

Deep Soils Testing Results

<u>_</u>					
TEST HOLE #	1	2	3	4	5
TESTING DATE:	9-30-16	9-30-16	9-30-16	9-30-16	9-30-16
TESTER:	RTS	RTS	RTS	RTS	RTS
DEEP TEST SOIL LOG (NO WATER OR ROCK UNLESS SO NOTED)	O'TOPSOIL I'	O' TOPSOIL I' GRAVELLY 2' HEAVY SILT LOAM 3' 4' 7754"/7 5' MOTTLED SILT 6' LOAM W/ SHALE FRAGS 7' \$ RIPABLE 8' SHALE	O' TOPSOIL GRAVELLY SILT LOAM WI CLAYEY COBBLES & BOULDERS TOPSOIL TO	O'	O'
NOTES:					

Percolation Testing Results

TEST HOLE #		1	2	3
TESTING DATE:		2-26-18	2-26-18	2-26-18
DEPTH / TESTER:		24" - RTS	24" - RTS	24" - RTS
PERCOLATION TEST RESULTS CALL TESTING COMPLETED WITH A STOPWATCH & ELAPSED TIMES ARE IN MINUTES)	RUN I ELAPSED TIME:	8:05	8:03	2:38
	RUN 2 ELAPSED TIME:	9:22	9:04	3:16
	RUN 3 ELAPSED TIME:	9:59	9:40	3:34
	RUN 4 ELAPSED TIME:			
	RUN 5 ELAPSED TIME:			
	RUN 6 ELAPSED TIME:			
PE.	RUN 7 ELAPSED TIME:			
	STABILIZED RATE:	9:59	9:40	3:34

Sewage Disposal System Requirements

* S.E.I.D. = SHALLOW "ELJEN" IN-DRAIN SYSTEM

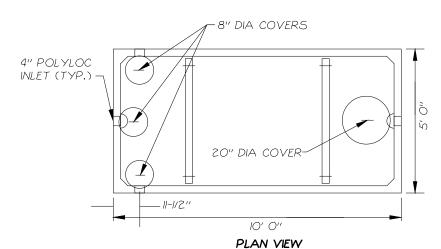
GEOTECHNICAL FABRIC (SEE CROSS-SECTION VIEW) -

- "ELJEN" IN-DRAIN UNITS

			-		•			
DESIGN .OW RATE (GPD)	SEPTIC TANK SIZE (GALLONS)	DISTRIBUTION BOX MODEL NUMBER	TYPE OF SYSTEM *	DESIGN STABILIZED PERCOLATION RATE (MIN.)	MIN. LENGTH OF ABSORPTION TRENCH (L.F.)	PROPOSED LENGTH OF ABSORPTION TRENCH (L.F.)	SEWAGE DISPOSAL SYSTEM DESIGN	MAX. PERMITTED FLOW RATE (GPD)
600	1,250	DB-9	S.E.I.D.	8-10	IIZ	120	2 ROWS @ 60 L.F.	648

FINAL GRADE 3" WALLS 3" MIN. SAND OR PEA GRAVEL

CROSS SECTION VIEW



I. ALL PIPE JOINTS (INLET & OUTLET PIPES) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

2. INLET BAFFLE CAN BE RELOCATED TO THE SIDE.

- I" (MIN.) WATERLINE, PIPE TO CONFIRM TO ANSI / NSF 61 \$

PROPOSED BUILDING OR

DWELLING

l tank

PROPOSED SEWAGE DISPOSAL SYSTEM*

-DISTRIBUTION

BOX

DISTRIBUTOR

SEWER RESERVE AREA

* THE 'GENERIC PLOT PLAN' IS INTENDED FOR ILLUSTRATION PURPOSES ONLY. FOR SPECIFIC DESIGN

INFORMATION ON THE PROPOSED SEWAGE DISPOSAL SYSTEM, SEE THE SEWAGE DISPOSAL SYSTEM

REQUIREMENTS TABLE, DETAILS, AND NOTES ON THIS SHEET.

4" SCH. 40 OR

CAST IRON SOLID

WALL PIPE AT 1/4"

PER FOOT (MIN.)

