PATENTED GEOMAT
WASTE WATER RECOVERY
THREE LAYER CONTAINMENT SYSTEM

TOP NON-SKID/DRAINAGE LAYER
GSE HD TEXTURED
ASTM D"5994"1505"6693"1004"1603"5596"

AS AN APPARATUS IS WASHED UPON THE GEOMAT, FLUID FLOWS OFF ONTO THE TOP NON-SKID LAYER. THE NON-SKID TEXTURE IS SAFE FOR WORKERS MEETING OSHA REQUIREMENTS AND CAN WITHSTAND THE HARSHEST OF CHEMICALS. THE FLUID FLOWS THROUGH THE 1/4" DRAINAGE HOLES. ANY PARTICLES OVER 1/4" REMAIN ON TOP OF THE LAYER TO PREVENT THEM FROM ENTERING THE FILTRATION SYSTEM.

MIDDLE CORRUGATED PLATE LAYERS
MARLEX POLYETHYLENE K306 BULK
ASTM D1238"1238"1505'

THE FLUID CONTINUES DRAINING THROUGH THE CORRUGATED MIDDLE LAYER PLATES. THIS INTERIOR SEPARATOR ALLOWS THE FLUID TO DRAIN THROUGH, WHILE ANY REMAINING PARTICLES SETTLE VIA TERMINAL VELOCITY WITHIN THE CORRUGATED PLATES. THE OIL DROPLETS INCREASE IN SIZE THEREBY SPEEDING THE GRAVITY SEPARATION PROCESS ACCORDING TO STOKES' LAW.* A WATER SEAL IS CREATED WITHIN THE SYSTEM PRIOR TO DISCHARGE. CONTINUING THE SETTLING & SEPARATION PROCESS.

10 X 20 3/4" (.063) = 12.6 CU FT TO TOP OF FILTERING SYSTEM OF GEOMAT.

WATER SEAL AREA: 12.6 CU FT = 94.849 US GALLONS. ALSO THE ZURN Z-1189 # 60

BOTTOM FLUID IMPERVIOUS LAYER
BLACK INDUSTRIAL POLYPROPYLENE 36 MILL
ASTM D751"D-413"D-751"D-5884*STD-15

THIS LAYER HAS A FILE SIDE TO HELP CONTINUE THE SETTLING PROCESS BY ALLOWING THE FLUID TO SETTLE INSIDE OF THE WATER SEAL. UPON MORE WATER BEING INTRODUCED INTO THE SYSTEM, IT BEGINS TO FLOW TOWARD THE DRAIN. THIS ACHIEVES MAXIMUM SETTLEMENT AND SEPARATION WITHIN THE WATER SEAL AND CORRUGATED PLATES.

THE INTERIOR OF THE WATER SEAL IS SLOW PITCHED, TO CREATE AND ENABLE A HOLDING PERIOD, PRIOR TO ENTERING THE INTERIOR DRAIN. THE FLUID SPREADS OUT IN THE WATER SEALS' (12.6 CU FT AREA DRAINING ROUGHLY 1/8" TO 1/4" PER FOOT) ALLOWING THE FLOW & SEPARATION TO OCCUR. THE FLUID THEN REMAINS IN THE SYSTEM / WATER SEAL AND CREATES OPTIMUM SEPARATION. AS MORE FLUID IS INTRODUCED IT CONTINUES TO FLOW THROUGH THE THREE LAYERS AND ULTIMATELY TO THE DRAIN / SEDIMENT BUCKET. ALL RESIDUAL WASTE TRAPPED AND CONTAINED IN THE LAYERS CAN BE REMOVED ACCORDING TO STATE, FEDERAL AND EPA GUIDELINES. THIS RESIDUAL WASTE WILL THEN BE MANIFESTED AND DISPOSED OF ACCORDING TO STATE, FEDERAL AND EPA GUIDELINES AND PICKED UP BY A LICENSED HAULER. THE SEDIMENT BUCKET CAN EASILY BE REMOVED AND CLEANED.

* BULK DENSITY IS NOT AN INTRINSIC PROPERTY OF A MATERIAL; IT CAN CHANGE DEPENDING ON HOW THE MATERIAL IS HANDLED (i.e.; GRAIN POURED IN A CYLINDER WILL HAVE A PARTICULAR BULK DENSITY. IF THE CYLINDER IS DISTURBED THE GRAIN PARTICLES WILL MOVE AND SETTLE CLOSER TOGETHER, RESULTING IN A HIGHER BULK DENSITY). FOR THIS REASON THE BULK DENSITY OF POWDERS IS USUALLY REPORTED BOTH AS "FREELY SETTLED" AND "TAPPED" DENSITY (TAPPED DENSITY REFERS TO THE BULK DENSITY OF THE POWDER AFTER A SPECIFIC COMPACTION PROCESS USUALLY INVOLVING VIBRATION OR FLOW THROUGH SETTLING CHAMBER). THIS IS ACHIEVED IN THE USE OF THE PARALLEL AND HORIZONTAL PLATE TECHNOLOGY OF THE GEOMAT TO MAXIMIZE SEPARATION.

