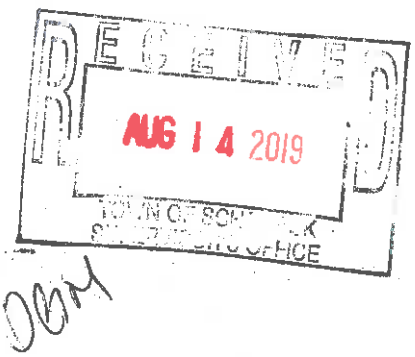
2

PLANNING & ZONING
Town of Schodack
265 Schuurman Rd.
Castleton, NY 12033



August 6, 2019

Supervisor David Harris
Schodack Town Board Members
Schodack Town Hall
265 Schuurman Road
Castleton, NY 12033

Re: Stewarts Shops Corp.
Rte. 9 & 20 and Sunset Rd at Miller Rd.
Town of Schodack
SEQR Lead Agency

Dear Supervisor and Town Board Members:

Enclosed is a Short Environmental Assessment Form for the above project. A copy of the concept plan are also enclosed

This is a Unlisted Action, The Schodack Planning Board wishes to undertake a coordinated review, Schodack Planning Board desires to declare itself as lead agency at a future meeting.

Please indicate if you object or concur at your earliest convenience.

Thank you.

Nadine Fuda

Nadine Fuda
Director of Planning and Zoning
Town of Schodack

Enclosure

cc: Richard Laberge, P.E., Planning Board Engineer
Craig Crist: Planning Board Attorney
Charles Marshall, Stewart's Shops

Voice (518) 477-7938 *Fax (518) 477-7983*

...onmental Assessment Form
...t Information

SPECIAL PERMIT /SITE PLAN APPLICATION

Town of Schodack- Planning Board
265 Schuurman Road, Castleton, NY 12033
Phone: 518-477-7938; Fax: 518-477-7983; Nadine.fuda@schodack.org

FILE 2018-34

CONCEPT MEETING: Monday 9/17/18

APPL... RECEIVED ON 9/4/18

LOCATION OF PROPERTY 1540-1538 Columbia Turnpike

TAX MAP # 1-14-5, 178.00-14-6, ...4-7

...NG/SURVEY FI... Sarito Associates ZONE HC ACRES 2.4 ROAD FRONTAGE (ft.) 260 Alon... 342 on Su...

TELEPHONE (518) 383-8001 Fax / Email (518) 383-6026

...ING USE(S) ...ng uses are a multi-tenant commercial building with live in residency and auto repair shop

... USE(S) ...s Shop - convenience store with gas

...PMENT BE...? YES ______ NO X

...EKING A S... DEVELOPMENT PERMIT BEFORE FINAL APPROVAL? YES ______ NO X IF YES, ATTACH LETTER OF EXPLANATION.

...RY APPRO... ...LDING IN... GRANTED, THE BUILDING INSPECTOR WILL BE NOTIFIED. A SITE DEVELOPMENT PERMIT WILL BE ... WHEN ALL PAPERWORK IS IN ORDER.

...IN AN AG...RAL DISTRICT CONTAINING A FARM OPERATION? YES ______ NO X

...ES OF TH... WITHIN 500 FEET OF A FARM OPERATION LOCATED IN AN AGRICULTURAL DISTRICT?

10___ IF Y... ...ED YES TO EITHER OF THE ** QUESTIONS, ADDITIONAL INFORMATION MAY BE REQUIRED.

...on fee, S...te Plan Maps (min. 10), appropriate fees, letter of intent, must be submitted

...de to th... ...ng Office. The Applicant or Owner agrees to comply with all applicable laws, ...ons of ... of Schodack and New York State for approval of the application.

Applic... ...ew.

WHO WIL... ATTEND THE PLANNING BOARD MEETINGS? Charles Marshall

Date 9/... FOR APPL... Charles Marshall

[signature] APPLICANT'S Signature

MAILING ADDRESS ...aratoga ...ne ...ew York 12866

TELEPHONE# (518) 269-0664 FAX # (518) 581-1209

Date ______

[signature] PROPERTY OWNER'S Signature

MAILING ADDRESS

TELEPHONE# ______ FAX # ______

Print...

...ne Fuda, Directo... OTH...
...e Johnson / John...
...son / ...wrence, Attor...

8 NF

SPECIAL PERMIT /SITE PLAN APPLICATION

Town of Schodack- Planning Board
265 Schuurman Road, Castleton, NY 12033
Phone: 518-477-7938; Fax: 518-477-7983; Nadine.fuda@schodack.org

FILE # 2018-39 CONCEPT MEETING: Monday 9/17/18

APPLICATION RECEIVED ON 9/4/18

LOCATION OF PROPERTY 1540-1538 Columbia Turnpike

TAX MAP # 178.00-14-5, 178.00-14-6, ~~178.00-14-7~~ ZONE HC ACRES 2.4 ROAD FRONTAGE (ft.) 260 Along Rt 9, 342 on Sunset

ENG/SURVEY FIRM Santo Associates TELEPHONE (518) 383-8001 Fax / Email (518) 383-6026

EXISTING USE(S) Existing uses are a multi-tenant commercial building with live in residency and auto repair shop

INTENDED USE(S) Stewart's Shop - convenience store with gas

WILL DEVELOPMENT BE PHASED? YES _____ NO X IF YES, ATTACH LETTER OF EXPLANATION.

WILL YOU BE SEEKING A SITE DEVELOPMENT PERMIT BEFORE FINAL APPROVAL? YES _____ NO X

WHEN PRELIMINARY APPROVAL IS GRANTED, THE BUILDING INSPECTOR WILL BE NOTIFIED. A SITE DEVELOPMENT PERMIT WILL BE ISSUED BY THE BUILDING INSPECTOR WHEN ALL PAPERWORK IS IN ORDER.

** IS THIS PROPERTY IN AN AGRICULTURAL DISTRICT CONTAINING A FARM OPERATION? YES _____ NO X

** ARE THE BOUNDARIES OF THIS PARCEL WITHIN 500 FEET OF A FARM OPERATION LOCATED IN AN AGRICULTURAL DISTRICT? YES _____ NO _____ IF YOU ANSWERED YES TO EITHER OF THE ** QUESTIONS, ADDITIONAL INFORMATION MAY BE REQUIRED.

ATTACH: EAF, Application fee, Survey/Site Plan Maps (min. 10), appropriate fees, letter of intent, must be submitted 10 days before initial review.

Application is Hereby Made to the Planning Office. The Applicant or Owner agrees to comply with all applicable laws, Ordinances, Regulations of the Town of Schodack and New York State for approval of the application.

WHO WILL BE REPRESENTING YOUR APPLICATION AT THE PLANNING BOARD MEETINGS? Charles Marshall

Date 8/31/18 Charles Marshall (Print name) Charles Marshall (APPLICANT'S Signature)

MAILING ADDRESS P.O. Box 435, Saratoga Springs, New York 12866

TELEPHONE# (518) 581-1201 ext 4435 OTHER# (518) 269-0664 FAX # (518) 581-1209

Date _____ _____ (Print name) John M Edwards Jr (PROPERTY OWNER'S Signature)

MAILING ADDRESS _____

TELEPHONE# _____ OTHER# _____ FAX # _____

Nadine Fuda, Director / Denise Mayrer -Chairperson / Craig Crist, Attorney / Richard Laberge, P.E.
Wayne Johnson / John LaVoie /Paul Puccio / Lawrence D Angelo /Andrew Aubin / [illegible] D. Shaughnessy

1/8/18 NF

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information

Stewart's Shops Corp.

Name of Action or Project:
Stewart's Relocation

Project Location (describe, and attach a location map):
1540 Columbia Turnpike

Brief Description of Proposed Action:
Stewart's will raze the existing multi-tenant building and neighboring automobile repair shop for the redevelopment of a new Stewart's Shop (convenience store) with self-service gasoline.

Name of Applicant or Sponsor:	Telephone: (518) 581-1201 ext 4435
Stewart's Shops Corp.	E-Mail: cmarshall@stewartsshops.com

Address:
P.O. Box 435

City/PO:	State:	Zip Code:
Saratoga Springs	New York	12866

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: NYSDEC, NYSODT, Town of Schodack ZBA, Rensselear County Health Dept, Town of Schodack Town Board	☐	☑

3.a. Total acreage of the site of the proposed action? 2.4 acres
b. Total acreage to be physically disturbed? 1.75 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 2.4 acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☐ Urban ☑ Rural (non-agriculture) ☐ Industrial ☑ Commercial ☑ Residential (suburban)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____
☐ Parkland

	NO	YES	N/A
5. Is the proposed action, a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	☐	☑	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO	YES	
	☑	☐	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	☑	☐	
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☑	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☒	☑	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	NO	YES	
	☐	☑	
10. Will the proposed action connect to an existing public/private water supply?	NO	YES	
If No, describe method for providing potable water: _____	☐	☑	
11. Will the proposed action connect to existing wastewater utilities?	NO	YES	
If No, describe method for providing wastewater treatment: Potential expansion of the municipal sewer	☐	☑	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
	☑	☐	
b. Is the proposed action located in an archeological sensitive area?	☐	☑	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
	☑	☐	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	☑	☐	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: ☐ Shoreline ☑ Forest ☐ Agricultural/grasslands ☐ Early mid-successional ☐ Wetland ☐ Urban ☑ Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES	
	☑	☐	
16. Is the project site located in the 100 year flood plain?	NO	YES	
	☑	☐	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	NO	YES	
a. Will storm water discharges flow to adjacent properties? ☐ NO ☑ YES	☐	☑	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☑ YES			
A Stormwater Pollution Prevention Plan is being developed for the construction activity and long-term operation of the site. The site is considered a "Hot Spot" by NYSDEC guidelines because of the petroleum elements and design accordingly.			

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: Temporary retention will be held in stormwater basins with the final volume included in the SWPPP as the final Site Plan will affect the volume of the basins.	☐	☑
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	☑	☐

I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

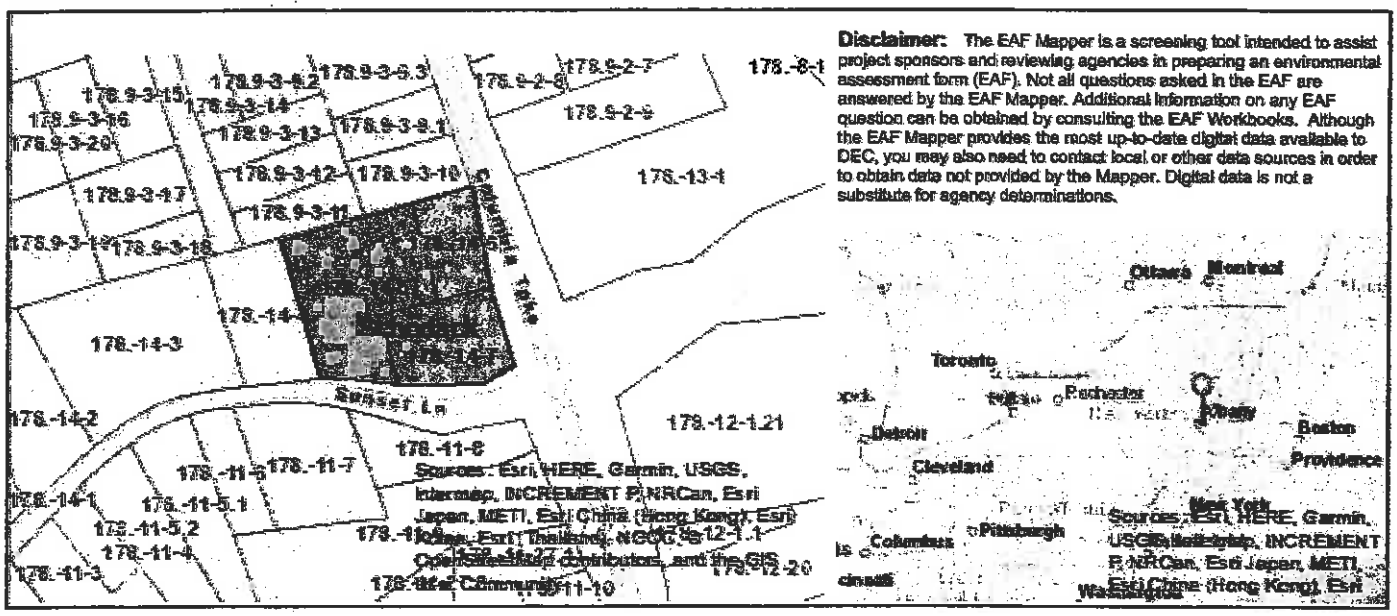
Applicant/sponsor name: Stewart's Shops Corp Date: 1/18/19

Signature: Charles Marshall (Charles Marshall)

PRINT FORM

EAF Mapper Summary Report

Tuesday, August 28, 2018 10:25 AM

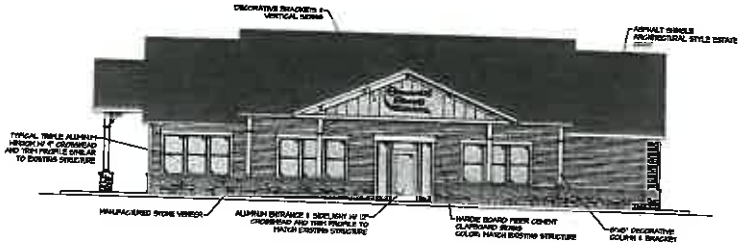


Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

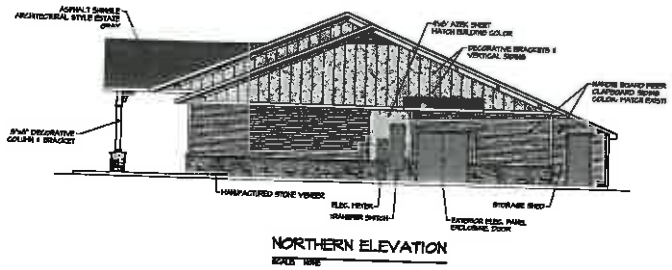
Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National Register of Historic Places]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 20 [Remediation Site]	No

PROPOSED STEWART'S SHOP
1538 & 1542 COLUMBIA TURNPIKE
CASTLETON, NY 12033

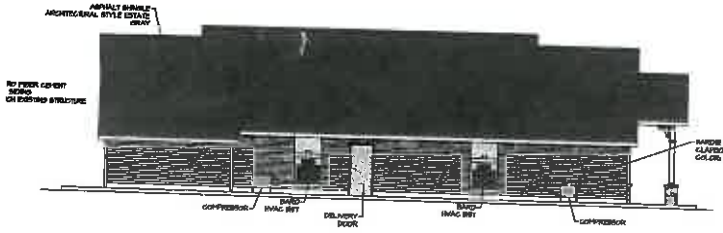
SH. NO.	DWG NO.	SHEET TITLE
1	T-1	TITLE SHEET
2	S-1	EXISTING CONDITIONS/DEMO PLAN
3	S-2	PROPOSED SITE PLAN
4	S-3	PROPOSED UTILITY PLAN
5	S-4	PROPOSED GRADING PLAN
6	S-5	EROSION & SEDIMENT CONTROL PLAN
7	S-6	STORMWATER MANAGEMENT PLAN
8	S-7	PROPOSED SANITARY SEWER PLAN
9	S-8	PROPOSED SANITARY SEWER PLAN
10	S-9	PROPOSED SANITARY SEWER PROFILE
11	S-10	PROPOSED LANDSCAPING PLAN
12	S-11	PROPOSED PHOTOMETRICS PLAN
13	S-12	PROPOSED TURNING MOVEMENTS
14	S-13	ZONING ANALYSIS / WELL SEPARATION
15	S-14	NEIGHBORING PROPERTIES
16	S-15	MISCELLANEOUS DETAILS
17	S-16	MISCELLANEOUS DETAILS
18	S-17	MISCELLANEOUS DETAILS
19	S-18	SANITARY SEWER DETAILS
20	S-19	SANITARY SEWER DETAILS
21	S-20	STORMWATER MANAGEMENT DETAILS
22	S-21	STORMWATER MANAGEMENT DETAILS
23	S-22	NYSDOT DETAILS



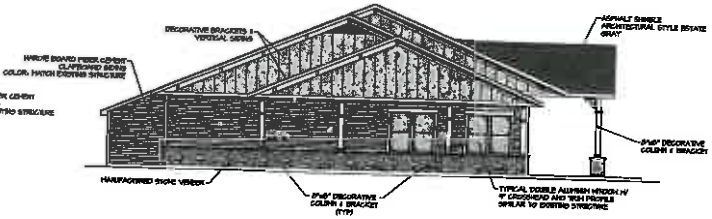
EASTERN ELEVATION
SCALE: NONE



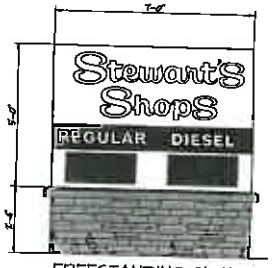
NORTHERN ELEVATION
SCALE: NONE



WESTERN ELEVATION
SCALE: NONE

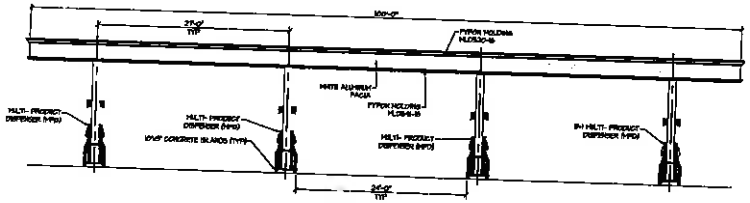


SOUTHERN ELEVATION
SCALE: NONE

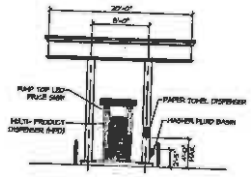


FREESTANDING SIGN

SIZE: 5'-0"X7'-0"=35 SQ. FT.
LETTERS: 1/8" FLEXGLASS FACE ON 4-1/2" THICK CAN
WHITE LETTERS/BRONZE TRIM
ILLUMINATION: INTERNALLY ILLUMINATED WITH LED LIGHTING
-BURGUNDY LETTERS
-WHITE BACKGROUND
-12" RED LED GAS PRICE NUMBERS
-12" GREEN LED DIESEL PRICE NUMBERS



GAS CANOPY EAST/WEST ELEVATION
SCALE: NONE



GAS CANOPY NORTH/SOUTH ELEVATION
SCALE: NONE

TYPICAL BUILDING SIGN
SIZE: 17 SQFT
SIGN: INTERNALLY ILLUMINATED WITH LED LIGHTING
-BURGUNDY LETTERS
-WHITE COLOR BACKGROUND

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS
2-8-21	2	Add revised SWP comments from 1-29-21

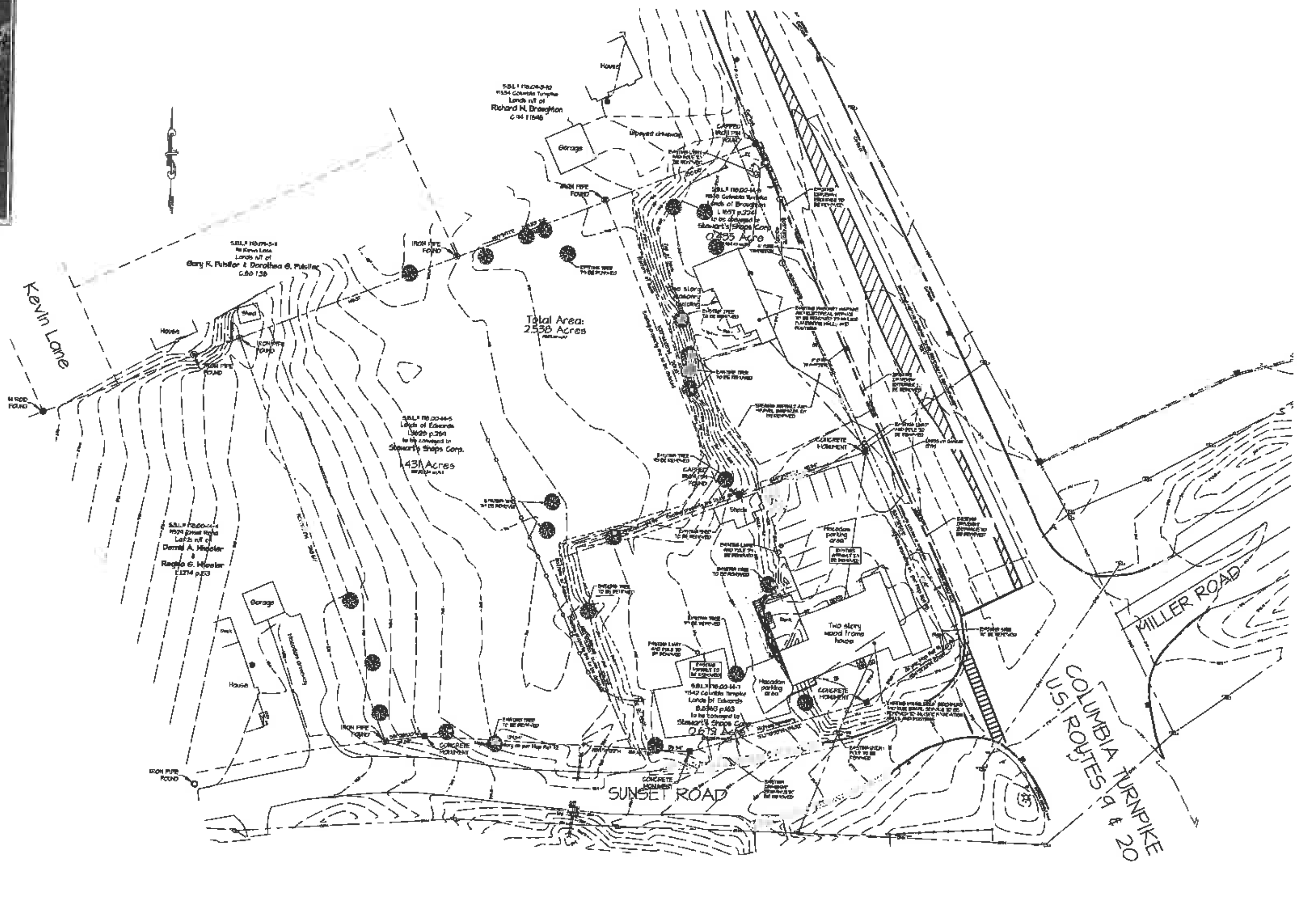
Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. (518)581-1200 FAX (518)581-1201

DRAWN BY: SEK
SCALE: NTS
DATE: 01/27/20

DRAWING NO. T-1

TITLE: TITLE SHEET

SITE LOCATION MAP
SCALE: N.T.S.



LEGEND	
FIRE HYDRANT	
WATER VALVE	
GAS VALVE	
SEWER MANHOLE	
SEWER CLEANOUT	
CURB INLET	
CATCH BASIN	
GUY WIRE	
UTILITY POLE	
SIGNPOST	
TRAFFIC SIGNAL CONTROL BOX	
POLE LIGHT	
MONITORING WELL	
BOLLARD	
IRRIGATION SLEEVE	
OVERHEAD UTILITIES	
WATER SERVICE	
SEWER SERVICE	
STORM PIPE, HDPE	
STOCKADE FENCE	
CHAINLINK FENCE	
SPLITRAIL FENCE	
U/G ELECTRICAL/TELE SERVICE	
U/G ELECTRICAL CONDUIT	
U/G GAS LINE	
U/G CAMERA CONDUIT	
DIESEL PRODUCT LINE	
SUPER PRODUCT LINE	
UNLEADED PRODUCT LINE	
EXISTING MAJOR CONTOUR	
EXISTING MINOR CONTOUR	
PROPOSED MAJOR CONTOUR	
PROPOSED MINOR CONTOUR	

NOTES:
1) EXISTING CONCRETE SURVEY MONUMENTS SHALL NOT BE INTENTIONALLY DISTURBED. SHOULD AN EXISTING MONUMENT BE ACCIDENTALLY DISTURBED, IT SHALL BE REPLACED IN-KIND BY A NYS LICENSED SURVEYOR.

STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER

ALTERATIONS TO THIS DOCUMENT BY OTHERS THAN AN APPROPRIATELY LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS
	1	

Stewart's Shops
SARATOGA SPRINGS, NY 12866

DRAWN BY: SBC
SCALE: 1" = 50'
DRAWING NO. S-1

TITLE: EXISTING CONDITIONS/DEMOLITION PLAN

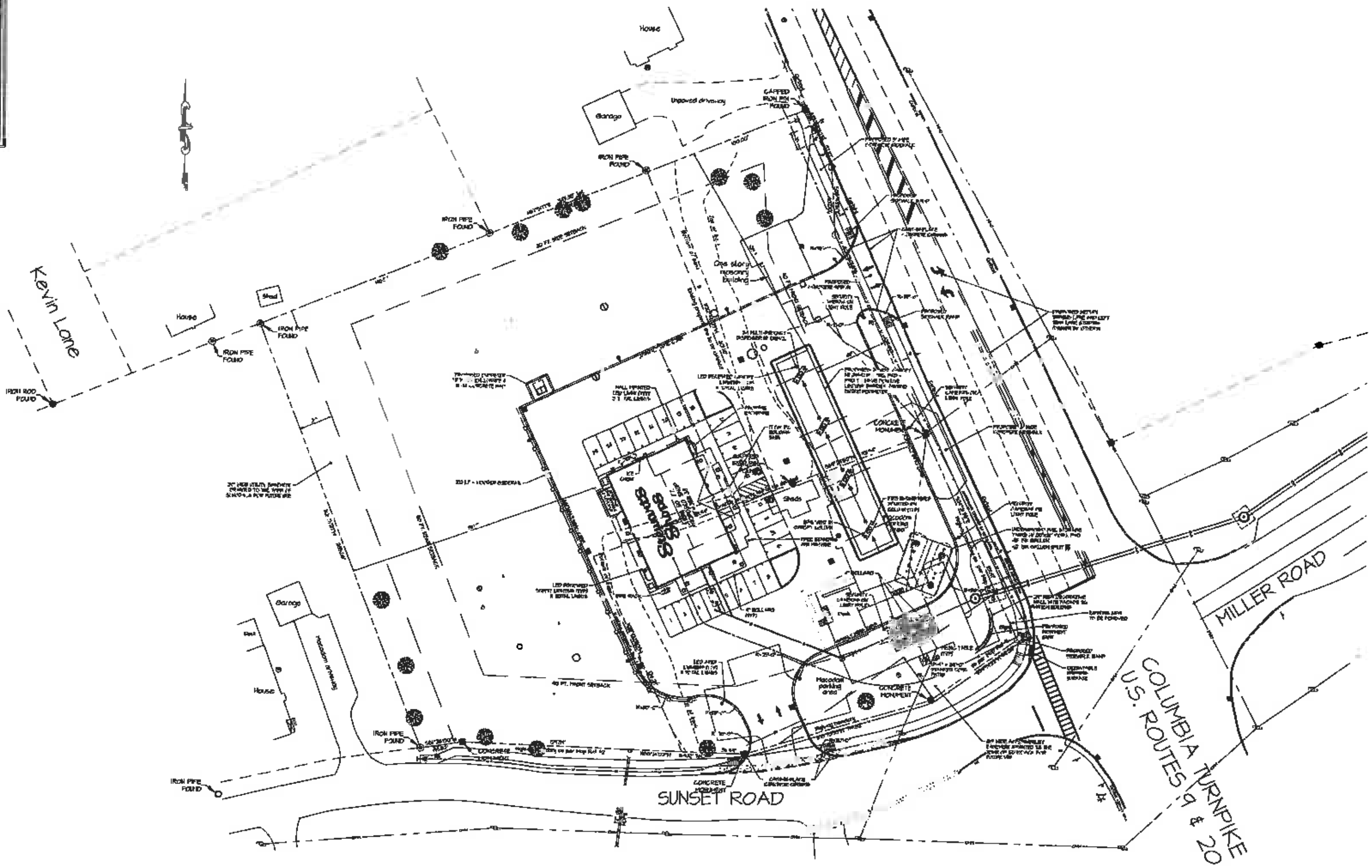
SITE LOCATION MAP
SCALE: N.T.S.