SLOPE

4" PVC SOLID

WALL PIPE AT 1/8"

SLOPE

4" PERFORATED DISTRIBUTOR

SEWER RESERVE AREA

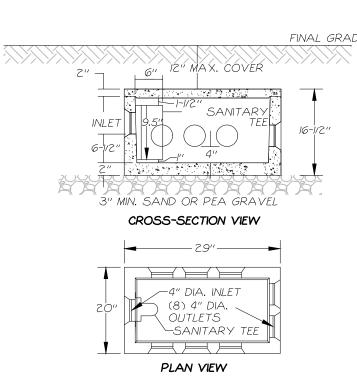
PER FOOT (MIN.)

ROPOSEL WELL @ 3. IF COVER EXCEEDS 12", A RISER MUST BE USED TO ALLOW ACCESS.

CONCRETE MINIMUM STRENGTH: 4.000 P.S.I. AT 28 DAYS STEEL REINFORCEMENT: 6" X 6" XIO GA. STEEL WIRE MESH #4 REBAR AROUND PERIMETER CONSTRUCTION JOINT: SEALED WITH BUTYL RUBBER CEMENT

Typical Precast 1,250 Gallon Concrete Septic Tank

AS MANUFACTURED BY "WOODARDS CONCRETE PRODUCTS, INC.", BULLVILLE, N.Y. MODEL ST-1250 (OR APPROVED EQUAL) NOT TO SCALE



DISTRIBUTION BOX NOTES: I) FLOW EQUALIZERS SHALL BE USED TO ENSURE EQUAL FLOW TO EACH OUTLET PIPE. YEARLY CHECKING AND ADJUSTMENT IS

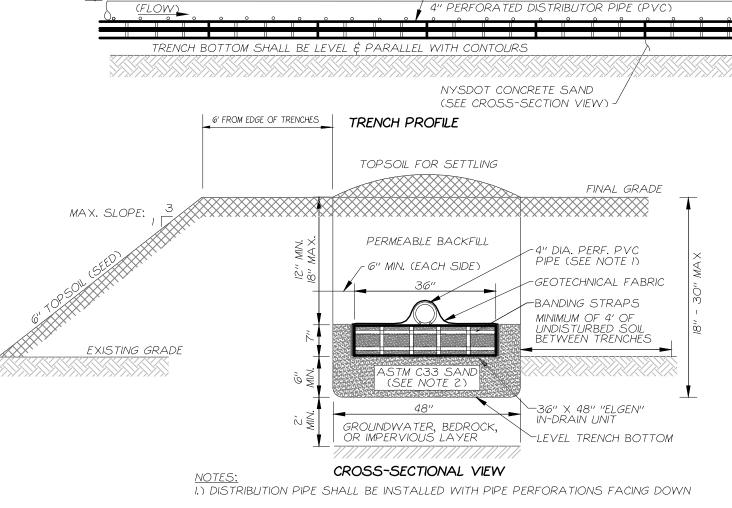
2) ALL PIPE JOINTS (INLET \$ OUTLET) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

3) FLOW EQUALIZERS MUST BE USED.

4) OUTLET INVERTS SHALL BE SET AT THE SAME ELEVATION. 5) OUTLETS MUST BE USED IN A MANNER TO ALLOW ACCESS TO THE NECESSARY NUMBER OF OUTLETS FOR THE EXPANSION

Typical Precast Concrete Distribution Box

AS MANUFACTURED BY "WOODARDS CONCRETE PRODUCTS, INC.", BULLVILLE, N.Y." MODEL DB-9 (OR APPROVED EQUAL) NOT TO SCALE



EARTH BACKFILL

FINAL GRADE TOPSOIL

2.) "ELJEN" SAND SHALL MEET ALL THE SPECIFICATIONS FOR ASTM C33 SAND AS FOLLOWS:

	PERCENT PASSING BY WEIGHT		
SIEVE SIZE	MINIMUM	MAXIMUM	
3/8"	100		
NO.4	95	100	
NO.8	80	100	
NO.16	50	85	
NO.30	25	60	
NO.50	5	30	
NO.100	0	10	
NO.200(WET)	0	5	

