Kaydeross Estates
Residential Subdivision

Owner:

John E. and Carolyn E. Davis
1 Kaydeross Avenue West
Saratoga Springs, NY 12866

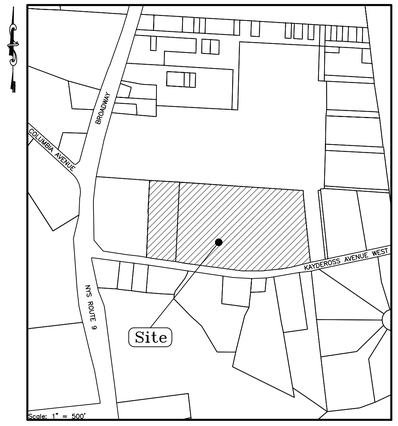
Applicant:

Kaydeross Partners 2013 LLC
P.O. Box 401
Burnt Hills, NY 12027
Contact: David Decker, PE
518-461-2200

Index of Site Drawings:

Underground Facilities Protection Organization
Utility Coordinating Committee
SAVE BIG, CALL BEFORE YOU DIG.
1-800-962-7962

THESE PLANS SHOW KNOWN SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE DIFFERENT FROM THAT SHOWN OR MAY NOT BE SHOWN AT ALL. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. THE CONTRACTOR SHALL CONTACT U.F.P.O. AT 1-800-962-7962 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO CONDUCT EXPLORATORY TESTS PITS AS MAY BE REQUIRED TO DETERMINE UNDERGROUND CONDITIONS, THE COST OF WHICH SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THIS CONTRACT. EXISTING UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER AND/OR CITY OF SARATOGA SPRINGS.



Site Location Map

City of Saratoga Springs Standard Notes:

1. ALL WORK MUST CONFORM TO ALL FEDERAL, STATE AND CITY CODES, SPECIFICATIONS, ORDINANCES, RULES AND REGULATIONS.
2. THE ELEVATION BASE FOR THE CONTOURS AND BENCHMARKS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM, 1929.
3. ALL REFUSE, DEBRIS AND MISCELLANEOUS ITEMS TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR TO A LOCATION APPROVED BY THE CITY ENGINEER.
4. THE CONTRACTOR MUST SET UP A PRE-CONSTRUCTION MEETING WITH THE CITY ENGINEER PRIOR TO ANY CONSTRUCTION. CONSTRUCTION INSPECTIONS BY THE DESIGN PROFESSIONAL OR A DESIGNATED REPRESENTATIVE ARE REQUIRED. THE COST OF THE CONSTRUCTION INSPECTIONS IS THE RESPONSIBILITY OF THE APPLICANT/DEVELOPER. A LETTER OF CREDIT FOR PROJECT SITE WORK MUST BE ESTABLISHED WITH THE CITY PRIOR TO ANY CONSTRUCTION FOR THE PROJECT.
5. THE CONTRACTOR MUST OBTAIN A BLASTING PERMIT FROM THE BUILDING INSPECTOR IF ANY BLASTING IS REQUIRED FOR THE PROJECT.
6. THE CONTRACTOR MUST OBTAIN A STREET OPENING PERMIT ISSUED BY THE DEPARTMENT OF PUBLIC WORKS FOR ANY WORK IN THE STREET OR RIGHT-OF-WAY OF ANY CITY STREET, ROAD OR ALLEY.
7. ALL POINTS OF CONSTRUCTION INGRESS OR EGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT OR DEBRIS ONTO A PUBLIC ROAD.
8. NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL ALL SITE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS; AND AN AS-BUILT DRAWING HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY ENGINEER.
9. THE APPLICANT MUST VERIFY THAT THE PROPOSED PROJECT CAN ACCOMMODATE THE TURNING MOVEMENTS OF ANY FIRE TRUCK THAT THE FIRE DEPARTMENT SO DESIGNATES.

I HEREBY CERTIFY THAT THE PROPOSED ROADS, WATER SYSTEM FACILITIES, SANITARY FACILITIES, AND STORM DRAINAGE FACILITIES FOR THIS PROJECT HAVE BEEN DESIGNED IN ACCORDANCE WITH ALL APPLICABLE STATE, COUNTY AND CITY STANDARDS.

KURT M. BEDORE, P.E. N.Y.S. LIC. NO. 75,223

APPROVAL:

APPROVED UNDER AUTHORITY OF A RESOLUTION ADOPTED _____

BY THE PLANNING BOARD OF THE CITY OF SARATOGA SPRINGS.

_____ CHAIRPERSON DATE SIGNED_____

RECORD OF WORK:

1.) 4/11/07: INITIAL PRELIMINARY/FINAL CITY SUBMITTAL.

2.) 6/21/07: ADDRESS CITY COMMENTS, DEFINE CONSERVATION EASEMENTS, FINALIZE SEPTIC SYSTEMS, FINALIZE WETLAND DELINEATION AND PROVIDE STORMWATER MANAGEMENT.

3.) 10/26/07: ADDRESS CITY COMMENTS, REVISE DRAINAGE & EASEMENTS, ADD RURAL CITY ROAD, ADD ROAD PROFILE, ADD CROSS SECTION DETAIL, REVISE WATER MAIN AND REFINE CONSERVATION AREA RESTRICTIONS.

4.) 12/28/07: ADDRESS FINAL CITY TECHNICAL COMMENTS, ADD STANDARD DESIGN NOTE, ADD SPLIT RAIL FENCE FOR ENTIRE ON SERVATION EASEMENT BOUNDARY, SHOW ENTIRE HAMMERHEAD TURNAROUND WITHIN CITY RIGHT OF WAY. ADD SUBDIVISION NAME AND STREET NAME.

5.) 2/1/08: ADDRESS FINAL CITY TECHNICAL COMMENTS, CHANGE PROPOSED STREET NAME, REVISE FIRE HYDRANT DETAIL AND ADD TABLE FOR REQUIRED LENGTHS OF SANITARY SEWER LATERALS.

6.) 10/16/13: UPDATE FINAL PLANS PER NEW NYSDEC AND CITY STORMWATER REQUIREMENTS. ADJUST LOT CONFIGURATION FOR CONVENTIONAL SUBDIVISION & OTHERWISE RETAIN PREVIOUS CONFIGURATION

6.) 02/05/14: REVISE PLANS TO REFLECT WITHDRAWAL OF PLANS DEPICTING CONVENTIONAL SUBDIVISION LAYOUT IN FAVOR OF PREVIOUS/ORIGINAL SUBMISSION SEEKING APPROVAL OF A CONSERVATION SUBDIVISION, FOLLOWING INPUT FROM SKETCH PLAN REVIEW MEETING WITH PLANNING BOARD

Cover Sheet

Kaydeross Estates Residential Subdivision

STATE OF NEW YORK · KURT M. BEDORE · 75223 · LICENSED PROFESSIONAL ENGINEER

KURT M. BEDORE, P.E.
N.Y.S. LIC. NO. 75,223

KB ENGINEERING & CONSULTING PLLC
89 KINGSBURY ROAD
BURNT HILLS NY, 12027–9432
518–384–3715

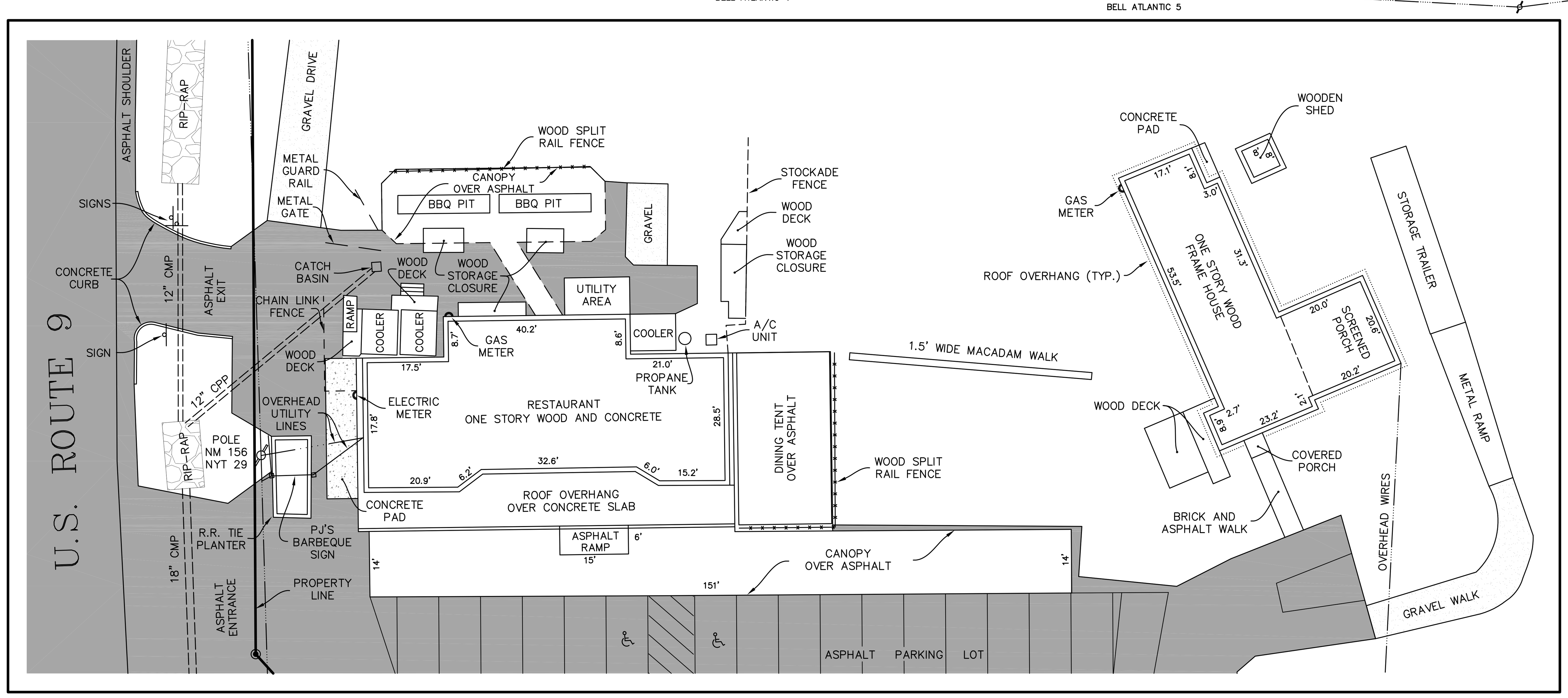
TOMMELL & ASSOCIATES
2 GILBERT ROAD
SARATOGA SPRINGS, NY 12866
PH: (518) 587–3149
FAX: (518) 587–7251

SCALE: AS SHOWN

CITY OF SARATOGA SPRINGS
~ OUTSIDE DISTRICT ~
SARATOGA COUNTY, NEW YORK
FEBRUARY 28, 2007

TA PROJECT NO. 2006–0193
KB PROJECT NO. 13020

REVISIONS:
04/11/07
06/21/07
10/26/07
12/28/07
2/1/08
10/16/13
02/05/14



BUILDING DETAIL
SCALE 1" = 30'

NOTES:

1.) A NOTE ON MAP REFERENCES 2 AND 3 STATES THAT: "JOHN DAVIS AGREES TO DEED THE CITY OF SARATOGA SPRINGS UPON THEIR DEMAND 7.5 FEET ALONG THE NORTHERLY LINE OF KAYDEROSS AVENUE."

2.) REFERENCE IS HEREBY MADE TO A CERTIFICATE FOR TITLE INSURANCE ISSUED BY SNEERINGER MONAHAN PROVOST REDGRAVE TITLE AGENCY, INC. AS AGENT FOR FIRST AMERICAN TITLE INSURANCE COMPANY, DATED OCTOBER 3, 2011, BEARING ORDER NUMBER S-054425, AS RECEIVED BY TOMMELL & ASSOCIATES FROM DENISE L. PROVOST BY E-MAIL ON OCTOBER 3, 2011.

3.) INDIVIDUAL LOTS FROM THE ORIGINAL SUBDIVISION ARE NOT SHOWN HEREON (SEE MAP REFERENCE NOS. 1 AND 5)

4.) NO PROPERTY CORNERS WERE SET AS PART OF THIS SURVEY.

5.) PARCEL IS SUBJECT TO ANY UTILITY EASEMENTS OF RECORD. UTILITIES ARE UNDERGROUND, AND UNDERGROUND UTILITIES, IF ANY, ARE NOT SHOWN HEREON.

6.) OFFSETS BETWEEN PROPERTY LINES AND STRUCTURES SHOWN HEREON ARE TO ROOF OVERHANGS UNLESS OTHERWISE NOTED.

MAP REFERENCES:

1.) MAP ENTITLED "PORTION OF SARASPA MANORS SUBDIVISION OF 9-C-4", FILED IN THE CITY OF SARATOGA SPRINGS, ASSESSOR'S OFFICE ON PAGE 27 OF THE ASSESSOR'S MAP, BEING THE OLD TAX ASSESSMENT MAP PRIOR TO 1980.

2.) MAP ENTITLED "AS-BUILT SURVEY OF P.J.'S BARBEQUE", DATED JULY 26, 1994, LAST REVISED ON AUGUST 3, 1994, AND MADE BY PAUL F. TOMMELL, L.S., P.C..

3.) MAP ENTITLED "SURVEY OF LANDS OF JOHN E. AND CAROLYN E. DAVIS", DATED JANUARY 18, 2000, AS LAST REVISED ON FEBRUARY 1, 2000, AND MADE BY PAUL F. TOMMELL, L.S. P.C..

4.) MAP ENTITLED "A SURVEY AND MAP OF LANDS OF YUEN HSIANG LU, LI HUA LU AND WEN MEI LU", DATED MARCH 25, 1998 AND MADE BY BY CARPENER ASSOCIATES, P.C..