TOWN OF SCHODACK – (HC) HIGHWAY COMMERCIAL
RENSSELAER COUNTY PARCEL# 178.00-14-5, 178.00-14-6 & 178.00-14-7

	REQUIRED/ALLOWED	PROPOSED
MINIMUM LOT AREA	20,000 SQ. FT	110,571.20 SQ. FT
MINIMUM LOT WIDTH	125 FEET	265.65 FEET
MAXIMUM STRUCTURE COVERAGE	35%	6.7%
MINIMUM OPEN SPACE	20%	64.1%
FRONT BLDG SETBACK	40 FEET	43.0 FEET
SIDE BLDG SETBACK	20 FEET	125.3 FEET
REAR BLDG SETBACK	50 FEET	182.5 FEET
BUILDING HEIGHT	45 FEET	23.5 FEET
STEWART'S BUILDING SIGN	32 SQ. FT	1 @ 17 SQ. FT.
FREESTANDING SIGN	42 SQ. FT	1 @ 40 SQ. FT. EA.
TOTAL SIGNAGE	74 SQ. FT	57 SQ. FT.
PARKING (RETAIL STORE)	1 PER 125 SQ. FT. (2,043 SQ. FT. RETAIL) = 17 SPACES	–
PARKING (EATING/DRINKING)	1 PER 60 SQ. FT (300 SQ. FT. EATING) = 5 SPACES	–
	22 SPACES	24 SPACES

LEGEND

FIRE HYDRANT	
WATER VALVE	
GAS VALVE	
SEWER MANHOLE	
SEWER CLEANOUT	
CURB INLET	
CATCH BASIN	
GUY WIRE	
UTILITY POLE	
SIGNPOST	
TRAFFIC SIGNAL CONTROL BOX	
POLE LIGHT	
MONITORING WELL	
BOLLARD	
IRRIGATION SLEEVE	
OVERHEAD UTILITIES	
WATER SERVICE	
SEWER SERVICE	
STORM PIPE, HDPE	
STOCKADE FENCE	
CHAINLINK FENCE	
SPLITRAIL FENCE	
U/G ELECTRICAL/TELE SERVICE	
U/G ELECTRICAL CONDUIT	
U/G GAS LINE	
U/G CAMERAL CONDUIT	
DIESEL PRODUCT LINE	
SUPER PRODUCT LINE	
UNLEADED PRODUCT LINE	
EXISTING MAJOR CONTOUR	
EXISTING MINOR CONTOUR	
PROPOSED MAJOR CONTOUR	
PROPOSED MINOR CONTOUR	



NOTES:

1) NO ADDITIONAL OUTSIDE STORAGE AREAS, BEYOND WHAT IS SHOWN ON THIS DRAWING SHEET, ARE PLANNED FOR THIS PROJECT.
2) EXISTING CONCRETE SURVEY MONUMENTS SHALL NOT BE INTENTIONALLY DISTURBED. SHOULD AN EXISTING MONUMENT BE ACCIDENTALLY DISTURBED, IT SHALL BE REPLACED IN-KIND BY A NYS LICENSED SURVEYOR

SIGN KEY:

1) ALL SIGNS ARE TO CONFORM WITH N.Y.S.D.O.T. STANDARD SECTION 645.
2) SIGN POST TO BE SECURED IN BOLLARD WITH SAND
3) SIGNS SHALL BE MOUNTED TO GALVANIZED U CHANNEL POSTES IN THE LOCATIONS INDICATED ON THE PLAN.

(1) 
HANDICAP SIGN
R7-8 12"x18"
R7-8A 12"x6"
5'-0" MOUNTING HEIGHT MIN.
SEE PLAN FOR LOCATION

(2) 

NO PARKING SIGN
R7-1 12"x18"
5'-0" MOUNTING HEIGHT MIN. SEE PLAN FOR LOCATION

STORE NAME, ABBREVIATION & NO.	SCHODACK - SCOV - 354
SITE LOCATION	1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS
[illegible]	1	Revised driveway location, added tree along [illegible] enclosure dumpster and revised site [illegible]
[illegible]	2	

Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. 518-581-1200 FAX (518)581-1207

DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 6/21/18

DRAWING NO. S-2

TITLE: PROPOSED SITE PLAN

LEGEND	
FIRE HYDRANT	
WATER VALVE	
GAS VALVE	
SEWER MANHOLE	
SEWER CLEANOUT	
CURB INLET	
CATCH BASIN	
GUY WIRE	
UTILITY POLE	
SIGNPOST	
TRAFFIC SIGNAL CONTROL BOX	
POLE LIGHT	
MONITORING WELL	
BOLLARD	
IRRIGATION SLEEVE	
OVERHEAD UTILITIES	
WATER SERVICE	W
SEWER SERVICE	S
STORM PIPE, HDPE	
STOCKADE FENCE	
CHAINLINK FENCE	
SPLITRAIL FENCE	
U/G ELECTRICAL/TELE SERVICE	
U/G ELECTRICAL CONDUIT	UE
U/G GAS LINE	G
U/G CAMERAL CONDUIT	CAM
DIESEL PRODUCT LINE	DSL
SUPER PRODUCT LINE	SUP
UNLEADED PRODUCT LINE	UL
EXISTING MAJOR CONTOUR	
EXISTING MINOR CONTOUR	
PROPOSED MAJOR CONTOUR	
PROPOSED MINOR CONTOUR	

NOTES:
1. SOME FEATURES IN LEGEND MAY NOT HAVE BEEN USED.
2. DASHED LINES INDICATE NEW WORK.
3. DOTTED LINES INDICATE REMOVED ITEMS.

NOTES:
1) EXISTING CONCRETE SURVEY MONUMENTS SHALL NOT BE INTENTIONALLY DISTURBED. SHOULD AN EXISTING MONUMENT BE ACCIDENTALLY DISTURBED, IT SHALL BE REPLACED IN-KIND BY A NYS LICENSED SURVEYOR.

STATE OF NEW YORK
SCOTT EDWIN KIRCHNER
061095
LICENSED PROFESSIONAL ENGINEER

ALTERATIONS TO THIS DOCUMENT BY OTHER THAN AN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

SHOP NAME, ABBREVIATION & NO.: SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

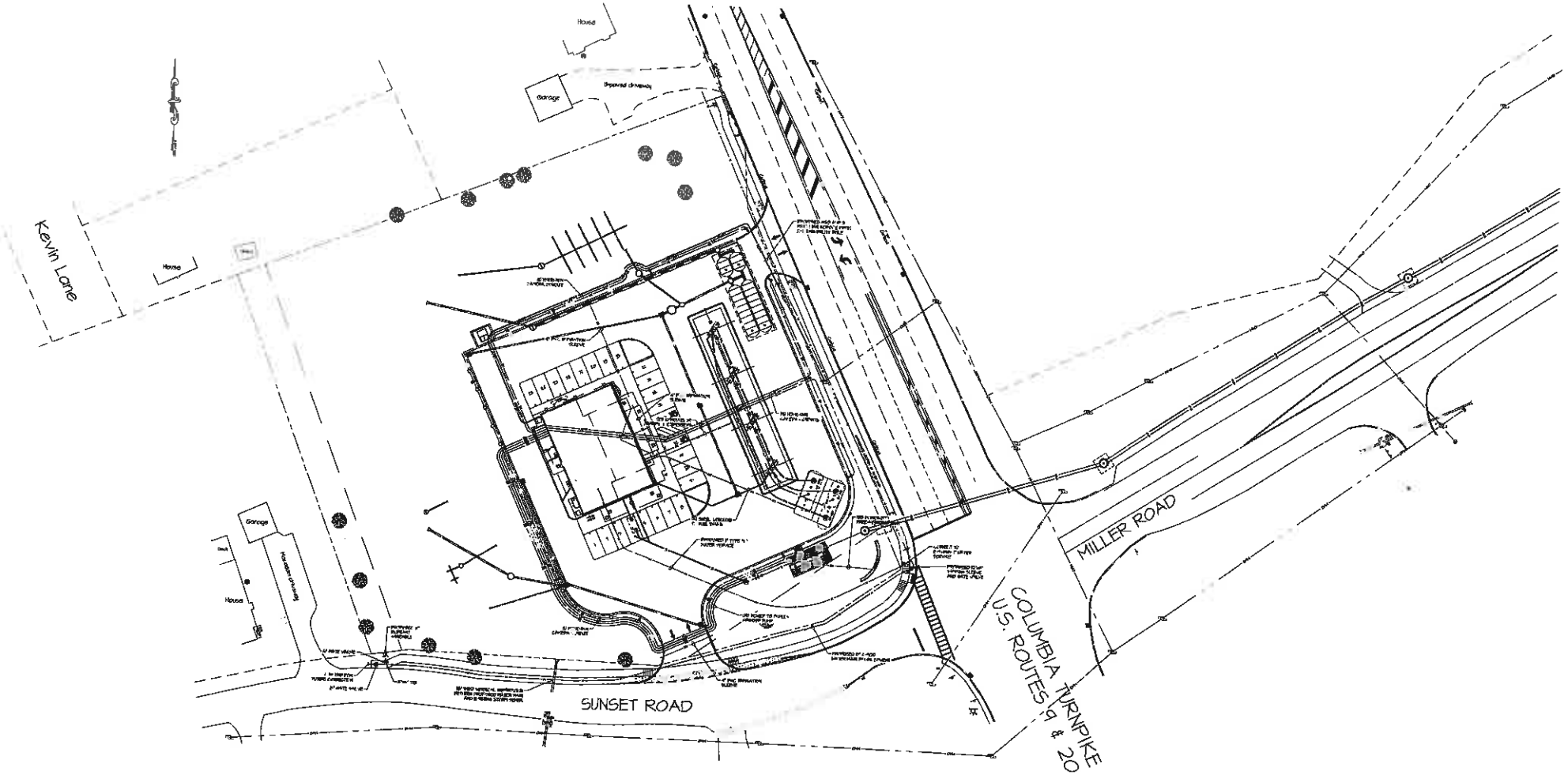
DATE	NO.	REVISIONS

Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. (518)581-1200 FAX (518)581-1204

DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 11/4/48

DRAWING NO.: S-4

TITLE: PROPOSED GRADING PLAN



WATER MAIN EXTENSION NOTES:

1. THE MINIMUM VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER (SANITARY OR STORM) LINES SHALL BE 18 INCHES MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING.
2. ONE FULL STANDARD LAYING LENGTH OF WATER MAIN SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AS FROM THE SEWER AS POSSIBLE.
3. IN ADDITIONS, IF THE WATER MAIN PASSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECT FILL) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING OF THE SEWER ON THE WATER MAIN.
4. THE MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER MAINS AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES, MANHOLES OR VAULTS.
5. ALL PLASTIC PIPING SHALL BE INSTALLED WITH DETECTION TAPE
6. WHEN INSTALLING HYDRANTS, SHOULD GROUND WATER BE ENCOUNTERED WITHIN 3 FEET OF FINISHED GRADE, FIRE HYDRANT WEEP HOLES (DRAINS) SHALL BE PLUGGED. IF GROUND WATER IS ENCOUNTERED, RENSSELAER COUNTY DEPARTMENT OF HEALTH (RCDOH) SHALL BE NOTIFIED TO ENSURE PROPER HYDRANT USE POLICIES ARE ESTABLISHED WITH THE MUNICIPALITY AND LOCAL FIRE DEPARTMENTS TO ENSURE THE HYDRANT IS MANUALLY PUMPED OUT AFTER ANY USE.
7. THE WATER MAIN SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE AWWA STANDARD C600 (LATEST VERSION) OR IN ACCORDANCE WITH MORE STRINGENT REQUIREMENTS IMPOSED BY THE SUPPLIER OF THE WATER.
8. THE WATER MAIN SHALL BE DISINFECTED EQUAL TO AWWA STANDARD FOR DISINFECTING WATER MAINS DESIGNATION C651 (LATEST REVISIONS). FOLLOWING DISINFECTION, THE WATER MAIN SHALL BE FLUSHED UNTIL THE CHLORINE CONCENTRATION IN THE WATER LEAVING THE MAIN IS NO HIGHER THAN THAT GENERALLY PREVAILING IN THE SYSTEM.
9. DISINFECTION AND PRESSURE TESTING PROCEDURES SHALL BE WITNESSED BY REPRESENTATIVES OF THE TOWN OF SCHODACK.
10. ALL WATER MAIN FITTINGS NOT RECEIVING 24-HOUR CHLORINE DISINFECTION CONTACT THE MUST BE SWAB DISINFECTED 20 MINUTES PRIOR TO INSTALLATION.
11. THE SAMPLING POINT SHALL BE DISCONTAMINATED BY FLAMING.
12. FIRE HYDRANTS ARE NOT ACCEPTABLE SAMPLING POINTS.
13. THE CONTRACTOR WILL COLLECT WATER SAMPLES. SAMPLING WILL INCLUDE HETEROTROPHIC PLATE COUNT ON THE FIRST DAY AND TWO CONSECUTIVE DAYS OF TOTAL COLIFORM
14. THE WATER MAIN SHALL NOT BE PLACED INTO SERVICE UNTIL SO AUTHORIZED BY THE RCDOH

NOTES:

1. EXISTING CONCRETE SURVEY MONUMENTS SHALL NOT BE INTENTIONALLY DISTURBED. SHOULD AN EXISTING MONUMENT BE ACCIDENTALLY DISTURBED, IT SHALL BE REPLACED IN-KIND BY A NYS LICENSED SURVEYOR.

STATE OF NEW YORK — GREAT SEAL OF THE STATE — LICENSED PROFESSIONAL ENGINEER

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops

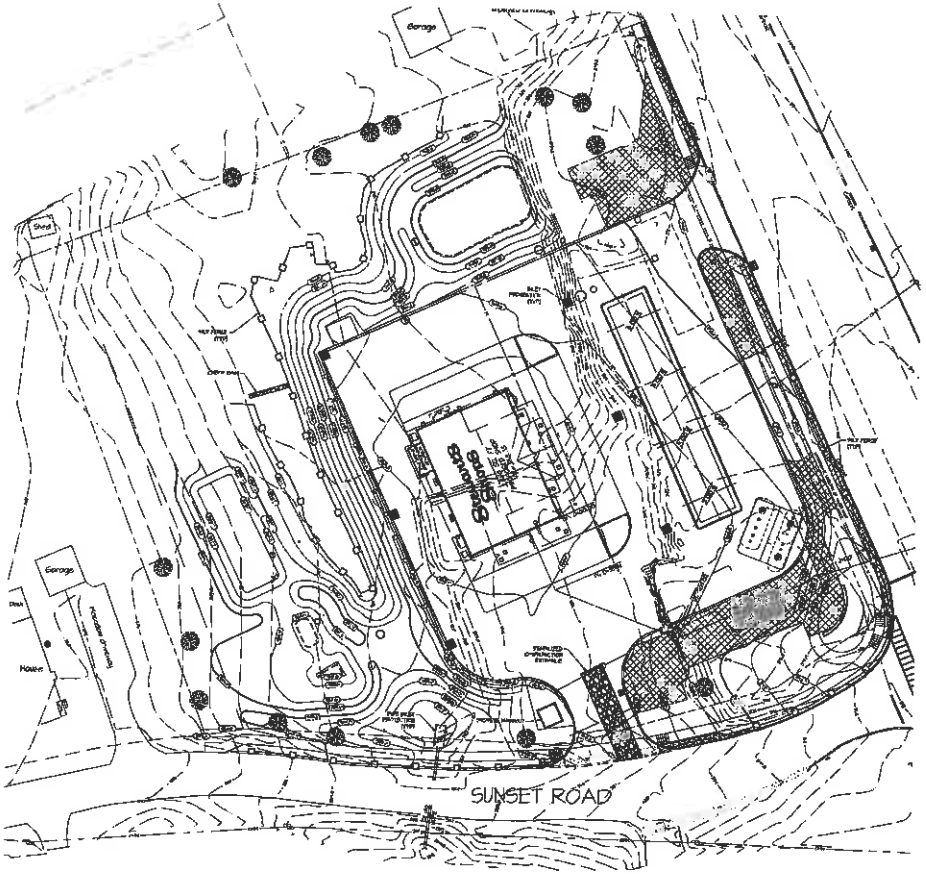
SARATOGA SPRINGS, NY 12866

TEL. (518)584-1200 FAX (518)581-1209

DRAWN BY: SBK
SCALE: 1" = 30'
DATE: 11/13/18

DRAWING NO.: S-3

TITLE: PROPOSED UTILITY PLAN



NOTES:

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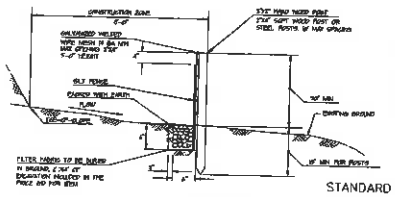


ELEVATION

NOTES:

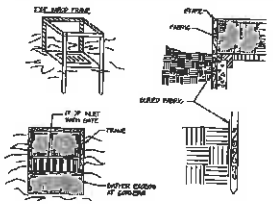
1. SILT FENCE SHALL BE INSTALLED IN ALL AREAS OF DISTURBED SLOPES SOIL DISTURBANCE STARTING EARTH MOVING OPERATIONS
2. THE DISTANCE IN WHERE MAY EXCAVATE THE DISTANCE BETWEEN THE PROPOSED TOE-OF-SLOPE AND THE SILT FENCE, IF THE ENCROACHMENT WERE NOT TAKE PLACE IN A WETLAND/WATERWAY AND DOES NOT REQUIRE THE REMOVAL OF EXISTING VEGETATION
3. SILT FENCE SHALL BE PLACED PARALLEL TO CONTOURS AND SHALD NOT BE PLACED IN CONCENTRATED FLOWS

STANDARD SYMBOLS

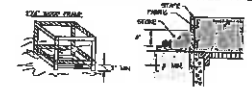
TEMPORARY SILT FENCE

SCALE: N.T.S.

INLET PROTECTION FOR NON-PAVED AREAS



INLET PROTECTION FOR PAVED AREAS



CONSTRUCTION SPECIFICATIONS

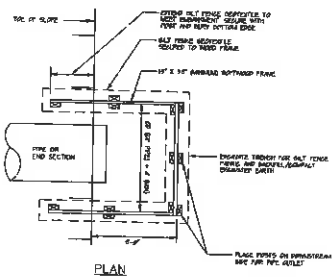
1. FILTER FABRIC SHALL HAVE AN EOS OF 30-50 (FILUP MAY BE USED FOR SHEET FLOW APPLICATIONS
2. SILT FENCING FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS IF JOINTS ARE NEEDED THEY SHALL BE OVERLAPPED TO THE NEXT STAKE
3. STAPLE MATERIALS SHALL BE STANDARD 1" x 1" WOOD OR EQUIVALENT METAL WITH A MAX LENGTH OF 3 FEET THEN A POST MAY BE DRIVEN INTO THE USE OF TAPE MUST REMAIN THE FLOW FENCE FOR SUPPORT FASTENED TO THE STAKES AND FRAME
4. A 2" x 4" WOOD FRAME SHALL BE CONSTRUCTED AROUND THE CREW OF THE FABRIC FOR ENDPLUM STABILITY
5. INLET PROTECTION AT CATCH BASINS IN PAVEDOR SOIL IS NEEDED IT SHALL BE INSTALLED FOR DETAIL ABOVE THIS THESE FRAME TARGET AND STAKES ACCORDINGLY TO MANUFACTURE SPECIFICATIONS AND AS NEEDED AS AREAS ARE PAVED OR GRADED FOR A CONTRACTOR TO FOLLOW THIS DETAIL

MINIMUM DRAINAGE AREA 1 ACRE

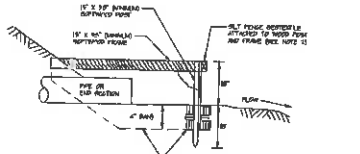
STANDARD SYMBOLS

TEMPORARY FABRIC DROP INLET PROTECTION

SCALE: N.T.S.



PLAN



SECTION

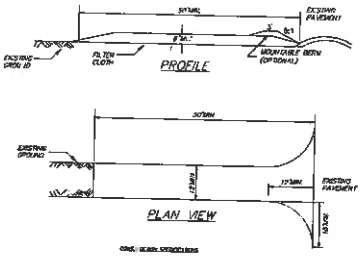
TEMPORARY FABRIC PIPE INLET PROTECTION

SCALE: N.T.S.

STANDARD SYMBOLS

GENERAL CONSTRUCTION SEQUENCE

1. CONTRACTOR SHALL INSTALL CONSTRUCTION ENTRANCE.
2. CLEAR NEEDED AREA.
3. INSTALL SILT FENCE AND GRUB AREA.
4. REMOVE EXISTING STRUCTURES AND UTILITIES.
5. ROUGH GRADE NEW BUILDING SITE AREA.
6. INSTALL BUILDING UTILITIES, FOUNDATION, CONSTRUCT BUILDING.
7. INSTALL BINDBASE FOR PARKING LOT
8. INSTALL PAVEMENT.
9. FINISH GRADE AROUND BUILDING AND SECONDFALL PLANTING
10. ROUGH GRADE REMAINDER OF BUILDING AREA.
11. INSTALL UTILITIES (SANITARY SEWER, ETC.)
12. INSTALL DRIVEWAY AND PAVE.
13. FINISH GRADE AREA AND SEED AREA.
14. REMOVE TEMPORARY MEASURES AS ORDERLY ELIMINATED INSPECTOR.



CONSTRUCTION NOTES

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON 4 SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY)
3. THICKNESS - NOT LESS THAN SIX (6) INCHES
4. WIDTH - TWELVE FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. WIDTH MUST END UP AT LEAST ONE FOOT IF SHORT GUARANTEE TO EXIT
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE, IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED

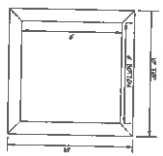
MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

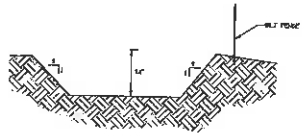
PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

TEMPORARY CONSTRUCTION ENTRANCE

SCALE: N.T.S.



PLAN



SECTION

TEMPORARY CONCRETE WASH OUT PIT

SCALE: N.T.S.

GENERAL REQUIREMENTS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING EROSION AND SEDIMENT CONTROL TO PROTECT SURROUNDING WATER BODIES.

CONTRACTOR OR OWNER SHALL ENSURE THAT AT LEAST ONE TRAINED NYSE DEC CERTIFIED EROSION CONTROL CONTRACTOR IS ON SITE OR A DAILY BASIS WHEN SOIL DISTURBANCE ACTIVITIES ARE BEING PERFORMED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION, CONTROL AND MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES TO ENSURE PROPER FUNCTIONING OF SAID FACILITIES DURING CONSTRUCTION.

AFTER THE PROJECT HAS BEEN COMPLETED, THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR ENSURING THAT ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED OR REPLACED BY PERMANENT CONTROLS.

ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED LONG THAN FOURTEEN (14) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING. MULCH SHALL BE USED IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER. DISTURBED AREAS SHALL BE LIMED AND FERTILIZED PRIOR TO TEMPORARY SEEDING.

PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCH AS NECESSARY FOR SEED PROTECTION AND ESTABLISHMENT. LIME AND FERTILIZE SODS SHALL BE LIMED AND FERTILIZED PRIOR TO PERMANENT SEEDING. SEE SECTION D.

EROSION & SEDIMENT POLLUTION CONTROL GUIDELINES SPECIFIED

EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES AND PRACTICES, AS USED IN THE CONSTRUCTION OF THE PROJECT, SHALL BE CONSISTENT WITH THE NEW YORK STATE GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL, MARCH 1988.

NATURAL VEGETATION SHALL BE RETAINED, PROTECTED, AND SUPPLEMENTED, AS FEASIBLE PRIOR TO AND DURING CONSTRUCTION.

CUT AND FILL SLOPES SHALL BE DESIGNED TO TRIM, PROPOSED GRADES AS SOON AS POSSIBLE IN THE CONSTRUCTION PROGRESSES, AND WHERE NO AREAS ARE ALREADY FULLY.

EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES (EROSION BALES, FILTER FABRIC FENCING, STABILIZED CONSTRUCTION ENTRANCE) SHALL BE PUT INTO SERVICE AND OTHER ACCEPTABLE FACILITIES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION UNTIL COMPLETE SITE STABILIZATION.

HEAVY CONSTRUCTION EQUIPMENT SHALL BE KEPT AS CLOSE TO THE AREAS AS PRACTICAL TO MINIMIZE DISTURBANCE OF SOIL AND PLANT LIFE IS OR DESTROYED

TOPSOIL AND OTHER SOIL REMOVED DURING CONSTRUCTION SHALL BE STOCKPILED IN A SUITABLE LOCATION CLEAR FROM ANY EXISTING WATER DRAINAGE COURSES. STOCKPILES WHICH ARE INACTIVE FOR MORE THAN FOURTEEN (14) DAYS SHALL BE SEEDED.

VEGETATIVE STABILIZATION SHALL BE PERIODICALLY INSPECTED FOR SUFFICIENT GROWTH AND PROGRESS. AREAS NOT RESPONDING SHALL BE PROMPTLY RESEEDED AND REMULCHED AS SOON AS POSSIBLE, AREAS SHOWING SIGNS OF EROSION, FROM TOPSOIL LOST ON SHALL BE GRADED, SEEDED, AND REMULCHED AS SOON AS POSSIBLE, AND OR EROSION CONTROL FABRIC SHALL BE UTILIZED WHERE ADEQUATE STABILIZATION IS NOT EXCESSIVE.

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY DEPTHS BE DRAINING EARTH MOVING ACTIVITIES, OR BY THE PROPER SEQUENCE, AND MAINTENANCE UNTIL PERMANENT PROTECTION IS ESTABLISHED.

A STABILIZED CONSTRUCTION ENTRANCE (MINIMUM PAD OF 1-1/2" TO 2" CLEAR STONE) WILL BE PLACED AT ALL CONSTRUCTION ENTRANCES WHENEVER SITE ENTRANCE DISTURBANCE, ENTRANCE LENGTH NOT LESS THAN 50 FT., WIDTH AS WIDE AS THE FULL WIDTH OF POINT OF INGRESS OR EGRESS (MINIMUM 10 FOOT WIDTH), BUT NOT LESS THAN FULL WIDTH OF ANY INGRESS OR EGRESS ROADWAY. DEPTH NOT LESS THAN 6 INCHES.

ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN 14 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF 1.5-2.0 TONS PER ACRE, ACCORDING TO STATE STANDARDS.

PERMANENT VEGETATION TO BE SEEDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCH TO BE USED AS NEEDED EARLY FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.

THE APPLICATION OF FERTILIZER, LIMING, PLANTING SEED, SEEDING, AND MULCHING FOR DISTURBED AREAS SHALL BE CONSISTENT WITH THE STANDARD GENERAL PRACTICES FOR CONSTRUCTION.