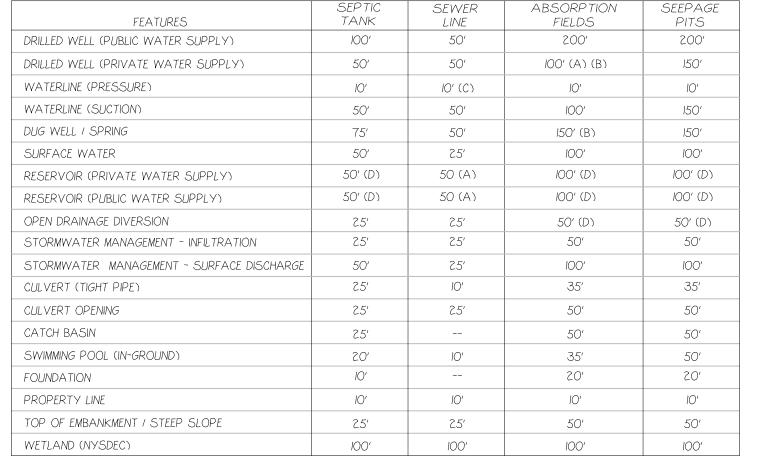
3.) DO NOT INSTALL TRENCHES IN WET SOIL. TRENCH SIDES AND BOTTOMS SHALL BE RAKED PRIOR TO INSTALLATION OF SAND.

4.) THE END OF EACH LATERAL SHALL BE CAPPED.

5.) LATERALS SHALL BE SLOPED I/16" - 1/32" PER FOOT FOR GRAVITY SYSTEMS, LATERALS SHALL BE INSTALLED LEVEL FOR PUMPED OR DOSED SYSTEMS.

6.) LATERALS SHALL BE INSTALLED 8 FEET ON CENTER, MINIMUM.

Shallow "Eljen" In-Drain Absorption Trench Detail



(A) IF THE ABSORPTION FIELD IS LOCATED IN GRAVEL SOILS, THEN 200; SEPARATION.

THE TOE OF THE SLOPE OF THE FILL.

(B) WHEN WASTEWATER TREATMENT SYSTEMS ARE LOCATED UP-GRADIENT AND IN THE DIRECT PATH OF SURFACE RUNOFF TO A WELL, THE CLOSEST PART OF THE SYSTEM SHOULD BE AT LEAST 200' AWAY FROM THE WELL.

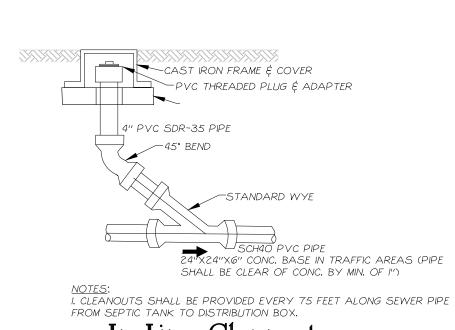
(C)WATER (PRESSURE) AND SEWER LINES MAY BE IN THE SAME TRENCH OF WATER LINE IS PLACED ON AN UNDISTURBED BENCH OR SHELF SO THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18" HIGHER THAN THE TOP OF THE SEWER MAIN, AND THE SEWER MAIN IS NOT SUBJECT TO SETTLING, VIBRATION, SUPERIMPOSED LOADS, OR

(C) IF BOTTOM OF DRAIN IS ABOVE FINISHED GRADE AT LEACHING FACILITY; OTHERWISE 50'.

(D) REFER TO LOCAL WATERSHED RULES AND REGULATIONS FOR POSSIBLE SUPERSEDING SPECIFICATIONS. (F) FOR ALL SYSTEMS INVOLVING THE PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM

Minimum Separation Distances From Existing Or Proposed Features

AS PER NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION "DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS", PUBLISHED MARCH 5, 2014



In Line Cleanout

ENGINEER'S COMMENTS

REVISION

ODATE

LAWRENCE MARSHALL PE #087107

'UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY

MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED

SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF

"ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY

MAP MARKED WITH THE LAND SURVEYORS EMBOSSED SEAL

CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS

SURVEY WAS PREPARED IN ACCORDANCE WITH THE

EXISTING CODE OF PRACTICE FOR LAND SURVEYORS

ADOPTED BY THE NEW YORK STATE ASSOCIATION OF

PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS

HALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR

ISTITUTIONS FOR WHOM THE SURVEY WAS PREPARED,

CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL

INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR

THE NEW YORK STATE EDUCATION LAW.'

ASSIGNS, OR SUBSEQUENT OWNERS."

SHALL BE CONSIDERED VALID, TRUE COPIES."

