MEETING HANDOUTS

- Sign-in sheet
- Agenda
- Handouts

September 14, 2011

Hanover Estates Charrette Participants

September 14, 2011

Sign-in Sheet

Name	Email	Affiliation	Signature
Rosemary Boyle Lasher	rosemaryb@townofcortlandt.com	Coordinator	
Ed Cocozza	tiebout2353@aol.com	Resident/TSAC	
Timothy L. Cronin, P.E.	tim@croninengineering.net	Applicant's Representative	
James Creighton	jimlegal@optonline.net	Resident/PRC	
Robert Cusick	robertcusick@cs.com	Resident	
David Douglas	dsd@gdblaw.com	Resident/ZBA	
Seth Jacobsen	jacobson.seth@gmail.com	Applicant	
Cynthia Kalangis	ckalangis@gmail.com	Resident	
Peter Kalangis	Pkalangis@msn.com	Resident	
Dominick Lauria	PHONE ONLY: 739-8464 No Email	Resident	

Michele McGovern	michelemcgovern1@mac.com	Resident	
John Milmore	cortlandtcac@gmail.com	Resident/CAC	
Marge Parsons	wjmparsons@aol.com	Resident	
Michelle Robbins	mrobbins@akrf.com	Facilitator	
Anthony Russo	ARusso@akrf.com	Facilitator	
David Steinmetz, Esq.	david@zarin-steinmetz.net	Applicant Representative	

BRAD SCHWARTZ, ESQ.

MARTIN MASTROMONACO PUBLIC / RESIDENT

COLIN NARSINGH RESIDENT

Joseph Kampf . Resident

MARGARET LAURIA

DOMINICK LAURIA

AGENDA

Hanover Estates Planning Charrette

Cortlandt Town Hall

September 14, 2011

7:00 PM to 9:15 PM

Charrette Meeting 1:

7:00 PM **Welcome and Introductions**

- Rosemary Boyle-Lasher— Town of Cortlandt
- Anthony Russo and Michelle Robbins AKRF, Inc.— Planning Consultants

7:10 PM **Purpose and Overview of the Charrette Process**

7:20 PM **Presentation of the Proposed Hanover Estates Residential Development**

- Tim Cronin — Cronin Engineering, P.E., P.C.

7:30 PM **Workshop**

- Presentation of Environmental and Operational Discussion Points (Traffic, Natural Resources, Visual, Other…)
- Open Discussion

8:45 PM **Summary of Workshop Discussion Topics**

8:55 PM **Comments/Questions**

9:10 PM **Schedule Future Meetings**

- Schedule Site Visit (Saturday, September 24, 2011)
- Next Charrette Meetings (possible dates October 12th, October 26th, and November 2nd)