SHALL INITIALLY FOLLOWING INITIAL DISTURBANCES OR ROUGH GRADING, ALL CHEMICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A BIODEGRADABLE EROSIONALITY, AT A RATE OF 2.0 - 2.5 TONS PER ACRE.

ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY. AS THE INSTALLATION PROCEEDS (I.E., SLOPES GREATER THAN 3:1)

AT THE TIME WHEN SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS TO BE ESTABLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE IMPROVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ASSIST THE SOIL CONDITIONS AND REMOVE IT SUITABLE FOR VEGETATIVE GROUND COVER.

IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES UNTIL ALL AREAS HAVE BEEN PERMANENTLY STABILIZED.

MAINTENANCE AND REPAIR OF EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES

PROPER MAINTENANCE AND REPAIR OF EROSION AND SEDIMENT CONTROL FACILITIES ARE NECESSARY TO THE EFFECTIVENESS OF THE EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES.

A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE ENTRANCE OF EACH CONSTRUCTION ENTRANCE ONTO PUBLIC ROADWAYS/DRIVES AND STABILIZED ROADWAYS.

DISTURBED AROUND SURFACES SHALL BE SPRINKLED WITH WATER, AS NEEDED, TO LIMIT THE FORMATION AND MIGRATION OF AIRBORNE DUST

OPERATIONAL MEASURES SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT THE SPILLS OF FUELS AND LUBRICANTS. IF A SPILL OCCURS, IT SHALL BE CONTROLLED IMMEDIATELY TO PREVENT ITS ENTRY INTO OFF-SITE AREAS INCLUDING ADJACENT STORM SEWER.

ANY TEMPORARY EROSION CONTROL FACILITY SHALL REMAIN FUNCTIONAL UNTIL VEGETATIVE COVER IS SUFFICIENTLY ESTABLISHED WITHIN THE PROTECTIVE TRIBUTARY DRAINAGE AREA.

ANY DEPOSIT ACCUMULATED BY EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE REMOVED AND PROPERLY DISPOSED. THESE FACILITIES SHALL BE INSPECTED DAILY AND AFTER EACH RAINFALL EVENTS, AND REPAIRED AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES THE FOLLOWING DEPTH:

CHECK DAMS - 6 INCHES
STRAW BALE BARRIERS - 6 INCHES
SILT FENCING - 6 INCHES
FILTRATION BASIN - 6 INCHES

NOTE: DISTURBED AREAS SHALL BE CONSIDERED AS PERMANENTLY ESTABLISHED WHEN A MINIMUM COVER OF 90% HAS BEEN ESTABLISHED.

SOIL RESTORATION

1. APPLY 3 INCHES OF COMPOST OVER SUBSOIL.
2. TILL COMPOST INTO SUBSOIL TO DEPTH OF AT LEAST 12 INCHES USING NON-INVERTED RIPPER, TRACTOR MOUNTED DISC, OR TILLER, MIXING AND CIRCULATING AIR AND COMPOST INTO SUBSOIL.
3. REMOVE ROCKS LARGER THAN 3" AND REMOVE ALL DEBRIS OF FOUR INCHES AND LARGER SIZE AND DISPOSE OFF THE SITE.
4. APPLY TOPSOIL TO DEPTH OF 3 INCHES
5. VEGETATE AS REQUIRED BY APPROVED PLAN

AT THE END OF PROJECT AN INSPECTOR SHOULD BE ABLE TO PUSH A 3/8" METAL BAR 12" INCHES INTO SOIL JUST WITH BODY WEIGHT. TILLED (STEP 2 ABOVE) SHOULD NOT BE NOTICEABLY WITHIN THE DRIVELINE OF ANY EXISTING ROADS OR OVER UTILITY EASEMENTS THAT ARE WITHIN 20 INCHES OF THE SURFACE.

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

TOPSOIL SHALL MEETING THE SPECIFICATIONS OF NYSDOT TYPE "A" TOPSOIL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING EROSION AND SEDIMENT CONTROL TO PROTECT WORKS AROUND WATER BODIES

STANDARD SYMBOLS OF AREA OF SOIL RESTORATION

ALTERATION TO THIS DRAWING OF OTHER THAN AN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

STORE NAME, ADDRESS/LETTER # NO.

SCHODACK - SCOV - 354

SITE LOCATION

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops

SARATOGA SPRINGS, NY 12866

TEL. (518)581-1200 FAX (518)581-1201

DRAWN BY: SER

SCALE: 1" = 30'

DATE: 11/4/08

DRAWING NO: S-5

TITLE:

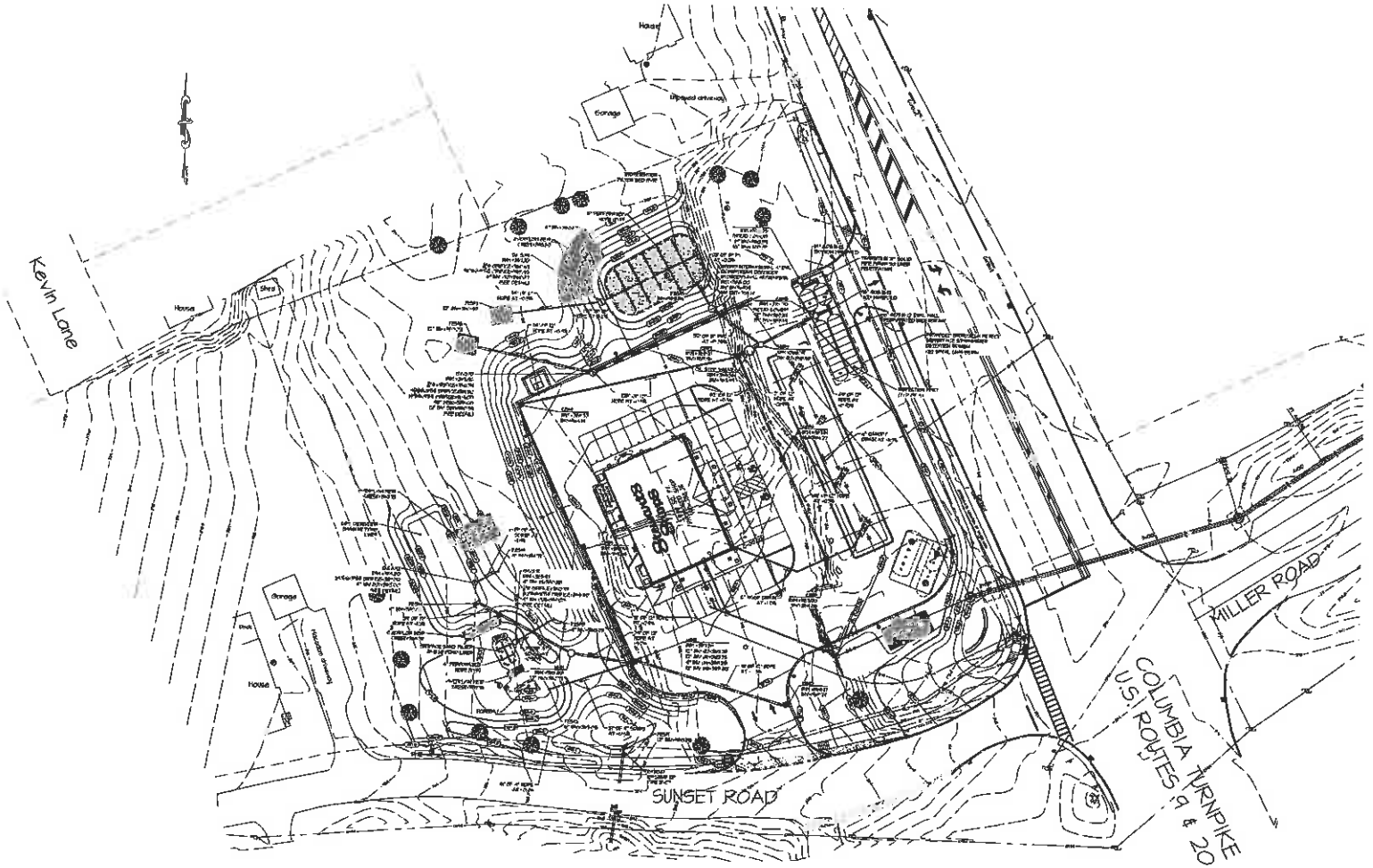
EROSION & SEDIMENT CONTROL PLAN

NOTES:

1) EXISTING CONCRETE SURVEY MONUMENTS SHALL NOT BE INTENTIONALLY DISTURBED. SHOULD AN EXISTING MONUMENT BE ACCIDENTALLY DISTURBED, IT SHALL BE REPLACED IN-KIND BY A NYS LICENSED SURVEYOR.

LEGEND	
FIRE HYDRANT	
WATER VALVE	
GAS VALVE	
SEWER MANHOLE	
SEWER CLEANOUT	
CURB INLET	
CATCH BASIN	
GUY WIRE	
UTILITY POLE	
SIGNPOST	
TRAFFIC SIGNAL CONTROL BOX	
POLE LIGHT	
MONITORING WELL	
BOLLARD	
IRRIGATION SLEEVE	
OVERHEAD UTILITIES	
WATER SERVICE	
SEWER SERVICE	
STORM PIPE, HDPE	
STOCKADE FENCE	
CHAINLINK FENCE	
SPLITRAIL FENCE	
NYS ELECTRICAL/FIELD SERVICE	
NYS ELECTRICAL CONDUIT	
NYS GAS LINE	
NYS CAMERAL CONDUIT	
DIESEL PRODUCT LINE	
SUPER PRODUCT LINE	
UNLEADED PRODUCT LINE	
EXISTING MAJOR CONTOUR	
EXISTING MINOR CONTOUR	
PROPOSED MAJOR CONTOUR	
PROPOSED MINOR CONTOUR	

NOTES:
1. SOME FEATURES IN LEGEND MAY NOT HAVE BEEN USED
2. MARKER LINES INDICATE NEW WORK
3. CONTOUR LINES REMOVE BEYOND SITE



SOIL DATA:
SOIL DATA OBTAINED BY
STEWART'S SHOPS CORP. (NEAR 1 1/8/2018
WITNESSED BY:
SCOTT E. KITCHNER, PE - STEWART'S SHOPS

DEEP HOLE 1
@ DP1
0'-24" TOPSOIL + PLACED FILL MATERIAL (ASPHALT, CONCRETE, GRAVEL, BRICKS)
24"-68" SANDY GRAVEL
68"-412" SILT

NO GROUNDWATER ENCOUNTERED
NO MOTTLING ENCOUNTERED
BOTTOM OF EXCAVATION ELEV. 362.48

@ DP2
0"-36" TOPSOIL + PLACED FILL MATERIAL (ASPHALT, CONCRETE, GRAVEL, BRICKS)
36"-412" STRATIGRAPHY PLACED FILL MATERIAL (SILTY SAND W/ WOOD DEBRIS & GOBBLES)

NO GROUNDWATER ENCOUNTERED
NO MOTTLING ENCOUNTERED
BOTTOM OF EXCAVATION ELEV. 362.48

@ DP3
0'-8" TOPSOIL
8"-36" GRAVELLY LOAM W/ GOBBLES

NO GROUNDWATER ENCOUNTERED
NO MOTTLING ENCOUNTERED
SHALE BEDROCK ENCOUNTERED @ 24" ELEV. 359.40

@ DP4
0'-4" TOPSOIL
4"-36" GRAVELLY LOAM
36"-152" GRAVELLY CLAY (LAYER OF GOBBLES @ 52")
152"-176" GRAVELLY LOAM

GROUNDWATER ENCOUNTERED @ 88" ELEV. 358.96
NO MOTTLING ENCOUNTERED
NO ROCK ENCOUNTERED
BOTTOM OF EXCAVATION ELEV. 356.92

@ DP5
0'-4" TOPSOIL
4"-30" GRAVELLY SILT W/ GOBBLES

NO GROUNDWATER ENCOUNTERED
NO MOTTLING ENCOUNTERED
SHALE BEDROCK ENCOUNTERED @ 30" ELEV. 358.60

INFILTRATION TESTING OCCURED ON-SITE ON APRIL 13, 2018. TESTING WAS DONE IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE NYSDEC STORMWATER DESIGN MANUAL APPENDIX D BY SCOTT E. KITCHNER, PE OF STEWART'S SHOPS.

INFILTRATION TEST SUMMARY:
RUN 1B - 34" IN 1 HOUR
RUN 2D - 8" IN 1 HOUR
RUN 3B - 5" IN 1 HOUR
RUN 4A - 2" IN 1 HOUR

AVERAGE - 12" IN 1 HOUR

FOR DESIGN PURPOSES, A SAFETY FACTOR OF 1.5 WILL BE APPLIED TO THE AVERAGE RATE FOR MODELING STORMWATER FACILITIES. AN INFILTRATION RATE OF 8" PER HOUR WILL BE USED FOR STORMWATER MODELING.

STATE OF NEW YORK
SCOTT EDWIN KITCHNER
081038
LICENSED PROFESSIONAL ENGINEER

ALTERATIONS TO THIS DOCUMENT BY ANYONE OTHER THAN AN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW.

SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

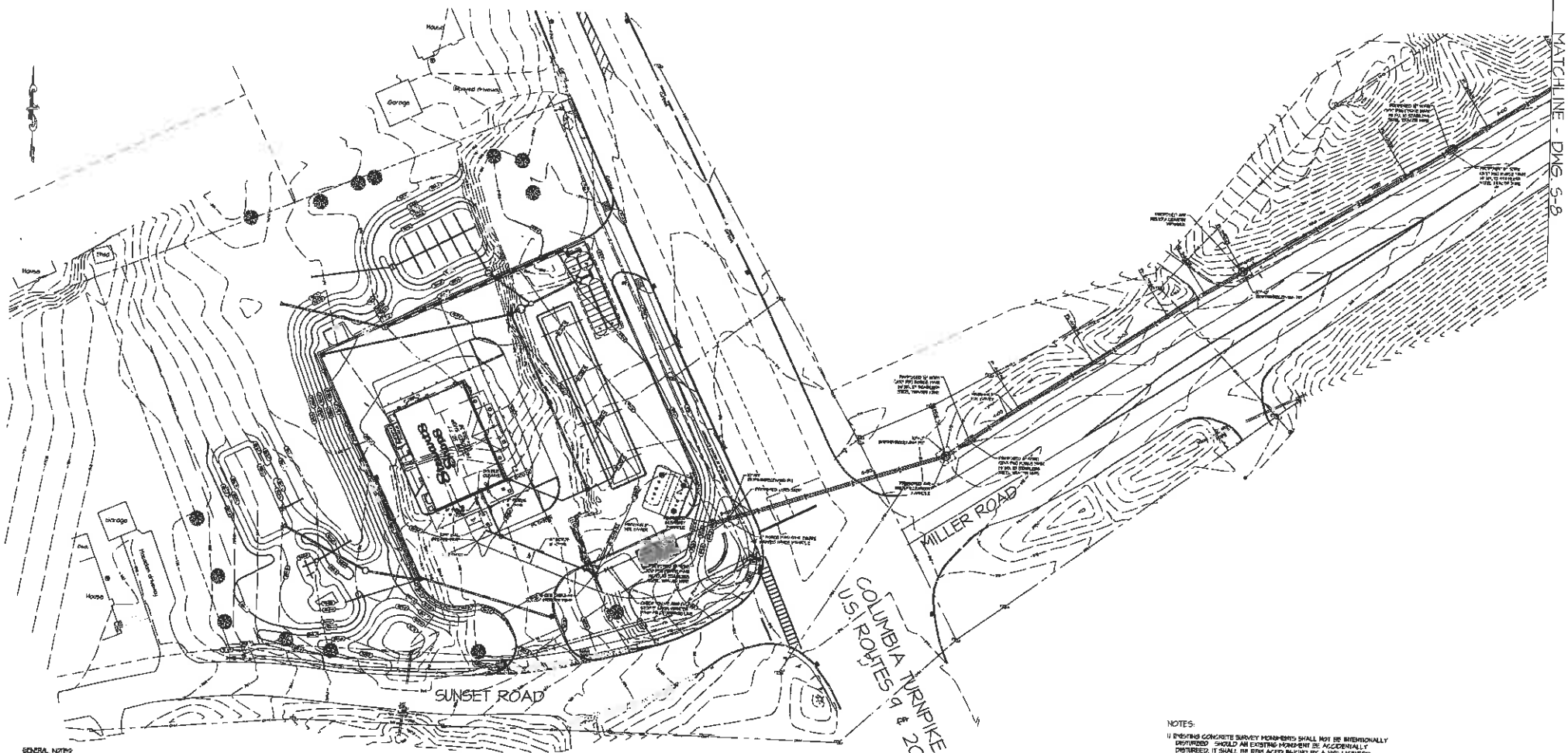
DATE	NO.	REVISIONS
3-08	1	Drawdown/hydrodynamic separator manufacturer

Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. 518-581-1250 FAX (518)581-1301

DRAWN BY: SEK
SCALE: 1" = 80'
DATE: 11/4/18

DRAWING NO. S-6

TITLE: STORMWATER MANAGEMENT PLAN



NOTES:

1) EXISTING CONCRETE SURVEY MONUMENTS SHALL NOT BE INTENTIONALLY DISTURBED. SHOULD AN EXISTING MONUMENT BE ACCIDENTALLY DISTURBED, IT SHALL BE REPLACED IN-KIND BY A NYS LICENSED SURVEYOR.

GENERAL NOTES:

1. ACCESS TO THE RESIDENTIAL DRIVEWAYS LOCATED WITHIN THE PROPOSED WORK AREA SHALL NOT BE CLOSED DURING CONSTRUCTION.
2. WALKING OR BICYCLE ACCESS SHALL NOT BE CLOSED DURING CONSTRUCTION. MATERIAL, EQUIPMENT OR OTHER SIGHT BARRIERS SHALL NOT BE PLACED OR PARKED SO AS TO OBSTRUCT PEDESTRIAN/BICYCLE TRAFFIC OR PRESENT A SAFETY HAZARD TO NON-MOTORIZED PUBLIC. IF PEDESTRIAN TRAFFIC MUST BE RELOCATED OR REROUTED OFF EXISTING FACILITY, WALKWAYS SHALL BE CLEARLY MARKED AND HAVE A LOGICAL START AND TERMINUS. ALL WALK SURFACES AND GRADES SHALL BE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG).
3. ANY VEGETATION, INCLUDING LAWN TURF, WITHIN THE RIGHT-OF-WAY THAT IS REMOVED OR DAMAGED TO FACILITATE THIS WORK MUST BE REPLACED IN KIND.
4. CONSTRUCTION OF THIS SEWER LINE SHALL NOT INTERFERE WITH ANY OVERHEAD UTILITY LINES AND POLES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES, KNOWN OR UNKNOWN, WITHIN THE PROJECT AREA.
6. THE PROPOSED 8" FORCEMAIN SHALL BE PRIVATELY OWNED AND MAINTAINED BY STEWART'S SHOPS. WHEN AND IF THE ADDITIONAL 6" (FUTURE USE) FORCEMAIN COMES ONLINE, THE 8" FORCEMAIN WILL BE ABANDONED AND TOWN OF SCHODACK WILL ASSUME OWNERSHIP AND MAINTENANCE RESPONSIBILITIES AT SUCH TIME.

EXCAVATION, TRENCHING, SHEETING AND SHORING REQUIREMENTS:

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADEQUACY OF ALL SHEETING AND SHORING USED AND FOR ALL DAMAGE RESULTING FROM ITS FAILURE OR FROM PLACING, MAINTAINING AND REMOVING IT.

B. REQUIREMENTS OF REGULATORY AGENCIES.

1. SUBPART 23-4, "EXCAVATION OPERATIONS", OF NEW YORK STATE DEPARTMENT OF LABOR INDUSTRIAL CODE RULE 23.
2. SUBPART P, "EXCAVATIONS" OF UNITED STATES DEPARTMENT OF LABOR OSHA REGULATIONS FOR CONSTRUCTION.
3. THE MORE STRINGENT REQUIREMENT IN EACH OF THE ABOVE CODES SHALL APPLY. THESE REQUIREMENTS ARE MINIMUM REQUIREMENTS AND SHALL BE INCREASED IF NECESSARY TO PROVIDE SAFE WORKING CONDITIONS.
4. ALL MUNICIPAL, COUNTY, STATE, OR FEDERAL ORDINANCES, REGULATIONS, OR LAWS AND ALL NECESSARY PERMITS AND APPROVALS OBTAINED BY THE CONTRACTOR SHALL BE OBSERVED.

PRESSURE TESTING NOTES:

THE COMPLETED SEWAGE FORCE MAIN INCLUDING VALVES AND FITTINGS SHALL BE HYDROSTATICALLY TESTED FOR LEAKAGE TO WATER MAIN STANDARDS. THE SYSTEM SHALL BE PRESSURIZED TO A MINIMUM OF 150 P.S.I. AT THE POINT OF TESTING FOR A MINIMUM OF TWO HOURS AFTER INITIAL EXPANSION OF THE HDPE PIPE. HYDROSTATIC TEST SHALL BE PERFORMED, AND SUCCESSFUL TEST RESULTS DERIVED IN ACCORDANCE WITH AWWA C600-99 AND PLEXCO TECHNICAL NOTE 802. IF THE LEAKAGE IN THE SYSTEM EXCEEDS THE SPECIFIED AMOUNT, THE CONTRACTOR SHALL AT NO ADDED COST TO THE OWNER, MAKE ANY REPAIRS OR REPLACEMENTS NECESSARY TO REDUCE THE LEAKAGE TO THE REQUIRED LIMITS AND RETEST THE SYSTEM.

THE TEST WILL BE CONDUCTED AS DIRECTED BY THE ENGINEER/ARCHITECT, BUT THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, EQUIPMENT, WATER AND MATERIALS NECESSARY FOR CONDUCTING THE TEST AS SPECIFIED.

STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER

ALTERATIONS TO THIS DOCUMENT BY ANYONE OTHER THAN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

ENGINEERING ABBREVIATION # NO.: SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops

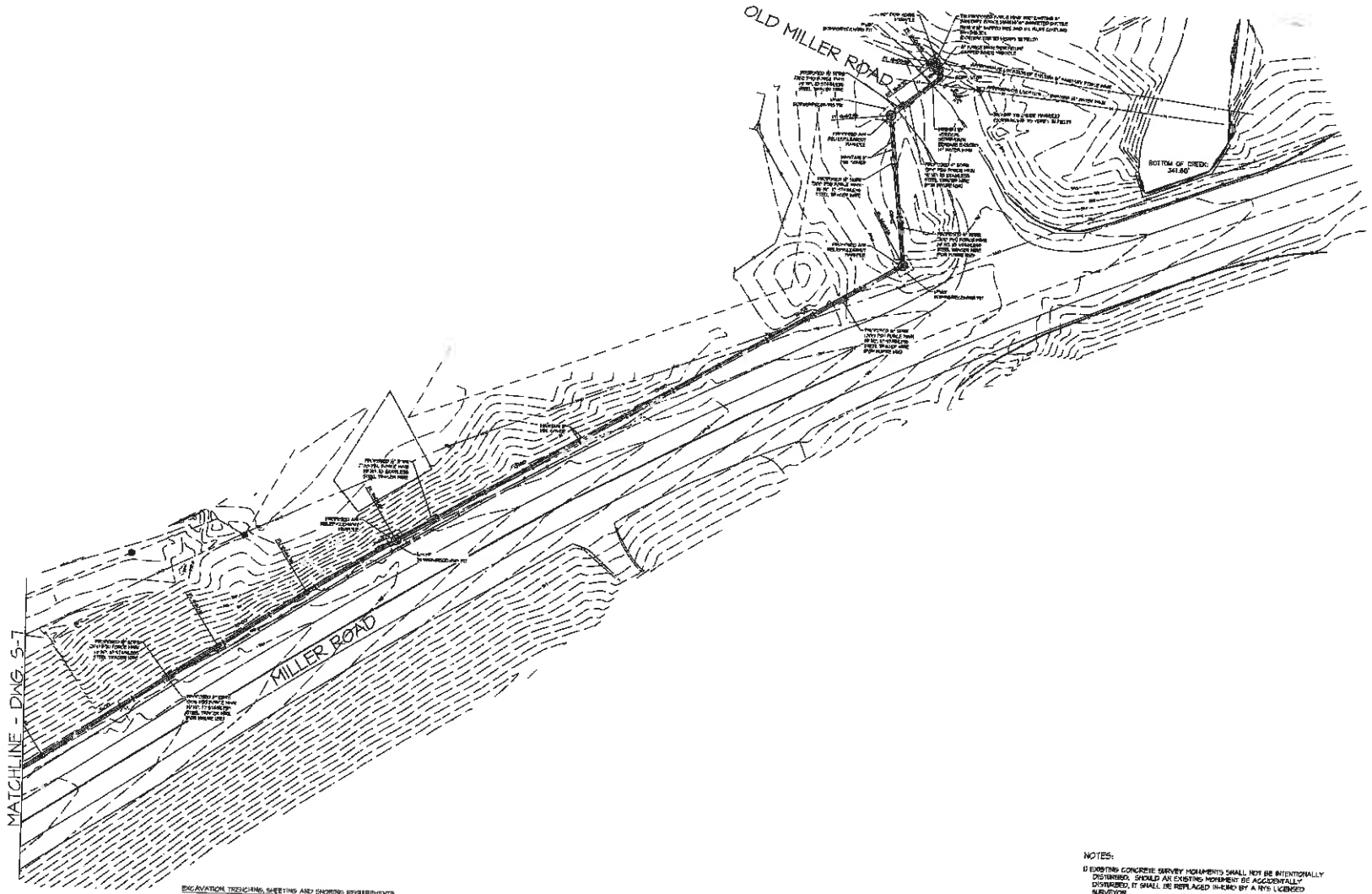
SARATOGA SPRINGS, NY 12866

TEL. (518)581-1250 FAX (518)581-1201

DRAWN BY: SEC
SCALE: 1" = 30'
DATE: 8/27/08

DRAWING NO: S-7

TITLE: PROPOSED SANITARY SEWER PLAN



GENERAL NOTES

1. ACCESS TO THE RESIDENTIAL DRIVEWAYS LOCATED WITHIN THE PROPOSED WORK AREA SHALL NOT BE CLOSED DURING CONSTRUCTION
2. WALKING OR BICYCLE ACCESS SHALL NOT BE CLOSED DURING CONSTRUCTION MATERIAL, EQUIPMENT OR OTHER SUCH BARRIERS SHALL NOT BE PLACED OR PARKED SO AS TO OBSTRUCT PEDESTRIAN/BICYCLE TRAFFIC OR PRESENT A SAFETY HAZARD TO NON-MOTORIZED PUBLIC. IF PEDESTRIAN TRAFFIC MUST BE RELOCATED OR REROUTED AT EXISTING FACILITY, WALKWAYS SHALL BE CLEARLY MARKED AND MAKE A LOGICAL START AND TERMINUS ALL WALK SURFACES AND GRADES SHALL BE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)
3. ANY VEGETATION, INCLUDING LAWN TURF, WITHIN THE RIGHT-OF-WAY THAT IS REMOVED OR DAMAGED TO FACILITATE THIS WORK MUST BE REPLACED IN KIND
4. CONSTRUCTION OF THIS SEWER LINE SHALL NOT INTERFERE WITH ANY OVERHEAD UTILITY LINES AND POLES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES, KNOWN OR UNKNOWN, WITHIN THE PROJECT AREA.
6. THE PROPOSED 8" FORCEMAIN SHALL BE PRIVATELY OWNED AND MAINTAINED BY STEWART'S SHOPS. WHEN AND IF THE ADDITIONAL 6" FUTURE USE) FORCEMAIN GIVES ONLINE, THE 8" FORCEMAIN WILL BE ABANDONED AND TOWN OF SCHODACK WILL ASSUME OWNERSHIP AND MAINTENANCE RESPONSIBILITIES AT SUCH TIME

EXCAVATION, TRENCHING, SHEETING AND SHORING REQUIREMENTS

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADEQUACY OF ALL SHEETING AND SHORING USED AND FOR ALL DAMAGE RESULTING FROM ITS FAILURE OR FROM PLACING, MAINTAINING AND REMOVING IT

B. REQUIREMENTS OF REGULATORY AGENCIES

1. SUBPART 23-4, "EXCAVATION OPERATIONS", OF NEW YORK STATE DEPARTMENT OF LABOR INDUSTRIAL CODE RULE 23.
2. SUBPART P, "EXCAVATIONS" OF UNITED STATES DEPARTMENT OF LABOR OSHA REGULATIONS FOR CONSTRUCTION.
3. THE MORE STRINGENT REQUIREMENT IN EACH OF THE ABOVE CODES SHALL APPLY. THESE REQUIREMENTS ARE MINIMUM REQUIREMENTS AND SHALL BE INCREASED IF NECESSARY TO PROVIDE SAFE WORKING CONDITIONS.
4. ALL MUNICIPAL, COUNTY, STATE, OR FEDERAL ORDINANCES, REGULATIONS, OR LAWS AND ALL NECESSARY PERMITS AND APPROVALS OBTAINED BY THE CONTRACTOR SHALL BE OBSERVED

PRESSURE TESTING NOTES

THE COMPLETED SEWAGE FORCE MAIN INCLUDING VALVES AND FITTINGS SHALL BE HYDROSTATICALLY TESTED FOR LEAKAGE TO WATER MAIN STANDARDS. THE SYSTEM SHALL BE PRESSURIZED TO A MINIMUM OF 150 PSI. AT THE POINT OF TESTING FOR A MINIMUM OF TWO HOURS AFTER INITIAL EXPANSION OF THE HDPE PIPE. HYDROSTATIC TEST SHALL BE PERFORMED, AND SUCCESSFUL TEST RESULTS DERIVED IN ACCORDANCE WITH AWWA C600-93 AND FLEXICO TECHNICAL NOTE 803. IF THE LEAKAGE IN THE SYSTEM EXCEEDS THE SPECIFIED AMOUNT, THE CONTRACTOR SHALL, AT NO ADDED COST TO THE OWNER, MAKE ANY REPAIRS OR REPLACEMENTS NECESSARY TO REDUCE THE LEAKAGE TO THE REQUIRED LIMITS AND RETEST THE SYSTEM

THE TEST WILL BE CONDUCTED AS DIRECTED BY THE ENGINEER/ARCHITECT. JUST THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, EQUIPMENT, WATER AND MATERIALS NECESSARY FOR CONDUCTING THE TEST AS SPECIFIED.