General Notes:

1) PIPE JOINTS TO BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

2) ALL 4" OUTLET PIPES (SOLID WALL) LEAVE DISTRIBUTION BOX AT SAME ELEVATION ON A MINIMUM SLOPE OF 1/8" PER FOOT UP TO A DISTRIBUTOR LATERAL.

3) SEWAGE DISPOSAL SYSTEMS LOCATED OF NECESSITY UPGRADE IN THE GENERAL PATH OF DRAINAGE TO A WELL MUST BE SPACED 200' OR MORE AWAY.

4) NO DRIVEWAY, ROADWAY, PARKING AREA OR ABOVE GROUND SWIMMING POOL IS TO BE CONSTRUCTED OVER ANY PORTION OF THE SEWER SYSTEM. HEAVY EQUIPMENT SHALL BE KEPT OUT OF THE ABSORPTION FIELD AREA.

6) ALL TREES TO BE CUT & REMOVED FROM SEWAGE DISPOSAL AREA IN A MANNER THAT WILL NOT DISTURB THE VIRGIN SOIL

5) ALL DISTRIBUTOR LINES (PERFORATED) SHALL BE OF EQUAL LENGTH.

7) MAXIMUM GROUND SLOPE OF TILE FIELD AREA SHALL NOT EXCEED 15%.

8) NO BASEMENT FIXTURES ARE PERMITTED WITHOUT A SPECIAL DESIGN FOR SEWAGE DISPOSAL.

9) NO COMPONENT PART OF ANY SEWAGE DISPOSAL SYSTEM SHALL BE LOCATED OR MAINTAINED WITHIN 100' OF ANY SPRING, RESERVOIR, BROOK, MARSH OR ANY OTHER BODY OF WATER.

10) NO ROOF, CELLAR OR FOOTING DRAINS ARE TO BE DISCHARGED IN THE SEWAGE DISPOSAL SYSTEM.

II) FLOW EQUALIZERS SHALL BE USED FOR ALL SEWAGE DISPOSAL SYSTEMS.

IZ) SLOPE BETWEEN SEPTIC TANK OR PUMPING CHAMBER AND THE HOUSE SHALL BE POSITIVE AND UNINTERRUPTED, AS TO ALLOW SEPTIC GASSES TO DISCHARGE THROUGH THE STACK VENT.

13) THE SEWER PIPE RUNNING FROM THE HOUSE TO THE SEPTIC TANK MUST BE LAID ON SUITABLY COMPACTED EARTH OR VIRGIN SOIL WITH THE FIRST WATERTIGHT JOINT LOCATED AT LEAST 3' FROM THE HOUSE. THE PIPE SHALL BE SCH 80 PVC OR CAST

14) THE DESIGN AND LOCATION OF SANITARY FACILITIES (WELL, SEPTIC TANK, AND LEACH FIELD) SHALL NOT BE CHANGED. ANY RELOCATION OF THE SEPTIC SYSTEMS OR WELLS SHOWN, TO AREAS OTHER THAN AS SHOWN ON THE APPROVED PLANS, MUST BE RESUBMITTED AND APPROVED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH.

15) ALL WELLS AND SEPTIC SYSTEMS THAT IMPACT SEPARATION DISTANCES FOR THE PROPOSED WELLS AND SEPTIC SYSTEMS ARE SHOWN ON THE PLANS. WELLS AND SEPTIC SYSTEMS WERE LOCATED WITHIN 300' WHEREVER POSSIBLE.

16) THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS. 17) HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION, EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDUE

18) THIS SYSTEM WAS NOT DESIGNED TO ACCOMODATE GARBAGE GRINDERS, WATER CONDITIONERS, OR JACUZZI TYPE SPA TUBS OVER 100 GALLONS. AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT

COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN LOAD WAS

19) SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.

20) DISTRIBUTION BOXES SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY. 21) A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER (OR OTHER DESIGN PROFESSIONAL AS ALLOWED BY THE NYS EDUCATION DEPARTMENT) SHALL INSPECT THE SANITARY FACILITIES (WATER SUPPLY AND SEWAGE DISPOSAL FACILITIES) AT THE TIME OF CONSTRUCTION. PRIOR TO OCCUPANCY OF THE DWELLING, THE ENGINEER SHALL CERTIFY TO THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN SEALED AND TESTED FOR WATER TIGHTNESS. A COPY OF THE NYSDEC WELL COMPLETION REPORT MUST ALSO BE PROVIDED.