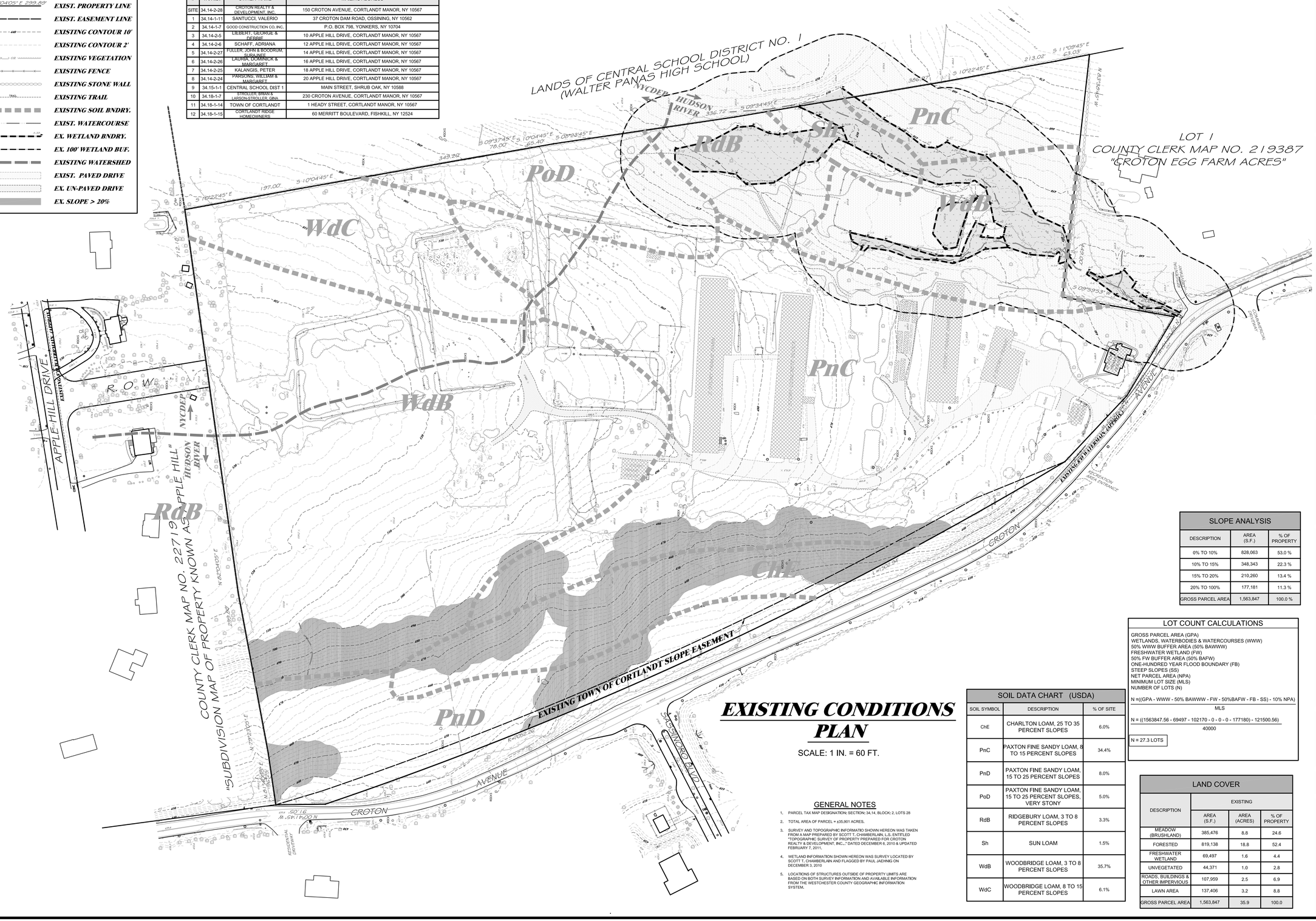

APPLE HILL DR
CROTON AVE
CROTON AVE

LEGEND

- EXIST. PROPERTY LINE (N 82°04'05" E 299.89')
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXISTING VEGETATION (OR)
- EXISTING FENCE
- EXISTING STONE WALL
- EXISTING TRAIL (TRAIL)
- EXISTING SOIL BNDRY.
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EXISTING WATERSHED
- EXIST. PAVED DRIVE
- EX. UN-PAVED DRIVE
- EX. SLOPE > 20%

ADJOINER PROPERTY INFO

#	TAX I.D.	OWNER NAME	MAILING ADDRESS
SITE	34.14-2-28	CROTON REALTY & DEVELOPMENT, INC.	150 CROTON AVENUE, CORTLANDT MANOR, NY 10567
1	34.14-1-11	SANTUCCI, VALERIO	37 CROTON DAM ROAD, OSSINING, NY 10562
2	34.14-1-7	GOOD CONSTRUCTION CO, INC.	P.O. BOX 798, YONKERS, NY 10704
3	34.14-2-5	LIEBERT, GEORGE & DEBBIE	10 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
4	34.14-2-6	SCHAFF, ADRIANA	12 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
5	34.14-2-27	FULLER, JOHN & BOGORUM, SUBA-INEE	14 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
6	34.14-2-26	LAURIA, DOMINICK & MARGARET	16 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
7	34.14-2-25	KALANGIS, PETER	18 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
8	34.14-2-24	PARSONS, WILLIAM & MARGARET	20 APPLE HILL DRIVE, CORTLANDT MANOR, NY 10567
9	34.15-1-1	CENTRAL SCHOOL DIST 1	MAIN STREET, SHRUB OAK, NY 10588
10	34.18-1-7	STROLLER, BRIAN & LARSON-STROLLER, GINA	230 CROTON AVENUE, CORTLANDT MANOR, NY 10567
11	34.18-1-14	TOWN OF CORTLANDT	1 HEADY STREET, CORTLANDT MANOR, NY 10567
12	34.18-1-15	CORTLANDT RIDGE HOMEOWNERS	60 MERRITT BOULEVARD, FISHKILL, NY 12524



EXISTING CONDITIONS PLAN

SCALE: 1 IN. = 60 FT.