NOTES:

1) EXISTING CONCRETE SURVEY MONUMENTS SHALL NOT BE INTENTIONALLY DISTURBED. SHOULD AN EXISTING MONUMENT BE ACCIDENTALLY DISTURBED, IT SHALL BE REPLACED IN-KIND BY A NYS LICENSED SURVEYOR.

STATE OF NEW YORK — JOHN P. DEVINE — 081298 — LICENSED PROFESSIONAL ENGINEER

ALTERATION TO THIS DOCUMENT BY ANYONE OTHER THAN A LICENSED PROFESSIONAL ENGINEER, ENGINEER IN TRAINING, ARCHITECT, OR LANDSCAPE ARCHITECT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

STORE NAME, ADDRESS AND STORE #: SCHODACK - SCOV - 354

THE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops

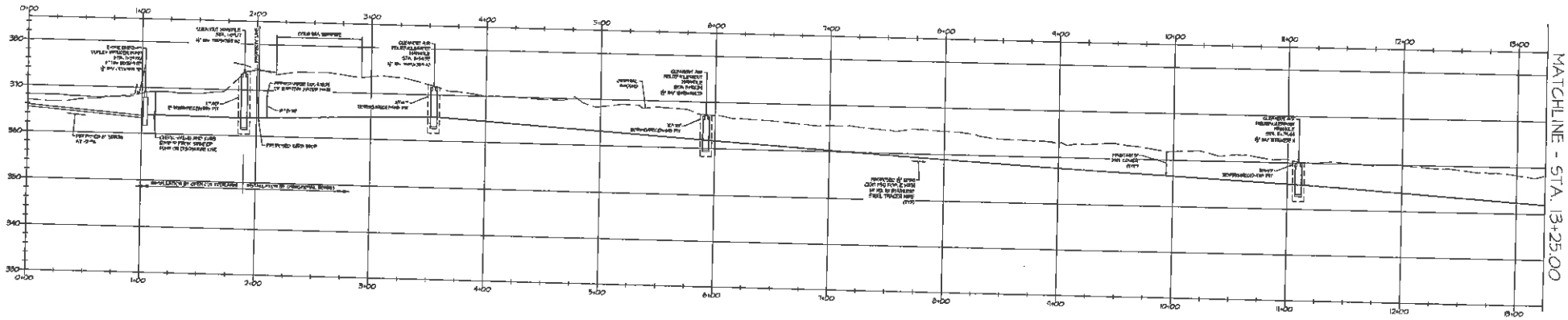
SARATOGA SPRINGS, NY 12866

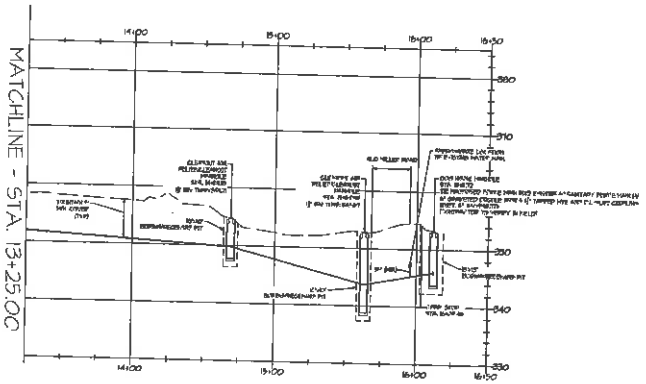
TEL. (518)584-1200 FAX (518)584-1209

DRAWN BY: SEC
SCALE: 1" = 30'
DATE: 11/14/18

DRAWING NO: S-8

TITLE: PROPOSED SANITARY SEWER PLAN





GENERAL NOTES:

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THE TEST WILL BE CONDUCTED AS DIRECTED BY THE ENGINEER/ARCHITECT, BUT THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, EQUIPMENT, WATER AND MATERIALS NECESSARY FOR CONDUCTING THE TEST AS SPECIFIED.

STATE OF NEW YORK — SCOTT EDWIN BUSHEY — 221035 — LICENSED PROFESSIONAL ENGINEER

STORE NAME, ABBREVIATION & NO.: SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO	REVISIONS

Stewart's Shops

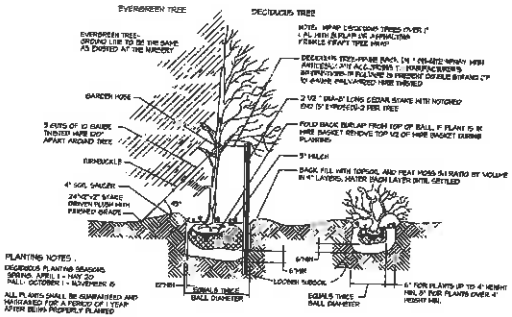
SARATOGA SPRINGS, NY 12866
TEL (518)581-1000 FAX (518)581-1005

DRAWN BY: SEE
SCALE: 1" = 30'
DATE: 11/19/20

DRAWING NO: S-9

TITLE: PROPOSED SANITARY SEWER PROFILE

ALTERATIONS TO THIS DOCUMENT BY OTHER THAN AN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW



PLANTING NOTES:

DECIDUOUS PLANTING SEASONS:
SPRING: APRIL 1 - MAY 30
FALL: OCTOBER 1 - NOVEMBER 15

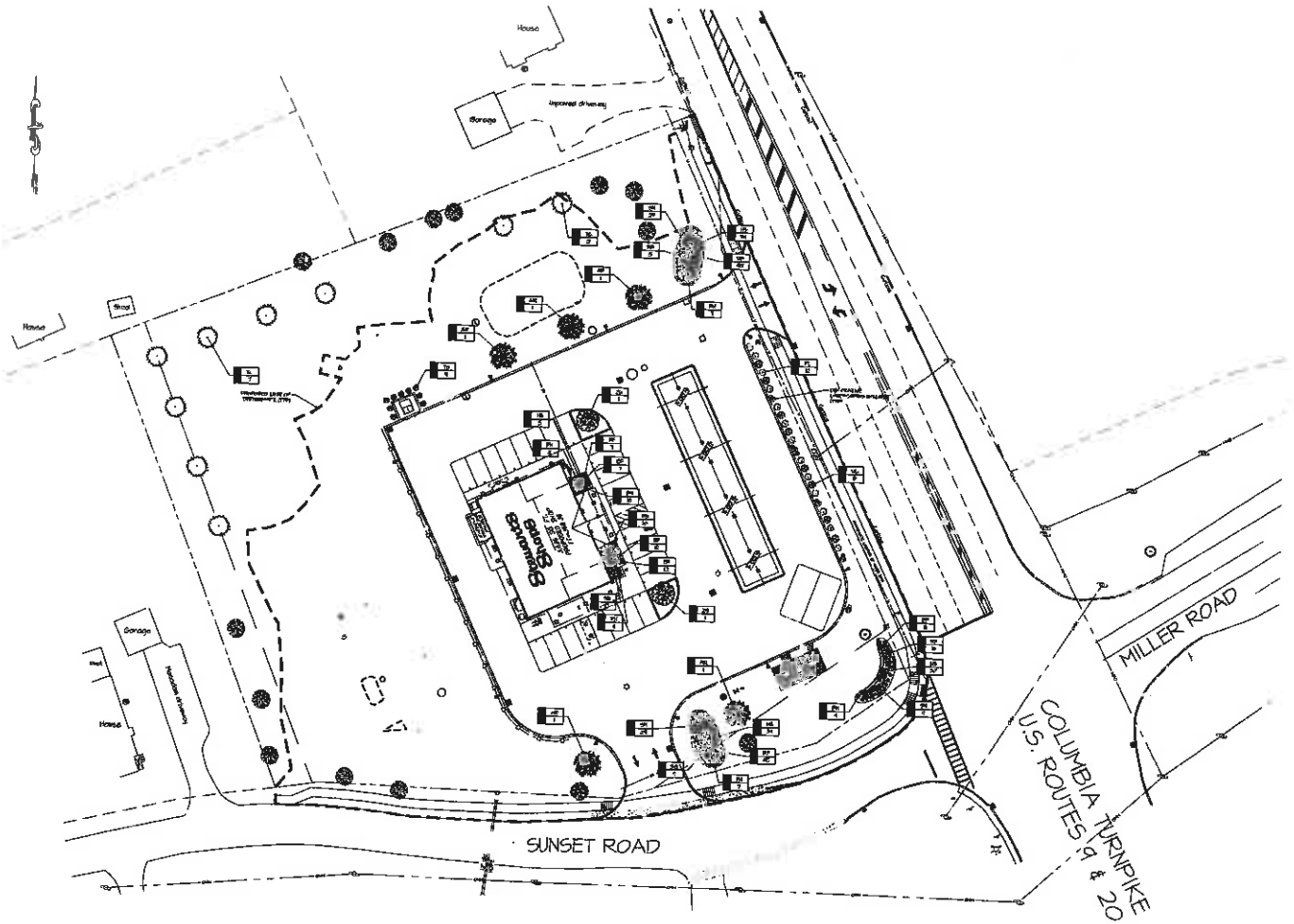
ALL PLANTS SHALL BE GUARANTEED AND MAINTAINED FOR A PERIOD OF 1 YEAR AFTER BEING PROPERLY PLANTED

REPLACEMENT PLANTS SHALL BE PLANTED IN CONFORMANCE WITH THE SAME SPECIFICATIONS AS THE ORIGINAL PLANTS.

PLANTING DETAIL

PLANT LIST

	ABBV	BOTANICAL NAME	COMMON NAME	QTY	SIZE	SPACING
PERENNIALS	HS	HEMEROCALLIS 'STELLA DE ORO'	DAYLILY - 'STELLA DE ORO'	159	2 GAL	AS SHOWN
	RF	RUDBECKIA FULGIDA	BLACK-EYED SUSAN	190	2 GAL	AS SHOWN
	EP	ECHINACEA PURPUREA 'ROBY STAR'	CONEFLOWER - PURPLE	6	2 GAL	AS SHOWN
	PH	PENNISETUM 'HAMELN'	HAMELN FOUNTAIN GRASS	24	3 GAL	AS SHOWN
	SH	SALVIA HENRICOSA 'MAINACHT'	SALVIA - MAY NIGHT	94	2 GAL	AS SHOWN
SHRUBS	SC	SPIRAEA BOLDMOUND	BOLDMOUND SPIREA	6	24"-30"	AS SHOWN
	LL	SYRINGA PERSONEEN PATRICA KIRK KIRK	NEW MOM LILAC	12	24"-30"	AS SHOWN
	VC	VIBURNUM CARLESII	KOREAN SPICE VIBURNUM	8	18 GAL	AS SHOWN
TREES	AR	ACER RUBRUM	RED MAPLE	5	2" CAL	AS SHOWN
	ZS	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE JAPANESE ZELKOVA	3	2" CAL	AS SHOWN
	TC	TSUGA CANADENSIS	EASTERN HEMLOCK	4	6'-7' B&B	AS SHOWN



NOTES:

1) IF EXISTING CONCRETE SURVEY MONUMENTS SHALL NOT BE INTENTIONALLY DISTURBED. SHOULD AN EXISTING MONUMENT BE ACCIDENTALLY DISTURBED, IT SHALL BE REPLACED IN-KIND BY A NYS LICENSED SURVEYOR.

2) ANY EXISTING TREE DISPLAYED ON THIS PLAN HAS IDENTIFIED AS A "SIGNIFICANT" TREE LARGER THAN 18" IN DIAMETER.

3) ALL EXISTING TREES OUTSIDE OF THE LIMIT OF DISTURBANCE SHOWN SHALL REMAIN REGARDLESS OF SIZE. EXISTING "SIGNIFICANT" TREES SHOWN WITHIN THE LIMITS OF DISTURBANCE SHALL ALSO REMAIN

STATE OF NEW YORK — LICENSED LANDSCAPE ARCHITECT — 001085

ALTERATIONS TO THIS DOCUMENT BY ANYONE WHO ARE NOT DULY LICENSED PROFESSIONAL ENGINEERS ARE ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

STORE NAME ABBREVIATION & NO.: SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

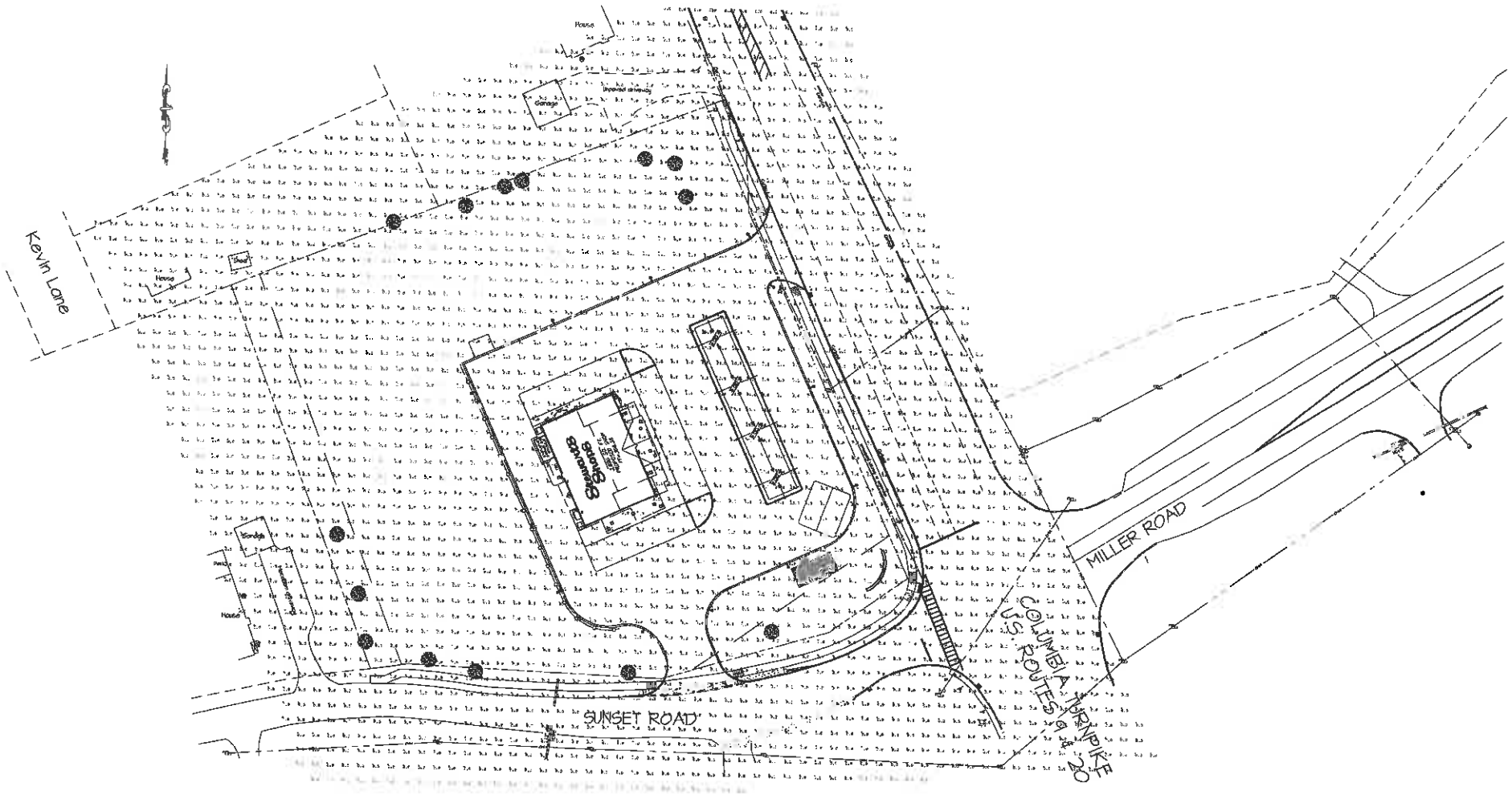
DATE	NO.	REVISIONS
9-24-18	1	LIMIT OF DISTURBANCE AND WATERSHED AREA

Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. (518)581-1000 FAX (518)581-1005

DRAWN BY: SER
SCALE: 1" = 30'
DATE: 11/14/18

DRAWING NO.: S-10

TITLE: PROPOSED LANDSCAPING PLAN



NOTES:

1) ALL PROPOSED LIGHTING SHALL BE FULL CUT-OFF, DOWNWARD DIRECTED LIGHTING. MAXIMUM HEIGHT ABOVE FINISHED GRADE GROUND ELEVATION SHALL BE 16-0 FT.

2) EXISTING CONCRETE SURVEY MONUMENTS SHALL NOT BE INTENTIONALLY DISTURBED. SHOULD AN EXISTING MONUMENT BE ACCIDENTALLY DISTURBED, IT SHALL BE REPLACED IN-KIND BY A NYS LICENSED SURVEYOR.

Luminaire Schedule

Symbol	Qty	Label	Description	Lum. Watts	Lum. Lumens	Comments
⊡	10	SP1-2@8-BK-WH-R2S-840-FSS-40K	SIGNPOST LIGHT, 80 WATT LED, 5,054LM DRIVER, RECESSED MOUNT	54	4856	
⊡	5	SEC-1@6-BK-WH-Q4-E1C-MH@25-40K	SECURITY LIGHT, 40 WATT LED, 3,094LM DRIVER, WALL MOUNTED	25	2614	
⊡	8	CAN-R64-FS-R5-Q8-E4L-MK-@25-40K	CANOPY LIGHT, 60 WATT LED, 5,094LM DRIVER, RECESSED MOUNT	100	10482	
⊡	11	ARE-E25-S-HS-D6-E-IL-BZ-@50-40K	POLE LIGHT, 60 WATT LED, 7,004LM DRIVER, DIRECT ARM MOUNT	154	5121	

Calculation Summary

Label	CalcType	Units	Avg	Max	Min
Site	Illuminance	Fc	1.9	30.3	0.0
Canopy	Illuminance	Fc	20.35	30.3	5.6
Parking Lot	Illuminance	Fc	3.27	15.1	0.3
Sidewalk	Illuminance	Fc	1.98	14.8	0.3

STATE OF NEW YORK — JOHN DAVID STEWART — 081065 — LICENSED PROFESSIONAL ENGINEER

ALTERATIONS TO THIS DOCUMENT BY OTHER THAN AN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF NEW YORK STATE EDUCATION LAW

STORE NAME, ABBREVIATION & NO.: SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

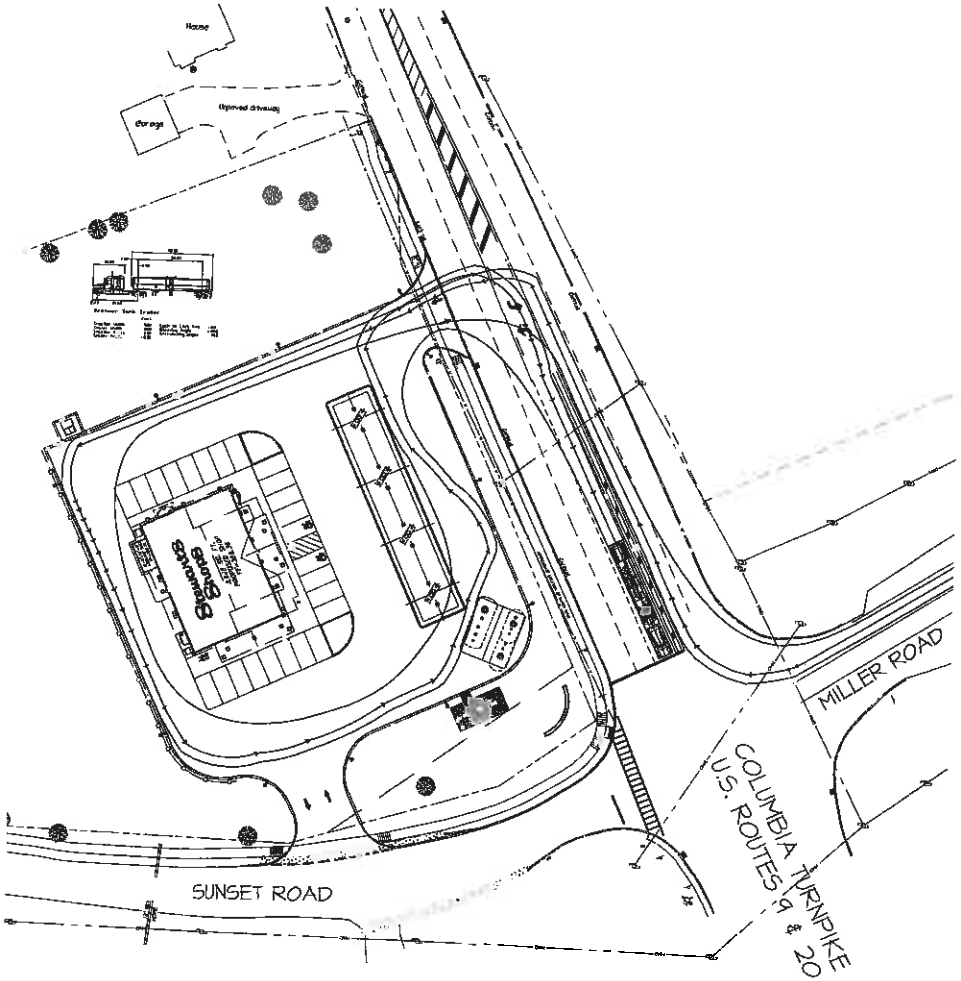
DATE	NO	REVISIONS

Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. (518)581-1000 FAX (518)581-1019

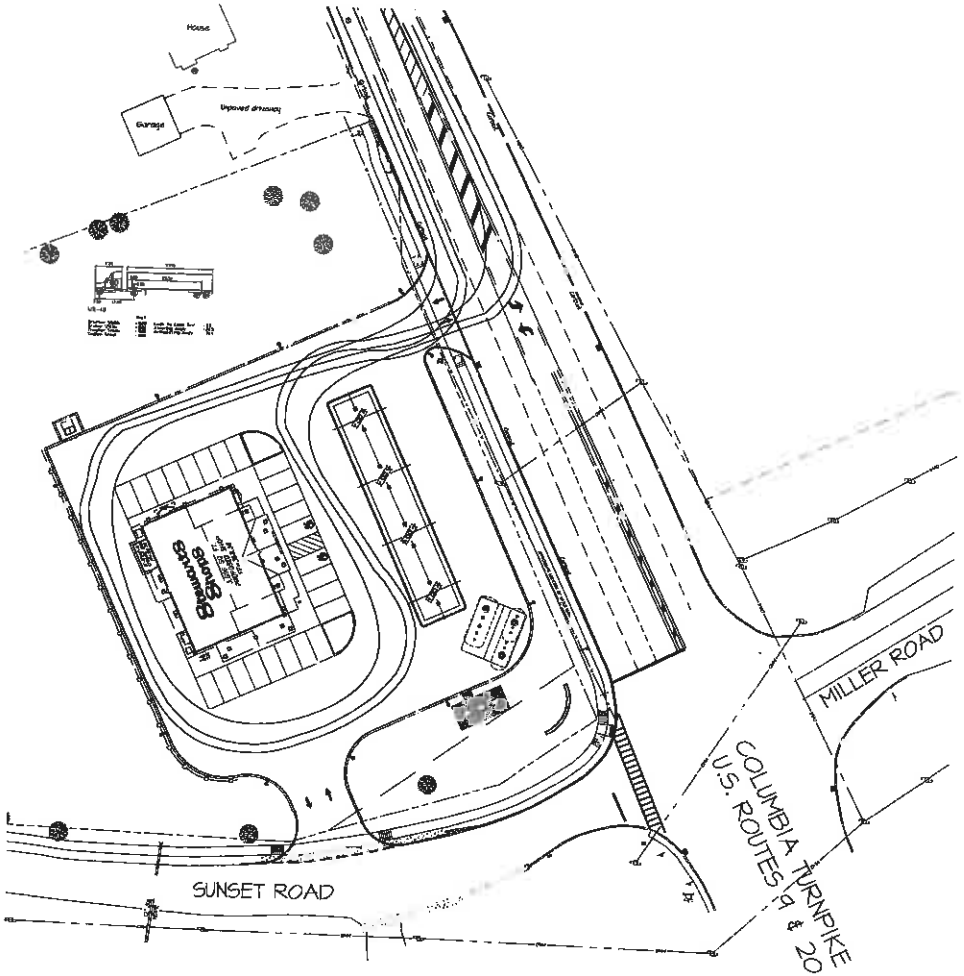
DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 11/19/18