5.) MAP ENTITLED "MAP OF SARASPA MANORS", DATED APRIL, 1926, MADE BY S.J. MOTT, C.E. AND FILED IN THE SARATOGA COUNTY CLERK'S OFFICE ON MAY 19, 1926 IN MAP DRAWER GG, MAP NO. 77.

RECORD OF WORK:

1.) BEARING AND DISTANCE LABELS REVISED ON NOVEMBER 14, 2011.

2.) CERTIFICAITONS REMOVED ON OCTOBER 16, 2013.

R:\SS (OD)\20060193 PJs BAR-B-Q\dwg\Survey\PJ'S Update2011.dwg

Survey of Lands of John E. Davis and Carolyn E. Davis

STATE OF NEW YORK · PAUL F. TOMMELL · 049192 · LICENSED LAND SURVEYOR

PAUL F. TOMMELL
P.L.S. LIC. NO. 49,192

TOMMELL & ASSOCIATES
28 CLINTON ST., SUITE 1
SARATOGA SPRINGS, NY 12866
PH: 518.587.3149 FA:518.587.7251

SCALE: 1" = 50'

CITY OF SARATOGA SPRINGS (O.D.)
SARATOGA COUNTY, NEW YORK
SEPTEMBER 27, 2011

PROJECT: 20060193-2011

MAP REFERENCES:

1.) MAP ENTITLED "PORTION OF SARASPA MANORS SUBDIVISION OF 9-C-4", FILED IN THE CITY OF SARATOGA SPRINGS, ASSESSOR'S OFFICE ON PAGE 27 OF THE ASSESSOR'S MAP, BEING THE OLD TAX ASSESSMENT MAP PRIOR TO 1980.

2.) MAP ENTITLED "SURVEY OF LANDS OF JOHN AND CAROLYN E. DAVIS", DATED JULY 26, 1994, LAST REVISED ON JANUARY 5, 1995 AND MADE BY PAUL F. TOMMELL, L.S., P.C..

3.) MAP ENTITLED "SURVEY OF LANDS OF JOHN E. AND CAROLYN E. DAVIS", DATED APRIL 7, 1997 AND MADE BY PAUL F. TOMMELL, L.S. P.C..

4.) MAP ENTITLED "A SURVEY AND MAP OF LANDS OF YUEN HSIANG LU, LI HUA LU AND WEN MEI LU", DATED MARCH 25, 1998 AND MADE BY BY CARPENER ASSOCIATES, P.C..

5.) MAP ENTITLED "MAP OF SARASPA MANORS", DATED APRIL, 1926, MADE BY S.J. MOTT, C.E. AND FILED IN THE SARATOGA COUNTY CLERK'S OFFICE ON MAY 19, 1926 IN MAP DRAWER GG, MAP NO. 77.

6.) MAP ENTITLED, "WETLANDS LOCATON SURVEY, LANDS OF DAVIS AND KOSHGARIAN", DATED MARCH 28, 1997, AND MADE BY AZIMUTH SURVEYING CARTOGRAPHY.

SITE STATISTICS:

ZONING: RR (RURAL RESIDENTIAL)
TAX MAP NO. 191.00-2-43.2 AND 191.00-2-43.1

TOTAL AREA OF PARCEL = 617,422± SQ. FT. (14.174± ACRES)

ZONING REQUIREMENTS

MINIMUM LOT SIZE: 2 ACRES (87,120± SQ. FT.)
200 FT.

FRONT YARD = 60 FT.
REAR YARD = 100 FT.
MINIMUM SIDE YARD = 30 FT.
TOTAL SIDE YARD = 100 FT.

WETLAND INFORMATION:
PERFORMED BY TOMMELL & ASSOCIATES IN 2007 AND VERIFIED BY NYSDEC AND ACOE. NYSDEC VERIFIED AS THE SAME ON SEPTEMBER 20, 2013

A.C.O.E. WETLANDS: 0.152± ACRES (Total Flagged)
N.Y.S.D.E.C. WETLANDS: 5.001± ACRES (Total Flagged)

WETLAND DISTURBANCE:

TOTAL DISTURBED AREA: 0.000± ACRES

CONSERVATION SUBDIVISION CALCULATIONS:

Total Acreage:	14.174± Sq. Ft.
Constrained Acreage:	
Wetland & Watercourses:	5.128± Acres (On-site)
100-Year Floodplains:	0
Slopes over 25%, > or =2,000 Contiguous SF:	0
Total Constrained Areage:	5.128± Acres
Unconstrained Acreage:	9.046± Acres
Acres per Unit:	2 Acres (Minimum)
Base Density:	Unconstrained Acreage / Acres per Unit
Base Density:	9.046± Acres / 2 Acres per Unit
Base Density:	4.5 = 5 Units
Total Units Allowed:	5
Total Units Proposed:	4
Area of Proposed Conservation Easement:	10.725± Acres
Total Area of Originally Unconstrained Land In Proposed Conservation Easement:	5.586± Acres (62% of Originally Unconstrained Land)

NOTES:

1.) THIS MAP IS A REVISION OF A PREVIOUSLY APPROVED AND EXPIRED CONSERVATION SUBDIVISION.

APPROVED UNDER AUTHORITY OF A RESOLUTION ADOPTED
_____ (DATE) BY THE PLANNING BOARD OF THE CITY OF SARATOGA SPRINGS.
_____ (CHAIRPERSON) _____ (DATE SIGNED)

Conservation Subdivision Plan
Kaydeross Estates Rssidential Subdivision

STATE OF NEW YORK
PAUL F. TOMMELL
049192
LICENSED LAND SUR

PAUL F. TOMMELL
P.L.S. LIC. NO. 49,192

TOMMELL & ASSOCIATES
28 CLINTON ST., SUITE 1
SARATOGA SPRINGS, NY 12866
PH: 518.587.3149 FA:518.587.7251

PB NO.: 13.___
SCALE: 1" = 50'
CITY OF SARATOGA SPRINGS (O.D.)
SARATOGA COUNTY, NEW YORK
JANUARY 08, 2014
PROJECT: 20060193
MAP NO. 20060193-10

Revisions:

TEST PIT DATA

TEST PITS #1 TO #4 DUG ON JANUARY 10, 2007 WITH A BACKHOE. WITNESSED BY GREG BESWICK & MIKE BROOKS OF TOMMELL & ASSOCIATES. TEST PITS L1 TO L4 DUG ON MAY 18, 2007 WITH A BACKHOE. WITNESSED BY SCOTT KITCHNER OF TOMMELL & ASSOCIATES.

MOTTLING DEPTHS RE-VERIFIED AS THE SAME BY KURT BEDORE, PE ON OCTOBER 9, 2013.

TP#1
0"-5" TOPSOIL
5"-22" SILTY CLAY
22"+ CLAY
* GROUNDWATER @ 22"

TP#2
0"-6" TOPSOIL
6"-35" SILTY CLAY/GRAVELLY LOAM
35"+ GRAVELY CLAY/BROKEN SHALE
* GROUNDWATER @ 35"

TP#3
0"-11" ORGANICS/ROOTS
11"-24"+ GRAVELLY/SILTY LOAM
* GROUNDWATER @ 24"

TP#4
0"-5" TOPSOIL
5"-38" GRAVELLY/SILTY LOAM
* MOTTLING @ 17"
* GROUNDWATER @ 27"

TP-L1
0"-7" TOPSOIL
7"-25" LOAMY CLAY WITH COBBLES
25"+ CLAY WITH COBBLES
* MOTTLING @ 25"

TP-L2
0"-4" TOPSOIL
4"-20" LOAMY CLAY
20"-28" CLAY
28"+ GRAVELY CLAY
* MOTTLING @ 30"

TP-L3
0"-8" TOPSOIL
8"-22" SANDY LOAM
22"-36" LOAMY CLAY
36"+ CLAY WITH COBBLES
* MOTTLING @ 36"

TP-L4
0"-6" TOPSOIL
6"-25" LOAMY GRAVELLY CLAY
25"+ CLAY
* MOTTLING @ 25"

PERCOLATION TEST DATA

PERCOLATION TESTS WERE PERFORMED ON MAY 18, 2007. WITNESSED BY SCOTT KITCHNER & KURT BEDORE, P.E. OF TOMMELL & ASSOCIATES.

PT-1A
STABILIZED PERC. RATE OF 1" IN 4 MIN. 9 SEC. @ 12"

PT-1B
STABILIZED PERC. RATE OF 1" IN 16 MIN. 52 SEC. @ 12"

PT-2A
STABILIZED PERC. RATE OF 1" IN 13 MIN. 0 SEC. @ 12"

PT-2B
STABILIZED PERC. RATE OF 1" IN 2 MIN. 0 SEC. @ 12"

PT-3A
STABILIZED PERC. RATE OF 1" IN 5 MIN. 0 SEC. @ 12"

PT-3B
STABILIZED PERC. RATE OF 1" IN 8 MIN. 20 SEC. @ 12"

PT-4A
STABILIZED PERC. RATE OF 1" IN 14 MIN. 0 SEC @ 12"

PT-4B
STABILIZED PERC. RATE OF 1" IN 18 MIN. 20 SEC. @ 12"

WETLAND INFORMATION:
PERFORMED BY TOMMELL & ASSOCIATES IN 2007 AND VERIFIED BY NYSDEC AND ACOE. NYSDEC RE-VERIFIED AS THE SAME ON SEPTEMBER 20, 2013

A.C.O.E. WETLANDS: 0.152± ACRES
N.Y.S.D.E.C. WETLANDS: 5.001± ACRES

WETLAND DISTURBANCE:

TOTAL DISTURBED AREA: 0.000± ACRES

SITE STATISTICS:

ZONING: RR-1 (OUTSIDE DISTRICT)
TAX MAP NO. 191.00-2-43.2 & 191.00-2-43.1
TOTAL PROJECT AREA = 617,423± SQ. FT. (14.174± ACRES)

EXISTING PARCEL AREAS:

191.00-2-43.2 - 2.578± ACRES
191.00-2-43.1 - 11.596± ACRES
TOTAL PARCEL AREA: 14.174± ACRES

PROPOSED PARCEL AREAS:

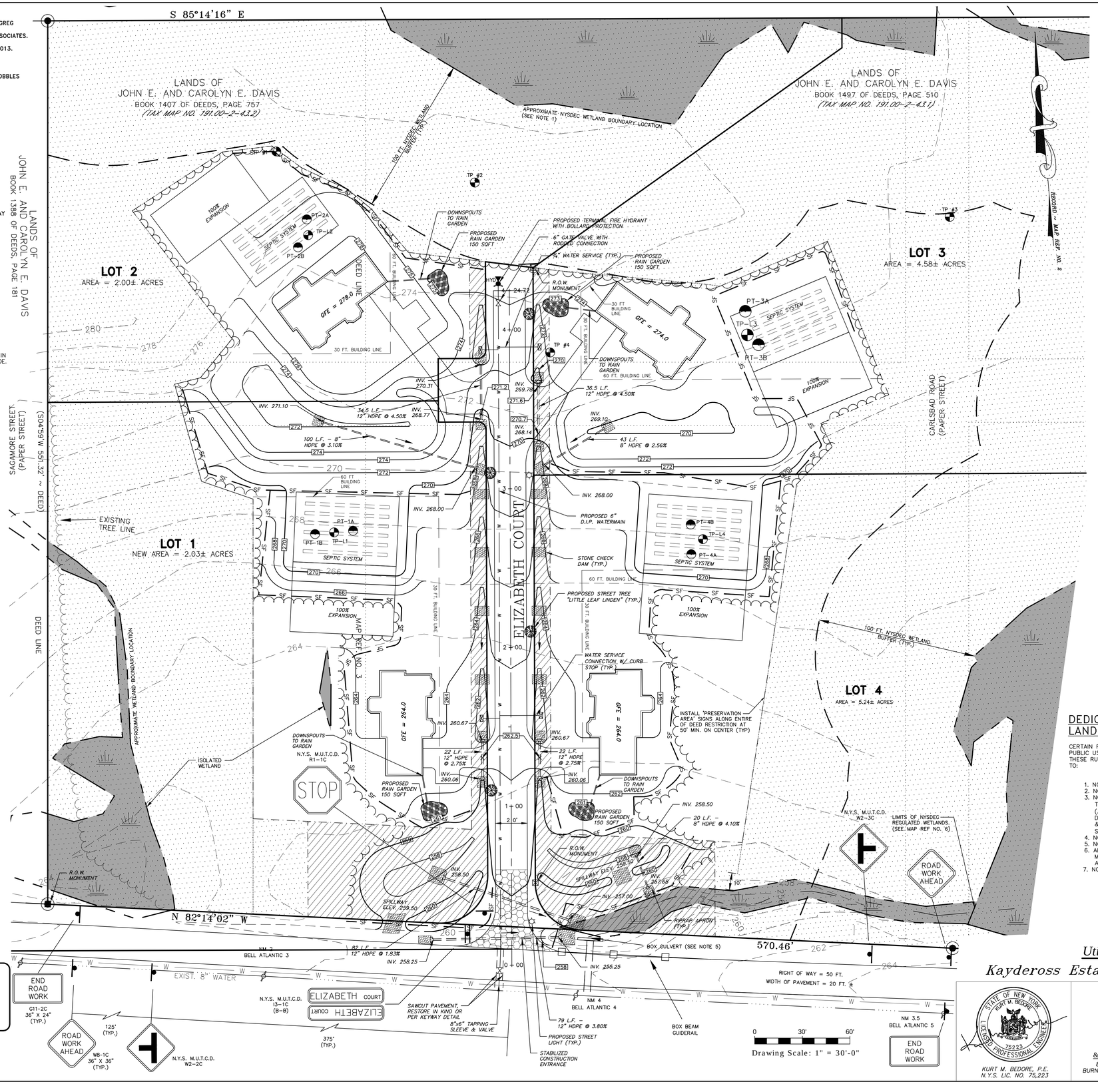
191.00-2-43.2 - 0.000± ACRES (PROPOSED 4 LOTS TOTALING 13.880± ACRES)
191.00-2-43.1 - 0.000± ACRES (PROPOSED 4 LOTS TOTALING 13.880± ACRES)
TOTAL PARCEL AREA: 14.174± ACRES

ZONING REQUIREMENTS

RR-1:
MINIMUM LOT SIZE: 2 ACRES (87,120± SQ. FT.)
MEAN WIDTH: 200 FT.

