TW/JK

Drawing:
Preliminary Exterior Elevations

Project Number:	Responsible Party:	Reviewed By:
15030	TW	JK

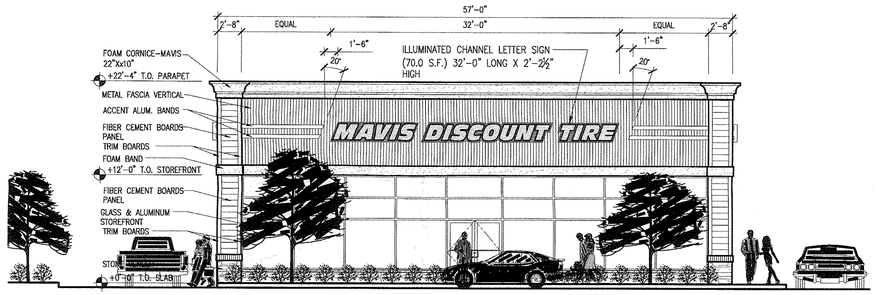
Scale:
SCALE: AS NOTED

Drawing Number:
A-202



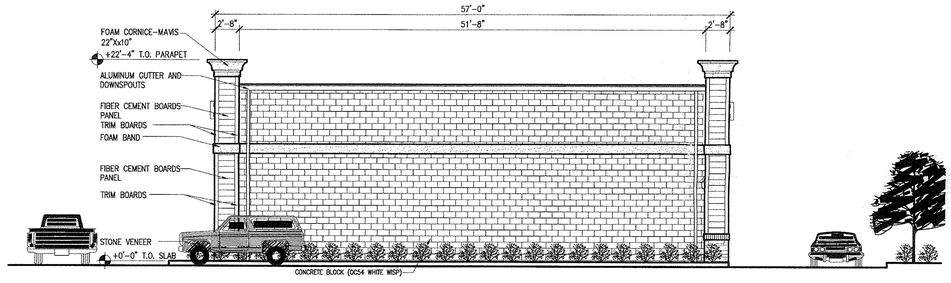
1 A-200 NORTH ELEVATION

SCALE: 1/8" = 1'-0"



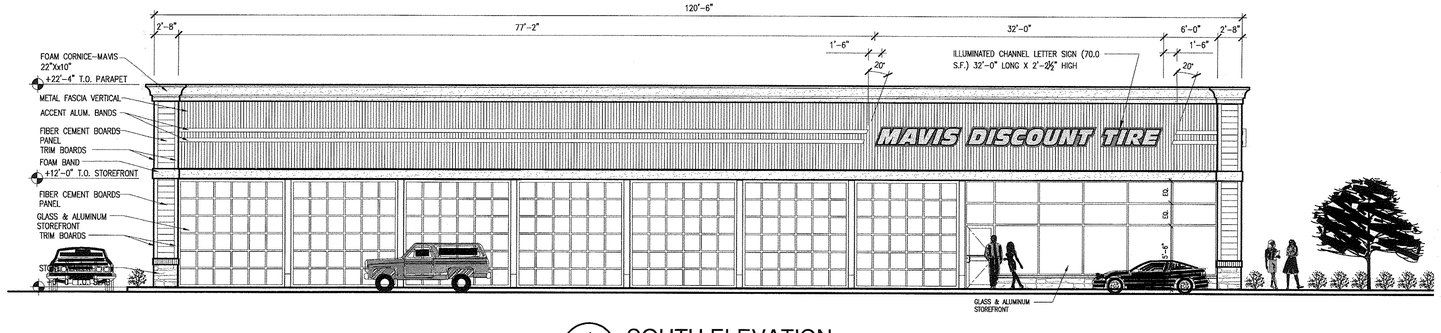
2 A-200 EAST ELEVATION

SCALE: 1/8" = 1'-0"



3 A-200 WEST ELEVATION

SCALE: 1/8" = 1'-0"



4 A-200 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

MATERIAL COLOR LEGEND

- CLEAR ANODIZED (STOREFRONT)
- CORNICE AND BAND – COLOR (ALABASTER WHITE SW7008)
- TRIM BOARDS COLOR (JAMES HARDIE ARTIC WHITE)
- HORIZONTAL CEMENT BOARD SIDING COLOR – (JAMES HARDI NAVAJO BEIGE)
- CONCRETE BLOCK COLOR – (NAVAJO WHITE OC95)
- NATURAL STONE VENEER (KKmason Stone – NOBLE HILL ASHLER)
- ATAS VERTICAL PANELS (TEAL)

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ARCHITECTURE AND ENGINEERING

53 HUDSON AVENUE
NYACK, NEW YORK 10960
www.DCAK-MSA.com
Email: info@DCAK-MSA.com

Tel 845-353-1300 Fax 845-353-1614

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Project Name:
Mavis Discount Tires
Newburgh Store

Project Address:
1413 Union Avenue
Newburgh, New York

Consultants

Seal:

REVISIONS

No:	Date:	Description:	Responsible Party:
-	05.26.15	Issued to Client	TW/JK
	04.13.16	Mod per Client	TW/JK

Drawing:
Preliminary Exterior Elevations

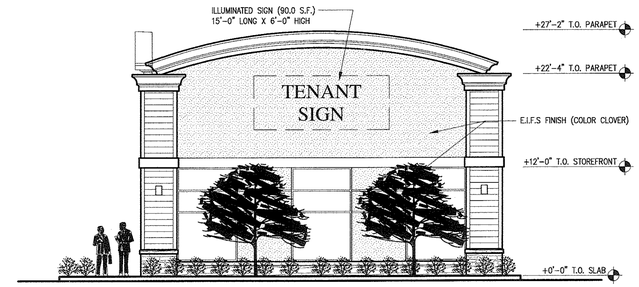
Project Number:	Responsible Party:	Reviewed By:
15030	TW	JK

Scale:
SCALE: AS NOTED

Drawing Number:
A-200

1 A-201 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

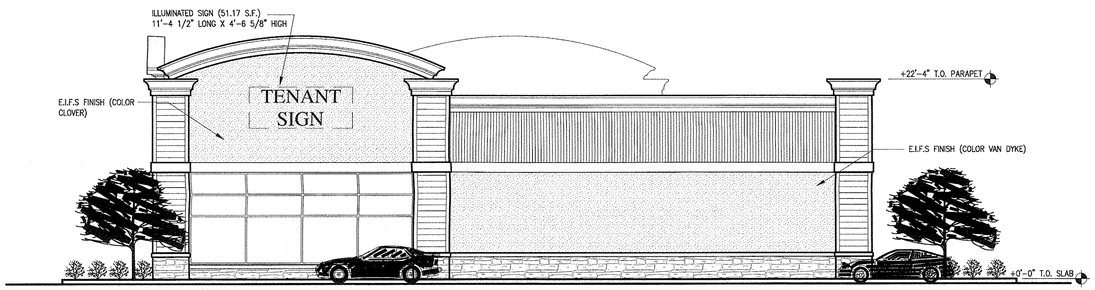


2 A-201 EAST ELEVATION

SCALE: 1/8" = 1'-0" REFER TO 1/A-201 FOR NOTS AND DIMS. U.O.N.

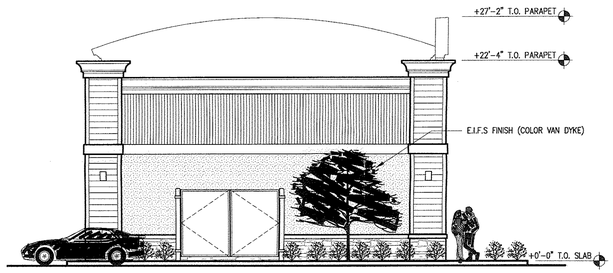
MATERIAL COLOR LEGEND

- CLEAR ANODIZED (STOREFRONT)
- CORNICE AND BAND – COLOR (ALABASTER WHITE SW7008)
- TRIM BOARDS COLOR (JAMES HARDIE ARTIC WHITE)
- E.I.F.S FINISH – COLOR DRYVIT COLOR "CLOVER"
- HORIZONTAL CEMENT BOARD SIDING COLOR – (HARDI PLANK – NAVAJO BEIGE)
- CONCRETE BLOCK TO MATCH DRYVIT COLOR "NAVAJO WHITE OC95"
- NATURAL STONE VENEER (KKmason Stone – NOBLE HILL ASHLER)
- ATAS VERTICAL PANELS (ELECTRIC BLUE)



3 A-201 NORTH ELEVATION

SCALE: 1/8" = 1'-0" REFER TO 1/A-201 FOR NOTS AND DIMS. U.O.N.



4 A-201 WEST ELEVATION

SCALE: 1/8" = 1'-0" REFER TO 1/A-201 FOR NOTS AND DIMS. U.O.N.

MAVIS NORTH

RESTAURANT EAST

RETAIL SOUTH

5 A-201 PANORAMIC VIEW FROM INSIDE PLAZA

SCALE: 3/32" = 1'-0"

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Preliminary Exterior Elevations

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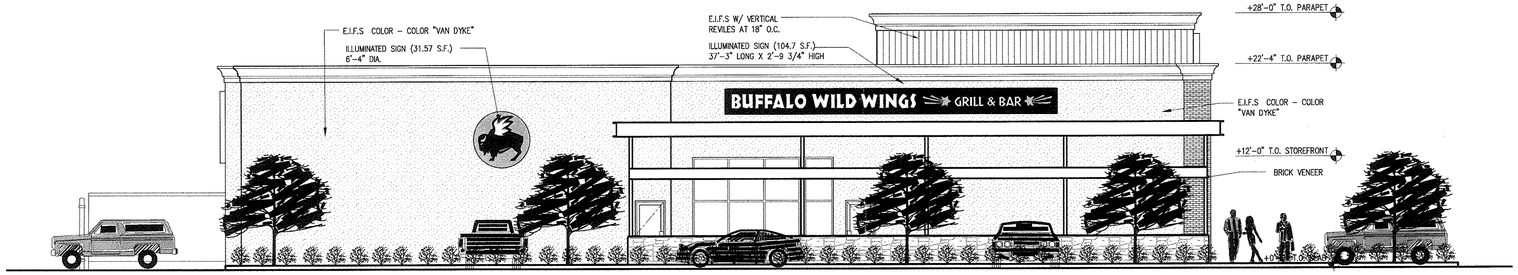
SCALE: AS NOTED

Drawing Number:
A-201

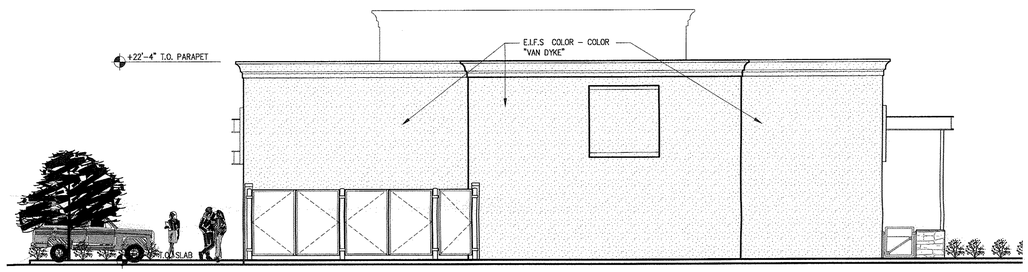


1 A-202 SOUTH ELEVATION

SCALE: 1/8" = 1'-0" REFER TO 2/A-202 FOR NOTS AND DIMS. U.O.N.

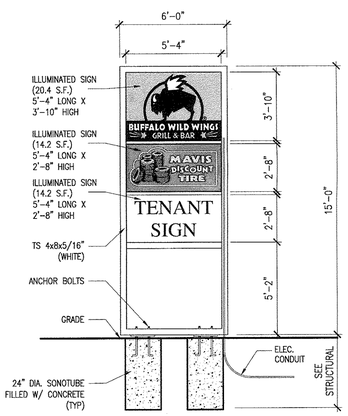
2 A-202 EAST ELEVATION

SCALE: 1/8" = 1'-0"



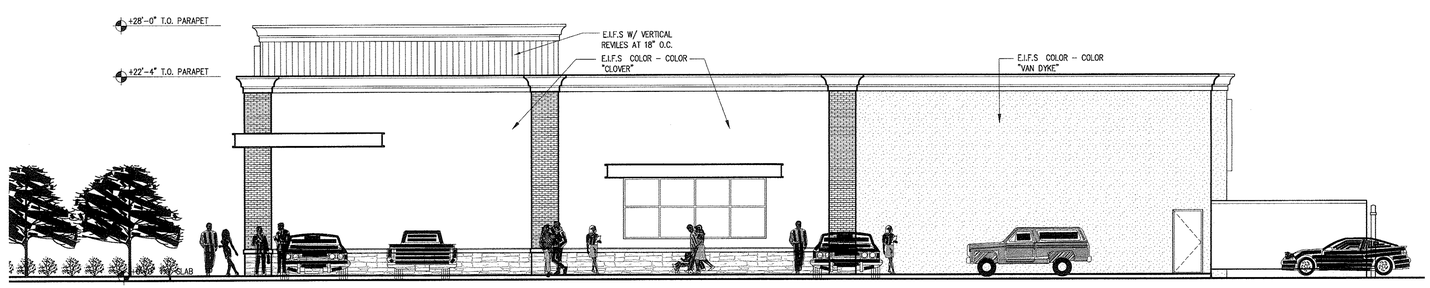
3 A-202 WEST ELEVATION

SCALE: 1/8" = 1'-0" REFER TO 2/A-202 FOR NOTS AND DIMS. U.O.N.



12 A-800 MONUMENT SIGN DETAIL

SCALE: N.T.S.



4 A-202 NORTH ELEVATION

SCALE: 1/8" = 1'-0" REFER TO 2/A-202 FOR NOTS AND DIMS. U.O.N.

MATERIAL COLOR LEGEND

- CLEAR ANODIZED (STOREFRONT)
- TRIM, CORNICE AND E.I.F.S. BAND TO MATCH DRYVIT COLOR "ALABASTER WHITE SW7008"
- E.I.F.S FINISH – COLOR DRYVIT COLOR "VAN DYKE"
- E.I.F.S FINISH – COLOR DRYVIT COLOR "CLOVER"
- E.I.F.S W/ VERTICAL REVILES AT 18" O.C. COLOR –(GRAPHITE BM 1602)
- E.I.F. FINISH (CITRUS SW–6906)
- NATURAL STONE VENEER (KKmason Stone – NOBLE HILL ASHLER)
- NICHIHA –ARCHITECTURAL WALL PANELS – BRICK SERIES – VINTAGE BRICK COLOR–(ALEXANDRIA BUFF)
- STEEL BEAMS AND COLUMNS (GRAPHITE BM 1602)

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	04.13.16	Mod per Client	TW/JK

Drawing:
Preliminary Exterior Elevations

Project Number:	Responsible Party:	Reviewed By:
15030	TW	JK

Scale:
SCALE: AS NOTED

Drawing Number:
A-202

SITE DEVELOPMENT PLANS

FOR:

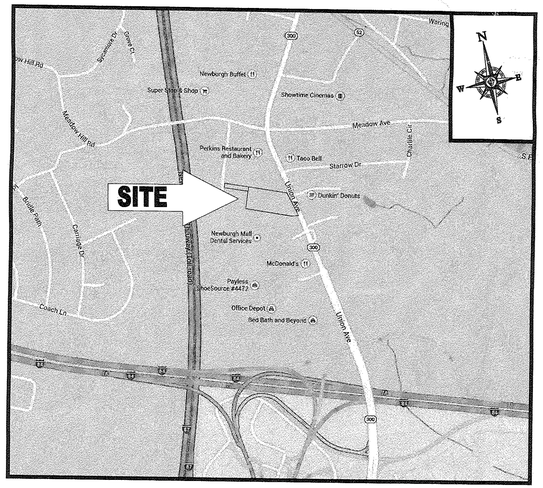
RHINEBECK REALTY, LLC

PROPOSED

REDEVELOPMENT PROJECT

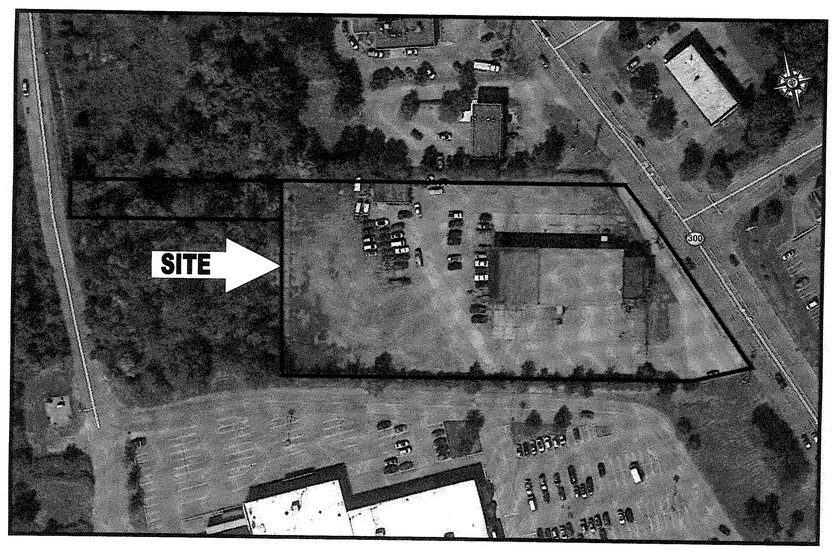
LOCATION OF SITE:

1413 UNION AVE(NYS ROUTE 300),
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK
MAP 60, BLOCK 3, LOT 40.2



LOCATION MAP

N.T.S.



AREA PLAN

N.T.S.

SHEET TITLE	SHEET NUMBER
COVER SHEET	1 OF 15
GENERAL NOTES SHEET	2 OF 15
DEMOLITION PLAN	3 OF 15
SITE PLAN	4 OF 15
GRADING & DRAINAGE PLAN	5 OF 15
CONSTRUCTION SEQUENCING GRADING & DRAINAGE PLAN	6 OF 15
UTILITY PLAN	7 OF 15
SOIL EROSION & SEDIMENT CONTROL PLAN	8 OF 15
SOIL EROSION CONTROL NOTES & DETAILS SHEET	9 OF 15
LANDSCAPE PLAN	10 OF 15
LANDSCAPE NOTES & DETAILS SHEET	11 OF 15
LIGHTING PLAN	12 OF 15
CONSTRUCTION DETAIL SHEET	13 OF 15
CONSTRUCTION DETAIL SHEET	14 OF 15
CONSTRUCTION DETAIL SHEET	15 OF 15
ALTA / ACSM SURVEY (BY OTHERS)	1 OF 1

SHEET INDEX

OWNER INFO:

JR & Ray LLC
5020 RTE 9W
NEWBURGH, NY 12550

APPLICANT INFO:

RHINEBECK REALTY, LLC
358 SAW MILL ROAD
MILLWOOD, NY 10546

PREPARED BY

BOHLER ENGINEERING

BOHLER ENGINEERING

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CORPORATE OFFICES:
♦ WARREN, NJ
♦ BOSTON, MA

♦ SOUTHBOROUGH, MA
♦ TOWSON, MD
♦ ALBANY, NY
♦ HAUPPAUGE, NY
♦ TAMPA, FL
♦ PHILADELPHIA, PA

♦ CENTREVILLE (VALLEY) PA
♦ CHARLOTTE, NC
♦ CHALLENGER, FL
♦ RALEIGH, NC
♦ HUNTINGTON, WV
♦ WARRENTON, VA
♦ WASHINGTON, D.C.

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REVISIONS

REV	DATE	COMMENT	BY
1	03/09/15	FRONT YARD SETBACK	TCF
2	05/28/15	PER TOWN COMMENTS	TCF
3	07/9/15	PHASING PLANS	TCF
4	08/27/15	OFFICE FULL DESIGN	TCF
5	12/01/15	PER NYSDOT COMMENTS	TCF
6	01/20/16	PER CLIENT COMMENTS	TCF
7	04/14/16	MISC. COMMENTS	TCF
8			
9			
10			
11			
12			
13			
14			
15			

PRELIMINARY

PROJECT No.: B140197
DRAWN BY: TCF
CHECKED BY: RWO
DATE: 01/27/2015
SCALE: AS NOTED
CAD I.D.: B140197SS19

PROJECT: SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC

LOCATION OF SITE
1413 UNION AVENUE
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

BOHLER ENGINEERING
17 COMPUTER DRIVE WEST
ALBANY, NY 12205
Phone: (518) 438-9900
Fax: (518) 438-0900
www.BohlerEngineering.com

R.W. OSTERHOUDT
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 076930

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
1
OF 15

REV 7 - 04/14/2016

GENERAL NOTES

CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS.

1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:

   "ALTA/ACSM LAND TITLE SURVEY OF THE LANDS TO BE CONVEYED TO MAVIS TIRE SUPPLY, LLC", PREPARED BY AUSFELD & WALDRUFF LAND SURVEYORS LLP, DATED JUNE 20, 2014, REVISED THROUGH JUNE 12, 2015.

   "GEOTECHNICAL EVALUATION", PREPARED BY DENTE ENGINEERING, DATED JUNE 26, 2015.

   "INDIANA BAT/BOG TURTLE HABITAT SUITABILITY ASSESSMENT REPORT", PREPARED BY ECOLOGICAL SOLUTIONS, LLC, DATED JULY 29, 2012.

   "TRAFFIC IMPACT ANALYSIS FOR RHINEBECK REALTY, LLC", PREPARED BY ATLANTIC TRAFFIC & DESIGN ENGINEERS, INC., DATED JULY 9, 2015.

   PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST VERIFY THAT HE/SHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE. THIS IS CONTRACTOR'S RESPONSIBILITY.

2. ALL ACCESSIBLE (A/K/A ADA) PARKING SPACES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 et seq. AND 42 U.S.C. § 4151 et seq.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THE PROJECT IS TO BE CONSTRUCTED, AND ANY AND ALL AMENDMENTS TO BOTH WHICH ARE IN EFFECT WHEN THESE PLANS ARE COMPLETED.

3. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND CONFIRMED THAT ALL NECESSARY OR REQUIRED PERMITS HAVE BEEN OBTAINED. CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.

4. THE OWNER/CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

5. ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT.

6. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN THE PLANS AND THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.

7. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO BOHLER ENGINEERING BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR MUST FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING, IN WRITING, IMMEDIATELY IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.

8. ALL DIMENSIONS SHOWN ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER, THEREAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.

9. CONTRACTOR MUST REFER TO THE ARCHITECTURAL/BUILDING PLANS "OF RECORD" FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.

10. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE ENTIRE SITE PLAN AND THE LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST.

11. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL GOVERNMENTAL AUTHORITIES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER CONTRACTOR.

12. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES.

13. THE CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.

14. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND SHALL BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND TO NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.

15. ALL CONCRETE MUST BE AIR ENTRAINED AND HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.

16. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEAN, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

17. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES, AT ANY TIME.

18. ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER ENGINEERING, AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THIS HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH BOHLER ENGINEERING WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR ONE YEAR AFTER THE COMPLETION OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER ENGINEERING AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS, ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.