GEOMAT SYSTEM MAINTENANCE

CLEANING SHOULD BE DONE ON A REGULAR BASIS, EITHER BEFORE OF AFTER SEDIMENT PLATES AND BUCKET PASSAGEWAY BECOME BLOCKED.
DEPENDING ON THE APPARATUS YOU ARE CLEANING, MAINTENANCE SCHEDULES WILL VARY. SIGNS OF NECESSARY MAINTENANCE WILL BE RESTRICTED WATER FLOW RATE OR VISUAL SOLIDS ATOP THE SURFACE.
IN THIS INSTANCE, REMOVE SOLIDS ON TOP OF MAT DISPOSING APPROPRIATELY AND CONTINUE THE CLEANING PROCESS BELOW.

* QUARTERLY THE SYSTEM SHOULD BE CHECKED FOR SOLIDS
* REMOVE FRONT BOLTS OF SYSTEM
* REMOVE FLAT STOCK OPPOSITE OF RAMP
* PULL THE TOP LAYER BACK
* PUL L THE MIDDLE LAYERS BACK ONE AT A TIME
* TAKE SHOP VAC AND REMOVE ALL THE SEDIMENT FROM BOTTOM AND MIDDLE LAYERS
* REMOVE GRATE IN SYSTEM DRAIN
* REMOVE SEDIMENT BUCKET
* PLACE STOP IN DRAIN
* AT THIS TIME SYSTEM CAN BE WASHED DOWN IF NEEDED
* TAKE SHOP VAC AND REMOVE ALL THE SEDIMENT AND WATER FROM BOTTOM LAYER AFTER FINAL RINSE
* PLACE ALL RESIDUAL WASTE IN APPROVED CONTAINERS FOR TRANSPORT BY A LICENSED HAULER
* MANIFEST TO BE KEPT UNDER STATE, FEDERAL & EPA GUIDELINES
* REMOVE STOP FROM DRAIN
* REINSTALL SEDIMENT BUCKET IN DRAIN
* REINSTALL THE TWO MIDDLE LAYERS IN SYSTEM
* REINSTALL TOP LAYER
* PLACE CLAMPS ON THE FLAT STOCK MAKING SURE THE HOLES LINE UP
* REINSTALL BOLTS AND TIGHTEN

THE AUTOMOBILE CLEANING PROCEDURE

THE AUTOMOBILE IS DRIVEN ON TO THE GEOMAT. WORKER EXITS AUTO AND STANDS UPON THE NON-SKID WORK SURFACE, WHICH MEETS OSHA STANDARDS. WORKER BEGINS THE CLEANING PROCESS OF AUTO, WHICH INCLUDES THE USE OF A LOW FLOW PRESSURE WASHER OR HAND HELD HOSE WITH LOW FLOW HEAD AND AN AUTOMATIC SHUT OFF. ENVIRONMENTALLY FRIENDLY CLEANERS ARE USED. WHEN THE AUTO WASH IS COMPLETE, WORKER DRIVES AUTO OFF OF THE GEOMAT.

NO ENGINE WASHING, DEGREASING NOR UNDERCARRIAGE WASHING SHALL TAKE PLACE ON GEOMAT SYSTEM.

GEOMAT
WASTEWATER
RECOVERY SYSTEM
UNITED STATES
PATENT # 5738139

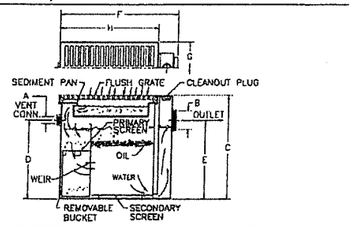
10 X 20 MAT SIZE = 10 X 20 X 2" (.167) = 33.4 CU FT TO TOP OF ANGLE *SYSTEM 12' OR WIDER CAN BE ACHIEVED WITH A HEAT SEAL WELD UP TO 80' IN LENGTH
33.4 CU FT = 249.849 US GALLONS

10 X 20 X 3/4" (.063) = 12.6 CU FT TO TOP OF FILTERING SYSTEM OF MAT
12.6 CU FT = 94.849 US GALLONS

INDUSTRY STANDARD HAND CAR WASH WITH STANDARD WATER HOSE. AUTO SHUT OFF AND LOW FLOW HEAD USES 5.5 - 10 US GALLONS OF WATER PER CAR.
LOW FLOW PRESSURE WASHERS USE 6 US GALLONS OF WATER PER CAR.