SETBACKS:

FRONT YARD = 60 FT.
REAR YARD = 100 FT.
MINIMUM SIDE YARD = 30 FT.
TOTAL SIDE YARD = 100 FT.



Legend:

- DELINEATED WETLANDS
- STONE FILL/RIPRAP
- WETLAND LIMITS
- WETLAND BUFFER
- EX. OVERHEAD UTILITY
- EXISTING POWER POLE
- EXISTING CONTOUR — 375 —
- PROPOSED CONTOUR 375
- PROPERTY LINE
- STORM SEWER
- WATERLINE 8"W
- GATE VALVE
- FIRE HYDRANT
- THRUST BLOCK
- ¾" WATER SERVICE WITH CURB STOP
- EXISTING TREELINE
- PROPOSED TREELINE
- SILT FENCE SF
- 4' WOODEN SPLITRAIL FENCE
- TEST PIT
- PERC. TEST LOCATION
- CONSERVATION EASEMENT
- CITY MAINTENANCE EASEMENT
- RAIN GARDEN
- PROPOSED STREET LIGHT
- PROPOSED STREET TREE

APPROVAL:

APPROVED UNDER AUTHORITY OF A RESOLUTION ADOPTED _____

BY THE PLANNING BOARD OF THE CITY OF SARATOGA SPRINGS.

_____ CHAIRPERSON DATE SIGNED_____

DEDICATED OPEN SPACE LAND MANAGEMENT PLAN:

CERTAIN RULES AND REGULATIONS GOVERNING THE PUBLIC USE OF THE GREENSPACE SHALL BE IMPOSED. THESE RULES SHALL INCLUDE, BUT ARE NOT LIMITED TO:

1. NO FIRES
2. NO CAMPING
3. NO CUTTING OF VEGETATION OR MATURE TREES (EXCEPT AS TRAIL MAINTENANCE (ACTIVITY FOR THE REMOVAL OF DEAD OR DISTURBED VEGETATION AND FOR DRIVEWAYS & UTILITIES. ALL OTHER OPEN MEADOW AREAS SHALL BE ALLOWED TO REVERT TO A FOREST)
4. NO HUNTING OR FIREARMS
5. NO SOIL DISTURBANCE
6. ALLOW FOR INSTALLATION OF STORMWATER MANAGEMENT AREAS AND MINIMAL GRADING AS SHOWN ON THESE PLANS.
7. NO DUMPING OF DEBRIS

OPEN SPACE NOTE:

ALL OPEN SPACE LAND IS TO HAVE A DEED RESTRICTION FILED WITH THE SARATOGA COUNTY CLERK'S OFFICE WHICH RESTRICTS THE USE OF THIS PROPERTY TO PASSIVE RECREATION ONLY. ANY NON-CONFORMING USES OF THE OPEN SPACE WILL REQUIRE APPROVALS FROM THE CITY OF SARATOGA SPRINGS PLANNING BOARD.

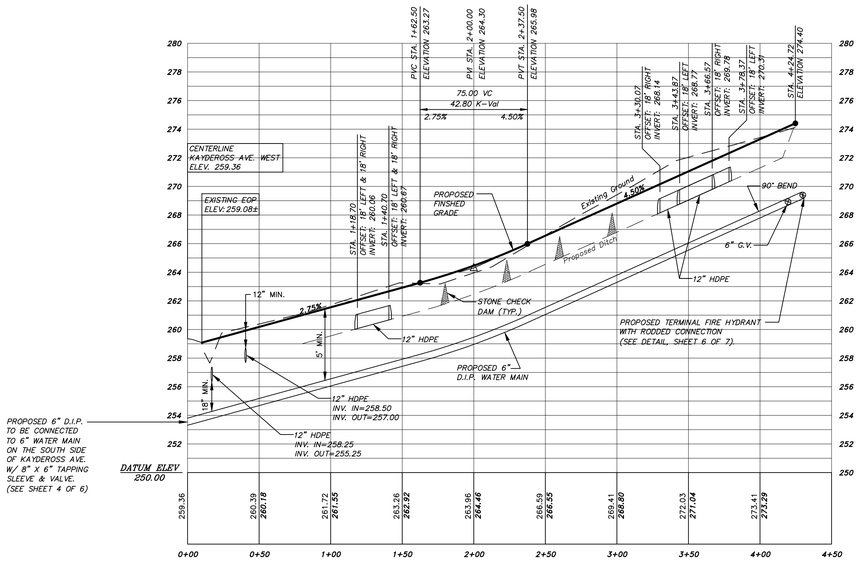
Utility & Grading Plan

Kaydeross Estates Residential Subdivision

STATE OF NEW YORK KURT M. BEDORE LICENSED PROFESSIONAL ENGINEER 75223
KURT M. BEDORE, P.E.
N.Y.S. LIC. NO. 75,223

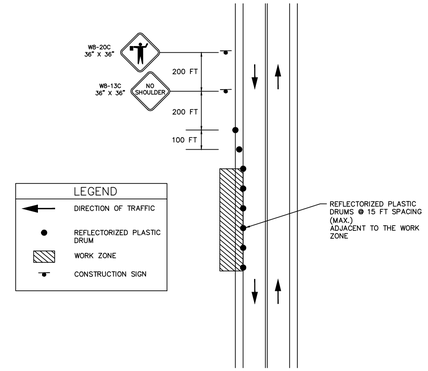
KB ENGINEERING & CONSULTING PLLC
89 KINGSBURY ROAD
BURNT HILLS NY, 12027-9432
518-384-3715

SCALE: 1" = 30'	REVISIONS:
	04/11/07
CITY OF SARATOGA SPRINGS ~ OUTSIDE DISTRICT ~ SARATOGA COUNTY, NEW YORK	06/21/07
	10/26/07
FEBRUARY 28, 2007	12/28/07
	2/1/08
	10/16/13
KB PROJECT NO. 13020	



PROPOSED ELIZABETH COURT

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



TRAFFIC CONTROL FOR CONVENTIONAL HIGHWAY SECTION WITH A SHORT DURATION SHOULDER CLOSURE

N.T.S.

NOTES:

1.) MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE PROVIDED FOR THE LENGTH AND DURATION OF THIS CONTRACT IN ACCORDANCE WITH THE PROVISIONS CONTAINED IN THE PLANS AND/OR PROPOSAL OF THIS CONTRACT AND THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (NYSMUTCD). IF THE CONTRACTOR PROPOSES ANY CHANGES TO THE TRAFFIC CONTROL PLAN, THEY MUST BE SUBMITTED TO THE CITY OF SARATOGA SPRINGS AND TOMMELL & ASSOCIATES FOR APPROVAL PRIOR TO THE START OF WORK.

2.) THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SAFE AND ADEQUATE INGRESS AND EGRESS TO AND FROM INTERSECTING HIGHWAYS, HOMES, AND COMMERCIAL ESTABLISHMENTES AT ALL TIMES.

3.) SHORT DURATION SHOULDER CLOSURES SHALL BE ESTABLISHED AND MAINTAINED AS SHOWN ON THESE PLANS AND THE NYSMUTCD. THE LENGTH AND DURATION OF ALL SHOULDER CLOSURES SHALL BE HELD TO A MINIMUM NECESSARY TO COMPLETE THE WORK, AND NO UNNECESSARY SHOULDER CLOSURES SHALL BE PERMITTED. THE CONTRACTOR WILL BE REQUIRED TO REOPEN ALL SHOULDERS FOR USE DURING NON-WORKING HOURS.

4.) DIAMOND-SHAPED WARNING SIGNS SHALL BE USED FOR ALL ADVANCED WARNING SIGNS SHOWN ON THE PLANS. COLOR REQUIREMENTS SHALL BE BLACK TEXT ON FLOURESCENT ORANGE BACKGROUND. COLOR REQUIREMENTS FOR GUIDE SIGNS AND REGULATORY SIGNS USED FOR CONSTRUCTION SIGNING SHALL BE AS SPECIFIED IN THE NYSMUTCD FOR EACH SIGN OR AS NOTED ON THE PLANS.

5.) THE CORRECT SEQUENCE AND SPACING OF SIGNS MUST BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS. ALL SIGNS, INCLUDING GUIDE SIGNS, SHALL INDICATE ACTUAL FIELD CONDITIONS AT ALL TIMES AND SHALL BE COVERED, MOVED, REMOVED, OR CHANGED IMMEDIATELY.

6.) LATERAL PLACEMENT OF CONSTRUCTION SIGNS SHALL BE SUCH THAT THE LATERAL CLEARANCE FROM THE EDGE OF THE TRAVEL LANE TO THE EDGE OF THE SIGN SHALL BE A MINIMUM OF 10 FEET. WHERE THE 10 FOOT OFFSET IS UNOBTAINABLE DUE TO CONSTRUCTION ACTIVITIES OR OTHER PHYSICAL CONSTRAINTS, THE SIGN MAY BE INSTALLED A MINIMUM OF 2 FEET FROM THE TRAVEL LANE.

7.) LONGITUDINAL PLACEMENT OF CONSTRUCTION SIGNS SHALL BE AS SHOWN ON THESE PLANS.

8.) ALL WORK, EQUIPMENT, TEMPORARY SIGNS, AND OTHER MATERIALS NECESSARY FOR MAINTENANCE AND PROTECTION OF TRAFFIC AS NOTED IN THE PLANS OR THE NYSMUTCD SHALL BE INCLUDED IN THE PRICE BID FOR THE CONTRACT.

9.) A WORK ZONE IS DEFINED AS THAT AREA IN WHICH TRAFFIC IS RESTRICED BECAUSE OF THE CONTRACTOR'S ACTIVITIES, OR THAT AREA WHERE THE CONTRACTOR'S EQUIPMENT, OR ANY PRIVATE VEHICLES OWNED BY THE CONTRACTOR OR THE WORKERS ARE WITHIN 10 FEET OF THE EDGE OF PAVEMENT.

10.) CONSTRUCTION EQUIPMENT SHALL BE REMOVED A DISTANCE OF AT LEAST 12 FEET FROM THE EDGE OF TRAVEL LANE TO ENSURE THE CLEAR ROADSIDE AREA DURING NON-WORKING HOURS.

11.) NO MATERIAL OR EQUIPMENT IS TO BE STORED WITHIN THE CLEAR ROADSIDE AREA (12 FEET) EXCEPT THAT WHICH IS TO BE USED THAT DAY.

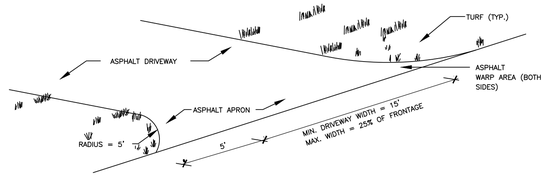
12.) THE CONTRACTOR SHALL COORDINATE ALL WORK SO THERE ARE NO CONFLICTS IN CONSTRUCTION SIGNING IN ANY OTHER WORK AREAS AND SO THAT THE LANE'S CONTINUITY IS MAINTAINED BETWEEN WORK AREAS.

13.) NO WORK ZONE SHALL REMAIN IN PLACE OVERNIGHT.

14.) IF AN OWNER'S REPRESENTATIVE NOTIFIES THE CONTRACTOR OR THE CONTRACTOR'S SUPERINTENDENT OF ANY HAZARDOUS CONSTRUCTION PRACTICES, ALL OPERATIONS IN THAT AREA SHALL BE DISCONTINUED AND IMMEDIATE REMEDIAL ACTION SHALL BE TAKEN TO THE SATISFACTION OF THE OWNER OR THE OWNER'S DESIGNEE BEFORE WORK IS RESUMED.

15.) THE CONTRACTOR SHALL PROVIDE AN UNOBSTRUCTED 10 FOOT TRAVEL LANE THROUGH ALL WORK ZONES AT ALL TIMES TO ALLOW FOR THE SAFE PASSAGE OF EMERGENCY VEHICLES.

16.) ALL SIGNING, DELINEATION DEVICES AND CHANNELIZING DEVICES SHALL MEET THE MATERIAL, COLOR AND REFLECTIVITY REQUIREMENTS OF THE NYSMUTCD.



RESIDENTIAL DRIVEWAY APRON

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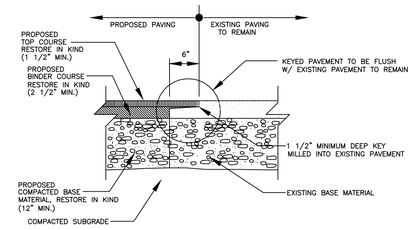

KEYWAY DETAIL

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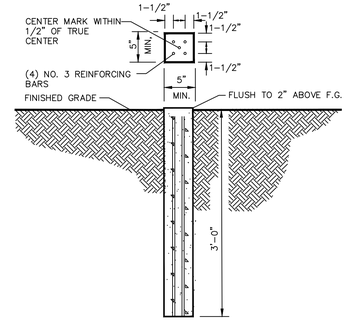
NOTE: THIS DETAIL IS FOR NEW BITUMINOUS PAVEMENT ADJACENT TO EXISTING BITUMINOUS PAVEMENT TO REMAIN.