22) THE OWNER/APPLICANT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES.

23) THE EXISTING LEACH FIELD SHALL BE REMOVED IN ITS ENTIRETY AND BACKFILLED WITH SOILS SIMILAR TO NATIVE MATERIAL. BACKFILL SHALL BE LIGHTLY COMPACTED TO BE SIMILAR TO THE COMPACTION OF NATIVE SOILS. THE EXISTING LEACH FIELD SHALL BE REMOVED PRIOR TO THE INSTALLATION OF THE NEW LEACH FIELD.

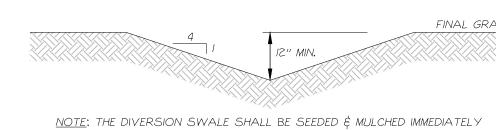
Design Flow Rate & Tank Sizing

SHOPPING CENTER: O.I GPD/SQUARE FOOT * 0.8 (WATER SAVING FIXTURE CREDIT) = 0.08 GPD/SF EXISTING BUILDING: 5,048 SF * 0.08 GPD/SF = 403.8 GPD DESIGN FLOW = 600 GPD

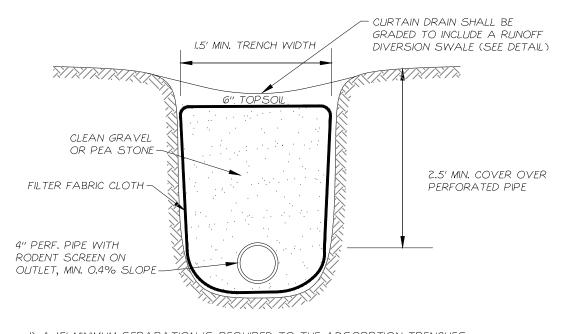
2.) SEPTIC TANK SIZING CRITERIA IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS

FOR DAILY FLOW (Q) UNDER 5,000 GPD: TANK SIZE = 1.5 % Q 900 GALLONS = 600 GPD * 1.5

USE 1,250 GALLON SEPTIC TANK



FOLLOWING CONSTRUCTION Diversion Swale Detail



I) A 15' MINIMUM SEPARATION IS REQUIRED TO THE ABSORPTION TRENCHES. 2) CURTAIN DRAIN SHALL PROVIDE A MINIMUM OF 48" OF USEABLE FILL THROUGHOUT THE SYSTEM.

3) THE CURTAIN DRAIN SHALL BE DUG TO THE DEPTH SPECIFIED ON THE PLAN. PRIOR TO BEING BACKFILLED WITH STONE AND TOPSOIL, THE CONTRACTOR SHALL CONTACT A N.Y.S. LICENSED ENGINEER FOR INSPECTION AND APPROVAL