15 X 6 WASHES PER HOUR = 90 US GALLONS LESS WHAT HAS FILTERED AND DRAINED.

ZURN Z-1189 OIL & SEDIMENT INTERCEPTOR
Operation and Maintenance Instructions



Size	Sludge Capacity Lbs. [Kg]	Gals Open Area [cm2]	No. of Inlets	No. of Outlets	Approx. Wt. Lbs. [Kg]	A Vent Size	B Pipe Size	Dimension in Inches C	D	E	F	G	H
12	12 [5]	49 [316]	1	1	70 [32]	—	2 [50]	15 [381]	—	10 1/2 [267]	17 1/8 [435]	11 3/8 [289]	12 3/8 [314]
60	60 [27]	131 [845]	1	1	175 [79]	2 [51]	4 [75]	25 1/4 [641]	19 1/4 [489]	17 5/8 [448]	29 1/8 [740]	13 3/8 [321]	24 3/8 [619]
100	100 [45]	262 [1690]	2	1	280 [127]	2 [51]	4 [75]	33 [838]	27 [686]	22 [559]	29 1/8 [740]	24 3/8 [619]	24 3/8 [619]
200	200 [91]	393 [2535]	3	1	370 [168]	2 [51]	4 [75]	33 [838]	27 [686]	22 [559]	41 1/8 [1044]	24 3/8 [619]	36 3/8 [834]
300	300 [136]	524 [3382]	4	1	460 [209]	2 [51]	4 [75]	33 [838]	27 [686]	22 [559]	53 1/8 [1349]	24 3/8 [619]	48 3/8 [1229]

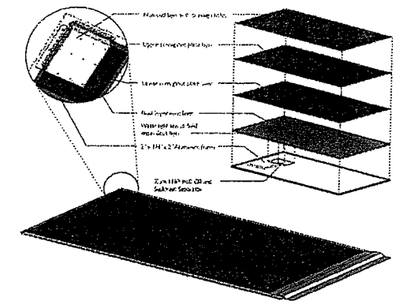
SIZING
The sizing of this interceptor is generally based upon the expected amount of sediment and solid waste to be retained. (See chart above for sludge capacity). Secondly, sizing will determine the frequency for which cleaning shall be required. Larger units will handle greater volumes of waste between cleanings. All units are made with a standard pipe size outlet and are capable of handling drainage volumes standard to their respective pipe size.

DESIGN
The Zurn Z-1189 Oil and Sediment Interceptor for garage and industrial floor drainage applications is designed to retain mud, sand, sediment, greasy sludge or any other solids entering a floor drain. In addition to any oil/grease laden waste material. This is accomplished through the principal of gravity and flotation separation. The sediment pan retains greasy sludge and solids. The removable bucket/weir will also retain solids and act to stop water turbulence so oil and grease can separate from the water, and be retained in the main separation chamber.

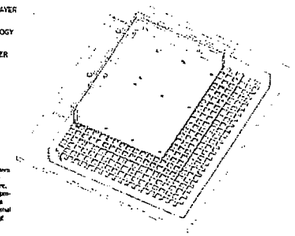
OPERATION
The waste water flows through the grate into the sediment pan, then down into the removable bucket, exiting through the weir at back of the bucket into the main separating chamber, down through the secondary screen, into the cleanout chamber, then exits the interceptor to the sanitary drain system.

MAINTENANCE
Cleaning should be done on a regular basis, either before or after sediment pan passageway becomes blocked. Remove the grate, sediment pan and bucket, and clean out all debris. Skim oil/grease from top of water or pump contents out. After cleaning all materials should be disposed of properly. Efficiency of operation is directly related to the level of maintenance. Cleaning should be done regularly to avoid oil/sludge from passing through the unit.