19. BOHLER ENGINEERING WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME HEREUNDER. BOHLER ENGINEERING'S SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM MUST NOT INDICATE THAT BOHLER ENGINEERING HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT PROMPTLY AND IMMEDIATELY BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. BOHLER ENGINEERING WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.

20. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING, NOR THE PRESENCE OF BOHLER ENGINEERING AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER ENGINEERING AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. BOHLER ENGINEERING SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND MUST BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE IN NOTE 19 FOR JOB SITE SAFETY.

21. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, IN ACCORDANCE WITH PARAGRAPH 19 HEREIN, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, PENALTIES AND THE LIKE RELATED TO SAME.

22. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE.

23. ALL SIGNING AND PAVEMENT STRIPING MUST CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCALLY APPROVED SUPPLEMENT.

24. ENGINEER IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS.

25. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN AND, FURTHER ENGINEER IS NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.

26. ALL DIMENSIONS MUST BE TO FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, UNLESS NOTED OTHERWISE.

27. ALL CONSTRUCTION AND MATERIALS MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, ORDINANCES, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.

28. CONTRACTOR AND OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.

29. CONTRACTOR IS RESPONSIBLE TO MAINTAIN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH EPA REQUIREMENTS FOR SITES WHERE ONE (1) ACRE OR MORE (UNLESS THE LOCAL JURISDICTION REQUIRES FEWER) IS DISTURBED BY CONSTRUCTION ACTIVITIES. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE.

30. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED APPLICATION DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER, THE USE OF THE WORDS CERTIFY OR CERTIFICATION CONSTITUTES AN EXPRESSION OF "PROFESSIONAL OPINION" REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.

GENERAL GRADING & UTILITY PLAN NOTES

1. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES MUST IMMEDIATELY BE REPORTED, IN WRITING, TO THE ENGINEER. CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.

2. CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION, AT NO COST TO THE OWNER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION.

3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT AND/OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE OR APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND/OR ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND/OR DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND, FURTHER, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SAME.

4. THE CONTRACTOR MUST LOCATE AND CLEARLY AND UNAMBIGUOUSLY DEFINE VERTICALLY AND HORIZONTALLY ALL ACTIVE AND INACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE AND INACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.

5. THE CONTRACTOR MUST FAMILIARIZE ITSELF WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

6. THE CONTRACTOR MUST INSTALL ALL STORM SEWER AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.

7. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS WITH JURISDICTION AND/OR CONTROL OF THE SITE, AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE SITE PLANS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, AND PRIOR TO CONSTRUCTION, RESOLVE SAME.

8. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE MUST INCLUDE ALL FEES, COSTS AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE FULL AND COMPLETE WORKING SERVICE. CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION.

9. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES MUST BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.

10. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS MUST BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO.

11. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND MUST BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST, AT A MINIMUM, COMPLY WITH THE STATE DOT REQUIREMENTS AND SPECIFICATIONS AND CONSULTANT SHALL HAVE NO LIABILITY OR RESPONSIBILITY FOR OR AS RELATED TO FILL, COMPACTION AND BACKFILL. FURTHER, CONTRACTOR IS FULLY RESPONSIBLE FOR EARTHWORK BALANCE.

12. THE CONTRACTOR MUST COMPLY, TO THE FULLEST EXTENT, WITH THE LATEST OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES AND CONSULTANT SHALL HAVE NO RESPONSIBILITY FOR OR AS RELATED FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES.

13. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.

14. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

15. DURING THE INSTALLATION OF SANITARY SEWER, STORM SEWER, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE FROM THE INFORMATION CONTAINED IN THE UTILITY PLAN. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE DRAINAGE OR UTILITY PLAN, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER AT THE COMPLETION OF WORK.

16. WHEN THE SITE IMPROVEMENT PLANS INVOLVE MULTIPLE BUILDINGS, SOME OF WHICH MAY BE BUILT AT A LATER DATE, THE CONTRACTOR MUST EXTEND ALL LINES, INCLUDING BUT NOT LIMITED TO STORM SEWER, SANITARY SEWER, UTILITIES, AND IRRIGATION LINE, TO A POINT AT LEAST FIVE (5) FEET BEYOND THE PAVED AREAS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. CONTRACTOR MUST CAP ENDS AS APPROPRIATE, MARK LOCATIONS WITH A 2X4, AND MUST NOTE THE LOCATION OF ALL OF THE ABOVE ON A CLEAN COPY OF THE DRAINAGE OR UTILITY PLAN, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER UPON COMPLETION OF THE WORK.

17. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. CONTRACTOR MUST CONFIRM AND ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT (EXCEPT WHERE ADA REQUIREMENTS OR EXISTING TOPOGRAPHY LIMIT GRADES), TO PREVENT PONDING. CONTRACTOR MUST IMMEDIATELY IDENTIFY, IN WRITING TO THE ENGINEER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER NOTIFICATION, MUST BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE DESIGN ENGINEER FOR ANY DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM SAME.

18. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF .075% GUTTER GRADE ALONG CURB FACE. IT IS CONTRACTOR'S OBLIGATION TO ENSURE THAT DESIGN ENGINEER APPROVES FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION OF SAME.

19. REFER TO THIS SHEET FOR ADDITIONAL NOTES.

20. IN THE EVENT OF DISCREPANCIES AND/OR CONFLICTS BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE AND CONTROL. CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER, IN WRITING, OF ANY DISCREPANCIES AND/OR CONFLICTS.

21. CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK ANY WORK.

22. WHERE RETAINING WALLS (WHETHER OR NOT THEY MEET THE JURISDICTIONAL DEFINITION) ARE IDENTIFIED ON PLANS, ELEVATIONS IDENTIFIED ARE FOR THE EXPOSED PORTION OF THE WALL. WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED HEREIN AND ARE TO BE SET/DETERMINED BY THE CONTRACTOR BASED ON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS.

23. STORM DRAINAGE PIPE:UNLESS INDICATED OTHERWISE, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SILT TIGHT JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M294 AND TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR SILT TIGHT JOINT. PVC PIPE FOR ROOF DRAIN CONNECTION MUST BE SDR 26 OR SCHEDULE 40 UNLESS INDICATED OTHERWISE.

24. SANITARY SEWER PIPE MUST BE POLYVINYL CHLORIDE (PVC) SDR 35 EXCEPT WHERE INDICATED OTHERWISE. SANITARY LATERAL MUST BE PVC SCHEDULE 40 OR PVC SDR 26 UNLESS INDICATED, IN WRITING, OTHERWISE.

25. STORM AND SANITARY SEWER PIPE LENGTHS INDICATED ARE NOMINAL AND MEASURED CENTER OF INLET AND/OR MANHOLES STRUCTURE TO CENTER OF STRUCTURE.

26. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON PRELIMINARY ARCHITECTURAL PLANS. CONTRACTOR IS RESPONSIBLE TO AND FOR VERIFYING LOCATIONS OF SAME BASED ON FINAL ARCHITECTURAL PLANS.

27. SEWERS CROSSING STREAMS AND/OR LOCATION WITHIN 10 FEET OF THE STREAM EMBANKMENT, OR WHERE SITE CONDITIONS SO INDICATE, MUST BE CONSTRUCTED OF STEEL, REINFORCED CONCRETE, DUCTILE IRON OR OTHER SUITABLE MATERIAL.

SEWERS CONVEYING SANITARY FLOW COMBINED SANITARY AND STORMWATER FLOW OR INDUSTRIAL FLOW MUST BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE PIPES MUST BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN, OR SUCH OTHER SEPARATION AS APPROVED BY THE GOVERNMENT AGENCY WITH JURISDICTION OVER SAME.

- WHERE APPROPRIATE SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER MUST BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER MUST BE PROVIDED.

28. WATER MAIN PIPING MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL WATER PURVEYOR. IN THE ABSENCE OF SUCH REQUIREMENTS, WATER MAIN PIPING MUST BE CEMENT-LINED DUCTILE IRON (DIP) MINIMUM CLASS 52 THICKNESS. ALL PIPE AND APPURTENANCES MUST COMPLY WITH THE APPLICABLE AWWA STANDARDS IN EFFECT AT THE TIME OF APPLICATION.

29. CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SEWER, WATER AND STORM SYSTEMS, MUST BE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND/OR DOT DETAILS AS APPLICABLE. CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME.

30. WHERE BASEMENTS ARE TO BE PROVIDED FOR PROPOSED DWELLING UNITS, THE DEVELOPER SHALL, BY BORING OR BY TEST PIT, DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED DWELLINGS. WHERE GROUNDWATER IS ENCOUNTERED IN THE BASEMENT AREA, BASEMENTS WILL NOT BE INSTALLED UNLESS SPECIAL CONSTRUCTION METHODS ARE UTILIZED, TO BE REVIEWED AND APPROVED BY THE MUNICIPAL CONSTRUCTION CODE OFFICIAL. IF AND WHERE SUMP PUMPS ARE INSTALLED, ALL DISCHARGES MUST BE CONNECTED TO THE STORM SEWER. A CLEANOUT MUST BE PROVIDED PRIOR TO THE CONNECTION TO THE STORM DRAIN IN ORDER THAT BLOCKAGES CAN BE ADDRESSED.

31. FOR SINGLE AND TWO-FAMILY RESIDENTIAL PROJECTS, WHERE THE PROPOSED DWELLING AND ADJACENT SPOT ELEVATION(S) ARE SCHEMATIC FOR GENERIC BUILDING FOOTPRINT, GRADES MUST BE ADJUSTED BASED ON FINAL ARCHITECTURAL PLANS TO PROVIDE A MINIMUM OF SIX (6) INCHES BELOW TOP OF BLOCK AND /OR SIX (6) INCHES BELOW SIDING, WHICHEVER IS LOWEST, AND MUST PROVIDE POSITIVE DRAINAGE (2% MIN.) AWAY FROM DWELLING. ALL CONSTRUCTION, INCLUDING GRADING, MUST COMPLY WITH THE LATEST LOCAL AND STATE BUILDING CODE AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

32. LOCATION OF PROPOSED UTILITY POLE RELOCATION IS AT THE SOLE DISCRETION OF UTILITY COMPANY.

33. CONSULTANT IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, SHALL HAVE NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.

GENERAL DEMOLITION NOTES

1. THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY:

   ALTA/ACSM LAND TITLE SURVEY
   1413 UNION AVE
   NEWBURGH, NY
   PREPARED BY: AUSFELD & WALDRUFF LAND SURVEYORS LLP
   SCHENECTADY, NY
   DATED JUNE 20,2014, REVISED THROUGH JUNE 12, 2015
   JOB#:14-1242

   GEOTECHNICAL EVALUATION
   NEWBURGH, NY
   PREPARED BY: DENTE ENGINEERING
   WATERVLIET, NY
   DATED JUNE 26, 2015
   JOB#:FDE-15-107

2. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 et seq.), AS AMENDED AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.

3. BOHLER ENGINEERING HAS NO CONTRACTUAL, LEGAL, OR OTHER RESPONSIBILITY FOR JOB SITE SAFETY OR JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME.

4. THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION, ONLY, REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR MUST ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.

5. CONTRACTOR MUST RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNS REGARDING THE APPLICABLE SAFETY STANDARDS, OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT, WITH BOHLER ENGINEERING, IN WRITING, AND RESPONDED TO BY BOHLER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.

6. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR/TO:

   A. OBTAINING A DEMOLITION PERMIT FROM THE TOWN OF NEWBURGH AND ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK.

   B. NOTIFYING, AT A MINIMUM, THE TOWN OF NEWBURGH BUILDING/CODE OFFICE AND DESIGN ENGINEER, 72 HOURS PRIOR TO THE START OF WORK.

   C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.

   D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARKOUT, IN ADVANCE OF ANY EXCAVATION.

   E. LOCATING AND PROTECTING ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.

   F. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.

   G. ARRANGING FOR AND COORDINATING WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.

   H. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES. WORK REQUIRED TO BE DONE "OFF-PEAK" IS TO BE DONE AT NO ADDITIONAL COST TO THE OWNER.

   I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK AND IMMEDIATELY NOTIFY THE OWNER AND ENGINEER OF THE DISCOVERY OF SUCH MATERIALS.

7. THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY.

8. THE CONTRACTOR MUST PROVIDE ALL "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIR MUST INCLUDE THE RESTORATION OF ANY ITEMS REPAIRED TO THE PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR SHALL PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.

9. THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE UNLESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND/OR UNDER THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.

10. CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL MUST BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS, AND MUST BE SUFFICIENTLY COMPACTED TO SUPPORT NEW IMPROVEMENTS AND PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES, AND MUST BE DONE SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE.

11. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND ALL APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS MUST BE IN PLACE PRIOR TO CONTRACTOR STARTING AN EXPLOSIVE PROGRAM AND/OR ANY DEMOLITION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.

12. CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY.

13. CONTRACTOR MUST CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.

14. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT WRITTEN PERMISSION OF THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION.

15. THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.

16. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.

17. CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH MUST INCLUDE, BUT NOT BE LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.

18. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION AS TO THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED TO ACCOMPLISH THAT WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.

19. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES. THE CONTRACTOR MUST MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.

20. CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS UPON WHICH IS INDICATED THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER, AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK.

ADA INSTRUCTIONS TO CONTRACTOR:

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAP) ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH ALL APPLICABLE STATE AND LOCAL ACCESSIBILITY LAWS AND REGULATIONS AND THE CURRENT ADA AND/OR STATE ARCHITECTURAL ACCESS BOARD STANDARDS AND REGULATIONS' BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THESE ADA AND/OR ARCHITECTURAL ACCESS BOARD CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
- CURB RAMPS - SLOPE MUST NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.
- LANDINGS - MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
- PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), ADA RAMP MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 IN ANY DIRECTION (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.
- DOORWAYS - MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2003 AND OTHER REFERENCED INCORPORATED BY CODE.)
- WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS, IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.
- THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

TYPICAL ABBREVIATIONS

KEY	DESCRIPTION	KEY	DESCRIPTION
BC	BOTTOM CURB	PROP.	PROPOSED
TC	TOP CURB	TBR/R	TO BE REMOVED AND REPLACED
BOC	BACK OF CURB	TBR	TO BE REMOVED
BW	BOTTOM OF WALL GRADE	TPF	TREE PROTECTION FENCE
TW	TOP OF WALL	BLDG.	BUILDING
EXIST.	EXISTING	SF	SQUARE FEET
BM.	BENCHMARK	SMH	SEWER MANHOLE
EOP	EDGE OF PAVEMENT	DMH	DRAIN MANHOLE
℄	CENTERLINE	STM.	STORM
FF.	FINISHED FLOOR	SAN.	SANITARY
V.I.F.	VERIFY IN FIELD	CONC.	CONCRETE
GC	GENERAL CONTRACTOR	ARCH.	ARCHITECTURAL
HP.	HIGH POINT	DEP.	DEPRESSED
LP.	LOW POINT	H'CAP.	HANDICAP
TYP.	TYPICAL	MIN.	MINIMUM
INT.	INTERSECTION	MAX.	MAXIMUM
PC.	POINT OF CURVATURE	No. / #	NUMBER
PT.	POINT OF TANGENCY	W.	WIDE
PI.	POINT OF INTERSECTION	DEC.	DECORATIVE
PVI.	POINT OF VERTICAL INTERSECTION	ELEV.	ELEVATION
STA.	STATION	UNG.	UNDERGROUND
GRT	GRATE	R.O.W.	RIGHT OF WAY
INV.	INVERT	LF	LINEAR FOOT
DIP	DUCTILE IRON PIPE	LOD	LIMIT OF DISTURBANCE
PVC	POLYVINYL CHLORIDE PIPE	LOW	LIMIT OF WORK
HDPE.	HIGH DENSITY POLYETHYLENE PIPE	L.S.A.	LANDSCAPED AREA
RCP	REINFORCED CONCRETE PIPE	±	PLUS OR MINUS
S	SLOPE	°	DEGREE
ME	MEET EXISTING	Ø / DIA.	DIAMETER
		R	RADIUS

TYPICAL LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	SETBACK	
	EASEMENT	
	CURB	
D	STORM MANHOLE	
S	SEWER MANHOLE	
	CATCH BASIN	
WF#5	WETLAND FLAG	
	WETLAND LINE	
× 54.83	SPOT ELEVATION	53.52
× TC 54.58 G 53.78	TOP & BOTTOM OF CURB	TC=54.32 BC=53.82
53	CONTOUR	50
	FLOW ARROW	5%
	PAINTED ARROW	
	RIDGE LINE	
G G	GAS LINE	G G
T T	TELEPHONE LINE	T T
E E	ELECTRIC LINE	E E
W W	WATER LINE	W W
OH OH	OVERHEAD WIRE	OH OH
	STORM PIPE	
	SANITARY LINE	S S
10	PARKING COUNT	3
	SIGN	
	LIGHT POLE	
	GUIDE RAIL	
Ø	UTILITY POLE	Ø

REFER TO SITE PLAN FOR ZONING ANALYSIS TABLE AND LAND USE/ ZONING INFORMATION & NOTES

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PROJECT No.:	B140197
DRAWN BY:	TCF
CHECKED BY:	RWO
DATE:	01/27/2015
SCALE:	AS NOTED
CAD I.D.:	B140197SS19

PROJECT: SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC

LOCATION OF SITE
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TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

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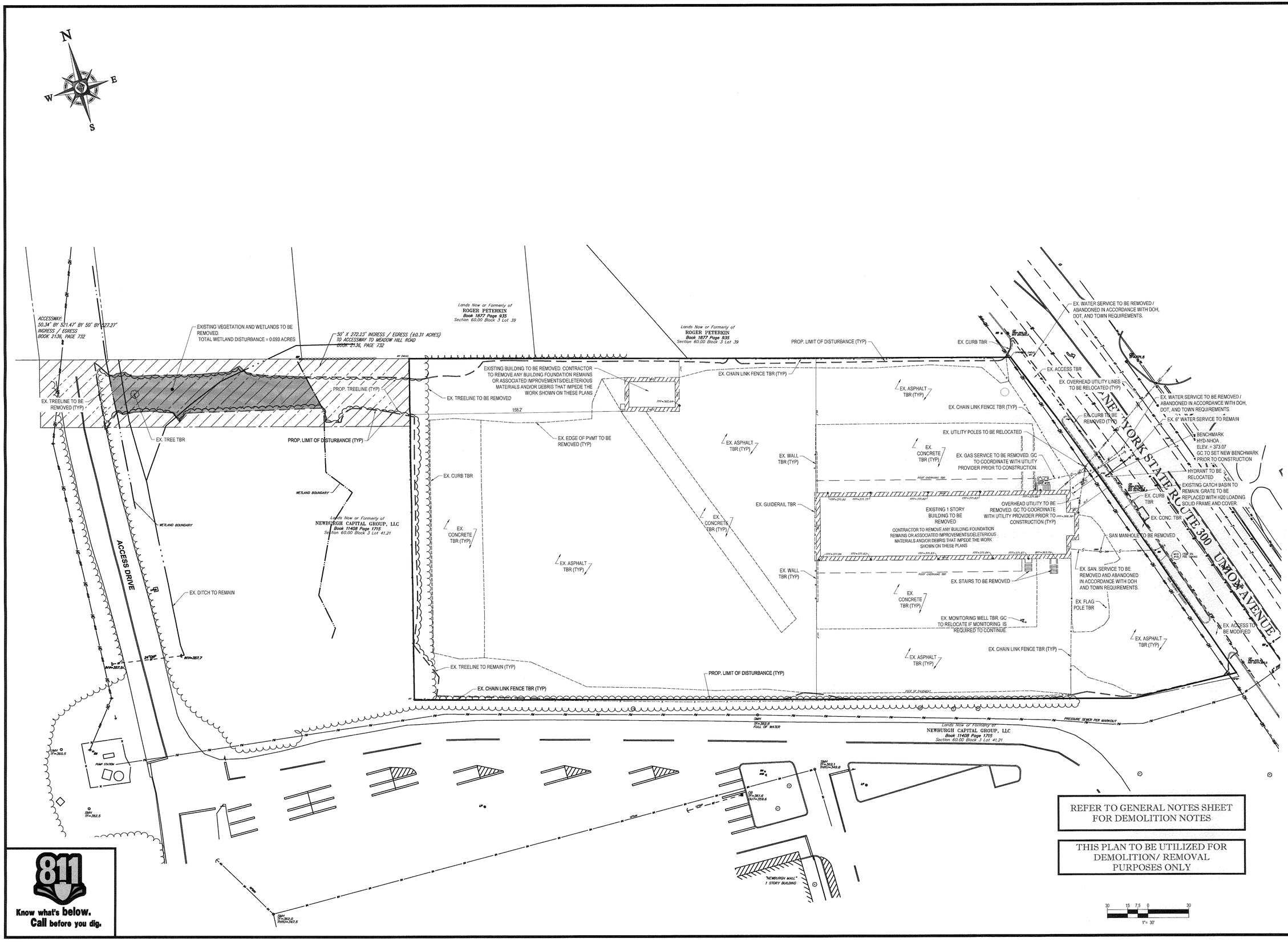
SHEET TITLE:
GENERAL NOTES SHEET

SHEET NUMBER:
2
OF 15

REV 7 - 04/14/2016



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SHEET TITLE:
DEMOLITION PLAN