DRAWING NO: S-11

TITLE: PROPOSED PHOTOMETRICS PLAN



FUEL DELIVERIES



SHOP DELIVERIES

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops

SARATOGA SPRINGS, NY 12866

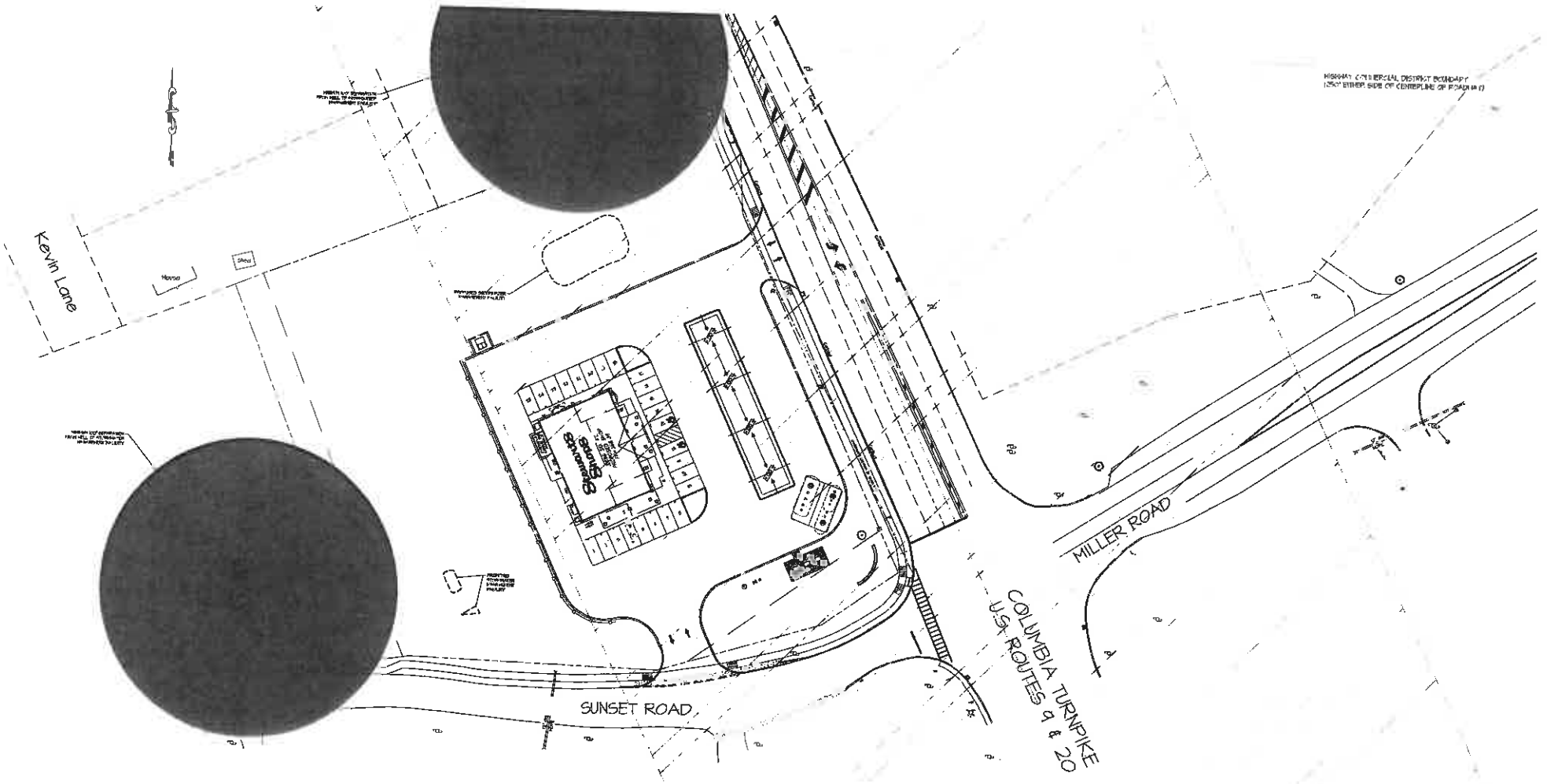
DRAWN BY: JSK

SCALE: 1" = 30'

DATE: 11/14/05

DRAWING NO. S-12

TITLE: PROPOSED TURNING MOVEMENTS



SCHODACK - SCCV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops

SARATOGA SPRINGS, NY 12866

DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 8/21/15

DRAWING NO. S-13

TITLE: ZONING ANALYSIS / WELL SEPARATION

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops

SARATOGA SPRINGS, NY 12866

TEL (518)581-1300 FAX (518)581-1301

DRAWN BY: SSK

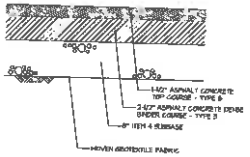
SCALE: 1" = 100'

DATE: 9/27/18

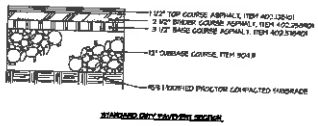
DRAWING NO. S-14

TITLE: NEIGHBORING PROPERTIES

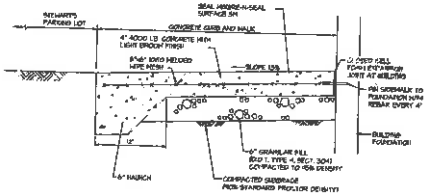
ALTERATIONS TO THIS DOCUMENT BY ANYONE OTHER THAN AN AUTHORIZED SURVEY PROFESSIONAL ENGINEER OR LICENSED ARCHITECT IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW



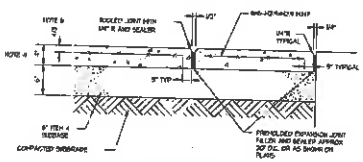
PARKING LOT PAVING SCHEDULE



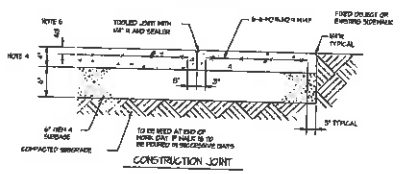
TYPICAL D.O.T. PAVEMENT SECTIONS



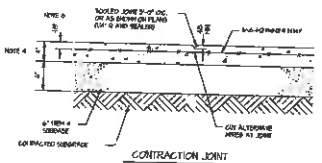
CURB AND SIDEWALK DETAIL



EXPANSION JOINT



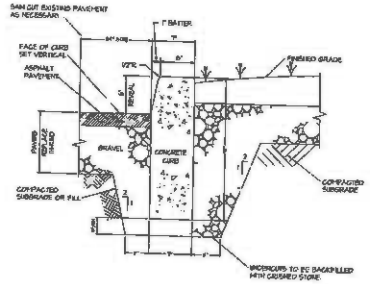
CONSTRUCTION JOINT



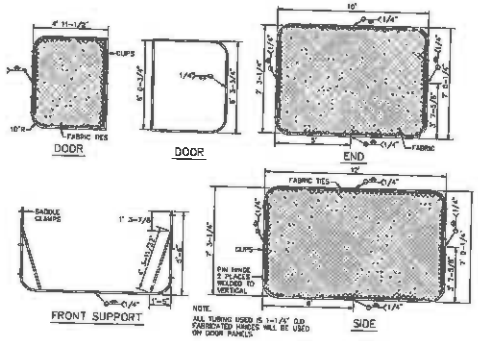
CONTRACTION JOINT

NOTES
1. ALL EXPOSED SURFACES TO HAVE BROOMED TEXTURE.
2. JOINTS SHALL NOT BE SAW CUT.
3. WHERE IT IS ANTICIPATED THAT A CONCRETE SURFACE WILL HAVE SALT OR CALCIUM CHLORIDE APPLIED, THAT SURFACE SHALL BE TREATED WITH AN APPROVED WATER PROOFING MATERIAL.
4. THICKNESS OF SIDEWALK DO TO BE 6" AT DRIVEWAY CROSSINGS AND 4" AT ALL OTHER LOCATIONS. 5. CONCRETE MIX TO BE 4,000 PSI.
6. MOUNT SIDEWALKS TO HAVE 2" COVER OVER WIRE MESH EXCEPT FOR AT DRIVEWAY WHERE 3" COVER IS REQUIRED

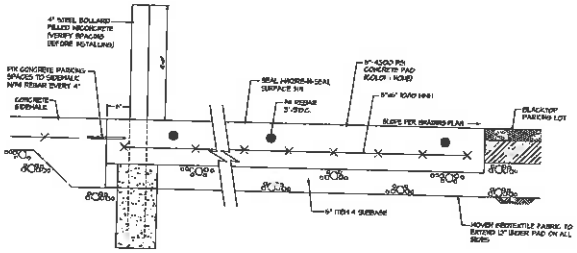
CONCRETE SIDEWALK DETAIL



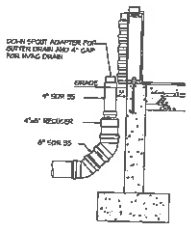
CAST-IN-PLACE VERTICAL CONCRETE CURBING



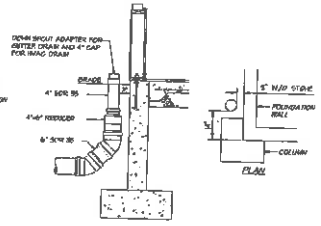
DUMPSTER ENCLOSURE DETAIL



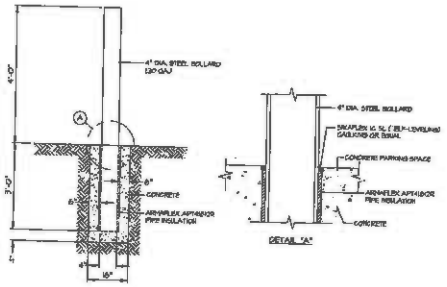
CONCRETE PAD UNDER PARKING SPACES



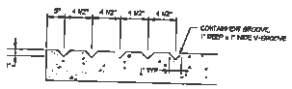
ROOF DRAIN W/ STONE



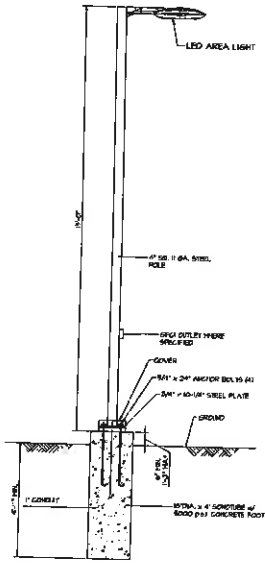
ROOF DRAIN W/O STONE



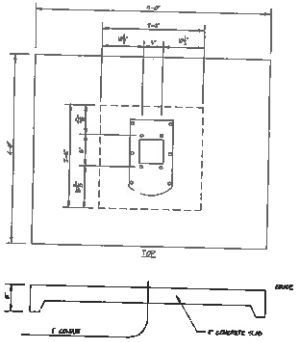
BOLLARD DETAIL



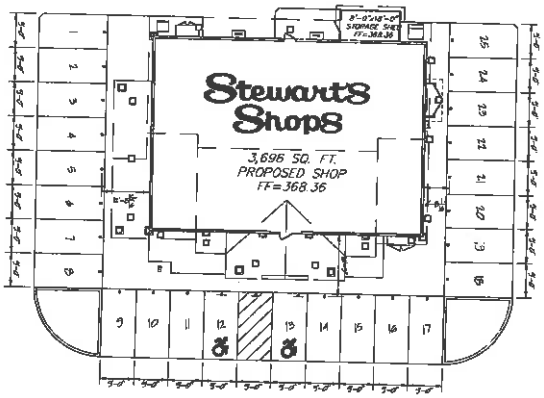
POSITIVE LIMITING BARRIER DETAIL



LIGHT POLE DETAIL



AIR MACHINE DETAIL



PARKING/BOLLARD LAYOUT DETAIL

SCHODACK - SCOV - 354

1588 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS
6-5-15		Replace existing barrier detail

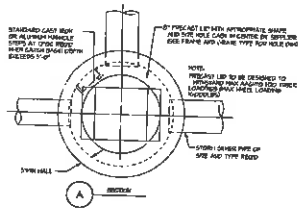
Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. (518)581-1200 FAX (518)581-1201

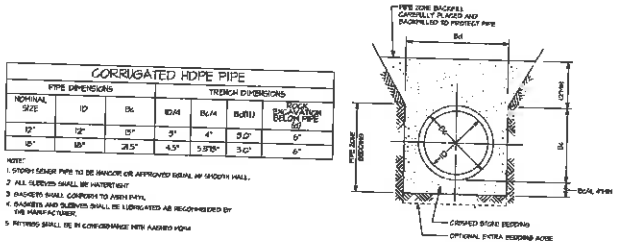
DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 11/19/15

DRAWING NO. S-15

TITLE: MISCELLANEOUS DETAILS

ALTERATIONS TO THIS DOCUMENT BY OTHER THAN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

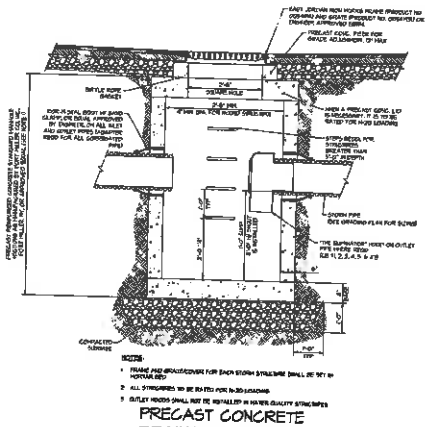




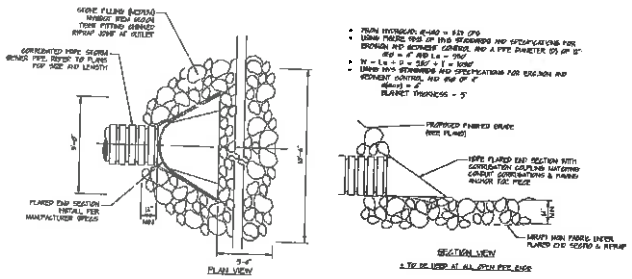
CORRUGATED HDPE PIPE						
PIPE DIMENSIONS			TRENCH DIMENSIONS			
NOMINAL SIZE	ID	BC	BD/4	B/4	B/8	MIN. EXCAVATION BELOW PIPE (D)
12"	12"	15"	3"	4"	3.0"	6"
15"	18"	21.5"	4.5"	5.375"	3.0"	6"

NOTES:
1. STORM SEWER PIPE TO BE MANDOR OR APPROVED EQUAL W/ SMOOTH WALL.
2. ALL SLEEVES SHALL BE WATERTIGHT
3. GASKETS SHALL CONFORM TO ASTM F477.
4. GASKETS AND SLEEVES SHALL BE LUBRICATED AS RECOMMENDED BY THE MANUFACTURER.
5. FITTINGS SHALL BE IN CONFORMANCE WITH AASHTO M294

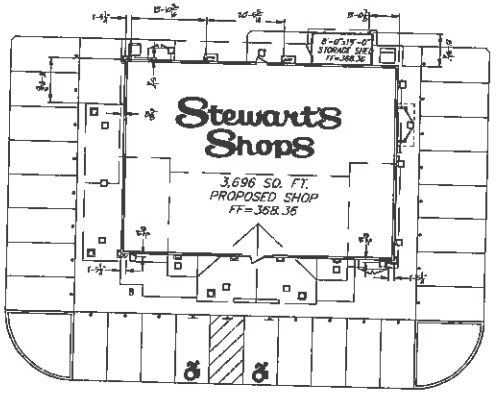
STORM SEWER CORRUGATED HDPE PIPE BEDDING



PRECAST CONCRETE DRAINAGE CATCH BASIN



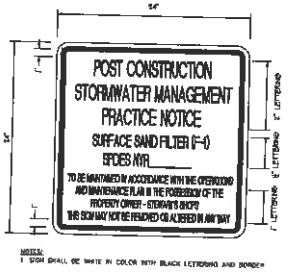
FLARED END SECTION DETAIL



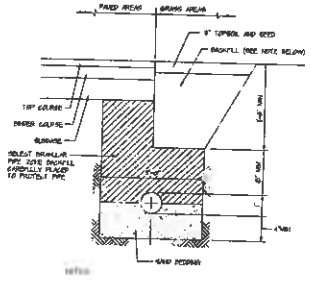
ROOF DRAIN LAYOUT DETAIL

STORMWATER MANAGEMENT PRACTICE SIGN #1

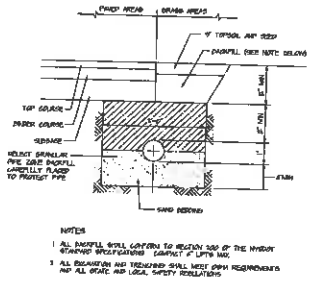
STORMWATER MANAGEMENT PRACTICE SIGN #2



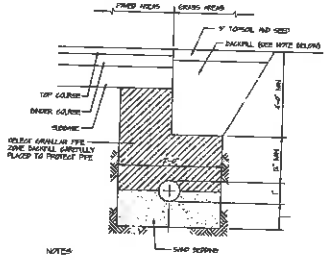
STORMWATER MANAGEMENT PRACTICE SIGN #3



ELECTRIC SERVICE TRENCH AND BEDDING DETAIL



ELECTRIC CONDUIT TRENCH AND BEDDING DETAIL



COPPER WATER LATERAL TRENCH AND BEDDING DETAIL

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

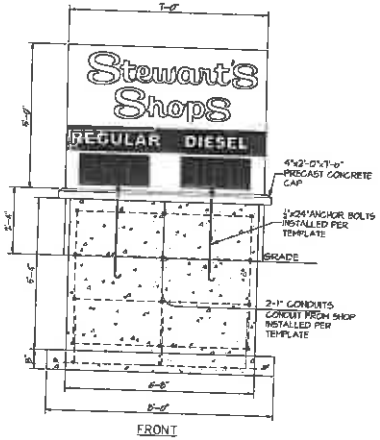
DATE	NO.	REVISIONS

Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. (518)584-1200 FAX (518)584-1201

DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 1/24/25

DRAWING NO. 5-16

TITLE: MISCELLANEOUS DETAILS



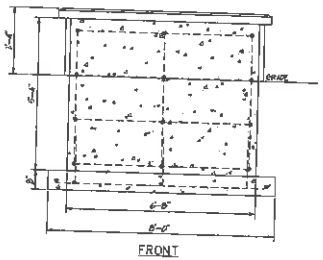
MONUMENT SIGN DETAIL

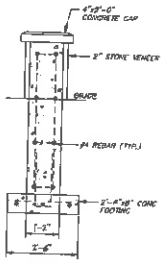
FREESTANDING SIGN

SIZE: 5'-0"x1'-0"=35 SQ. FT.

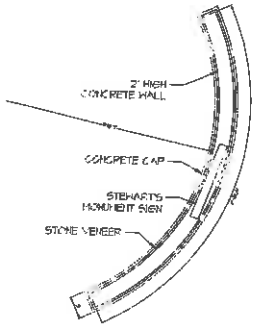
LETTERS: 1/8" PLEXIGLASS FACE ON 4-1/2" THICK CAN WHITE LETTERS/BRONZE TRIM

ILLUMINATION: INTERNALLY ILLUMINATED WITH LED LIGHTING -BURGANDY LETTERS -WHITE BACKGROUND -12" RED LED GAS PRICE NUMBERS -12" GREEN LED DIESEL PRICE NUMBERS

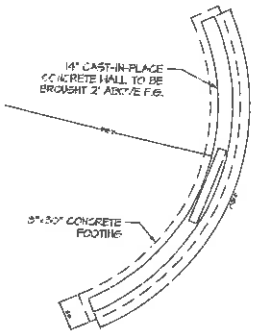




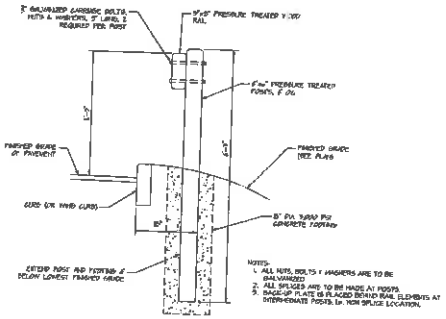
STONE WALL DETAIL



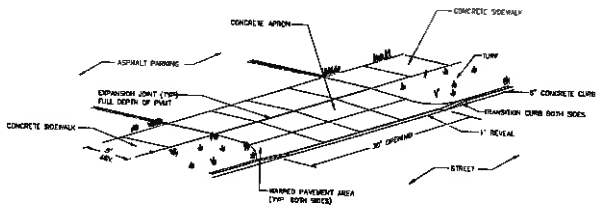
STONE WALL PLAN



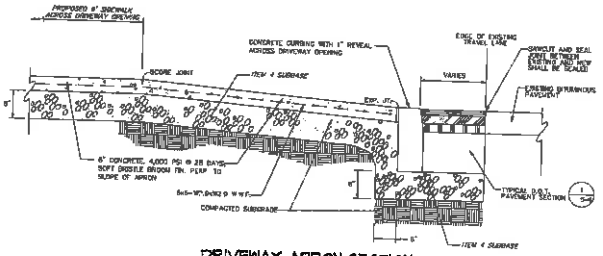
STONE WALL FOUNDATION PLAN



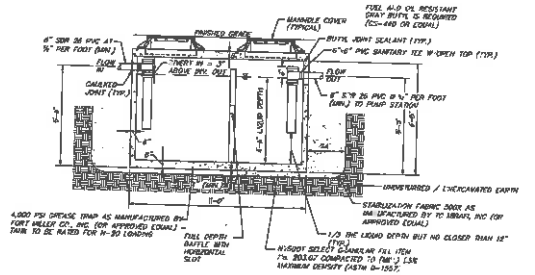
WOODEN GUIDERAIL DETAIL



DROP CURB AT DRIVEWAY ENTRANCES DETAIL



DRIVEWAY APRON SECTION



1,250 GALLON GREASE TRAP

STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER — 091088

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS
5-24-16	1	MINOR CHANGES

Stewart's Shops

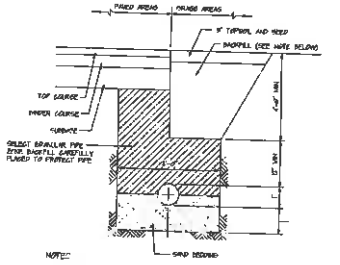
SARATOGA SPRINGS, NY 12866

TEL. (518)584-1200 FAX (518)584-0109

DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 11/14/16

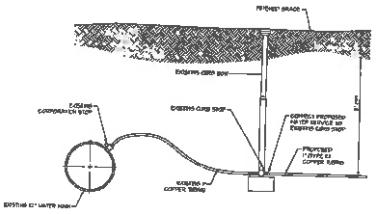
DRAWING NO. S-17

TITLE: MISCELLANEOUS DETAILS

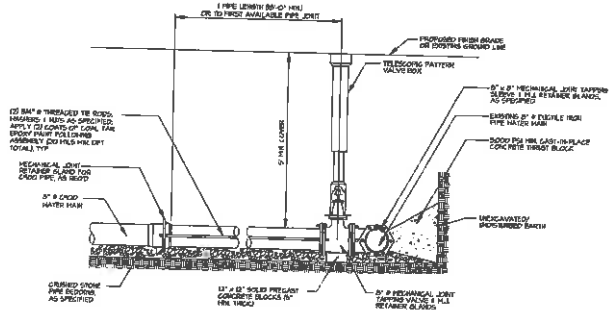


NOTES:
1. ALL CULVERT BACKFILL SHALL CONFORM TO SECTION 203 OF THE NYSDOT STANDARD SPECIFICATIONS. COMPACT 6" LIFTS MAX.
2. ALL EXCAVATION AND TRENCHING SHALL MEET OSHA REQUIREMENTS AND ALL STATE AND LOCAL SAFETY REGULATIONS.

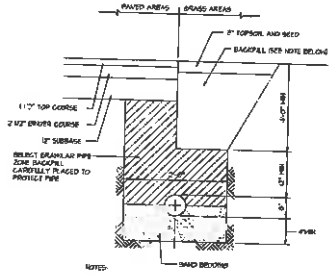
COPPER WATER LATERAL TRENCH AND BEDDING DETAIL



WATER SERVICE DETAIL



WATER MAIN TAPPING SLEEVE DETAIL

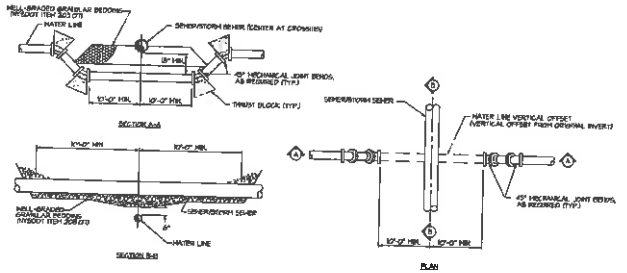


NOTES:
1. ALL CULVERT BACKFILL SHALL CONFORM TO SECTION 203 OF THE NY DEPT. STANDARD SPECIFICATIONS. COMPACT 6" LIFTS MAX.
2. ALL EXCAVATION AND TRENCHING SHALL MEET OSHA REQUIREMENTS AND ALL STATE AND LOCAL SAFETY REGULATIONS. SEE GENERAL NOTES, THIS DRAWING.

WATER MAIN TRENCH AND BEDDING DETAIL

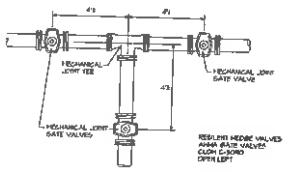
END OF LINE CAP DETAIL

NOTES:
1) ALL MECHANICAL JOINT RESTRAINTS SHALL BE EBBA IRON OR APPROVED EQUAL.
2) BLUE BOLTS SHALL BE USED FOR ALL WATER MAIN FITTINGS.

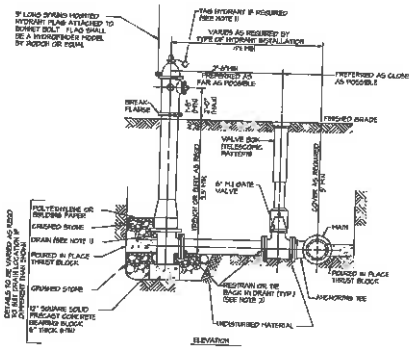


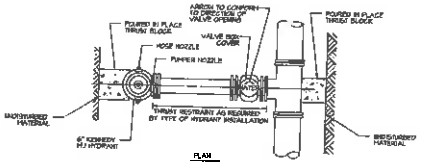
WATER MAIN/SEWER CROSSING DETAIL

NOTES:
1. IF MUCK, PEAT, OR RECENTLY PLACED FILL ARE ENCOUNTERED/REQUIRED, ALL THRUSTS SHALL BE RESISTED BY PILES OR TIE RODS TO SOLID FOUNDATIONS, OR BY REMOVAL OF SUCH UNSTABLE MATERIAL AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS. ALL AS REQUIRED BY THE ENGINEER.



TYPICAL JUNCTION LAYOUT





TYPICAL HYDRANT INSTALLATION

NOTES:
1. WEEP HOLE SHALL BE PLUGGED AND HYDRANT SHALL BE TAGGED IF INSTALLED INTO GROUNDWATER. TAG TO DIRECT WATER DEPARTMENT TO PUMP OUT DRAIN COLUMN AFTER EACH USE.
2. IF MUCK, PEAT, OR RECENTLY PLACED FILL ARE ENCOUNTERED/REQUIRED, ALL THRUSTS SHALL BE RESISTED BY PILES OR TIE RODS TO SOLID FOUNDATIONS, OR BY REMOVAL OF SUCH UNSTABLE MATERIAL AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS, ALL AS REQUIRED BY THE ENGINEER.
3. GUARD STOPS TYPE SHALL BE APPROVED BY THE TOWN WATER DEPARTMENT.