Form # 1160 — Date 9/24/96
C.N. No. 78588 — Rev. 13

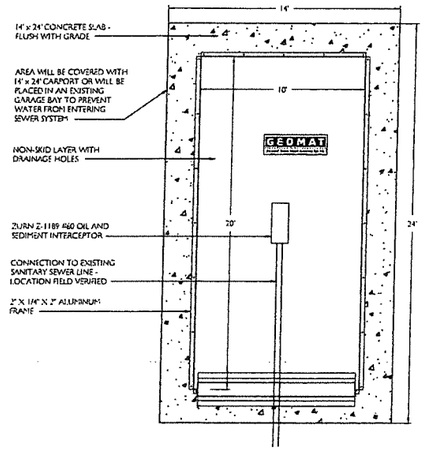


FRAME
DRAINAGE HOLES
NON-SKID LAYER
CORRUGATED PLATE TECHNOLOGY
FLUID IMPERVIOUS LAYER



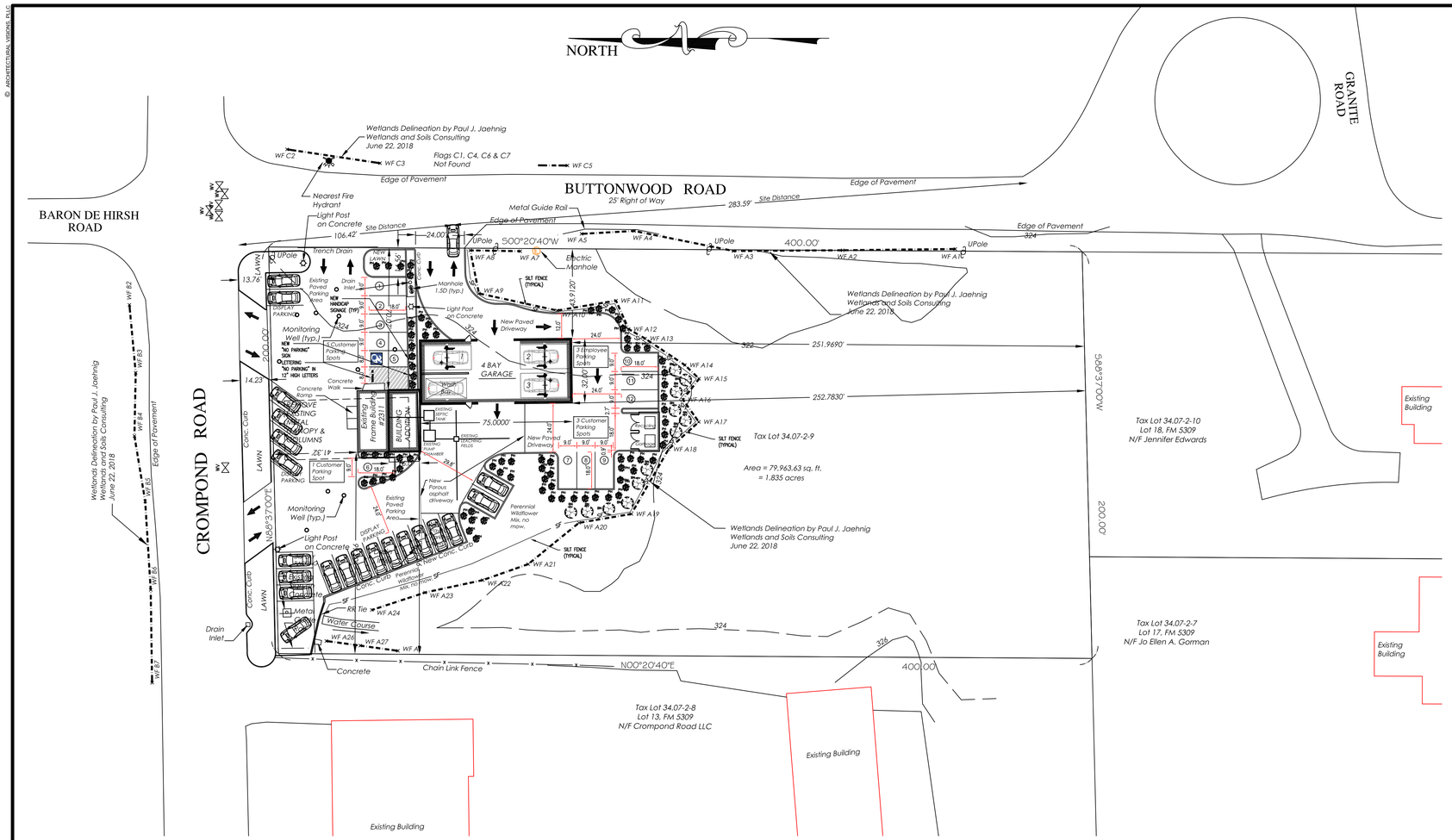
Geomat patent retainer oil/water separators use parallel corrugated plate technology that causes oil droplets to intercept at low, thereby speeding the gravity separation process according to Stokes' Law. We offer a unique inclined plate design with an internal structure of interconnecting flutes having many crossing points between adjacent plates, so the oil water mixture flows through the separator, new droplets co-alesce with coalesced droplets to form larger droplets. Since the Stokes' Law calculations presume a pure velocity flow, this ensures no future separation in the Geomat waste water recovery system.