GENERAL NOTES

1. PARCEL TAX MAP DESIGNATION: SECTION: 34.14, BLOCK: 2, LOTS 28
2. TOTAL AREA OF PARCEL = ±35,901 ACRES.
3. SURVEY AND TOPOGRAPHIC INFORMATIO SHOWN HEREON WAS TAKEN FROM A MAP PREPARED BY SCOTT T. CHAMBERLAIN, L.S. ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY PREPARED FOR CROTON REALTY & DEVELOPMENT, INC.," DATED DECEMBER 6, 2010 & UPDATED FEBRUARY 7, 2011.
4. WETLAND INFORMATION SHOWN HEREON WAS SURVEY LOCATED BY SCOTT T. CHAMBERLAIN AND FLAGGED BY PAUL JAEHNIG ON DECEMBER 3, 2010
5. LOCATIONS OF STRUCTURES OUTSIDE OF PROPERTY LIMITS ARE BASED ON BOTH SURVEY INFORMATION AND AVAILABLE INFORMATION FROM THE WESTCHESTER COUNTY GEOGRAPHIC INFORMATION SYSTEM.

SOIL DATA CHART (USDA)

SOIL SYMBOL	DESCRIPTION	% OF SITE
ChE	CHARLTON LOAM, 25 TO 35 PERCENT SLOPES	6.0%
PnC	PAXTON FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES	34.4%
PnD	PAXTON FINE SANDY LOAM, 15 TO 25 PERCENT SLOPES	8.0%
PoD	PAXTON FINE SANDY LOAM, 15 TO 25 PERCENT SLOPES, VERY STONY	5.0%
RdB	RIDGEBURY LOAM, 3 TO 8 PERCENT SLOPES	3.3%
Sh	SUN LOAM	1.5%
WdB	WOODBRIDGE LOAM, 3 TO 8 PERCENT SLOPES	35.7%
WdC	WOODBRIDGE LOAM, 8 TO 15 PERCENT SLOPES	6.1%

SLOPE ANALYSIS

DESCRIPTION	AREA (S.F.)	% OF PROPERTY
0% TO 10%	828,063	53.0 %
10% TO 15%	348,343	22.3 %
15% TO 20%	210,260	13.4 %
20% TO 100%	177,181	11.3 %
GROSS PARCEL AREA	1,563,847	100.0 %

LOT COUNT CALCULATIONS

GROSS PARCEL AREA (GPA)
WETLANDS, WATERBODIES & WATERCOURSES (WWW)
50% WWW BUFFER AREA (50% BAWWW)
FRESHWATER WETLAND (FW)
50% FW BUFFER AREA (50% BAFW)
ONE-HUNDRED YEAR FLOOD BOUNDARY (FB)
STEEP SLOPES (SS)
NET PARCEL AREA (NPA)
MINIMUM LOT SIZE (MLS)
NUMBER OF LOTS (N)

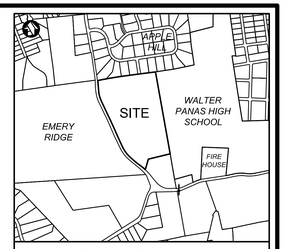
$$N = \frac{(GPA - WWW - 50\%\ BAWWW - FW - 50\%BAFW - FB - SS) - 10\%\ NPA)}{MLS}$$

$$N = \frac{((1563847.56 - 69497 - 102170 - 0 - 0 - 0 - 177180) - 121500.56)}{40000}$$

N = 27.3 LOTS

LAND COVER

DESCRIPTION	EXISTING		
	AREA (S.F.)	AREA (ACRES)	% OF PROPERTY
MEADOW (BRUSHLAND)	385,476	8.8	24.6
FORESTED	819,138	18.8	52.4
FRESHWATER WETLAND	69,497	1.6	4.4
UNVEGETATED	44,371	1.0	2.8
ROADS, BUILDINGS & OTHER IMPERVIOUS	107,959	2.5	6.9
LAWN AREA	137,406	3.2	8.8
GROSS PARCEL AREA	1,563,847	35.9	100.0



VICINITY MAP SCALE: 1" = 1000'

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www.digsafelynewyork.com

60 0 30 60
SCALE: 1" = 60 FT.

