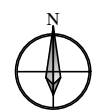
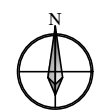


CIVIL ENGINEERING  
DRAWINGS  
FOR:  
PROPOSED RETAIL COMPLEX  
VENEZIA SQUARE, LLC c/o  
THE  
NORTHWIND  
GROUP  
LOCATION OF SITE:  
PORT JEFFERSON-RIVERHEAD ROAD  
(NYS ROUTE 25A)  
WADING RIVER  
TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NY 11792



SITE AERIAL MAP

SCALE: N.T.S.  
SOURCE: NYS GIS Clearing House  
NYSOGP High Resolution  
Imagery 2016



SITE LOCATION MAP

SCALE: 1"=600'  
Google Image  
Copyright Map Data ©2018 Google

REFERENCES

- BOUNDARY & TOPOGRAPHIC SURVEY:  
CONTROL POINT ASSOCIATES, INC.  
35 TECHNOLOGY DRIVE  
WARREN, NJ 07059  
DATED: 1/18/16 (REVISION 2)
- GEOTECHNICAL INVESTIGATION REPORT:  
McDONALD GEOSCIENCE  
BOX 1000  
SOUTHOLD, NY 11971  
DATED: 10/02/08

GOVERNING AGENCIES

- TOWN OF RIVERHEAD:  
PLANNING DEPARTMENT  
200 HOWELL AVENUE  
RIVERHEAD, NY 11901  
RICK HANLEY  
(631) 727-3200
- SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES:  
OFFICE OF WASTEWATER MANAGEMENT  
360 YAPHANK AVENUE, SUITE 2C  
YAPHANK, NY 11790  
(631) 852-5700
- FIRE MARSHAL:  
RIVERHEAD FIRE MARSHAL  
200 HOWELL AVENUE  
RIVERHEAD, NY 11901  
DAVID J. ANDRUSZKIEWICZ  
(631) 727-3700

UTILITIES

- WATER:  
RIVERHEAD WATER DISTRICT  
1035 PULASKI STREET  
RIVERHEAD, NY 11901  
GARY PENDZICK  
(631) 727-3205
- GAS:  
KEYSPAN  
175 EAST OLD COUNTRY ROAD  
HICKSVILLE, NY 11801  
KENNETH J. CAMILLERI  
(516) 545-3865
- ELECTRIC:  
LIPA  
117 DOCTOR'S PATH  
RIVERHEAD, NY 11901  
STEVE AYLWARD  
(631) 548-7062
- TELEPHONE:  
VERIZON  
501 NORTH OCEAN AVENUE  
PATCHOGUE, NY 11772  
SUFFOLK COUNTY DIVISION  
RICHARD WASKEWICZ  
(631) 687-8430

R.O.W. JURISDICTIONS

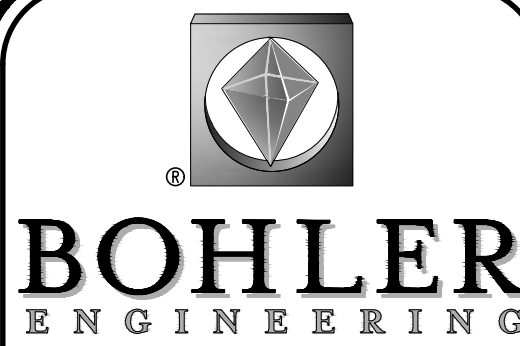
- NEW YORK STATE DEPT. OF TRANSPORTATION:  
250 VETERANS MEMORIAL HIGHWAY  
HAUPPAUGE, NY 11788  
MARK WOLFGANG  
(631) 952-6014

LIST OF DRAWINGS

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GRADING & DRAINAGE PLAN	C-4 OF 15
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UTILITY & SANITARY PLAN	C-8 OF 15
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PLANNING BOARD CERTIFICATION

THIS IS TO CERTIFY THAT THIS SITE PLAN HAS BEEN APPROVED BY THE PLANNING BOARD OF THE TOWN  
OF RIVERHEAD BY PLANNING BOARD RESOLUTION NUMBER \_\_\_\_\_ DATED \_\_\_\_\_  
SIGNATURE OF PLANNING BOARD CHAIRPERSON \_\_\_\_\_  
DATE OF SIGNATURE \_\_\_\_\_

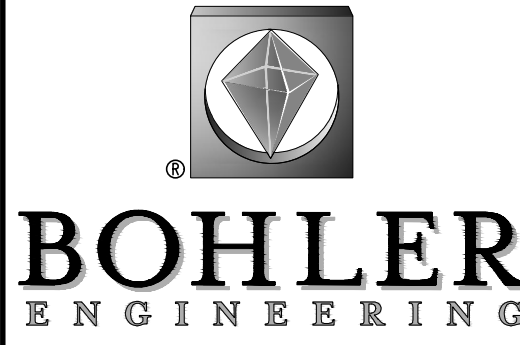


WARREN, NJ - CORPORATE OFFICE  
WHITE PLAINS, NY CENTER VALLEY, PA  
ALBANY, NY SOUTHBOROUGH, MA  
BOWIE, MD STERLING, VA  
TOWSON, MD WARRENTON, VA  
CHALFONT, PA FT. LAUDERDALE, FL

THE EDUCATION LAW OF THE STATE OF NEW YORK  
PROHIBITS ANY PERSON ALTERING ANYTHING ON THESE  
DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS,  
UNLESS IT IS UNDER THE DIRECTION OF A LICENSED  
PROFESSIONAL ENGINEER WHERE SUCH ALTERATIONS ARE  
MADE. THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE  
AND DESCRIBE THE FULL EXTENT OF THE ALTERATION  
ON THE DRAWINGS, AND/OR IN THE SPECIFICATIONS.  
(NYS EDUCATION LAW SECTION 2209.2)

APPROVALS

No.	Date	Description
1	12/20/09	REVISED AS PER SCOHNS COMMENTS
2	11/18/15	REV. PER TOWN PLANNING DEPARTMENT COMMENTS
3	9/20/17	REV. PER DISTURBED AREA
4	3/16/18	REV. LAYOUT & NYSDOT COMMENTS
5	11/19/18	REV. PER NYSDOT COMMENTS
6	12/20/18	TOWN OF RIVERHEAD SUBMISSION
7	2/13/23	REV. SITE COVERAGE AREAS



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Fax: 631.285.6464  
WWW.BOHLERENGINEERING.COM

JOSEPH A. DEAL  
PROFESSIONAL ENGINEER  
NEW YORK LICENSE No. 087122

DATE: 09/18/08 DRAWN BY: MD  
SCALE: AS SHOWN CHECKED BY: JPC  
CAD I.D. No.: N08029-CS-7A PROJECT No.: N08029

NOT FOR CONSTRUCTION

NYSDOT CASE #: N/A  
HEALTH DEP. REF. #: N/A

CLIENT/  
PROJECT: VENEZIA  
SQUARE, LLC c/o  
THE  
NORTHWIND  
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PORT JEFFERSON-RIVERHEAD ROAD  
(NYS ROUTE 25A)  
WADING RIVER  
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SUFFOLK COUNTY, NY 11792  
TAX MAP #: 600-73-1-1.4, 1.16-1.19

TITLE:

COVER  
SHEET

SHEET NO. REV. 7

C-1  
OF 15

SUBMISSION SET



GENERAL NOTES

THESE GENERAL NOTES PROVIDED HEREIN ARE INTENDED TO SUPPLEMENT THE NOTES AND OR SPECIFICATIONS PROVIDED ELSEWHERE IN THESE CONTRACT DOCUMENTS AND ANY CODES, RULES, REGULATIONS, AND OR LAWS PROMULGATED BY APPLICABLE GOVERNING JURISDICTIONS. CONTRACTORS ARE MADE FULLY AWARE THAT THIS GENERAL NOTES SHEET IS PART OF THE ENTIRE CONTRACT DOCUMENTS AND SHALL NOT BE OMITTED IN ANY PARTIAL TRANSMISSIONS OF THE CONTRACT DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ANY PARTIAL TRANSMISSION OR RECEIPT OF THE CONTRACT DOCUMENTS INCLUDES THIS GENERAL NOTES SHEET.

BOHLER ENGINEERING, PLLC IS NOT RESPONSIBLE OR RETAINED BY ANY PARTY FOR JOB SITE SAFETY OR CONSTRUCTION SUPERVISION, NOR IS THE ENGINEER OF RECORD FOR SAME. CONTRACTOR SHALL PERFORM ALL ITS ACTIVITIES IN A SYSTEMATIC AND SAFE MANNER IN ACCORDANCE WITH OSHA REQUIREMENTS, AND ANY CODES, RULES, REGULATIONS, AND OR LAWS OF THE APPLICABLE GOVERNING JURISDICTIONS TO ENSURE THE PROTECTION AND SAFETY OF THE PUBLIC AND THE JOB SITE.

DO NOT SCALE PLANS. COPYING, PRINTING, SOFTWARE AND OTHER PROCESSES REQUIRED TO PREPARE THE DESIGN PLANS CAN STRETCH OR SHRINK THE ACTUAL PAPER THEREFORE AFFECTING THE LAYOUT. THEREFORE, SCALING OF THE DESIGN PLANS MAY RESULT IN INACCURACIES. CONTACT THE ENGINEER OF RECORD WITH ANY NEED FOR ADDITIONAL DIMENSIONS OR CLARIFICATIONS.

THE ENGINEER OF RECORD SHALL NOT SUPERVISE, DIRECT OR HAVE CONTROL OVER THE CONTRACTOR'S WORK NOR HAVE ANY RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES SELECTED NEITHER BY THE CONTRACTOR NOR FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR PROGRAMS IN CONNECTION WITH THE WORK. THESE RIGHTS AND RESPONSIBILITIES ARE SOLELY THOSE OF THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

THE ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR ANY ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, AND ANY ENTITY PERFORMING ANY PORTIONS OF THE WORK, OR ANY AGENTS OR EMPLOYEES OF ANY OF THEM. THE ENGINEER OF RECORD DOES NOT GUARANTEE THE PERFORMANCE OF THE CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO PERFORM ITS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR ANY APPLICABLE LAWS, CODES, RULES OR REGULATIONS.

PRIOR TO STARTING ANY CONSTRUCTION RELATED ACTIVITIES, THE CONTRACTOR SHALL ENSURE THAT ANY AND ALL PERMITS AND APPROVALS HAVE BEEN OBTAINED, AND/OR WILL OBTAIN THOSE THAT ARE TO BE OBTAINED DURING CONSTRUCTION, BY AND OR FROM THE APPROPRIATE GOVERNING JURISDICTIONS' LEGAL REQUIREMENTS. CONTRACTOR WILL ALSO RENEW ANY SUCH PERMITS. THE CONTRACTOR ASSUMES ALL RISK ASSOCIATED WITH THE COMMENCEMENT OF CONSTRUCTION WITHOUT SATISFYING ALL OF THE LEGAL REQUIREMENTS.

CONTRACTOR SHALL BE LIABLE FOR ANY COSTS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF THE VIOLATION OF ANY SUCH LEGAL REQUIREMENTS BY THE CONTRACTOR, ANY SUBCONTRACTORS OR ANYONE FOR WHOM THE CONTRACTOR IS RESPONSIBLE. THE CONTRACTOR SHALL INDEMNIFY, DEFEND AND SAVE HARMLESS THE OWNER AND BOHLER ENGINEERING, PLLC FROM AND AGAINST ANY SUCH COSTS, DAMAGES, LOSSES AND EXPENSES, INCLUDING REASONABLE ATTORNEY FEES AND DISBURSEMENTS, ATTRIBUTABLE TO ANY SUCH VIOLATION OR NONCOMPLIANCE BY CONTRACTOR OR ANY SUBCONTRACTOR, AS WELL AS ANY DELAY IN THE COMPLETION OF THE WORK. NO CONSTRUCTION RELATED ACTIVITIES SHOULD COMMENCE UNTIL THE CONTRACTOR HAS THOROUGHLY REVIEWED THE ENTIRE CONTRACT DOCUMENTS AND THOROUGHLY REVIEWED THE APPROVALS AND PERMITS OBTAINED FROM THE APPROPRIATE GOVERNING JURISDICTIONS. CONTRACTOR SHALL MAINTAIN ALL SUCH PERMITS AND APPROVALS AT THE JOB SITE AT ALL TIMES AND MAKE SAME AVAILABLE UPON REQUEST.

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, CONTRACTOR MUST INSPECT THE SITE, SATISFY ITSELF AS TO THE CONDITION OF THE SITE INCLUDING, BUT NOT LIMITED TO, ALL STRUCTURAL, SURFACE AND SUBSURFACE CONDITIONS, FAMILIARIZE ITSELF WITH THE SITE AND THE LOCAL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, AND CORRELATE ITS OBSERVATIONS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR IS AWARE THAT THE CONTRACT DOCUMENTS FOR THIS PROJECT INCLUDE VARIOUS RESOURCES, WHICH MAY BE IN A FORMAT OTHER THAN DRAWING DOCUMENTS. SUCH RESOURCES MAY INCLUDE, BUT ARE NOT LIMITED TO, SOIL MECHANICS STUDIES; ENVIRONMENTALLY RELATED INVESTIGATIONS, STUDIES, MAPPING, RECOMMENDATIONS; LAND SURVEYS; TITLE REPORTS; ARCHITECTURAL DOCUMENTS INCLUDING STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING; TESTING REPORTS; ET AL. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL SUCH ITEMS PRIOR TO COMMENCEMENT OF CONSTRUCTION RELATED ACTIVITIES. ANY REQUIRED CLARIFICATION BY THE CONTRACTOR SHALL BE IN WRITING TO THE OWNER AND BOHLER ENGINEERING, PLLC PRIOR TO COMMENCING CONSTRUCTION RELATED ACTIVITIES.

WHEN WORK IS INDICATED ON THE DRAWINGS BUT IS NOT CALLED FOR IN THE OTHER CONTRACT DOCUMENTS, OR IS CALLED FOR IN THE OTHER CONTRACT DOCUMENTS BUT IS NOT INDICATED ON THE DRAWINGS, AND THE NATURE OF THE WORK IS SUCH THAT IT SHOULD BE PERFORMED BY WORKERS EMPLOYED BY THIS CONTRACTOR, OR IF STANDARD BUILDING PRACTICES IN THE LOCALE OF THE PROJECT WOULD REQUIRE SUCH WORK TO BE PERFORMED BY THIS CONTRACTOR, THEN SUCH WORK SHALL BE DEEMED A PART OF THE WORK COVERED BY THIS CONTRACT AND SHALL BE PERFORMED BY THIS CONTRACTOR WITHOUT ADDITIONAL COMPENSATION.

ALL CONSTRUCTION RELATED ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AS WELL AS IN ACCORDANCE WITH ALL THE REQUIREMENTS OF THE APPROPRIATE GOVERNING JURISDICTIONS. THE CONTRACTOR SHALL PROMPTLY REPORT TO THE OWNER AND BOHLER ENGINEERING, PLLC ANY ERROR, OMISSION, INCONSISTENCY, CONFLICT, AMBIGUITY OR SIMILAR DEFECT THAT MAY BE APPARENT FROM CONTRACTOR'S REVIEW OF THE CONSTRUCTION DOCUMENTS, THE CONTRACT DOCUMENTS, AND/OR EXISTING CONDITIONS AT THE PROJECT SITE. CONTRACTOR SHALL IMMEDIATELY UPON DISCOVERY BRING SUCH ERROR, OMISSION, INCONSISTENCY, CONFLICT, AMBIGUITY OR SIMILAR DEFECT TO THE ATTENTION OF THE OWNER AND BOHLER ENGINEERING, PLLC FOR RESOLUTION. IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT OWNER, IN CONSULTATION WITH BOHLER ENGINEERING, PLLC AND THE ARCHITECT, SHALL BE THE INTERPRETER OF THE CONTRACT DOCUMENTS AND SHALL RESOLVE ANY SUCH CONFLICTS AND AMBIGUITIES. IN THE EVENT THERE IS ANY SUCH ERROR, OMISSION, INCONSISTENCY, CONFLICT, AMBIGUITY OR SIMILAR DEFECT, THEN THE MORE STRINGENT PROVISION SHALL APPLY. IN ADDITION, IN THE EVENT THERE IS ANY SUCH ERROR, OMISSION, INCONSISTENCY, CONFLICT, AMBIGUITY OR SIMILAR DEFECT, WHICH RESULT IN A CHOICE BETWEEN DIFFERENT MEANS AND METHODS TO PERFORM THE WORK AFTER THE RESOLUTION OF THE CONFLICT OR AMBIGUITY, CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM THE WORK WITHOUT ADDITIONAL COMPENSATION FOR USING THE COSTLIER MEANS AND METHODS. IF CONTRACTOR PERFORMS ANY SUCH WORK BEFORE THE OWNER AND BOHLER ENGINEERING, PLLC HAVE HAD A REASONABLE TIME TO RESPOND, THE CONTRACTOR SHALL SOLELY BEAR THE RISK OF PERFORMING SUCH WORK CONTRARY TO THE RESOLUTION THEREOF BY OWNER.

THE CONTRACTOR SHALL BE FAMILIAR WITH AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT AND SCHEDULING OF ANY AND ALL CERTIFICATIONS, TESTING, INSPECTIONS, ETC., INCLUDING THOSE THAT SHALL BE PERFORMED BY THIRD PARTIES, REQUIRED BY THE APPROPRIATE GOVERNING JURISDICTIONS DURING THE COURSE OF CONSTRUCTION OR FOR THE PURPOSES OF PROCURING SIGNOFFS, CERTIFICATE OF COMPLETIONS OR CERTIFICATE OF OCCUPANCY. IF THE CONTRACT DOCUMENTS OR ANY LAWS, RULES, ORDINANCES OR REGULATIONS OF ANY FEDERAL, STATE OR LOCAL GOVERNMENTAL AUTHORITIES HAVING JURISDICTION OVER THE WORK REQUIRE THAT ANY WORK BE INSPECTED OR TESTED, CONTRACTOR SHALL GIVE SUCH GOVERNING ENTITIES TIMELY NOTICE OF READINESS OF THE WORK FOR INSPECTION OR TESTING, COORDINATE AND FIX THE DATE FOR SUCH INSPECTION OR TESTING BY SUCH JURISDICTIONAL ENTITIES AND PROCURE THE NECESSARY MEANS TO HAVE SUCH INSPECTION OR TESTING PERFORMED TO THE SATISFACTION OF THE GOVERNING JURISDICTIONAL ENTITIES.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE CIVIL DESIGN DOCUMENTS AND THE ARCHITECTURAL DOCUMENTS FOR REFERENCE TO EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS AND DETAILS, ENTRY AND EXIT LOCATIONS, FINISHED FLOOR ELEVATIONS AND EXTERIOR GRADING, ETC. THE UTILITY SERVICE SIZES SHALL BE DETERMINED BY THE ARCHITECT.

ALL CONCRETE SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH AT TWENTY-EIGHT (28) DAYS UNLESS OTHERWISE INDICATED IN THE CONSTRUCTION DOCUMENTS. UNSUITABLE MATERIALS, CONSTRUCTION DEBRIS, EXCESS SOIL, ETC., SHALL BE PROPERLY REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL CODES, ORDINANCES, AND LAWS OF THE APPLICABLE GOVERNING JURISDICTIONS. ALL FILL, COMPACTION AND BACKFILL MATERIALS AND PLACEMENT METHODS REQUIRED FOR THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS PROVIDED IN THE SOIL MECHANICS STUDIES. THE CONTRACTOR SHALL PLACE ASPHALT WITH SUITABLE GRADES TO PREVENT PONDING.

THE CONTRACTOR SHALL BE RESPONSIBLE TO USE APPROPRIATE DUST CONTROL AND EROSION CONTROL MEASURES IN ACCORDANCE WITH FEDERAL, STATE AND OR LOCAL STANDARDS, RULES, REGULATIONS OF THE APPROPRIATE GOVERNING JURISDICTIONS. AFTER CONSTRUCTION IS COMPLETE, ADJACENT STRUCTURES AND AREAS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE CONSTRUCTION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR PRE-CONSTRUCTION CONDITIONS.

THE CONTRACTOR SHALL SAFEGUARD THE PROJECT SITE IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL CODES AS NECESSARY TO PERFORM THE CONSTRUCTION IN SUCH A MANNER AS TO PREVENT ENTRY BY UNAUTHORIZED PERSONS AT ANY AND ALL TIMES.

THE CONTRACTOR SHALL NOT USE AREAS OUTSIDE THE PROPERTY LINE AND OR WORK LIMITS WITHOUT WRITTEN PERMISSION FROM THE OWNER AND OR THE APPROPRIATE GOVERNING JURISDICTIONS, WHICH MAY BE IN THE FORM OF PERMITS.

DURING ALL CONSTRUCTION RELATED OPERATIONS, THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE OPERATION, IN A MANNER SATISFACTORY TO OWNER, OF ALL ACTIVE SYSTEMS THAT ARE NOT TO BE REMOVED.

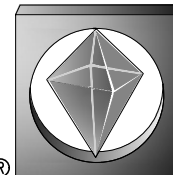
PROPOSED WATER SERVICE CUTOFFS, REMOVALS, AND ABANDONMENTS REQUIREMENT SHALL BE IN ACCORDANCE WITH THE LOCAL UTILITY COMPANIES' REQUIREMENTS. CONTRACTOR SHALL INCLUDE ALL FEES AND APPURTENANCES REQUIRED BY THE LOCAL UTILITY COMPANIES TO PROVIDE THE OWNER WITH A COMPLETE WORKING WATER SERVICE. ALL TOPOGRAPHY SHOWN IN THESE CONSTRUCTION DOCUMENTS DEPICT THE EXISTING CONDITIONS AT THE TIME OF THE CONTRACT DOCUMENTS' PREPARATION. CONTRACTOR SHALL OBSERVE THE CONDITIONS OF THE PROJECT PRIOR TO COMMENCING CONSTRUCTION RELATED ACTIVITIES AND NOTIFY THE OWNER AND THE ENGINEER OF RECORD IN WRITING IF ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS ARE OBSERVED.

CONTRACTOR MUST CARRY STATUTORY WORKERS' COMPENSATION INSURANCE, EMPLOYERS LIABILITY INSURANCE AND APPROPRIATE LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). CONTRACTOR MUST HAVE THEIR CGL POLICY ENDORSED NAMING BOHLER ENGINEERING, PLLC AND ITS AFFILIATES AS ADDITIONAL INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO ENSURE THE HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTOR. THE CONTRACT SHALL FURNISH CERTIFICATES TO BOHLER ENGINEERING, PLLC AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND WITHIN THIRTY (30) DAYS UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION. CONTRACTOR MUST HAVE ITS INSURANCES IN FULL FORCE THROUGHOUT THE CONSTRUCTION. IN ADDITION, THE CONTRACTOR WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS BOHLER ENGINEERING, PLLC AND ITS AFFILIATES FROM AND AGAINST ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEY FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR.

UNLESS OTHERWISE AGREED TO IN WRITING SIGNED BY AN OFFICER OF BOHLER ENGINEERING, PLLC, UNDER NO CIRCUMSTANCE IS ANY PERSON A THIRD PARTY BENEFICIARY OF THE AGREEMENT BETWEEN BOHLER ENGINEERING, PLLC AND THE OWNER.

ACCESSIBILITY NOTE

ALL ACCESSIBLE PARKING STALLS, SIDEWALKS, RAMPS AND ALL OTHER ACCESS PROVISIONS TO, INTO AND FROM BUILDINGS AND TO AND FROM PARKING AREAS AND PUBLIC WAYS SHALL BE CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH ADA REQUIREMENTS. THE OWNER AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADA COMPLIANCE WITH ANY PROPOSED SIDEWALK CONSTRUCTION AND OTHER SITE WORK ELEMENTS (WHETHER ON OR OFF SITE). IT IS THE OWNER'S RESPONSIBILITY TO MAINTAIN CONTINUED ADA COMPLIANCE AT THE PROJECT SITE REGARDING ACCESS, PARKING AND DIMENSIONAL REQUIREMENTS.