GEOMAT
Patented Waste Water Recovery System

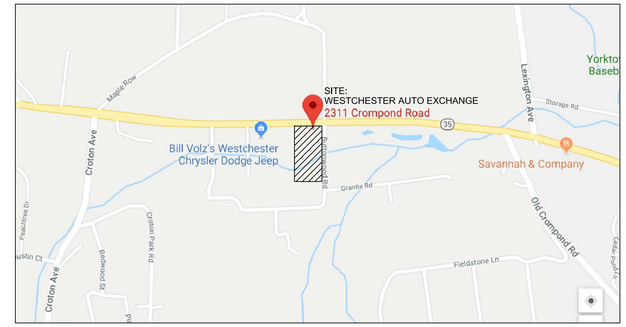


1 EXTERIOR GEOMAT SYSTEM
NTS

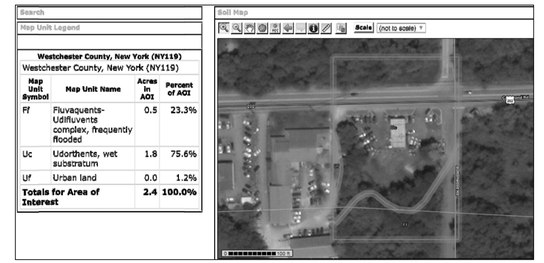
GEOMAT
SPECIFICATION SHEET



1 SITE PLAN
1" = 30'-0"



2 LOCATION PLAN



Map Unit Legend

Westchester County, New York (NY119)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ff	Fluvaquents-Udifluvents complex, frequently flooded	0.5	23.3%
Uc	Udorthents, wet substratum	1.8	75.6%
Uf	Urban land	0.0	1.2%
Totals for Area of Interest		**2.4**	**100.0%**

3 SOIL TYPES

4 EXISTING SIGN (TO REMAIN)

The Department Head signatures indicate that this drawing or set of drawings is consistent with the Planning Board resolution of approval and with the general requirements and policies of the Town of Cortlandt for which the Department Head is responsible. The project design including all public health and safety considerations are solely responsibility of the design professional who has signed and sealed the drawings.

Reviewed by the Department of Environmental Services

_____
Jeff Coleman, P.E., Director

Reviewed by the Department of Technical Services

_____
Michael Preziosi, P.E., Director

Approved by Resolution No. _____ of the Planning Board of the Town of Cortlandt, New York on the _____ day of _____, 20__ subject to all requirements and conditions of said Resolution. Any change, erasure, modification or revision except the addition of signatures, on this Plat or Site Plan, after the above date, shall void this approval.

Signed this _____ day of _____, 20__ by

_____
chairman of the Planning Board

PLANTING SCHEDULE

SYMBOL	COMMON NAME BOTANICAL NAME	SIZE	ROOT	QUANTITY
PH	BLACK DWARF FOUNTAIN GRASS PENNNISETUM ALOPECUROIDES MOUDRY	3 GAL	CONT	76
BN	RIVER BIRCH BETULA NIGRA (3–TRUNK MAXIMUM)	8 GAL	CONT	12

NOTE:

NO WORK WILL OCCUR WITHIN THE NYSDOT ROW.

NO CONSTRUCTION WORK WILL DONE IN THE WETLANDS. ALL WORK CAN BE COMPLETED WITHOUT CROSSING THE LINE OF WETLANDS DELINEATION.

EXISTING POLE SIGN AND LIGHT POLES TO REMAIN.

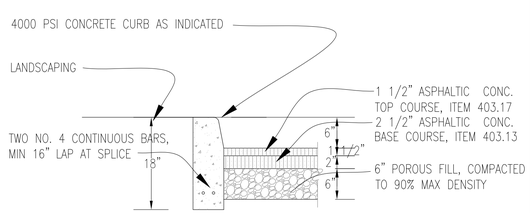
THE SUBJECT WETLAND IS A NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) REGULATED WETLAND.

THE APPLICANT INTENDS TO WORK WITH THE TOWN DEPARTMENT OF ENVIRONMENTAL SERVICES, THE NYSDEP AND EAST OF HUDSON FUND TO COMPLETE A PHOSPHOROUS REDUCTION PROJECT IN THE WETLAND.

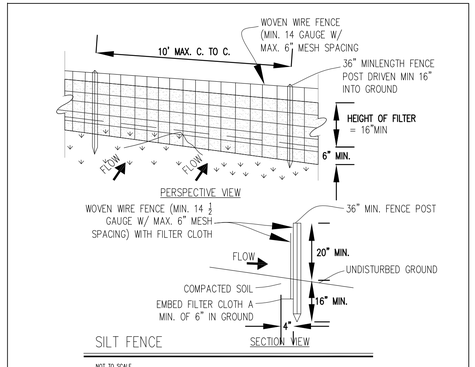
THERE IS NO CHANGE TO THE EXISTING STORMWATER.

DISPLAY CARS FOR SALE ARE SHOWN IN THE FRONT AND SIDE OF THE PROPERTY.

THERE WILL BE NO AUTO BODY WORK DONE ON THE PREMISES.