SHEET NUMBER:
3
OF 15

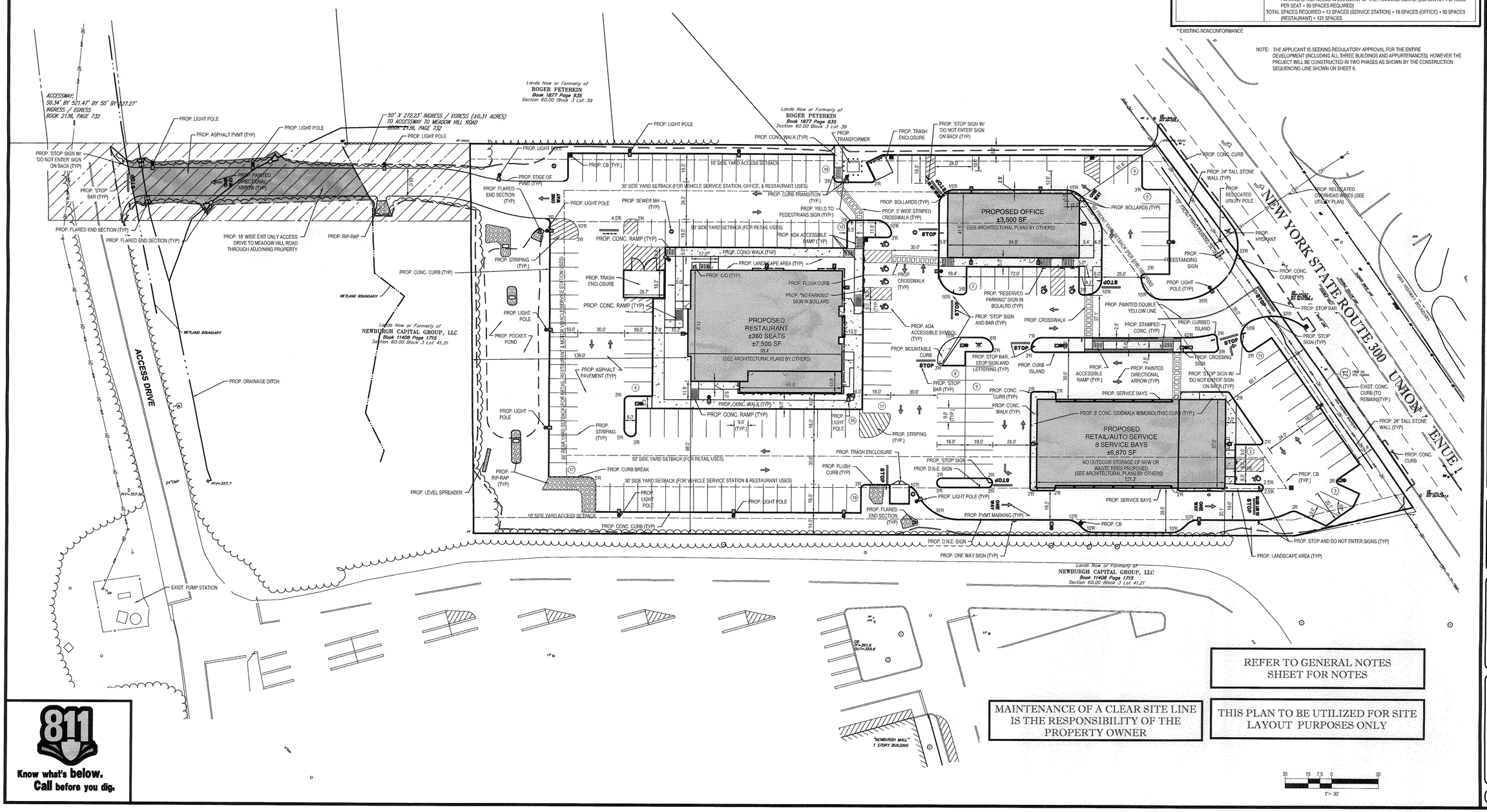
REV 7 - 04/14/2016

ZONING ANALYSIS TABLE

ZONING DISTRICT	IB - INTERCHANGE BUSINESS DISTRICT OFFICE, RESTAURANTS, & MOTOR VEHICLE SERVICE STATION USES ARE PERMITTED SUBJECT TO SITE PLAN REVIEW BY THE PLANNING BOARD		
ZONE CRITERIA	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	40,000 SF	3.04 AC (132,422.4 SF)	NO CHANGE
MINIMUM LOT WIDTH	150'	250.6'	NO CHANGE
MINIMUM LOT DEPTH	150'	442.7'	NO CHANGE
MAX. BUILDING COVERAGE	40% RETAIL/RESTAURANT USE 20% SERVICE STATION USE	7.9%	13.3% (TOTAL)
MIN. FRONT SETBACK	60'	23.5'	61.6'
MIN. SIDE SETBACK	30'/60' SERVICE STATION, OFFICE AND & RESTAURANT USES	14.2*	30.1'
MIN. REAR SETBACK	60'	158.2'	139.0'
MAX. BUILDING HEIGHT	40' SERVICE STATION, OFFICE AND & RESTAURANT USES	1 STORY	+34'
MAX. LOT COVERAGE	80%	± 87%	±75%
PARKING SPACES	121SPACES	±8 SPACES	166 SPACES
PARKING CRITERIA (9'X18')	GASOLINE STATION, PARKING GARAGE, OR REPAIR STATION REQUIRES SUFFICIENT PARKING FOR ALL VEHICLES STORED OR SERVICED AT 1 TIME PLUS 5 ADDITIONAL SPACES. (8 SERVICE BAYS x 1 SPACE/BAY + 5 ADDITIONAL SPACES = 13 SPACES REQUIRED) OFFICE USE REQUIRES 1 SPACE PER 200 SF FLOOR AREA (3,500 SF RETAIL AREA / 200 SF/SPACE = 18 SPACES REQUIRED) RESTAURANT USE REQUIRES 1 SPACE PER 4 SEATS OR 1 SPACE PER 40 SF OF SEATING AREA, OR AS REQUIRED BY THE PLANNING BOARD.FOR RESTAURANTS DEMONSTRATING GREATER PARKING SPACE NEEDS IN JUDGMENT OF THE PLANNING BOARD. (360 SEATS / 4 SPACES PER SEAT = 90 SPACES REQUIRED) TOTAL SPACES REQUIRED = 13 SPACES (SERVICE STATION) + 18 SPACES (OFFICE) + 90 SPACES (RESTAURANT) = 121 SPACES		

* EXISTING NONCONFORMANCE

NOTE: THE APPLICANT IS SEEKING REGULATORY APPROVAL FOR THE ENTIRE DEVELOPMENT (INCLUDING ALL THREE BUILDINGS AND APPURTENANCES). HOWEVER THE PROJECT WILL BE CONSTRUCTED IN TWO PHASES AS SHOWN BY THE CONSTRUCTION SEQUENCING LINE SHOWN ON SHEET 6.



REFER TO GENERAL NOTES SHEET FOR NOTES

MAINTENANCE OF A CLEAR SITE LINE IS THE RESPONSIBILITY OF THE PROPERTY OWNER

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

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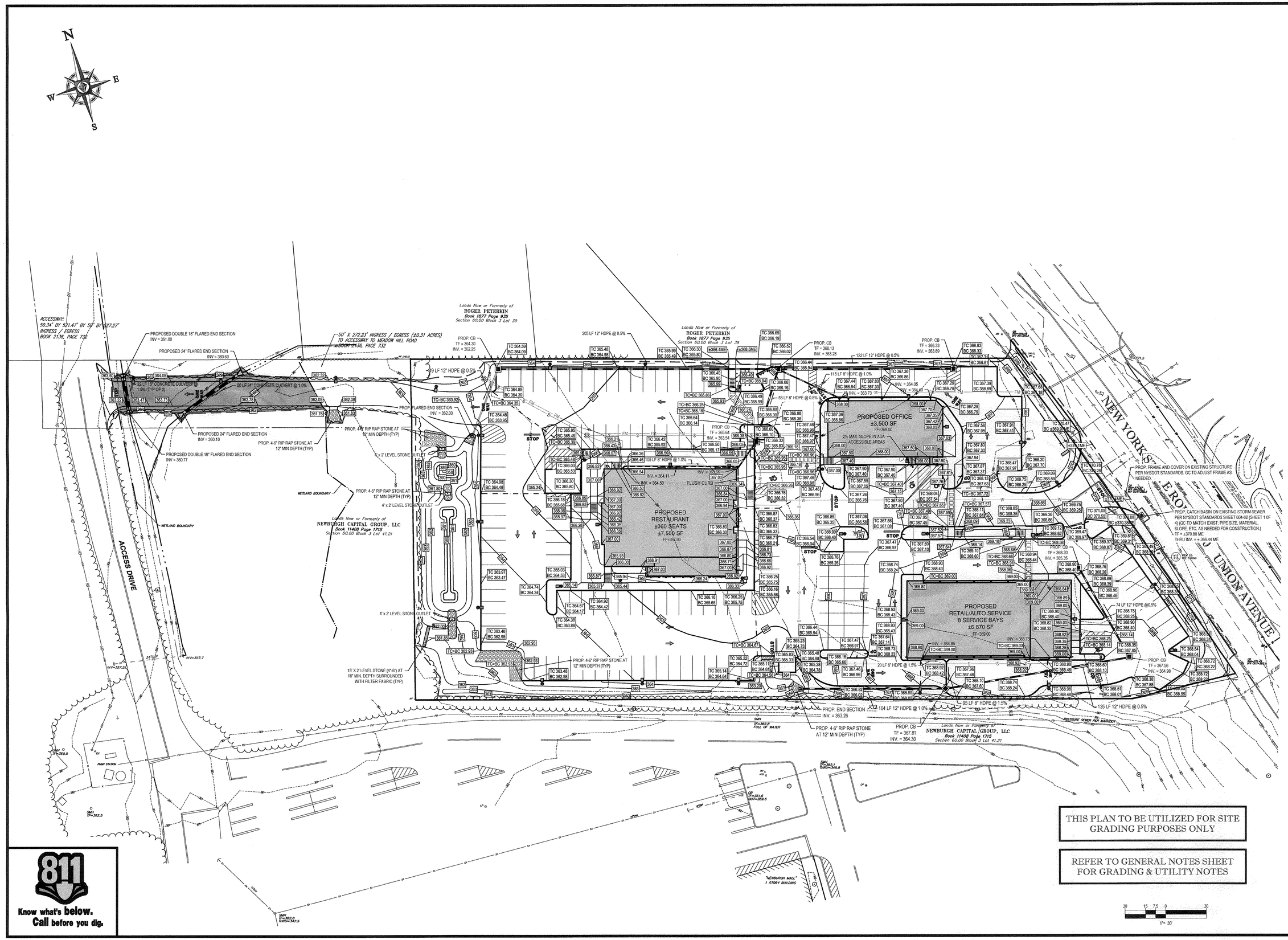
SHEET TITLE: SITE PLAN

SHEET NUMBER: 4 OF 15

REV 7 - 04/14/2016



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1	03/09/15	FRONT YARD SETBACK	TCF
2	05/28/15	PER TOWN COMMENTS	TCF
3	07/9/15	PHASING PLANS	TCF
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PRELIMINARY

PROJECT No.:	B140197
DRAWN BY:	TCF
CHECKED BY:	RWO
DATE:	01/27/2015
SCALE:	AS NOTED
CAD I.D.:	B140197SS19

PROJECT:

SITE DEVELOPMENT PLANS
FOR
RHINEBECK REALTY, LLC

LOCATION OF SITE
1413 UNION AVENUE
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

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R.W. OSTERHOUDT
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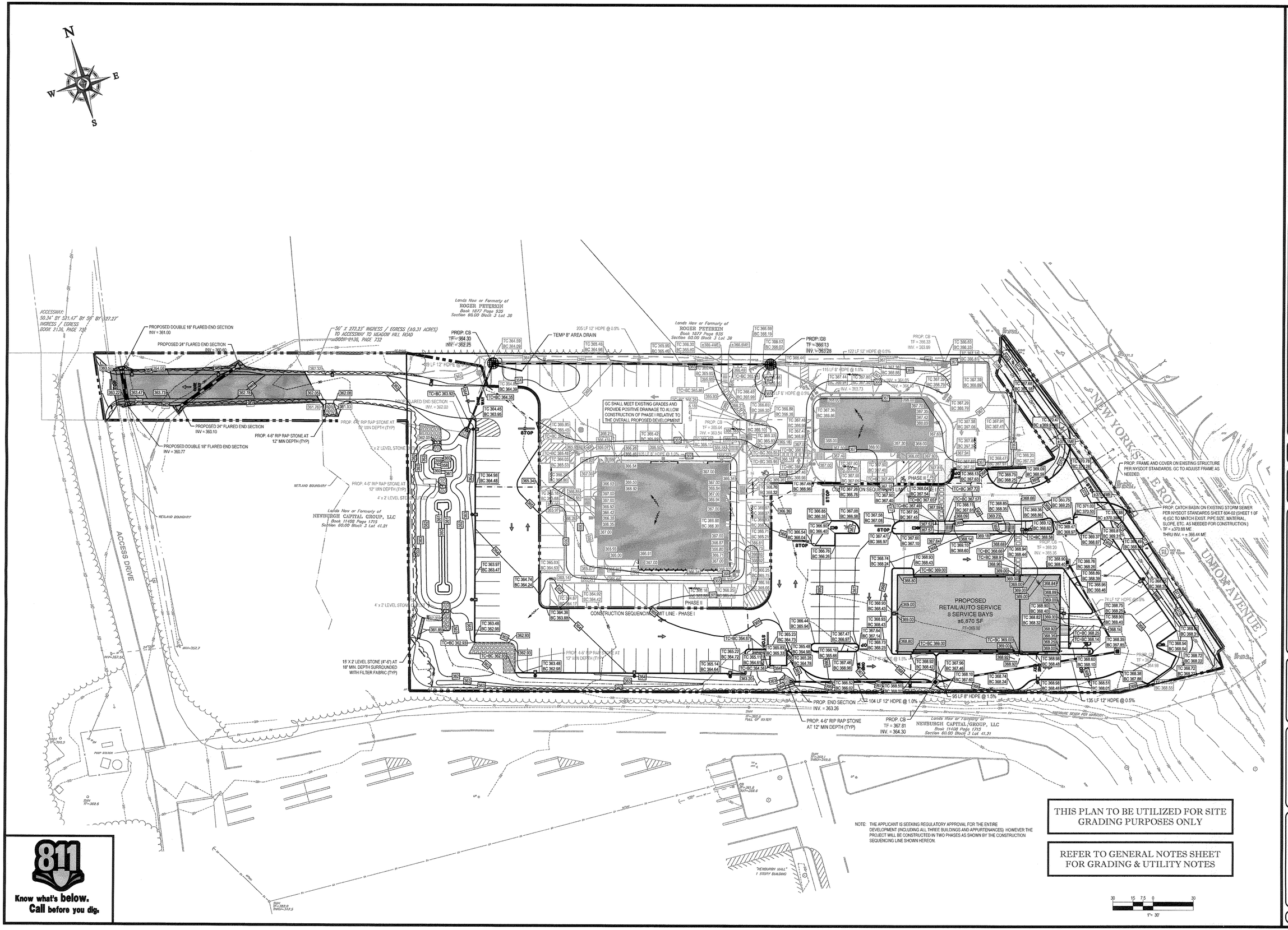
SHEET TITLE:

GRADING & DRAINAGE PLAN

SHEET NUMBER:

5
OF 15

REV 7 - 04/14/2016



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NOTE: THE APPLICANT IS SEEKING REGULATORY APPROVAL FOR THE ENTIRE DEVELOPMENT (INCLUDING ALL THREE BUILDINGS AND APPURTENANCES). HOWEVER THE PROJECT WILL BE CONSTRUCTED IN TWO PHASES AS SHOWN BY THE CONSTRUCTION SEQUENCING LINE SHOWN HEREON.

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY

REFER TO GENERAL NOTES SHEET FOR GRADING & UTILITY NOTES

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PROJECT No.: B140197
DRAWN BY: TCF
CHECKED BY: RWO
DATE: 01/27/2015
SCALE: AS NOTED
CAD I.D.: B140197SS19

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FOR
RHINEBECK REALTY, LLC

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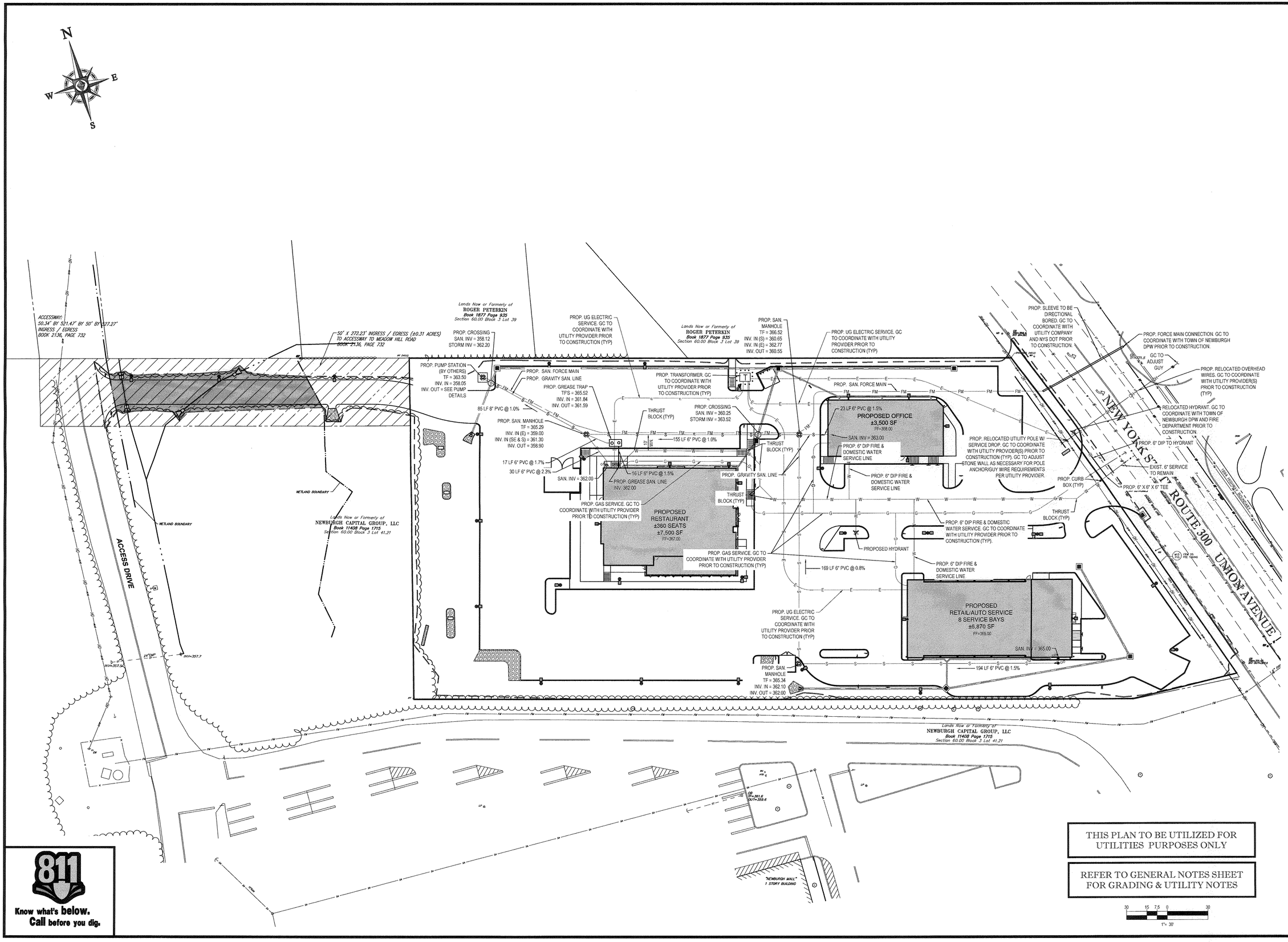
SHEET TITLE:
CONSTRUCTION SEQUENCE GRADING & DRAINAGE PLAN

SHEET NUMBER:
6
OF 15

REV 7 - 04/14/2016



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SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:

7 OF 15

REV 7 - 04/14/2016

SOIL RESTORATION REQUIREMENTS

TYPE OF DISTURBANCE	SOIL RESTORATION REQUIREMENT
NO SOIL DISTURBANCE	RESTORATION NOT PERMITTED
MINIMAL SOIL DISTURBANCE	RESTORATION NOT REQUIRED
AREAS WHERE TOPSOIL IS STRIPPED ONLY - NO CHANGE IN GRADE	AERATE AND APPLY 6" OF TOPSOIL
AREAS OF CUT OR FILL	APPLY FULL SOIL RESTORATION (SEE NOTES ON SHEET 8)
HEAVY TRAFFIC AREAS ON SITE (ESPECIALLY IN A ZONE 5-25 FEET AROUND BUILDINGS BUT NOT WITHIN 5 FOOT PERIMETER AROUND FOUNDATION WALLS)	APPLY FULL SOIL RESTORATION (DE-COMPACTION AND COMPOST ENHANCEMENT)
AREAS WHERE INFILTRATION PRACTICES ARE APPLIED	RESTORATION NOT REQUIRED, BUT MAY BE APPLIED TO ENHANCE THE REDUCTION SPECIFIED FOR APPROPRIATE PRACTICES.

OPERATION / MAINTENANCE NOTES

1. MAINTENANCE OF ALL PARKING LOTS AND ON-SITE DRAINAGE SYSTEMS ON THE PROPERTIES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE IMPLEMENTATION OF THE FOLLOWING MAINTENANCE PROGRAM IS INTENDED TO ADEQUATELY MANAGE SEDIMENT INFILTRATION TO THE STORM WATER DRAINAGE SYSTEM.
2. ALL PARKING LOTS SHALL BE SWEPT TWO (2) TIMES PER YEAR, BETWEEN THE DATES OF OCTOBER 1 AND JUNE 1 OF EACH YEAR AND ALL SAND AND DEBRIS SHALL BE PROPERLY DISPOSED.
3. THE ON-SITE DRAINAGE SYSTEM INCLUDING CATCH BASINS, DIVERSION MANHOLE STRUCTURES, PIPES, END SECTIONS, OUTLET CONTROL STRUCTURES, INLET PROTECTION, INFILTRATION BASINS AND DETENTION BASINS SHALL BE INSPECTED PER GUIDELINES SET FORTH IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). CLEANING OF STRUCTURES SHALL INCLUDE THE REMOVAL, AND PROPER DISPOSAL, OF ALL SAND AND DEBRIS FROM ANY AND ALL COMPONENTS OF THE SYSTEM AND REPAIR AND OR REPLACEMENT OF ANY DAMAGED STRUCTURES, STONE OUTLET PROTECTION, SLOPES OR ANY COMPONENT OF THE SYSTEM THAT IS IN NEED OF REPAIR TO RESTORE TO ITS ORIGINALLY DESIGNED AND CONSTRUCTED CONDITION.
4. PROPERTY OWNER SHALL MAINTAIN A MAINTENANCE LOG DOCUMENTING THE INSPECTION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM. A COPY OF THE CONSTRUCTION INSPECTION, OPERATIONS AND MAINTENANCE CHECK LISTS AND DOWNSTREAM DEFENDER OPERATIONS AND MAINTENANCE MANUAL ARE INCLUDED IN THE SWPPP AND SHALL BE COMPLETED AS NOTED AND KEPT IN THE LOG FOR REVIEW AND REFERENCE.

SOIL RESTORATION NOTES:

SOIL RESTORATION PROCEDURE:

DURING PERIODS OF RELATIVELY LOW TO MODERATE SUBSOIL MOISTURE, THE DISTURBED SUBSOILS ARE RETURNED TO ROUGH GRADE AND THE FOLLOWING SOIL RESTORATION STEPS APPLIED:

1. APPLY 3 INCHES OF COMPOST OVER SUBSOIL
2. TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT-MOUNTED RIPPER, TRACTOR-MOUNTED DISC, OR TILLER, MIXING, AND CIRCULATING AIR AND COMPOST INTO SUBSOILS
3. ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE
4. APPLY TOPSOIL TO A DEPTH OF 6 INCHES
5. VEGETATE AS REQUIRED BY APPROVED PLAN.