STATE OF NEW YORK — JOHN LOUIS AREZZO — LICENSED PROFESSIONAL ENGINEER — 071068

ALTERATIONS TO THIS DOCUMENT BY OTHER THAN AN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

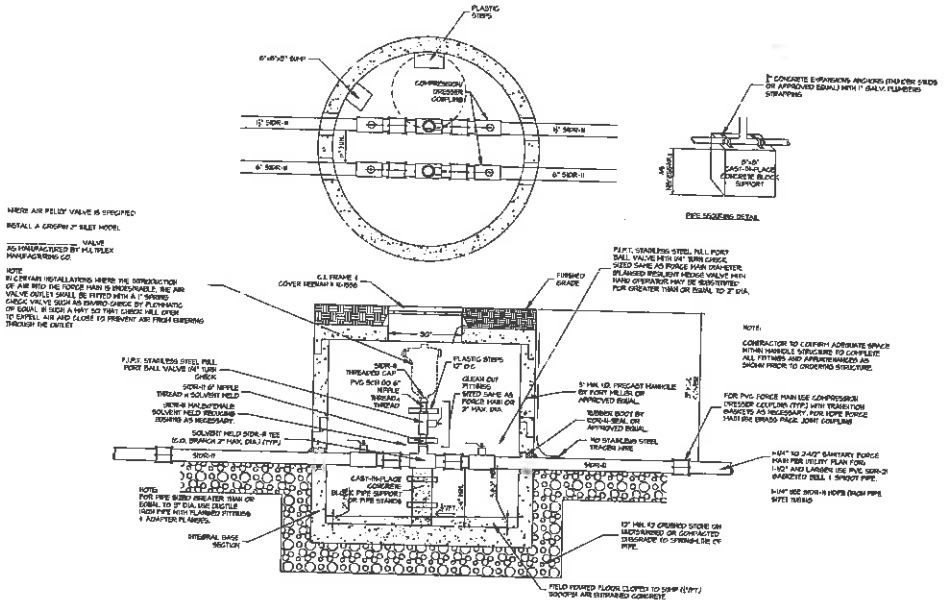
DATE	NO.	REVISIONS

Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL (518)581-1200 FAX (518)581-1201

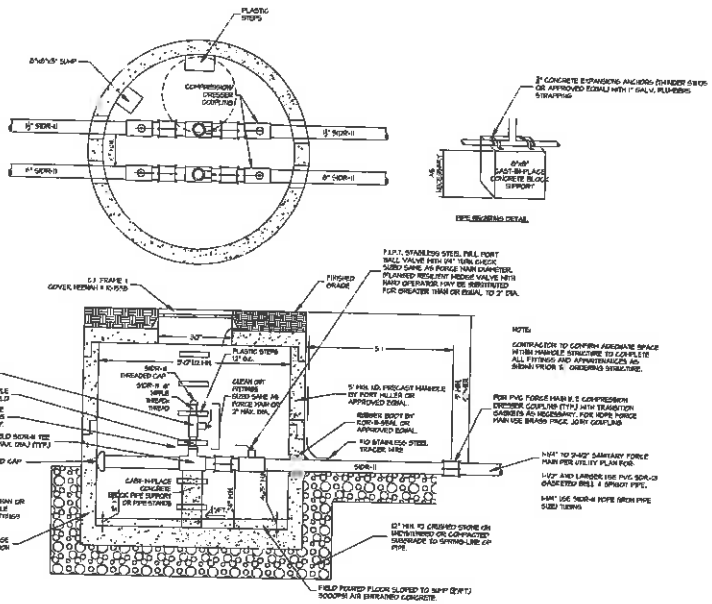
DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 11/19/08

DRAWING NO. S-18

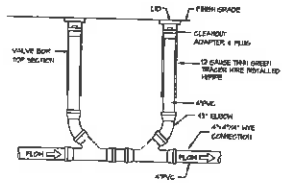
TITLE: WATER DETAILS



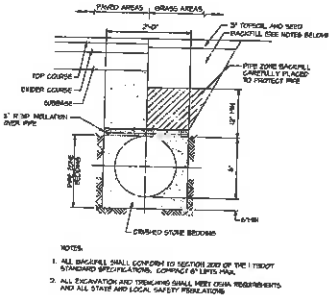
PRESSURE SANITARY SEWER IN-LINE CLEAN OUT AND AIR RELIEF STATION



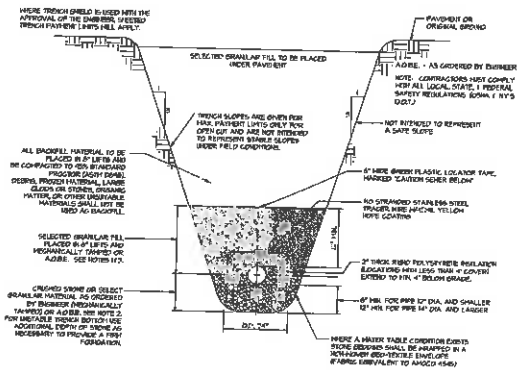
PRESSURE SANITARY SEWER END-OF-LINE CLEAN OUT



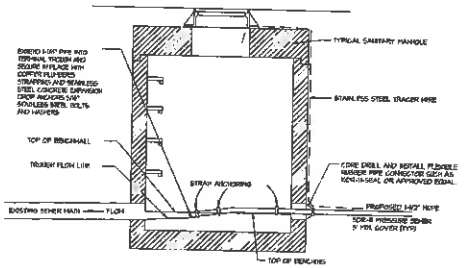
DOUBLE CLEANOUT DETAIL



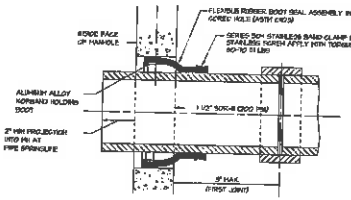
PVC SEWER LATERAL TRENCH AND BEDDING DETAIL



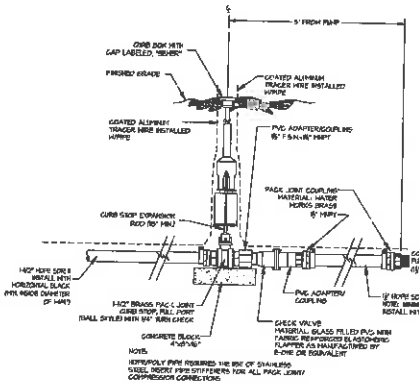
PRESSURE SANITARY SEWER TRENCH DETAIL



PRESSURE SEWER CONNECTION TO GRAVITY MANHOLE



CORED HOLE PIPE TO MANHOLE DETAIL



PRESSURE SEWER CURB BOX DETAIL

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops

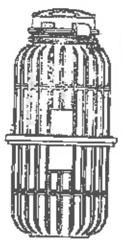
SARATOGA SPRINGS, NY 12866

DRAWN BY: SDC
SCALE: 1" = 30'
DATE: 1/2022

DRAWING NO. S-19

TITLE: SANITARY SEWER DETAILS

E/ONE EXTREME SERIES

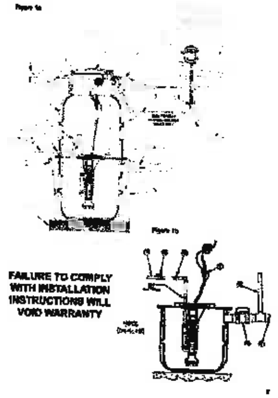


DH152 & DR152

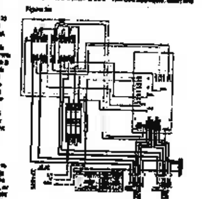
Typical Installation Instructions & Warranty Information

Duplex Station
150-Gal. Capacity

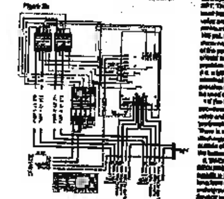
Environment One Grinder Pump Feature Identification



FAILURE TO COMPLY WITH INSTALLATION INSTRUCTIONS WILL VOID WARRANTY

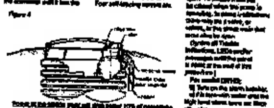


120 VOLT DUPLEX WIRING



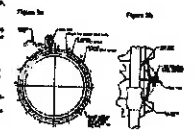
240 VOLT DUPLEX WIRING

TYPICAL IN-GROUND SECTION VIEW



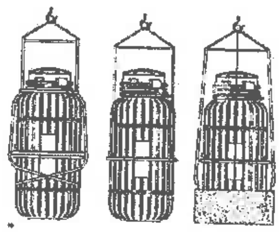
TYPICAL SUPPLY CABLE CONFIGURATION

Field Joint Assembly Instructions



Lifting Instructions

FAILURE TO FOLLOW THESE INSTRUCTIONS COMPLETELY WILL VOID WARRANTY.



E/One Grinder Pump Station Ballast Calculations

Installation Site Assumptions

Physical Constants

Procedure

Ballast Calculation

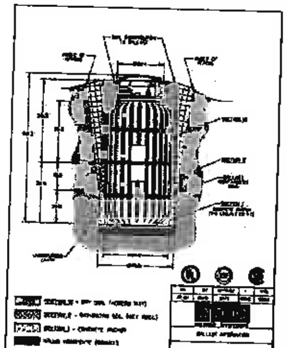
E/One Grinder Pump Station Ballast Calculations

Sample Calculation

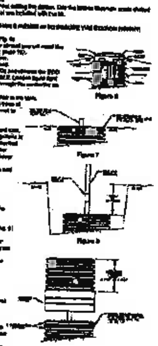
E/One Grinder Pump Station Ballast Calculations

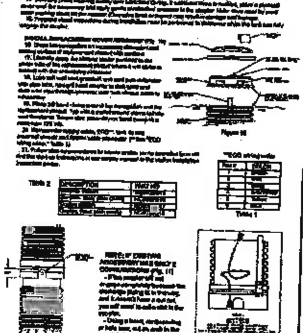
Sample Calculation, Continued

Chart 1



Adjusting the Height of the Grinder Pump Station





SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

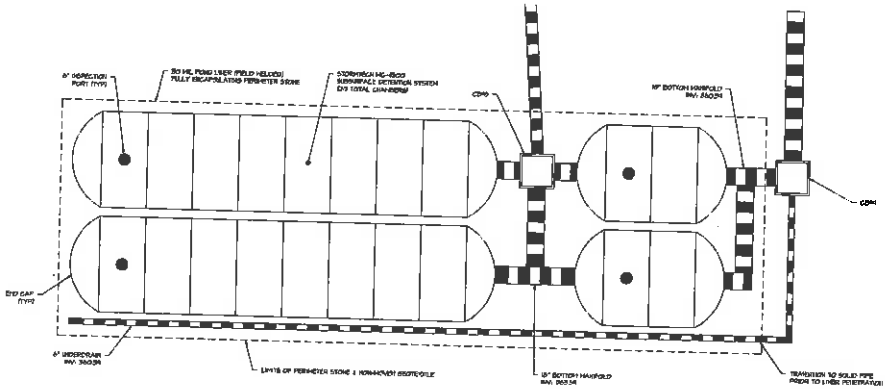
Stewart's Shops

SARATOGA SPRINGS, NY 12866

DRAWN BY: SER
SCALE: 1" = 50'
DATE: 8/4/15

DRAWING NO. S-20

TITLE: SANITARY SEWER DETAILS

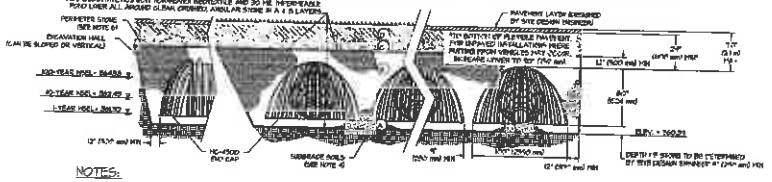


STORMTECH MC-4500 SUBSURFACE "DETENTION" SYSTEM
SCALE: N.T.S

ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS

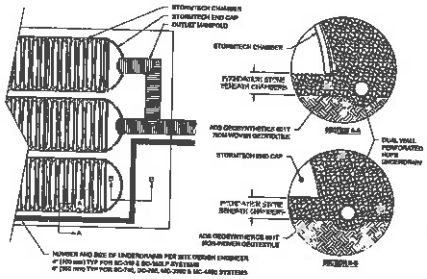
	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	MAIN BACKFILL MATERIAL FOR LAYERS 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEERS PLANS, GREATER THAN OR EQUAL TO PAVEMENT SUBBASE REQUIREMENTS	N/A	PREPARE PER SITE DESIGN ENGINEERS PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS
C	SPECIAL BACKFILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (SEE LAYER B) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'D' LAYER	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, 35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A 95% MIN PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS
B	EMBEDMENT STONE FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A) LAYER[2] TO 24" (600 mm) ABOVE THE CROWN OF THE CHAMBER	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE[3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
3. ADS GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE AND 30 MIL IMPERMEABLE LINER LINER ALL AROUND CLEAN, CRUSHED, ANGULAR STONE IN A 4 LAYERS.

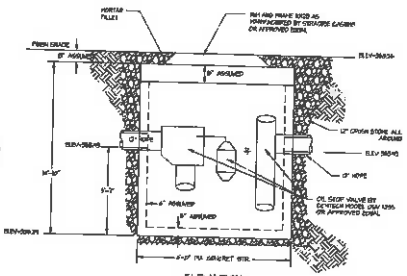


NOTES:
1. MC-4500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"
2. MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

MC-4500 CROSS SECTION DETAIL

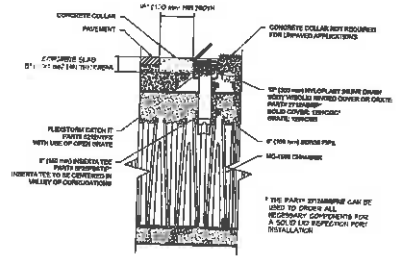


6" UNDERDRAIN DETAIL

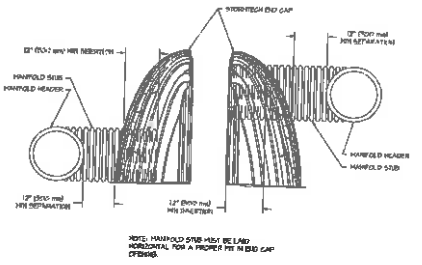


ELEVATION

OIL WATER SEPARATOR

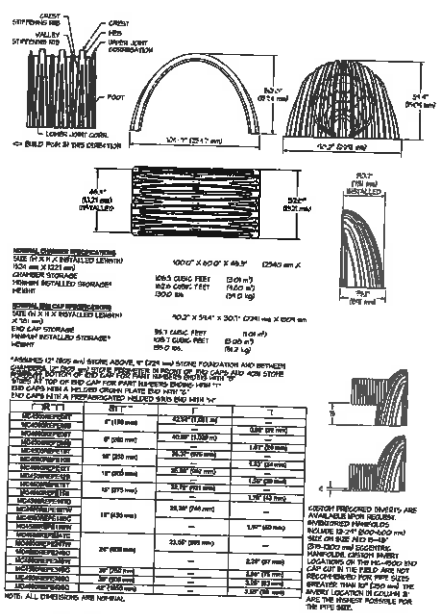


INSPECTION PORT DETAIL



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-SERIES END CAP INSERTION DETAIL



PART #	ST	A	B	C	D	E	FT	HP	WEIGHT
MC4500IEPP06B	6" (150 mm)	42.50" (1,080 mm)	—	—	—	—	—	—	60 lbs (27 kg)
MC4500IEPP08B	8" (200 mm)	40.80" (1,036 mm)	—	—	—	—	—	—	60 lbs (27 kg)
MC4500IEPP10B	10" (250 mm)	39.20" (995 mm)	—	—	—	—	—	—	60 lbs (27 kg)
MC4500IEPP12B	12" (300 mm)	36.80" (934 mm)	—	—	—	—	—	—	60 lbs (27 kg)
MC4500IEPP15B	15" (375 mm)	33.70" (856 mm)	—	—	—	—	—	—	60 lbs (27 kg)
MC4500IEPP18B	18" (450 mm)	30.60" (777 mm)	—	—	—	—	—	—	60 lbs (27 kg)
MC4500IEPP24B	24" (600 mm)	24.40" (620 mm)	—	—	—	—	—	—	60 lbs (27 kg)
MC4500IEPP30B	30" (750 mm)	23.00" (585 mm)	—	—	—	—	—	—	60 lbs (27 kg)
MC4500IEPP36B	36" (900 mm)	—	—	—	—	—	—	—	60 lbs (27 kg)
MC4500IEPP42B	42" (1050 mm)	—	—	—	—	—	—	—	60 lbs (27 kg)

CUSTOM PREFORMED INVERTS ARE AVAILABLE UPON REQUEST. INVERSIONS/MANIFOLDS INCLUDE 12"-24" (300-600 mm) SIZE ON SIDE AND 6"-48" (150-1200 mm) EXCENTRIC. MANIFOLDS, CRUSH SAFETY LOCATIONS OR THE MC-4500 END CAP SIT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 30" (750 mm) THE INVERT LOCATION IN COLUMN 'E' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

MC-4500 TECHNICAL SPECIFICATIONS

STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-4500.
2. CHAMBERS SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK (HS-20) CONSIDERATION FOR 8 PASSES AND MULTIPLE VEHICLE PRESENCES.
5. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
7. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER PRIOR APPROVAL DELIVERING CHAMBERS TO THE PROJECT SITE:
   a. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
   b. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER, THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET. WE 50 YEARS CREEP MODULUS DATA SPECIFIED IN ASTM F2418 MUST BE USED AS PART OF THE ASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
   c. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
8. CHAMBERS AND END CAPS SHALL BE FABRICATED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-4500 CHAMBER SYSTEM

1. STORMTECH MC-4500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG REACH BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN A MINIMUM 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF 3, 4, 57 OR 67.
9. STONE SHALL BE PROVIDED UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
10. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBERS TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING
11. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
12. ADS RECOMMENDS THE USE OF FLEXSTORM CATCH IT™ INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-4500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
   - REFER TO LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THIS METHOD AND ANY OTHER METHODS ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-800-848-3864 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WITH/IN LIMITS FOR CONSTRUCTION EQUIPMENT

STATE OF NEW YORK — JOHN EDWARD BRESSER — 081,084 — LICENSED PROFESSIONAL ENGINEER

ALTERATIONS TO THIS DOCUMENT BY OTHER THAN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

STORM WATER MANAGEMENT FACILITY, ABBREVIATION I.D.: SCHODACK - SCOV - 354

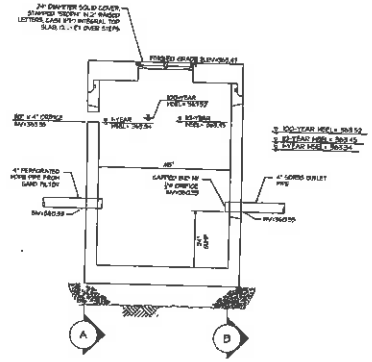
SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

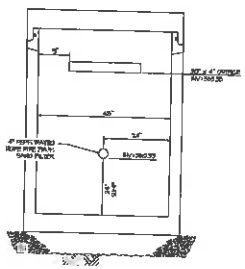
DATE	NO.	REVISIONS
9-9-21	1	ADDED MANUAL SEPARATOR DETAIL

Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. (518)581-2000 FAX (518)581-2001

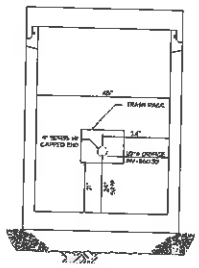
DRAWN BY: SEC
SCALE: 1" = 80'
DATE: 11/14/18
DRAWING NO: S-21

TITLE: STORMWATER MANAGEMENT DETAILS



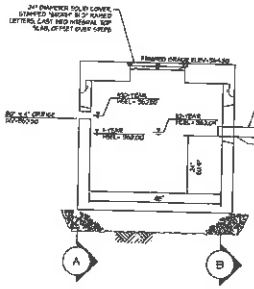


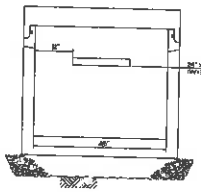
A SECTION



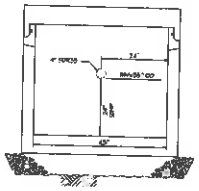
B SECTION

OUTLET CONTROL STRUCTURE #1



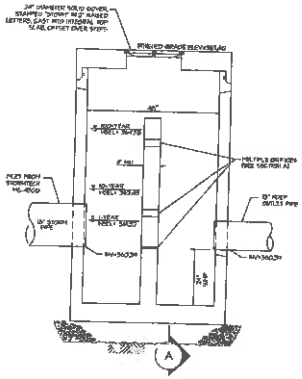


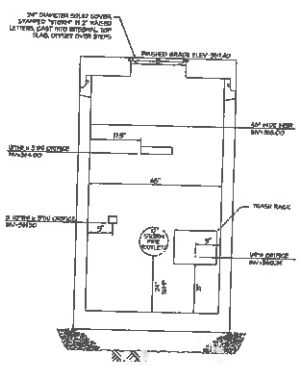
A SECTION



B SECTION

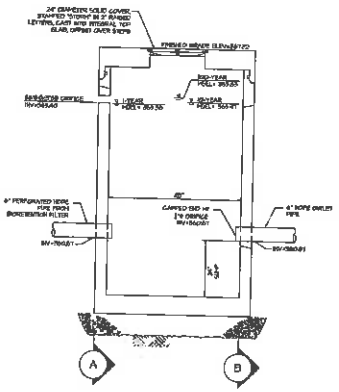
OUTLET CONTROL STRUCTURE #2

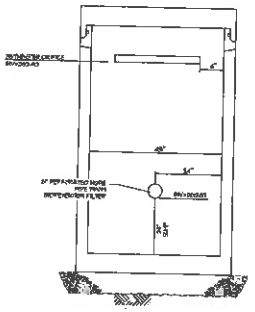




A SECTION

OUTLET CONTROL STRUCTURE #3





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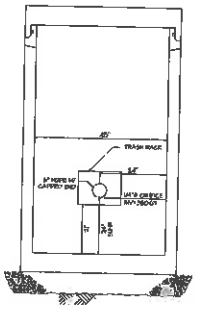


B SECTION

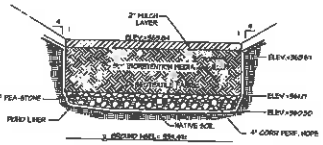
OUTLET CONTROL STRUCTURE #4

BIORETENTION MEDIA

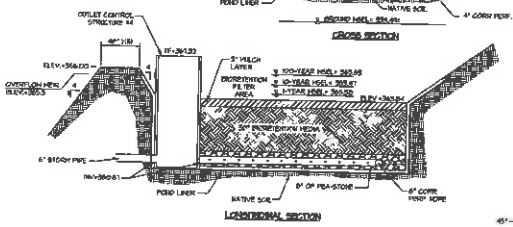
THE PLANTING SOIL SHALL BE A SANDY LOAM, LOAMY SAND, LOAM (SSDA), OR A LOAM/SAND MIX (SHALL CONTAIN A MINIMUM 35 TO 60% SAND, BY VOLUME. THE CLAY CONTENT FOR THESE SOILS SHOULD BY LESS THAN 25% BY VOLUME. SOILS SHOULD FALL WITHIN THE SM, OR ML CLASSIFICATIONS OF THE UNIFIED SOIL CLASSIFICATION SYSTEM. SOME A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (UNTIL) IS RECEIVED (A CONSERVATIVE VALUE OF 0.5 FEET PER DAY MATERIAL OVER 1" IN DIAMETER, BRUSH OR SEEDS FROM NOXIOUS WEEDS. PLACEMENT OF THE PLANTING SOIL SHOULD BE IN LIFTS OF 12 TO 18", LOOSELY COMPACTED (TAMPED) LIGHTLY WITH A DOZER OR BACKHOE BUCKET). THE SPECIFIC CHARACTERISTICS ARE AS FOLLOW:

PLANTING SOIL CHARACTERISTICS

PH RANGE: 5.2 TO 7.0
ORGANIC MATTER: 1.5 TO 4.0%
MAGNESIUM: 35 LBS. PER ACRE, MINIMUM
PHOSPHORUS (P2O5): 75 LBS. PER ACRE, MINIMUM
POTASSIUM (K2O): 85 LBS. PER ACRE, MINIMUM
SOLUBLE SALTS: 500 PPM
CLAY: 10 TO 25%
SILT: 30 TO 55%
SAND: 35 TO 60%

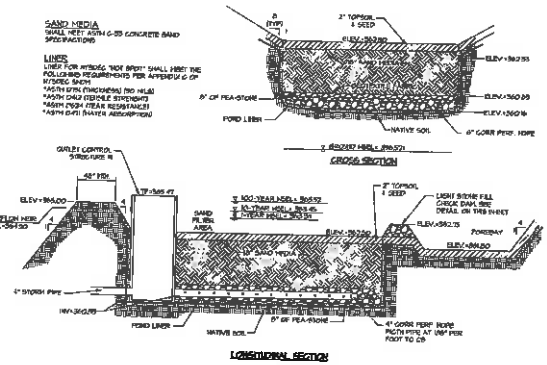


CROSS SECTION

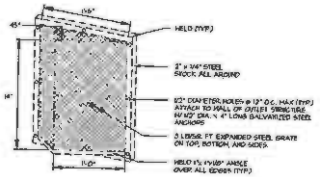


LONGITUDINAL SECTION

BIORETENTION FILTER TYPICAL SECTIONS



SURFACE SAND FILTER TYPICAL SECTIONS



NOTES FOR TRASH RACK:

1. TRASH RACK TO BE CENTERED OVER OPENING. TRIM OUTLET STRUCTURE AS PER DRAWING
2. STEEL TO CONFORM TO ASTM A-36.
3. ALL SURFACES TO BE COATED WITH ZRC COLD GALVANIZING COMPOUND AFTER WELDING.