CURB AND PAVING DETAIL



CONSTRUCTION SPECIFICATIONS:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BUILGES" DEVELOP IN THE SILT FENCE.

SITE DATA NOTES

NAME OF PROJECT / OWNER PROJECT ADDRESS TELEPHONE NO. TAX MAP #:	WESTCHESTER AUTO EXCHANGE 2311 CROMPOND ROAD CORTLANDT MANOR, NY 10567 914-402-4959 34.07-2-9		
ZONING DISTRICT USE	HC ZONE AUTOMOBILE SALES AND SERVICE		
ZONING DATA			
ITEM	REQUIRED – ALLOWED	PROPOSED	VARIANCE REQUIRED
AREA	.459 ACRES (20,000 SF)	1.835 ACRES (79,963.63 SF)	NO
BUILDING COVERAGE	25%	4.5%	NO
FRONT YARD (NORTH)	30 FT	41.32 FT CROMPOND ROAD	NO
FRONT YARD (EAST)	30 FT	43.91 FT BUTTONWOOD ROAD	NO
SIDE YARD	25 EA	99.82 FT	NO
REAR YARD	25 FT	251.92 FT	NO
BUILDING HEIGHT	35 FT, 2 1/2 STORIES	25.75 FT, 1 STORY	NO
LANDSCAPE	25%	75.5%	NO
LANDSCAPE BUFFER @ STREET	25 FT	13.76' FT AT CROMPOND ROAD LAWN TO ST.	NO – EXISTING
LANDSCAPE BUFFER @ STREET	25 FT	14.56 FT AT BUTTONWOOD ROAD LAWN TO ST.	NO –(EXISTING ZERO)
PARKING	1 PER 300 SF. 3300 SF BUILDING/300 =11 PARKING SPACES	12 PROVIDED, ONE IS HANDICAPPED ACCESSIBLE. 9 SPOTS FOR CUSTOMERS AND 3 SPOTS FOR EMPLOYEES.	NO

* NOTE: THE PLANNING BOARD PREVIOUSLY GRANTED SITE PLAN APPROVAL FOR THE USED CAR LOT (PB–10–07) BY PLANNING BOARD RESOLUTION 4–08 ON FEBRUARY 5, 2008. THE EXISTING CURB CUTS AND LANDSCAPE AREAS ARE TO REMAIN UNTOUCHED ON CROMPOND ROAD AND AS WELL AS THE EXISTING CURB CUT AT BUTTONWOOD ROAD. WE HAVE ADDED A LANDCAPE ISLAND ALONG BUTTONWOOD ROAD AND HAVE MOVED PARKING INTO THE SITE BY 14.56 FT.

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2 MUSCOOT ROAD NORTH
MAHOPAC NY, 10541
JOEL.GREENBERG@ARCH-VISIONS.COM
P: 845-628-6613
F: 845-628-2807

PROJECT:
WESTCHESTER AUTO EXCHANGE

PROJECT ADDRESS
2311 CROMPOND RD
CORTLANDT MANOR, NY 10567

MAILING ADDRESS
2311 CROMPOND RD
CORTLANDT MANOR, NY 10567

TAX MAP NO. 34.07-2-9

ARCHITECTURAL SITE PLAN

ISSUANCE

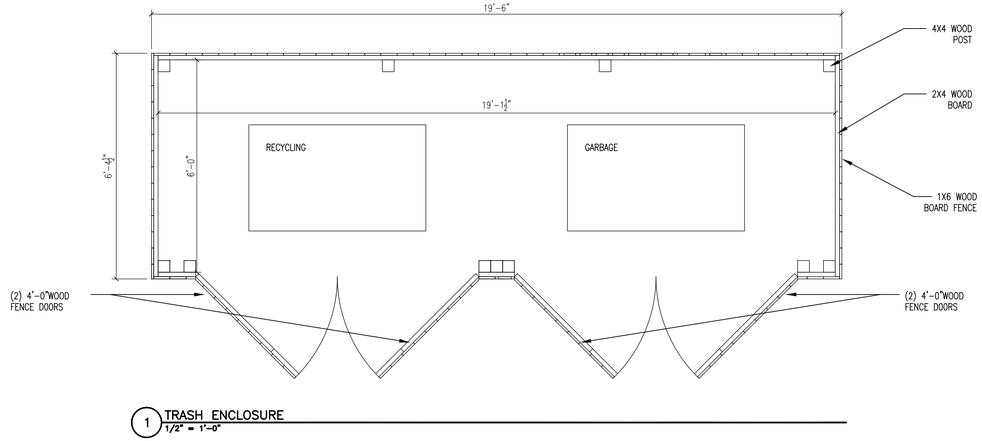
ISSUANCE	DATE
FOR REVIEW	3/14/2018
FOR REVIEW	5/15/2018