PRECAST CONCRETE MONUMENT

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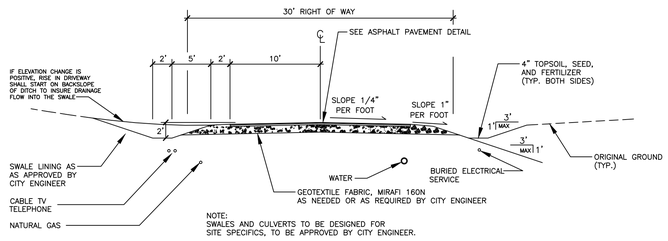

ROAD SECTION – RURAL STREET

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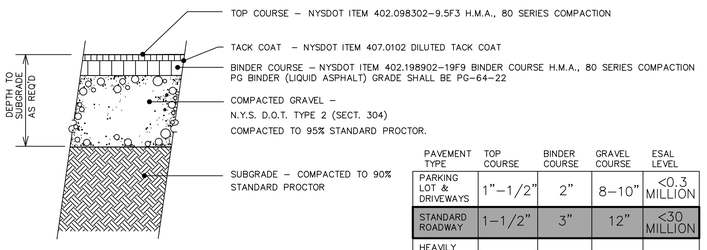

PAVEMENT TYPE	TOP COURSE	BINDER COURSE	GRAVEL COURSE	ESAL LEVEL
PARKING LOT & DRIVEWAYS	1"–1/2"	2"	8–10"	<0.3 MILLION
STANDARD ROADWAY	1–1/2"	3"	12"	<30 MILLION
HEAVILY TRAVELED/ TRUCK LOADING & SHARED DRIVEWAY	2"	*4"	12"	<30 MILLION

* SEE NOTE 2

NOTES:

1. PAVEMENT SECTIONS SPECIFIED ARE TYPICAL FOR STREET, DRIVEWAY AND PARKING LOT CONSTRUCTION WHERE TRAFFIC VOLUMES AND LOADINGS ARE NOT EXCESSIVE. BASED ON ANTICIPATED VOLUMES AND LOADS, THE CITY ENGINEER MAY REQUIRE STRUCTURAL PAVEMENT SECTION TO BE INCREASED TO CARRY DESIGN LOADING.
2. BINDER TO BE PLACED IN 2–2" LIFTS W/ TACK COAT BETWEEN.
3. THE CITY ENGINEER MAY REQUIRE COMPACTION TESTING AND/OR CORE SAMPLES TO VERIFY PAVEMENT THICKNESS. ALL TESTING SHALL BE AS ORDERED BY THE CITY ENGINEER AND SHALL BE PAID FOR BY THE CONTRACTOR.
4. NOTIFY THE CITY ENGINEER 48 HOURS MINIMUM PRIOR TO COMMENCING PAVING OPERATIONS.

ASPHALT PAVEMENT

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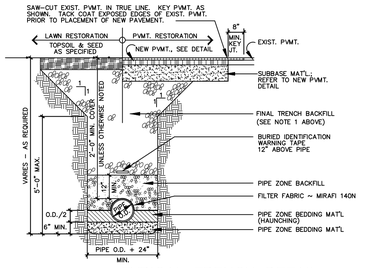


ITEM	DEPTH	MATERIAL	NYSDOT ITEM # OR MAT'L DESIG.	METHOD OF PLACEMENT
PIPE ZONE BEDDING (ENCOUNTERED DRY COND.)	6" MIN.	CRUSHED STONE	203.07	MECHANICAL COMPACTION
PIPE ZONE BEDDING (ENCOUNTERED WET COND.)	6" MIN.	CRUSHED STONE	623.03	MECHANICAL COMPACTION
PIPE ZONE BEDDING (HAUNCHING)	PIPE O.D./2	CRUSHED STONE	203.07	MECHANICAL COMPACTION
PIPE ZONE BACKFILL	12" MIN. COVER	SELECT BORROW	203.05	MECHANICAL COMPACTION
FINAL TRENCH BACKFILL	VARIES	SEE NOTE 1	SEE NOTE 1	MECHANICAL COMPACTION

NOTES:
1) FINAL TRENCH BACKFILL
a) IN NON–PAVED AREAS, FINAL TRENCH BACKFILL SHALL BE EXCAVATED MATERIAL WHEN DETERMINED SUITABLE BY THE ENGINEER OF RECORD; OTHERWISE IT SHALL BE SELECT GRANULAR FILL, NYSDOT ITEM 203.07 MIN. MOD. PROCTOR DENSITY SHALL BE 85 PERCENT.
b) IN PAVED AREAS, FINAL TRENCH BACKFILL SHALL BE SELECT GRANULAR FILL, NYSDOT ITEM 203.07 MIN. MODIFIED PROCTOR DENSITY SHALL BE 95 PERCENT.
2) ALL PIPE ZONE BEDDING, PIPE ZONE BACKFILL, AND FINAL TRENCH BACKFILL SHALL BE PLACED IN 6 INCH MAX. COMPACTED LIFTS. ALL BEDDING AND BACKFILL MATERIALS SHALL BE MECHANICALLY COMPACTED TO THE SATISFACTION OF THE ENGINEER & PER THE REFERENCE NYSDOT SPECIFICATIONS.
3) EXCAVATION SHALL BE KEPT DRY AND DEWATERED AT ALL TIMES.
4) CONTRACTOR SHALL BE RESPONSIBLE FOR COMPACTION EQUIPMENT SELECTION AND OPERATION TO ACHIEVE REQUIRED RESULTS.

TYPICAL TRENCH DETAIL

N.T.S.

APPROVAL:

APPROVED UNDER AUTHORITY OF A RESOLUTION ADOPTED _____

BY THE PLANNING BOARD OF THE CITY OF SARATOGA SPRINGS.

_____ CHAIRPERSON DATE SIGNED_____

Road Profile & Site Details

Kaydeross Estates Residential Subdivision

STATE OF NEW YORK
KURT M. BEDORE
75223
LICENSED PROFESSIONAL ENGINEER

KURT M. BEDORE, P.E.
N.Y.S. LIC. NO. 75,223

KB ENGINEERING
& CONSULTING PLLC
89 KINGSBURY ROAD
BURNT HILLS NY, 12027–9432
518–384–3715

SCALE: AS SHOWN

CITY OF SARATOGA SPRINGS
~ OUTSIDE DISTRICT ~
SARATOGA COUNTY, NEW YORK
FEBRUARY 28, 2007

KB PROJECT NO. 13020

REVISIONS:
04/11/07
06/21/07
10/26/07
12/28/07
2/1/08
10/16/13

REQUIRED SEPARATION DISTANCES FROM WASTEWATER SYSTEM COMPONENTS:

SYSTEM COMPONENTS	WELL (F) OR SUCTION LINE	TO STREAM, LAKE WATERCOURSE (B) OR WETLAND	DWELLING	PROPERTY LINE	DRAINAGE DITCH
HOUSE SEWER (WATER TIGHT JOINTS)	25' IF CAST IRON OR PVC WITH O-RING JOINTS, 50' OTHERWISE	25'	3'	10'	------
SEPTIC TANK	50'	50'	10'	10'	10'
EFFLUENT LINE TO DISTRIBUTION BOX	50'	50'	10'	10'	10'
DISTRIBUTION BOX	100'	100'	20'	10'	20'
ABSORPTION FIELD	100'(A)	100'	20'	10'	20'
SEEPAGE PIT	150'(A)	100'	20'	10'	10'
DRY WELL ROOF AND FOOTING	50'	25'	20'	10'	10'
RAISED OR MOUND SYSTEM	100'(A)	100'	20'	10'	20'

(A) WHEN SEWAGE TREATMENT SYSTEMS ARE LOCATED IN COARSE GRAVEL OR UPGRADE AND IN THE GENERAL PATH OF DRAINAGE TO A WELL, THE CLOSEST PART OF THE TREATMENT SYSTEM SHALL BE AT LEAST 200 FEET AWAY FROM THE WELL.

(B) MEAN HIGH WATER MARK

(C) FOR ALL SYSTEMS INVOLVING THE PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM THE TOE OF SLOPE OF THE FILL.

(D) ANY WATER SERVICE LINE UNDER PRESSURE (I.E. PUBLIC WATER SUPPLY MAIN, HOUSEHOLD SERVICE LINE, WELL TO HOUSEHOLD SERVICE LINE) LOCATED WITHIN TEN FEET OF ANY ABSORPTION FIELD, SEEPAGE PIT OR SANITARY PRIVY SHALL BE INSTALLED INSIDE A LARGER DIAMETER TIGHT JOINT RIGID PIPE & WATER MAIN TO PROTECT THE POTABLE WATER SUPPLY.

(E) ANY WATER SERVICE LINE UNDER PRESSURE (I.E. PUBLIC WATER SUPPLY MAIN, HOUSEHOLD SERVICE LINE, WELL TO HOUSEHOLD SERVICE LINE) CROSSING A SEWER SHALL BE INSTALLED WITH ONE FULL LENGTH OF WATER MAIN CENTERED ABOVE THE SEWER SO BOTH WATER CONNECTION JOINTS ARE AS FAR AS POSSIBLE FROM THE SEWER. MINIMUM SEPARATION FOR A WATER SERVICE LINE CROSSING A SEWER LINE IS 18" OF VERTICAL DISTANCE, AND WATER SERVICE LINES RUNNING PARRALLEL TO SEWER LINES SHOULD HAVE A MINIMUM OF 10' HORIZONTAL SEPARATION. SECTION 8.6 OF THE GREAT LAKES -- UPPER MISSISSIPPI RIVER RECOMMENDED STANDARDS FOR WATERWORKS, SHALL BE FOLLOWED FOR SEPARATION OF WATER MAINS, SANITARY SEWERS AND STORM SEWERS.

(F) THE MINIMUM SEPARATION DISTANCES BETWEEN A SEPTIC TANK AND COMMUNITY TYPE PUBLIC WATER SUPPLY WELL SHOULD BE 100' FEET. DISTRIBUTION BOXES AND ABSORPTION FACILITIES (E.G., ABSORPTION TRENCHES/BEDS, SEEPAGE PITS, RAISED SYSTEMS, MOUND SYSTEMS, ETC.) SHOULD BE LOCATED AT LEAST 200 FEET FROM COMMUNITY TYPE PUBLIC WATER SUPPLY WELLS.

DESIGN LIMITS - SEPTIC SYSTEMS:

** THE BEST DESIGNED AND INSTALLED SEPTIC SYSTEM WILL EVENTUALLY EXHAUST THE SOIL INFILTRATION CAPABILITIES & FAIL TO FUNCTION PROPERLY WITHOUT PERIODIC MAINTENANCE.

** INADEQUATE SEPTIC TANK MAINTENANCE CAN RESULT IN CLOGGING OF THE TANK AND/OR PIPING RESULTING SEWAGE BACKUP INTO THE HOME AND/OR SEWAGE OVERFLOW ONTO THE GROUND SURFACE. FAILURE TO PERIODICALLY CLEAN A SEPTIC TANK, COMMONLY RESULTS IN CLOGGING OF SOIL SURROUNDING THE ABSORPTION FIELD BY OVERFLOWING SOLIDS, NOT REMOVED BY THE SEPTIC TANK. A 2 YEAR CLEANING CYCLE SHOULD BE MAINTAINED.

1. THIS DESIGN IS INTENDED TO PROVIDE SUBSURFACE SEWAGE DISPOSAL FOR THIS LOT AND A SINGLE DWELLING ONLY. NO ADDITIONS INVOLVING LIVING OR SLEEPING AREAS MAY BE ADDED TO THIS HOUSE WITHOUT THE APPROVAL OF THE LOCAL AUTHORITY AND REDESIGN OF THE SUBSURFACE DISPOSAL SYSTEM. THE SEAL AND SIGNATURE ON THIS PLAN SPECIFICALLY EXCLUDES CERTIFICATION FOR FUTURE EXPANSION OR REPLACEMENT.
2. THE SEPTIC TANKS MUST HAVE A DUAL COMPARTMENT DESIGN WITH A GAS DEFLECTION BAFFLE. IF GARBAGE GRINDERS ARE INSTALLED, THE SURFACE AREA MUST BE INCREASED BY 7 SQ. FT. AND THE TOTAL TANK VOLUME MUST BE INCREASED BY 250 GALLONS.
3. NO SUMP PUMP, WATER SOFTENER, GUTTERS, FOOTING DRAINS, SPAS, HOT TUBS OR WHIRLPOOLS SHALL BE DRAINED INTO THIS SYSTEM.
4. DWELLING TO HAVE WATER SAVING FIXTURES, INCLUDING BUT NOT LIMITED TO: LESS THAN 2 GPM SHOWER HEADS, LOW WATER USE TOILETS & SINK FLOW RESTRICTORS.
5. OBSERVE WATER CONSERVATION PRACTICES.
6. SEPTIC TANKS SHALL BE INSPECTED ANNUALLY TO DETERMINE SCUM AND SLUDGE ACCUMULATION BY THE HOMEOWNER OR A QUALIFIED SEPTIC HAULER. THE AMOUNT OF BUILD-UP NOTED AT EACH SHOULD BE RECORDED AND MAINTAINED IN A RECORD BOOK. THE TANK SHALL BE PUMPED WHENEVER THE BOTTOM OF THE SCUM LAYER IS WITHIN THREE INCHES OF THE BOTTOM OF THE OUTLET BAFFLE OR SANITARY TEE, OR THE TOP OF THE SLUDGE IS WITHIN TEN INCHES OF THE BOTTOM OF THE OUTLET SANITARY TEE. THE PUMP-OUT CLEARANCES ALSO APPLY TO ANY CHAMBER IN MULTI-COMPARTMENT TANKS AND TO ANY TANKS IN SERIES (I.E., PUMP OUT ALL TANKS/CHAMBERS AS SOON AS ANY TANK CHAMBER FAILS THE MINIMUM CLEARANCE). MOST TANKS SHOULD BE PUMPED OUT EVERY TWO TO THREE YEARS.
7. WHEN SEPTIC TANK IS PUMPED, THE SEPTIC TANK, BAFFLES/TEES, HOUSE SEWER CONNECTION, AND TANK OUTLET PIPE SHALL BE INSPECTED. BAFFLES/TEES THAT HAVE DETERIORATED AND NO LONGER PERFORM AS DESIGNED MUST BE REPLACED. CRACKED OR BROKEN LINES MUST BE REPAIRED OR REPLACED.
8. ANY COMPANY EMPLOYED TO CLEAN AND SERVICE THE SEPTIC TANK AND SYSTEM, MUST BE A NYSDEC PERMITTED SEPTIC HAULER. SEPTIC TANKS SHOULD NOT BE WASHED OR DISINFECTED AFTER BEING PUMPED OUT.
9. SEPTIC TANK ADDITIVES SHALL NOT BE USED IN THE SEPTIC SYSTEMS.
10. DO NOT DISPOSE OF EXCESS HOUSEHOLD GREASE AND FAT IN THE SEPTIC SYSTEM.
11. WHENEVER SEPTIC TANKS ARE TO BE ABANDONED (I.E., WHEN PUBLIC SEWERS ARE INSTALLED TO HANDLE HOUSEHOLD WASTES), THE TANKS SHALL BE REMOVED OR PUMPED OUT AND REFILLED WITH SAND TO PREVENT FUTURE CAVE-INS.
12. DO NOT POUR OR DUMP CHEMICAL CLEANERS IN THE SINKS OR TOILETS.
13. NO VEHICULAR PARKING OR TRAFFIC SHALL BE ALLOWED ON ANY PORTION OF THE SEWAGE DISPOSAL AREA.
14. DO NOT DISCHARGE ROOF DRAINS ONTO THE GROUND NEAR THE SEPTIC SYSTEM OR ALLOW THE DISCHARGE FROM ROOF DRAINS TO GO OVER THE LEACH FIELD.
15. THE SUBSURFACE DISPOSAL FIELD IS DESIGNED FOR DOMESTIC WASTEWATER ONLY. THE SEPTIC FIELD IS DESIGNED BASED ON THE PROJECTED FLOW RATES. ANY USE OF THE BUILDINGS THAT HAS A GREATER DISCHARGE OF WASTE WATER FLOW THAN DESIGNED WILL REQUIRE REDESIGN OF THE SUBSURFACE DISPOSAL SYSTEM.
16. THE STAMP AND SEAL OF THE ENGINEER ON THE DRAWING IS FOR THE INTENDED USE ONLY. CHANGE OF USE INVALIDATES THE SEAL.