AT THE END OF THE PROJECT AN INSPECTOR SHOULD BE ABLE TO PUSH A 3/8 " METAL BAR 12 INCHES INTO THE SOIL JUST WITH BODY WEIGHT. FIGURES 5.16 AND 5.17 SHOW TWO ATTACHMENTS USED FOR SOIL DECOMPACTION. TILLING (STEP 2 ABOVE) SHOULD NOT BE PERFORMED WITHIN THE DRIP LINE OF ANY EXISTING TREES OR OVER UTILITY INSTALLATIONS THAT ARE WITHIN 24 INCHES OF THE SURFACE.

COMPOST SPECIFICATIONS:

COMPOST SHALL BE AGED, FROM PLANT DERIVED MATERIALS, FREE OF VIABLE WEED SEEDS, HAVE NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING. PASS THROUGH A HALF INCH SCREEN AND HAVE A PH SUITABLE TO GROW DESIRED PLANTS.

MAINTENANCE:

A SIMPLE MAINTENANCE AGREEMENT SHOULD IDENTIFY WHERE SOIL RESTORATION IS APPLIED, WHERE NEWLY RESTORED AREAS ARE/CANNOT BE CLEARED, WHO THE RESPONSIBLE PARTIES ARE TO ENSURE THAT ROUTINE VEGETATION IMPROVEMENTS ARE MADE (I.E., THINNING, INVASIVE PLANT REMOVAL, ETC.). SOIL COMPOST AMENDMENTS WITHIN A FILTER STRIP OR GRASS CHANNEL SHOULD BE LOCATED IN PUBLIC RIGHT OF WAY, OR WITHIN A DEDICATED STORMWATER OR DRAINAGE EASEMENT.

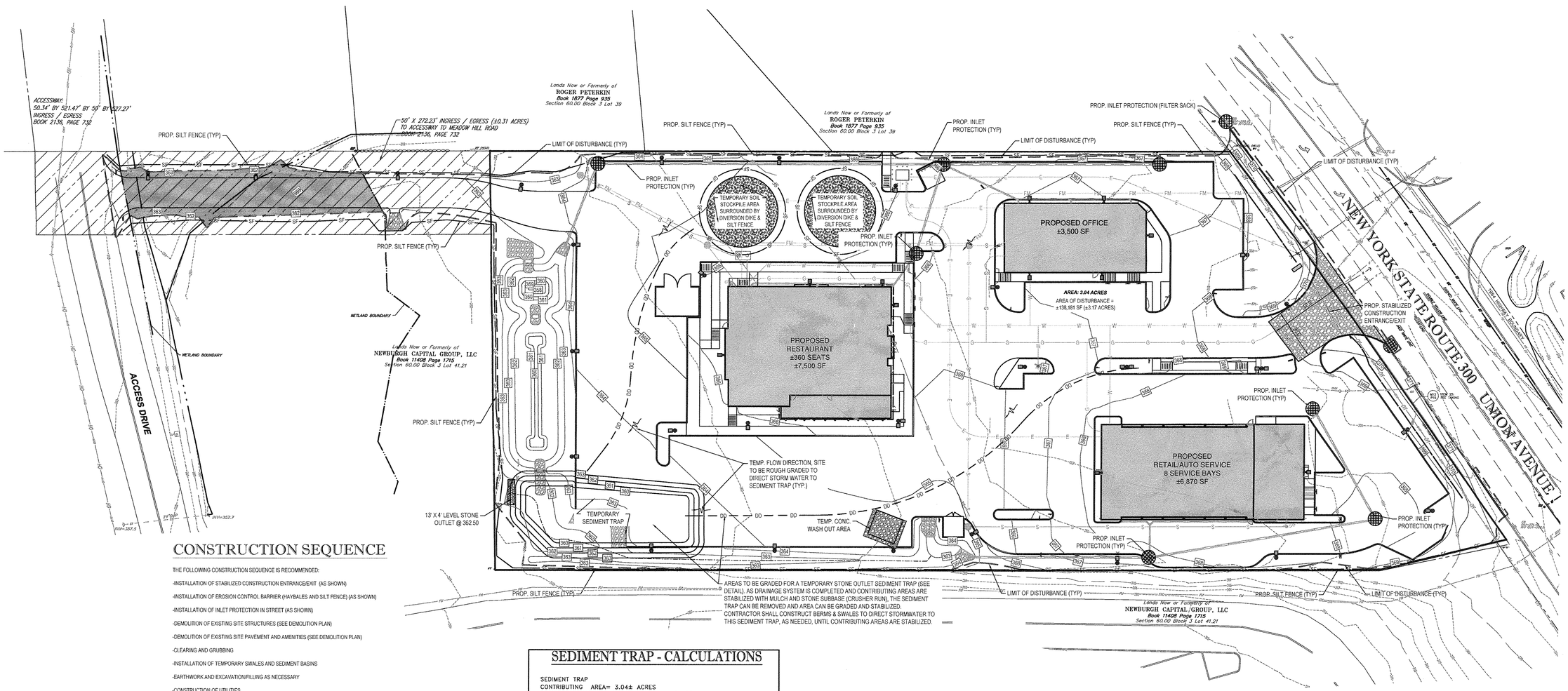
FIRST YEAR MAINTENANCE OPERATIONS INCLUDES:

- INITIAL INSPECTIONS FOR THE FIRST SIX MONTHS (ONCE AFTER EACH STORM GREATER THAN HALF-INCH)
- RESEEDING TO REPAIR BARE OR ERODING AREAS TO ASSURE GRASS STABILIZATION
- WATER ONCE EVERY THREE DAYS FOR FIRST MONTH, AND THEN PROVIDE A HALF INCH OF WATER PER WEEK DURING FIRST YEAR. IRRIGATION PLAN MAY BE ADJUSTED ACCORDING TO THE RAIN EVENT.
- FERTILIZATION MAY BE NEEDED IN THE FALL AFTER THE FIRST GROWING SEASON TO INCREASE PLANT VIGOR.

ONGOING MAINTENANCE:

TWO POINTS HELP ENSURE LASTING RESULTS OF DECOMPACTION:

1. PLANTING THE APPROPRIATE GROUND COVER WITH DEEP ROOTS TO MAINTAIN SOIL STRUCTURE.
2. KEEPING THE SITE FREE OF VEHICULAR AND FOOT TRAFFIC OR OTHER WEIGHT LOADS. CONSIDER PEDESTRIAN FOOTPATHS. (SOMETIMES IT MAY BE NECESSARY TO DE-THATCH THE TURF EVERY FEW YEARS).



CONSTRUCTION SEQUENCE

THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:

-INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE/EXIT (AS SHOWN)

-INSTALLATION OF EROSION CONTROL BARRIER (HAYBALES AND SILT FENCE) (AS SHOWN)

-INSTALLATION OF INLET PROTECTION IN STREET (AS SHOWN)

-DEMOLITION OF EXISTING SITE STRUCTURES (SEE DEMOLITION PLAN)

-DEMOLITION OF EXISTING SITE PAVEMENT AND AMENITIES (SEE DEMOLITION PLAN)

-CLEARING AND GRUBBING

-INSTALLATION OF TEMPORARY SWALES AND SEDIMENT BASINS

-EARTHWORK AND EXCAVATION/FILLING AS NECESSARY

-CONSTRUCTION OF UTILITIES

-STABILIZE PERMANENT LAWN AREAS AND SLOPES WITH TEMPORARY SEEDING

-INSTALLATION OF INLET PROTECTION ON ON-SITE UTILITIES (AS SHOWN)

-CONSTRUCTION OF BUILDINGS

-CONSTRUCTION OF ALL CURBING AND LANDSCAPE ISLANDS AS INDICATED ON THE PLANS

-SPREAD TOPSOIL ON SLOPED AREAS AND SEED AND MULCH

-FINAL GRADING OF ALL SLOPED AREAS

-PLACE 6" TOPSOIL ON SLOPES AFTER FINAL GRADING COMPLETED. FERTILIZE, SEED, AND MULCH SEED MIXTURE TO BE INSTALLED REQUIRED.

-REMOVAL OF THE TEMPORARY SEDIMENT BASINS

-PAVE PARKING LOT

-LANDSCAPING PER LANDSCAPING PLAN

-REMOVE EROSION CONTROLS AS DISTURBED AREAS BECOME STABILIZED TO 70% STABLIZATION OR GREATER.

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SEDIMENT TRAP - CALCULATIONS

SEDIMENT TRAP
CONTRIBUTING AREA= 3.04± ACRES
REQUIRED LENGTH OF OUTLET= 4(DRAINAGE AREA)
= 4 x 3.04 = 12.16'
MINIMUM WIDTH= 4'
PROVIDED: 4'x13' OUTLET
REQUIRED STORAGE= 3,600 CF PER ACRE OF
CONTRIBUTING DRAINAGE AREA=
3.04' * (3,600)= 10,944 CF
PROVIDED: ±12,204 CF
REQUIRD: 10,944 CF
SEDIMENT SHALL BE REMOVED AND TRAP
RESTORED TO ORIGINAL DIMENSIONS WHEN
SEDIMENT HAS ACCUMULATED TO 1/2 THE
ORIGINAL DESIGN CAPACITY
DESIGN CAPACITY= 12,204 CF x 0.5= 6102 CF
SEDIMENT TRAP WILL REACH 1/2 DESIGN CAPACITY
AT ELEVATION 361.75
ORIGINAL ELEVATION TO BE MARKED AND TRAP TO BE RESTORED
TO ORIGINAL DIMENSIONS WHEN 1.67' OF SEDIMENT HAS ACCUMULATED

THIS PLAN TO BE UTILIZED FOR SITE SOIL AND EROSION CONTROL PURPOSES ONLY

REFER TO SOIL EROSION CONTROL NOTES & DETAIL SHEET FOR EROSION NOTES AND DETAILS

30 15 7.5 0 30
1"= 30'

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LOCATION OF SITE
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SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:
8
OF 15

REV 7 - 04/14/2016

EROSION & SEDIMENT CONTROL NOTES

1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.
2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
3. SEDIMENT BARRIERS (SILT FENCE, HAY BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
4. INSTALL SILT FENCE AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILT FENCE DETAIL FOR PROPER INSTALLATION. SILT FENCE WILL REMAIN IN PLACE PER NOTE #5.
5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSURE. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF.
6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1).
7. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
8. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.
9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.
10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:

10.1. SIX INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.

10.2. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 LB PER ACRE OR 18.4 LB PER 1,000 SF USING 10-20-20 OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER1,000 SF).

10.3. FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUE-GRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS: SEEDING RATE IS 1.03 LBS PER 1,000 SF LAWN QUALITY SOD MAY BE SUBSTITUTED FOR SEED.

10.4. HAY MULCH AT THE RATE OF 70-90 LBS PER 1,000 SF. A HYDRO-APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS WILL BE USED ON HAY MULCH FOR WIND CONTROL.

11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
12. WETLANDS WILL BE PROTECTED W/HAYBALES AND/OR SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
13. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.
14. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IF NOT BEING ACTIVELY WORKED.

MULCH

LOCATION	MULCH	RATE (1000 SF)
PROTECT AREA	STRAW OR HAY	100 POUNDS
WINDY AREA	SHREDDED OR CHOPPED CORNSTALKS STRAW OR HAY (ANCHORED)*	185-275 POUNDS 100 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES GREATER THAN 3:1	JUTE MESH OR EXCELSIOR MAT	AS REQUIRED
GREATER THAN 3:1	(REFER TO GEOTECHNICAL REPORT FOR FINAL DESIGN REQUIREMENT)	

* A HYDRO-APPLICATION OF WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB
PLUS SHALL BE USED ON HAY MULCH FOR WIND CONTROL.

MULCH ANCHORING
ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD/BLOCK); MULCH NETTING (AS PER MANUFACTURER); WOOD CELLULOSE FIBER (750 LBS/ACRE); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SERRATED STRAIGHT DISK. WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

EROSION CONTROL NOTES DURING WINTER CONSTRUCTION

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHOULD BE LIMITED TO THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
4. CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 200 - 300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
7. MULCHING REQUIREMENTS:

7.1. BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE FIBER.

7.2. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.

7.3. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.

8. AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
9. DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.
10. STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) MUST REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT MAY OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST EROSION RUNOFF.
11. EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.

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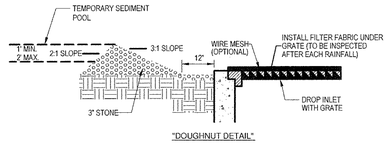
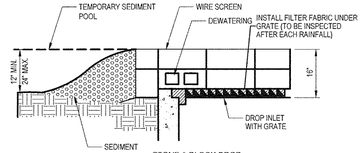


"DOUGHNUT DETAIL"

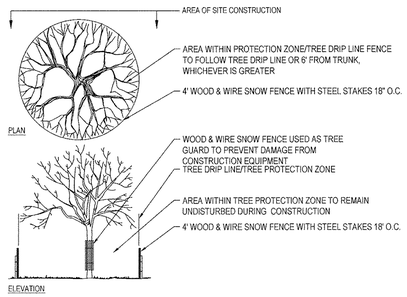


STONE & BLOCK DROP

CONSTRUCTION SPECIFICATIONS:
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON IT'S SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER CLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY. A 1 FOOT THICK LAYER OF THE FILER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.

STONE & BLOCK DROP INLET PROTECTION STRUCTURE

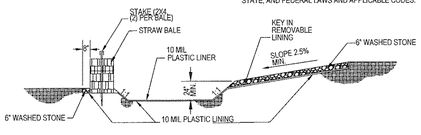
N.T.S.



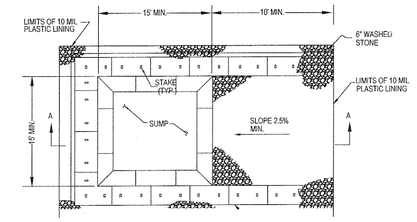
TREE PROTECTION DURING CONSTRUCTION

N.T.S.

NOTES:
1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
4. FACILITY SHALL NOT BE FILLED BEYOND 90% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
5. SAW CUT PORTLAND CEMENT CONCRETE RESIDUE FROM SAWCUT & GRINDING TO BE DISPOSED OF IN THE PIT.
6. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 90% FULL CAPACITY.
7. DEBRIS FROM THE VEHICLE WASH AREA SHALL NOT BE SUBDIVIDED ON THE SUBJECT SITE. ALL DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES.

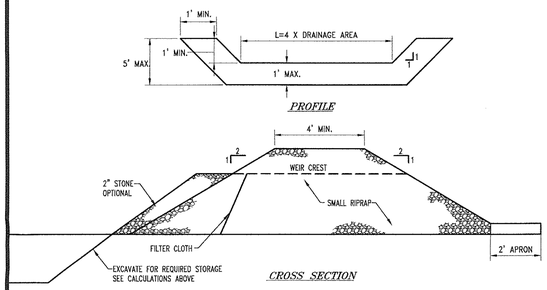


SECTION A-A



CONCRETE WASHOUT AREA DETAIL

N.T.S.

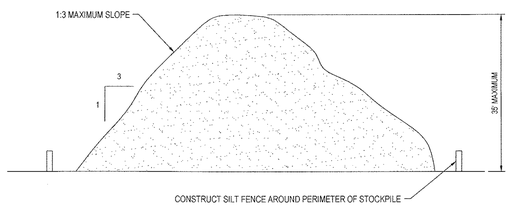


OPTION: A ONE FOOT LAYER OF 2" STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIPRAP IN PLACE OF THE EMBEDDED FILTER CLOTH.

NOTES:
1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE STONE USED IN THE OULET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1' THINKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO IT'S ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH TO THE TRAP.
6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IN MINIMIZED. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

STONE OUTLET SEDIMENT TRAP DETAIL

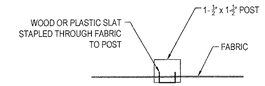
N.T.S.



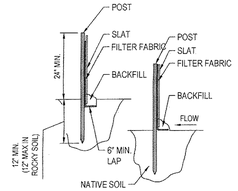
TEMPORARY STOCKPILE DETAIL

N.T.S.

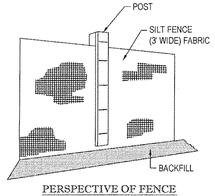
INSTALLATION:
1. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF EROSION CONTROL OF THE SITE.
2. UNROLL SILTATION FENCE AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM FLOW DIRECTION).
3. DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS LAYING ACROSS THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF THE FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING FABRIC FLAP ON UNDISTURBED GROUND AND PILING & TAMP- ING FILL AT THE BASE.



DETAIL OF POST ATTACHMENT
(PRE-ASSEMBLED PRIOR TO INSTALLATION)



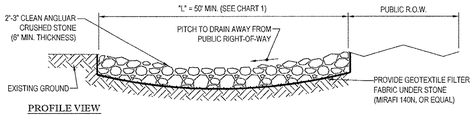
TOE-IN METHODS



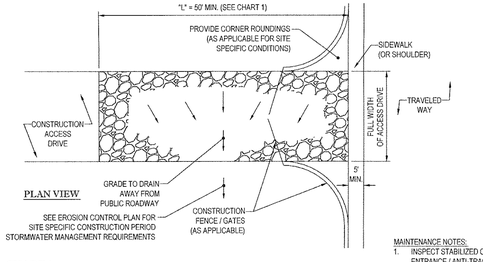
PERSPECTIVE OF FENCE

TYP. SILTATION FENCE DETAIL

N.T.S.



PROFILE VIEW



PLAN VIEW

CHART 1

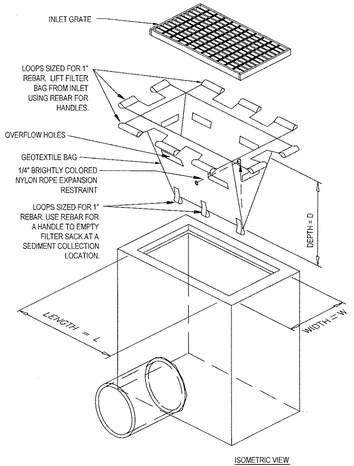
PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2% TO 5%	100 FT	200FT
>5%	ENTIRE ENTRANCE STABILIZED WITH FABC BASE COURSE (1)	

(1) AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

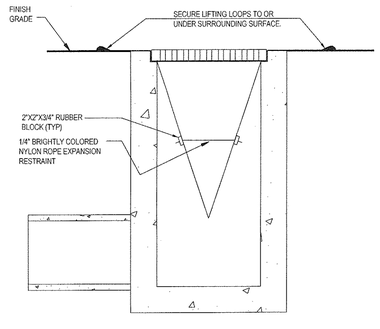
MAINTENANCE NOTES:
1. INSPECT STABILIZED CONSTRUCTION ENTRANCE / ANTI-TRACKING PAD AND SEDIMENT DISPOSAL AREA WEEKLY OF AFTER EVERY MAJOR RAIN STORM EVENT.
2. WASH WATER (IF USED) SHALL BE DIRECTED TOWARD A SEDIMENT TRAP, SUFFICIENTLY SIZED FOR SPECIFIC SITE CONDITIONS.
3. EXCESSIVELY MUD-CLOGGED STONE SHALL BE REMOVED AND REPLACED, AS NEEDED.

STABILIZED CONSTRUCTION ENTRANCE/EXIT

N.T.S.



ISOMETRIC VIEW



SECTION VIEW
PROFILE VIEW OF INSTALLED FILTER SACK

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

1. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
3. PLACE AN OIL ADSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
4. INSPECT PER REGULATORY REQUIREMENTS.
5. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
6. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES
7. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

DO NOT USE IN PAVED AREAS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

TO BE USED IN EXISTING RIGHT OF WAY

FILTER SACKS (NYS DOT INLETS ONLY)

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REVISIONS

REV	DATE	COMMENT	BY
1	03/09/15	FRONT YARD SETBACK	TCF
2	05/28/15	PER TOWN COMMENTS	TCF
3	07/9/15	PHASING PLANS	TCF
4	08/27/15	OFFICE FULL DESIGN	TCF
5	12/01/15	PER NYSDOT COMMENTS	TCF
6	01/20/16	PER CLIENT COMMENTS	TCF
7	04/14/16	MISC. COMMENTS	TCF
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12			
13			
14			
15			

PRELIMINARY

PROJECT No.: B140197
DRAWN BY: TCF
CHECKED BY: RWO
DATE: 01/27/2015
SCALE: AS NOTED
CAD I.D.: B140197SS19

PROJECT:
SITE DEVELOPMENT PLANS
FOR
RHINEBECK REALTY, LLC

LOCATION OF SITE
1413 UNION AVENUE
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

BOHLER ENGINEERING
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R.W. OSTERHOUDT
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 076930

SHEET TITLE:
SOIL EROSION CONTROL NOTES & DETAILS SHEET

SHEET NUMBER:
9
OF 15

REV 7 - 04/14/2016

CITY OF NEWBURGH LANDSCAPE REQUIREMENTS

SECTION OF BY-LAW	DESCRIPTION	REQUIRED	PROPOSED
	ONE TREE PER 8 PARKING SPACES 153 SPACES / 8 = 19.1 TREES	19.1 TREES	20 TREES