TRASH RACK DETAIL

STATE OF NEW YORK
JOHN TOWN
LICENSED PROFESSIONAL ENGINEER
091008

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS
11-2-18	1	Added yard drain to head wall and backfill detail

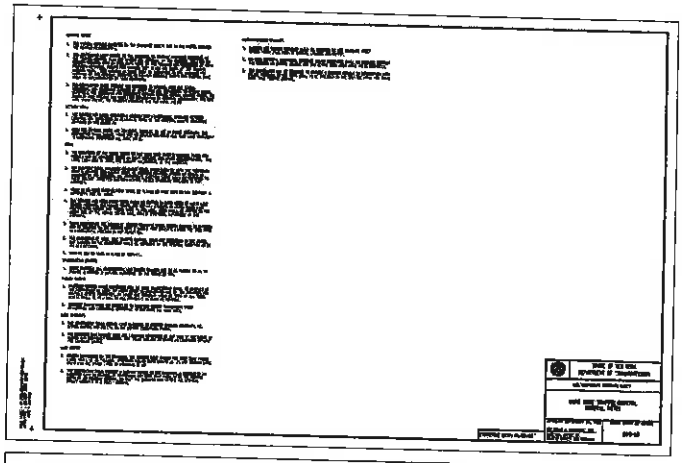
Stewart's Shops

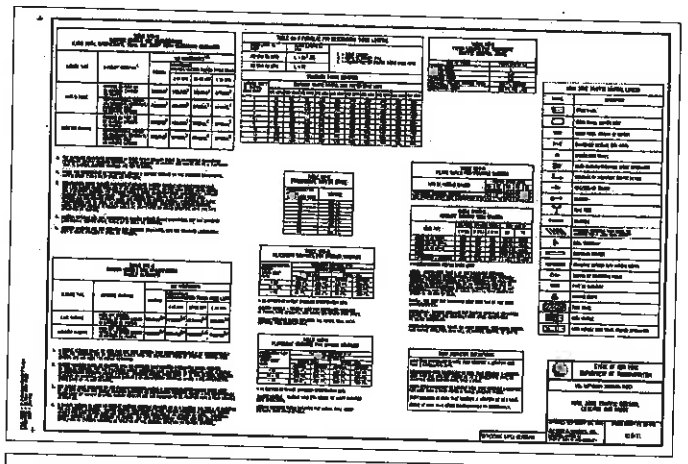
SARATOGA SPRINGS, NY 12866
TEL. (518)584-1200 FAX (518)581-1201

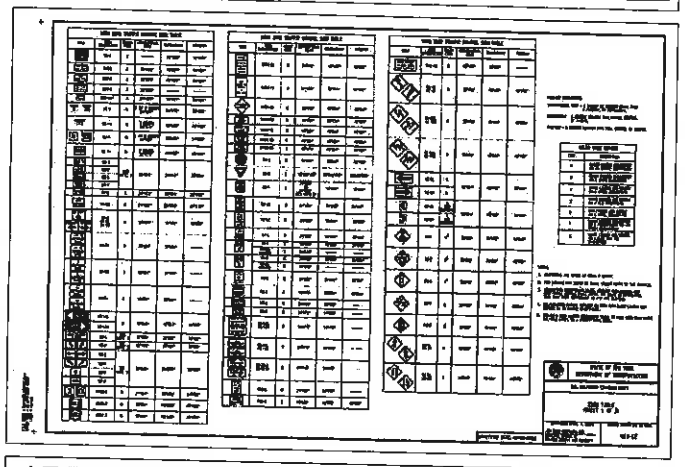
DESIGN BY: SBC
SCALE: 1" = 30'
DATE: 10/19/18

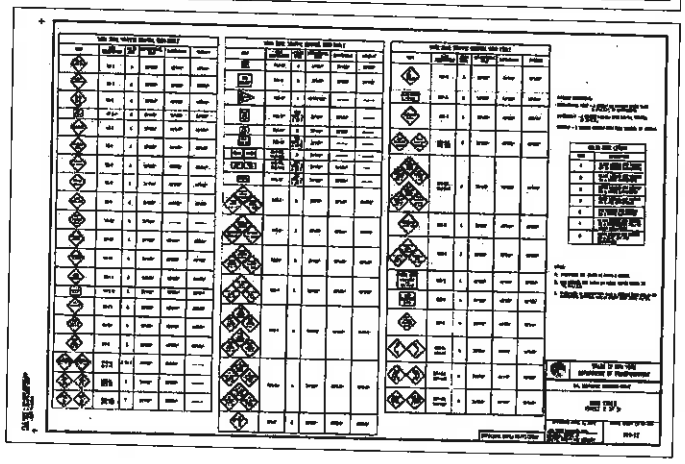
DRAWING NO: S-22

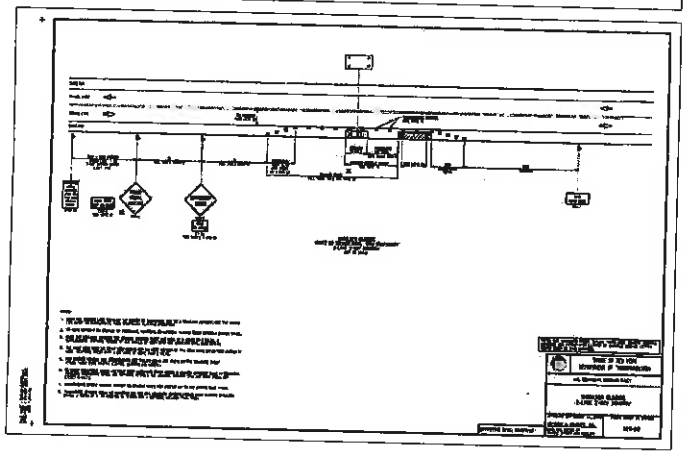
TITLE: STORMWATER MANAGEMENT DETAILS









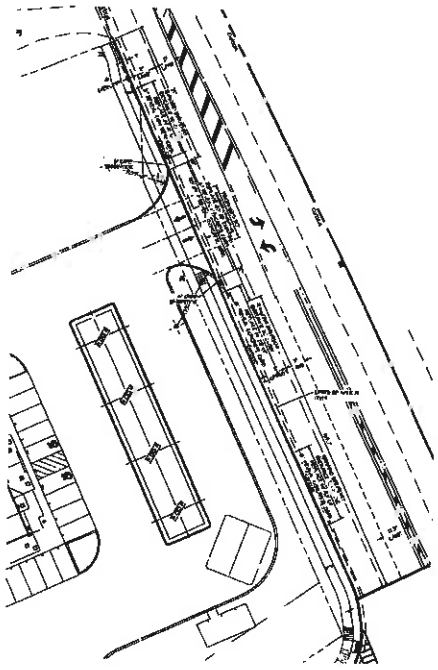


HOLIDAY LANE CLOSURE RESTRICTIONS

THERE SHALL BE NO TEMPORARY LANE CLOSURES OR ROADWAY FACILITIES OWNED AND/OR MAINTAINED BY NYSDOT ON THE MAJOR HOLIDAYS LISTED BELOW.

CONSTRUCTION ACTIVITIES THAT WILL RESULT IN TEMPORARY LANE CLOSURES SHALL BE SUSPENDED TO MINIMIZE TRAVEL DELAYS ASSOCIATED WITH ROAD WORK FOR MAJOR HOLIDAYS AS FOLLOWS:

MAJ
NEW YEARS DAY - MONDAY, JANUARY 1. BEGINNING 9:00 AM FRIDAY, DECEMBER 29 AND ENDING 6:00 AM TUESDAY, JANUARY 2.
MEMORIAL DAY - MONDAY, MAY 27. BEGINNING 6:00 AM FRIDAY, MAY 24 AND ENDING 6:00 AM TUESDAY, MAY 28.
INDEPENDENCE DAY - THURSDAY, JULY 4. BEGINNING 6:00 AM FRIDAY, JUNE 28 AND ENDING 6:00 AM FRIDAY, JULY 5.
LABOR DAY - MONDAY, SEPTEMBER 2. BEGINNING 6:00 AM FRIDAY, AUGUST 30 AND ENDING 6:00 AM TUESDAY, SEPTEMBER 3.
THANKSGIVING DAY - THURSDAY, NOVEMBER 26. BEGINNING 6:00 AM WEDNESDAY, NOVEMBER 27 AND ENDING 6:00 AM MONDAY, DECEMBER 2.
CHRISTMAS DAY - WEDNESDAY, DECEMBER 25. BEGINNING 6:00 AM FRIDAY, DECEMBER 29 AND ENDING 6:00 AM THURSDAY, DECEMBER 26.



COLUMBIA TURNPIKE DRIVEWAY ENTRANCE DETAIL

NOTE:
DRIVEWAY ENTRANCE WAS DESIGNED IN ACCORDANCE WITH THE NYSDOT DRIVEWAY DESIGN GUIDELINES AND THE ADA-PS DESIGNED SPECS

NOTES:

1. ANY SIGNS INSTALLED WITHIN THE STATE RIGHT-OF-WAY SHALL BE INSTALLED PER NYSDOT STANDARDS AND SPECIFICATIONS.
2. THERE SHALL BE NO TEMPORARY LANE CLOSURE ON ROUTE #22 ON THE FOLLOWING DAYS AND TIMES:
   MONDAY - FRIDAY: 6:00 A.M. THROUGH 9:00 A.M.
   3:00 P.M. THROUGH 6:00 P.M.
3. THE DEPARTMENT RETAINS THE RIGHT TO CANCEL ANY WORK OPERATIONS INCLUDING LANE CLOSURE AND/OR TOTAL ROAD CLOSURES THAT WOULD BE AFFECTED BY UNFORESEEN MAJOR EVENTS THAT MAY CREATE TRAFFIC DELAYS SEVEN (7) CALENDAR DAYS PRIOR TO THE PROPOSED WORK. SPECIFIC DATES ARE YET TO BE DETERMINED.
4. PEDESTRIAN ACCOMMODATIONS MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
5. THE TOWN OF SCHODACK MUST BE NOTIFIED PRIOR TO ANY LANE CLOSURE.

STATE OF NEW YORK
JOSEPH SMITH JR. DOYLE
LICENSED PROFESSIONAL ENGINEER

SCHODACK - SCOV - 354

SITE LOCATION
1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

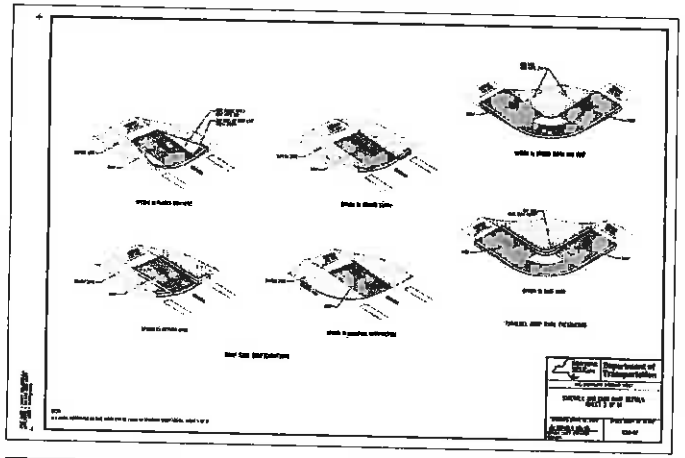
Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL (518)581-4000 FAX (518)581-4001

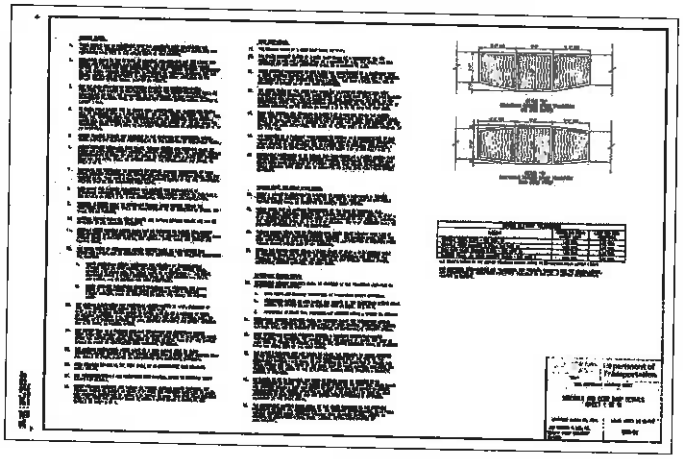
DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 8/27/18

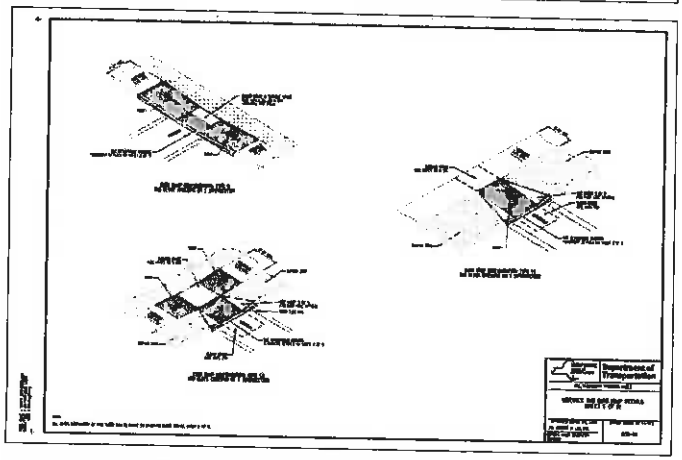
DRAWING NO. S-23

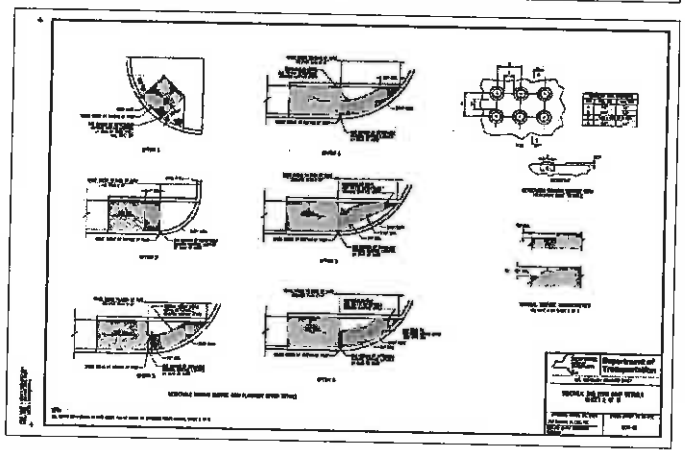
TITLE: NYSDOT DETAILS

ALTERATION TO THIS DOCUMENT BY ANY PERSON WITHOUT AUTHORITY FROM THE PROFESSIONAL NAMED IN SEAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW









HOLIDAY LANE CLOSURE RESTRICTIONS

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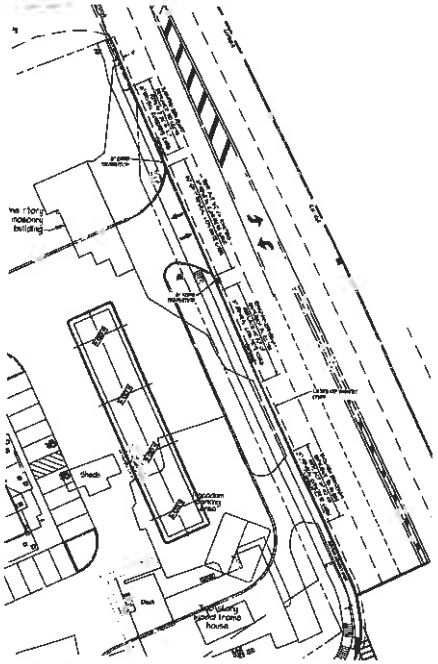
CHRISTMAS DAY - WEDNESDAY, DECEMBER 25, BEGINNING 6:00 AM FRIDAY, DECEMBER 20 AND ENDING 6:00 AM THURSDAY, DECEMBER 26.



COLUMBIA TURNPIKE DRIVEWAY ENTRANCE DETAIL

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops

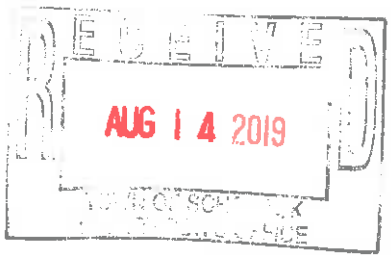
SARATOGA SPRINGS, NY 12866
TEL (518)581-1200 FAX (518)581-1209

DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 8/21/18

DRAWING NO: S-24

TITLE: NYSDOT DETAILS

CHA
design/construction solutions



August 12, 2019

Honorable David Harris, Supervisor
Town of Schodack
265 Schuurman Road
Castleton, NY 12033

RE: Town of Schodack Sewer District No. 6, Extension No. 5
Map, Plan, and Report Revision

Dear Supervisor Harris:

Please be advised that we have revised the above referenced Map, Plan, and Report (MPR) to incorporate minor changes to the proposed sewer extension. Based on subsequent discussions with the Town's engineer, a modification to the sewer connection point was required to avoid disturbing existing utilities.

The updated MPR now states the required sewer force main length is 1,500 feet, with new connection to an existing sewer force main on Old Miller Road within the right of way. The revised construction cost estimate is $213,983.00, privately funded by Stewart's Shops. The operation and maintenance cost remains unchanged.

The revised document is attached for your reference. If you have any questions, please do not hesitate to contact me at (518) 453-8213.

Sincerely,

Eric J. Hirschmann

Eric Hirschmann, P.E.
Senior W/WW Engineer

Encl.

V:\Projects\ANY\K5\35271\Corres\MPR Revision Letter.docx

111 Winners Circle, PO Box 5269, Albany, NY 12205-0269
T 518.453.4500 • F 518.458.1735 • www.chacompanies.com

Map, Plan and Report

Sewer District #6
Extension #5

Town of Schodack, New York

CHA Project Number: 35271.2001

Prepared for:

Stewart's Shops
PO Box 435
Saratoga Springs, NY 12866

Prepared by:

8/5/2019

3 Winners Circle
Albany, NY 12205
(518) 453-4500

February 2019
(Revised March 2019)
(Revised August 2019)

1.0 INTRODUCTION

1.1 BACKGROUND

The Town of Schodack (Schodack) is located in southwest Rensselaer County, approximately 7 miles southeast of Albany, New York. Schodack has proposed to create a new sewer district extension along Miller Road, from the intersection of Columbia Turnpike (NYS Route 9 & 20) to the intersection of Old Miller Road and Miller Rd. A site location map of the area is shown on the following page.

There is a need for a public sewer service due to the development of a Stewart's Shop convenience store proposed on the corner of Columbia Turnpike and Sunset Road. There are no available sewer mains that serve this property, nor along the route where the proposed force main sewer can be connected to the existing sewer system within the boundaries of Schodack's Sewer District 6. This project will therefore require an extension of the existing Sewer District 6 (Extension #5).

1.2 PURPOSE AND SCOPE

Stewarts Shops has contracted CHA Consulting Inc. (CHA) to prepare a Map, Plan and Report (MPR) for extension #5 of Sewer District 6. This report documents the sewer system expansion to the proposed Stewart's Shop convenience store and includes the following:

- Description of sewer district extension boundary;
- General plan for the required sewer infrastructure;
- Estimated capital, operational, and maintenance costs; and
- Potential financing opportunities.

2.0 EXISTING FACILITIES

Currently there is no public sewer system for the property located within the proposed Extension #5 of the existing Sewer District 6. The existing property within the proposed district extension is a former commercial property being developed into a convenience store and gas station.

The nearest pump station to the proposed district extension is Pump Station #1, located on the northwest side of the intersection of Miller Road and Empire State Boulevard. Pump Station #1 is a Smith & Loveless recessed wet well with two pumps and was built in 1999. Each pump is a 15HP, 1800 RPM unit, capable of a pumping capacity of 350 gallons per minute (GPM). Currently the station pumps approximately 27,000 GPD, which is equivalent to approximately 1.5 hours of run time per day. Effluent from the pump station discharges into a 6-inch force main.

A second pump station (Pump Station #2) collects sanitary flows from residences in the vicinity of Waters Road and discharges into the same 6-inch force main on Old Miller Road. Pump Station #2 consists of two Smith & Loveless pumps Model 4B2B with 3 HP motors and a design point of 120 gpm at 34 feet of total dynamic head (TDH). Existing pressure within the 6-inch force main along Old Miller Road is approximately 20 psi when pumps are not operating, and 40 psi when pumps are in operation.

Sewer effluent from the pump stations is conveyed and treated downstream through Schodack's and East Greenbush's existing sewer conveyance systems to the East Greenbush WWTP, located on Columbia Turnpike approximately 4.5 miles north west of the proposed sewer district extension. The WWTP is an approved treatment facility permitted by the New York State Department of Environmental Conservation (NYSDEC). It has a permitted capacity of 2.5 million gallons per day (MGD).

3.0 PROPOSED SEWER DISTRICT EXTENSION

3.1 DISTRICT EXTENSION BOUNDARY

In determining the area to be served by the proposed sewer district extension and the required facilities needed to service this area, a number of factors were considered, including:

- Existing sewer system that serves this district extension;
- Servicing the proposed Stewart's Shop convenience store;
- Limits of area to be served by existing available treatment capacity.

The proposed sewer district extension will connect to the Schodack's sewer system at the 6-inch force main along Old Miller Road. A boundary map (Figure 3-1) of the proposed Extension #5 of Sewer District 6 is included in Appendix A. This map shows the area to be served by the proposed sewer district extension and the proposed parcel to be served by public sewer. Appendix B contains a description of the proposed district extension boundary.

maintenance costs are estimated at $7.50 per 1,000 gallons of sanitary sewer effluent (assessed by Schodack), plus an initial connection fee of $11,250 (assessed by East Greenbush).

5.0 IMPLEMENTATION PLAN

5.1 COST APPORTIONMENT

There will be no cost apportionment for the debt service based on the EDU system for this extension.

5.2 CONSTRUCTION FINANCING

No public construction financing is needed for this extension, as the proposed sewer system will be constructed utilizing private funds provided by Stewart's Shops Convenience Stores.

5.3 OPERATION AND MAINTENANCE COST APPORTIONMENT

The cost of operation and maintenance would include the costs to operate, maintain, and supply the sewer system. Based on an estimated annual usage of 328,500 gallons per year, and an existing operation and maintenance rate of $7.50 per 1,000 gallons (based on a review of current rate structures), the convenience store/gas station property yearly amount would be $2,464 per year.

5.4 USER COST SUMMARY

Since the extension will be funded privately, only the annual operation and maintenance charge would be the total annual user cost per EDU, per the rate stated in Section 5.3.

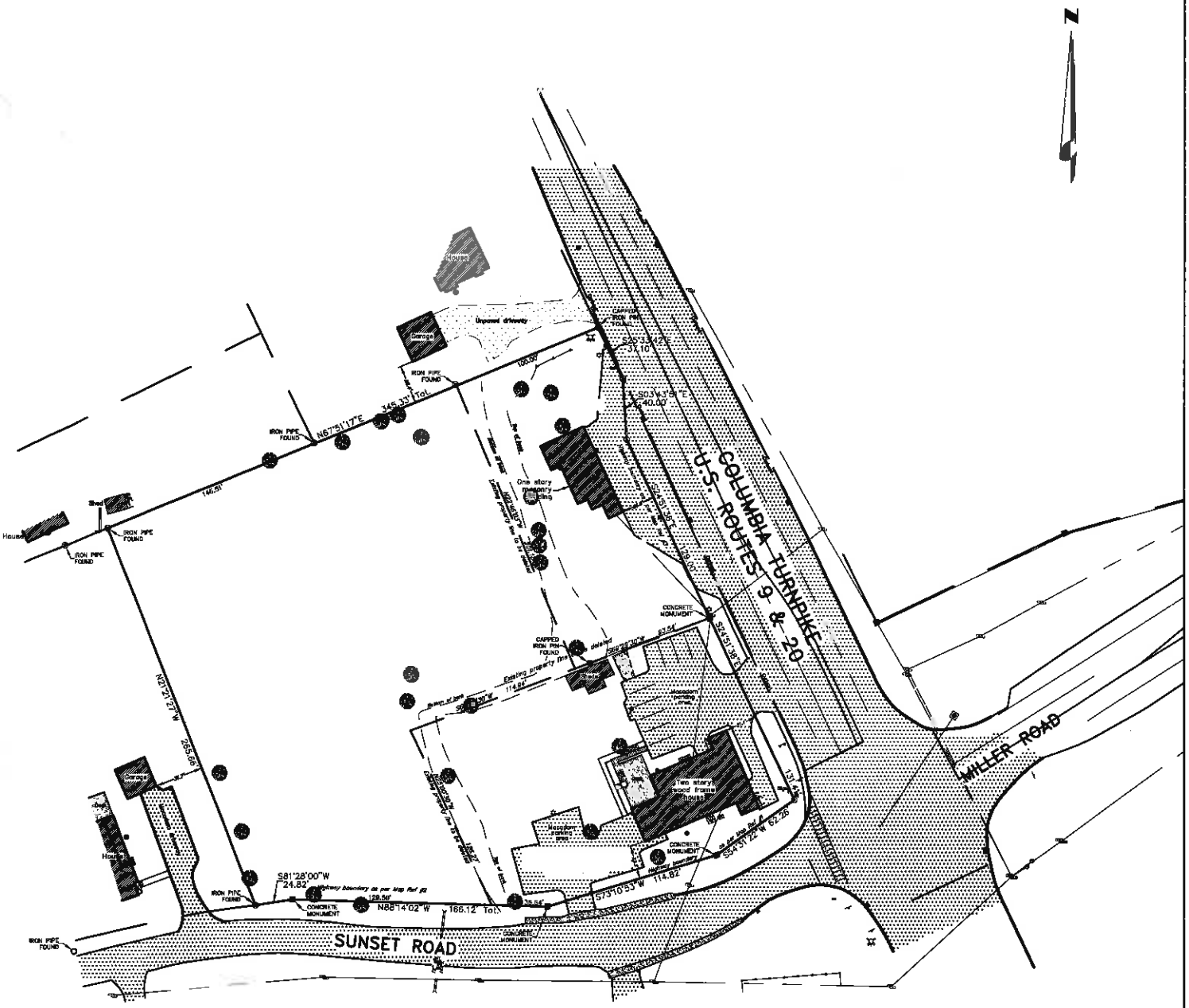
5.5 IMPLEMENTATION SCHEDULE

The public hearing for this project has not been scheduled yet. It is anticipated that if the project is approved, construction of this project will begin in the Spring of 2019 with completion in the Fall of 2019. A preliminary project schedule outlining project milestones is included on Table 5-1 below.

Table 5-1: Anticipated Project Schedule

Task	Anticipated Date
Finalize Map, Plan and Report	February 2019
Sewer District Extension Formation and SEQRA	February 2019 – April 2019
System Design	February 2019
Submit Design to Town/NYSDEC for Review	February 2019
Construction	April 2019 – November 2019*

*Site restoration may be completed in Spring 2020 depending on weather and existing conditions



CHA

SEWER DISTRICT 6 EXTENSION
TOWN OF SCHODACK, NEW YORK
STEWART'S SHOPS

BOUNDARY MAP

PROJECT NO.
35271

FIGURE

3–1

BOUNDARY DESCRIPTION OF THE PROPOSED TOWN OF SCHODACK SANITARY SEWER DISTRICT #6 EXTENSION #5

Beginning at the intersection of the western right-of-way of NYS Route 9 and 20, also known as Columbia Turnpike, and the northern right-of-way of Sunset Road, said point being the southeast corner of district boundary;

Thence North 24°51'38" West approximately 131.41 feet along the westerly right-of-way of NYS Route 9 and 20, also known as Columbia Turnpike, to a concrete monument; thence North 24°51'38" West approximately 129.00 feet along the westerly right-of-way of NYS Route 9 and 20, also known as Columbia Turnpike, to a point; thence North 03°43'51" West approximately 40.00 feet along the westerly right-of-way of NYS Route 9 and 20, also known as Columbia Turnpike, to a point; thence North 25°33'42" West approximately 37.10 feet along the westerly right-of-way of NYS Route 9 and 20, also known as Columbia Turnpike, to the an iron pin; thence South 67°51'17" West along the boundary approximately 345.33 feet to an iron pin; thence South 21°21'27" East approximately 265.66 feet to an iron pin; thence North 81°28'00" East approximately 24.82 feet along the northerly right-of-way of Sunset Road, to a concrete monument; thence South 88°14'02" East approximately 166.12 feet along the northerly right-of-way of Sunset Road, to a concrete monument; thence North 73°10'53" East approximately 114.82 feet along the northerly right-of-way of Sunset Road, to a concrete monument;

Thence North 54°31'22" East 62.26 feet along the northerly right-of-way of Sunset Road to a point on the westerly right-of-way of NYS Route 9 and 20, also known as Columbia Turnpike, to the point of beginning.

Devendorf, Kimberly

rom: Laura Palmer <laura@schodack.org>
Sent: Tuesday, February 12, 2019 9:05 AM
To: Devendorf, Kimberly
Subject: RE: Stewarts - Sewer District #6, Ext #5 (Tax Map # 178.-14-6 and 178.-14-7)

Kim,

For commercial properties, each property is assigned 1 EDU plus additional EDU's for every 72,000 gallons, or portion thereof. Therefore, the current Stewarts 2019 EDU's were calculated as follows: 296,500 gallons / 72,000 = 4.12 or 5 EDU's plus 1 EDU = 6 Total EDU's. Let me know if you have any other questions. Thank you.