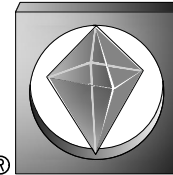
BOHLER ENGINEERING

- WARREN, NJ - CORPORATE OFFICE
- WHITE PLAINS, NY
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- CENTER VALLEY, PA
- SOUTHBOROUGH, MA
- STERLING, VA
- WARRENTON, VA
- FT. LAUDERDALE, FL

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER WHERE SUCH ALTERATIONS ARE MADE. THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 220(2))

APPROVALS

REVISIONS	
No.	Desc.
1	12/30/09 REVISED AS PER SCOHMS COMMENTS
2	11/18/15 REV. PER TOWN PLANNING DEPARTMENT COMMENTS
3	9/20/17 REV. PER DISTURBED AREA
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5	11/19/19 REV. PER NYSDOT COMMENTS
6	12/2/19 TOWN OF RIVERHEAD SUBMISSION
7	2/13/23 REV. SITE COVERAGE AREAS



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Fax: 631.285.6464

WWW.BOHLERENGINEERING.COM

JOSEPH A. DEAL

PROFESSIONAL ENGINEER  
NEW YORK LICENSE No. 087122

DATE: 09/18/08	DRAWN BY: MD
SCALE: N/A	CHECKED BY: JPC
CAD I.D. No.: N08029-CS-7A	PROJECT No.: N08029

NOT FOR CONSTRUCTION

NYSDOT CASE #: N/A  
HEALTH DEP. REF. #: N/A

CLIENT/  
PROJECT: VENEZIA  
SQUARE, LLC c/o  
THE  
NORTHWIND  
GROUP  
PORT JEFFERSON-RIVERHEAD ROAD  
(NYS ROUTE 25A)  
WADING RIVER  
TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NY 11792  
TAX MAP #: 600-73-1-1.4, 1.16-1.19

TITLE:

GENERAL  
NOTES

SHEET NO. REV. 7

C-2  
OF 15

SUBMISSION SET



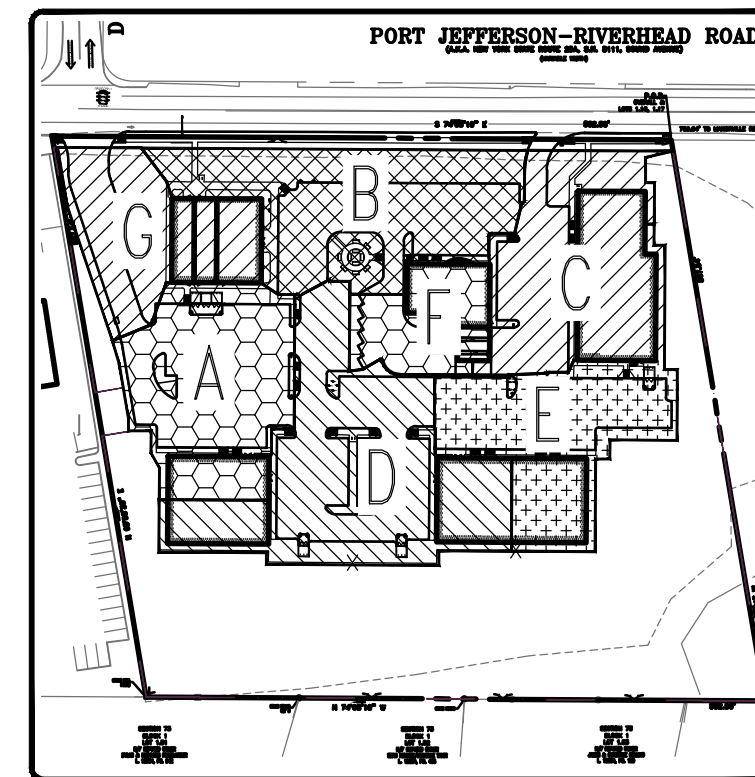




# PORT JEFFERSON-RIVERHEAD ROAD

(A.K.A. NEW YORK STATE ROUTE 25A, S.H. 8111, SOUND AVENUE)

(VARIABLE WIDTH)



TRIBUTARY AREA MAP  
N.T.S.

## GRADING & DRAINAGE NOTES

- THE GENERAL NOTES SHEET SHALL BE PART OF THIS ENTIRE DOCUMENT PACKAGE AND IS PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES SHEET IS REFERENCED HEREIN AND IS TO BE REFERRED TO BY THE CONTRACTOR. THE CONTRACTOR IS TO FAMILIARIZE HIMSELF AND ACKNOWLEDGE HIS FAMILIARITY WITH ALL THE NOTES ON THE GENERAL NOTES SHEET AS WELL AS ANY AND ALL DRAWING SHEET SPECIFIC NOTES BELOW.
- CONTRACTOR SHALL ADJUST ALL REMAINING STRUCTURES TO MEET PROPOSED GRADE FLUSH W/PAVEMENT SURFACE TO MEET EXISTING STRUCTURES. IF STRUCTURES CANNOT BE ADJUSTED TO MEET GRADE FLUSH, CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IMMEDIATELY IN WRITING.
- ELEVATIONS ARE BASED UPON NAVD 88 DATUM.
- CONTRACTOR SHALL ENSURE THAT CONSTRUCTION OF PROPOSED ON AND OFF-SITE ACCESSIBLE AREAS CONFORMS WITH THE FOLLOWING CRITERIA AND THRESHOLDS:
  - RAMP SLOPES SHALL NOT EXCEED A MAXIMUM RUNNING SLOPE OF 1:12 (8.33%) AND A MAXIMUM CROSS SLOPE OF 1:50 (2.00%).
  - CURB RAMP FLARES (IF PROVIDED) SHALL NOT EXCEED A SLOPE OF 1:10 (10.00%).
  - NO CRACKS / GAPS WIDER THAN 1/2" MAXIMUM AND NO UPS HIGHER THAN 1/2" MAXIMUM ARE ALLOWED WITHIN THE PAVEMENT, SIDEWALKS AND/OR RAMP SURFACES ALONG THE PEDESTRIAN ACCESS ROUTE.
  - EXCEPT FOR CURB RAMP, HANDRAILS SHALL BE PROVIDED ALONG BOTH SIDES OF ANY PROPOSED RAMP EXCEEDING A RISE OF 6".
  - LANDINGS SHALL BE PROVIDED FOR ALL PROPOSED RAMP IN COMPLIANCE WITH THE LOCATIONS AND DIMENSIONS INDICATED IN THE RAMP DETAILS PROVIDED ON THE DETAIL SHEET. LANDINGS SHALL NOT EXCEED A MAXIMUM SLOPE OF 1:50 (2.00%) IN ANY DIRECTION.
  - PEDESTRIAN WALKWAYS AND/OR CROSSWALKS SHALL NOT EXCEED A MAXIMUM RUNNING SLOPE OF 1:20 (5.00%) AND A MAXIMUM CROSS SLOPE OF 1:50 (2.00%).
  - WHERE A PEDESTRIAN WALKWAY OR RAMP CHANGES DIRECTION OR INTERSECTS ANOTHER WALKWAY OR RAMP, A LANDING MEASURING A MINIMUM OF 5' X 5' SHALL BE PROVIDED. SLOPES WITHIN THIS LANDING SHALL NOT EXCEED 1:50 (2.00%) IN ANY DIRECTION.
  - ADA PARKING STALLS AND ADA STRIPED ACCESS AISLES, SHALL NOT EXCEED A MAXIMUM SLOPE OF 1:50 (2.00%) IN ANY DIRECTION ACROSS THE ENTIRE ADA PARKING AREA.

## DRAINAGE STRUCTURE SCHEDULE

STRUCTURE	STRUCTURE TYPE	RIM	TOP OF RINGS	BOT. OF RINGS	INV. IN	INV. OUT	EFF. DEPTH
A-1	PROP. 10" DRYWELL W/ FRAME & GRATE	107.80	106.50	94.50	104.55	104.55	12
A-2	PROP. 10" DRYWELL W/ MANHOLE COVER	108.10	106.50	94.50	104.40	104.55	12
A-3	PROP. 10" DRYWELL W/ FRAME & GRATE	107.90	106.50	94.50	104.40	104.55	12
A-4	PROP. 10" DRYWELL W/ FRAME & GRATE	107.90	106.50	94.50	-	104.55	12
A-5	PROP. 10" DRYWELL W/ MANHOLE COVER	108.50	106.50	94.50	104.40	-	12
				TOTAL A:		60	
B-1	PROP. 10" DRYWELL W/ FRAME & GRATE	109.45	107.75	95.75	-	106.75	11
B-2	PROP. 10" DRYWELL W/ MANHOLE COVER	109.75	107.75	95.75	106.60	106.75	11
B-3	PROP. 10" DRYWELL W/ MANHOLE COVER	110.20	107.75	95.75	105.80	-	11
B-4	PROP. 10" DRYWELL W/ MANHOLE COVER	109.90	107.75	95.75	106.60	106.75	11
B-5	PROP. 10" DRYWELL W/ MANHOLE COVER	109.90	107.75	95.75	106.60	-	11
				TOTAL B:		55	
C-1	PROP. 10" DRYWELL W/ FRAME & GRATE	109.50	107.80	97.80	106.30	106.30	10
C-2	PROP. 10" DRYWELL W/ FRAME & GRATE	109.70	107.80	97.80	105.70	106.30	10
C-3	PROP. 10" DRYWELL W/ FRAME & GRATE	110.05	108.00	99.00	105.80	-	9
C-4	PROP. 10" DRYWELL W/ FRAME & GRATE	110.20	108.00	99.00	106.00	106.50	9
C-5	PROP. 10" DRYWELL W/ FRAME & GRATE	111.30	109.20	99.20	106.10	107.70	10
C-6	PROP. 10" DRYWELL W/ FRAME & GRATE	109.80	108.20	98.20	106.70	106.70	10
				TOTAL C:		58	
D-1	PROP. 10" DRYWELL W/ CURB INLET	106.95	105.25	94.25	103.75	103.75	11
D-2	PROP. 10" DRYWELL W/ CURB INLET	106.95	105.25	94.25	103.75	103.75	11
D-3	PROP. 10" DRYWELL W/ FRAME & GRATE	107.40	105.25	94.25	103.40	103.40	11
D-4	PROP. 10" DRYWELL W/ FRAME & GRATE	107.40	105.25	94.25	103.40	103.40	11
D-5	PROP. 10" DRYWELL W/ MANHOLE COVER	107.65	105.25	94.25	103.25	103.25	11
D-6	PROP. 10" DRYWELL W/ MANHOLE COVER	107.65	105.25	94.25	103.25	103.25	11
D-7	PROP. 10" DRYWELL W/ MANHOLE COVER	107.95	105.25	94.25	103.10	-	11
D-8	PROP. 10" DRYWELL W/ MANHOLE COVER	107.95	105.25	94.25	103.10	-	11
				TOTAL D:		88	
E-1	PROP. 10" DRYWELL W/ FRAME & GRATE	108.10	106.15	96.15	-	104.65	10
E-2	PROP. 10" DRYWELL W/ MANHOLE COVER	108.40	106.15	96.15	104.35	104.65	10
E-3	PROP. 10" DRYWELL W/ FRAME & GRATE	107.90	106.15	96.15	104.35	104.35	11
E-4	PROP. 10" DRYWELL W/ MANHOLE COVER	108.55	106.75	95.75	104.95	105.25	11
E-5	PROP. 10" DRYWELL W/ MANHOLE COVER	109.70	107.20	97.20	104.40	105.70	10
				TOTAL E:		52	
F-1	PROP. 10" DRYWELL W/ CURB INLET	109.40	107.60	94.60	106.10	106.10	13
F-2	PROP. 10" DRYWELL W/ MANHOLE COVER	110.50	107.60	94.60	105.65	-	12
				TOTAL F:		25	
G-1	PROP. 10" DRYWELL W/ MANHOLE COVER	112.80	111.00	100.00	109.40	109.40	11
G-2	PROP. 10" DRYWELL W/ FRAME & GRATE	112.80	111.00	100.00	108.95	108.95	11
G-3	PROP. 10" DRYWELL W/ MANHOLE COVER	113.75	112.00	99.00	108.20	108.20	12
G-4	PROP. 10" DRYWELL W/ CURB INLET	111.40	-	-	109.60	-	-
				TOTAL G:		34	

## BORING LOG

THIS PLAN REFERENCES A GEOTECHNICAL REPORT AS DESCRIBED ON COVER SHEET:

McDONALD GEOSCIENCE

Box 1000 • Sound, New York 11971 • (815) 766-0877

### TEST HOLE DATA SHEET

Name: Northwind Group 51

Surveyor: Wading River

Location: Wading River

Tax Map Number: 600-73-1-1.4, 1.16, 1.17, 1.18, 1.19

Project Description: Site plan

Date: 10/2/20

Notes: Brown silty loam of

Notes: Brown fine to coarse sand SH

Notes: Pale brown fine to medium sand GP

Notes: Pale brown fine to medium sand GP

Notes: Pale brown fine to medium sand GP

Notes: Pale brown fine to medium sand GP

Notes: Pale brown fine to medium sand GP

Notes: Pale brown fine to medium sand GP

Notes: Pale brown fine to medium sand GP

Notes: Pale brown fine to medium sand GP

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Notes: Pale brown fine to medium sand GP

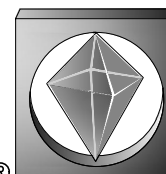
## DRAINAGE DESIGN CRITERIA

- RUNOFF COEFFICIENTS:
  - PAVEMENT = 1.00
  - ROOF = 1.00
  - LANDSCAPED = 0.30
- PROVIDE STORAGE FOR 2" RAINFALL
- 10" DRYWELL CAPACITY = 68.42 CF/VF
- MINIMUM SEPARATION OF DRYWELLS = 10 LF
- TRENCH DRAIN/CATCH BASIN/DRYWELL INTERCONNECTING PIPE TO BE 12" ADS N-12 CPP @ 1.5% MIN.
- ALL ROOF DRAIN SHALL BE 6" ADS N-12 CPP AT A MINIMUM SLOPE OF 1.5% UNLESS OTHERWISE NOTED.

## DRAINAGE CALCULATIONS

SYSTEM NAME	AREA	TRIBUTARY AREA (SF)	STORAGE REQ. (CF)	STORAGE DEPTH REQ. (VF)	STORAGE DEPTH PROVIDED (VF)	STORAGE PROVIDED (CF)
A	PAVEMENT	18504	3866.4	56.5	60	4105.2
	ROOF	3500				
	LANDSCAPE	3982				
B	PAVEMENT	17352	3533.7	51.6	55	3763.1
	ROOF	0				
	LANDSCAPE	12833				
C	PAVEMENT	12089	3885.7	56.8	58	3968.4
	ROOF	10000				
	LANDSCAPE	4084				
D	PAVEMENT	23584	5666.9	82.8	88	6021.0
	ROOF	8500				
	LANDSCAPE	6392				
E	PAVEMENT	13586	3347.7	48.9	52	3557.8
	ROOF	5000				
	LANDSCAPE	5001				
F	PAVEMENT	4891	1663.9	24.3	25	1710.5
	ROOF	4855				
	LANDSCAPE	791				
G	PAVEMENT	5809	2299.5	33.6	34	2326.3
	ROOF	6000				
	LANDSCAPE	6626				
TOTAL		173379	24263.8	356.1	372	25452.2

\*DRAINAGE CALCULATIONS DO NOT INCLUDE LAND ALONG THE R.O.W. BEING DEDICATED TO NEW YORK STATE NOR DO THEY INCLUDE THE EXISTING LAND TO REMAIN UNDISTURBED PER PINE BARRENS COMPATIBLE GROWTH AREA REGULATIONS.



**BOHLER**  
ENGINEERING

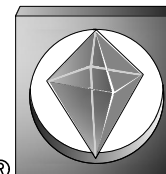
WARREN, NJ - CORPORATE OFFICE  
WHITE PLAINS, NY  
ALBANY, NY  
BOWIE, MD  
TOWSON, MD  
CHALFONT, PA  
CENTER VALLEY, PA  
SOUTHBOROUGH, MA  
STERLING, VA  
WARRENTON, VA  
FT. LAUDERDALE, FL

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APPROVALS

### REVISIONS

No.	Date	Description
1	12/03/09	REVISED AS PER SCOS COMMENTS
2	11/15/15	REV. PER TOWN PLANNING DEPARTMENT COMMENTS
3	9/20/17	REV. PER DISTURBED AREA
4	3/16/18	REV. LAYOUT & NYSDOT COMMENTS
5	11/19/19	REV. PER NYSDOT COMMENTS
6	12/21/19	TOWN OF RIVERHEAD SUBMISSION
7	2/13/23	REV. SITE COVERAGE AREAS



**BOHLER**  
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CIVIL & CONSULTING ENGINEERS

2929 EXPRESSWAY DRIVE NORTH  
HAUPPAUGE, NY 11749

Phone: 631.738.1200  
Fax: 631.285.6464

WWW.BOHLERENGINEERING.COM

JOSEPH A. DEAL

PROFESSIONAL ENGINEER

NEW YORK LICENSE No. 087122

DATE: 09/18/08 DRAWN BY: MD

SCALE: AS SHOWN CHECKED BY: JPC

CAD ID No.: N08029-SS-7A PROJECT No.: N08029

NOT FOR CONSTRUCTION

NYSDOT CASE #: N/A

HEALTH DEP. REF. #: N/A

CLIENT/ PROJECT: VENEZIA

SQUARE, LLC c/o

THE

NORTHWIND

GROUP

PORT JEFFERSON-RIVERHEAD ROAD

(NYS ROUTE 25A)

WADING RIVER

TOWN OF RIVERHEAD

SUFFOLK COUNTY, NY 11792

TAX MAP #: 600-73-1-1.4, 1.16-1.19

TITLE:

**GRADING &  
DRAINAGE  
PLAN**

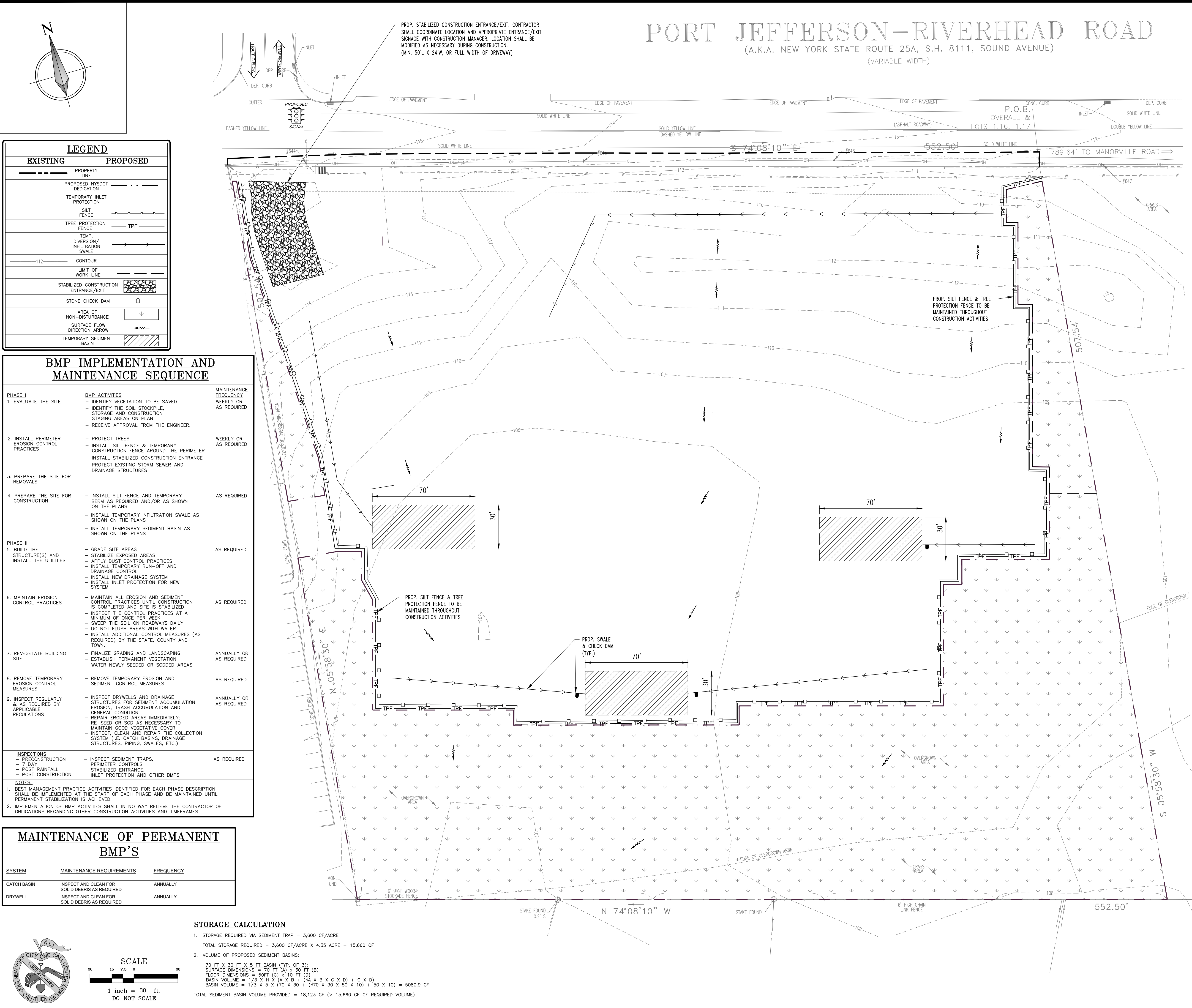
SHEET NO. REV. 7

**C-4**

OF 15

SUBMISSION SET





**SOIL EROSION & SEDIMENT CONTROL PLAN NOTES**

1. THE GENERAL NOTES SHEET SHALL BE PART OF THIS ENTIRE DOCUMENT PACKAGE AND IS PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES SHEET IS REFERENCED HEREIN AND IS TO BE REFERRED TO BY THE CONTRACTOR. THE CONTRACTOR IS TO FAMILIARIZE HIMSELF AND ACKNOWLEDGES HIS FAMILIARITY WITH ALL THE NOTES ON THE GENERAL NOTES SHEET AS WELL AS ANY AND ALL DRAWING SHEET SPECIFIC NOTES BELOW.

2. INSTALLATION OF EROSION CONTROL, CLEARING, AND SITE WORK SHALL BE DONE AS INDICATED IN THE EROSION CONTROL CONSTRUCTION NOTES.

3. INSTALL FILTER FABRIC FENCING ON THE DOWNHILL SIDE OF TEMPORARY FILL STOCKPILES.

4. EROSION CONTROL MEASURES SHALL CONFORM TO THE STATE OF NEW YORK GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL, UNLESS OTHERWISE NOTED, OR AS DIRECTED BY ENGINEER.

5. INSTALLATION OF EROSION CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6. INSPECT EROSION CONTROL MEASURES AFTER EACH RAINFALL EVENT, BUT NO LESS THAN WEEKLY CLEAR ANY SILT GREATER THAN 6" BEHIND THE FILTER FABRIC BARRIERS. EXCAVATE AND REMOVE ANY SILT FROM DROP INLET PROTECTION.

7. TEMPORARY SEED AND MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINISHED GRADE AND VEGETATED WITHIN 15 DAYS. WHEN AREAS ARE DISTURBED AFTER THE GROWING SEASON, THEY SHALL BE STABILIZED WITH GEOTEXTILE FABRIC AND MAINTAINED ACCORDING TO BEST MANAGEMENT PRACTICES.

8. INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE ENGINEER TO PREVENT THE INCIDENTAL DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE.

9. CONTINUE INSPECTION AND REPAIR OF EROSION CONTROL MEASURES UNTIL THE COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF VEGETATION.

10. REMOVE EROSION CONTROL MEASURES, SILT AND DEBRIS UPON ESTABLISHMENT OF PERMANENT VEGETATION COVER OR OTHER SPECIFIED METHOD OF STABILIZATION.

11. THE DISTURBED LAND AREA OF THIS SITE IS APPROXIMATELY 4.35 ACRES.

12. THE FOLLOWING EROSION CONTROL MEASURES ARE PROPOSED FOR THIS SITE:

-STABILIZED CONSTRUCTION ENTRANCE/ EXIT - A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/ EXIT IS TO BE INSTALLED AT THE NORTHWEST CORNER OF THE SITE. THIS AREA SHALL BE GRADED SO THAT RUNOFF WATER WILL BE RETAINED ON-SITE.

-SEDIMENT FENCE - INSTALL SILT FENCE(S) AROUND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE AND SOIL STOCKPILES.

-INSTALL FILTER FABRIC DROP INLET PROTECTION AROUND EACH DRAINAGE INLET AS DRAINAGE STRUCTURES ARE INSTALLED TO REDUCE THE QUANTITY OF SEDIMENT.

-DUST CONTROL - STOCKPILES OF SOIL SHOULD BE LIMITED TO 15' MAXIMUM HEIGHT AND REMOVED OR UTILIZED FOR SITE CONSTRUCTION AS SOON AS PRACTICABLE. SHOULD EXCESSIVE DUST BE GENERATED, THE CONTRACTOR SHALL APPLY WATER TO BARE SOIL SURFACES TO MINIMIZE BLOWING DUST.

13. THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES ON THE SITE UNTIL PERMANENT PAVING AND TURF/LANDSCAPING IS ESTABLISHED. THE COSTS OF INSTALLING AND MAINTAINING THE EROSION CONTROL MEASURES SHALL BE DEEMED INCLUDED IN THE BID PRICE FOR THE SITE WORK.

14. REFER TO LANDSCAPE PLAN FOR TREE PROTECTION FENCE LOCATIONS AND DETAILS.

15. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL UNSUITABLE MATERIAL AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, TOWN, COUNTY, STATE AND FEDERAL LAWS AND APPLICABLE CODES.

16. THESE PLANS ARE BASED ON INFORMATION AVAILABLE TO OUR OFFICE AT THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD-VERIFY EXISTING CONDITIONS AND NOTIFY OUR OFFICE IF ACTUAL SITE CONDITIONS DIFFER FROM THAT SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE IMPACTED BY ANY OTHER SITE FEATURES.

17. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL STRUCTURES. ADDITIONAL FACILITIES OR MEASURES SHALL BE INSTALLED WHERE NECESSARY TO COMPLY WITH ALL APPLICABLE CODES AND STANDARDS OR TO PREVENT THE INCIDENTAL DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE.