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

REVISIONS

#	REASON	DATE

MUNICIPAL TAX IDENTIFICATION:

SECTION:	34.14
BLOCK:	2
LOT:	28
SUBLOT:	-----
DRAWN BY:	JWT
CHECKED:	KCS
PROJECT:	JACOBSON
DATE:	FEBRUARY 14, 2011
JOB #:	100210

STATE OF NEW YORK TIMOTHY L. CRONIN III 62980 LICENSED PROFESSIONAL ENGINEER

TIMOTHY L. CRONIN III, P.E.
LICENSE #062980

CRONIN ENGINEERING
PROFESSIONAL ENGINEERING & CONSULTING
(914) 736-3664

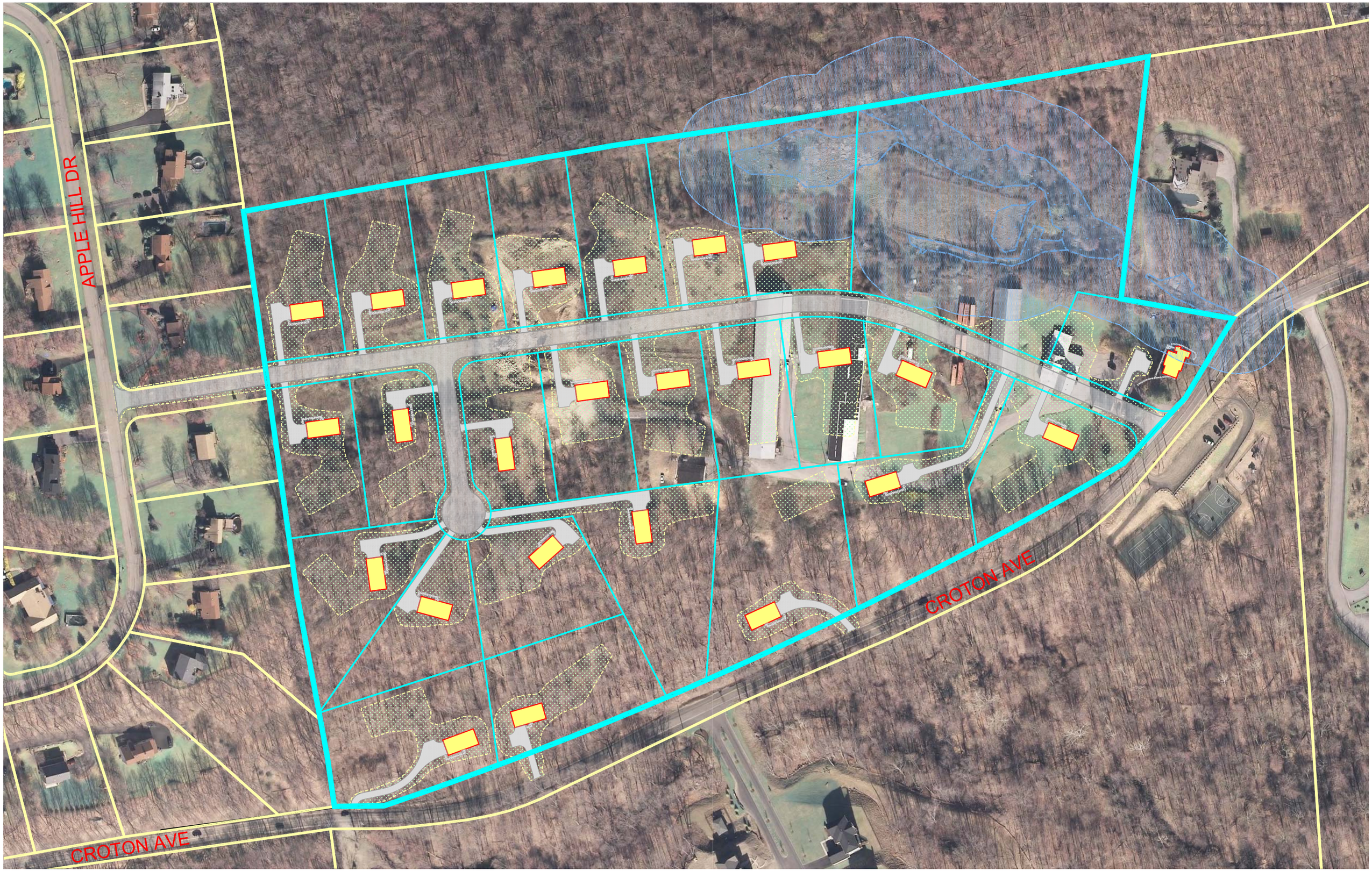
39 ARLO LANE
CORTLANDT, NEW YORK 10567

EXISTING CONDITIONS

SUBDIVISION PLAN FOR HANOVER ESTATES

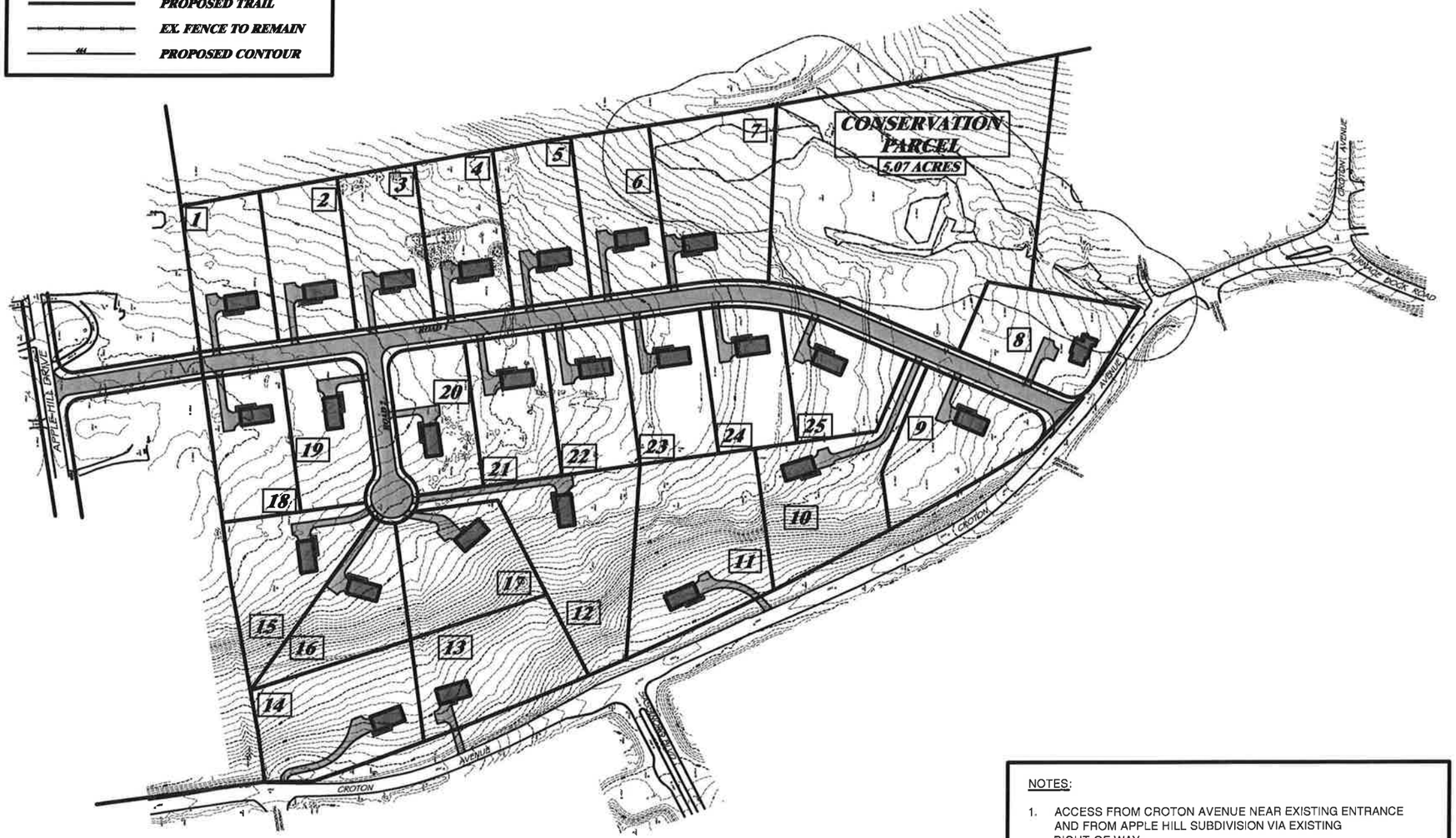
LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 2 OF 6 | EX-1.1