Curtain Drain Detail

Sewage Disposal System Details for Lake Station Plaza, LLC

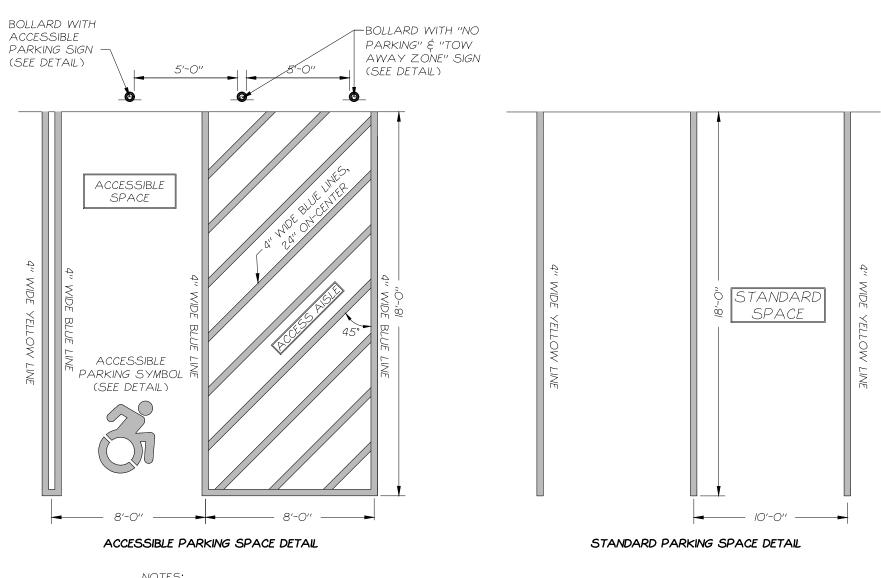


RECORD OWNER: LAKE STATION PLAZA LLC SECTION 17. BLOCK I. LOT IOI

OWN OF CHESTER COUNTY OF ORANGE STATE OF NEW YORK ATE: 11-21-2017

SCALE: I" = 20' DRAFTED BY: KMW PROJECT 4266

P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

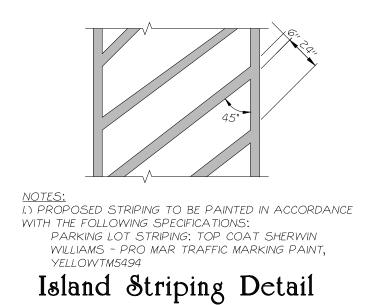


I.) ALL ACCESSIBLE RAMP AND ACCESS AISLES SHALL MEET ALL CURRENT CODES AND ADAAG REGULATIONS. 2.) PROPOSED ACCESS RAMP SHALL CONSIST OF COLORED TOOLED/SERRATE SLIP RESISTANT SURFACING AND/OR TACTILE WARNING DEVICE AS REQUIRED BY AMERICANS WITH DISABILITIES ACT ACCESSBILITY GUIDELINES AND CODE

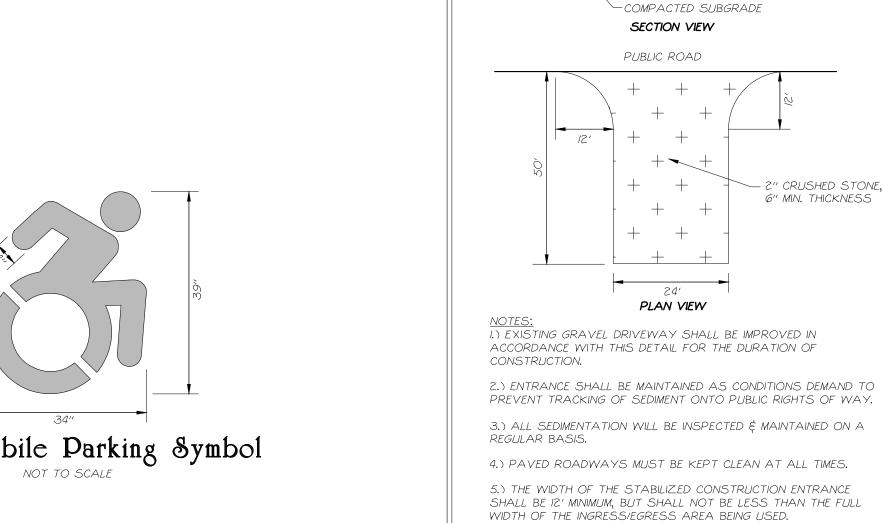
3.) PROPOSED STRIPING TO BE PAINTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS: CURBING & BOLLARDS: TWO (2) COATS SHERWIN WILLIAMS - KEM 4000 ACRYLIC ALKYD ENAMEL, SAFETY PARKING LOT STRIPING & WHEELSTOPS: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, YELLOWTM5494 ACCESSIBLE STRIPING & DETAIL: TOP COAT SHERWIN WILLIAMS - PRO MAR TRAFFIC MARKING PAINT, "H.C." BLUE 4.) ALL CURBING LESS THAN 6" HIGH SHALL BE PAINTED IN KIND WITH THE BOLLARDS.

5.) THE MAXIMUM SLOPE ACROSS THE ACCESIBLE SPACES AND ACCESS AISLES SHALL BE 2.0%.