18. EXISTING TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR.

19. REFER TO GRADING AND LANDSCAPING PLANS FOR ADDITIONAL INFORMATION.

20. THE CONTRACTOR SHALL CLEAN EXISTING & PROPOSED DRAINAGE STRUCTURES AND INTERCONNECTING PIPE AT END OF PROJECT.

21. WITHOUT WRITTEN APPROVAL OF NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION, UNSTABILIZED AREAS OF DISTURBANCE THROUGHOUT THE SITE SHALL BE NO MORE THAN 5 ACRES AT ANY TIME.

22. CONTRACTOR SHALL PROVIDE TEMPORARY INLET PROTECTION BEYOND THE LIMITS OF DISTURBED AREA.

23. THIS PLAN IS TO BE USED IN CONJUNCTION WITH THE SITE SPECIFIC SWPPP REPORT/BINDER. CONTRACTOR SHALL COMPLY FULLY WITH (NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION GP-02-01) PERMIT.

24. SOIL EROSION CONTROL MEASURES SHALL BE ADJUSTED/ RELOCATED BY CONTRACTOR AS IDENTIFIED DURING SITE INSPECTIONS IN ORDER TO MAINTAIN EFFECTIVENESS OF CONTROL MEASURES TO ENSURE COMPLIANCE WITH SWPPP.

25. CONTRACTOR SHALL LOCATE CONSTRUCTION WASTE MATERIAL STORAGE AREAS SO AS TO MINIMIZE EXPOSURE TO STORMWATER. CONSTRUCTION WASTE SHALL BE IMMEDIATELY PLACED IN ON-SITE STORAGE CONTAINERS UNTIL READY FOR OFF-SITE DISPOSAL. CONTRACTOR SHALL MAINTAIN SPILL PREVENTION & RESPONSE EQUIPMENT AND MAKE AVAILABLE ON-SITE FOR USE BY CONTRACTOR'S EMPLOYEES TRAINED IN THE APPLICATION OF SPILL PREVENTION & RESPONSE PROCEDURES.

26. CONTRACTOR SHALL IDENTIFY LOCATION OF WASTE CONTAINERS, FUEL STORAGE TANKS, CONCRETE WASHOUT AREAS AND ANY OTHER LOCATIONS WHERE HAZARDOUS MATERIALS ARE STORED ON THE PLAN.

**EROSION CONTROL CONSTRUCTION NOTES**

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE AT THE ENTRANCE/ EXIT TO THE PROPOSED SITE AS INDICATED ON THE PLANS.

2. INSTALL SILT FENCING AT LIMITS OF DISTURBANCE DOWNHILL FROM PROPOSED CONSTRUCTION.

3. STRIP AND STOCKPILE TOPSOIL AND INSTALL SILT FENCING ALONG DOWNHILL SIDE OF THE STOCKPILES.

4. INSTALL SITE DRAINAGE AND UTILITIES AND INSTALL DROP INLET PROTECTION UPON CONSTRUCTION OF CATCH BASINS.

5. INSTALL PARKING LOT AND SITE IMPROVEMENTS SHOWN HEREON.

6. INSTALL ADDITIONAL EROSION CONTROL AS REQUIRED TO PREVENT THE INCIDENTAL DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE AND AS DIRECTED BY THE ENGINEER.

7. WHEN PERMANENT STABILIZATION OF DISTURBED SURFACES IS ACHIEVED, REMOVE THE EROSION CONTROL DEVICES AND ANY ACCUMULATED SEDIMENT AND/ OR DEBRIS.

**BOHLER ENGINEERING**

WARREN, NJ - CORPORATE OFFICE

WHITE PLAINS, NY CENTER VALLEY, PA

ALBANY, NY SOUTHBOROUGH, MA

BOWIE, MD STERLING, VA

TOWSON, MD WARRENTON, VA

CHALFONT, PA FT. LAUDERDALE, FL

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**APPROVALS**

**REVISIONS**

No.	Date	Description
1	12/09/09	REVISED AS PER SCOH'S COMMENTS
2	11/18/15	REV. PER TOWN PLANNING DEPARTMENT COMMENTS
3	9/20/17	REV. PER DISTURBED AREA
4	3/16/18	REV. LAYOUT & NYSDOT COMMENTS
5	11/19/18	REV. PER NYSDOT COMMENTS
6	12/21/18	TOWN OF RIVERHEAD SUBMISSION
7	2/13/23	REV. SITE COVERAGE AREAS

**BOHLER ENGINEERING**

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2929 EXPRESSWAY DRIVE NORTH  
HAUPPAUGE, NY 11749

Phone: 631.738.1200  
Fax: 631.285.6464

WWW.BOHLERENGINEERING.COM

**JOSEPH A. DEAL**

PROFESSIONAL ENGINEER  
NEW YORK LICENSE NO. 087122

DATE: 09/18/08 DRAWN BY: MD  
SCALE: AS SHOWN CHECKED BY: JPC  
CADD: No.: N08025-SWP-7A PROJECT No.: N08029

**NOT FOR CONSTRUCTION**

NYSDOT CASE #: N/A  
HEALTH DEP. REF. #: N/A

CLIENT/ PROJECT: VENEZIA SQUARE, LLC c/o THE NORTHWIND GROUP

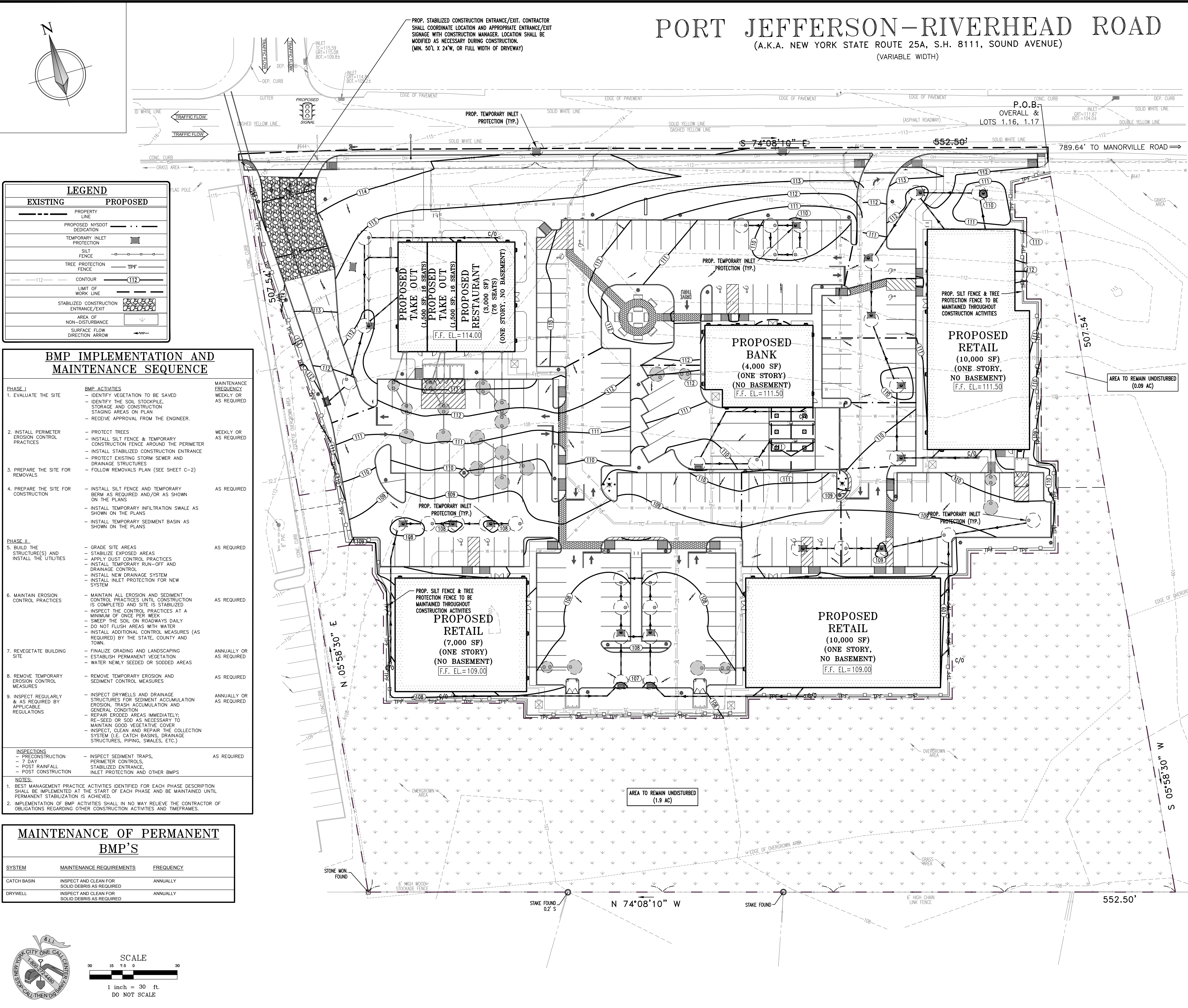
PORT JEFFERSON-RIVERHEAD ROAD  
(NYS ROUTE 25A)  
WADING RIVER  
TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NY 11792  
TAX MAP #: 600-73-1-1.4, 1.16-1.19

TITLE: PHASE I SWPPP PLAN

SHEET NO. C-5 OF 15

REVISION SET





### SOIL EROSION & SEDIMENT CONTROL PLAN NOTES

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- INSTALL FILTER FABRIC FENCING ON THE DOWNHILL SIDE OF TEMPORARY FILL STOCKPILES.
- EROSION CONTROL MEASURES SHALL CONFORM TO THE STATE OF NEW YORK GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL UNLESS OTHERWISE NOTED, OR AS DIRECTED BY ENGINEER.
- INSTALLATION OF EROSION CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- INSPECT EROSION CONTROL MEASURES AFTER EACH RAINFALL EVENT, BUT NO LESS THAN WEEKLY CLEAR ANY SILT GREATER THAN 6" BEHIND THE FILTER FABRIC BARRIERS, EXCAVATE AND REMOVE ANY SILT FROM DROP INLET PROTECTION.
- TEMPORARY SEED AND MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINISHED GRADE AND VEGETATED WITHIN 15 DAYS. WHEN AREAS ARE DISTURBED AFTER THE GROWING SEASON, THEY SHALL BE STABILIZED WITH GEOTEXTILE FABRIC AND MAINTAINED ACCORDING TO BEST MANAGEMENT PRACTICES.
- INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE ENGINEER TO PREVENT THE INCIDENTAL DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE.
- CONTINUE INSPECTION AND REPAIR OF EROSION CONTROL MEASURES UNTIL THE COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF VEGETATION.
- REMOVE EROSION CONTROL MEASURES, SILT AND DEBRIS UPON ESTABLISHMENT OF PERMANENT VEGETATION COVER OR OTHER SPECIFIED METHOD OF STABILIZATION.
- THE DISTURBED LAND AREA OF THIS SITE IS APPROXIMATELY 4.35 ACRES.
- THE FOLLOWING EROSION CONTROL MEASURES ARE PROPOSED FOR THIS SITE:
  - STABILIZED CONSTRUCTION ENTRANCE/ EXIT - A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/ EXIT IS TO BE INSTALLED AT THE NORTHWEST CORNER OF THE SITE. THIS AREA SHALL BE GRADED SO THAT RUNOFF WATER WILL BE RETAINED ON-SITE.
  - SEDIMENT FENCE - INSTALL SILT FENCE(S) AROUND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE AND SOIL STOCKPILES.
  - INSTALL FILTER FABRIC DROP INLET PROTECTION AROUND EACH DRAINAGE INLET AS DRAINAGE STRUCTURES ARE INSTALLED TO REDUCE THE QUANTITY OF SEDIMENT.
  - DUST CONTROL - STOCKPILES OF SOIL SHOULD BE LIMITED TO 15' MAXIMUM HEIGHT AND REMOVED OR UTILIZED FOR SITE CONSTRUCTION AS SOON AS PRACTICABLE. SHOULD EXCESSIVE DUST BE GENERATED, THE CONTRACTOR SHALL APPLY WATER TO BARE SOIL SURFACES TO MINIMIZE BLOWING DUST.
- THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES ON THE SITE UNTIL PERMANENT PAVING AND TURF/LANDSCAPING IS ESTABLISHED. THE COSTS OF INSTALLING AND MAINTAINING THE EROSION CONTROL MEASURES SHALL BE DEEMED INCLUDED IN THE BID PRICE FOR THE SITE WORK.
- REFER TO LANDSCAPE PLAN FOR TREE PROTECTION FENCE LOCATIONS AND DETAILS.
- DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL UNSUITABLE MATERIAL AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, TOWN, COUNTY, STATE AND FEDERAL LAWS AND APPLICABLE CODES.
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- EXISTING TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR.
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- WITHOUT WRITTEN APPROVAL OF NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION, UNSTABILIZED AREAS OF DISTURBANCE THROUGHOUT THE SITE SHALL BE NO MORE THAN 5 ACRES AT ANY TIME.
- CONTRACTOR SHALL PROVIDE TEMPORARY INLET PROTECTION BEYOND THE LIMITS OF DISTURBED AREA.
- THIS PLAN IS TO BE USED IN CONJUNCTION WITH THE SITE SPECIFIC SWPPP REPORT/BINDER. CONTRACTOR SHALL COMPLY FULLY WITH (NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION GP-02-01) PERMIT.
- SOIL EROSION CONTROL MEASURES SHALL BE ADJUSTED/ RELOCATED BY CONTRACTOR AS IDENTIFIED DURING SITE INSPECTIONS IN ORDER TO MAINTAIN EFFECTIVENESS OF CONTROL MEASURES TO ENSURE COMPLIANCE WITH SWPPP.
- CONTRACTOR SHALL LOCATE CONSTRUCTION WASTE MATERIAL STORAGE AREAS SO AS TO MINIMIZE EXPOSURE TO STORMWATER. CONSTRUCTION WASTE SHALL BE IMMEDIATELY PLACED IN ON-SITE STORAGE CONTAINERS UNTIL READY FOR OFF-SITE DISPOSAL. CONTRACTOR SHALL MAINTAIN SPILL PREVENTION & RESPONSE EQUIPMENT AND MAKE AVAILABLE ON-SITE FOR USE BY CONTRACTOR'S EMPLOYEES TRAINED IN THE APPLICATION OF SPILL PREVENTION & RESPONSE PROCEDURES.
- CONTRACTOR SHALL IDENTIFY LOCATION OF WASTE CONTAINERS, FUEL STORAGE TANKS, CONCRETE WASHOUT AREAS AND ANY OTHER LOCATIONS WHERE HAZARDOUS MATERIALS ARE STORED ON THE PLAN.

### EROSION CONTROL CONSTRUCTION NOTES

- INSTALL STABILIZED CONSTRUCTION ENTRANCE AT THE ENTRANCE/ EXIT TO THE PROPOSED SITE AS INDICATED ON THE PLANS.
- INSTALL SILT FENCING AT LIMITS OF DISTURBANCE DOWNHILL FROM PROPOSED CONSTRUCTION.
- STRIP AND STOCKPILE TOPSOIL AND INSTALL SILT FENCING ALONG DOWNHILL SIDE OF THE STOCKPILES.
- INSTALL SITE DRAINAGE AND UTILITIES AND INSTALL DROP INLET PROTECTION UPON COMPLETION OF CATCH BASINS.
- INSTALL PARKING LOT AND SITE IMPROVEMENTS SHOWN HEREON.
- INSTALL ADDITIONAL EROSION CONTROL AS REQUIRED TO PREVENT THE INCIDENTAL DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE AND AS DIRECTED BY THE ENGINEER.
- WHEN PERMANENT STABILIZATION OF DISTURBED SURFACES IS ACHIEVED, REMOVE THE EROSION CONTROL DEVICES AND ANY ACCUMULATED SEDIMENT AND/OR DEBRIS.

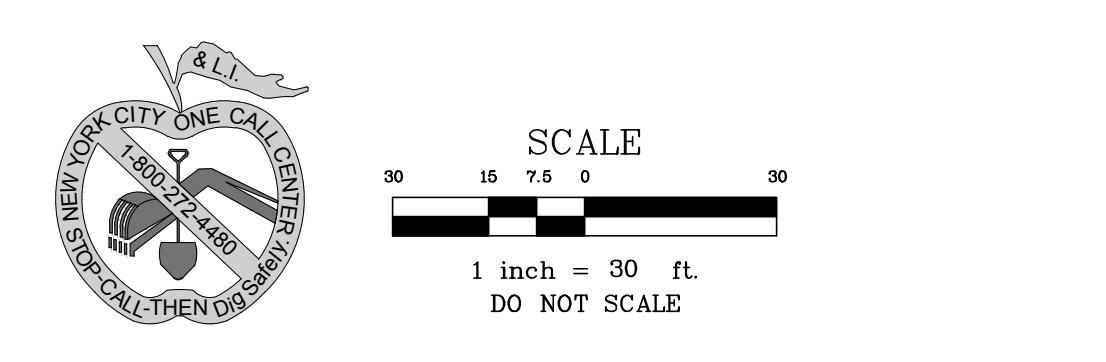
LEGEND	
EXISTING	PROPOSED
PROPERTY LINE	PROPOSED NYSOT DEDICATION
TEMPORARY INLET PROTECTION	SILT FENCE
TREE PROTECTION FENCE	TPF
CONTOUR	CONTOUR
LIMIT OF WORK LINE	LIMIT OF WORK LINE
STABILIZED CONSTRUCTION ENTRANCE/EXIT	AREA OF NON-DISTURBANCE
SURFACE FLOW DIRECTION ARROW	

### BMP IMPLEMENTATION AND MAINTENANCE SEQUENCE

PHASE	BMP ACTIVITIES	MAINTENANCE FREQUENCY
1. EVALUATE THE SITE	- IDENTIFY VEGETATION TO BE SAVED - IDENTIFY THE SOIL STOCKPILE, STORAGE AND CONSTRUCTION STAGING AREAS ON PLAN - RECEIVE APPROVAL FROM THE ENGINEER.	WEEKLY OR AS REQUIRED
2. INSTALL PERIMETER EROSION CONTROL PRACTICES	- PROTECT TREES - INSTALL SILT FENCE & TEMPORARY CONSTRUCTION FENCE AROUND THE PERIMETER - INSTALL STABILIZED CONSTRUCTION ENTRANCE - PROTECT EXISTING STORM SEWER AND DRAINAGE STRUCTURES - FOLLOW REMOVALS PLAN (SEE SHEET C-2)	WEEKLY OR AS REQUIRED
3. PREPARE THE SITE FOR REMOVALS		
4. PREPARE THE SITE FOR CONSTRUCTION	- INSTALL SILT FENCE AND TEMPORARY BERM AS REQUIRED AND/OR AS SHOWN ON THE PLANS - INSTALL TEMPORARY INFILTRATION SWALE AS SHOWN ON THE PLANS - INSTALL TEMPORARY SEDIMENT BASIN AS SHOWN ON THE PLANS	AS REQUIRED
5. BUILD THE STRUCTURE(S) AND INSTALL THE UTILITIES	- GRADE SITE AREAS - STABILIZE EXPOSED AREAS - APPLY DUST CONTROL PRACTICES - INSTALL TEMPORARY RUN-OFF AND DRAINAGE CONTROL - INSTALL NEW DRAINAGE SYSTEM - INSTALL INLET PROTECTION FOR NEW SYSTEM	AS REQUIRED
6. MAINTAIN EROSION CONTROL PRACTICES	- MAINTAIN ALL EROSION AND SEDIMENT CONTROL PRACTICES UNTIL CONSTRUCTION IS COMPLETED AND SITE IS STABILIZED - INSPECT THE CONTROL PRACTICES AT A MINIMUM OF ONCE PER WEEK - SWEEP THE SOIL ON ROADWAYS DAILY - DO NOT FLUSH AREAS WITH WATER - INSTALL ADDITIONAL CONTROL MEASURES (AS REQUIRED) BY THE STATE, COUNTY AND TOWN.	AS REQUIRED
7. REVEGETATE BUILDING SITE	- FINALIZE GRADING AND LANDSCAPING - ESTABLISH PERMANENT VEGETATION - WATER NEWLY SEEDDED OR SOODED AREAS	ANNUALLY OR AS REQUIRED
8. REMOVE TEMPORARY EROSION CONTROL MEASURES	- REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES	AS REQUIRED
9. INSPECT REGULARLY AS REQUIRED BY APPLICABLE REGULATIONS	- INSPECT DRYWELLS AND DRAINAGE STRUCTURES FOR SEDIMENT ACCUMULATION, EROSION, TRASH ACCUMULATION AND GENERAL CONDITION - REPAIR ERODED AREAS IMMEDIATELY; RE-SEED OR SOO AS NECESSARY TO MAINTAIN GOOD VEGETATIVE COVER - INSPECT, CLEAN AND REPAIR THE COLLECTION SYSTEM (I.E. CATCH BASINS, DRAINAGE STRUCTURES, PIPING, SWALES, ETC.)	ANNUALLY OR AS REQUIRED
INSPECTIONS	- PRECONSTRUCTION - 7 DAY - POST RAINFALL - POST CONSTRUCTION	AS REQUIRED
NOTES:	1. BEST MANAGEMENT PRACTICE ACTIVITIES IDENTIFIED FOR EACH PHASE DESCRIPTION SHALL BE IMPLEMENTED AT THE START OF EACH PHASE AND BE MAINTAINED UNTIL PERMANENT STABILIZATION IS ACHIEVED. 2. IMPLEMENTATION OF BMP ACTIVITIES SHALL IN NO WAY RELIEVE THE CONTRACTOR OF OBLIGATIONS REGARDING OTHER CONSTRUCTION ACTIVITIES AND TIMEFRAMES.	

### MAINTENANCE OF PERMANENT BMP'S

SYSTEM	MAINTENANCE REQUIREMENTS	FREQUENCY
CATCH BASIN	INSPECT AND CLEAN FOR SOLID DEBRIS AS REQUIRED	ANNUALLY
DRYWELL	INSPECT AND CLEAN FOR SOLID DEBRIS AS REQUIRED	ANNUALLY



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### REVISIONS

No.	Date	Description
1	12/03/09	REVISED AS PER SCDS COMMENTS
2	11/18/15	REV. PER TOWN PLANNING DEPARTMENT COMMENTS
3	9/20/17	REV. PER DISTURBED AREA
4	3/16/18	REV. LAYOUT & NYSOT COMMENTS
5	11/19/19	REV. PER NYSOT COMMENTS
6	12/21/19	TOWN OF RIVERHEAD SUBMISSION
7	2/13/23	REV. SITE COVERAGE AREAS

## BOHLER ENGINEERING

CIVIL & CONSULTING ENGINEERS

2929 EXPRESSWAY DRIVE NORTH  
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JOSEPH A. DEAL

PROFESSIONAL ENGINEER  
NEW YORK LICENSE No. 087122

DATE: 09/18/08	DRAWN BY: MD
SCALE: AS SHOWN	CHECKED BY: JPC
CAD/12: No.: N08025-SWP-7A	PROJECT No.: N08029

**NOT FOR CONSTRUCTION**

NYSOT CASE #: N/A  
HEALTH DEP. REF. #: N/A

CLIENT/ PROJECT: VENEZIA SQUARE, LLC c/o THE NORTHWIND GROUP.