SEPTIC SYSTEM NOTES:

1. THERE SHALL BE NO CHANGE ON THESE PLANS IN ADVANCE OF OR DURING CONSTRUCTION, WITHOUT PRIOR APPROVAL OF THE DESIGN ENGINEER, NYSDOH, NYSDEC AND THE TOWN BUILDING INSPECTOR AS APPLICABLE.
2. DESIGN, CONSTRUCTION, MATERIAL STANDARDS AND INSPECTION REQUIREMENTS SHALL COMPLY WITH THE LATEST EDITION(S) OF:
   A. NEW YORK STATE PUBLICATION(S):
   A.1. NYSDOH INDIVIDUAL RESIDENTIAL WASTEWATER TREATMENT SYSTEMS DESIGN HANDBOOK
   A.2. NYSDOH APPENDIX 75A
   A.3. NYSDEC DESIGN HANDBOOK (1988)
   B. LOCAL ZONING ORDINANCE
3. THE BUILDER/DEVELOPER IS OBLIGATED TO FURNISH PURCHASER WITH A LEGIBLE REPRODUCTION OF THE APPROVED PLAN, OR A LEGIBLE AS-BUILT FACILITIES LAYOUT, AND IDENTIFY THE MAINTENANCE REQUIREMENTS AS LISTED ON THESE PLANS.
4. THE FOLLOWING SEWAGE AND WATER FACILITIES MUST BE INSPECTED BY A PROFESSIONAL ENGINEER:
   A.SYSTEM CONSTRUCTION PRIOR TO BACKFILL OF PIPING, TANKS, PITS, WELL SEALS, ETC
   B. AFTER FINAL GRADING & PRIOR TO SYSTEM ACTIVATION, PUMP SYSTEM CHECKS, ALARMS & DOSING VOLUMES MUST BE VERIFIED BY THE ENGINEER.
   C. AN "AS-BUILT" DRAWING MUST BE FURNISHED BY THE INSTALLER TO THE ENGINEER, OWNER AND BUILDING INSPECTOR
5. NO EXISTING OR APPROVED PROPOSED WATER SUPPLY AND/OR SEWAGE FACILITIES OR OTHER SIGNIFICANT PHYSICAL FEATURES ARE KNOWN TO BE LOCATED WITHIN 200' OF THIS PROJECT'S LIMITS, EXCEPT AS SHOWN.
6. ALL TREES WITHIN DISPOSAL AND EXPANSION AREA SHALL BE CUT FLUSH & REMOVED WITH ALL ROOTS SYSTEMS SHALL NOT BE REMOVED WHERE AT ALL POSSIBLE. SHALLOW TRENCH ABSORPTION SYSTEM FILL MATERIAL SHALL HAVE A PERCOLATION RATE OF LESS THAN 1" IN 30 MINS AND GREATER THAN 1" IN 5 MINUTES.

SANITARY INSPECTIONS:

1. SEPTIC TANK TO BE SET LEVEL ON 6" LAYER OF COMPACTED GRAVEL OR STONE.
2. SEPTIC TANK TO HAVE SCH 40 PVC "T" AT INLET AND OUTLET.
   - INLET 12" BELOW FLOW LINE, 6" ABOVE FLOW LINE.
   - OUTLET 14" BELOW FLOW LINE, 6" ABOVE FLOW LINE.
   - 3" AIR SPACE ABOVE "TS" TO TOP OF TANK.
3. THERE SHALL BE NO CONSTRUCTION OF SANITARY FACILITIES (SEPTIC SYSTEMS) WITHIN 100' OF A CLASSIFIED BODY OF WATER.
4. HOUSE TO SEPTIC TANK: 4" PVC SCHEDULE 40 PIPE WITH TIGHT JOINTS, MINIMUM SLOPE = 1/4" PER FOOT, WITH CLEANOUT FITTED WITH PROPER FITTING CAPS.
5. SEPTIC TANK TO DISTRIBUTION BOX: 4" PVC SCHEDULE 40 PIPE, TIGHT JOINTS, MIN. SLOPE = 1/8" PER FOOT.
6. SANITARY DISPOSAL FIELD: 4" PERFORATED PLASTIC PIPE, MAX. SLOPE = 1/16" PER FOOT, CAP ALL ENDS.
7. DISTRIBUTION BOX SHALL BE NEW YORK STATE HEALTH DEPARTMENT APPROVED AND SHALL BE SET BY WATER LEVEL METHOD. SPEED LEVELERS SHALL BE USED
8. ENGINEER SHALL VERIFY PERCOLATION OF FILL AND ADEQUATE SEPARATION TO GROUNDWATER AND IMPERMEABLE CONDITIONS PRIOR TO PLACEMENT OF LATERALS. PERCOLATION TESTS (2) MIN. AND (1) 7' DEEP, DEEP PIT TEST TO BE CONDUCTED IN CONSOLIDATED FILL MATERIAL PRIOR TO ABSORPTION FIELD CONSTRUCTION.
9. ACTUAL LINEAR FOOTAGE OF ABSORPTION FIELD TO BE DETERMINED BASED ON THE SLOWER OF THE PERCOLATION RATE OF THE ORIGINAL IN-SITE SOIL OR THE CONSOLIDATED FILL MATERIAL.

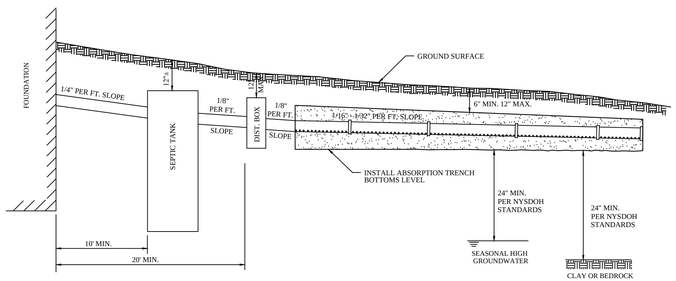
SEPTIC SYSTEM DESIGN TABLE [1]

LOT #	FIELD PERC. RATE (Min./In.)	APPLICATION RATE (Gal/Day/SF)	# BEDROOMS	DESIGN FLOW [2]	TOTAL TRENCH REQ. (LF)	# LATERALS	LATERAL LENGTH (LF)	TOTAL TRENCH LENGTH PROPOSED (LF)	DEPTH TO MOTTLING (INCH)	FILL DEPTH (INCH)	COMMENTS (SEE NOTE 5)
1	16:52	1.2	4	440	315	6	53	318	25	23	SHALLOW TRENCH
2	13:00	1.2	4	440	275	5	55	275	30	18	SHALLOW TRENCH
3	8:00	1.2	4	440	245	5	49	245	36	36	SHALLOW TRENCH
4	18:00	1.2	4	440	315	6	53	318	25	25	SHALLOW TRENCH

NOTES:
1.) INDIVIDUAL SEPTIC SYSTEM DESIGNS AS PER 2012 NYSDOH "INDIVIDUAL RESIDENTIAL WASTEWATER TREATMENT SYSTEM DESIGN HANDBOOK" AND ARE CONCEPTUAL FOR PLANNING PURPOSES.
2.) DESIGN FLOW BASIS IS 110 GPD/BEDROOM ASSUMING WATER SAVING FIXTURES PER NYSDOH REGULATIONS.
3.) CONVENTIONAL SHALLOW TRENCH SYSTEMS ARE PROPOSED FOR ALL LOTS. SEPTIC SYSTEM DESIGNS AND INSTALLATION TO COMPLY WITH NYSDOH AND CITY REQUIREMENTS.
4.) SEE SHEET 4 FOR SOIL TEST PIT PERCOLATION TEST INFORMATION.
5.) FINAL SYSTEM TYPE AND DESIGN SHALL BE DETERMINED CONCURRENT WITH INDIVIDUAL LOT BUILDING PERMIT APPLICATIONS.

REQUIRED ABSORPTION TRENCH LENGTHS

PERCOLATION RATE (MIN./INCH)	FLOW RATE (GALLONS/DAY)														
	2 BEDROOMS			3 BEDROOMS			4 BEDROOMS			5 BEDROOMS			6 BEDROOMS		
1 – 5	220	260	300	330	390	450	440	520	600	550	650	750	660	780	900
6 – 7	92	108	125	138	162	187	184	216	250	230	270	312	275	325	374
8 – 10	110	130	150	165	195	225	220	260	300	275	325	375	330	390	450
11 – 15	123	145	167	184	217	250	245	290	333	306	360	417	367	433	500
16 – 20	138	162	188	207	244	281	275	325	375	344	406	469	413	488	563
21 – 30	158	186	214	236	279	321	315	372	429	393	464	536	472	557	643
31 – 45	184	217	250	275	325	375	367	433	500	459	542	625	550	650	750
46 – 60	220	260	300	330	390	450	440	520	600	550	650	750	660	780	900
	245	290	333	367	433	500	489	578	667	612	722	833	734	867	1000*
	DOSING NOT REQUIRED						DOSING OR ALTERNATE DESIGN REQUIRED								



SEPTIC SYSTEM PROFILE – TYPICAL

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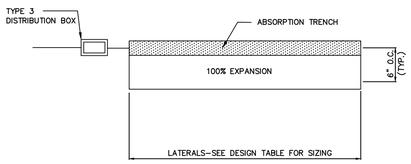

MATERIALS SCHEDULE

ITEM	SIZE	MATERIAL	MFG. *	SLOPE
SEPTIC TANK	See Notes	PRECAST CONC.	FORT MILLER	——
DISTRIBUTION BOX	#3	PRECAST CONC.	FORT MILLER	——
HOUSE TO SEPTIC TANK	4"	SOLID PVC SCH-40	——	1/4"/FT. MIN.
SEPTIC TANK TO D-BOX	4"	SOLID PVC SCH-40	——	1/8"/FT. MIN.
D-BOX TO LATERALS	4"	SOLID PVC SEWER PIPE	——	1/8"/FT. MIN.
LATERALS	4"	PERF. PVC SEWER PIPE	——	1/16"/FT. MAX.

TYPICAL LEACH FIELD LAYOUT

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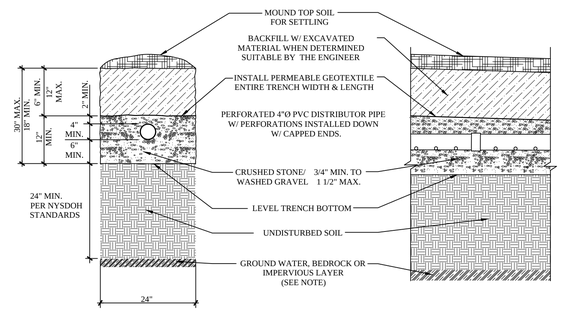
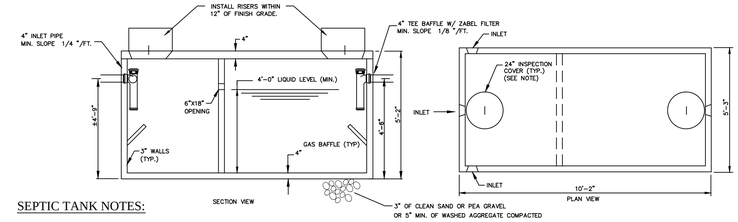


CROSS-SECTIONAL VIEW LONGITUDINAL VIEW

NOTES:
1) DO NOT INSTALL TRENCH IN WET SOIL.
2) RAKE SIDES AND BOTTOM OF TRENCH PRIOR TO PLACING GRAVEL OR STONE.
3) END OF ALL DISTRIBUTOR PIPES MUST BE CAPPED.
4) SLOPE DISTRIBUTOR PIPE @ 1/16" - 1/32" PER FT.
5) IF VERTICAL SEPARATION CANNOT BE OBTAINED, USE ALTERNATE METHOD.

ABSORPTION TRENCH DETAIL

N.T.S.