Typical Parking Space Details







"NO PARKING"

SIGN DETAIL

- 2" CRUSHED STONE, 6" MIN. THICKNESS

Stabilized Construction

Entrance Detail

OR APPROVED EQUAL)

- FILTER FABRIC (TREVIRA #1127,

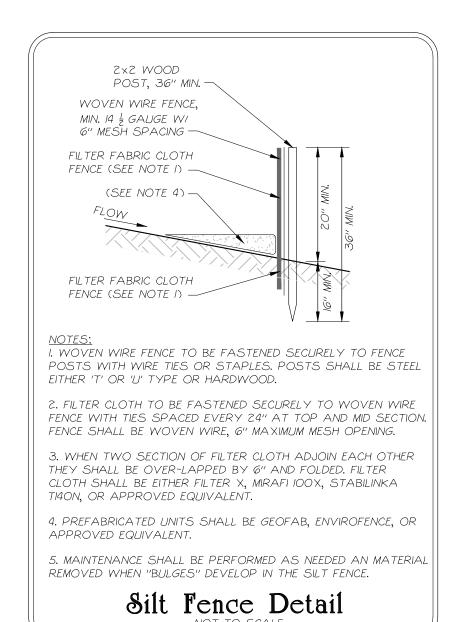
<u>NOTES:</u> I. SIGNS TO BE MOUNTED ON EXISTING BUILDING.

Sign Details

NOT TO SCALE

ACCESSIBLE PARKING

SIGN DETAIL



Erosion & Sediment Control Notes:

I.) DUST CONTROL SHALL BE PROVIDED IN TIMES OF DRY WEATHER. AREAS SHALL BE SPRAYED WITH WATER TO PREVENT DUST FROM TRANSFERRING TO ADJACENT PROPERTIES.

2.) THE PROPOSED AREA OF DISTURBANCE IS APPROXIMATELY 0.58 ACRES. 3.) IDLE DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION REQUIREMENTS IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, JULY 2016 EDITION. TEMPORARY STABILIZATION SPECIFICATIONS INCLUDE:

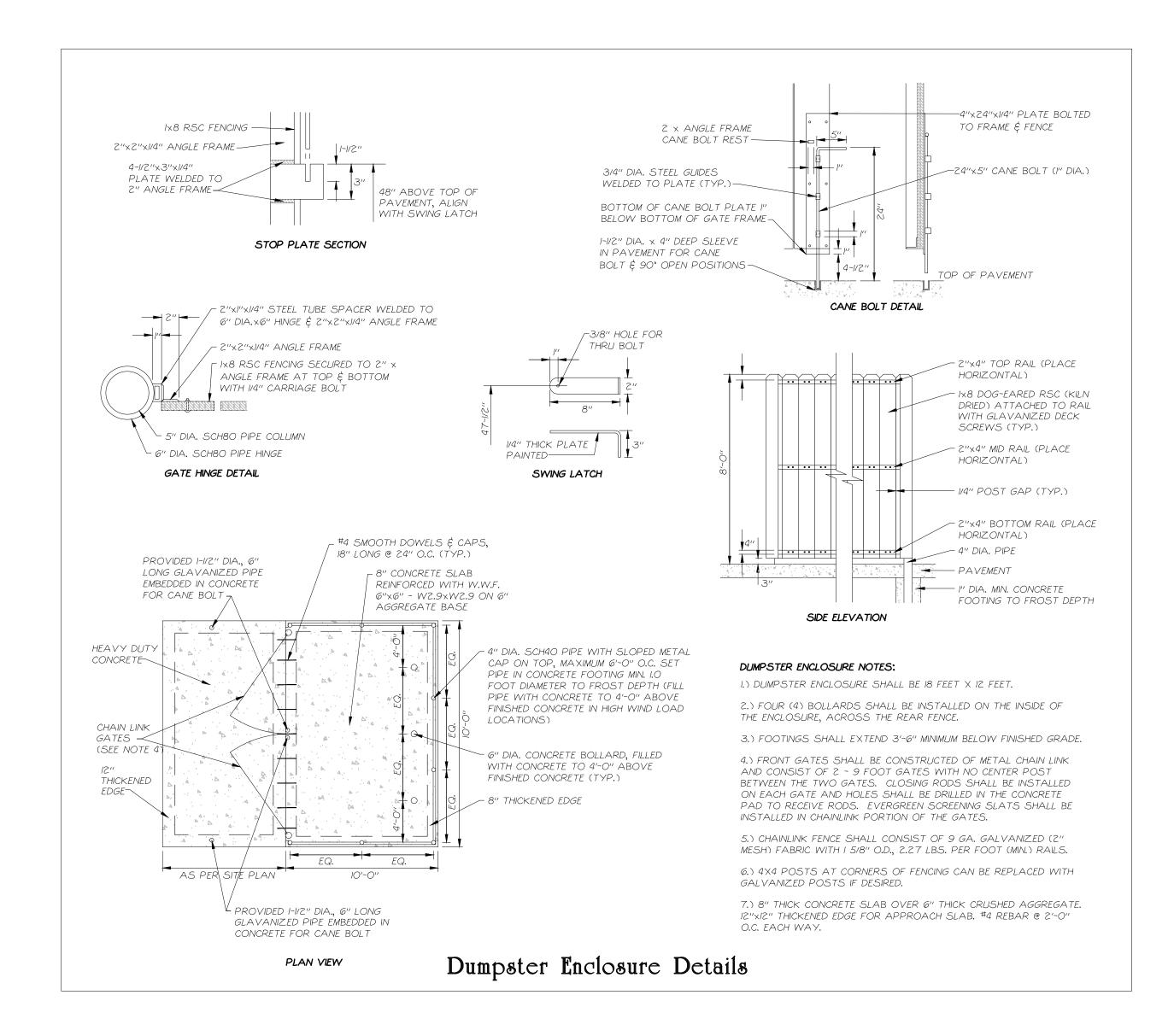
- ANNUAL OR PERENNIAL RYEGRASS SEEDING WITH STRAW MULCHING AT A RATE OF 30 LBS PER ACRE.