PORT JEFFERSON-RIVERHEAD ROAD (NYS ROUTE 25A)  
WADING RIVER  
TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NY 11792  
TAX MAP #: 600-73-1-1.4, 1.16-1.19

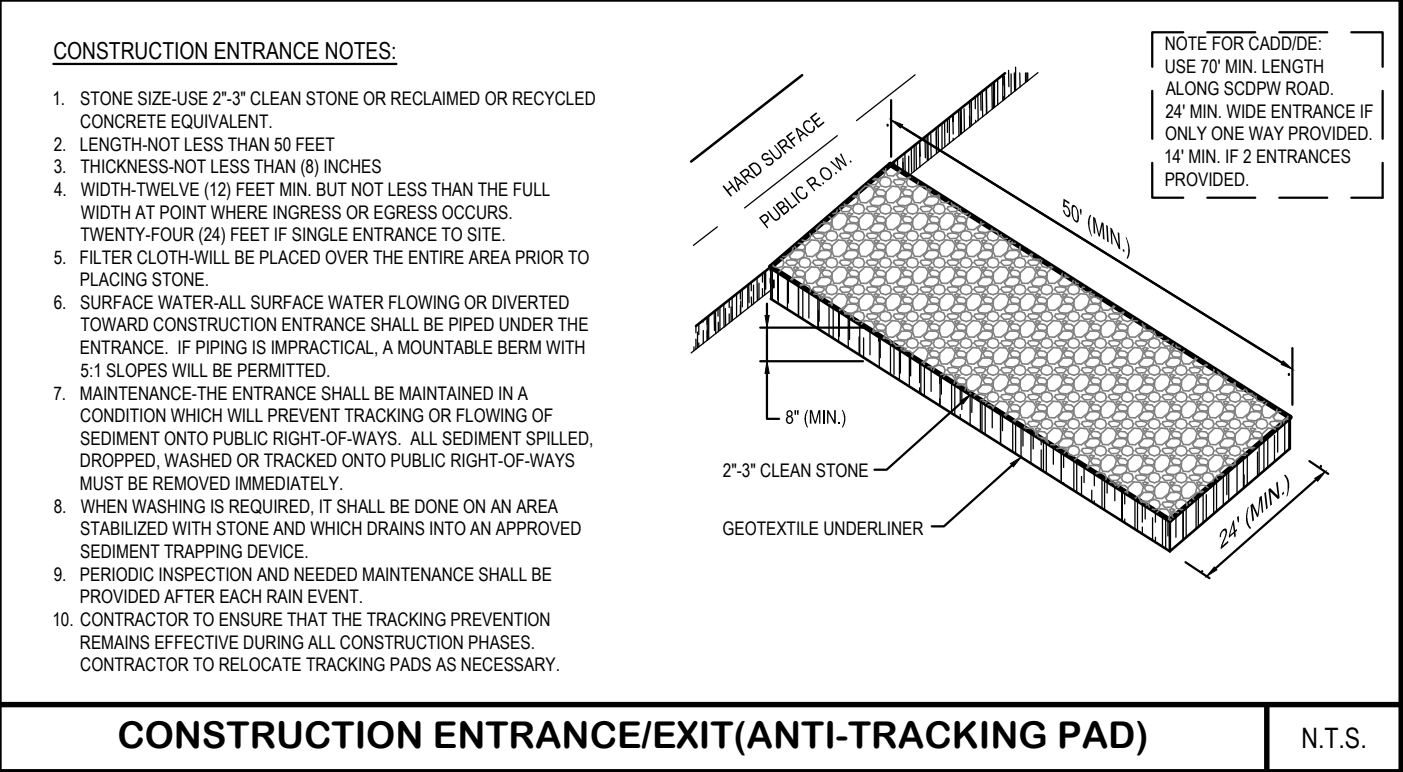
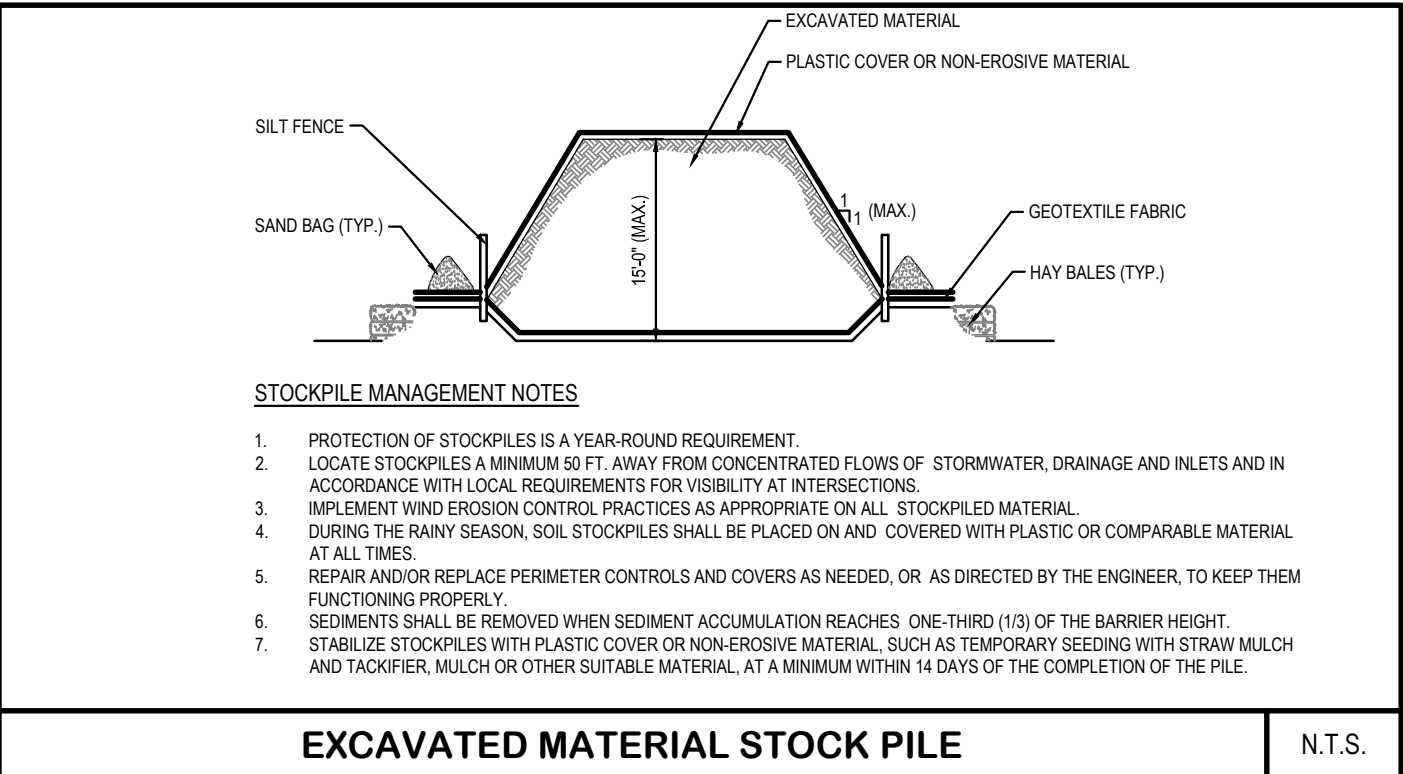
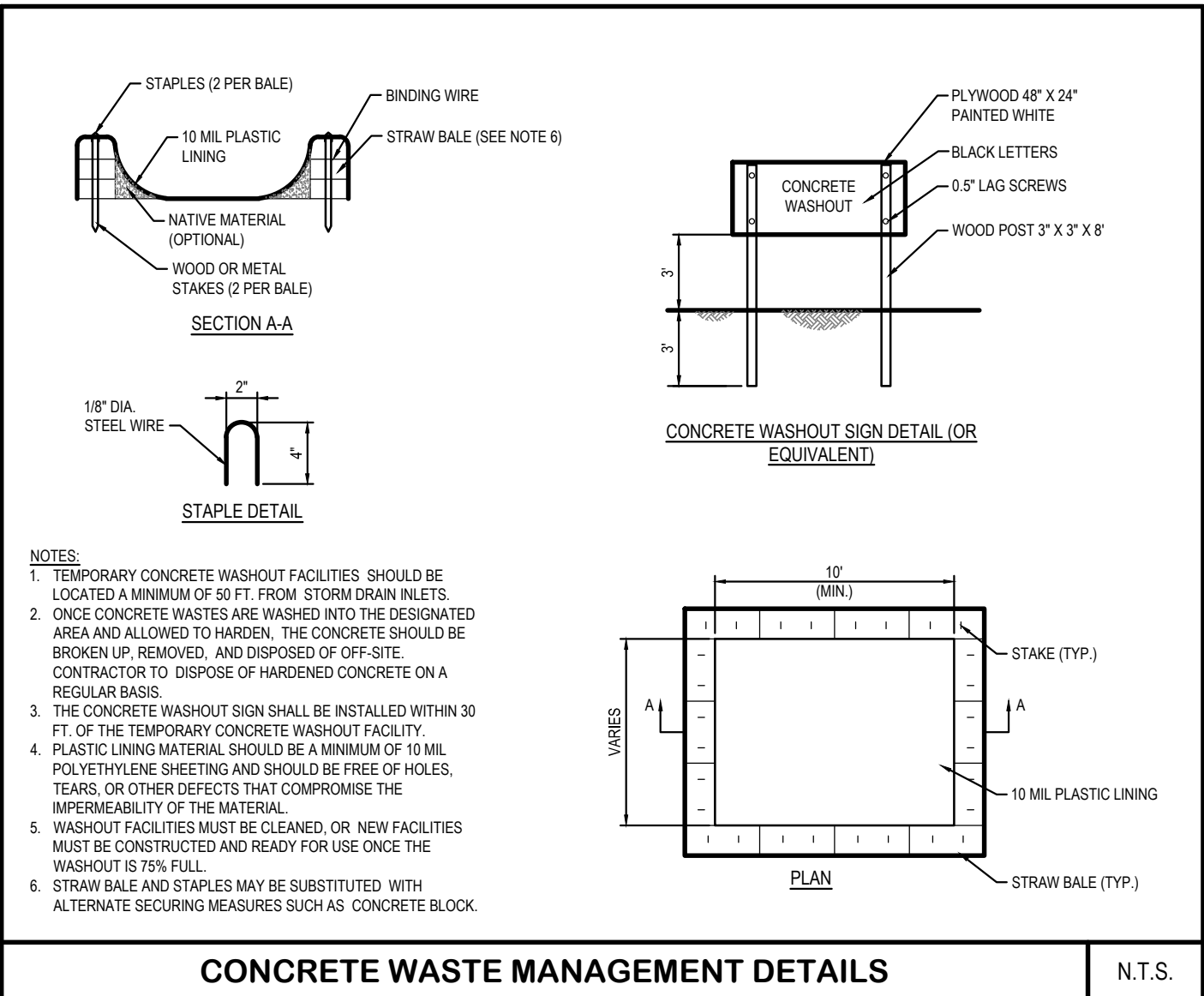
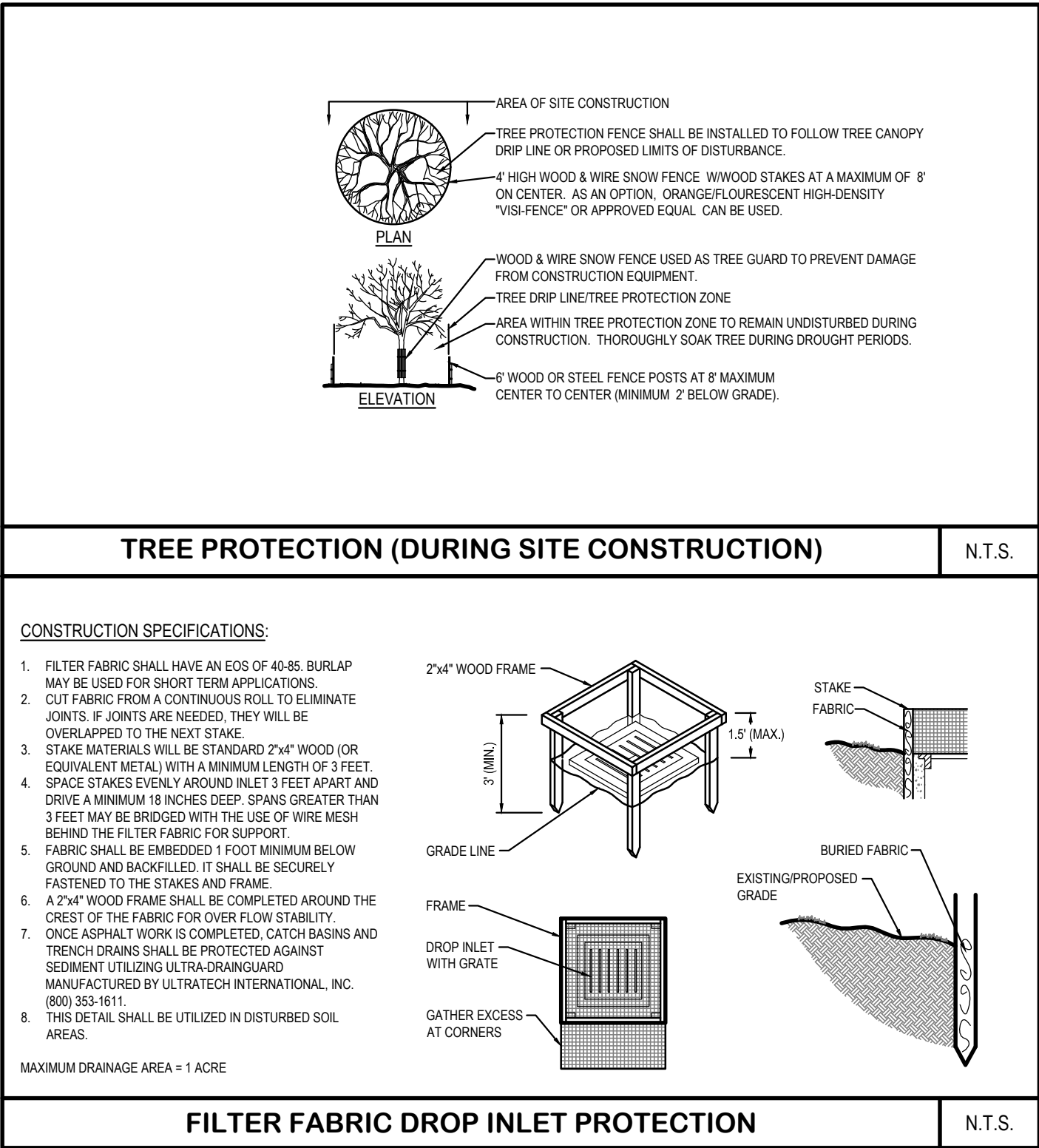
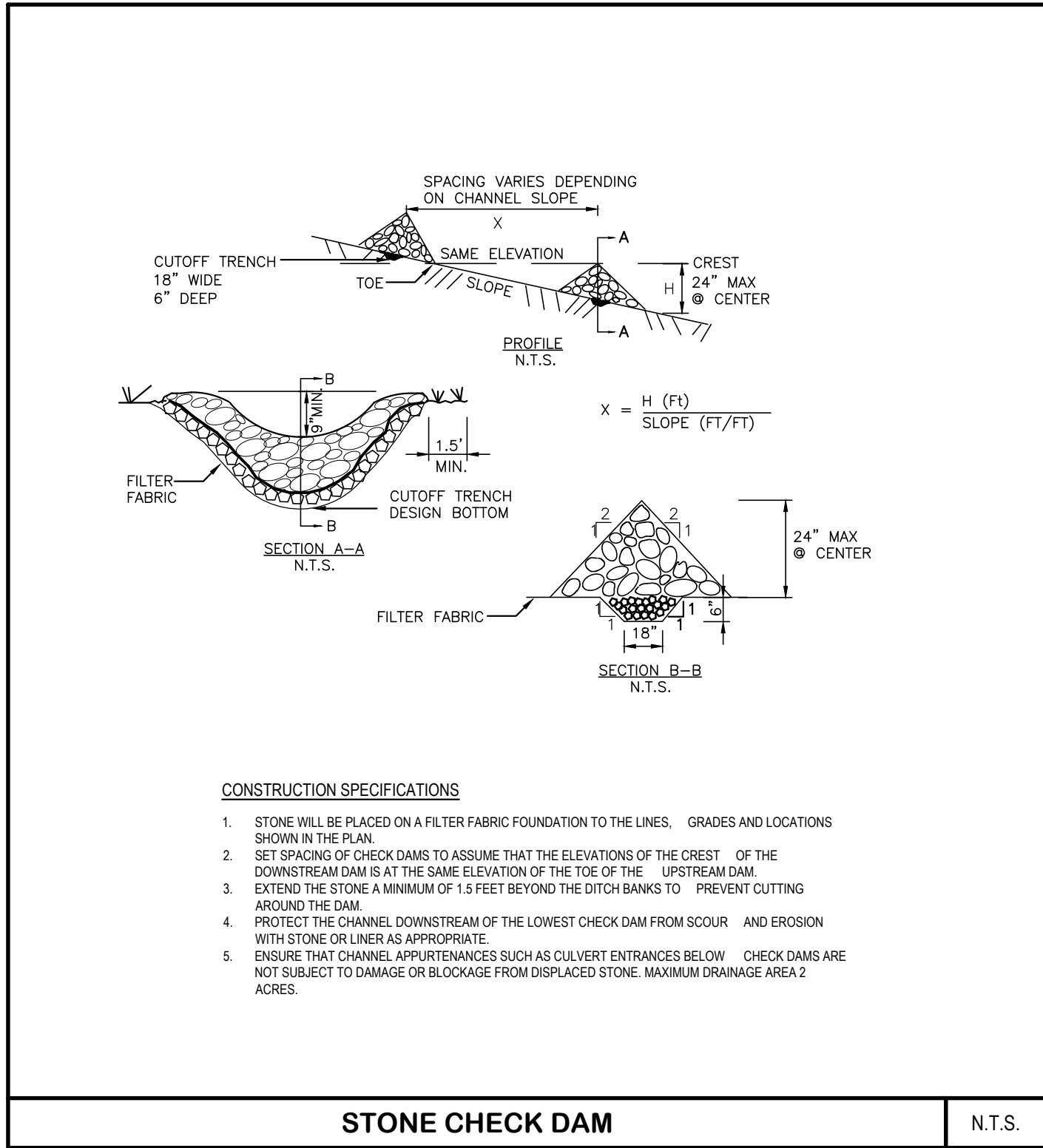
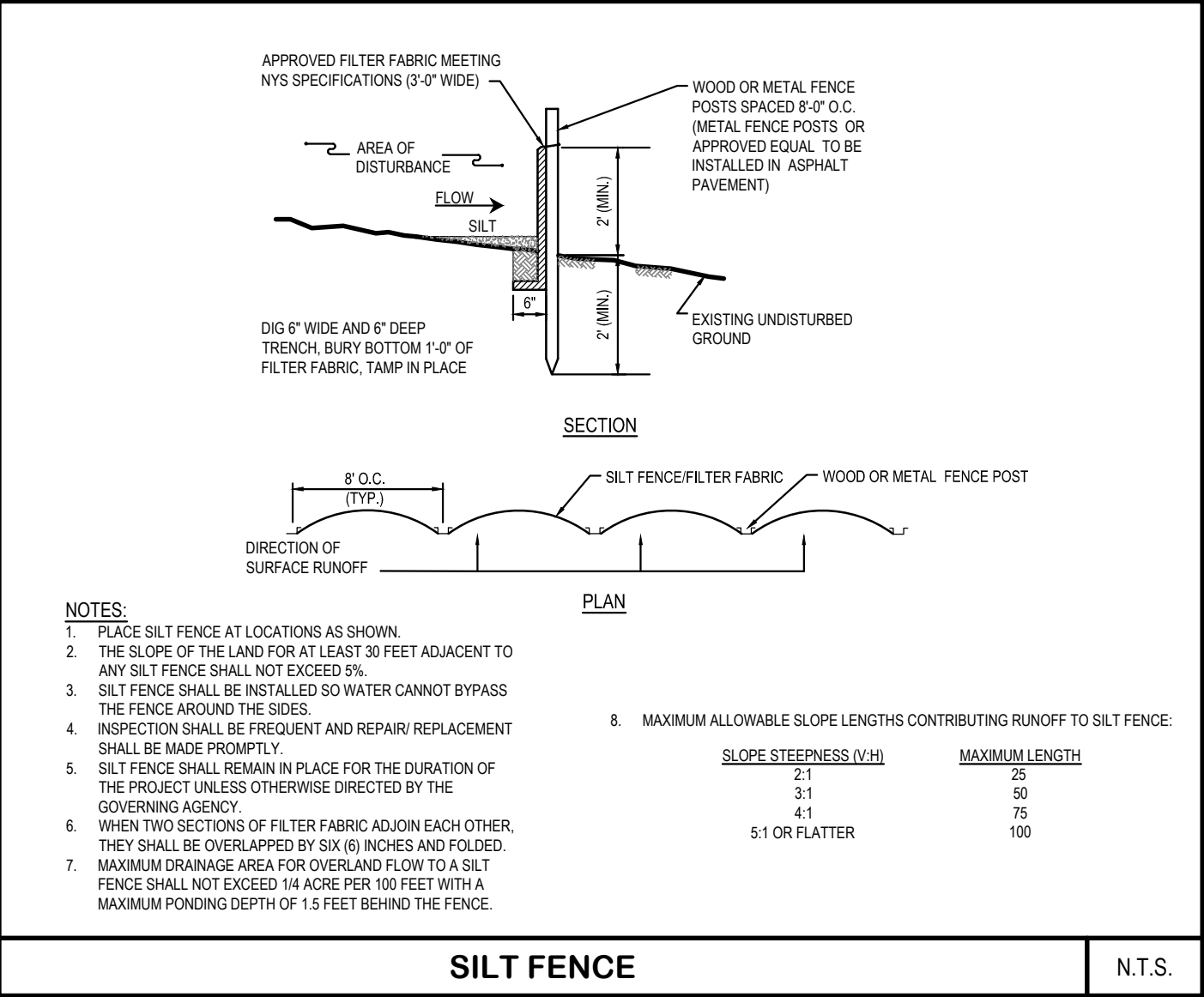
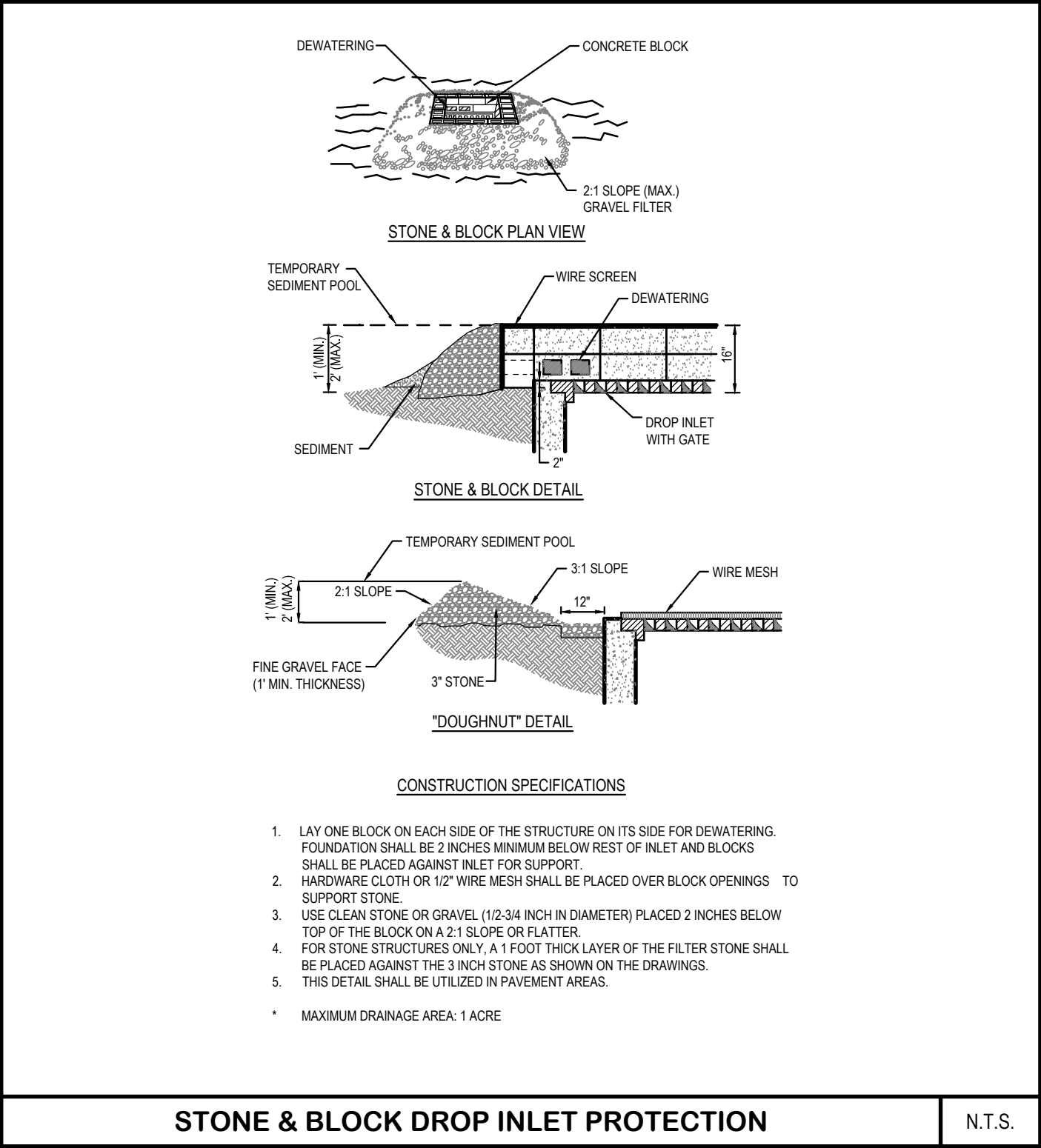
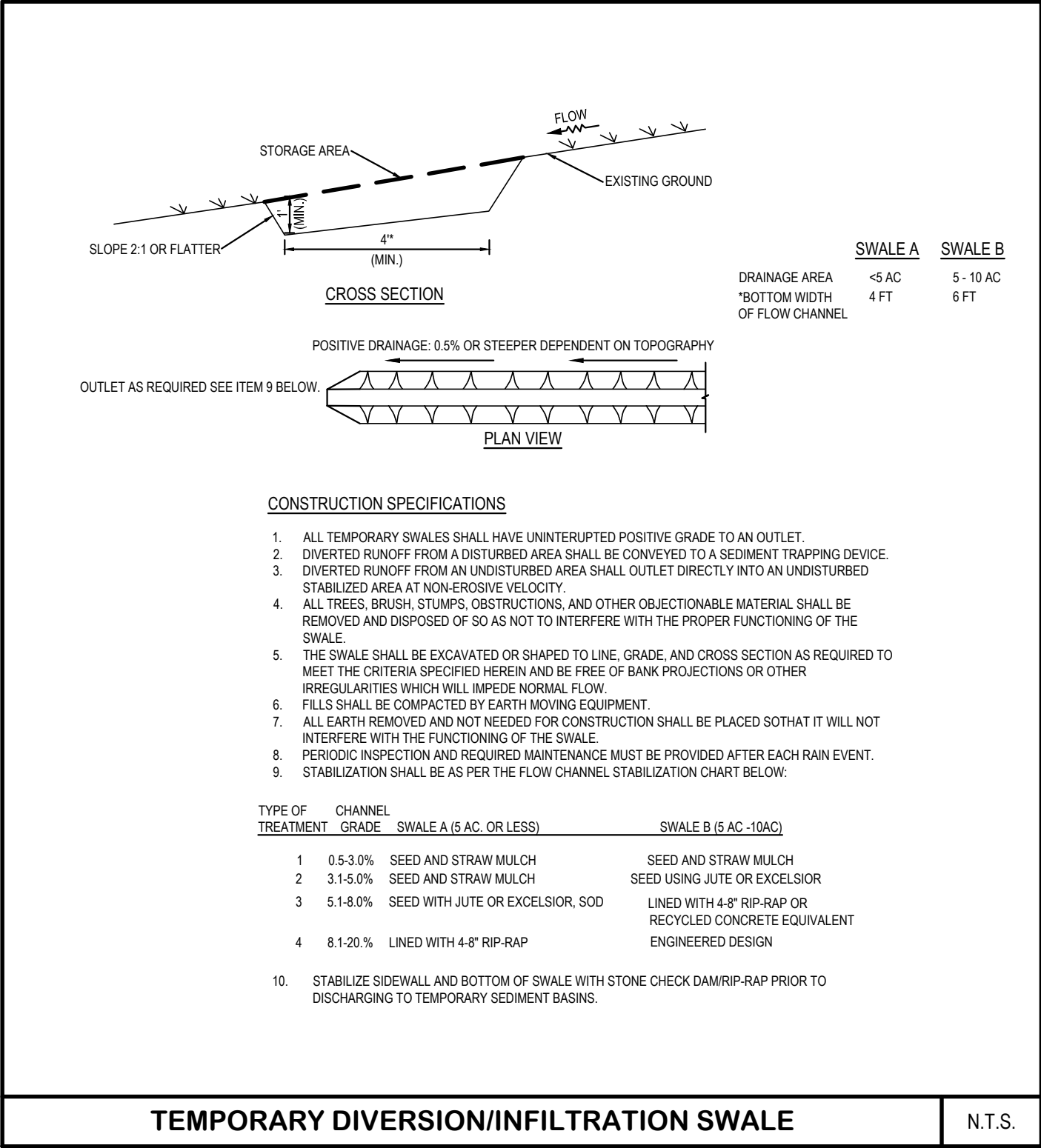
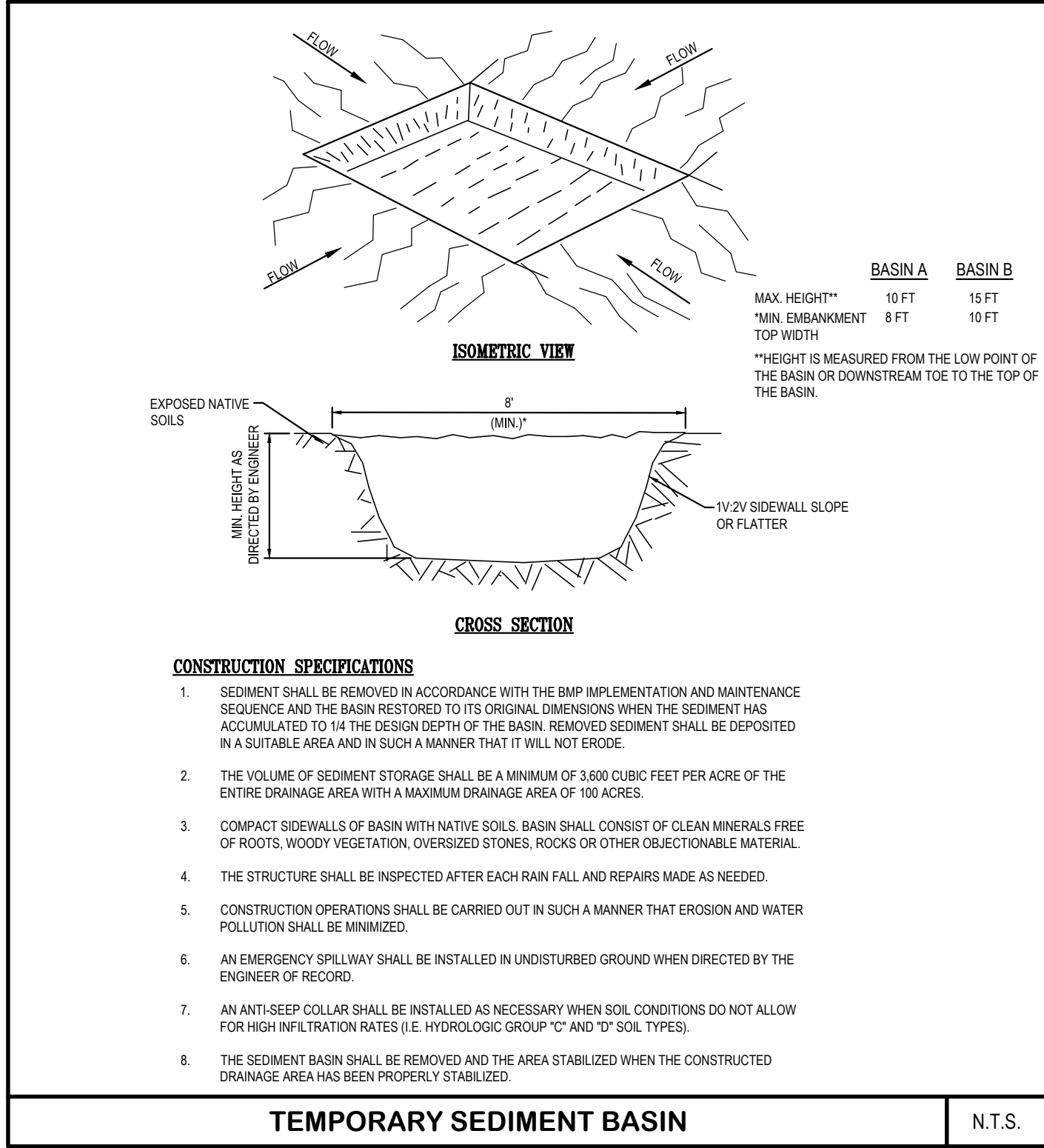
TITLE: PHASE II SWPPP PLAN