SCALE
AS NOTED

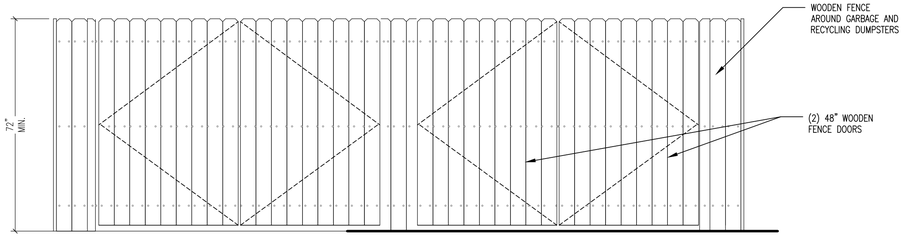
DRAWN BY/CHKD BY
MLS / — / JLG

PROJECT NO.
01-19-011

AS-100



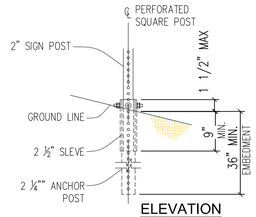
1 TRASH ENCLOSURE
1/2" = 1'-0"



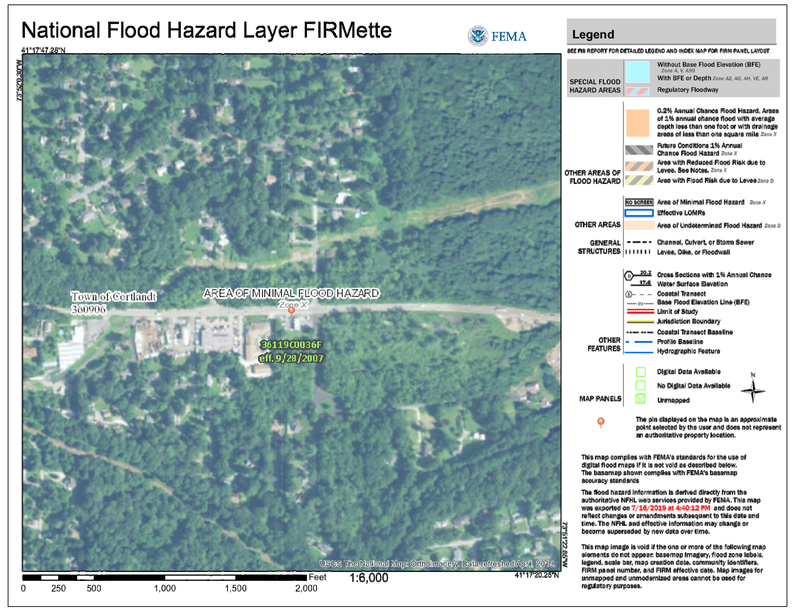
2 TRASH ENCLOSURE ELEVATION
1/2" = 1'-0"