SEPTIC TANK NOTES:

1. SHALL HAVE INLET/OUTLET SANITARY TEE BAFFLE
2. MIN. ONE 20" DIA. ACCESS/INSPECTION OPENING PER COMPARTMENT
3. MIN. ONE CLEAN OUT OPENING
4. TANK SHALL BE WATER TIGHT WITH 4 HT. MIN. (DESIGN CALC. - 5'MAX) LIQUID DEPTH
5. MIN. 2" INLET/OUTLET INVERT DIFFERENTIAL
6. RECT. TANKS SHALL HAVE AN EFFECTIVE LENGTH 2 TO 4 TIMES THE EFFECTIVE WIDTH
7. LIQUID SURFACE SHALL BE BETWEEN 2.7 AND 5.3 SF/100 GAL. OF TANK CAPACITY
8. MIN. 1' VERTICAL CLEARANCE BETWEEN BAFFLES AND INSIDE TOP OF TANK
9. TANK TOP SHALL BE ABLE TO SUPPORT 300 PSF. MIN.
10. MULTI COMPARTMENT TANKS SHALL BE REQUIRED IF INSIDE TANK LENGTH > 10 FT.
11. FIRST COMPARTMENT SHALL BE 60 - 75% OF DESIGN VOLUME
    a. COMPARTMENT DIVIDER SHALL EXTEND FROM THE TANK BOTTOM UP TO 6" ABOVE OUTLET INVERT
    b. CONNECT COMPARTMENTS WITH 4"W X 28" H. SLOT OR (2) 4'DIA. ELBOWS, AT 1/3 LIQUID DEPTH
    c. RECOMMEND TWO ACCESS PORTS BE INSTALLED TO FINISHED GRADE FOR EASE OF MAINTENANCE
13. ALL TANK PENETRATIONS TO BE SEALED OR CAULKED WATERTIGHT
14. INSTALL ZABEL FILTER ON TEE OUTLET BAFFLE

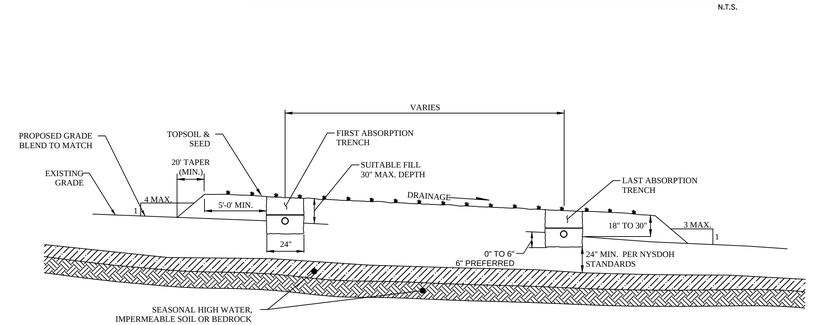
ADDITIONAL CAPACITY
15. ADD 500 GALLONS TO THE SEPTIC TANK CAPACITY IF A SPA/WHIRLPOOL/HOT TUB IS INSTALLED

REQUIRED TANK SIZES

BEDROOMS	MINIMUM TANK SIZE (GALLONS)	MINIMUM LIQUID SURAFCE AREA (SQ. FT.)
1–3	1,000	27
4	1,250	34
5	1,500	40
6	1,750	47

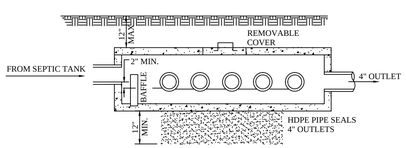
SEPTIC TANK DETAIL–TYPICAL

N.T.S.

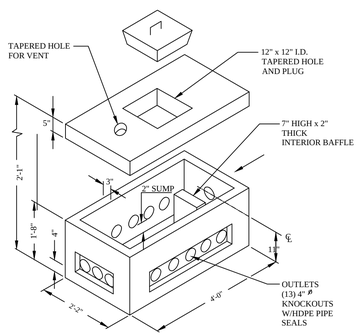


SEWAGE LEACH FIELD–SHALLOW TRENCH

N.T.S.



SECTION VIEW



NOTES:
1. PIPE JOINTS TO BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.
2. INVERT ELEVATIONS OF ALL OUTLET PIPES MUST BE EQUAL. USE OF SPEED LEVELING DEVICES IS REQUIRED.
3. THE SLOPE OF OUTLET PIPES BETWEEN THE DISTRIBUTION BOX AND DISTRIBUTOR LATERALS SHOULD BE AT LEAST 1/8" PER FOOT.
4. BAFFLE REQUIRED.
5. INSTALL USING WATER LEVEL METHOD.
6. USE FORT MILLER #2 DISTRIBUTION BOX OR APPROVED EQUAL SUITABLE FOR 100% EXPANSION.

#3 DISTRIBUTION BOX DETAIL

N.T.S.

APPROVAL:

APPROVED UNDER AUTHORITY OF A RESOLUTION ADOPTED _____

BY THE PLANNING BOARD OF THE CITY OF SARATOGA SPRINGS.

_____ CHAIRPERSON DATE SIGNED_____

Site Details & Notes

Kaydeross Estates Residential Subdivision

STATE OF NEW YORK · KURT M. BEDORE · LICENSED PROFESSIONAL ENGINEER · 75223
KURT M. BEDORE, P.E.
N.Y.S. LIC. NO. 75,223

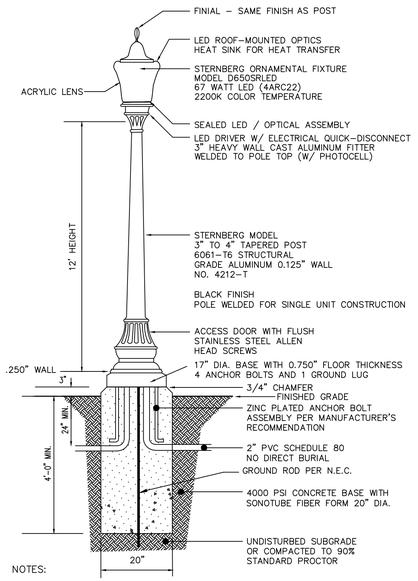
KB ENGINEERING & CONSULTING PLLC
89 KINGSBURY ROAD
BURNT HILLS NY, 12027–9432
518–384–3715

SCALE: AS SHOWN

CITY OF SARATOGA SPRINGS ~ OUTSIDE DISTRICT ~ SARATOGA COUNTY, NEW YORK FEBRUARY 28, 2007

KB PROJECT NO. 13020

REVISIONS:
04/11/07
06/21/07
10/26/07
12/28/07
2/1/08
10/16/13

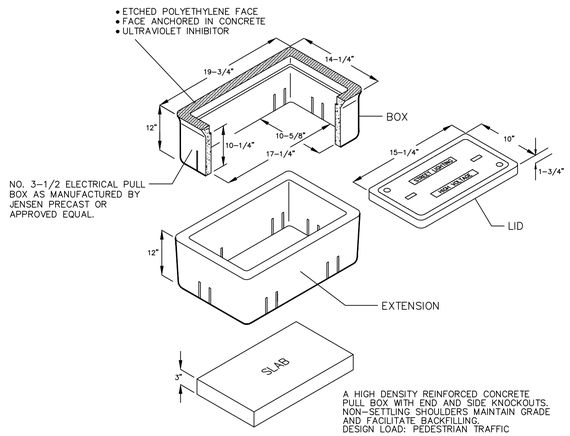


NOTES:

1. INSTALLATION OF DECORATIVE LIGHTS SHALL BE COORDINATED WITH THE CITY ELECTRICIAN AND DEPARTMENT OF PUBLIC WORKS.*WATTAGE SHALL BE AS DIRECTED BY CITY ELECTRICIAN.
2. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ELECTRIFYING THE SYSTEM AND PAYING THE ELECTRIC BILLS UNTIL ACCEPTED AND TAKEN OVER BY THE CITY OF SARATOGA SPRINGS.
3. ELECTRIC SERVICE: SWEEPS AT CONCRETE BASES AND BETWEEN BASES USE 2" SCH. 80 PVC NON-METALLIC CONDUIT: FOR WIRE: URD 3-CONDUCTOR NO. 2, 120 VOLT, 100 AMP CABLE. IF CONNECTING TO NATIONAL GRID FROM A POLE, PROVIDE A SEPARATE HANDHOLE TO BE OWNED BY THE CITY FOR THE DISCONNECT AT BASE OF ELECTRIC POLE AT THE BEGINNING OF ELECTRIC SERVICE. WIRE AND CONDUIT FROM HANDHOLE TO POLE PER NATIONAL GRID STANDARDS. USE POLARIS CONNECTORS, CATALOG NUMBER IT-1/0, FOR CONNECTIONS IN HANDHOLE AND IN BASE OF LIGHTS. EACH LIGHT TO BE FUSED IN BASE OF LAMP POLE WITH 10 AMP FUSE WITH BUSSMANN HEB-AA IN-LINE FUSE HOLDER. IF CONNECTING MORE THAN THREE LIGHTS FROM SAME SOURCE OF POWER, PROVIDE 30 AMP IN-LINE FUSE WITH WATERTIGHT FUSE HOLDER OF PROPER SIZE FOR WIRE. SEPARATE HANDHOLE IS NOT REQUIRED IF CONNECTING TO A NATIONAL GRID HANDHOLE.

LED LUMINAIRE (TYPE A) AND POLE FOUNDATION

(DECORATIVE STREET LIGHT) N.T.S.



JENSEN PRECAST CATALOG NO.	PRODUCT	DESCRIPTION	APPROX. WT. (LBS.)
CYN9	BOX	REINFORCED CONCRETE	85
FL9T	LID	NONMETALLIC LID W/HOLD DOWN BOLTS	6
CYN9EX	EXTENSION	12" HIGH REINFORCED CONCRETE	82
CYN9SL	SLAB	REINFORCED CONCRETE	30

ELECTRCAL PULL BOX DETAIL

N.T.S.

WATER SYSTEM NOTES:

1.) A. THE WATER SYSTEM PROVIDER IS THE CITY OF SARATOGA SPRINGS.

B. THE WATER SYSTEMS AND SERVICES SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ALL PROVIDER, LOCAL, STATE, AND FEDERAL REQUIREMENTS.

C. ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C-651 OR OTHER METHOD APPROVED BY THE CITY OF SARATOGA SPRINGS FOLLOWING FLUSHING, WATER SAMPLES SHALL BE COLLECTED FROM THE MAIN AND EACH BRANCH. FIRE HYDRANTS ARE NOT ACCEPTABLE SAMPLING POINTS. WATER SAMPLES SHALL BE COLLECTED AND THE WATER MAIN SHALL NOT BE PLACED IN SERVICE UNTIL THE WATER HAS BEEN APPROVED NOTIFICATION THEREOF RECIEVED.

D. WATER MAINS SHALL BE CLEANED, INSPECTED, AND DISINFECTED, IN ACCORDANCE WITH AWWA STANDARDS FOR DISINFECTING WATER MAINS C-651-92 WITH THE EXCEPTION OF SECTION 5.1 TABLET METHOD, (AND REPAIRED, RETESTED, REDISINFECTED, REPRESSURE TESTED,, AND REINSPECTED IF REQUIRED) IN ACCORDANCE WITH THE SARATOGA WATER SEWER AUTHORITY, NYSDOH, AND ALL APPLICABLE REQUIREMENTS. RESULTS TO BE SUBMITTED TO THE CITY ENGINEER. NO PIPELINE INSTALLATION WILL BE APPROVED WHEN LEAKAGE IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{S\ D\ P^{(1/2)}}{133{,}200}$$

L = ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE IN INCHES
P = AVERAGE TEST PRESSURE DURING LEAKAGE TEST (PSIG)

EXAMPLE: THE MAXIMUM ALLOWABLE LEAKAGE OF 8" PIPE FOR A TWO-HOUR TEST PER ONE-THOUSAND-FOOT LENGTH OF PIPE SHALL BE 1.48 GALLONS AT 150 PSI PRESSURE.

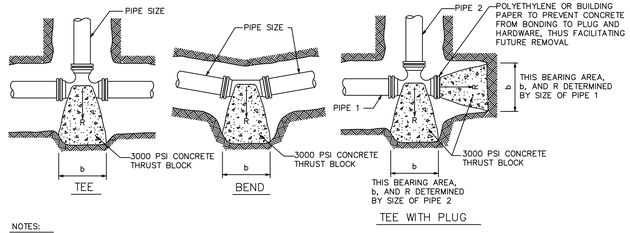
$$\frac{S\ D\ P^{(1/2)}}{133{,}200} = \frac{(1000') \times (8") \times 150^{(1/2)}}{133{,}200} = 0.74 \text{ GALLONS PER HOUR} = 1.48 \text{ GALLONS FOR 2 HOURS}$$

E. CHLORINATED WATER FROM THE DISINFECTION PROCESS SHALL BE THOROUGHLY NEUTRALIZED WITH AN ACCEPTABLE CHEMICAL (SEE APPENDIX B OF AWWA C-651-92) PRIOR TO DISPOSAL, IF DISPOSAL IS NOT INTO A PUBLIC SEWER SYSTEM. THE NEUTRALIZATION PROCESS CAN TAKE PLACE IN A TANKER TRUCK OR OTHER MEANS ACCEPTABLE TO REGULATORY AGENCIES.

F. THE MINIMUM SEPARATION DISTANCE BETWEEN WATER SERVICES AND SEWER LINES SHALL BE 18 INCHES MEASURED VERTICALLY FROM THE OUTSIDE OF PIPE TO OUTSIDE OF PIPE. WATER SERVICES AND SEWER LINES RUNNING PARALLEL SHALL HAVE A MINIMUM HORIZONTAL SEPARATION DISTANCE OF 10 FEET MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE. A MINIMUM SEPARATION DISTANCE OF 4 FEET SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ALL CATCH BASINS.

2.) ALL NEWLY INSTALLED WATER MAINS SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA C-600.