SHEET NO. C-6 REV. 7

OF 15

SUBMISSION SET





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**APPROVALS**

No.	Date	Description
1	12/30/09	REVISED AS PER SCDS COMMENTS
2	11/18/15	REV. PER TOWN PLANNING DEPARTMENT COMMENTS
3	9/20/17	REV. PER DISTURBED AREA
4	3/16/18	REV. LAYOUT & NYSDOT COMMENTS
5	11/19/19	REV. PER NYSDOT COMMENTS
6	12/2/19	TOWN OF RIVERHEAD SUBMISSION
7	2/13/23	REV. SITE COVERAGE AREAS

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**JOSEPH A. DEAL**  
PROFESSIONAL ENGINEER  
NEW YORK LICENSE NO. 087122

DATE: 09/18/08 DRAWN BY: MD  
SCALE: AS SHOWN CHECKED BY: JPC  
CADD ID. No.: N08029-SWP-7A PROJECT No.: N08029

**NOT FOR CONSTRUCTION**  
NYSDOT CASE #: N/A  
HEALTH DEPT. REF. #: N/A

CLIENT/ PROJECT: VENEZIA SQUARE, LLC c/o THE NORTHWIND GROUP.  
PORT JEFFERSON-RIVERHEAD ROAD (NYS ROUTE 25A)  
WADING RIVER  
TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NY 11792  
TAX MAP #: 600-73-1-1.4, 1.16-1.19

TITLE: SWPPP PLAN DETAILS  
REV. 7  
C-7  
OF 15

SUBMISSION SET



# PORT JEFFERSON-RIVERHEAD ROAD

(A.K.A. NEW YORK STATE ROUTE 25A, S.H. 8111, SOUND AVENUE)

(VARIABLE WIDTH)

NOTE FOR UTILITY SERVICES:  
IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE THE ROUTING OF THE PROP. UNDERGROUND ELECTRIC, GAS, TELEPHONE AND WATER SERVICES FOR THE PROP. BUILDING WITH THE GOVERNING UTILITY COMPANIES. CONTRACTOR SHALL ALSO COORDINATE AVAILABILITY OF SERVICES WITHIN THE RIGHT-OF-WAY WITH THE UTILITY COMPANIES.

CONTRACTOR MUST COORDINATE TAPS FOR 8" WATER MAIN LOOP WITH SCWA PRIOR TO CONSTRUCTION

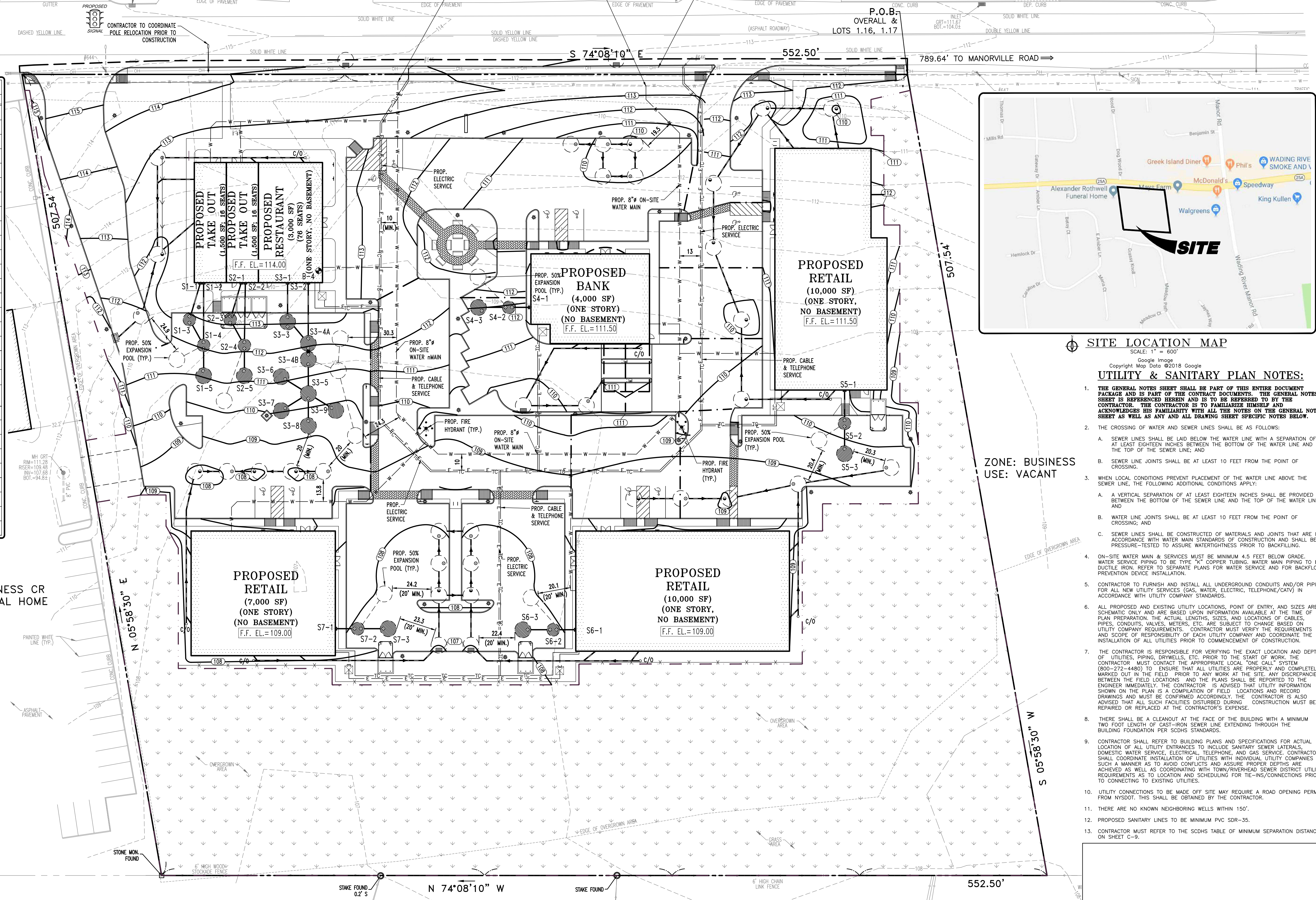
PROP. ELECTRIC SERVICE LAYOUT IS PRELIMINARY AND SUBJECT TO CHANGE BASED UPON THE USE CHARACTERISTICS OF THE PROP. BUILDINGS. THIS LAYOUT IS NOT TO BE CONSTRUCTED AS FINAL.

LEGEND	
EXISTING	PROPOSED

ZONE: BUSINESS CR  
USE: FUNERAL HOME

SECTION 73  
BLOCK 1  
LOT 1.51  
N/F REPUTED OWNER  
DYLAN & KATHLEEN FRIEDLANDER  
L 12304, PG. 942

SCALE  
1 inch = 30 ft.  
DO NOT SCALE



SECTION 73  
BLOCK 1  
LOT 1.52  
N/F REPUTED OWNER  
SEAN NEKNEZ/MICHELLE TAHIR  
L 12284, PG. 465

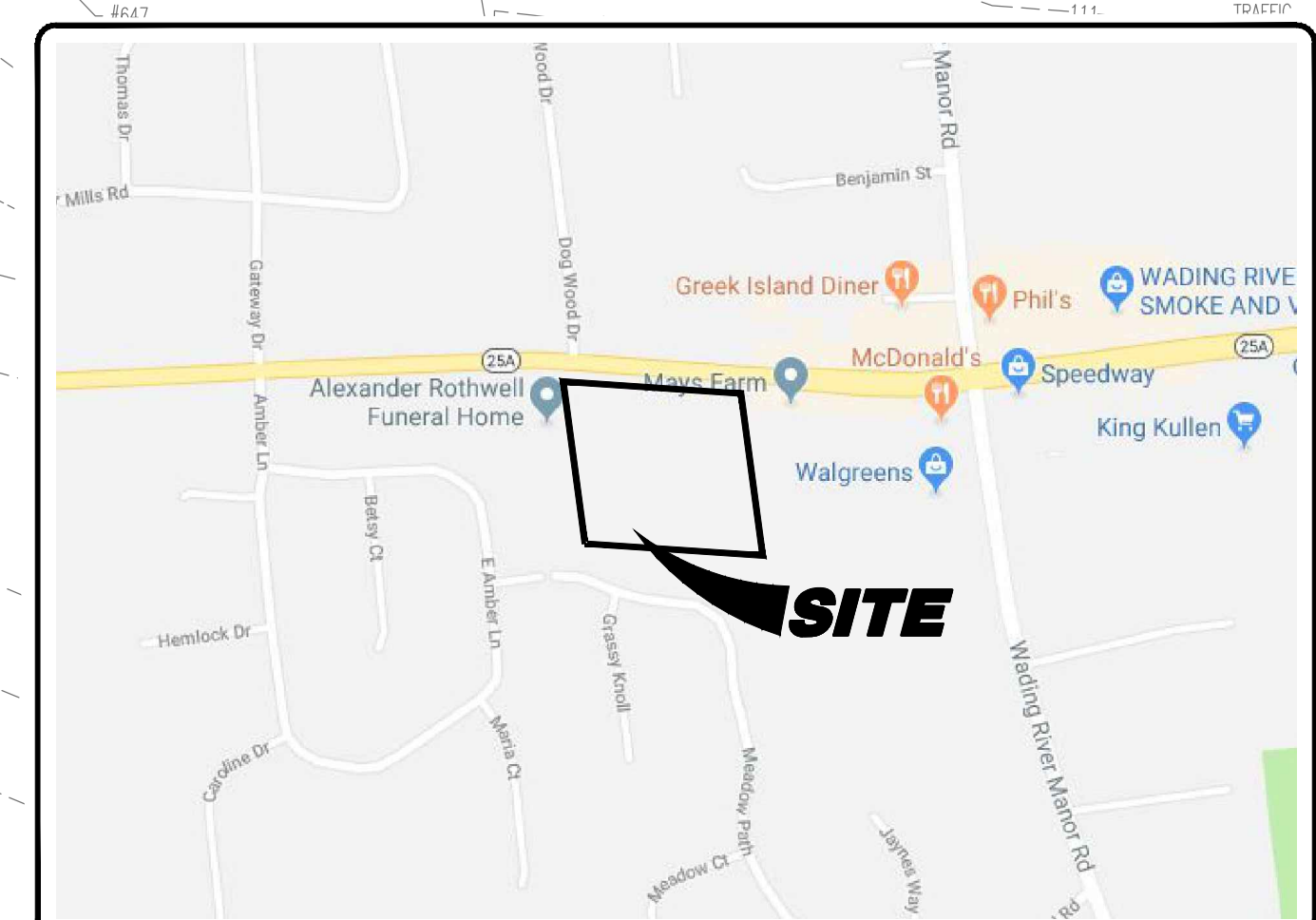
SECTION 73  
BLOCK 1  
LOT 1.53  
N/F REPUTED OWNER  
JAMES & CHRISTINE BELLINO  
L 12304, PG. 159

ZONE: RESIDENCE B-80  
USE: RESIDENCE

ZONE: RESIDENCE B-80  
USE: RESIDENCE

ZONE: RESIDENCE B-80  
USE: RESIDENCE

ZONE: RESIDENCE B-80  
USE: RESIDENCE

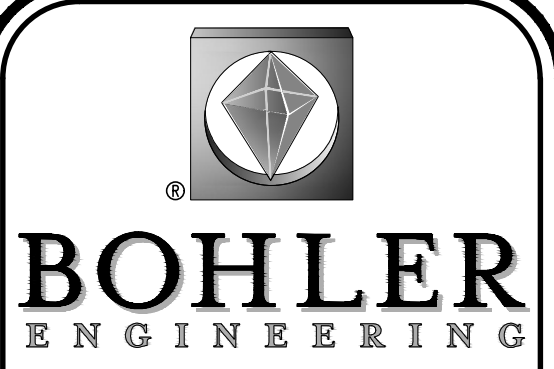


SITE LOCATION MAP  
SCALE: 1" = 600'

## UTILITY & SANITARY PLAN NOTES:

- THE GENERAL NOTES SHEET SHALL BE PART OF THIS ENTIRE DOCUMENT PACKAGE AND IS PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES SHEET IS REFERENCED HEREIN AND IS TO BE REFERRED TO BY THE CONTRACTOR. THE CONTRACTOR IS TO FAMILIARIZE HIMSELF AND ACKNOWLEDGE HIS FAMILIARITY WITH ALL THE NOTES ON THE GENERAL NOTES SHEET AS WELL AS ANY AND ALL DRAWING SHEET SPECIFIC NOTES BELOW.
- THE CROSSING OF WATER AND SEWER LINES SHALL BE AS FOLLOWS:
  - SEWER LINES SHALL BE LAID BELOW THE WATER LINE WITH A SEPARATION OF AT LEAST EIGHTEEN INCHES BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE SEWER LINE; AND
  - SEWER LINE JOINTS SHALL BE AT LEAST 10 FEET FROM THE POINT OF CROSSING; AND
- WHEN LOCAL CONDITIONS PREVENT PLACEMENT OF THE WATER LINE ABOVE THE SEWER LINE, THE FOLLOWING ADDITIONAL CONDITIONS APPLY:
  - A VERTICAL SEPARATION OF AT LEAST EIGHTEEN INCHES SHALL BE PROVIDED BETWEEN THE BOTTOM OF THE SEWER LINE AND THE TOP OF THE WATER LINE; AND
  - WATER LINE JOINTS SHALL BE AT LEAST 10 FEET FROM THE POINT OF CROSSING; AND
  - SEWER LINES SHALL BE CONSTRUCTED OF MATERIALS AND JOINTS THAT ARE IN ACCORDANCE WITH WATER MAIN STANDARDS OF CONSTRUCTION AND SHALL BE PRESSURE-TESTED TO ASSURE WATERTIGHTNESS PRIOR TO BACKFILLING.
- ON-SITE WATER MAIN & SERVICES MUST BE MINIMUM 4.5 FEET BELOW GRADE. WATER SERVICE PIPING TO BE TYPE "K" COPPER TUBING. WATER MAIN PIPING TO BE DUCTILE IRON. REFER TO SEPARATE PLANS FOR WATER SERVICE AND FOR BACKFLOW PREVENTION DEVICE INSTALLATION.
- CONTRACTOR TO FURNISH AND INSTALL ALL UNDERGROUND CONDUITS AND/OR PIPING FOR ALL NEW UTILITY SERVICES (GAS, WATER, ELECTRIC, TELEPHONE/CATV) IN ACCORDANCE WITH UTILITY COMPANY STANDARDS.
- ALL PROPOSED AND EXISTING UTILITY LOCATIONS, POINT OF ENTRY, AND SIZES ARE SCHEMATIC ONLY AND ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF PLAN PREPARATION. THE ACTUAL LENGTHS, SIZES, AND LOCATIONS OF CABLES, PIPES, CONDUITS, VALVES, METERS, ETC. ARE SUBJECT TO CHANGE BASED ON UTILITY COMPANY REQUIREMENTS. CONTRACTOR MUST VERIFY THE REQUIREMENTS AND SCOPE OF RESPONSIBILITY OF EACH UTILITY COMPANY AND COORDINATE THE INSTALLATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATION AND DEPTH OF UTILITIES, PIPING, DRYWELLS, ETC. PRIOR TO THE START OF WORK. THE CONTRACTOR MUST CONTACT THE APPROPRIATE LOCAL "ONE CALL" SYSTEM (800-272-4480) TO ENSURE THAT ALL UTILITIES ARE PROPERLY AND COMPLETELY MARKED OUT IN THE FIELD PRIOR TO ANY WORK AT THE SITE. ANY DISCREPANCIES BETWEEN THE FIELD LOCATIONS AND THE PLANS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR IS ADVISED THAT UTILITY INFORMATION SHOWN ON THE PLAN IS A COMPILATION OF FIELD LOCATIONS AND RECORD DRAWINGS AND MUST BE CONFIRMED ACCORDINGLY. THE CONTRACTOR IS ALSO ADVISED THAT ALL SUCH FACILITIES DISTURBED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- THERE SHALL BE A CLEANOUT AT THE FACE OF THE BUILDING WITH A MINIMUM TWO FOOT LENGTH OF CAST-IRON SEWER LINE EXTENDING THROUGH THE BUILDING FOUNDATION PER SCDS STANDARDS.
- CONTRACTOR SHALL REFER TO BUILDING PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC WATER SERVICE, ELECTRICAL, TELEPHONE, AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES WITH INDIVIDUAL UTILITY COMPANIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH TOWN/RIVERHEAD SEWER DISTRICT UTILITY REQUIREMENTS AS TO LOCATION AND SCHEDULING FOR TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.
- UTILITY CONNECTIONS TO BE MADE OFF SITE MAY REQUIRE A ROAD OPENING PERMIT FROM NYSOT. THIS SHALL BE OBTAINED BY THE CONTRACTOR.
- THERE ARE NO KNOWN NEIGHBORING WELLS WITHIN 150'.
- PROPOSED SANITARY LINES TO BE MINIMUM PVC SDR-35.
- CONTRACTOR MUST REFER TO THE SCDS TABLE OF MINIMUM SEPARATION DISTANCES ON SHEET C-9.