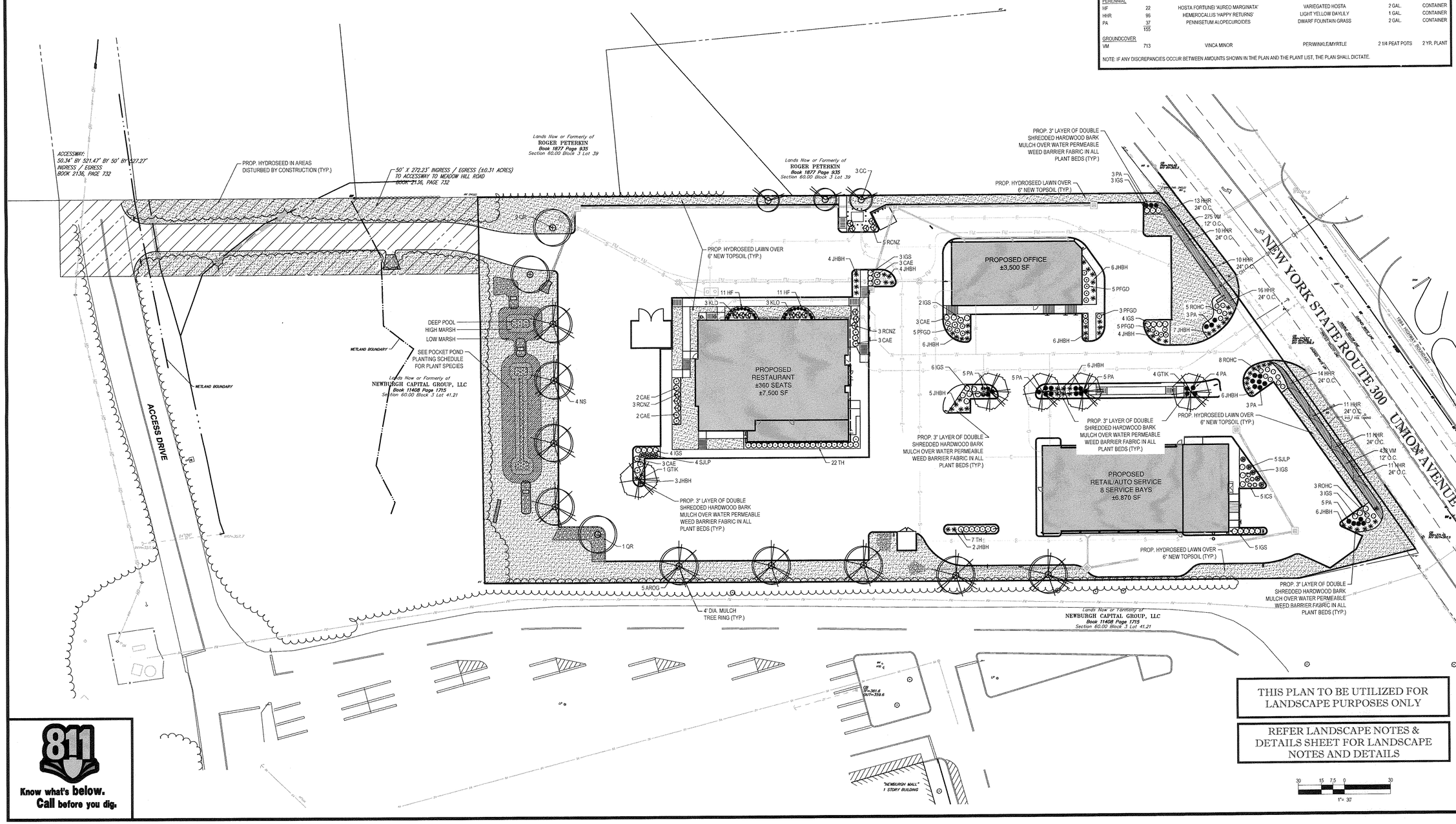
POCKET POND PLANTING SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SPACING	RATIO	SQ. FT.
LOW MARSH							
	68	PELTANDRA VIRGINICA	ARROW ARUM	2" PLUG	3' O.C.	35%	607
	68	PONTEDERIA CORDATA	PICKEREL WEED	2" PLUG	3' O.C.	35%	607
	58	SAGITTARIA LATIFOLIA	DUCK POTATO	2" PLUG	3' O.C.	30%	520
HIGH MARSH							
	25	ACORNUS AMERICANAS	SWEETFLAG	2" PLUG	3' O.C.	35%	220
	25	CALTHA PALUSTRIS	MARSH MARIGOLD	2" PLUG	3' O.C.	35%	220
	21	IRIS VERSICOLOR	BLUE FLAG IRIS	2" PLUG	3' O.C.	30%	188
DEEP POOL							
	15	NUPHAR LUTEA	YELLOW WATER LILY	TUBERS	3' O.C.	50%	135
	15	NYMPHAEA ODORATA	WHITE WATER LILY	TUBERS	3' O.C.	50%	135

LANDSCAPE SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SHADE TREE					
AROG	5	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2 1/2-3" CAL.	B+B
GTIK	5	GLEDITSIA TRIACANTHOS VAR. INTERMIS 'SKYCOLE'	SKYLINE THORNLESS HONEYLOCUST	2 1/2-3" CAL.	B+B
NS	4	NYSSA SYLVATICA	TUPELO	2 1/2-3" CAL.	B+B
QR	3	QUERCUS RUBRA	RED OAK	2 1/2-3" CAL.	B+B
	17				
ORNAMENTAL TREE					
CC	3	CERCIS CANADENSIS	EASTERN REBUD	2-2 1/2" CAL.	B+B
EVERGREEN SHRUB					
ICS	5	ILEX CRENATA 'STEEDS'	STEEDS JAPANESE HOLLY	30-36"	#3 CAN
IGS	34	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	24-30"	#5 CAN
JHBH	69	JUNIPERUS HORIZONTALIS 'BAR HARBOR'	BAR HARBOR CREEPING JUNIPER	15-18" SPRD.	#3 CAN
KLO	6	KALMIA LATIFOLIA 'OLYMPIC FIRE'	OLYMPIC FIRE MOUNTAIN LAUREL	30-36"	B+B
RCNZ	11	RHODODENDRON CATAWBIENSE 'NOVA ZEMBLA'	NOVA ZEMBLA RHODODENDRON	30-36"	B+B
ROHC	16	RHODODENDERON X OBTUSUM 'HINO CRIMSON'	HINO CRIMSON AZALEA	18-24"	#3 CAN
TH	29	TAXUS MEDIA 'HICKSII'	HICKS YEW	24-30"	B+B
	170				
DECIDUOUS SHRUB					
CAE	14	CORNUS ALBA 'ELEGANTISSIMA'	VARIEGATED RED TWIG DOGWOOD	2-3'	B+B
PFGD	18	POTENTILLA FRUTICOSA 'GOLD DROP'	GOLD DROP CINQUEFOIL	15-18"	#3 CAN
SJLP	9	SPIREA JAPONICA 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	15-18"	#3 CAN
	41				
PERENNIAL					
HF	22	HOSTA FORTUNEI 'AUREO MARGINATA'	VARIEGATED HOSTA	2 GAL.	CONTAINER
HHR	95	HEMEROCALLIS 'HAPPY RETURNS'	LIGHT YELLOW DAYLILY	1 GAL.	CONTAINER
PA	37	PENNISETUM ALOPECUROIDES	DWARF FOUNTAIN GRASS	2 GAL.	CONTAINER
	155				
GROUNDCOVER					
VM	713	VINCA MINOR	PERIWINKLE/MYRTLE	2 1/4 PEAT POTS	2 YR. PLANT

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.



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PRELIMINARY

PROJECT No.:	B140197
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SCALE:	AS NOTED
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PROJECT: SITE DEVELOPMENT PLANS FOR RHINEBECK REALTY, LLC

LOCATION OF SITE
1413 UNION AVENUE
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

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SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
10
OF 15

REV 7 - 04/14/2016

LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:
THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS
A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM 6" THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN
I. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
II. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES /DETAILS.

E. FERTILIZER
I. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER.
FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
II. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

F. PLANT MATERIAL
I. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN).
II. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
III. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
IV. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1¼", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED.
PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
V. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
VI. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
VII. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
VIII. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES
A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS
A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION
A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS
A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
I. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
II. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM.
COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
III. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING
A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING
A. CONTRACTOR SHALL PROVIDE A 6" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.
B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.
C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.A.]):
I. 20 POUNDS 'GRO-POWER' OR APPROVED SOIL CONDITIONER/FERTILIZER
II. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING
A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
I. PLANTS: MARCH 15 TO DECEMBER 15
II. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELREUTERIA	QUERCUS VARIETIES
LIQUIDAMBAR STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES

H. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
I. 1 PART PEAT MOSS
II. 1 PART COMPOSTED COW MANURE BY VOLUME
III. 3 PARTS TOPSOIL BY VOLUME
IV. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
A) 2 TABLETS PER 1 GALLON PLANT
B) 3 TABLETS PER 5 GALLON PLANT
C) 4 TABLETS PER 15 GALLON PLANT
D) LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK

I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

L. GROUND COVER AREAS SHALL RECEIVE A ¼" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)
A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING
A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE
A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.

C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

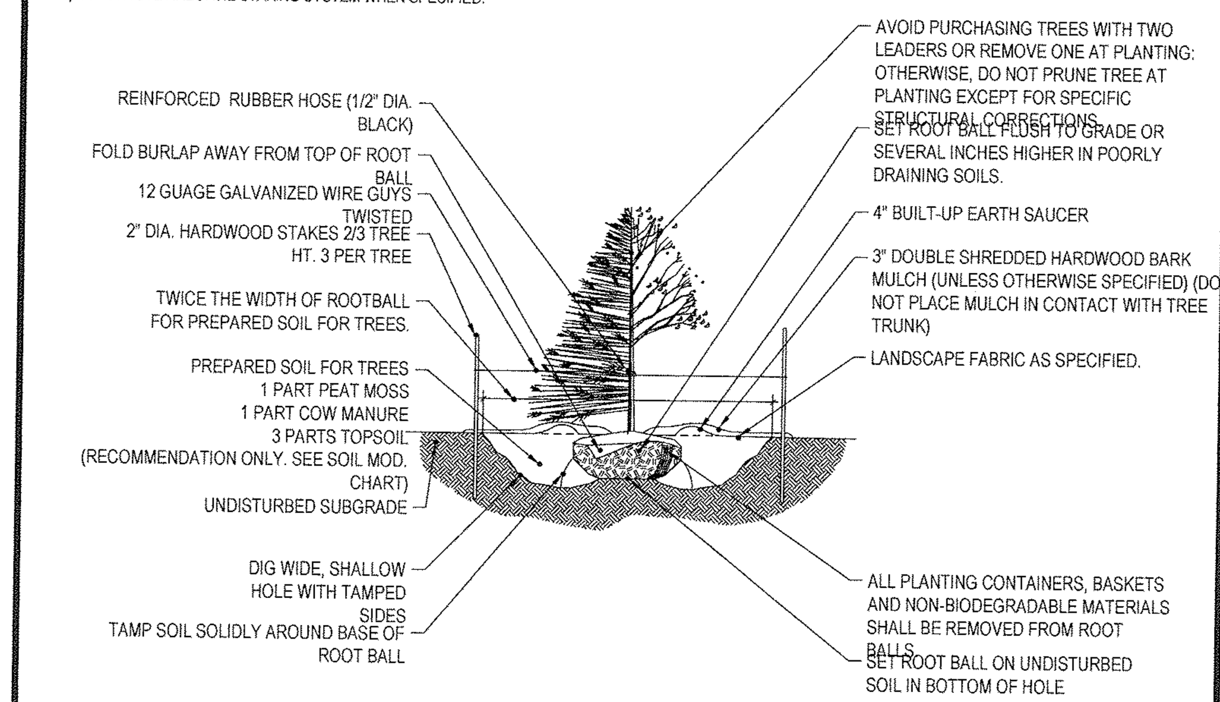
D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP
A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

14. MAINTENANCE (ALTERNATIVE BID):
A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIATE TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE OWNER/OPERATOR.

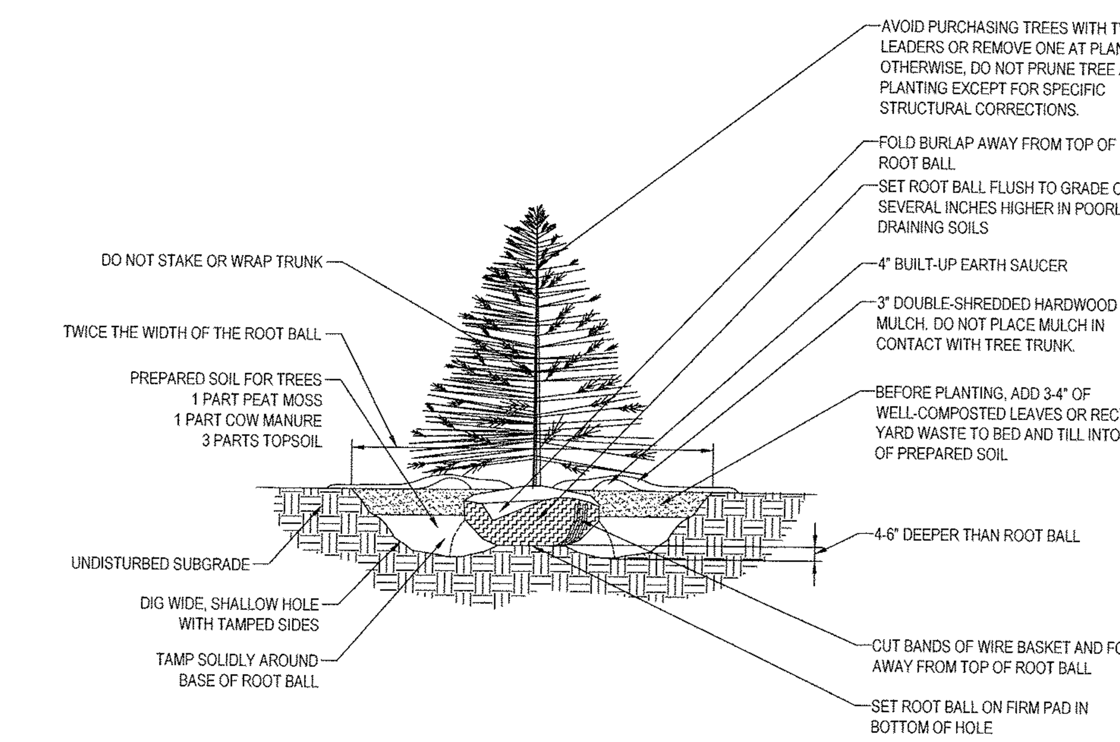
NOTES:
1.) NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2.) REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 1/3 FROM ROOT BALL.
3.) PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4.) THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5.) THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.
6.) REFER TO THE CHART "GENERAL RANGE OF SOIL MODIFICATIONS & VOLUMES FOR VARIOUS SOIL CONDITIONS" TO DETERMINE MINIMUM WIDTH OF PREPARED SOIL (X).
7.) SUBSTITUTE ARBORTIE STAKING SYSTEM WHEN SPECIFIED.



TREE PLANTING DETAIL

N.T.S.

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. REMOVE ALL ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 1/3 FROM TOP OF ROOT BALL.
3. PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5. THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 -3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.

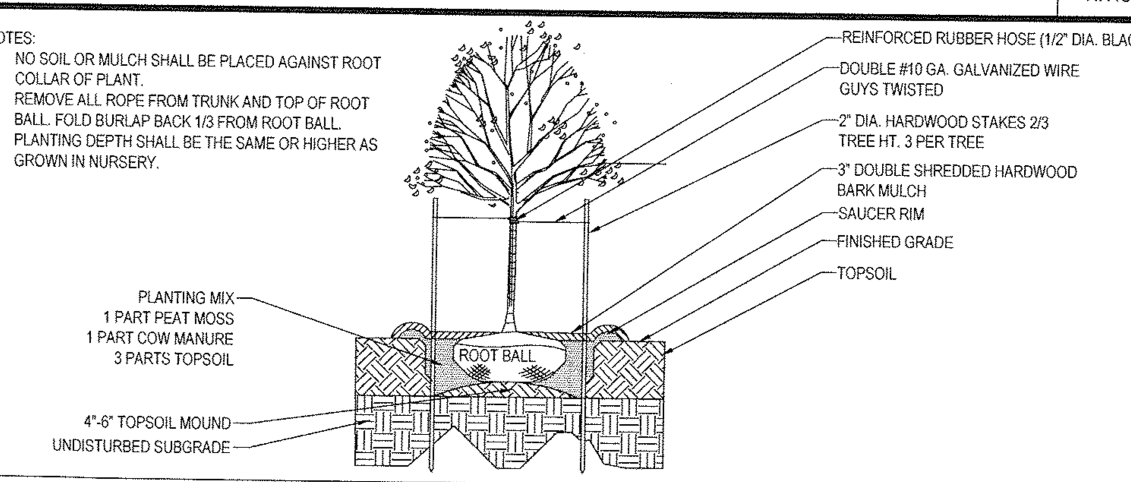


REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT

EVERGREEN TREE PLANTING DETAIL

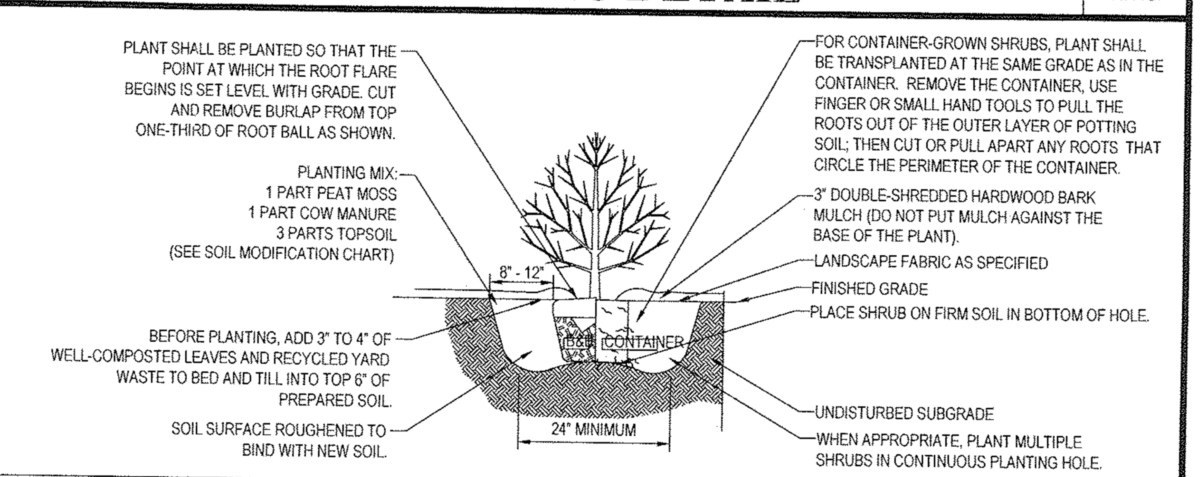
N.T.S.

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. REMOVE ALL ROPE FROM TRUNK AND TOP OF ROOT BALL. FOLD BURLAP BACK 1/3 FROM ROOT BALL.
3. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.



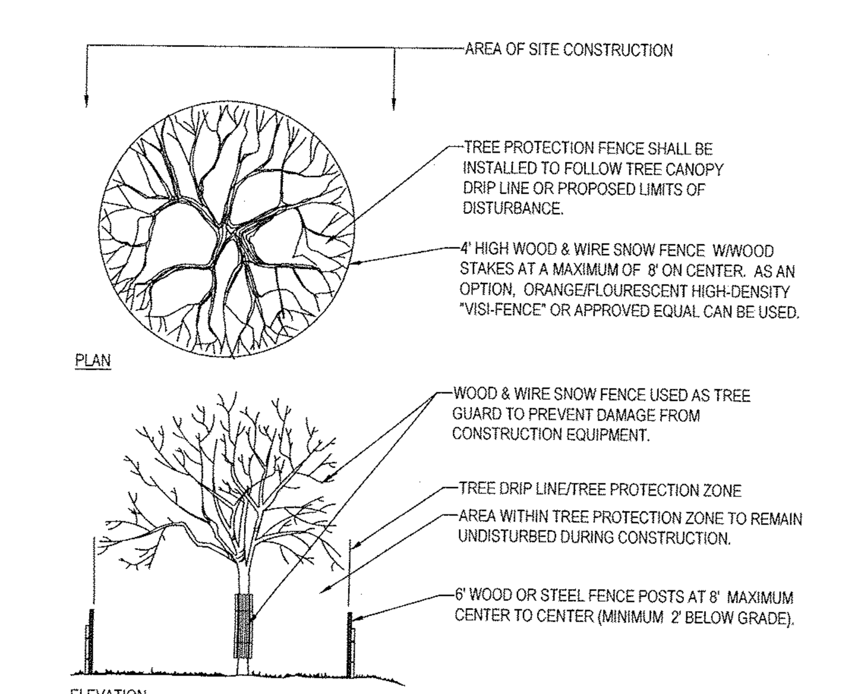
DECIDUOUS TREE PLANTING DETAIL

N.T.S.



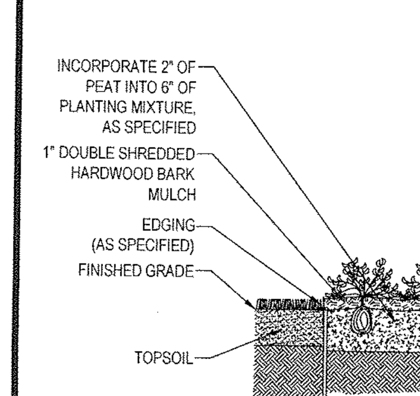
SHRUB PLANTING DETAIL

N.T.S.



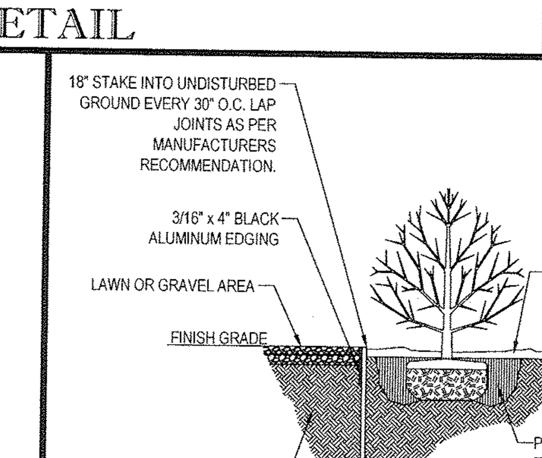
TREE PROTECTION DURING SITE CONSTRUCTION

N.T.S.



GROUNDCOVER PLANTING

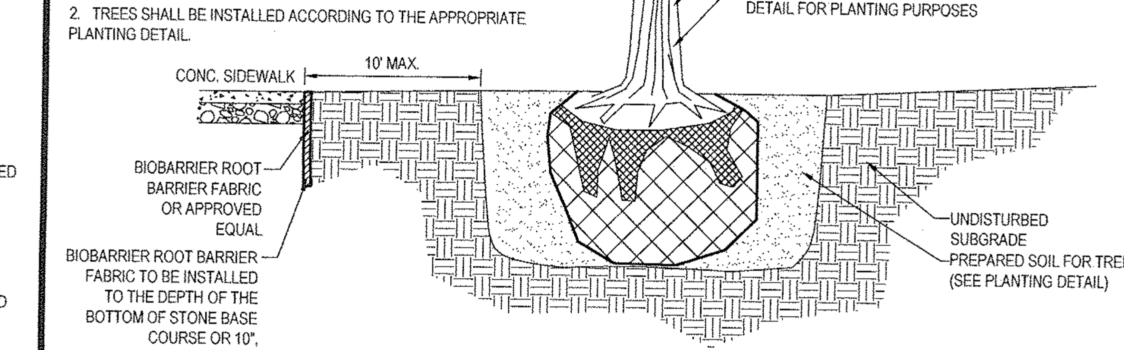
N.T.S.



BLACK ALUMINUM EDGING

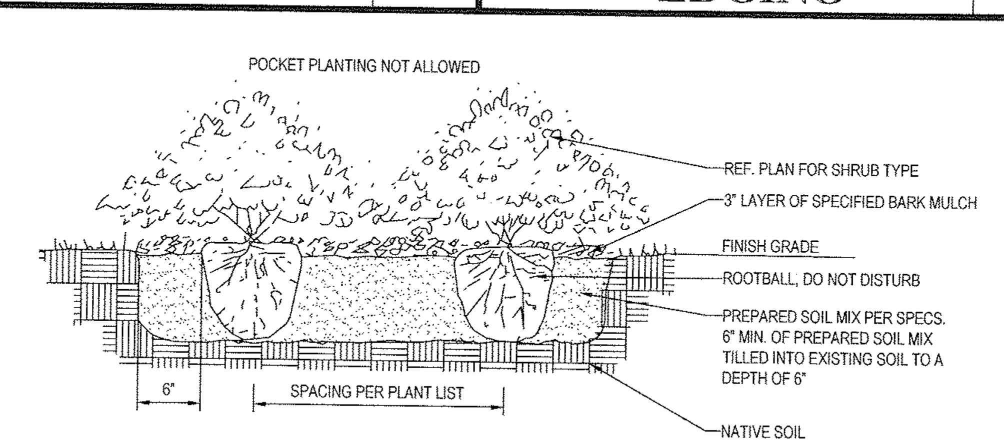
N.T.S.