MINIMUM REQUIRED BEARING AREAS & DIMENSIONS FOR CONCRETE THRUST BLOCKS										
PIPE SIZE (IN.)	TEE (NOTE #1)		90° (1/4) BEND		45° (1/8) BEND		22.5° (1/16) BEND		11.25° (1/32) BEND	
	AREA SQ.FT.	DIMENSIONS D x L	AREA SQ.FT.	DIMENSIONS D x L	AREA SQ.FT.	DIMENSIONS D x L	AREA SQ.FT.	DIMENSIONS D x L	AREA SQ.FT.	DIMENSIONS D x L
3"	1.5	1.0x1.5	2.0	1.0x2.0	1.2	0.8x1.5	0.6	0.8x0.8	0.4	0.5x0.8
4"	2.6	1.3x2.0	3.2	1.6x2.0	1.7	1.3x1.3	1.0	0.8x1.3	0.5	0.5x1.0
6"	4.5	1.8x2.5	8.0	2.0x3.0	3.5	1.5x2.3	2.0	1.3x1.5	1.2	0.8x1.5
8"	7.5	2.5x3.0	10.6	2.8x3.8	5.8	2.3x2.5	3.0	1.5x2.0	1.5	1.0x1.5

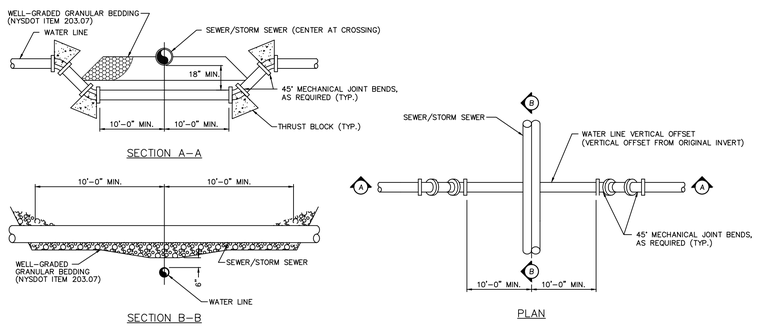


NOTES:

1. CONCRETE NOT TO OVERLAP ANY JOINT.
2. CONCRETE TO BE PLACED SO AS NOT TO INTERFERE WITH REMOVING OR INSTALLING ANY OF THE JOINTING HARDWARE.
3. FOR REDUCERS USE MECHANICAL JOINT FITTINGS WITH RETAINER GLANDS.
4. FOR DIMENSIONS AND THRUST REACTIONS SEE TABLE THIS SHEET

TYPICAL CONCRETE THRUST BLOCK DETAIL

N.T.S.

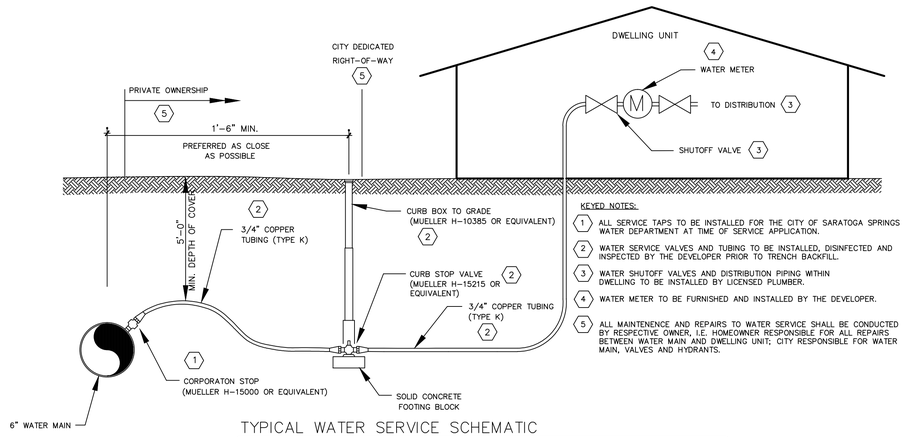


NOTES:

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 OF SUFFICIENT STABILITY TO RESIST THE THRUSTS, ALL AS REQUIRED BY THE ENGINEER.

WATER LINE/STORM SEWER CROSSING DETAIL

N.T.S.

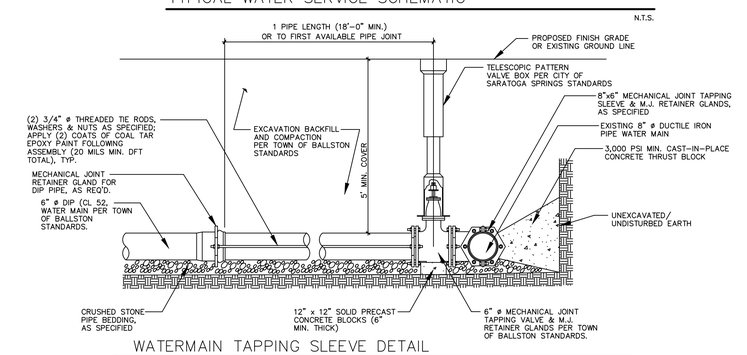


KEYED NOTES:

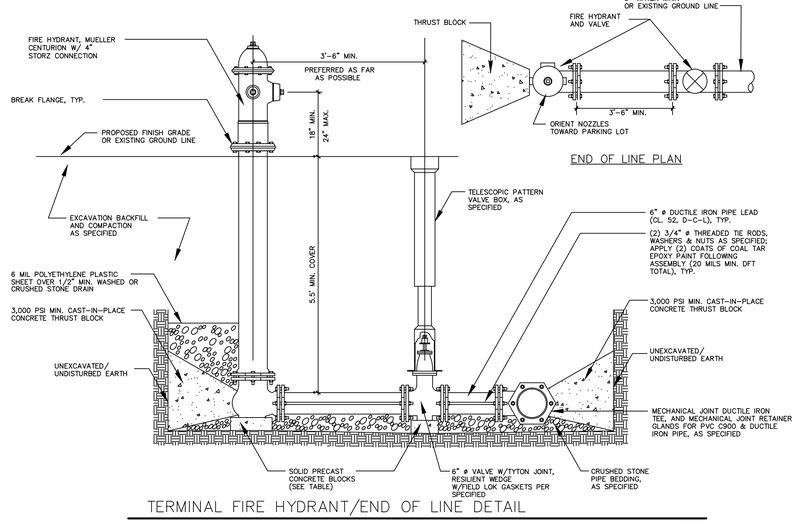
1. ALL SERVICE TAPS TO BE INSTALLED FOR THE CITY OF SARATOGA SPRINGS WATER DEPARTMENT AT TIME OF SERVICE APPLICATION.
2. WATER SERVICE VALVES AND TUBING TO BE INSTALLED, DISINFECTED AND INSPECTED BY THE DEVELOPER PRIOR TO TRENCH BACKFILL.
3. WATER SHUTOFF VALVES AND DISTRIBUTION PIPING WITHIN DWELLING TO BE INSTALLED BY LICENSED PLUMBER.
4. WATER METER TO BE FURNISHED AND INSTALLED BY THE DEVELOPER.
5. ALL MAINTENENCE AND REPAIRS TO WATER SERVICE SHALL BE CONDUCTED BY RESPECTIVE OWNER, I.E. HOMEOWNER RESPONSIBLE FOR ALL REPAIRS BETWEEN WATER MAIN AND DWELLING UNIT; CITY RESPONSIBLE FOR WATER MAIN, VALVES AND HYDRANTS.

TYPICAL WATER SERVICE SCHEMATIC

N.T.S.



WATERMAIN TAPPING SLEEVE DETAIL



TERMINAL FIRE HYDRANT/END OF LINE DETAIL

N.T.S.

APPROVAL:

APPROVED UNDER AUTHORITY OF A RESOLUTION ADOPTED _____

BY THE PLANNING BOARD OF THE CITY OF SARATOGA SPRINGS.

_____ CHAIRPERSON DATE SIGNED_____

Utility Details

Kaydeross Estates Residential Subdivision

STATE OF NEW YORK · KURT M. BEDORE · LICENSED PROFESSIONAL ENGINEER · 75223

KURT M. BEDORE, P.E.
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89 KINGSBURY ROAD
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SCALE: AS SHOWN

CITY OF SARATOGA SPRINGS
~ OUTSIDE DISTRICT ~
SARATOGA COUNTY, NEW YORK
FEBRUARY 28, 2007

KB PROJECT NO. 13020

REVISIONS:
04/11/07
06/21/07
10/26/07
12/28/07
2/1/08
10/16/13

EROSION CONTROL, SITE RESTORATION AND STORMWATER MANAGEMENT:

1. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ON SITE AND SHALL SIGN THE AGREEMENT TO COMPLY WITH THE PLAN AS A CONDITION OF AUTHORIZATION TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES.

2. PRIOR TO CONSTRUCTION EQUIPMENT ENTERING OR EXITING THE SITE, A CONSTRUCTION ENTRANCE SHALL BE BUILT UNLESS EXISTING CONDITIONS PREVENT ANY TRACKING OF DIRT, MUD, OR DEBRIS OFF THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE TO KEEP ALL ROAD, PARKING SPACES, SIDEWALKS AND ADJACENT PROPERTIES FREE OF DIRT OR OTHER DEBRIS. THIS WILL INCLUDE SCRAPING AND WASHING THE PAVEMENT SURFACES WHENEVER NEEDED. THE CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS. THE ENTRANCE SHOULD BE LOCATED THAT ALL VEHICLES LEAVING THE SITE SHALL UTILIZE IT.

3. ALL EROSION CONTROL DEVICES SHALL BE PLACED AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE FEDERAL, STATE, LOCAL AND MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL PLACE AND MAINTAIN ALL EROSION CONTROL DEVICES AS NEEDED THROUGHOUT THE PROJECT.

4. SILT FENCE SHALL HAVE HARDWOOD STAKES 2X2 INCH AND 4 FEET LONG, WOVEN INTO THE FABRIC. THE BASE OF THE SILT FENCE SHALL BE EXCAVATED SO AS TO PROVIDE AN AREA TO BURY THE BOTTOM OF THE FABRIC AT LEAST 8" INTO THE GROUND. THE STAKES SHALL BE DRIVEN TO A DEPTH THAT WILL PLACE THE BOTTOM FABRIC AT THE BOTTOM OF THE TRENCH. THEN BACK FILL THE BOTTOM FABRIC ON THE UPSTREAM SIDE WITH THE MATERIAL THAT WAS EXCAVATED.

5. SILT FENCE SHALL BE PLACED WHEREVER SURFACE DRAINAGE CAN LEAVE THE SITE AND AT THE TOE OF THE FILL SLOPES TO PROTECT THE WETLANDS.

6. STONE CHECK DAMS SHALL BE PLACED IN ALL DRAINAGE WAYS, BUT NOT IN STREAMS, CREEKS OR RIVERS. STONE FILTERS SHALL CONSIST OF UNIFORM MIX OF ½" TO ¾" CLEAN STONE WRAPPED IN FILTER FABRIC AND COVERED WITH 4" STONE.

7. AREAS SHALL BE TEMPORARY SEEDED WHEN THEY ARE SUBJECT TO EROSION AND WILL LIE DORMANT FOR A PERIOD OF 14 DAYS OR MORE.

7.A. IF SPRING, SUMMER OR EARLY FALL; SEED WITH RYE GRASS (ANNUAL OR PERENNIAL) AT 30 LBS. PER ACRE (APPROXIMATELY 0.7 LB/1000 SQ. FT. OR USE 1 LB/1000 SQ. FT.)

7.B. IF LATE FALL OR EARLY WINTER; THEN SEED WITH CERTIFIED 'AROOSTOCK' WINTER RYE (CEREAL RYE) AT 100 LBS. PER ACRE (2.5 LB/1000 SQ. FT.)

8. MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ACRE (APPROX. 0.05 LB/SQ. FT.). QUALITY OF HAY OR STRAW MULCH ALLOWABLE WILL BE DETERMINED BASED ON LONG TERM USE AND VISUAL CONCERNS. MULCH ANCHORING WILL BE REQUIRED WHERE WINDS OR AREAS OF CONCENTRATED WATER ARE OF CONCERN.

SEQUENCE OF CONSTRUCTION:

1. PRIOR TO DISTURBANCE OF ANY KIND, THE CONTRACTOR SHALL HAVE SIGNED THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AND HAVE THE ORIGINAL SWPPP AND A COPY OF THE EROSION CONTROL PLAN ON SITE THROUGHOUT THE LIFE OF THE PROJECT. THE OWNER SHALL EMPLOY A PERSON OR FIRM TO INSPECT THE SITE AND THE SEDIMENT CONTROLS INSTALLED ON AT LEAST A WEEKLY BASIS, AND AFTER EVERY RAINFALL OF ½ " OR MORE

2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AND HAVE A PRE-CONSTRUCTION MEETING WITH THE CITY OF SARATOGA SPRINGS CITY ENGINEER PRIOR TO ANY WORK ONSITE.

3. CONTRACTOR SHALL CLEAR AND GRUB AS NECESSARY FOR, AND INSTALL THE STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND OTHER SEDIMENT CONTROL DEVICES.

4. CLEAR AND GRUB SITE WITHIN LIMITS OF CLEARING, AND INSTALL UTILITIES AND DRAINAGE SYSTEM.

5. CONTRACTOR SHALL NOT BURY TREES, STUMPS, CONSTRUCTION DEBRIS OR OTHER DELETERIOUS MATERIALS - ANY SUCH MATERIALS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF OFFSITE.