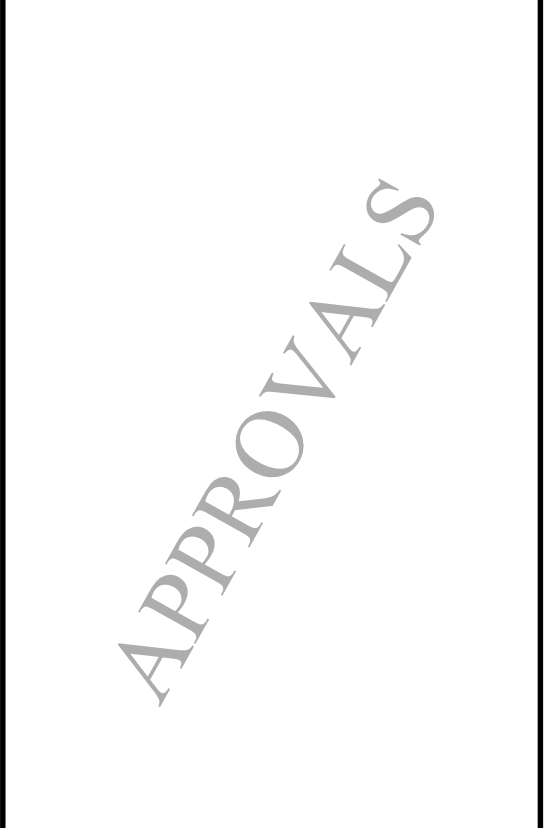
SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES APPROVAL



WARREN, NJ - CORPORATE OFFICE  
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ALBANY, NY  
BOWIE, MD  
TOWSON, MD  
CHALFONT, PA

CENTER VALLEY, PA  
SOUTHBOROUGH, MA  
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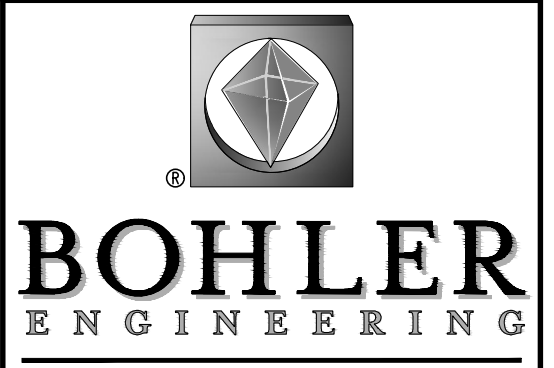
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SITE LOCATION MAP  
SCALE: 1" = 600'

## REVISIONS

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JOSEPH A. DEAL  
PROFESSIONAL ENGINEER  
NEW YORK LICENSE No. 087122

DATE: 09/18/08	DRAWN BY: MD
SCALE: AS SHOWN	CHECKED BY: JPC
CAD ID No.: N08029-SS-7A	PROJECT No.: N08029

## NOT FOR CONSTRUCTION

NYSOT CASE #: N/A  
HEALTH DEP. REF. #: N/A

CLIENT/PROJECT: VENEZIA SQUARE, LLC c/o THE NORTHWIND GROUP  
PORT JEFFERSON-RIVERHEAD ROAD (NYS ROUTE 25A)  
WADING RIVER  
TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NY 11792  
TAX MAP #: 600-73-1-1.4, 1.16-1.19

UTILITY & SANITARY PLAN  
SHEET NO. C-8  
REV. 7  
OF 15

SUBMISSION SET



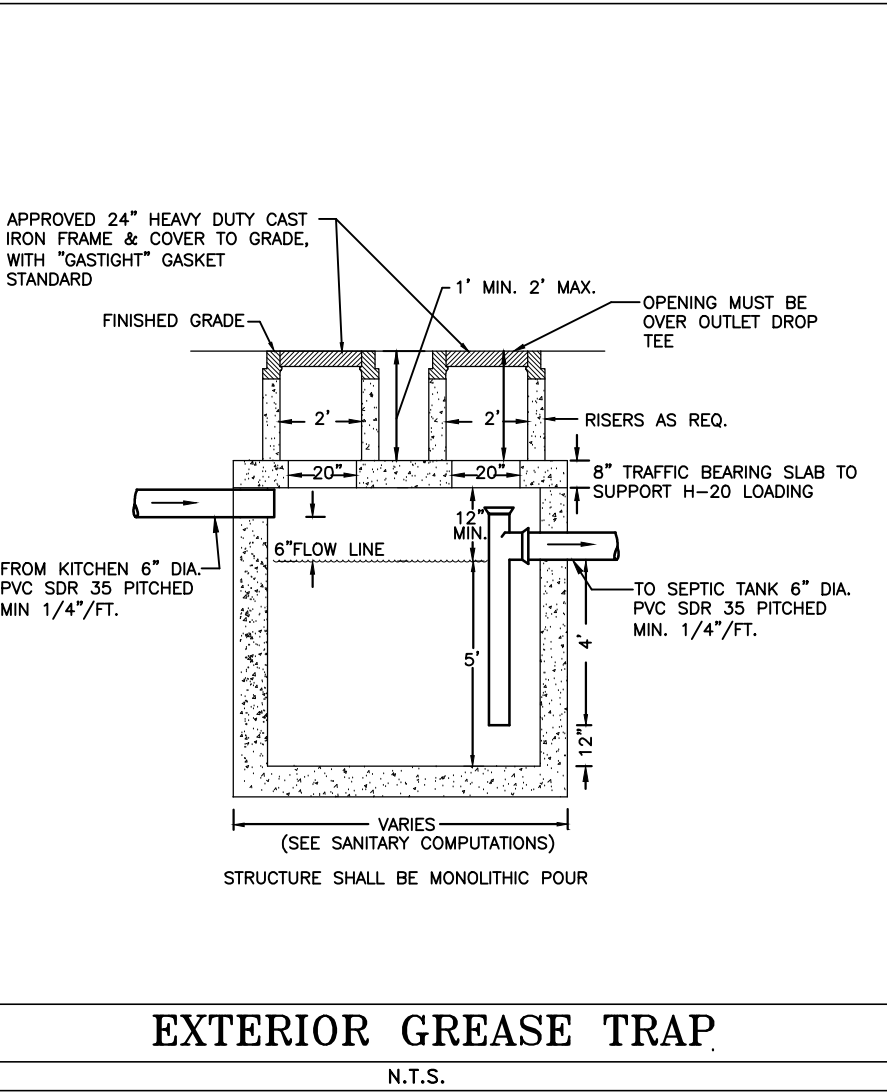
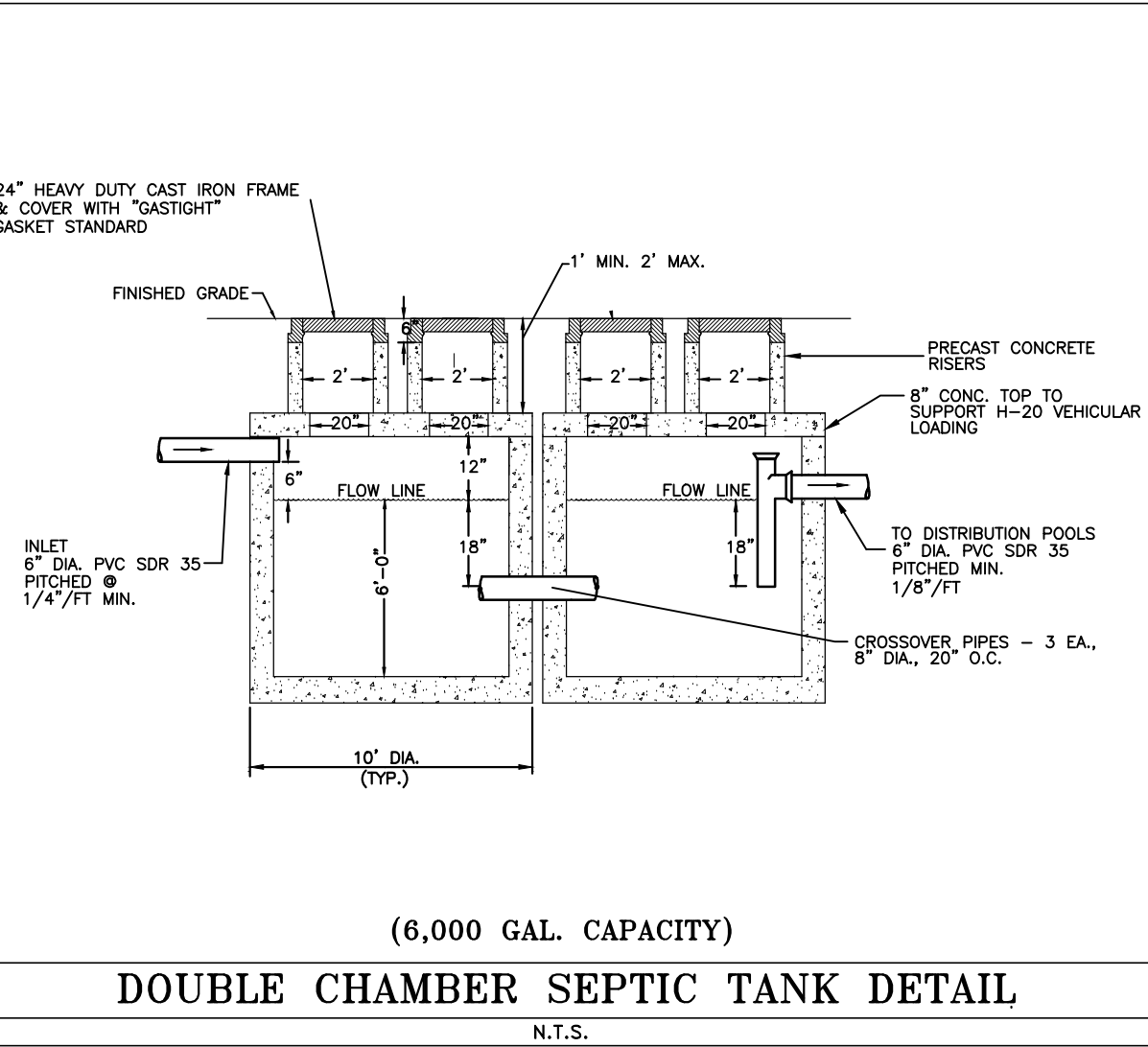
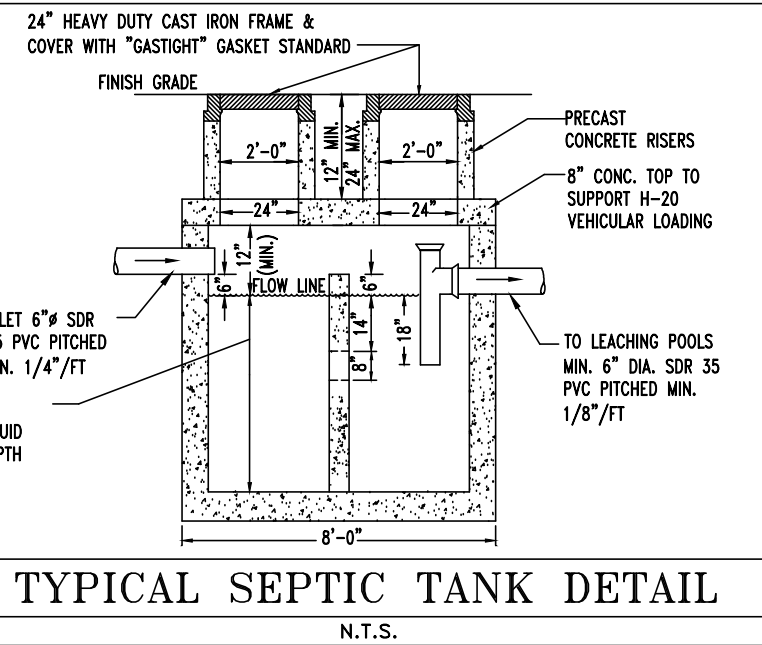
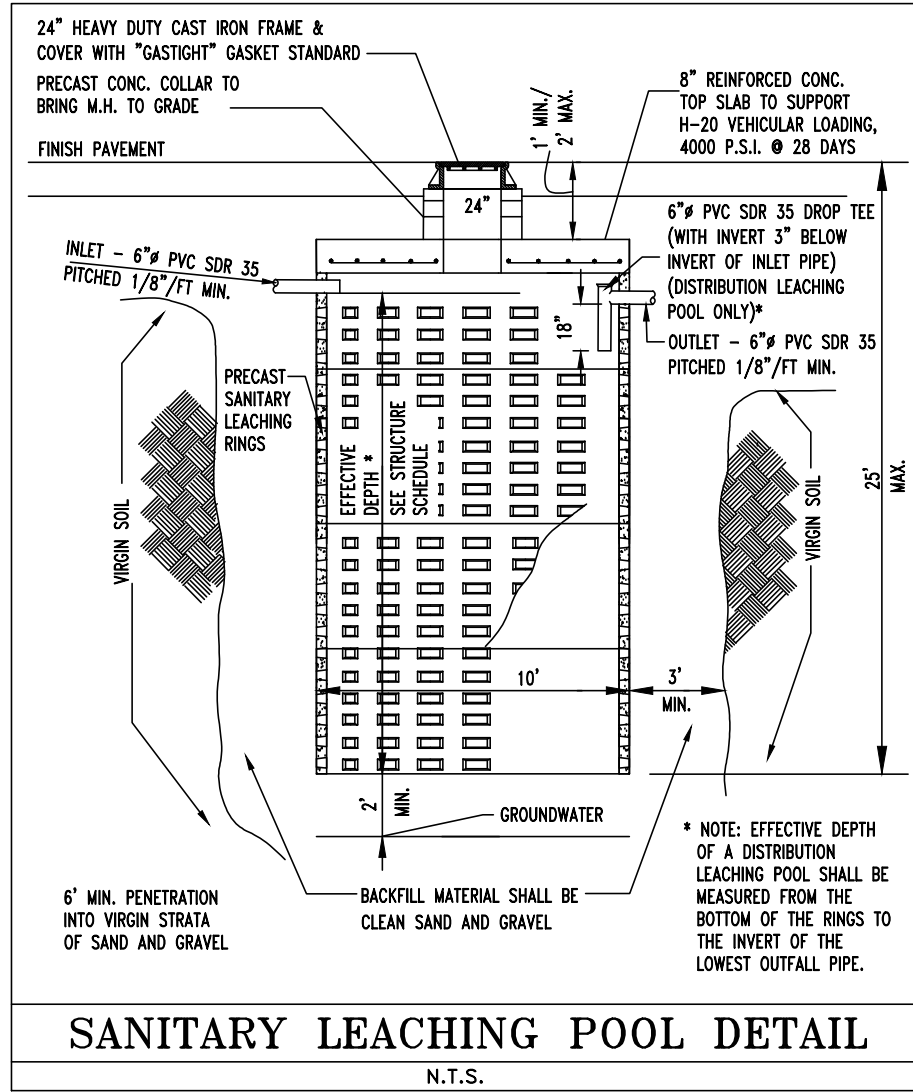


Table of Minimum Horizontal Separation Distances From:	Septic Tank, Pump Station, Grease Trap, or Manhole	Leaching Pool <sup>3</sup>	Sewer Line, Force Main
Building with Cellar	10 ft.	10 ft.	5 ft.
Building on Slab	5 ft.	10 ft.	5 ft.
Water Service Line/Laterals/Mains <sup>5</sup>	10 ft.	10 ft.	10 ft. <sup>4</sup>
Underground Utilities	5 ft.	5 ft.	5 ft.
Surface Water/Regulated Wetlands	75 ft.	100 ft.	50 ft.
Public Water Well <sup>2</sup>	200 ft.	200 ft.	50 ft.
Private Well <sup>1</sup>	100 ft.	150 ft.	50 ft.
Storm Drain/Stormwater Recharge Basin <sup>5</sup>	20 ft.	20 ft.	10 ft.
Catch Basins (non leaching)/Drainage Pipe <sup>6</sup>	5 ft.	10 ft.	5 ft.
Leaching Pool	8 ft.	8 ft.	10 ft. <sup>7</sup>
Septic Tank, Pump Station, Grease Trap, or Manhole <sup>8</sup>	5 ft.	8 ft.	5 ft.
Property Lines	5 ft.	10 ft.	5 ft.
Swimming Pool	20 ft.	20 ft.	5 ft.
Retaining Wall (water proof)	10 ft.	10 ft.	5 ft.
Fuel Storage Tanks (below ground)	20 ft.	20 ft.	10 ft.
Top of Embankment or Steep Slope (15 % slope or greater)	25 ft.	25 ft.	25 ft.
Bluffs	65 ft.	65 ft.	65 ft.

- Increased distance between leaching pools and private wells may be required based upon the depth of the wells involved and the direction of groundwater flow. Refer to **Standards For The Design Of Individual Water Supply Systems**. Discharges from treatment works shall be located down gradient of the well or out of the groundwater flow path towards the well. **Precise groundwater flow direction measurements may be required.**
- Significant discharges (generally greater than 5,000 gpd or those in proximity to wells) are subject to a separate site review by the department.
- Leaching pools for treatment works have different distance requirements. See **Appendix A** and **Appendix B** for distance requirements for leaching pools or recharge beds associated with modified subsurface sewage disposal systems and treatment works, respectively.
- Water and sewer lines may be in the same trench if the water line is placed on an undisturbed bench or shelf so that the bottom of the water main is at least 18 inches higher than the top of the sewer and the sewer is not subject to settling, vibration, superimposed loads, or frost action.
- A minimum of 10 foot separation is required between water service line/laterals/mains and the edge of all stormwater drainage leaching structures.
- A minimum of 5 foot separation is required between water service line/laterals/mains and the edge of all stormwater drainage non-leaching structures and associated piping.
- Sewer piping between clusters of leaching pools may be installed at lesser separation distances.
- Multiple unit septic tanks and grease traps shall be considered one structure and therefore individual components may be installed at lesser separation distances.

## SANITARY DENSITY COMPUTATIONS

### ALLOWABLE SANITARY DENSITY FLOW

SITE AREA = 6.342 ACRES (276,249 SF)  
GROUNDWATER MANAGEMENT ZONE III = 300 GPD/AC  
AREA OF SITE IN GROUNDWATER MANAGEMENT ZONE III = 6.342 ACRES  
(300 GPD/AC X 6.342 AC) = 1,902.6 GPD ALLOWABLE

### PROPOSED SANITARY FLOW

DENSITY COMPUTATIONS PER TENANT LIST (PROPOSED CONDITIONS)					
Tenant	Use	Building Area	Restaurant seats	Density Flow Rate	Density Flow
TENANT 1	WET RETAIL W/FOOD	1,500 SF	16 SEATS	0.03 GPD/SF	45.00 GPD
TENANT 2	WET RETAIL W/FOOD	1,500 SF	16 SEATS	0.03 GPD/SF	45.00 GPD
TENANT 3	RESTAURANT	3,000 SF	76 SEATS	10 GPD/SEAT	760.00 GPD
TENANT 4	BANK	4,000 SF	-----	0.06 GPD/SF	240.00 GPD
TENANT 5	DRY RETAIL	10,000 SF	-----	0.03 GPD/SF	300.00 GPD
TENANT 6	DRY RETAIL	10,000 SF	-----	0.03 GPD/SF	300.00 GPD
TENANT 7	DRY RETAIL	7,000 SF	-----	0.03 GPD/SF	210.00 GPD
Total:		37,000 SF		Total Density Flow:	1,900.00 GPD

ALLOWABLE DENSITY FLOW = 1,902.6 GPD  
PROPOSED DENSITY FLOW = 1,900.0 GPD

### SANITARY SYSTEM DESIGN #1 & 2

#### DESIGN FLOW

USE: WET RETAIL W/FOOD = 0.15 GPD/SF  
BUILDING AREA = 1,500 SF  
TOTAL DAILY FLOW = 1,500 SF x 0.15 GPD/SF = 225 GPD

#### SEPTIC TANK

REQUIRED CAPACITY = 2 DAYS FLOW = 225 GPD X 2 DAYS = 450 GAL  
MINIMUM ALLOWABLE SEPTIC TANK PER SCDS STANDARDS IS 1,200 GAL  
USE A SINGLE SEPTIC TANK 8' DIA. X 4' LIQ. DEPTH  
CAPACITY = 1,200 GAL

#### LEACHING POOLS

DESIGN FLOW = 225 GPD  
LEACHING RATE = 1.5 GPD/SF  
REQUIRED SIDEWALL AREA = 225 GPD/1.5 GPD/SF = 150 SF  
MINIMUM ALLOWABLE LEACHING POOL PER SCDS STANDARDS IS 300 SF (9.55 VF)  
USE 1 LEACHING POOL @ 10' x 10 VF EFFECTIVE DEPTH FOR EACH SYSTEM  
TOTAL EFFECTIVE DEPTH = 10 VF

#### GREASE TRAP

DESIGN FLOW = 1,500 SF X 0.12 GPD/SF = 180 GPD  
MINIMUM ALLOWABLE GREASE TRAP PER SCDS STANDARDS IS 8' x 5' LIQUID DEPTH (1,500 GAL)  
USE A 8' x 5' LIQUID DEPTH GREASE TRAP FOR SYSTEM A  
USE A 8' x 5' LIQUID DEPTH GREASE TRAP FOR SYSTEM B

### SANITARY SYSTEM DESIGN #3

#### DESIGN FLOW

USE: RESTAURANT = 30 GPD/SEAT  
NUMBER OF SEATS = 76  
TOTAL DAILY FLOW = 76 SEATS X 30 GPD/SEAT = 2,280 GPD

#### SEPTIC TANK

REQUIRED CAPACITY = 2 DAYS FLOW = 2,280 GPD X 2 DAYS = 4,560 GAL  
USE A DOUBLE SEPTIC TANK 10' DIA. X 5' LIQ. DEPTH  
CAPACITY = 5,000 GAL

#### LEACHING POOLS

DESIGN FLOW = 2,280 GPD  
LEACHING RATE = 1.5 GPD/SF  
REQUIRED SIDEWALL AREA = 2,280 GPD/1.5 GPD/SF = 1,520 SF  
REQUIRED DEPTH = 1,520 SF/31.42 SF/VF = 48.38 VF  
USE 5 LEACHING POOLS @ 10' x 10 VF EFFECTIVE DEPTH  
TOTAL EFFECTIVE DEPTH = 50 VF

#### GREASE TRAP

DESIGN FLOW = 76 SEATS X 20 GPD/SF = 1,520 GPD  
MINIMUM ALLOWABLE GREASE TRAP GREASE TRAP PER SCDS STANDARDS IS 10' x 5' LIQUID DEPTH (2,500 GAL)  
USE A 10' x 5' LIQUID DEPTH GREASE TRAP

### SANITARY SYSTEM DESIGN #4

#### DESIGN FLOW

USE: BANK = 0.06 GPD/SF  
BUILDING AREA = 4,000 SF  
TOTAL DAILY FLOW = 4,000 SF x 0.06 GPD/SF = 240 GPD

#### SEPTIC TANK

REQUIRED CAPACITY = 2 DAYS FLOW = 240 GPD X 2 DAYS = 480 GAL  
MINIMUM ALLOWABLE SEPTIC TANK PER SCDS STANDARDS IS 1,200 GAL  
USE A SINGLE SEPTIC TANK 8' DIA. X 4' LIQ. DEPTH  
CAPACITY = 1,200 GAL

#### LEACHING POOLS

DESIGN FLOW = 240 GPD  
LEACHING RATE = 1.5 GPD/SF  
REQUIRED SIDEWALL AREA = 240 GPD/1.5 GPD/SF = 160 SF  
MINIMUM ALLOWABLE LEACHING POOL PER SCDS STANDARDS IS 300 SF (9.55 VF)  
USE 1 LEACHING POOL @ 10' x 10 VF EFFECTIVE DEPTH  
TOTAL EFFECTIVE DEPTH = 10 VF

### SANITARY SYSTEM DESIGN #5 & 6

#### DESIGN FLOW

USE: DRY RETAIL = 0.03 GPD/SF  
BUILDING AREA = 10,000 SF  
TOTAL DAILY FLOW = 10,000 SF x 0.03 GPD/SF = 300 GPD

#### SEPTIC TANK

REQUIRED CAPACITY = 2 DAYS FLOW = 300 GPD X 2 DAYS = 600 GAL  
MINIMUM ALLOWABLE SEPTIC TANK PER SCDS STANDARDS IS 1,200 GAL  
USE A SINGLE SEPTIC TANK 8' DIA. X 4' LIQ. DEPTH FOR EACH SYSTEM  
CAPACITY = 1,200 GAL

#### LEACHING POOLS

DESIGN FLOW = 300 GPD  
LEACHING RATE = 1.5 GPD/SF  
REQUIRED SIDEWALL AREA = 300 GPD/1.5 GPD/SF = 200 SF  
REQUIRED DEPTH = 200 SF/31.42 SF/VF = 6.37 VF  
USE 1 LEACHING POOL @ 10' x 10 VF EFFECTIVE DEPTH FOR EACH SYSTEM  
TOTAL EFFECTIVE DEPTH = 10 VF

### SANITARY SYSTEM DESIGN #7

#### DESIGN FLOW

USE: DRY RETAIL = 0.03 GPD/SF  
BUILDING AREA = 7,000 SF  
TOTAL DAILY FLOW = 7,000 SF x 0.03 GPD/SF = 210 GPD

#### SEPTIC TANK

REQUIRED CAPACITY = 2 DAYS FLOW = 300 GPD X 2 DAYS = 600 GAL  
MINIMUM ALLOWABLE SEPTIC TANK PER SCDS STANDARDS IS 1,200 GAL  
USE A SINGLE SEPTIC TANK 8' DIA. X 4' LIQ. DEPTH FOR EACH SYSTEM  
CAPACITY = 1,200 GAL

#### LEACHING POOLS

DESIGN FLOW = 210 GPD  
LEACHING RATE = 1.5 GPD/SF  
REQUIRED SIDEWALL AREA = 210 GPD/1.5 GPD/SF = 140 SF  
REQUIRED DEPTH = 140 SF/31.42 SF/VF = 4.46 VF  
USE 1 LEACHING POOL @ 10' x 10 VF EFFECTIVE DEPTH  
TOTAL EFFECTIVE DEPTH = 10 VF

## BORING LOG

THIS PLAN REFERENCES A GEOTECHNICAL REPORT AS DESCRIBED ON COVER SHEET:

**McDONALD GEOSCIENCE**  
Box 1000 • Southold, New York 11971 • (815) 769-3877

**TEST HOLE DATA SHEET**

Name: Northwind Group 01  
Surveyor:  
Location: Wading River  
Tax Map Number: 800-73-1-1.4, 1.16, 1.17, 1.18, 1.19  
Project Description: Bldg plan  
Date: 10/22/03