NOTES:
1. ANY TREE INSTALLED WITHIN 10 FT. OF NEW CONCRETE SIDEWALKS SHOULD BE INSTALLED WITH BIOBARRIER ROOT BARRIER FABRIC AS SHOWN
2. TREES SHALL BE INSTALLED ACCORDING TO THE APPROPRIATE PLANTING DETAIL.



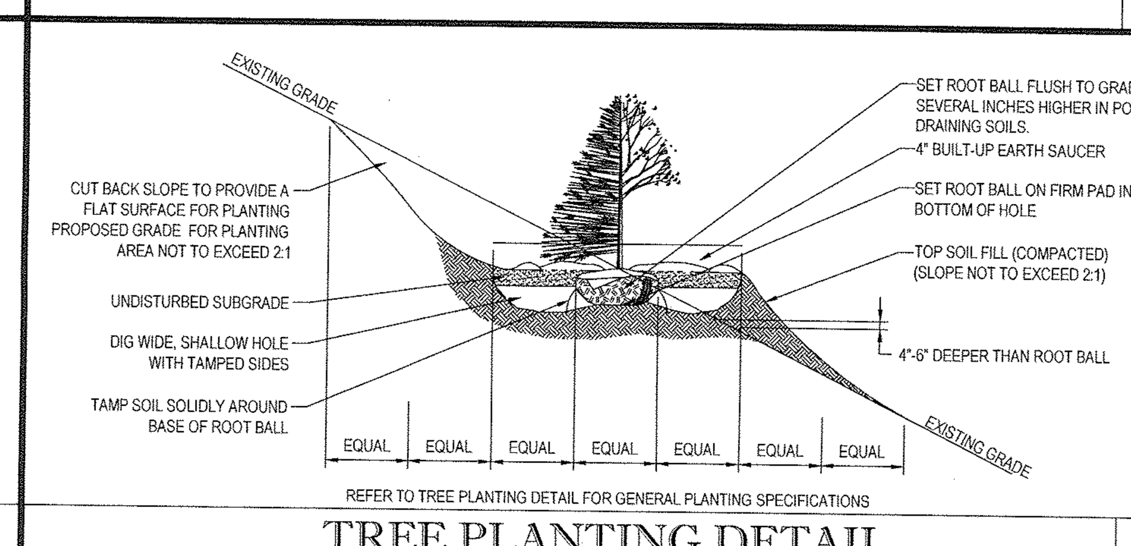
BI0BARRIER ROOT BARRIER DETAIL

N.T.S.



SHRUB/GROUNDCOVER DETAIL

N.T.S.



REFER TO TREE PLANTING DETAIL FOR GENERAL PLANTING SPECIFICATIONS

TREE PLANTING DETAIL - ON SLOPE

N.T.S.

BOHLER ENGINEERING
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SURVEYORS
PROJECT MANAGERS
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1	03/09/15	FRONT YARD SETBACK	TCF
2	05/28/15	PER TOWN COMMENTS	TCF
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PRELIMINARY

PROJECT No.:	B140197
DRAWN BY:	TCF
CHECKED BY:	RWO
DATE:	01/27/2015
SCALE:	AS NOTED
CAD I.D.:	B140197SS19

PROJECT: SITE DEVELOPMENT PLANS
FOR
RHINEBECK REALTY, LLC

LOCATION OF SITE
1413 UNION AVENUE
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

BOHLER ENGINEERING
17 COMPUTER DRIVE WEST
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R.W. OSTERHOUDT
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 076930

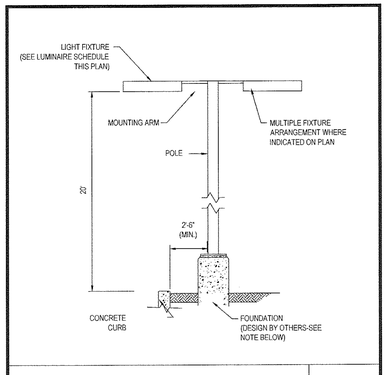
SHEET TITLE:
LANDSCAPE NOTES & DETAILS SHEET

SHEET NUMBER:
11
OF 15

REV 7 - 04/14/2016

LUMINAIRE SCHEDULE

SYMBOL	QTY	ARRANGEMENT	LUMENS	DESCRIPTION
A	21	SINGLE	1500	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-3-LED-128-HO-NW-UE (LSI INDUSTRIES)
B	1	SINGLE	15800	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-FT-LED-128-HO-NW-UE (LSI INDUSTRIES)
C	2	DOUBLE @ 180	15800	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-FT-LED-126-HO-NW-UE (LSI INDUSTRIES)
D	1	DOUBLE @ 90	15800	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-3-LED-128-HO-NW-UE (LSI INDUSTRIES)
E	3	SINGLE	12500	176 WATT LED AREA LIGHTS - AEROMAX MEDIUM XAMU-5-LED-128-HO-NW-UE (LSI INDUSTRIES)
F	11	SINGLE	7900	89 WATT LED WALL LIGHTS - AEROMAX XAWSU-3-LED-64-HO-NW (LSI INDUSTRIES)



AREA LIGHT DETAIL

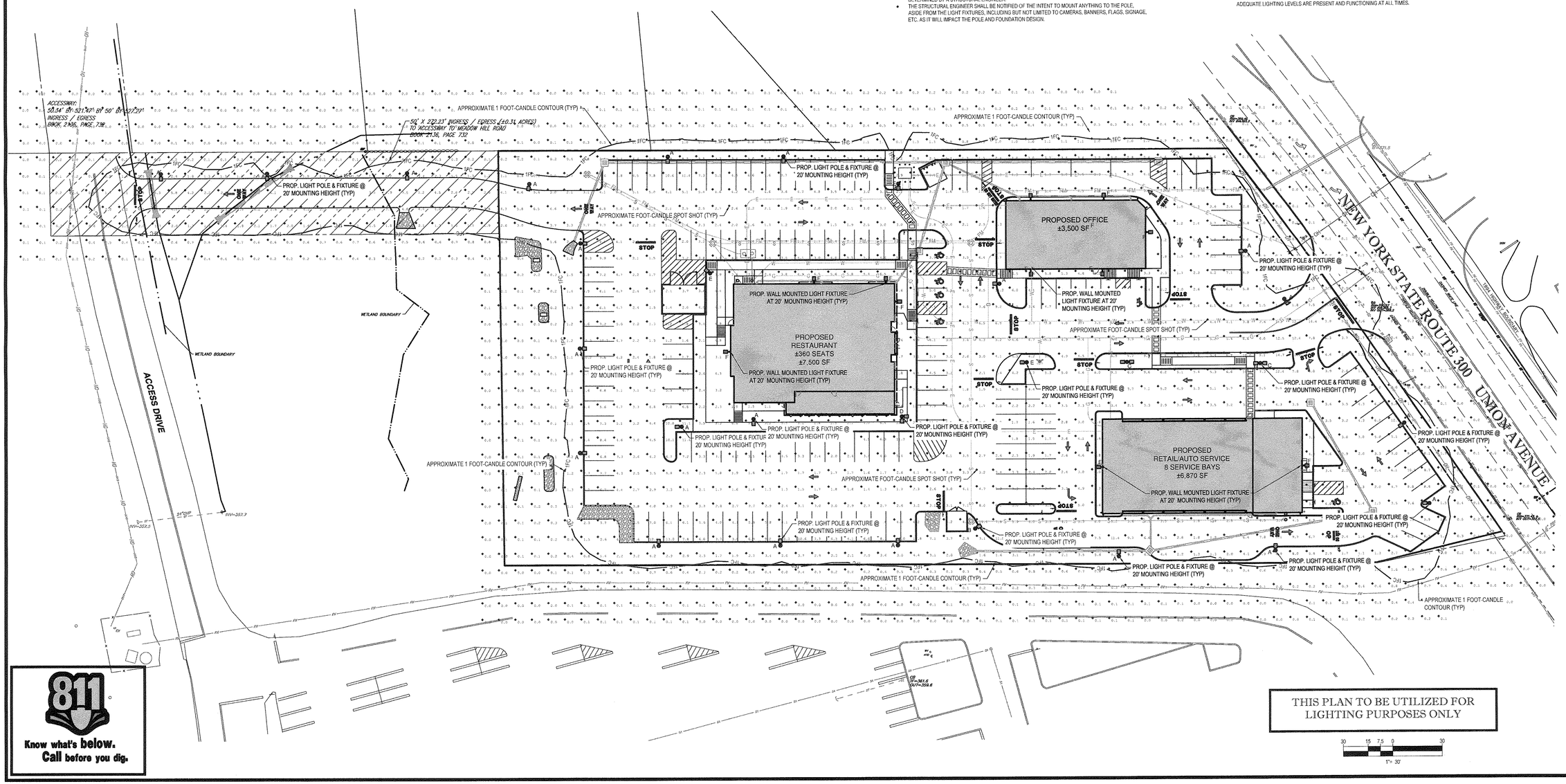
N.T.S.

NOTE: THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS.

- SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER.
- THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

LIGHTING NOTES:

1. THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
2. THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.90 FOR ALL LED LUMINAIRES, 0.80 FOR ALL HIGH PRESSURE SODIUM LUMINAIRES OR 0.72 FOR ALL METAL HALIDE LUMINAIRES UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOTCANDLES.
4. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINAIRES, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
5. WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY, DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC, ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
6. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
7. CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
8. IT IS LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
9. THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
10. THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.
11. WHEN A BANK ATM IS INCLUDED IN THE PLAN, THE LIGHTING DESIGN REPRESENTS BOHLER'S UNDERSTANDING AND INTERPRETATION OF THE REGULATORY LIGHTING LEVELS INTENDED BY PUBLISHED STANDARDS.
12. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.



THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

30 15 7.5 0 30
1"= 30'

811 Know what's below. Call before you dig.

BOHLER ENGINEERING

CORPORATE OFFICE: WARREN, NJ

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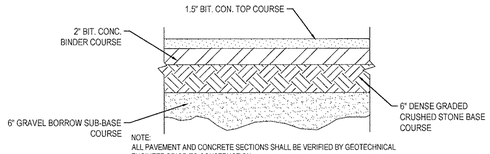
R.W. OSTERHOUDT
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 076930

SHEET TITLE: LIGHTING PLAN

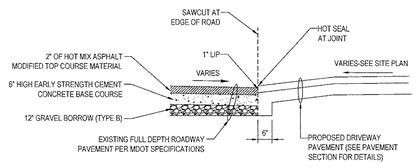
SHEET NUMBER: 12 OF 15

REV 7 - 04/14/2016



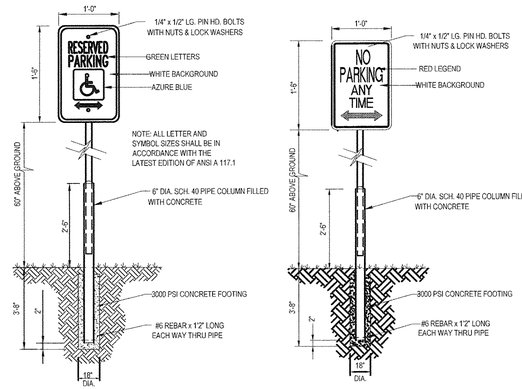
TYPICAL PAVEMENT SECTION

N.T.S.



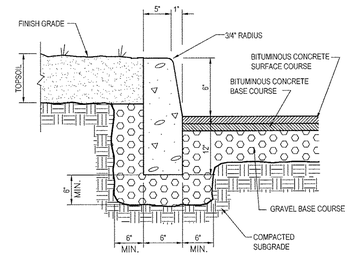
DRIVEWAY CONSTRUCTION DETAIL

N.T.S.



ACCESSIBLE / NO PARKING SIGN DETAILS

N.T.S.



NOTES:
CURB SHALL CONSIST OF 4,000 PSI AIR ENTRAINED CONCRETE, EXPOSED EDGES TO HAVE RUBBED FINISH AND SURFACE SHALL BE TREATED WITH A CONCRETE PENETRANT/SEALER.

THE ENDS OF CURB SECTIONS SHALL BE CHAMFERED 1/4 INCH.

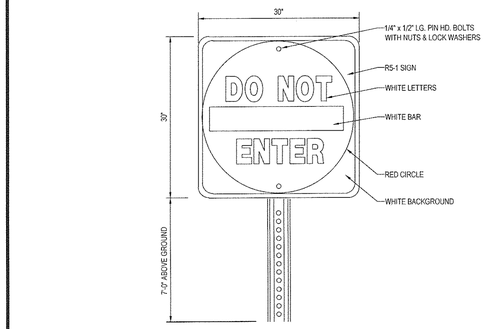
THE CORNERS OF CURB SECTIONS SHALL MATCH THE ADJACENT CURB IN SIZE, COLOR AND FINISH.

CURBS, CURB CORNERS OR EDGING SHALL BE FITTED TOGETHER AS CLOSELY AS POSSIBLE.

EXPANSION JOINTS SHALL BE INSTALLED AT A MAXIMUM OF TWENTY FEET (20') ON CENTER USING PREFORMED EXPANSION JOINT FILLER HAVING A THICKNESS OF 1/2 INCH.

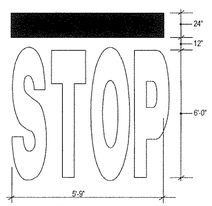
CONCRETE CURB DETAIL

N.T.S.



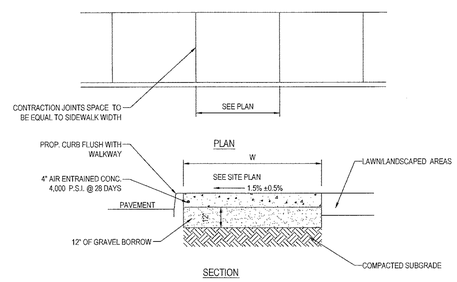
"DO NOT ENTER" SIGN

N.T.S.



'STOP' BAR DETAIL

N.T.S.

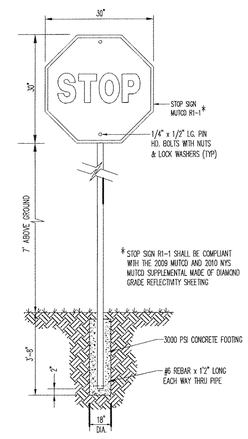


NOTE:
1. PROVIDE 1/2" PREMOLDED BITUMINOUS EXPANSION JOINT AT 20' O.C.
2. ALL JOINTS SEALED PER SPECIFICATIONS.

NOTE:
ALL PAVEMENT AND CONCRETE DETAILS SHOWN HEREIN WERE PREPARED WITHOUT THE BENEFIT OF A GEOTECHNICAL REPORT OR RECOMMENDATION. IT IS RECOMMENDED THAT THESE DETAILS ARE REVIEWED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.

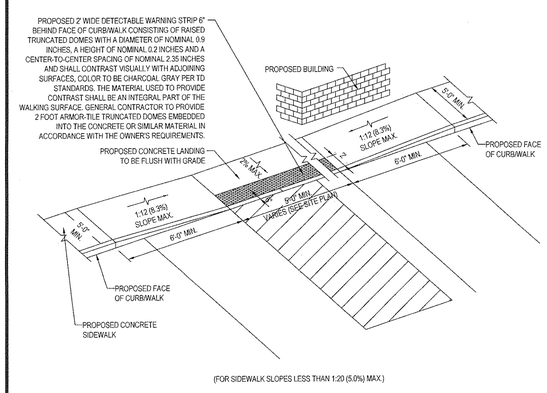
SIDEWALK DETAIL

N.T.S.



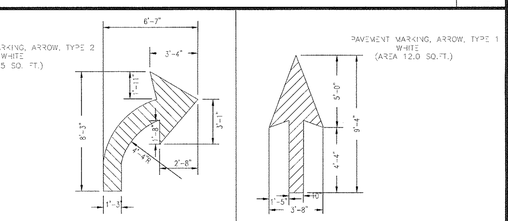
'STOP' SIGN

N.T.S.



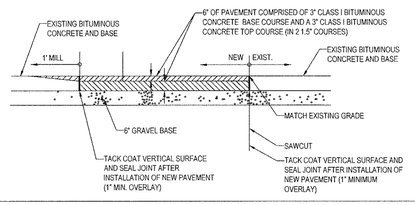
SLOPED WALK DETAIL

N.T.S.



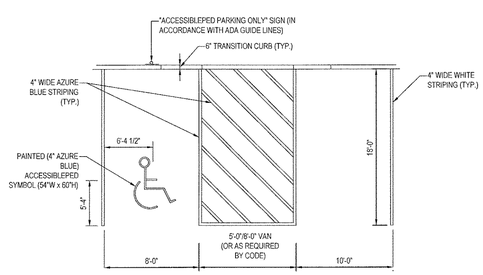
PAVEMENT MARKINGS ARROWS

N.T.S.



ROADWAY PATCHING DETAIL

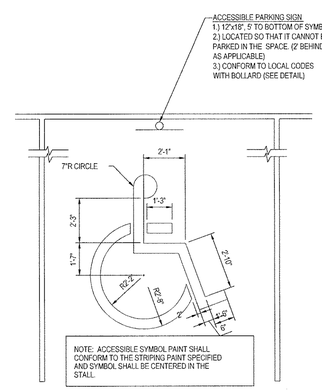
N.T.S.



NOTE: ALL PAVEMENT STRIPING AND MARKINGS SHALL CONSIST OF CHLORINATED RUBBER PAINT APPLIED TO A DRY SURFACE WHEN THE TEMPERATURE IS GREATER THAN 40°F. PAINT SHALL BE APPLIED AT A MINIMUM OF 0.015" (15 MIL) FILM THICKNESS

ACCESSIBLE STALL MARKINGS & PARKING LOT STRIPING DETAIL

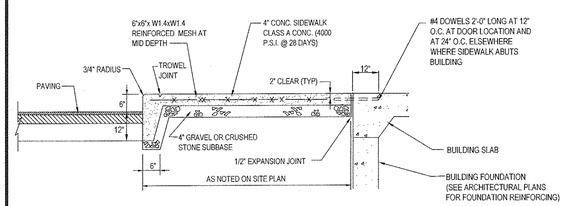
N.T.S.



NOTE: ACCESSIBLE SYMBOL PAINT SHALL CONFORM TO THE STRIPING PAINT SPECIFIED AND SYMBOL SHALL BE CENTERED IN THE STALL.

ACCESSIBLE PARKING STALL PAINTING DETAIL

N.T.S.



NOTE:

1. EXPANSION JOINTS SHALL BE INSTALLED EVERY 20 FEET WITH SCORE JOINTS EVERY 5 FEET. EXPANSION JOINTS SHALL ALSO BE PLACED WHERE THE SIDEWALK ABUTS THE BUILDING, BETWEEN ADJACENT SLABS, CURBS OR AT PENETRATION STRUCTURES. EXPANSION JOINTS ARE TO BE 1/2" WIDE PREMOLDED BITUMINOUS MATERIAL. SLOPE ACROSS SIDEWALK TO BE 1/4" PER FOOT TOWARDS PAVEMENT.
2. TRANSVERSE FALSE JOINTS AT 5' INTERVALS.
3. REFER TO GEOTECHNICAL REPORT ORCONFIRM WITH A GEOTECHNICAL ENGINEER FOR SITE SPECIFIC SIDEWALK SPECIFICATION, WHICH MAY REQUIRE ADDITIONAL STONE OR CONCRETE THICKNESS.

TYPICAL CURB AND SIDEWALK DETAIL

N.T.S.

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TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

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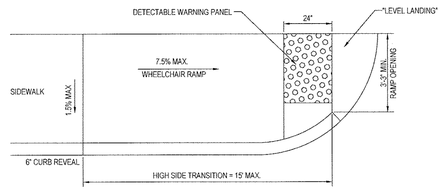
Fax: (518) 438-0900
www.BohlerEngineering.com

R.W. OSTERHOUDT
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 076930

SHEET TITLE:
CONSTRUCTION DETAIL SHEET

SHEET NUMBER:
13 OF 15

REV 7 - 04/14/2016



ADA ACCESSIBLE RAMP DETAIL

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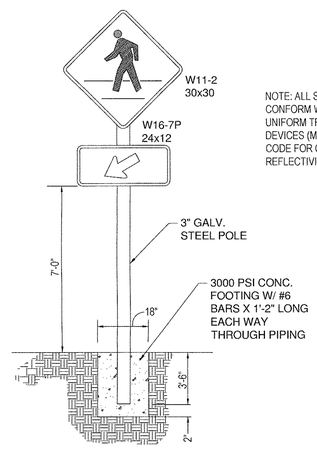
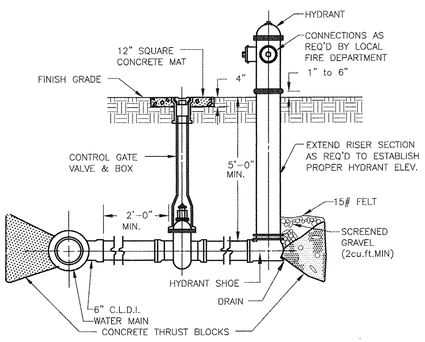


NOTE: ALL SIGNS SHALL CONFORM WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCAL CODE FOR COLOR, SIZE, REFLECTIVITY, AND HEIGHT.

PEDESTRIAN CROSSING SIGNAGE

N.T.S.



HYDRANT DETAIL

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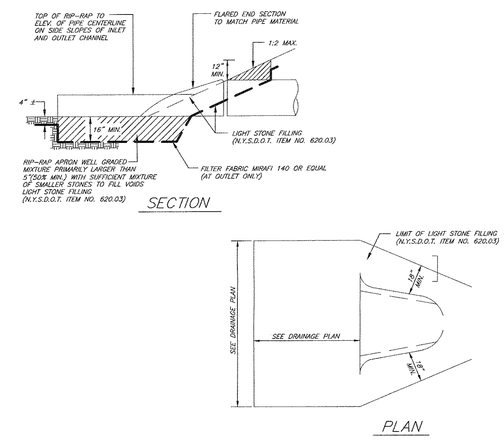
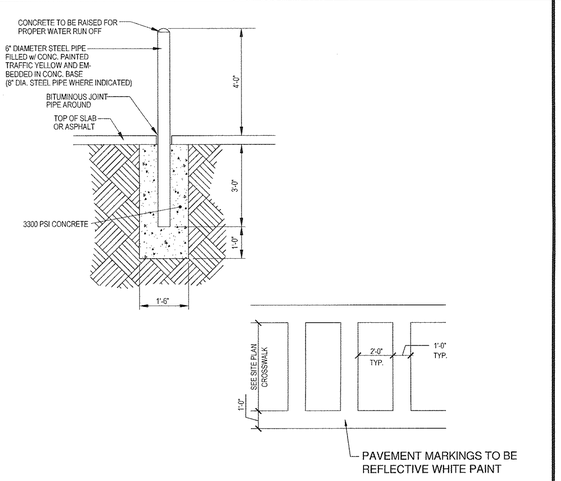


SECTION

PLAN

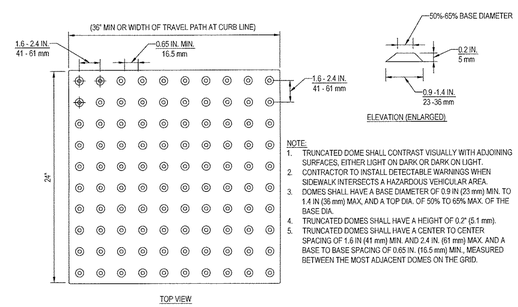
STORM SEWER END SECTION DETAILS

N.T.S.