3 HANDICAP PARKING SIGN

4 SIGN FOR HANDICAP PARKING AISLE



5 HANDICAP PARKING SIGN MOUNTING



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TAX MAP NO. 34.07-2-9

DETAILS & TRASH ENCLOSURE

ISSUANCE

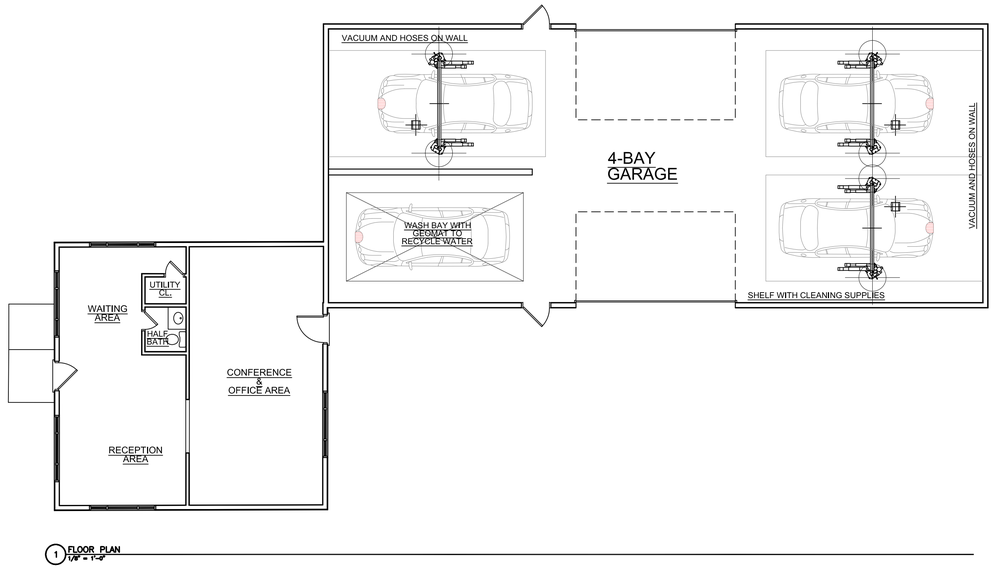
ISSUANCE	DATE
FOR REVIEW	7/17/2019

SCALE
AS NOTED

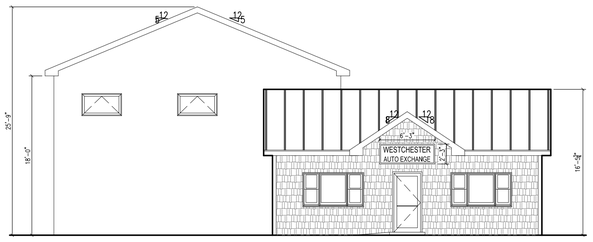
DRAWN BY/CHKD BY
MLS / --- /JLG

PROJECT NO.
01-19-011

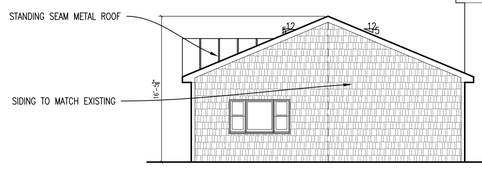
AS-101



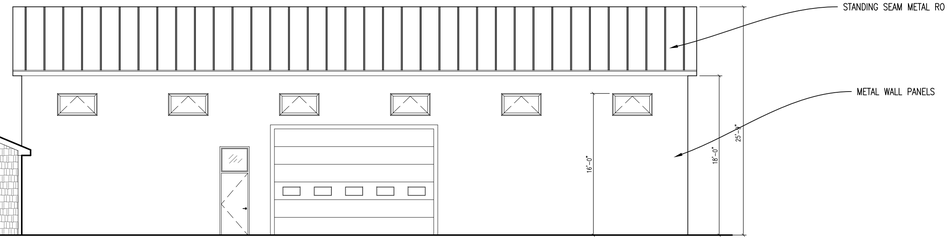
1 FLOOR PLAN
1/8" = 1'-0"

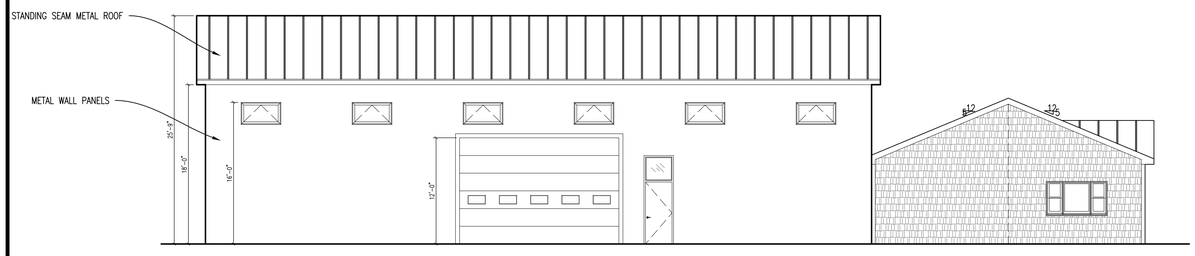


1 FRONT ELEVATION
1/8" = 1'-0"

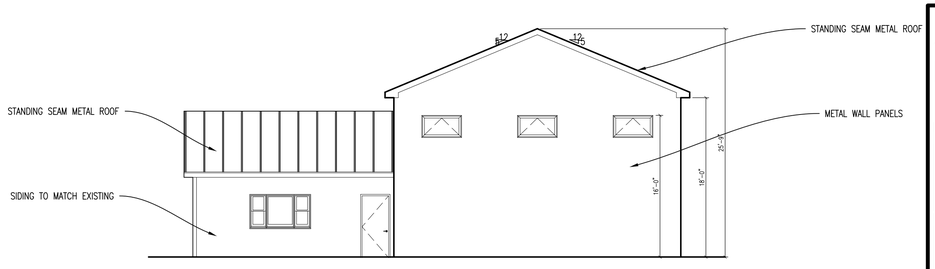


2 RIGHT SIDE ELEVATION
1/8" = 1'-0"





2 LEFT SIDE ELEVATION
1/8" = 1'-0"



1 REAR ELEVATION
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MAILING ADDRESS
2311 CROMPOND RD
CORTLANDT MANOR, NY 10567

TAX MAP NO. 34.07-2-9

PLANS & ELEVATIONS

ISSUANCE

FOR REVIEW	7/17/2019

SCALE
AS NOTED

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