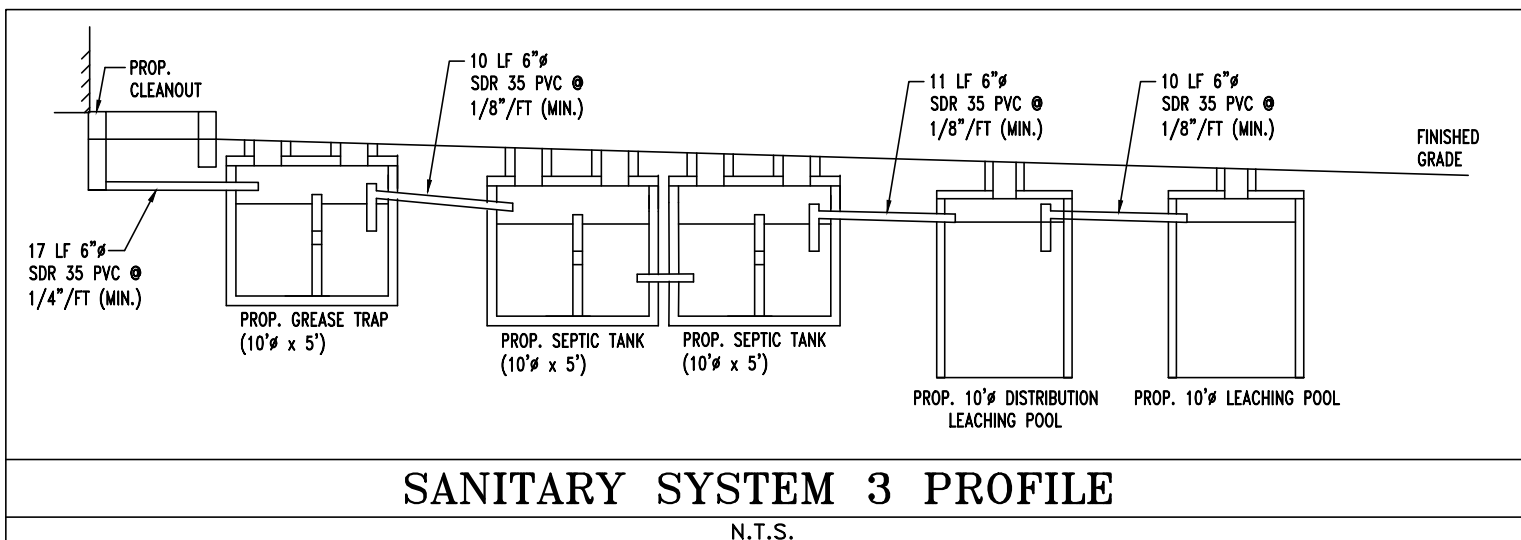
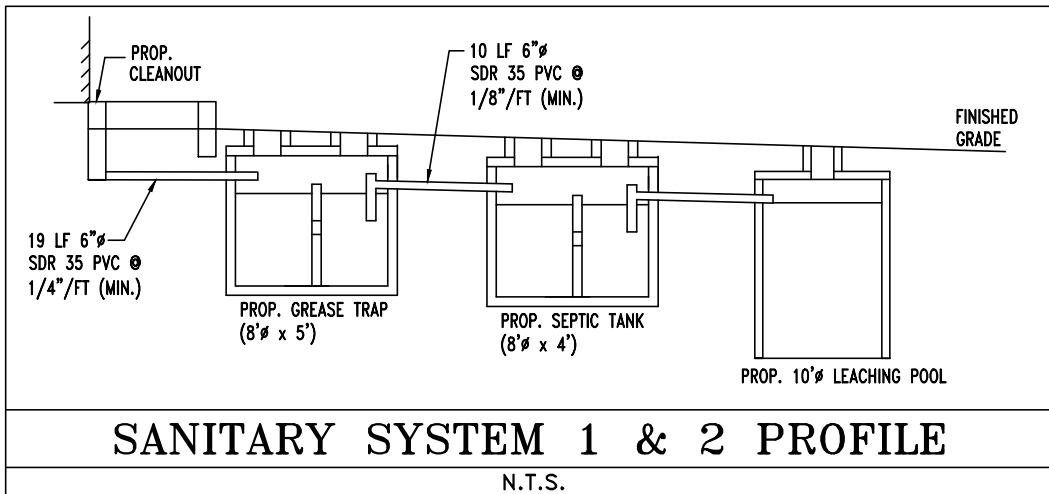
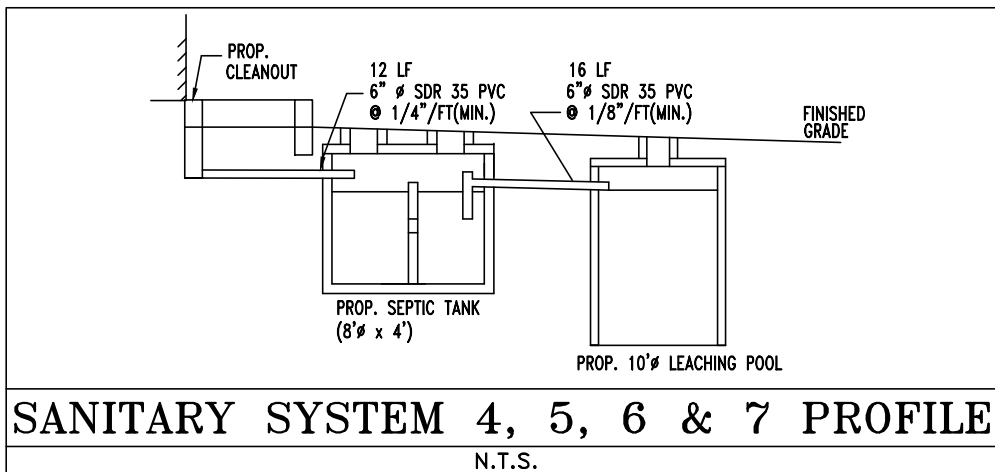
2'  
Brown silty loam GR  
7'  
Brown fine to coarse sand GR  
33'  
Pale brown fine to medium sand GR

Comments: No water encountered

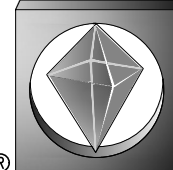
Test hole boring (H1-54).....

## SANITARY STRUCTURE SCHEDULE

STRUCTURE	STRUCTURE TYPE	RIM	TOP OF RINGS	BOT. OF RINGS	INV. IN	INV. OUT	EFF. DEPTH
S1-1	KITCHEN OUTLET	114.00	-	-	-	111.00	-
S1-2	SANITARY OUTLET	114.00	-	-	-	111.00	-
S1-3	8" GREASE TRAP	112.95 / 112.75	111.00	105.00	110.50	110.00	5
S1-4	8" SEPTIC TANK	112.20 / 112.00	110.30	105.30	109.80	109.30	4
S1-5	10" LEACHING POOL	111.25	109.50	98.50	108.50	-	10
TOTAL S1 LEACHING POOL EFF. DEPTH:							10
S2-1	KITCHEN OUTLET	114.00	-	-	-	111.00	-
S2-2	SANITARY OUTLET	114.00	-	-	-	111.00	-
S2-3	8" GREASE TRAP	113.25 / 113.05	111.00	105.00	110.50	110.00	5
S2-4	8" SEPTIC TANK	112.35 / 112.15	110.30	105.30	109.80	109.30	4
S2-5	10" LEACHING POOL	111.40	109.55	98.55	109.00	-	10
TOTAL S2 LEACHING POOL EFF. DEPTH:							10
S3-1	KITCHEN OUTLET	114.00	-	-	-	111.00	-
S3-2	SANITARY OUTLET	114.00	-	-	-	111.00	-
S3-3	10" GREASE TRAP	113.20 / 112.90	111.05	105.05	110.55	110.05	5
S3-4A	10" SEPTIC TANK	112.30 / 111.90	109.70	103.70	109.20	107.20	5
S3-4B	10" SEPTIC TANK	111.70 / 111.40	109.70	103.70	107.20	108.70	5
S3-5	10" DISTRIBUTION POOL	110.25	108.95	97.95	108.20	107.95	10
S3-6	10" LEACHING POOL	111.05	108.80	97.80	107.80	-	10
S3-7	10" LEACHING POOL	110.10	107.55	96.55	106.55	-	10
S3-8	10" LEACHING POOL	109.55	107.55	96.55	106.55	-	10
S3-9	10" LEACHING POOL	109.80	107.55	96.55	106.55	-	10
TOTAL S3 LEACHING POOL EFF. DEPTH:							50
S4-1	SANITARY OUTLET	112.25	-	-	-	107.50	-
S4-2	8" SEPTIC TANK	111.95 / 111.95	109.75	102.75	107.25	106.75	4
S4-3	10" LEACHING POOL	111.95	109.55	96.55	106.55	-	10
TOTAL S4 LEACHING POOL EFF. DEPTH:							10
S5-1	SANITARY OUTLET	111.50	-	-	-	107.50	-
S5-2	8" SEPTIC TANK	110.30 / 110.10	107.75	102.75	107.25	106.75	4
S5-3	10" LEACHING POOL	109.85	107.55	96.55	106.55	-	10
TOTAL S5 LEACHING POOL EFF. DEPTH:							10
S6-1	SANITARY OUTLET	109.65	-	-	-	105.00	-
S6-2	8" SEPTIC TANK	107.95 / 107.90	106.25	100.25	104.75	104.25	4
S6-3	10" LEACHING POOL	107.70	105.10	94.10	104.10	-	10
TOTAL S6 LEACHING POOL EFF. DEPTH:							10
S7-1	SANITARY OUTLET	108.85	-	-	-	105.00	-
S7-2	8" SEPTIC TANK	107.95 / 107.90	106.25	100.25	104.75	104.25	4
S7-3	10" LEACHING POOL	107.75	105.10	94.10	104.10	-	10
TOTAL S7 LEACHING POOL EFF. DEPTH:							10



SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES APPROVAL



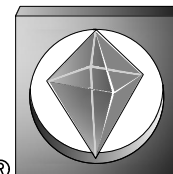
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THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER WHERE SUCH ALTERATIONS ARE MADE. THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS, AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 209.2)

APPROVALS

REVISIONS	
No.	DESCRIPTION
1	12/03/09 REVISED AS PER SCDS COMMENTS
2	11/18/15 REV. PER TOWN PLANNING DEPARTMENT COMMENTS
3	9/20/17 REV. PER DISTURBED AREA
4	3/16/18 REV. LAYOUT & NYSDOT COMMENTS
5	11/19/19 REV. PER NYSDOT COMMENTS
6	12/21/19 TOWN OF RIVERHEAD SUBMISSION
7	2/13/23 REV. SITE COVERAGE AREAS



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JOSEPH A. DEAL

PROFESSIONAL ENGINEER  
NEW YORK LICENSE No. 087122

DATE: 09/18/08 DRAWN BY: MD  
SCALE: AS SHOWN CHECKED BY: JPC  
CADD ID No.: N08029-SS-7A PROJECT No.: N08029

NOT FOR CONSTRUCTION

NYSDOT CASE #: N/A  
HEALTH DEP. REF. #: N/A

CLIENT/ PROJECT: VENEZIA SQUARE, LLC c/o THE NORTHWIND GROUP  
PORT JEFFERSON-RIVERHEAD ROAD (NYS ROUTE 25A)  
WADING RIVER TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NY 11792  
TAX MAP #: 600-73-1-1.4, 1.16-1.19

TITLE: **SANITARY DETAILS & COMPUTATIONS**

SHEET NO. REV. 7

**C-9**  
OF 15

SUBMISSION SET







# LANDSCAPE NOTES

1. SCOPE OF WORK:
- A. 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 CLOUDS.
- C. LAWN – ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (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 WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES.
- 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. WEED BARRIER LANDSCAPE FABRIC–ALL PLANTING AREAS AND PLANTING PITS SHALL BE COVERED WITH WEED BARRIER LANDSCAPE FABRIC (EXXON LSF OR MIRAFI MIRASCAPe.) NO FABRIC OR MULCH SHALL TOUCH THE TRUNK OF THE TREE OR SHRUB.
- E. 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.
- F. 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.
- G. 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 NURSERMEN).
- 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 1½", WHICH HAVE NOT BEEN COMPLETELY CALLOSED, 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.

vi. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.

vii. 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 15 FEET FROM THE TRUNK 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 CLEANING 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 SIX INCH (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 PLANTING AND 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):
- i. 20 POUNDS 'GROW POWER' OR APPROVED EQUAL
- ii. 20 POUNDS NITRO-FORM (COURSE) 38–0–0 BLUE CHIP

- 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:

- |                             |                       |
|-----------------------------|-----------------------|
| (1) ACER RUBRUM             | PLATANUS X ACERIFOLIA |
| (2) BETULA VARIETIES        | POPULUS VARIETIES     |
| (3) CARPINUS VARIETIES      | PRUNUS VARIETIES      |
| (4) CRATAEGUS VARIETIES     | PYRUS VARIETIES       |
| (5) KOELREUTERIA            | QUERCUS VARIETIES     |
| (6) LIQUIDAMBAR STYRACIFLUA | TILIA TOMENTOSA       |
| (7) LIRIODENDRON TULIPIFERA | ZELKOVA VARIETIES     |

- H. PLANTING PITS SHALL BE DUG WITH LEVEL OR CONVEX 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:

- |                                   |  |
|-----------------------------------|--|
| (1) 2 TABLETS PER 1 GALLON PLANT  | (2) 3 TABLETS PER 5 GALLON PLANT                     |
| (3) 4 TABLETS PER 15 GALLON PLANT | (4) 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. NO PRUNING SHALL BE CONDUCTED WITHIN THE FIRST YEAR OF PLANTING, EXCEPT TO CLEAR LOW HANGING BRANCHES.

- L. GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS BAKED INTO THE TOP 3" 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. (SEE SPECIFICATION 2.F. ABOVE)
- 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

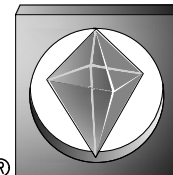
- A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE 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. 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.



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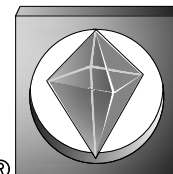
WARREN, NJ - CORPORATE OFFICE  
WHITE PLAINS, NY CENTER VALLEY, PA  
ALBANY, NY SOUTHBOROUGH, MA  
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APPROVALS

## REVISIONS

No.	Date	Description
1	12/30/09	REVISED AS PER SCDS COMMENTS
2	11/18/15	REV. PER TOWN PLANNING DEPARTMENT COMMENTS
3	9/20/17	REV. PER DISTURBED AREA
4	3/16/18	REV. LAYOUT & NYSDOT COMMENTS
5	11/19/19	REV. PER NYSDOT COMMENTS
6	12/20/19	TOWN OF RIVERHEAD SUBMISSION
7	2/13/23	REV. SITE COVERAGE AREAS



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DATE: 09/18/08 DRAWN BY: MD  
SCALE: N/A CHECKED BY: JPC  
CAD I.D. No.: N08029-SS-7A PROJECT No.: N08029

## NOT FOR CONSTRUCTION

NYSDOT CASE #: N/A  
HEALTH DEP. REF. #: N/A

CLIENT/ PROJECT: VENEZIA SQUARE, LLC c/o THE NORTHWIND GROUP  
PORT JEFFERSON-RIVERHEAD ROAD (NYS ROUTE 25A)  
WADING RIVER TOWN OF RIVERHEAD  
SUFFOLK COUNTY, NY 11792  
TAX MAP #: 600-73-1-1.4, 1.16-1.19

TITLE:

**LANDSCAPE**  
**NOTES**

SHEET NO. REV. 7

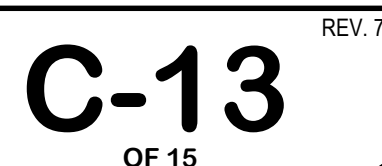
**C-11**  
OF 15

**THIS PLAN TO BE UTILIZED FOR**  
**LANDSCAPE PURPOSES ONLY**





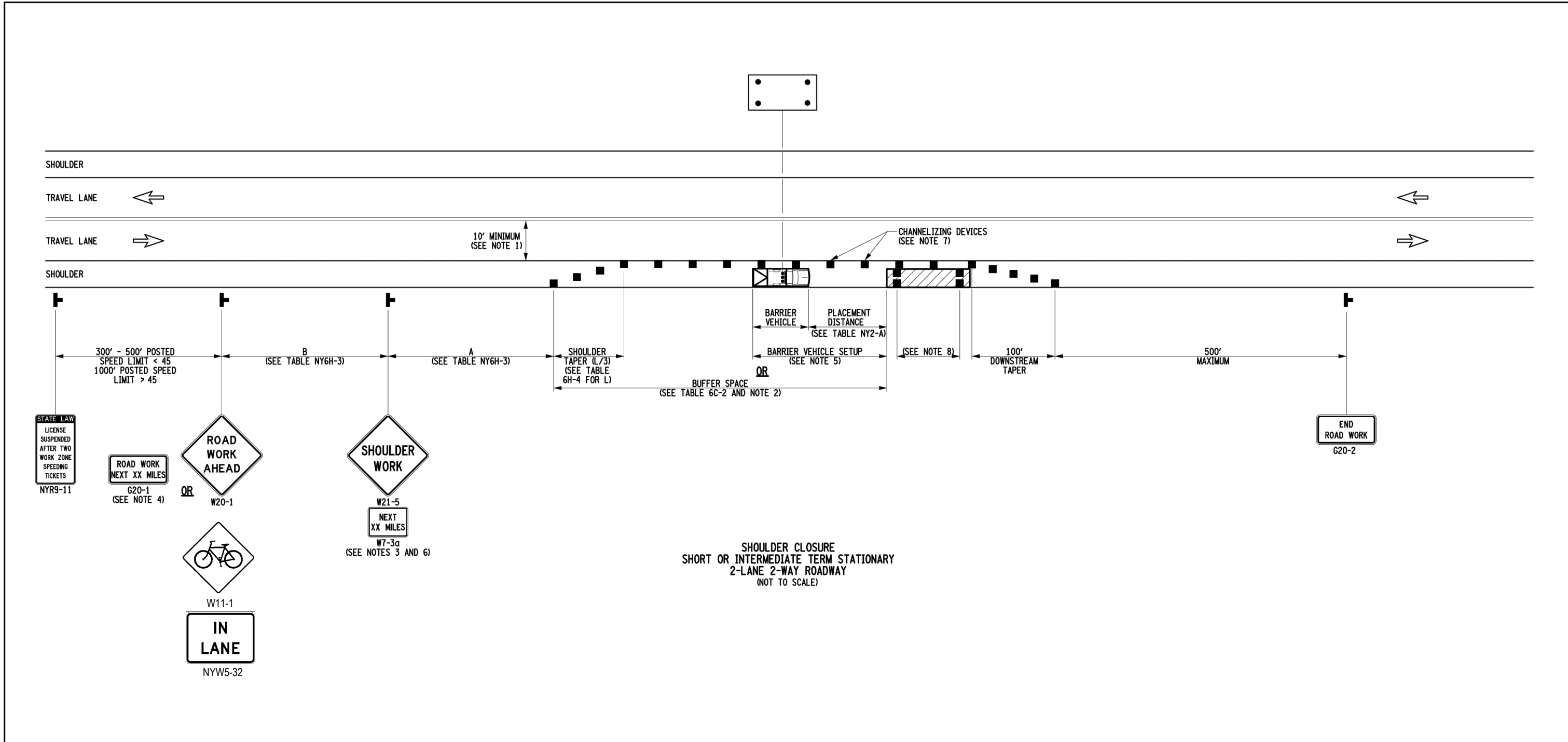












- NOTES:
1. WHEN THE MINIMUM LANE WIDTH OF 10' CANNOT BE MAINTAINED DUE TO A SHOULDER CLOSURE, USE THE DETAIL FOR SHORT OR INTERMEDIATE TERM STATIONARY FLAGGING OPERATION.
  2. NO WORK ACTIVITY OR STORAGE OF EQUIPMENT, VEHICLES, OR MATERIAL SHOULD OCCUR WITHIN A BUFFER SPACE.
  3. WHEN THE DISTANCE BETWEEN THE ADVANCE WARNING SIGNS AND WORK IS 2 MILES TO 5 MILES, A SUPPLEMENTAL DISTANCE PLACED W21-50 SHOULD BE USED WITH THE SHOULDER WORK SIGN W21-50.
  4. THE ROAD WORK NEXT 1/4 MILES SIGN (W21-5) MAY BE USED INSTEAD OF THE ROAD WORK AHEAD SIGN (W20-1) IF WORK LOCATIONS OCCUR OVER A DISTANCE OF MORE THAN 2 MILES.
  5. FOR BARRIER VEHICLE USE REQUIREMENTS SEE TABLES NY1-A AND NY2-A ON THE STANDARD SHEET TITLED "WORK ZONE TRAFFIC CONTROL LEGENDS AND NOTES".
  6. IN THOSE SITUATIONS WHERE MULTIPLE WORK LOCATIONS EXIST WITHIN A LIMITED DISTANCE MAKE IT PRACTICAL TO PLACE STATIONARY SIGNS, THE DISTANCE BETWEEN THE ADVANCE WARNING SIGN AND WORK SHALL NOT EXCEED 5 MILES.
  7. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL NOT EXCEED 40' IN THE ACTIVE WORK SPACE.
  8. TRANSVERSE DEVICES SHALL BE REQUIRED AS PER 619 STANDARD SPECIFICATIONS WHEN A PAVED SHOULDER HAVING A WIDTH OF 8' OR GREATER IS CLOSED FOR A DISTANCE GREATER THAN 1500'.

NOTE: SEE STANDARD SHEET TITLED "WORK ZONE TRAFFIC CONTROL LEGENDS AND NOTES" FOR LEGEND OF SYMBOLS AND/OR LETTER CODES USED IN THIS DRAWING.

STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY STANDARD SHEET

SHOULDER CLOSURE  
2-LANE 2-WAY ROADWAY

APPROVED SEPTEMBER 15, 2009 ISSUED UNDER EB 09-025  
/S/ DAVID J. CLEMENTS, P.E.  
DIRECTOR, OFFICE OF TRAFFIC SAFETY AND MOBILITY

EFFECTIVE DATE: 01/07/10

TABLE NY1-A BARRIER VEHICLE USE REQUIREMENTS (LONG TERM, INTERMEDIATE TERM, AND SHORT TERM STATIONARY CLOSURES)				
CLOSURE TYPE	EXPOSURE CONDITION <sup>1</sup>	USE REQUIREMENTS <sup>4,5</sup>		
		FREEWAY	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT)	
LANE CLOSURE	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED <sup>3</sup>	REQUIRED <sup>3</sup>	OPTIONAL <sup>2</sup>
	NON-TRAVELABLE HAZARD (E.G. EQUIPMENT, MATERIALS, EXCAVATION ONLY, NO WORKERS EXPOSED)	REQUIRED <sup>3</sup>	REQUIRED <sup>3</sup>	OPTIONAL <sup>2</sup>
SHOULDER CLOSURE	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED <sup>3</sup>	REQUIRED <sup>3</sup>	OPTIONAL <sup>2</sup>
	NON-TRAVELABLE HAZARD (E.G. EQUIPMENT, MATERIALS, EXCAVATION ONLY, NO WORKERS EXPOSED)	REQUIRED <sup>3</sup>	OPTIONAL <sup>2</sup>	OPTIONAL <sup>2</sup>

1. THE EXPOSURE CONDITIONS DESCRIBED IN TABLE NY1-A ASSUMES THERE IS NO POSITIVE PROTECTION (TEMPORARY TRAFFIC BARRIER PRESENT). WHERE WORKERS OR HAZARDS ARE PROTECTED BY A TEMPORARY TRAFFIC BARRIER, BARRIER VEHICLES ARE NOT REQUIRED.
2. WHERE THE REQUIREMENT IS "OPTIONAL", EITHER A BARRIER VEHICLE OR THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
3. REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE BARRIER VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH. IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE BARRIER VEHICLE SHALL BE REPOSITIONED ACCORDINGLY. BARRIER VEHICLES PROTECTING NON-TRAVELABLE HAZARDS SHOULD BE REPOSITIONED DURING SHIFT CHANGES, WORKING AND NON-WORKING HOURS UNTIL THE HAZARD NO LONGER EXISTS. EXCEPTIONS TO THESE REQUIREMENTS MAY BE MADE AS APPROVED BY THE REGIONAL DIRECTOR OR HIGHWAY DESIGNER WHERE BARRIER VEHICLE PLACEMENT WOULD BE INEFFECTIVE OR WOULD INTERFERE WITH THE SAFE OPERATION OF TRAFFIC.
4. BARRIER VEHICLES ARE NOT REQUIRED FOR MILLING AND/OR PAVING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
5. BARRIER VEHICLES ARE NOT REQUIRED FOR FLAGGING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.