BOLLARD & CROSSWALK DETAIL

N.T.S.

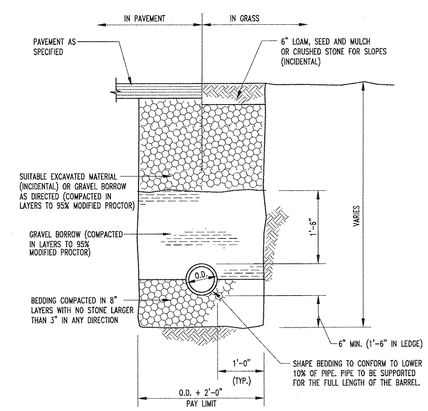


NOTE:
1. TRUNCATED DOME SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT ON DARK OR DARK ON LIGHT.
2. CONTRACTOR TO INSTALL DETECTABLE WARNINGS WHEN SIDEWALK INTERSECTS A HAZARDOUS VEHICULAR AREA.
3. DOMES SHALL HAVE A BASE DIAMETER OF 0.9 IN (23 mm) MIN. TO 1.4 IN (36 mm) MAX, AND A TOP DIA. OF 50% TO 65% MAX. OF THE BASE DIA.
4. TRUNCATED DOMES SHALL HAVE A HEIGHT OF 0.2" (5.1 mm).
5. TRUNCATED DOMES SHALL HAVE A CENTER TO CENTER SPACING OF 1.6 IN (41 mm) MIN. AND 2.4 IN. (61 mm) MAX. AND A BASE TO BASE SPACING OF 0.65 IN. (16.5 mm) MIN., MEASURED BETWEEN THE MOST ADJACENT DOMES ON THE GRID.

NOTE TO DESIGNER:
IF A WALK CROSSES OR ADJOINS A VEHICULAR WAY WHERE THE WALKING SURFACE AND PAVEMENT ARE NOT SEPERATED BY CURBS, RAILING OR OTHER ELEMENTS, THE BOUNDARY BETWEEN THE AREA SHALL BE DEFINIED BY A CONTINUOUS DETECTABLE WARNING WHICH IS MIN. 36" WIDE (ADA ACCESSIBLE GUIDELINES PRINTED 11-4-06) AND MIN. 24" DEPTH.

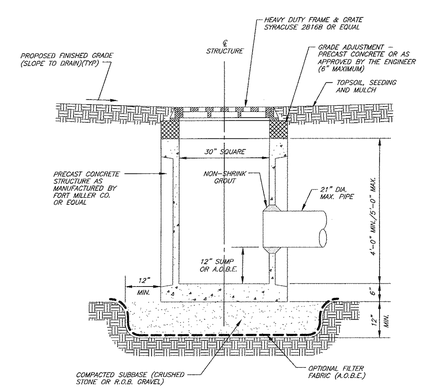
TRUNCATED DOME PATTERN

N.T.S.



STORM SEWER PIPE TRENCH DETAIL

N.T.S.



PRECAST CONCRETE CATCH BASIN

N.T.S.

BOHLER ENGINEERING

CORPORATE OFFICE:
♦ WARREN, NJ

OFFICES:
♦ SOUTHBOROUGH, MA
♦ BOWIE, MD
♦ TOWSON, MD
♦ ALBANY, NY
♦ HAUPPAUGE, NY
♦ TAMPA, FL
♦ PHILADELPHIA, PA
♦ CENTER VALLEY, PA
♦ HARRISBURG, PA
♦ CHARLOTTE, NC
♦ RALEIGH, NC
♦ STERLING, VA
♦ WASHINGTON, DC
♦ WASHINGTON, NJ

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

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REVISIONS

REV	DATE	COMMENT	BY
1	03/09/15	FRONT YARD SETBACK	TCF
2	05/28/15	PER TOWN COMMENTS	TCF
3	07/9/15	PHASING PLANS	TCF
4	08/27/15	OFFICE FULL DESIGN	TCF
5	12/01/15	PER NYSDOT COMMENTS	TCF
6	01/20/16	PER CLIENT COMMENTS	TCF
7	04/14/16	MISC. COMMENTS	TCF
8			
9			
10			
11			
12			
13			
14			
15			

PRELIMINARY

PROJECT No.:	B140197
DRAWN BY:	TCF
CHECKED BY:	RWO
DATE:	01/27/2015
SCALE:	AS NOTED
CAD I.D.:	B140197SS19

PROJECT:
SITE DEVELOPMENT PLANS
—FOR—
RHINEBECK REALTY, LLC

LOCATION OF SITE
1413 UNION AVENUE
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

BOHLER ENGINEERING
17 COMPUTER DRIVE WEST
ALBANY, NY 12205
Phone: (518) 438-9900
Fax: (518) 438-0900
www.BohlerEngineering.com

R.W. OSTERHOUDT
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 076930

SHEET TITLE:
CONSTRUCTION DETAIL SHEET

SHEET NUMBER:
14 OF 15

REV 7 - 04/14/2016

SANITARY SEWER SYSTEM NOTES

1. DESIGN, CONSTRUCTION, MATERIAL STANDARDS, MINIMUM SEPARATION DISTANCES, AND INSPECTION REQUIREMENTS SHALL COMPLY WITH:
   - TOWN OF NEWBURGH SEWER DEPARTMENT
   - NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION REQUIREMENTS
   - APPROVED PLANS
   - APPROVED ENGINEERING REPORT(S)
   - TOWN OF NEWBURGH
2. A LICENSED PROFESSIONAL ENGINEER SHALL SUPERVISE CONSTRUCTION IN ACCORDANCE WITH THE APPROVED PLAN
3. ALL PROPOSED SANITARY SEWER SYSTEM COMPONENTS SHALL CONFORM TO THE TOWN OF NEWBURGH SEWER DEPARTMENT SPECIFICATIONS AND REQUIREMENTS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE PROPOSED WORK. THE LAYOUT SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL FURNISH SHOP DRAWINGS FOR ALL PROPOSED IMPROVEMENTS TO THE ENGINEER FOR APPROVAL PRIOR TO THE BEGINNING OF CONSTRUCTION.
6. THE ENGINEER SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE PROPOSED WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER.
7. SEWER MAIN AND WATER MAIN SEPARATION: WHERE POSSIBLE, SEWERS SHALL BE LAID AT LEAST 10' HORIZONTALLY DISTANT FROM ANY EXISTING OR PROPOSED WATER MAIN. VERTICAL SEPARATION SHALL BE MAINTAINED TO PROVIDE 18" BETWEEN TOP OF SEWER AND INVERT OF WATER MAIN AT UTILITY CROSSINGS.
8. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE TOWN OF NEWBURGH REQUIREMENTS.
9. THE CONTRACTOR SHALL COMPLY WITH ALL O.S.H.A. AND OTHER STATE AND LOCAL SAFETY REQUIREMENTS DURING CONSTRUCTION.
10. ALL EXCAVATIONS SHALL BE KEPT DRY AND DEWATERED AT ALL TIMES DURING CONSTRUCTION.
11. ALL EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES SHALL BE MAINTAINED DURING CONSTRUCTION BY THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.
12. THE CONTRACTOR SHALL FERTILIZE, SEED AND MULCH ALL DISTURBED VEGETATED AREAS UNLESS OTHERWISE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
13. SEWER SERVICE TO BE PROVIDED BY TOWN OF NEWBURGH SEWER DEPARTMENT. ALL INSTALLATION AND MATERIAL SPECIFICATIONS FOR SANITARY SEWER MAINS AND SERVICE CONNECTIONS SHALL CONFORM TO TOWN OF NEWBURGH SEWER DEPARTMENT STANDARD DETAILS AND REQUIREMENTS.
14. TOWN OF NEWBURGH SEWER DEPARTMENT SUPERINTENDENT SHALL BE NOTIFIED OF COMMENCEMENT OF CONSTRUCTION FOR THE PURPOSES OF INSPECTION.
    CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT FROM THE TOWN OF NEWBURGH SEWER DEPARTMENT PRIOR TO CONSTRUCTION OF ANY PROPOSED SANITARY SEWERS.

TOWN SEWER SYSTEM NOTES

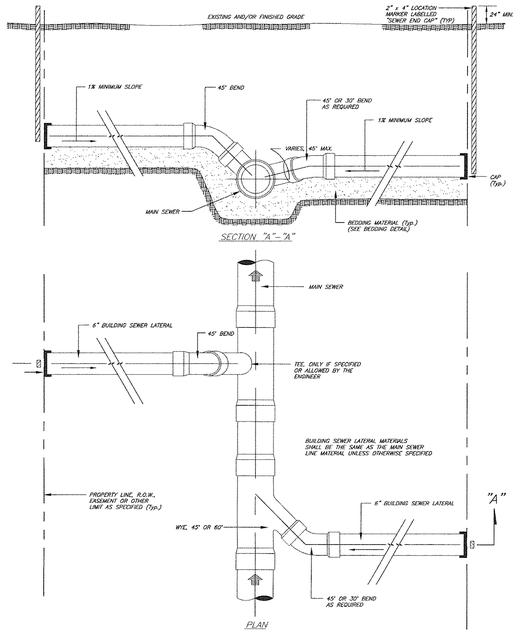
1. Construction of sanitary sewer facilities and connection to the Town of Newburgh sanitary sewer system requires a permit from the Town of Newburgh Sewer Department. All construction shall conform to the requirements of the NYSDEC and the Town of Newburgh.

2. All sewer pipe installation shall be subject to inspection by the Town of Newburgh Sewer Department. The Contractor shall be responsible for coordinating all inspections as required with the Town of Newburgh Sewer Department.

3. All gravity sanitary sewer service lines shall be 4 inches in diameter or larger and shall be SDR-35 PVC pipe conforming to ASTM D-3034-89. Joints shall be push-on with elastomeric ring gasket conforming ASTM D-3212. Fittings shall be as manufactured by the pipe supplier or equal and shall have a bell and spigot configuration compatible with the pipe.

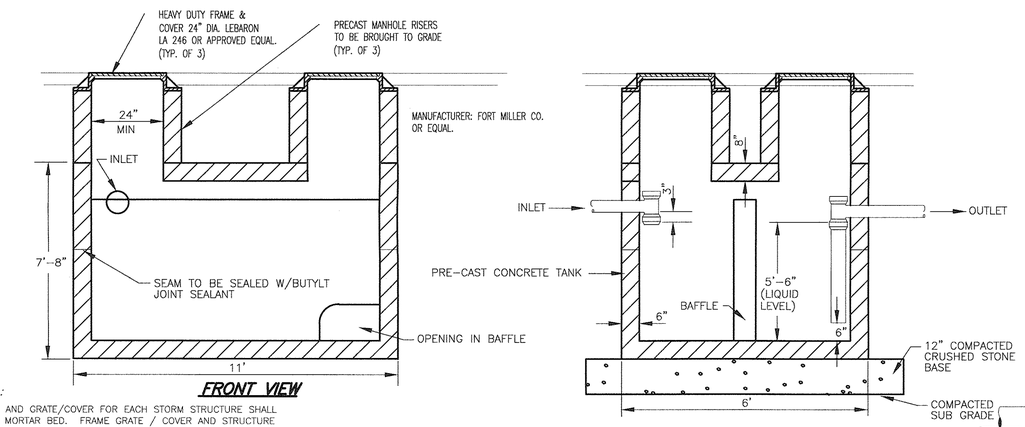
4. The sewer main shall be tested in accordance with Town of Newburgh requirements. All testing shall be coordinated with the Town of Newburgh Sewer Department.

5. The final layout of the proposed water and/or sewer connection, including all materials, size and location of service and all appurtenances, is subject to the review and approval of the Town of Newburgh Water and/or Sewer Department. No permits shall be issued for a water and/or sewer connection until a final layout is approved by the respective Department.



STANDARD SEWER SERVICE CONNECTIONS

N.T.S.



NOTES :

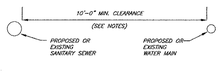
1. FRAME AND GRATE/COVER FOR EACH STORM STRUCTURE SHALL BE SET IN MORTAR BED. FRAME GRATE / COVER AND STRUCTURE SHALL BE H20 RATED.

2. GREASE TRAP TO BE HYDROSTATIC TESTED FOR 24 HOURS WITH NO APPRECIABLE LOSS. RESULTS OF THE TEST ARE TO BE PROVIDED IN WRITING TO THE DESIGN ENGINEER. HYDROSTATIC TESTING OF TANKS MUST BE WITNESSED BY CERTIFYING ENGINEER.

CONCRETE:	4000 PSI
REINFORCEMENT:	ASTM A615 – GRADE 60
ENTRAINED AIR:	5.0% – 9.0%
MEETS ASTM C890	

CONCRETE GREASE TRAP (2,000 GAL.)

N.T.S.

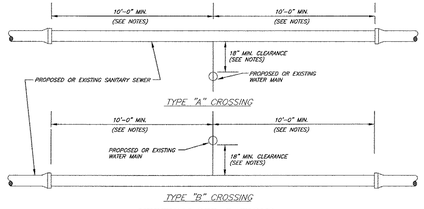


HORIZONTAL SEPARATIONS

NOTES:

WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, ONE OF THE FOLLOWING METHODS MUST BE SPECIFIED.

1. THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO WATER PIPE, AND SHALL BE PRESSURE TESTED AT 150 PSI TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.
2. EITHER THE WATER MAIN OR THE SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE HEALTH DEPARTMENT FOR USE IN WATER MAIN CONSTRUCTION.



VERTICAL SEPARATIONS

WATER AND SEWER SEPARATION DETAILS

N.T.S.

WATER SUPPLY SYSTEM NOTES

1. WATER SUPPLY SYSTEM COMPONENTS SHALL NOT BE PLACED IN OPERATION UNTIL AN "APPROVAL TO OPERATE" HAS BEEN ISSUED BY THE TOWN OF NEWBURGH WATER DEPARTMENT.

2. THERE SHALL BE NO CHANGES ON THESE PLANS IN ADVANCE OF, OR DURING CONSTRUCTION, WITHOUT PROPER APPROVAL OF THE DESIGN ENGINEER AND THE NEW YORK STATE DEPARTMENT OF HEALTH.

3. WATER SUPPLY SYSTEM SHALL CONFORM TO THE FOLLOWING:
   - RECOMMENDED STANDARDS FOR WATER WORKS ADOPTED BY THE GREAT LAKES–UPPER MISSISSIPPI RIVER BOARD OF STATE SANITARY ENGINEERS (NEW YORK STATE DEPARTMENT OF HEALTH BULLETIN NO. 42).
   - RECOMMENDED WATER SYSTEM DESIGN STANDARDS OF THE INSURANCE SERVICES OFFICE OF NEW YORK.
   - TOWN OF NEWBURGH WATER DEPARTMENT REGULATIONS.
   - NEW YORK STATE DEPARTMENT OF HEALTH PUBLICATION(S):
     - RURAL WATER SUPPLY.
     - RECOMMENDED STANDARDS FOR WATER WORKS.
4. A LICENSED PROFESSIONAL ENGINEER SHALL SUPERVISE CONSTRUCTION IN ACCORDANCE WITH THE APPROVED PLAN AND SUPPLEMENTAL DATA. HE SHALL THEN CERTIFY THE CONSTRUCTION, IN WRITING, AND FURNISH "AS BUILT" PLANS.
5. WATER LINES, HYDRANTS AND SERVICES SHALL BE INSTALLED, TESTED AND ACCEPTED IN ACCORDANCE WITH "LATHAM WATER DISTRICT'S STANDARD SPECIFICATIONS FOR WATER DISTRIBUTION SYSTEMS.
6. ALL PROPOSED WATER MAINS AND SERVICES CONSTRUCTION SHALL CONFORM TO THE NEW YORK STATE DEPARTMENT OF HEALTH REGULATIONS AND REQUIREMENTS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE PROPOSED WORK. THE LAYOUT SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
8. THE CONTRACTOR SHALL FURNISH SHOP DRAWINGS FOR ALL PROPOSED IMPROVEMENTS TO THE ENGINEER FOR APPROVAL PRIOR TO THE BEGINNING OF CONSTRUCTION.
9. THE ENGINEER SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE PROPOSED WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER.
10. THE CONTRACTOR SHALL RESTORE PAVEMENT, LAWNS, DRIVEWAYS, CULVERTS, SIGNS AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD A CONDITION AS BEFORE BEING DISTURBED AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS, AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
11. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE TOWN OF NEWBURGH REQUIREMENTS.
12. THE CONTRACTOR SHALL COMPLY WITH ALL O.S.H.A. AND OTHER STATE AND LOCAL SAFETY REQUIREMENTS DURING CONSTRUCTION.
13. ALL EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES SHALL BE MAINTAINED DURING CONSTRUCTION BY THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.
14. THE CONTRACTOR SHALL FERTILIZE, SEED AND MULCH ALL DISTURBED VEGETATED AREAS UNLESS OTHERWISE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
17. SEWER MAIN AND WATER MAIN SEPARATION: WHERE POSSIBLE, WATER MAINS SHALL BE INSTALLED AT LEAST 10' HORIZONTALLY DISTANT FROM ANY EXISTING OR PROPOSED SANITARY SEWER. WATER MAINS CROSSING SANITARY SEWERS SHALL BE INSTALLED TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18". THIS SHALL APPLY WHETHER THE WATER MAIN CROSSED ABOVE OR BELOW THE SANITARY SEWER. FOR ALL CROSSINGS, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE LOCATED SO THAT EACH JOINT IS AS FAR AWAY AS POSSIBLE FROM THE SANITARY SEWER. WHERE NOT POSSIBLE, SEE SEWER MAIN AND WATER MAIN SEPARATION DETAILS. THIS SHEET.
18. ONCE ALL PROPOSED WATER MAINS AND SERVICE LATERALS HAVE BEEN PROPERLY INSTALLED TO THE SATISFACTION OF THE TOWN OF NEWBURGH AND THE ENGINEER, THEY SHALL BE CLEANED, HYDROSTATICALLY TESTED AND DISINFECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE TOWN OF NEWBURGH AND THE ENGINEER.
19. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER THE LOCATION OF ALL INSTALLED IMPROVEMENTS THAT HE HAS COMPLETED, SO THAT THE ENGINEER MAY FURNISH RECORD MAPS TO THE TOWN OF NEWBURGH.

TOWN OF NEWBURGH
WATER SYSTEM NOTES FOR SITE PLANS

1. "Construction of potable water utilities and connection to the Town of Newburgh water system requires a permit from the Town of Newburgh Water Department. All work and materials shall conform to the requirements of the NYSDOH and the Town of Newburgh."

2. All water service lines four (4) inches and larger in diameter shall be cement lined class 52 ductile iron pipe conforming to ANSI\AWWA C151\A21.51 for Ductile Iron Pipe, latest revision. Joints shall be either push-on or mechanical joint as required.

3. Thrust restraint of the pipe shall be through the use of joint restraint. Thrust blocks are not acceptable. Joint restraint shall be through the use of mechanical joint pipe with retainer glands. All fittings and valves shall also be installed with retainer glands for joint restraint. Retainer glands shall be EBBA Iron Megalug Series 1100 or approved equal. The use of a manufactured restrained joint pipe is acceptable with prior approval of the Water Department.

4. All fittings shall be cast iron or ductile iron, mechanical joint, class 250 and conform to ANSI\AWWA C110\A21.10 for Ductile and Gray Iron Fittings or ANSI\AWWA C153\A21.53 for Ductile Iron Compact Fittings, latest revision.

5. All valves 4 to 12 inches shall be Resilient Wedge Gate Valves conforming to ANSI\AWWA C509 such as Mueller Model A-2360-23 or approved equal. All gate valves shall open left (counterclockwise).

6. Tapping sleeve shall be mechanical joint such as Mueller H-615 or equal. Tapping valves 4 to 12 inches shall be Resilient Wedge Gate Valves conforming to ANSI\AWWA C509 such as Mueller Model T-2360-19 or approved equal. All tapping sleeves and valves shall be tested to 150 psi minimum; testing of the tapping sleeve and valve must be witnessed and accepted by the Town of Newburgh Water Department prior to cutting into the pipe.

7. All hydrants shall be Clow-Eddy F-2640 conforming to AWWA Standard C-502, latest revision. All hydrants shall include a 5 ¼ inch main valve opening, two 2 ½ inch diameter NPT hose nozzles, one 4 inch NPT steamer nozzle, a 6 inch diameter inlet connection and a 1 ½ inch pentagon operating nut. All hydrants shall open left (counter-clockwise). Hydrants on mains to be dedicated to the Town shall be Equipment Yellow. Hydrants located on private property shall be Red.

8. All water service lines two (2) inches in diameter and smaller shall be type K copper tubing. Corporation stops shall be Mueller H-15020N for ¾ and 1 inch, Mueller H-15000N or B-25000N for 1 ½ and 2 inch sizes. Curb valves shall be Mueller H-1502-2N for ¾ and 1 inch and Mueller B-25204N for 1 ½ and 2 inch sizes. Curb boxes shall be Mueller H-10314N for ¾ and 1 inch and Mueller H-10310N for 1 ½ and 2 inch sizes.

9. All pipe installation shall be subject to inspection by the Town of Newburgh Water Department. The contractor shall be responsible for coordinating all inspections as required with the Town of Newburgh Water Department.

10. The water main shall be tested, disinfected and flushed in accordance with the Town of Newburgh requirements. All testing, disinfection and flushing shall be coordinated with the Town of Newburgh Water Department. Prior to putting the water main in service satisfactory sanitary results from a certified lab must be submitted to the Town of Newburgh Water Department. The test samples must be collected by a representative of the testing laboratory and witnessed by the Water Department.

11. The final layout of the proposed water and/or sewer connection, including all materials, size and location of service and all appurtenances, is subject to the review and approval of the Town of Newburgh Water and/or Sewer Department. No permits shall be issued for a water and/or sewer connection until a final layout is approved by the respective Department.