APPLE HILL DR
CROTON AVE
CROTON AVE

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR



PREFERRED PLAN

NOTES:

1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE AND FROM APPLE HILL SUBDIVISION VIA EXISTING RIGHT-OF-WAY.
2. CONVENTIONAL SUBDIVISION - 25 LOTS
3. DOG PARK AND PICNIC AREA PROVIDED
4. 5.07 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)

DATE: OCTOBER 6, 2011

240 0 120 240

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
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150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

CRONIN ENGINEERING
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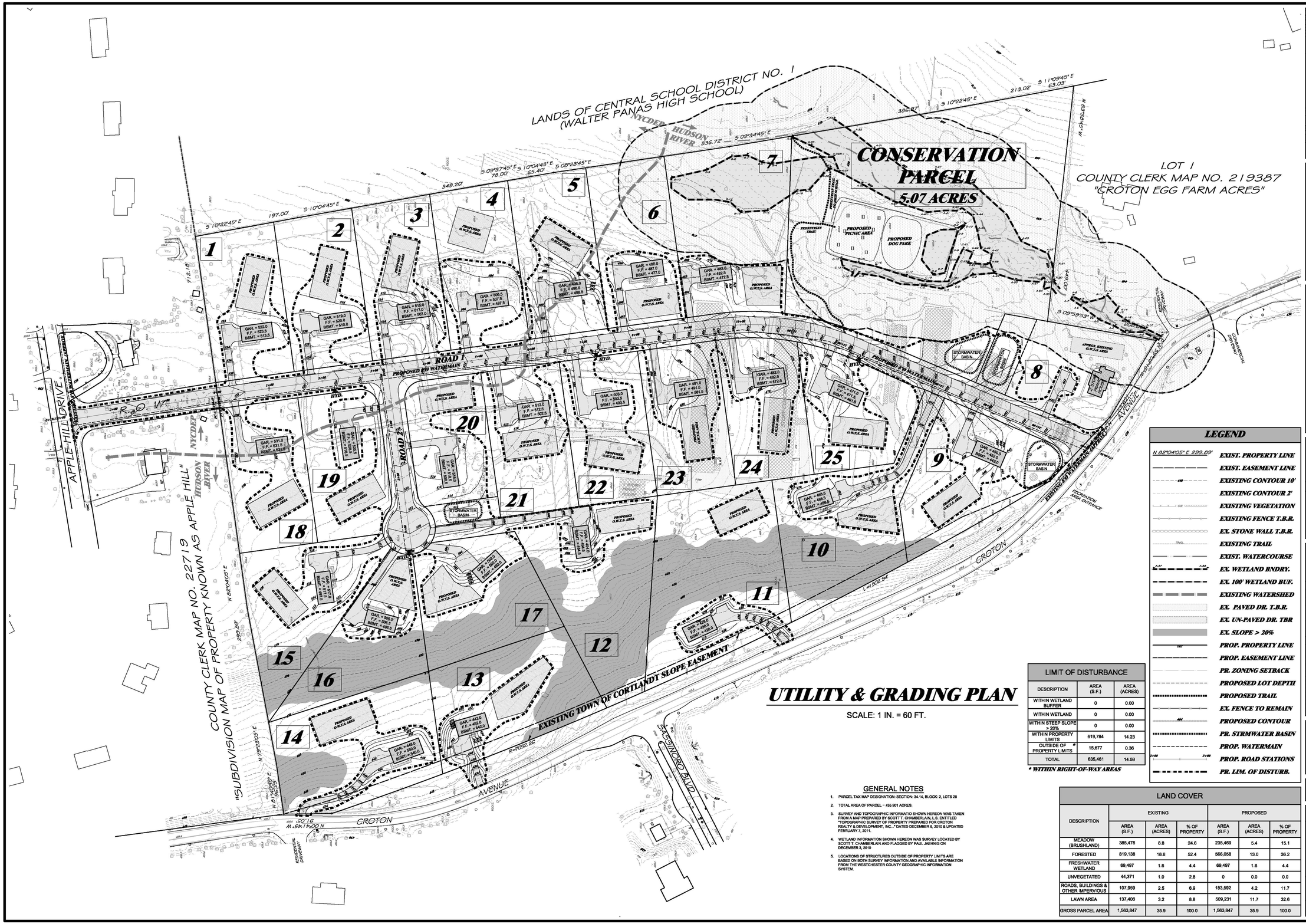
CORTLANDT, NEW YORK 10567