TABLE NY1-B SHADOW VEHICLE REQUIREMENTS (MOBILE CLOSURES)				
CLOSURE TYPE	EXPOSURE CONDITION	USE REQUIREMENTS		
		FREEWAY	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT)	
LANE CLOSURE	WHEN ANY WORKER, VEHICLE, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED <sup>3,4</sup>	REQUIRED <sup>3,4</sup>	REQUIRED <sup>3,4</sup>
	WHEN ANY WORKER, VEHICLE, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED <sup>3,4</sup>	REQUIRED <sup>3,4</sup>	REQUIRED <sup>3,4</sup>

1. A MOBILE CLOSURE SHALL BE USED FOR ANY WORK ACTIVITY THAT MOVES CONTINUOUSLY OR INTERMITTENTLY FOR 30 MINUTES OR MORE ON SHOULDER CLOSURES OR FOR SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 45 MPH OR MORE.
2. SHADOW VEHICLES SHALL BE EQUIPPED WITH AN APPROVED REAR MOUNTED ATTENUATOR (TRUCK MOUNTED ATTENUATOR) FOR THE ACTIVE WORK SPACE. SHADOW VEHICLES SHALL BE REQUIRED ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 35 MPH OR MORE, SHOULDER CLOSURES ON FREEWAYS, AND SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE.
3. FOR MOBILE LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 30 MPH OR LESS, MOBILE SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 40 MPH OR LESS, SHADOW VEHICLES ARE NOT REQUIRED TO BE EQUIPPED WITH A REAR MOUNTED ATTENUATOR.
4. A SHADOW VEHICLE IS USED TO PROTECT EXPOSED WORKERS (ON FOOT OR IN A VEHICLE) AND SHALL BE REQUIRED FOR ALL MOBILE CLOSURES. SHADOW VEHICLE REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE SHADOW VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH. ADDITIONAL SHADOW VEHICLES MAY BE REQUIRED TO PROMOTE THE SAFE OPERATION OF TRAFFIC AND THE INCREASED PROTECTION OF EXPOSED WORKERS, AS DIRECTED BY THE REGIONAL DIRECTOR OR HIGHWAY DESIGNER.

TABLE 6H-4 FORMULAS FOR DETERMINING TAPER LENGTHS				
SPEED LIMIT (SI) (MPH)	TAPER LENGTH (L) (FT)	L = TAPER LENGTH B = WIDTH OF OFFSET (FT) S = PRECONSTRUCTION POSTED SPEED LIMIT (MPH)		
40 MPH OR LESS	$L = W S^2 / 40$			
45 MPH OR MORE	$L = W S$			

STANDARD TAPER LENGTHS										
TEMPORARY TRAFFIC CONTROL ZONE POSTED SPEED LIMIT										
LATERAL SHIFT UP TRAFFIC FLOW PATH	(25 MPH)	(30 MPH)	(35 MPH)	(40 MPH)	(45 MPH)	(50 MPH)	(55 MPH)	(60 MPH)	(65 MPH)	(70 MPH)
4	45	60	85	110	140	200	220	240	260	280
5	55	75	105	135	225	250	275	300	325	350
6	65	90	125	160	270	300	330	360	390	420
7	75	105	145	190	315	350	385	420	455	490
8	85	120	165	215	360	400	440	480	520	560
9	95	135	185	240	405	450	495	540	585	630
10	105	150	205	270	450	500	550	600	650	700
11	115	165	225	295	495	550	605	660	715	770
12	125	180	245	320	540	600	660	720	780	840

TABLE 6C-2 LONGITUDINAL BUFFER SPACE	
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	DISTANCE (FEET)
35	155
40	200
45	250
50	300
55	350
60	400
65	445

TABLE NY2-A PLACEMENT DISTANCE FOR BARRIER VEHICLES			
PLACEMENT DISTANCE (FT.)			
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	BARRIER VEHICLES*		
	(15000 LBS.)	(24000 LBS.)	
> 55	100 FT.	200 FT.	100 FT.
45 - 55	100 FT.	200 FT.	100 FT.
< 45	85 FT.	165 FT.	100 FT.

\* AS DEFINED IN NYSDOT STANDARD SPECIFICATION 619:  
BARRIER VEHICLE - VEHICLE USED FOR STATIONARY SHOULDER CLOSURES, LANE CLOSURES, AND OTHER STATIONARY WORK ZONES.  
MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

TABLE NY2-B PLACEMENT DISTANCE FOR SHADOW VEHICLES			
PLACEMENT DISTANCE (FT.)			
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	SHADOW VEHICLES*		
	(15000 LBS.)	(24000 LBS.)	
> 55	230 FT.	330 FT.	180 FT.
45 - 55	180 FT.	280 FT.	150 FT.
< 45	100 FT.	200 FT.	100 FT.

\* AS DEFINED IN NYSDOT STANDARD SPECIFICATION 619:  
SHADOW VEHICLE - VEHICLE USED FOR MOBILE OR SHORT DURATION WORK OPERATIONS.  
MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

TABLE 6C-3 TAPER LENGTHS FOR TEMPORARY TRAFFIC CONTROL ZONES	
TYPE OF TAPER	TAPER LENGTH (L) (FT.)
MERGING TAPER	L/2
SHOULDER TAPER	L/2
ONE-LANE, TWO-WAY TRAFFIC TAPER	100 FT. MAXIMUM
DOWNSLOPE TAPER	100 FT. PER LANE

TABLE 619-4 FLARE RATES FOR POSITIVE BARRIER	
TYPE OF POSITIVE BARRIER	POSTED SPEED LIMIT (MPH)
TEMPORARY CONCRETE BARRIER	30 40 50 55 65
BOX BEAM OR HEAVY POST CORRUGATED BEAM	70 80 110 140 160 180
	210 240 270 300 330 360

TABLE NY2H-3 ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS (FT.)	SIGN LEGEND	
URBAN (≤ 30 MPH)	100	100	AHEAD AHEAD
URBAN (35-40 MPH)	200	200	AHEAD AHEAD
URBAN (45 MPH)	350	350	1000 FT. AHEAD
RURAL	500	500	1500 FT. 1000 FT.
EXPRESSWAY / FREEWAY	1000	1500	2640 1 MILE 1/2 MILE

\* PRECONSTRUCTION POSTED SPEED LIMIT  
URBAN - MEETS MORE THAN 1 OF THE FOLLOWING CRITERIA:  
1. DENSITY OF TRAFFIC, INCLUDING CLOSED DRAINAGE SYSTEMS,  
2. DENSITY OF TRAFFIC GREATER THAN 24 DRIVeways PER MILE, MINOR  
COMMERCIAL, DRIVEWAY DENSITIES OF 10 DRIVeways PER MILE, OR  
GREATER, MAJOR COMMERCIAL DRIVeways, NUMEROUS RIGHT OF WAY  
CONSTRAINTS, HIGH DENSITY OF CROSS STREETS, 80TH PERCENTILE  
SPEEDS OF 45 MPH OR LESS.

RURALLY - ANY AREA NOT EXHIBITING MORE THAN ONE OF THE ABOVE  
CHARACTERISTICS.  
EXPRESSWAY - DIVIDED HIGHWAYS FOR TRAFFIC WITH FULL OR PARTIAL  
CONTROL OF ACCESS AND GENERALLY WITH GRADE SEPARATIONS  
AT MAJOR CROSSINGS.

FREEWAYS/INTERSTATES - LOCAL OR INTER REGIONAL, HIGH-SPEED, DIVIDED,  
HIGH-VOLUME FACILITIES WITH FULL OR PARTIAL CONTROL OF ACCESS.

#### WORK DURATION DEFINITIONS

LONG-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE  
THAN 3 CONSECUTIVE DAYS.  
INTERMEDIATE-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION  
MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR  
NIGHTTIME WORK LASTING MORE THAN 1 HOUR.  
SHORT-TERM STATIONARY IS DAILY WORK THAT OCCUPIES A LOCATION  
FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.  
SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.  
MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

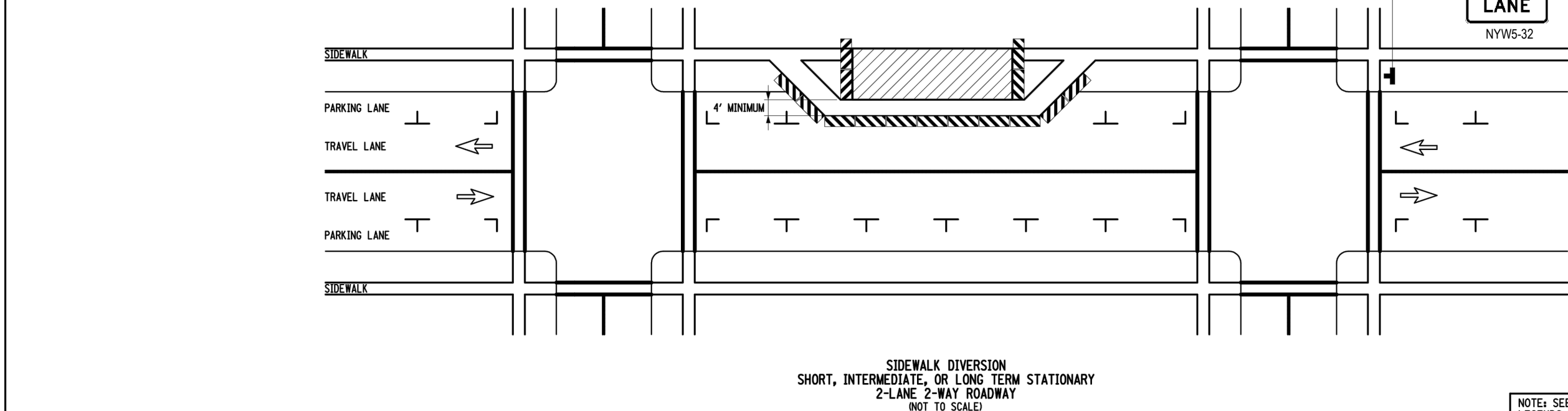
EFFECTIVE DATE: 01/08/09

## MAINTENANCE AND PROTECTION OF TRAFFIC NOTES

1. MAINTENANCE AND PROTECTION OF TRAFFIC TO INVOLVE AN EAST BOUND SHOULDER CLOSURE ON NY 25A. THE SITE IS LOCATED BETWEEN NYSDOT MILE MARKER 25 0703 1417 AND 25 0703 1416.
2. MAINTENANCE AND PROTECTION OF TRAFFIC SCHEMES ARE TO BE IN ACCORDANCE WITH THE FEDERAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE NEW YORK STATE SUPPLEMENT TO THE FEDERAL MUTCD, DATED MARCH 2008. PLEASE NOTE, NYS SIGN DESIGNATIONS ARE SHOWN ABOVE WITH CORRESPONDING FEDERAL SIGN DESIGNATIONS SHOWN IN PARENTHESES.
3. THE USE, DESIGN, SPACING AND LOCATION OF SIGNS, FLAG MEN, DRUMS, BARRICADES, FLASHING BEACONS, ETC. SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE FEDERAL MUTCD.
4. THIS MINIMUM MAINTENANCE AND PROTECTION OF TRAFFIC PLAN DOES NOT RELEASE THE CONTRACTOR FROM HIS RESPONSIBILITY TO SAFELY MAINTAIN AND PROTECT TRAFFIC IN ACCORDANCE WITH SECTION 619 OF THE NYSDOT STANDARD SPECIFICATIONS. OTHER TRAFFIC CONTROL DEVICES ABOVE AND BEYOND THOSE SHOWN ON THIS PLAN MAY BE REQUIRED TO MAINTAIN AND PROTECT TRAFFIC OR ADOPT.
5. DRUMS, BARRICADES OR OTHER TRAFFIC CONTROL EQUIPMENT SHALL NOT REMAIN IN A LOCATION WHERE THEY INTERFERE WITH, OR MAY BE DISTURBED BY, A SLOW FLOWING OPERATION. THE WORK MUST BE SCHEDULED TO AVOID THE SAFE REMOVAL OF SUCH DEVICES WHEN NECESSARY.
6. DRAINAGE FRAMES, GRATES AND COVERS SHALL NOT BE ADJUSTED IN A TRAVEL LANE UNLESS THE FINAL PAVEMENT COURSE IS PLACED PRIOR TO THE ONSET OF SNOW AND ICE WEATHER. STEEL PLATES, ETC. SHALL NOT PROTRUDE ABOVE THE ADJACENT PAVEMENT. IF ANY OF THESE PROTRUSIONS EXIST IN A NON-TRAVEL LANE PRIOR TO A SLOW FLOWING ICE CONDITION, THEN TEMPORARY ASPHALT RAMPS MUST BE PLACED SO THAT FOR EVERY ONE INCH OF RISE, THERE IS A SIX FOOT RUN OF RAMP.
7. IN ADDITION TO THE SIGNAGE REQUIRED IN THE FEDERAL MUTCD AND NYS SUPPLEMENT, THE CONTRACTOR SHALL USE A FLASHING ARROW BOARD AS ORDERED BY ENGINEER.
8. THE CONTRACTOR SHALL PROVIDE FLAGGERS WHEN SIGHT DISTANCES ARE IMPAIRED BY HIS OPERATION OR ADOPT.
9. THE CONTRACTOR SHALL NOT PARK HIS EQUIPMENT OR STORE MATERIAL OVERNIGHT WHERE IT IS DEEMED BY THE ENGINEER TO BE A SAFETY HAZARD TO TRAFFIC. STORAGE WITHIN THE NYSDOT RIGHT-OF-WAY WILL NOT BE PERMITTED.
10. THE CONTRACTOR IS ADVISED THAT NO PAVEMENT EDGE DROP-OFFS WILL BE PERMITTED WITHIN ELEVEN (11) FEET OF TRAVEL LANES. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SO THAT ALL EXCAVATED WORK AREAS SHALL BE BACKFILLED TO GRADE AT CONCLUSION OF THE WORK DAY.
11. THE CONTRACTOR SHALL NOT RESTRICT THE INGRESS/EGRESS REQUIRED FOR DRIVeways ALONG NY 25A.
12. ALL LANES MUST BE OPEN TO TRAFFIC BEFORE 10 AM AND AFTER 3 PM. NO LANE CLOSURES ARE PERMITTED ON WEEKENDS OR HOLIDAYS. NIGHTTIME CLOSINGS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL FROM THE STATE PERMIT INSPECTOR.
13. ANY UTILITY WORK PROPOSED IN STATE HIGHWAY RIGHT-OF-WAY WILL REQUIRE A SEPARATE APPLICATION AND SUBMISSION OF UTILITY PLANS TO OUR MAINTENANCE FACILITY AT CENTRAL ISLIP.

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
U.S. CUSTOMARY STANDARD SHEET	
WORK ZONE TRAFFIC CONTROL GENERAL NOTES	
APPROVED SEPTEMBER 16, 2008	ISSUED UNDER EB 08-036
/S/ DAVID J. CLEMENTS, P.E. DIRECTOR, OFFICE OF TRAFFIC SAFETY AND MOBILITY	619-10

EFFECTIVE DATE: 01/08/09



- NOTES:
1. WHEN CROSSWALKS OR OTHER PEDESTRIAN FACILITIES ARE CLOSED OR RELOCATED, TEMPORARY FACILITIES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY.
  2. WHERE HIGH SPEEDS ARE ANTICIPATED, A TEMPORARY TRAFFIC BARRIER AND TEMPORARY IMPACT ATTENUATOR SHOULD BE USED TO SEPARATE THE TEMPORARY SIDEWALKS FROM VEHICULAR TRAFFIC.
  3. ONLY THE WORK ZONE TRAFFIC CONTROL DEVICES RELATED TO PEDESTRIANS ARE SHOWN. OTHER DEVICES, SUCH AS LANE CLOSURE SIGNS OR ROAD NARROWING SIGNS (W4-A), MAY BE USED TO CONTROL VEHICULAR TRAFFIC.
  4. FOR NIGHTTIME CLOSURES, FLASHING WARNING LIGHTS SHALL BE USED ON BARRICADES SUPPORTING SIGNS AND CLOSING SIDEWALKS.
  5. SIGNS SUCH AS KEEP RIGHT (LEFT) SHALL BE PLACED ALONG A TEMPORARY SIDEWALK, WHERE APPLICABLE AND ACCORDING TO AMERICAN WITH DISABILITIES STANDARDS, TO GUIDE OR DIRECT FORETRAVELERS.
  6. TYPE II BARRICADES MAY BE SUBSTITUTED FOR TYPE III BARRICADES AS PER 619 STANDARD SPECIFICATIONS.

NOTE: SEE STANDARD SHEET TITLED "WORK ZONE TRAFFIC CONTROL LEGENDS AND NOTES" FOR LEGEND OF SYMBOLS AND/OR LETTER CODES USED IN THIS DRAWING.

STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY STANDARD SHEET

SIDEWALK DETOUR OR DIVERSION

APPROVED SEPTEMBER 15, 2009 ISSUED UNDER EB 09-025  
/S/ DAVID J. CLEMENTS, P.E.  
DIRECTOR, OFFICE OF TRAFFIC SAFETY AND MOBILITY

EFFECTIVE DATE: 01/07/10

- GENERAL NOTES
1. THE TYPICAL DETAILS DEPICTED ON THE STANDARD SHEETS AND IN THE MUTCD, REFLECT THE MINIMUM REQUIREMENTS.
  2. THE CONTRACTOR MUST SUBMIT TO THE ENGINEER, IN WRITING, PROPOSED REVISIONS TO THE TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL BY THE REGIONAL DIRECTOR OR HIGHWAY DESIGNER FIVE (5) WORK DAYS PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH PROPOSED REVISIONS, EXCEPT FOR CHANGES THAT ALTER THE SCOPE OF THE TRAFFIC CONTROL PLAN. SUCH CHANGES IN SCOPE MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL BY THE REGIONAL DIRECTOR OR HIGHWAY DESIGNER THIRTY (30) WORKING DAYS PRIOR TO IMPLEMENTATION OF SUCH REVISIONS.
  3. THE CONTRACTOR SHALL PROVIDE THE ENGINEER, IN WRITING, WITH THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF STAFF WHO ARE AUTHORIZED TO SECURE LABOR, MATERIALS, AND EQUIPMENT FOR EMERGENCY REPAIRS OUTSIDE NORMAL WORKING HOURS. THE ENGINEER WILL PROVIDE THE SUBMITTED INFORMATION TO REGIONAL MANAGEMENT, THE NEW YORK STATE POLICE, THE RESIDENT ENGINEER, AND THE LOCAL POLICE.

#### ACTIVITY AREA

1. THE CONTRACTOR SHALL MAINTAIN A MINIMUM 500' LONGITUDINAL DISTANCE BETWEEN CONSTRUCTION OPERATIONS ON ALTERNATE SIDES OF THE ROADWAY, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. WHEN TWO OR MORE AREAS ARE ADJACENT, OVERLAP, OR ARE IN CLOSE PROXIMITY, THE CONTRACTOR SHALL ENSURE THERE ARE NO CONFLICTING SIGNS AND THAT LANE CONTINUITY IS MAINTAINED THROUGHOUT ALL WORK AREAS.

#### SIGNS

1. THE LOCATIONS OF THE SIGNS SHOWN ON THE WORK ZONE TRAFFIC CONTROL PLANS AND DETAILS MAY BE ADJUSTED BASED ON SHORT DISTANCE AND OTHER CONSIDERATIONS. THE FINAL LOCATIONS OF SIGNS ARE SUBJECT TO APPROVAL OF THE ENGINEER.
2. ANY EXISTING SIGNS, INCLUDING OVERHEAD SIGNS, WHICH CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL SIGN LAYOUT SHALL BE CORRECTED, REMOVED, STORED OR RESET, AS APPROVED BY THE ENGINEER. ALL APPROPRIATE EXISTING SIGNS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND/OR LOCATION UNLESS OTHERWISE RELEASED IN THIS CONTRACT.
3. SIGNS AT OR NEAR INTERSECTIONS SHALL BE PLACED SO THAT THEY DO NOT OBSTRUCT A MOTORIST'S LINE OF SIGHT.
4. ALL WARNING AND REGULATORY SIGNS SHALL BE POSTED ON BOTH SIDES OF MULTI-LANE DIVIDED HIGHWAYS, MULTI-LANE RAMPS, AND ONE-WAY STREETS. IN CASES WHERE LANE RESTRICTIONS REDUCE THE TRAVEL LANE TO ONE LANE, SIGNS SHALL BE POSTED ON THE RIGHT SIDE OF THE ACTIVE TRAVEL LANE, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
5. SIGNS MOUNTED ON THE MEDIAN OF DIVIDED HIGHWAYS WHERE MEDIAN BARRIER IS IN PLACE MAY BE MOUNTED ON THE BARRIER WITH A SADDLE TYPE BRACKET, LAYING THE SIGN DOWN IN A HORIZONTAL POSITION IS NOT PERMITTED.
6. THE DIMENSIONS OF WORK ZONE TRAFFIC CONTROL SIGNS ARE DESCRIBED IN THE MUTCD. ANY CHANGES TO THE DIMENSIONS SHALL BE APPROVED BY THE REGIONAL DIRECTOR OR BY HIGHWAY DESIGNER.
7. NY29-12 MAY BE USED IN PLACE OF NY29-11.

#### CHANNELIZING DEVICES

1. WHERE POSSIBLE ALL CHANNELIZING AND GUIDING DEVICES ARE TO BE PLACED SO AS TO PROVIDE A MINIMUM 2' LATERAL CLEARANCE TO THE TRAVELED WAY.

#### PUBLIC ACCESS

1. PROPERTY OWNERS WHOSE DRIVEWAYS WILL BE MADE UNACCESSIBLE SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST 24 HOURS PRIOR TO RESTRICTING USE OF THE DRIVEWAY FOR MULTIPLE ACCESS PROPERTIES. AT LEAST ONE DRIVEWAY SHALL BE OPEN AT ALL TIMES. ACCESS SHALL BE RESTORED TO ALL DRIVEWAYS AS SOON AS POSSIBLE.
2. SUITABLE RAMPS SHALL BE INSTALLED TO MAINTAIN SMOOTH TRANSITIONS FROM RESIDENTIAL AND COMMERCIAL DRIVEWAYS TO AND FROM THE WORK AREA.

#### LANE CLOSURES

1. THE CONTRACTOR SHALL LOCATE LANE CLOSURES TO PROVIDE OPTIMUM VISIBILITY, I.E. BEFORE CURVES AND OBSTACLES, TO THE EXTENT CONDITIONS PERMIT.
2. THE ENGINEER MAY REQUIRE THAT ALL LANES BE RE-OPENED AT ANY TIME IF THE ROUTE IS NEEDED FOR EMERGENCY PURPOSES. THIS COULD INCLUDE INCIDENTS AT LOCATIONS OUTSIDE THE CONTRACT LIMITS.

#### LANE WIDTHS

1. UNLESS AUTHORIZED BY THE ENGINEER, THE MINIMUM LANE WIDTHS FOR WORK ZONE TRAVEL LANES SHALL BE, AS FOLLOWS: FREEWAYS AND/OR EXPRESSWAYS IS 11'. THE MINIMUM LANE WIDTH FOR ALL OTHER TYPES OF ROADWAYS IS 10'.
2. THE CONTRACTOR SHALL PROVIDE A WRITTEN NOTICE TO THE ENGINEER, A MINIMUM OF 21 CALENDAR DAYS IN ADVANCE OF PERFORMING ANY WORK THAT RESULTS IN THE REDUCED WIDTH OF AN EXISTING ROADWAY, SO THAT THE ENGINEER MAY NOTIFY THE REGIONAL PERMIT ENGINEER IN A TIMELY MANNER.

#### BARRIER/SHADOW VEHICLES

BARRIER AND SHADOW VEHICLES SHALL BE REQUIRED AS PER STANDARD SHEET TITLED "WORK ZONE TRAFFIC CONTROL LEGENDS AND NOTES".

1. BARRIER AND SHADOW VEHICLES SHALL BE REQUIRED AS PER STANDARD SHEET TITLED "WORK ZONE TRAFFIC CONTROL LEGENDS AND NOTES".
2. NO WORK ACTIVITY, EQUIPMENT, VEHICLES AND/OR MATERIALS SHALL BE LOCATED BETWEEN THE BARRIER OR SHADOW VEHICLE AND THE ACTIVE WORK AREA ROLL AHEAD DISTANCES.
3. THE CONTRACTOR MAY BE REQUIRED TO PROVIDE A BARRIER VEHICLE IN CONJUNCTION WITH POLICE PRESENCE IN THE WORK ZONE, TO BE INCLUDED IN THE UNIT BID PRICE FOR BASIC WORK ZONE TRAFFIC CONTROL.



WARREN, NJ - CORPORATE OFFICE  
WHITE PLAINS, NY CENTER VALLEY, PA  
ALBANY, NY SOUTHBOROUGH, MA  
BOWIE, MD STERLING, VA  
TOWSON, MD WARRENTON, VA  
CHALFONT, PA FT. LAUDERDALE, FL

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER WHERE SUCH ALTERATIONS ARE MADE. THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 2209.2)

APPROVALS

REVISIONS	
No.	Desc.
1	12/30/09 REVISED AS PER SCOS COMMENTS
2	11/18/15 REV. PER TOWN PLANNING DEPARTMENT COMMENTS
3	9/20/17 REV. PER DISTURBED AREA
4	3/16/18 REV. LAYOUT A NYSDOT COMMENTS
5	11/19/19 REV. PER NYSDOT COMMENTS
6	12/20/19 TOWN OF RIVERHEAD SUBMISSION
7	2/13/23 REV. SITE COVERAGE AREAS

STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
U.S. CUSTOMARY STANDARD SHEET  
WORK ZONE TRAFFIC CONTROL  
LEGENDS AND NOTES  
APPROVED SEPTEMBER 16, 2008 ISSUED UNDER EB 08-036  
/S/ DAVID J. CLEMENTS, P.E.  
DIRECTOR, OFFICE OF TRAFFIC SAFETY AND MOBILITY

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