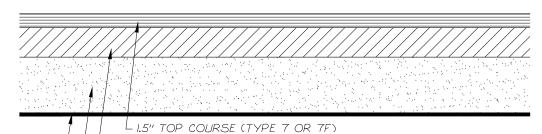
COARSE WOOD CHIPS AT A RATE OF 500 LBS PER ACRE. WOOD FIBER HYDROMULCH, AS PER MANUFACTURERS SPECIFICATIONS.

4.) ALL DISTURBED AREAS NOT ENCUMBERED BY LANDSCAPING MULCH, PAVEMENT, CONCRETE, OR OTHER IMPERVIOUS COVER BE STABILIZED WITH BLUE GRASS BLEND, WITH THE FOLLOWING SPECIFICATIONS: - 25% FESTUCA RUBRA COMMUTATA (CHEWINGS FESCUE) LOLIUM PERENNE (PERENNIAL RYEGRASS)

5.) SEEDING SHALL BE PERFORMED AT A RATE OF FIVE (5) LBS. PER ACRE.

- 60% POA PRATENSIS (KENTUCKY BLUEGRASS)

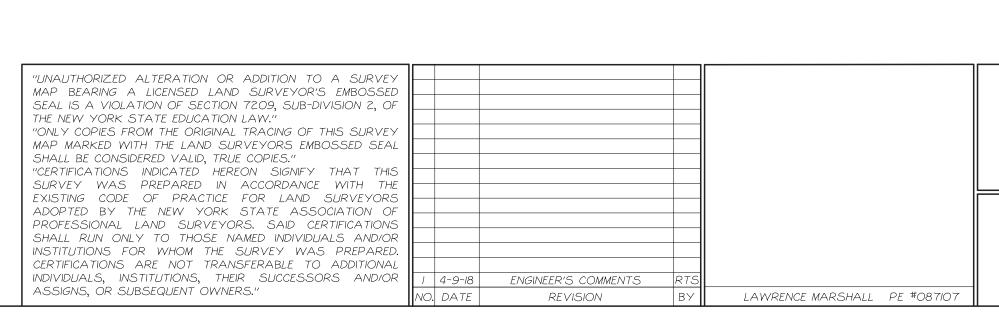




L 2.5" DENSE BINDER COURSE (TYPE 3) 6" STONE SUBBASE (NYSDOT 733-04 SUBBASE COURSE, TYPE 2)

GEOTEXTILE IS ONLY REQUIRED IN AREAS WHERE SUBBASE IS NOT ACCEPTABLY STABLE. GEOTEXTILE SHALL BE APPROVED BY A NEW YORK STATE LICENSED

Standard Asphalt Pavement Section



Site Plan Details Lake Station Plaza, LLC

PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566

P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

TAX MAP REFERENCE: SECTION 17, BLOCK I, LOT 101 TOWN OF CHESTER

COUNTY OF ORANGE STATE OF NEW YORK DATE: 11-21-2017

SCALE: I" = 20' DRAFTED BY: KMW PROJECT: 4266

RECORD OWNER:

LAKE STATION PLAZA LLC