6. UPON COMPLETION OF UTILITY AND DRAINAGE INSTALLATION, BOX OUT SHARED DRIVEWAY, INSTALL GRAVEL AND PAVEMENT.

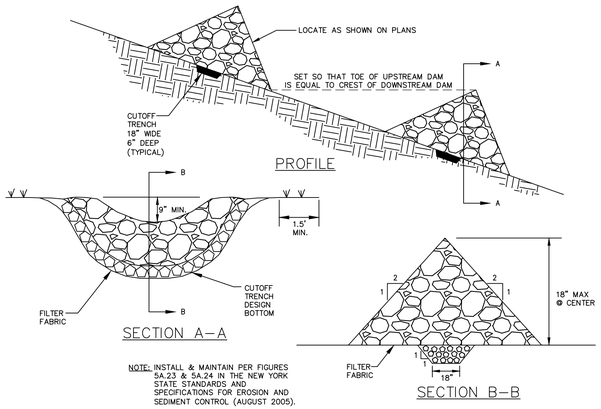
7. UPON COMPLETION OF UTILITY AND PAVEMENT RESTORATION, AND STABILIZATION OF DISTURBANCE TO THOSE AREAS, REMOVE SEDIMENT CONTROLS AND STABILIZE ANY REMAINING DISTURBED AREAS.

8. STABILIZE ALL DISTURBED AREAS AS SOON AS POSSIBLE. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT CONTROLS FOR HOUSE CONSTRUCTION.

9. CONSTRUCT HOUSE AND INSTALL UTILITIES, DRIVEWAY, GRADING AND LANDSCAPING. WATER SERVICES MUST BE INSTALLED FROM THE MAIN TO THE RIGHT-OF-WAY LINE PRIOR TO BEGINNING HOUSE CONSTRUCTION.

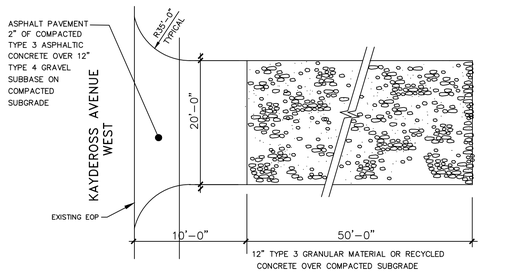
10. UPON COMPLETION OF HOUSE CONSTRUCTION AND STABILIZATION OF AREA DRAINING TO THE SEDIMENT CONTROLS INSTALLED IN ABOVE NOTE 6, REMOVE THOSE SEDIMENT CONTROLS AND STABILIZE ANY REMAINING DISTURBED AREAS.

11. IMPLEMENT SWPPP OPERATION & MAINTENANCE MEASURES FOR POST CONSTRUCTION PRACTICES IMMEDIATELY UPON STABILIZATION AND NOTICE OF TERMINATION FILLING. RAIN GARDEN OPERATION AND MAINTENANCE RESPONSIBILITIES TRANSFER FROM THE APPLICANT/CONTRACTOR AS APPLICABLE TO THE INDIVIDUAL LOT OWNER THEREAFTER.



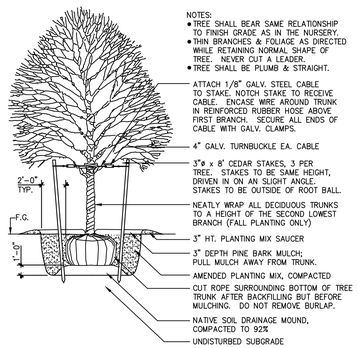
STONE CHECK DAM DETAIL

N.T.S.



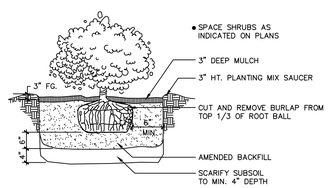
STABILIZED CONSTRUCTION ENTRANCE

N.T.S.



DECIDUOUS TREE PLANTING

N.T.S.



SHRUB TREE PLANTING

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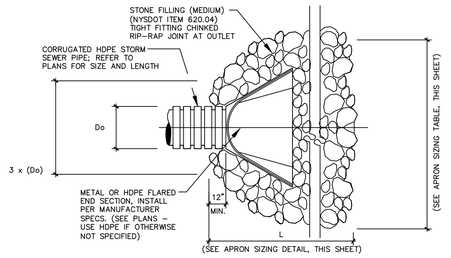
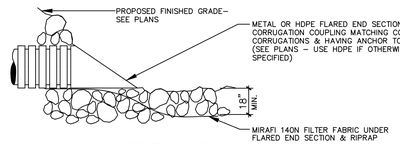


PLAN VIEW



SECTION VIEW

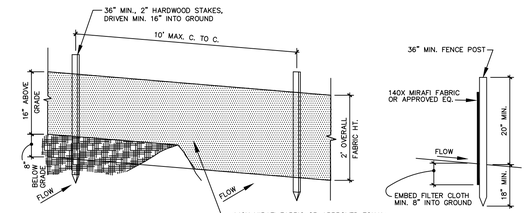
* TO BE USED AT ALL OPEN PIPE ENDS

APRON SIZING TABLE

LOCATION	APRON SIZE (LxW)
12" INLET/OUTLET LOT #1	10' x 10'
8" INLET/OUTLET LOT #2	6' x 6'
8" INLET/OUTLET LOT #3	6' x 6'
8" INLET/OUTLET LOT #4	6' x 6'
12" DRIVEWAY CULVERTS (ALL LOTS)	6' x 6'
12" INLET & OUTLET LOT #1 TO STREAM	10' x 10'
12" INLET KAYDEROSS AVE. R.O.W.	5' x 10'
12" OUTLET KAYDEROSS AVE. R.O.W.	10' x 10'

FLARED END SECTION DETAIL

N.T.S.



SILT FENCE DETAIL

N.T.S.

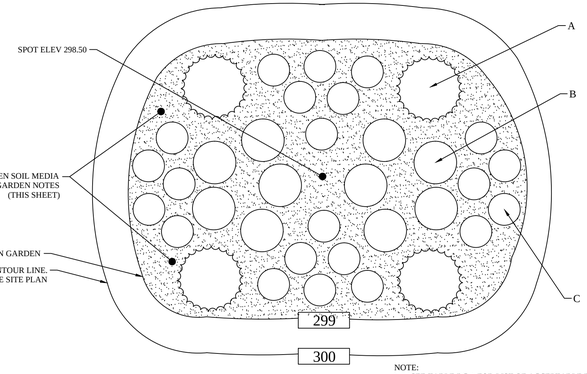
SCHEDULE OF MAINTENANCE:
1.) MAINTENANCE OF ALL EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2.) EROSION CONTROL DEVICES SHALL BE INSPECTED BY THE CONSTRUCTION SUPERINTENDENT AT THE CONCLUSION OF EACH CONSTRUCTION DAY TO ENSURE ALL CONTROLS ARE FUNCTIONING PROPERLY.
3.) SWPPP INSPECTIONS SHALL OCCUR EVERY SEVEN (7) CALENDAR DAYS OR FOLLOWING ANY STORM EVENT OF 0.5 INCHES OF PRECIPITATION OR GREATER BY A TRAINED INSPECTOR.
4.) SILT FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO ENSURE THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO ENSURE THE FENCE POSTS ARE FIRMLY IN THE GROUND.
5.) SHOULD ANY EROSION CONTROL MEASURE BE FOUND TO BE IN NEED OF REPAIR, THE REPAIR SHALL BE INITIATED WITHIN 24 HOURS OF THE REPORT OF THE DEFICIENCY.

TABLE RG-1

SCIENTIFIC NAME	COMMON NAME	PLANT CATEGORY
HAMEMELIS VIRGINIANA	WITCH HAZEL	A
ILEX VERTICILLATA	WINTERBERRY	
VIBURNUM DENTATUM	ARROWWOOD	
ALNUS SERRULATA	BROOK-SIDE ALDER	
CORNUS STOLONIFERA	RED-OSIER DOGWOOD	
CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	B
OSMUNDA CINNAMOMOMEA	CINNAMON FERN	
RUDBECKIA LACINIATA	CUTLEAF CONEFLOWER	C
SCIRPUS CYPERINUS	WOOLGRASS	
ASTER NOVAE-ANGLIAE	NEW ENGLAN ASTER	
CAREX VULPINOIDEA	FOX SEDGE	
EUPATORIUM MACULATUM	SPOTTED JOE-PYE WEED	
PANICUM VIRGATUM	SWITCH GRASS	
LOBELIA SIPHATICA	GREAT BLUE LOBELIA	
MONARDA FISTULOSA	WILD BERGAMOT	
ASCLEPIAS INCARNATE	RED MILKWEED	

PLANT QUANTITY PER CATEGORY

A-4
B-10
C-22



NOTE:
1. SEE TABLE RG-1 FOR LIST OF ACCEPTABLE PLANTINGS. CONTRACTOR AND OWNER TO SPECIFY THE EXACT PLANTINGS FROM APPROVED LIST. REFER TO THE GRADING AND LANDSCAPING PLANS FOR RAIN GARDEN AREA CONFIGURATIONS. GRADE TO DRAIN RAIN GARDEN SURCHARGE TO BE DIRECTED TOWARD ROADSIDE SWALES VIA POSITIVE SURFACE GRADES - SEE SHEET FOR FOR GRADING PLAN

2. MAXIMUM DEPTH OF RAIN GARDEN NOT TO EXCEED 18" BELOW EXISTING GRADE

RAIN GARDEN DETAIL – PLAN VIEW

N.T.S.

RAIN GARDEN INSTALLATION, OPERATIONS & MAINTENANCE NOTES:

1. RAIN GARDENS SHALL BE INSTALLED AND MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH N.Y.S.D.E.C. STORMWATER MANAGEMENT DESIGN MANUAL 2010 ED., CHAPTER 5, SECTION 5.3.7.,
2. RAIN GARDENS SHALL BE LOCATED A MINIMUM OF 10 FEET FROM ANY BUILDING FOUNDATION.
3. RAIN GARDENS SHALL BE GRADED A MINIMUM OF 6 INCHES LOWER THAN SURROUNDING FINISHED GRADES.
4. RAIN GARDENS SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 24 INCHES, THEN LAYERED WITH GEOTEXTILE FABRIC. BACKFILL WITH 6 TO 12 INCHES OF CLEAN GRAVEL. GRAVEL SHALL BE 1 ½"-2" WASHED, ANGULAR STONE. FILL WITH 12 TO 18 INCHES OF SOIL MEDIA.
5. SOIL MEDIA SHALL BE COMPOSED OF 50%-70% SAND (LESS THAN 5% CLAY CONTENT), 30%-50% TOPSOIL WITH LESS THAN 5% ORGANIC MATTER.
6. CONTRACTOR SHALL INSTALL AN OVERFLOW AREA DRAIN INLET AT LOW POINT OF RAIN GARDEN. INVERT ELEVATION SHALL BE SET AT 6-8 INCHES ABOVE LOWEST POINT OF RAIN GARDEN AND SHALL CONNECT TO AN APPROPRIATE SIZED STORMWATER MANAGEMENT SYSTEM SIZED TO ACCEPT OVERFLOW VOLUMES, OR ACCEPTABLE OUTLET CONTROL DEVICE.
7. CONTRACTOR TO CONSULT WITH ENGINEER AND/OR REGISTERED LANDSCAPE ARCHITECT FOR INDIVIDUAL RAIN GARDEN LANDSCAPING PLANS ON EACH LOT. PLANTINGS SHALL BE CHOSEN FROM TABLE RG-1 AND/OR APPROVED EQUALS.
8. OPERATIONS & MAINTENANCE RESPONSIBILITIES FOR PRIVATELY OWNED STORMWATER POST CONSTRUCTION PRACTICES TO BE LISTED AS COVENANTS AND / OR DEED RESTRICTIONS ON EACH INDIVIDUAL LOT DEED AND SHALL BE INCLUDED IN THE PROJECT SWPPP. THIS IS CONSISTENT WITH THE CROSS REFERENCED WORDING IN THE STORMWATER MANAGEMENT AND SWPPP REPORTS.
9. DETAILS REGARDING THE DEED RESTRICTION, RAIN GARDEN FUNCTION AND MAINTENANCE TO BE PROVIDED TO PROPERTY OWNER A THE TIME OF SALE.

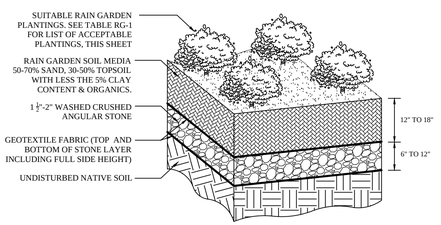
RAIN GARDEN SIGN NOTE:

1. CONTRACTOR TO INSTALL A SIGN AT EVERY RAIN GARDEN LOCATION ON SITE, IN ACCORDANCE WITH GP-0-10-001 & N.Y.S.D.E.C. STORMWATER MANAGEMENT DESIGN MANUAL 2010 ED.

2. SIGNS SHALL BE: 12"X18", BROWN BACKGROUND WITH YELLOW REFLECTORIZED LETTERING.

3. SIGNS SHALL READ, IN ORDER AS FOLLOWS:

STORMWATER MANAGEMENT PRACTICE - RAIN GARDEN
PROJECT ID #_____
MUST BE MAINTAINED IN ACCORDANCE WITH OPERATIONS & MAINTENANCE PLAN
DO NOT REMOVE OR ALTER



RAIN GARDEN DETAIL – PERSPECTIVE VIEW

N.T.S.

Landscaping - Erosion & Sediment Control Details

Kaydeross Estates Residential Subdivision

APPROVAL:

APPROVED UNDER AUTHORITY OF A RESOLUTION ADOPTED _____

BY THE PLANNING BOARD OF THE CITY OF SARATOGA SPRINGS.

_____ CHAIRPERSON DATE SIGNED_____

STATE OF NEW YORK KURT M. BEDORE LICENSED PROFESSIONAL ENGINEER 75223

KURT M. BEDORE, P.E.
N.Y.S. LIC. NO. 75,223

KB ENGINEERING & CONSULTING PLLC
89 KINGSBURY ROAD
BURNT HILLS NY, 12027–9432
518–384–3715

SCALE: AS SHOWN

CITY OF SARATOGA SPRINGS ~ OUTSIDE DISTRICT ~ SARATOGA COUNTY, NEW YORK FEBRUARY 28, 2007

KB PROJECT NO. 13020

REVISIONS:
04/11/07
06/21/07
10/26/07
12/28/07
2/1/08
10/16/13

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