Laura Palmer
Town of Schodack
Asst. Comptroller
265 Schuurman Road, Castleton, NY 12033
Phone: (518)477-7917
Fax: (518)477-6546
E-Mail: Laura@Schodack.org

From: Devendorf, Kimberly [mailto:KDevendorf@chacompanies.com]
Sent: Tuesday, February 12, 2019 8:43 AM
To: Laura Palmer
Cc: Laberge, Richard F.; Nadine Fuda; Paul Harter; David Harris
Subject: RE: Stewarts - Sewer District #6, Ext #5 (Tax Map # 178.-14-6 and 178.-14-7)

Thank you.

Just for clarification, how many gallons are in one EDU?

Kimberly A. Devendorf, P.E.*, PMP
Senior Engineer V
CHA ~ *design/construction solutions*
Office: (315) 257-6518
kdevendorf@chacompanies.com
www.chacompanies.com
*NY, GA

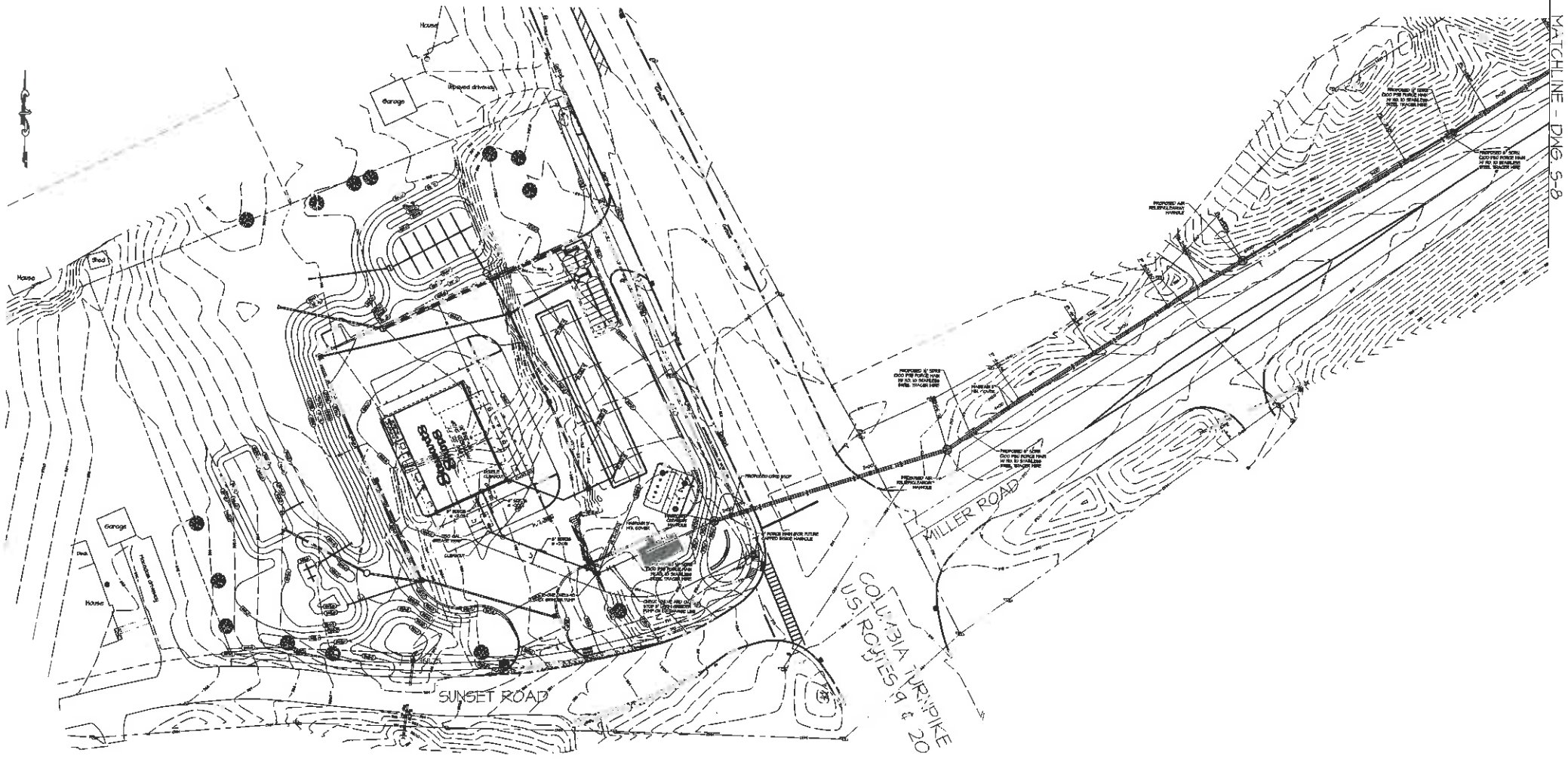
esponsibly Improving
the World We Live In

Sewer District Connection Fee	$ 225
East Greenbush Sewer Connection Fee (to be approved) conversation of 900 gpd)	$11,250 (estimated based on our
Total	$18,325

Please provide the Town with the documentation calculating the expected number of gallons of water per day usage (GPD) as per you MP&R. Please note the East Greenbush Fee is an estimate based upon an average of 900 GPD of water use, as per our conversation. It has not been confirmed or accepted by the Town of East Greenbush and may vary depending upon the final determination. Any funds not utilized will be returned upon completion of the project.

If you have any questions, please contact me. Thank you.

Laura Palmer
Town of Schodack
Asst. Comptroller
265 Schuurman Road, Castleton, NY 12033
Phone: (518)477-7917
Fax: (518)477-6546
E-Mail: Laura@Schodack.org



GENERAL NOTES:

1. ACCESS TO THE RESIDENTIAL DRIVEWAYS LOCATED WITHIN THE PROPOSED WORK AREA SHALL NOT BE CLOSED DURING CONSTRUCTION.
2. WALKING OR BICYCLE ACCESS SHALL NOT BE CLOSED DURING CONSTRUCTION. MATERIAL, EQUIPMENT OR OTHER SUCH BARRIERS SHALL NOT BE PLACED OR PARKED SO AS TO OBSTRUCT PEDESTRIAN/BICYCLE TRAFFIC OR PRESENT A SAFETY HAZARD TO NON-MOTORIZED PUBLIC. IF PEDESTRIAN TRAFFIC MUST BE RELOCATED OR REROUTED OFF EXISTING FACILITY, WALKWAYS SHALL BE CLEARLY MARKED AND HAVE A LOGICAL START AND TERMINUS. ALL WALK SURFACES AND GRADES SHALL BE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG).
3. ANY VEGETATION, INCLUDING LAWN TURF, WITHIN THE RIGHT-OF-WAY THAT IS REMOVED OR DAMAGED TO FACILITATE THIS WORK MUST BE REPLACED IN KIND.
4. CONSTRUCTION OF THIS SEWER LINE SHALL NOT INTERFERE WITH ANY OVERHEAD UTILITY LINES AND POLES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES, KNOWN OR UNKNOWN, WITHIN THE PROJECT AREA.

EXCAVATION, TRENCHING, SHEETING AND SHORING REQUIREMENTS:

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADEQUACY OF ALL SHEETING AND SHORING USED AND FOR ALL DAMAGE RESULTING FROM ITS FAILURE OR FROM PLACING, MAINTAINING AND REMOVING IT.

B. REQUIREMENTS OF REGULATORY AGENCIES.

1. SUBPART 23-4, "EXCAVATION OPERATIONS", OF NEW YORK STATE DEPARTMENT OF LABOR INDUSTRIAL CODE RULE 23.
2. SUBPART P, "EXCAVATIONS" OF UNITED STATES DEPARTMENT OF LABOR OSHA REGULATIONS FOR CONSTRUCTION.
3. THE MORE STRINGENT REQUIREMENT IN EACH OF THE ABOVE CODES SHALL APPLY. THESE REQUIREMENTS ARE MINIMUM REQUIREMENTS AND SHALL BE INCREASED IF NECESSARY TO PROVIDE SAFE WORKING CONDITIONS.
4. ALL MUNICIPAL, COUNTY, STATE, OR FEDERAL ORDINANCES, REGULATIONS, OR LAWS AND ALL NECESSARY PERMITS AND APPROVALS OBTAINED BY THE CONTRACTOR SHALL BE OBSERVED.

PRESSURE TESTING NOTES:

THE COMPLETED SEWAGE FORCE MAIN INCLUDING VALVES AND FITTINGS SHALL BE HYDROSTATICALLY TESTED FOR LEAKAGE TO WATER MAIN STANDARDS. THE SYSTEM SHALL BE PRESSURIZED TO A MINIMUM OF 150 P.S.I. AT THE POINT OF TESTING FOR A MINIMUM OF TWO HOURS AFTER INITIAL EXPANSION OF THE HDPE PIPE. HYDROSTATIC TEST SHALL BE PERFORMED, AND SUCCESSFUL TEST RESULTS DERIVED IN ACCORDANCE WITH AWWA C600-82 AND PLEXCO TECHNICAL NOTE 802. IF THE LEAKAGE IN THE SYSTEM EXCEEDS THE SPECIFIED AMOUNT, THE CONTRACTOR SHALL, AT NO ADDED COST TO THE OWNER, MAKE ANY REPAIRS OR REPLACEMENTS NECESSARY TO REDUCE THE LEAKAGE TO THE REQUIRED LIMITS AND RETEST THE SYSTEM.

THE TEST WILL BE CONDUCTED AS DIRECTED BY THE ENGINEER/ARCHITECT, BUT THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, EQUIPMENT, WATER AND MATERIALS NECESSARY FOR CONDUCTING THE TEST AS SPECIFIED.

STATE OF NEW YORK — JOINT BOARD — ENGINEERING AND LAND SURVEYING — PROFESSIONAL ENGINEER

ALTERATIONS TO THIS DRAWING BY OTHER THAN AN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW.

WORK NAME, ABBREVIATION & NO.: SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

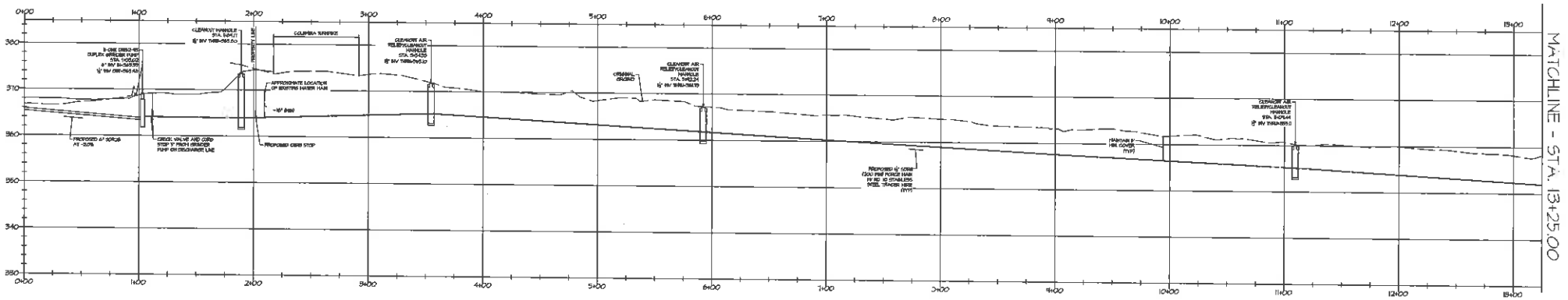
DATE	NO.	REVISIONS

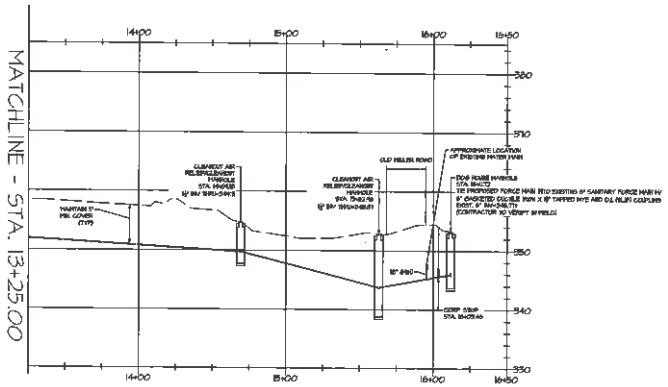
Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. (518)581-1200 FAX (518)581-1204

DRAWN BY: SBK
SCALE: 1" = 50'
DATE: 6/27/18

DRAWING NO.: S-7

TITLE: PROPOSED SANITARY SEWER PLAN





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STATE OF NEW YORK — DEPT. OF — LICENSED PROFESSIONAL ENGINEER — 021088

ALTERATIONS TO THIS DOCUMENT BY OTHER THAN AN ACTIVATED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

SEWER DISTRICT NAME/NUMBER & NO.: SCHODACK - SCOV - 354

SITE LOCATION: 1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO	REVISIONS

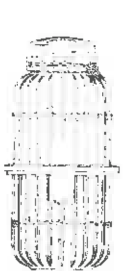
Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL. (518)581-1200 FAX (518)581-1209

DRAWN BY: SBK
SCALE: 1" = 30'
DATE: 11/19/18

DRAWING NO: S-9

TITLE: PROPOSED SANITARY SEWER PROFILE

E/ONE EXTREME



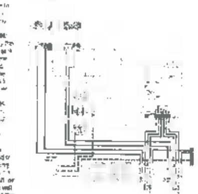
DH152 & DR152

Typical Installation Instructions & Warranty Information

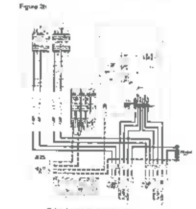
Duplex Station
150-Gal. Capacity

Environment One Grinder Pump Feature Identification

FAILURE TO COMPLY WITH INSTALLATION INSTRUCTIONS WILL VOID WARRANTY



120 VOLT DUPLEX WIRING



240 VOLT DUPLEX WIRING

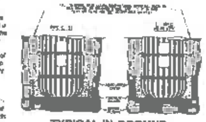
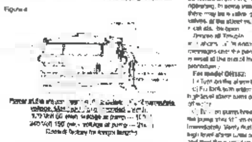


Figure 3

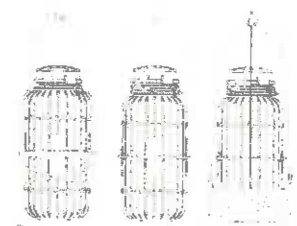
TYPICAL IN-GROUND SECTION VIEW



TYPICAL SUPPLY CABLE CONFIGURATION

Field Joint Assembly Instructions

Lifting Instructions



E/One Grinder Pump Station Ballast Calculations

Installation Site Assumptions

Physical Constants

Procedure

Ballast Calculations

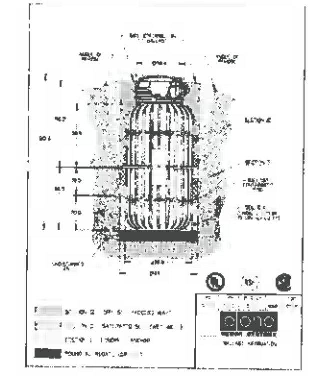
E/One Grinder Pump Station Ballast Calculations

Sample Calculation

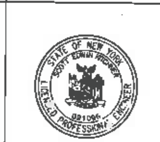
E/One Grinder Pump Station Ballast Calculations

Sample Calculation, Continued

Chart 1



Adjusting the Height of the Grinder Pump Station



STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER

ALTERATIONS TO THIS DOCUMENT BY OTHER THAN AN AUTHORIZED LICENSED PROFESSIONAL ENGINEER IS ILLEGAL AND A VIOLATION OF THE NEW YORK STATE EDUCATION LAW

SCHODACK - SCOV - 354

1538 & 1542 COLUMBIA TURNPIKE - CASTLETON, NY 12033

DATE	NO.	REVISIONS

Stewart's Shops
SARATOGA SPRINGS, NY 12866
TEL (518)581-1200 FAX (518)581-1209

DRAWN BY: SEK
SCALE: 1" = 30'
DATE: 8.17/18

DRAWING NO. S-19

TITLE: SANITARY SEWER DETAILS

INTERMUNICIPAL SEWER AGREEMENT

This Agreement is made as of the 27th day of May, 2004, by and between the TOWN OF EAST GREENBUSH, Rensselaer County, New York ("East Greenbush"), acting through its elected Town Board, and the TOWN OF SCHODACK, Rensselaer County, New York ("Schodack"), acting through its elected Town Board.

WHEREAS, East Greenbush owns and operates a wastewater treatment facility and collection lines (collectively, the "Facility"); and

WHEREAS, Schodack established Town of Schodack Sewer District No. 6 (the "District") and wishes to arrange for treatment by the Facility of wastewater generated by the District; and

WHEREAS, Schodack and East Greenbush entered into an agreement, dated as of July 24, 1998 (the "1998 Agreement"), for the provision of such services, and

WHEREAS, Schodack and East Greenbush wish to make certain revisions to the 1998 Agreement, and wish to enter into this superseding Agreement.

NOW, THEREFORE, the parties hereby agree as follows:

I. East Greenbush agrees to accept and treat at its Facility wastewater from the District as it currently exists, and as it may be expanded in the future, under the terms and conditions set

IV. Schodack agrees to install and maintain at its own expense and/or the expense of the respective users within the District all of the necessary lines and appurtenances to make sewer service available within the District. East Greenbush shall not be responsible for any installation or maintenance expenses related to sewer lines and appurtenances within the District.

V. The connection to the East Greenbush sewer main shall be at the Horizon View Drive sewer main. Schodack shall install and maintain a master sewage meter and meter pit as required by East Greenbush. Any construction or maintenance work that violates the integrity of the aforesaid main must be performed under the supervision of representatives of East Greenbush. The costs of installing and maintaining the meter and meter pit. shall be borne by Schodack

VI. Schodack shall not cause its wastewater collection system to be installed unless the installation is conducted under the supervision and approval of a New York State licensed professional engineer. Such system shall not be installed by Schodack without prior notice to East Greenbush.

VII. The parties recognize that East Greenbush currently imposes upon new users of its system a one-time hookup fee of five thousand dollars ($5,000) per unit (a unit being the equivalent in flow of a single family residence, which is four hundred (400) gallons per day). A similar fee shall be charged to new users in Schodack, in the following manner. Residential hookups shall be charged a fee of five thousand dollars ($5,000) per unit. Commercial hookups shall be charged a fee that is based upon one hundred percent (100%) of the average metered water usage (for existing users) or sixty percent (60%) of the anticipated water usage (for new or expanding business), divided

exercised by written notice by Schodack to the Supervisor of East Greenbush no less than six (6) months prior to the expiration of the initial ten (10) year term of this Agreement. The Agreement may thereafter be renewed by the parties on such terms as the parties may agree.

X. During the first year after the effective date of this Agreement, Schodack agrees to pay to East Greenbush the sum of one dollar and eight-five cents ($1.85) per thousand gallons (the "Base Price"), plus a Capacity Usage Surcharge of one dollar and eighty-six cents ($1.86) per thousand gallons (the "Capacity Usage Surcharge"), as said gallons are measured by the master sewage meter or as otherwise agreed upon by East Greenbush.

XI. East Greenbush will bill Schodack twice per year, in May for the preceding November through April and in November for the preceding May through October. Payment shall be due within thirty (30) days after receipt of the bill. If Schodack does not pay any bill by the thirtieth (30th)day (the "due date"), Schodack shall pay to East Greenbush a late charge. Said late charge shall be computed at an annual rate of the current prime rate plus one percent (1%) for the first forty-five (45) days after the due date and two percent (2%) over prime for each day that a payment is late beyond forty-five (45) days from the due date. The prime rate shall further be the prime rate in effect as of the date of the billings and as it is established or charged from time to time by Citibank (N.Y.S.) N.A.

XII. After the first year of service under this Agreement, and at one (1) year intervals thereafter, the price for sewer services provided hereunder may be revised by East Greenbush. Any increase in the Base Price of sewer usage charge shall be in an amount that is identical to the increase

IN WITNESS WHEREOF, the parties have executed this instrument by their Supervisors and caused their official seals to be affixed pursuant to resolutions adopted by their Town Boards, copies which are annexed hereto.

TOWN OF EAST GREENBUSH

By: _____
Robert Angelini
Supervisor

ATTEST:

_____
Town Clerk

Approved as to Form and Sufficiency

_____
Town Attorney

TOWN OF SCHODACK

By: _____
Beth K. Secor
Supervisor

ATTEST:

_____
Town Clerk, Deputy

Approved as to Form and Sufficiency

_____
Attorney for the Town

Completed By:	KAD	**Job No**	35271
Checked By		**Page**	1 of 1
Project Name:	Stewart's Shop Columbia Turpike	**Date:**	Feb. 2019

CLOUGH HARBOUR & ASSOCIATES LLP

Subject: Sewer District #6 Extension Discharge Calculations

Objective: Determine the average daily and maximum day demands for the proposed extension of Sewer District #6 for the Town of Schodack

Given:
1. For commercial properties, each property is assigned 1 EDU plus additional EDU's for every 72,000 gallons, or portion thereof.
2. The proposed sewer district will have approximately 6 EDUs

Calculation:

Standard sewer flows from similar Stewart Shops has been in the range of 800 - 900 GPD, according to metering records of similar stores.

According to NYS Design Standards for Intermediate Sized Wastewater Treatment Systems (2014 Edition), gas station/convenience store is rated at 400 GPD per toilet. There are two toilets, putting the flow rate at 800 GPD.

To be conservative, we will assume 900 GPD, according to similar stores metering records.

Gallons per Year = 900 GPD x 365 = 328,500 gallons per year

EDUs = 328,500 GPY/72,000 GPY = 4.56 EDUs or 5 EDUs

Total EDUs = 1 EDU assigned + 5 EDUs = **6 EDUs total**

TOWN OF SCHODACK, NEW YORK

Miller Road Sewer Extension

Engineer's Opinion of Probable Capital Cost Estimate

August 2019

Item No.	Description	Unit	Est. Qty.	Cost/Unit	Total Cost	Comments
1	**General Conditions**					
1.1	Mobilization/Demobilization (Approx. 3.5%)	LS	1	$5,738	$5,738	
1.2	Overhead and Profit (Approx. 10%)	LS	1	$16,394	$16,394	
				Subtotal Item 1	**$22,132**	
2						
2.1	1.5" HDPE Pressure Main	LF	1500	$35	$52,500	Trenchless
2.2	6" HDPE Pressure Main	LF	1500	$46	$69,000	Trenchless
2.3	Air Relief Structure	EA	2	$20,000	$40,000	
2.4	Vegetation Restoration	SY	20	$2	$40	For boring and receiving pits
2.5	Replacement Backfill	CY	40	$60	$2,400	For boring and receiving pits
				Subtotal Item 2	**$163,940**	

Subtotal of Items 1 to 2	**$186,072**
15% Contingency	**$27,911**
COST ESTIMATE TOTAL	**$213,983**

Note: Estimates primarily based on recent contractor quotes and historical bid prices.

Kerrie Joiner

From: SHRM <emailfromshrm@e.shrm.org>
Sent: Monday, August 12, 2019 4:32 PM
To: Kerrie Joiner
Subject: Mark your calendars September 22-24

Follow Up Flag: Follow up
Flag Status: Flagged

August 12, 2019

Join us for the NYS SHRM Conference

"Stepping into the Future"

Sept 22-24, 2019

The Albany, Capital Center

Did you know that Albany is the host of the 2019 NYS SHRM Conference- *Stepping into the Future?* In the newly reconstructed Capital Center, our conference will bring over 500 HR professionals from across New York State to learn best practices, network and hear from over 30 best in class HR service providers.

The 2019 NYS SHRM Conference has 5 amazing keynote speakers from Speaker Hall of Fame members to inspirational business leaders to humorous lawyers. No matter what you need, we have a keynote to motivate, energize and teach you over our three-day

conference.

Are you certified in SHRM-CP/ SHRM-SCP or PHR/SPHR? Our Conference offers up to 19 recertification credits to keep those valuable certifications you worked so hard for. We have over 30 concurrent session options to share the latest and greatest tips, tricks and tools to maximize performance, potential and leadership skills for any level of HR professional or business leader.

Still on the fence? 3 days of cutting edge content, 5 keynote speakers, access to over 30 best in class HR vendors, networking with peers from all over New York State, a dinner on Sunday, and the chance to win $25,000 only costs you $600 as a SHRM member or $650 as a non-SHRM member! You can't beat that kind of value- the average conference costs over $1000.

Register by clicking HERE!

1800 Duke Street, Alexandria, Virginia 22314 USA
Email Us | +1.703.548.3440 | shrm.org

General Options

Name:
Kerrie Joiner

Email:
kerrie@schodack.org

Company:
Town of Schodack

Confirmation Number:
KRNL9H94Y3J (needed to modify your registration)

Event Title:
2019 NYS SHRM Conference

Location:
Albany Capital Center

Albany, New York

USA

Date:
09/22/2019

Time:
9:00 AM

Current Registration Details

Kerrie Joiner

Registration Item

Registration Item	Cost
NYS SHRM Conference - SHRM Member Registration	$600.00

Sessions Selected

Date and Time	Session	Cost
09/22/2019 10:15 AM	How The Supreme Court is Shaping the Future of HR — LEGAL	
09/22/2019 12:45 PM	Conducting Lawful Investigations: Facing New Challenges, Refining Techniques, Avoid Common Pitfalls	
09/22/2019 2:15 PM	To Be or Not To Be, Exempt From Overtime — LEGAL	
09/23/2019 7:15 AM	Could Your Background Screening Process Put You In Hot Water?	
09/23/2019 10:30 AM	Engage Your Employees: Storytelling for HR With Metrics — STRATEGIC	
09/23/2019 2:15 PM	What Managers Can Do To Mitigate Litigation Risk (and What You Can Do To Help Them) — LEGAL	
09/23/2019 4:30 PM	Governmental Advocacy on the State and Federal Level	
09/24/2019 7:15 AM	Strategies for Recognizing & Engaging Employees	
09/24/2019 10:30 AM	Building a Future Toward a Healthy Workforce — INNOVATION	

Optional Items Selected

Optional Item	Cost
Attendee Orientation II Sun 3:30PM	$0.00 x 1 = $0.00
Breakfast Mon 8:00AM	$0.00 x 1 = $0.00
Keynote Mon 9:00AM	$0.00 x 1 = $0.00
Lunch in SC Mon 11:45AM	$0.00 x 1 = $0.00
Keynote Mon 12:45PM	$0.00 x 1 = $0.00
Breakfast Tue 8:00AM	$0.00 x 1 = $0.00
Keynote Tue 9:00AM	$0.00 x 1 = $0.00
Lunch Tue 11:45 AM	$0.00 x 1 = $0.00
Keynote Tue 1:00PM	$0.00 x 1 = $0.00
Close/Prizes/Bk Sign Tue 2:15PM	$0.00 x 1 = $0.00

Order Summaries

Order

Date	Type	Invoice #	Amt Ordered	Amt Paid	Amt Due
08/13/2019 9:18 AM ET	offline order	2019AL-082019-0426-0430	$600.00	$0.00	$600.00
Total:			$600.00	$0.00	$600.00

Payment Details/Cancellation Policy

Please send checks to :
NYS SHRM CONFERENCE
192 Benson Street
Albany, NY 12206

Cancellation Policy:
PARTICIPANT cancellations received in writing to [redacted] before August 10, 2019 will receive a full refund less a $100 administrative fee. After August 10, 2019, no refund is provided. Refunds are not processed until after the event.