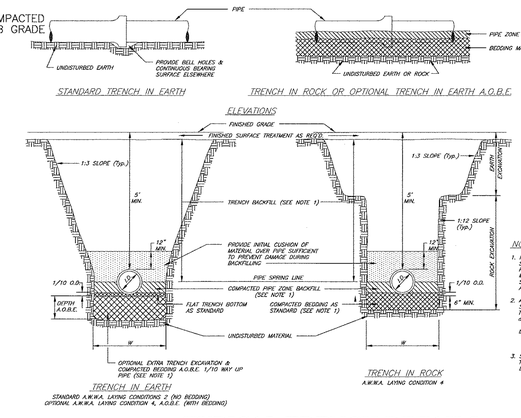


TABLE 3

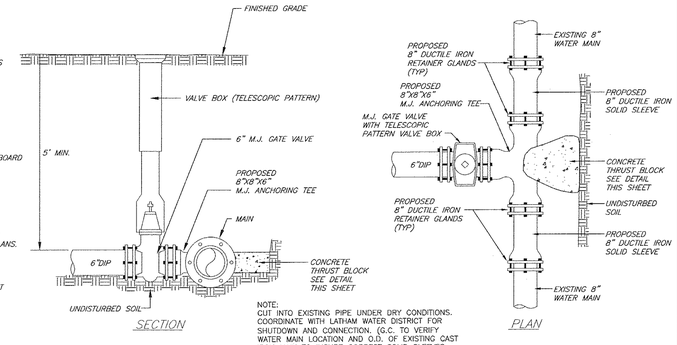
PIPE SIZE I.D. (INCHES)	MIN. SUGGESTED TRENCH WIDTH (FOR ROCK TRENCH SHOULD BE WIDER)	MAX. TRENCH WIDTH AT 18" ABOVE TOP OF PIPE
I.D.	W min.	W max.
2	18	26
3	18	27
4	18	28
6	21	30
8	24	32
10	26	34
12	28	36

NOTES :

1. PIPE ZONE BEDDING SHALL CONSIST OF CRUSHED STONE, SAND, OR SUITABLE EXCAVATED MATERIAL OR OTHER APPROVED MATERIAL. PIPE ZONE BACKFILL SHALL CONSIST OF SAND, SUITABLE EXCAVATED MATERIAL, OR OTHER APPROVED MATERIAL. TRENCH BACKFILL SHALL SHALL CONSIST OF SUITABLE EXCAVATED MATERIAL OR OTHER APPROVED MATERIAL.
2. ALL TRENCH EXCAVATION & ANY REQUIRED SHEETING & SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE FOLLOWING CODES:
   a. SUBPART P, "EXCAVATION OPERATIONS," OF
      U.S. DEPARTMENT OF LABOR INDUSTRIAL CODE RULE 23
   b. SUBPART P, "EXCAVATIONS, TRENCHING AND SHORING," OF
      U.S. DEPARTMENT OF LABOR OSHA REGULATIONS FOR CONSTRUCTION.
      THE MORE STRINGENT REQUIREMENT IN EACH CODE SHALL APPLY.
3. SHEETING & SHORING SYSTEMS OTHER THAN THOSE ALLOWED BY THE CODES, SHALL BE IN ACCORDANCE WITH SPECIFIC DESIGN PLANS DONE BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER.

TYPICAL TRENCH DETAILS

N.T.S.



NOTE:
CUT INTO EXISTING PIPE UNDER DRY CONDITIONS. COORDINATE WITH LATHAM WATER DISTRICT FOR SHUTDOWN AND CONNECTION. (C.C. TO VERIFY WATER MAIN LOCATION AND O.D. OF EXISTING CAST IRON MAIN TO INSURE CORRECT SOLID SLEEVES ARE ON–SITE PRIOR TO CONSTRUCTION)

WATER SERVICE CONNECTION DETAIL

N.T.S.

TABLE 1

SAFE BEARING LOADS OF SOIL & MULTIPLICATION FACTORS FOR MODIFICATION OF THRUST BLOCK AREAS

SOIL	SAFE BEARING LOAD (LBS./SQ. FT.)	FACTOR
MUCK, PEAT	0	0
SOFT CLAY	1,000	2.00
SAND	2,000	1.00
SAND & GRAVEL	3,000	0.67
SAND & GRAVEL CEMENTED WITH CLAY	4,000	0.50
SHALE	10,000	0.20

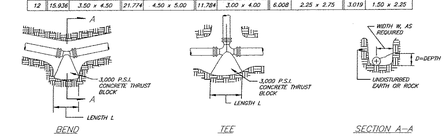
NOTES:

1. FOR REQUIRED BEARING AREA AND DIMENSIONS D&L SEE TABLE 2. VALUES OF D&L OTHER THAN THOSE SHOWN IN THE TABLE MAY BE USED PROVIDED THEY YIELD A BEARING AREA EQUAL TO OR LARGER THAN THAT REQUIRED.
2. CONCRETE NOT TO OVERLAP ANY JOINT.
3. CONCRETE TO BE PLACED SO AS NOT TO INTERFERE WITH REMOVING OR INSTALLING ANY OF THE JOINTING HARDWARE.
4. VALUES FOR TEE, ALSO APPLY TO END PLUGS, CAPS, AND TAPPING SLEEVES.
5. REQUIRED BEARING AREAS ARE DUE TO THRUSTS CAUSED BY 50 P.S.I. WORKING PRESSURE PLUS 50% (75 P.S.I.) SURGE ALLOWANCE RESULTING IN 225 P.S.I. TOTAL INTERNAL PRESSURE, NOMINAL PIPE DIAMETER USED.
6. REQUIRED BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING CAPACITY OF 2,000 POUNDS PER SQUARE FOOT FOR SAND. FOR OTHER SOIL CONDITIONS ENCOUNTERED, BEARING AREAS MAY BE MODIFIED BY THE ENGINEER, BY MULTIPLYING THE AREA GIVEN IN TABLE 1 FOR THE APPROPRIATE PIPE SIZE AND FITTING BY THE LISTED CORRECTION FACTORS.
7. IN MUCK, PEAT OR RECENTLY PLACED FILL, ALL THRUSTS SHALL BE RESISTED BY PILES OR PIER BLOCKS OR SOLID FOUNDATIONS, OR BY REMOVAL OF SUCH UNSTABLE MATERIAL & REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS, ALL AS REQUIRED BY THE ENGINEER.

TABLE 2

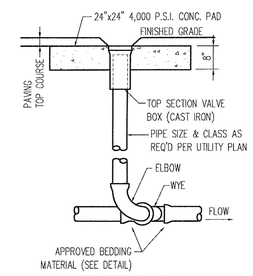
MINIMUM REQUIRED BEARING AREAS & DIMENSIONS FOR CONCRETE THRUST BLOCKS

PIPE SIZE (IN.)	TEE (See Note 4) Area Sq. Ft.	TEE (See Note 4) Dimension D x L	90°(1/4) Bend Area Sq. Ft.	90°(1/4) Bend Dimension D x L	45°(1/8) Bend Area Sq. Ft.	45°(1/8) Bend Dimension D x L	22 1/2°(1/16) Bend Area Sq. Ft.	22 1/2°(1/16) Bend Dimension D x L	11 1/4°(1/32) Bend Area Sq. Ft.	11 1/4°(1/32) Bend Dimension D x L
2	0.400	0.50 x 1.00	0.500	0.50 x 1.00	0.300	0.50 x 1.00	0.100	0.50 x 1.00	0.100	0.50 x 1.00
3	1.266	1.00 x 1.50	1.960	1.00 x 2.00	1.061	0.75 x 1.50	0.541	0.75 x 0.75	0.273	0.50 x 0.75
4	2.037	1.25 x 2.00	2.880	1.50 x 2.00	1.559	1.25 x 1.25	0.796	0.75 x 1.25	0.400	0.50 x 1.00
6	4.208	1.75 x 2.50	5.951	2.00 x 3.00	3.220	1.50 x 2.25	1.642	1.25 x 1.50	0.826	0.75 x 1.25
8	7.238	2.50 x 3.00	10.236	2.75 x 3.75	5.540	2.25 x 2.50	2.824	1.50 x 2.00	1.420	1.00 x 1.50
10	10.867	2.75 x 4.00	15.397	3.25 x 4.75	8.333	2.00 x 3.50	4.248	1.75 x 2.50	2.136	1.25 x 2.00
12	15.936	3.50 x 4.50	21.774	4.50 x 5.00	11.784	3.00 x 4.00	6.008	2.25 x 2.75	3.018	1.50 x 2.25



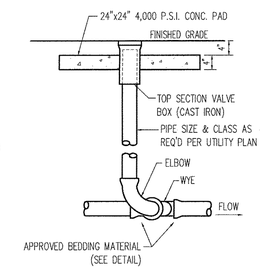
TYPICAL CONCRETE THRUST BLOCK DETAILS

N.T.S.



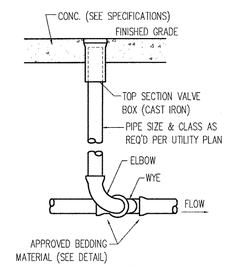
TYPICAL CLEANOUT DETAIL (PAVED AREAS)

NOT TO SCALE



TYPICAL CLEANOUT DETAIL (LANDSCAPED AREAS)

NOT TO SCALE



TYPICAL CLEANOUT DETAIL (CONCRETE AREAS)

NOT TO SCALE

BOHLER ENGINEERING

CORPORATE OFFICE: WARREN, NJ
OFFICES: SOUTHBOROUGH, MA · MALVERN, PA · TOWSON, MD · HAUPPAUGE, NY · TAMPA, FL · CENTER VALLEY, PA · CHARLOTTE, NC · MIDDLETOWN, NY · STERLING, VA · WARRENTON, VA · CHESTER SPRINGS, PA

CIVIL & CONSULTING ENGINEERS · SURVEYORS · PROJECT MANAGERS · ENVIRONMENTAL CONSULTANTS · LANDSCAPE ARCHITECTS

THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE PROPRIETARY AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT WRITTEN AUTHORIZATION FROM BOHLER ENGINEERING. ALL PRINTS MUST BEAR ORIGINAL SIGNATURE AND SEAL TO BE CONSIDERED AUTHENTIC AND VALID.

REVISIONS

REV	DATE	COMMENT	BY
1	03/09/15	FRONT YARD SETBACK	TCF
2	05/28/15	PER TOWN COMMENTS	TCF
3	07/9/15	PHASING PLANS	TCF
4	08/27/15	OFFICE FULL DESIGN	TCF
5	12/01/15	PER NYSDOT COMMENTS	TCF
6	01/20/16	PER CLIENT COMMENTS	TCF
7	04/14/16	MISC. COMMENTS	TCF
8			
9			
10			
11			
12			
13			
14			
15			

PRELIMINARY

PROJECT No.:	B140197
DRAWN BY:	TCF
CHECKED BY:	RWO
DATE:	01/27/2015
SCALE:	AS NOTED
CAD I.D.:	B140197SS19

PROJECT: SITE DEVELOPMENT PLANS –FOR– RHINEBECK REALTY, LLC

LOCATION OF SITE
1413 UNION AVENUE
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

BOHLER ENGINEERING
17 COMPUTER DRIVE WEST
ALBANY, NY 12205
Phone: (518) 438-9900
Fax: (518) 438-0900
www.BohlerEngineering.com

R.W. OSTERHOUDT
PROFESSIONAL ENGINEER
NEW YORK LICENSE No. 076930

SHEET TITLE:

CONSTRUCTION DETAIL SHEET

SHEET NUMBER:

15 OF 15

REV 7 - 04/14/2016

LEGEND:

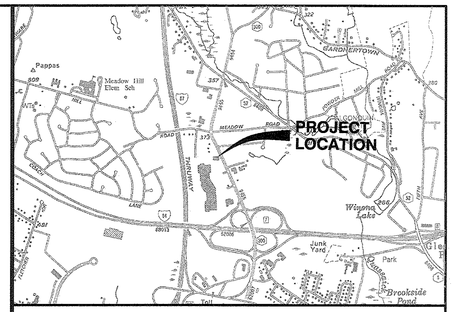
- CB — CATCH BASIN
- HYD — HYDRANT
- LP — LIGHT POLE
- SMH — SANITARY MANHOLE
- SMH — STORM MANHOLE
- EMH — ELECTRIC MANHOLE
- WV — WATER VALVE
- TEL PED — TELEPHONE PEDESTAL
- UTILITY POLE
- G — GAS LINE
- FM — SANITARY FORCE MAIN
- ST — STORM LINE
- W — WATER LINE
- T — TELEPHONE LINE

LEGAL DESCRIPTION:

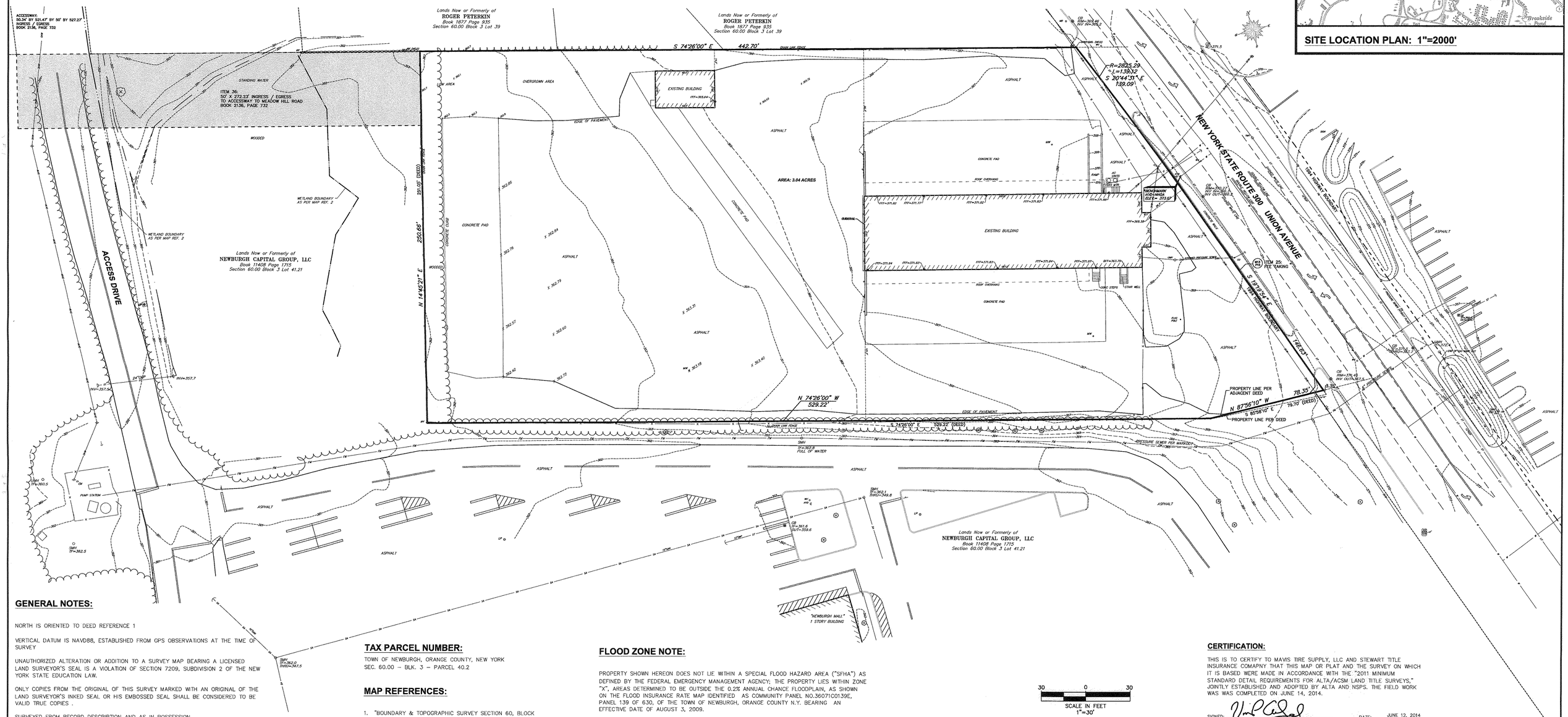
ALL THAT PIECE OR PARCEL OF LAND SITUATE IN THE TOWN OF NEWBURGH, COUNTY OF ORANGE AND THE STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT LOCATED ALONG THE WESTERLY LINE OF NEW YORK STATE ROUTE 300, ALSO KNOWN AS UNION AVENUE, SAID POINT BEING THE INTERSECTION FORMED BY THE AFORESAID WESTERLY LINE OF UNION AVENUE WITH THE DIVISION LINE BETWEEN THE LANDS NOW OR FORMERLY OF NEWBURGH CAPITAL GROUP, LLC (BOOK 11408, PAGE 1715) ON THE SOUTH AND THE LANDS NOW OR FORMERLY OF JR & RAY LLC (BOOK 13067, PAGE 507) ON THE NORTH; THENCE IN A WESTERLY AND NORTHERLY DIRECTION AND ALONG THE AFORESAID DIVISION LINE, THE FOLLOWING THREE COURSES: 1) NORTH 87°56'10" WEST, 78.35 FEET TO A POINT; 2) NORTH 74°26'00" WEST, 529.22 FEET TO A POINT AND 3) NORTH 14°45'21" EAST, 250.66 FEET TO A POINT; THENCE IN AN EASTERLY DIRECTION AND ALONG THE LANDS NOW OR FORMERLY OF ROGER PETERKIN (BOOK 1877, PAGE 935) SOUTH 74°26'00" EAST, 442.70 FEET TO A POINT; THENCE IN A SOUTHERLY DIRECTION AND ALONG THE AFORESAID WESTERLY LINE OF UNION AVENUE, THE FOLLOWING TWO COURSES: 1) ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 2,859.29 FEET, AN ARC LENGTH OF 139.12 FEET AND BEARING A CHORD OF SOUTH 20°44'31" EAST, 139.09 FEET TO A POINT AND 2) SOUTH 19°19'54" EAST, 146.63 FEET TO THE POINT OR PLACE OF BEGINNING.

CONTAINING IN ALL 3.04 ACRES OF LAND BEING MORE OR LESS



SITE LOCATION PLAN: 1"=2000'



GENERAL NOTES:

NORTH IS ORIENTED TO DEED REFERENCE 1

VERTICAL DATUM IS NAVD88, ESTABLISHED FROM GPS OBSERVATIONS AT THE TIME OF SURVEY

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES .

SURVEYED FROM RECORD DESCRIPTION AND AS IN POSSESSION.

SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.

SURVEY SUBJECT TO ANY RIGHT, TITLE OR INTEREST THE PUBLIC MAY HAVE FOR HIGHWAY USE.

SURVEY SHOWN IS SUBJECT TO ANY SUBSURFACE CONDITIONS THAT MAY EXIST, IF ANY.

UNDERGROUND FACILITIES AND STRUCTURES SHOWN HEREON WERE TAKEN FROM DATA OBTAINED FROM PREVIOUS MAPS AND RECORD DRAWINGS. ALL ABOVE GROUND STRUCTURES AND SURFACE FEATURES SHOWN HEREON ARE THE RESULT OF A FIELD SURVEY UNLESS OTHERWISE NOTED. THERE MAY BE OTHER UNDERGROUND UTILITLES, THE EXISTANCE OF WHICH ARE NOT KNOWN OR CERTIFIED BY THE UNDERSIGNED. THE SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES. THE UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION MUST BE NOTIFIED PRIOR TO CONDUCTING TEST BORINGS, EXCAVATION AND CONSTRUCTION.

TAX PARCEL NUMBER:

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK
SEC. 60.00 – BLK. 3 – PARCEL 40.2

MAP REFERENCES:

1. "BOUNDARY & TOPOGRAPHIC SURVEY SECTION 60, BLOCK 3, LOTS 40 & 41.22," PREPARED BY LANGAN, DATED FEBRUARY 1, 2012 PROVIDED BY THE CLIENT.

2. ROUTE 300 CENTER ACCESS ROAD CONCEPTUAL LAYOUT, 1413 ROUTE 300, DATED 7–19–2012 PREPARED BY LANGAN ENGINEERING & ENVIRONMENTAL SERVICES.

DEED REFERENCES:

1. JR & RAY LLC TO JR & RAY LLC, DATED SEPTEMBER 23, 2010 AND RECORDED IN THE ORANGE COUNTY CLERKS OFFICE IN DEED BOOK 13067 AT PAGE 507.

2. JOHN J. LEASE JR., ELIZABETH L. LEASE, RICHARD F. LEASE AND RAPHAEL J. LEASE TO THE FAIRFIELD MALL LIMITED PARTNERSHIP, DATED JULY 6, 1979 AND RECORDED IN THE ORANGE COUNTY CLERKS OFFICE IN DEED BOOK 2136 AT PAGE 732.

FLOOD ZONE NOTE:

PROPERTY SHOWN HEREON DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA ("SFHA") AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY; THE PROPERTY LIES WITHIN ZONE "X", AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP IDENTIFIED AS COMMUNITY PANEL NO.36071C0139E, PANEL 139 OF 630, OF THE TOWN OF NEWBURGH, ORANGE COUNTY N.Y. BEARING AN EFFECTIVE DATE OF AUGUST 3, 2009.

EASEMENT NOTES:

BASED UPON REVIEW OF STEWART TITLE INSURANCE COMPANY, TITLE POLICY NO. SA–113318–ORS, EFFECTIVE DATE OF JUNE 20, 2014 SCHEDULE B:

ITEM NO 25: NOTICE OF APPROPRIATION LIBER 2395, PAGE 5 DOES NOT AFFECT THE PROPERTY. THIS APPROPRIATION LIES SOUTH OF THE PROPERTY. NOTICE OF APPROPRIATION LIBER 2460, PAGE 15 IS SHOWN HEREON. THE TEMPORARY EASEMENT ATTACHED TO THIS IS ASSUMED TERMINATED.

ITEM 36: 50 FOOT RIGHT OF WAY IN LIBER 2136, PAGE 732 IS SHOWN HEREON AND IS IN BENEFIT OF THIS PROPERTY.

30 0 30
SCALE IN FEET
1"=30'

CERTIFICATION:

THIS IS TO CERTIFY TO MAVIS TIRE SUPPLY, LLC AND STEWART TITLE INSURANCE COMAPNY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS. THE FIELD WORK WAS WAS COMPLETED ON JUNE 14, 2014.

SIGNED: _____ DATE: JUNE 12, 2014
N.Y.S. REGISTRATION NO. 049597

6-12-15	REVISED	
6-2-15	ADDITIONAL TOPO	
8-2-14	REVISED	

1413 UNION AVENUE

ALTA/ACSM LAND TITLE SURVEY OF THE LANDS TO BE CONVEYED TO MAVIS TIRE SUPPLY, LLC

TOWN OF NEWBURGH	ORANGE COUNTY,N.Y.
SCALE: 1"=30'	JUNE 20, 2014
DRAWN BY: KCW	PROJECT NO: 14-1242

Ausfeld & Waldruff Land Surveyors LLP
514 State Street, Schenectady N.Y. 12305
Phone: (518) 346-1595 Fax: 518-770-1655

VINCENT P. AUSFELD P.L.S.
LICENSE #049597
www.awlsllp.com

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