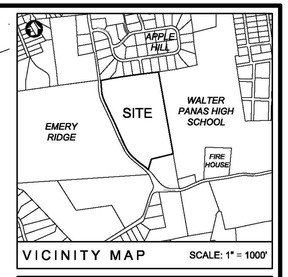
PREFERRED PLAN

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | PREF





VICINITY MAP SCALE: 1" = 1000'

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www.digsafelynewyork.com

UTILITY & GRADING PLAN

SCALE: 1 IN. = 60 FT.

LIMIT OF DISTURBANCE		
DESCRIPTION	AREA (S.F.)	AREA (ACRES)
WITHIN WETLAND BUFFER	0	0.00
WITHIN WETLAND	0	0.00
WITHIN STEEP SLOPE > 20%	0	0.00
WITHIN PROPERTY LIMITS	619,784	14.23
OUTSIDE OF * PROPERTY LIMITS	15,677	0.36
TOTAL	635,461	14.59

*** WITHIN RIGHT-OF-WAY AREAS**

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LAND COVER						
DESCRIPTION	EXISTING			PROPOSED		
	AREA (S.F.)	AREA (ACRES)	% OF PROPERTY	AREA (S.F.)	AREA (ACRES)	% OF PROPERTY
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FORESTED	819,138	18.8	52.4	566,058	13.0	36.2
FRESHWATER WETLAND	69,497	1.6	4.4	69,497	1.6	4.4
UNVEGETATED	44,371	1.0	2.8	0	0.0	0.0
ROADS, BUILDINGS & OTHER IMPERVIOUS	107,959	2.5	6.9	183,592	4.2	11.7
LAWN AREA	137,406	3.2	8.8	509,231	11.7	32.6
GROSS PARCEL AREA	1,563,847	35.9	100.0	1,563,847	35.9	100.0

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXISTING VEGETATION
- EXISTING FENCE T.B.R.
- EX. STONE WALL T.B.R.
- EXISTING TRAIL
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EXISTING WATERSHED
- EX. PAVED DR. T.B.R.
- EX. UN-PAVED DR. TBR
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROP. EASEMENT LINE
- PR. ZONING SETBACK
- PROPOSED LOT DEPTH
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR
- PR. STRMWATER BASIN
- PROP. WATERMAIN
- PROP. ROAD STATIONS
- PR. LIM. OF DISTURB.

60 0 30 60
SCALE: 1" = 60 FT.

OWNER/DEVELOPER
HANOVER ESTATES
PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.
150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

REVISIONS

#	REASON	DATE

MUNICIPAL TAX IDENTIFICATION:	
SECTION:	34.14
BLOCK:	2
LOT:	28
SUBLOT:	—
DRAWN BY:	JWT
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PROJECT:	JACOBSON
DATE:	FEBRUARY 14, 2011
JOB #:	100210

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CORTLANDT, NEW YORK 10567

UTILITY & GRADING PLAN

SUBDIVISION PLAN FOR
HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 4 OF 6 | UG-3.1

LEGEND

- EXIST. PROPERTY LINE
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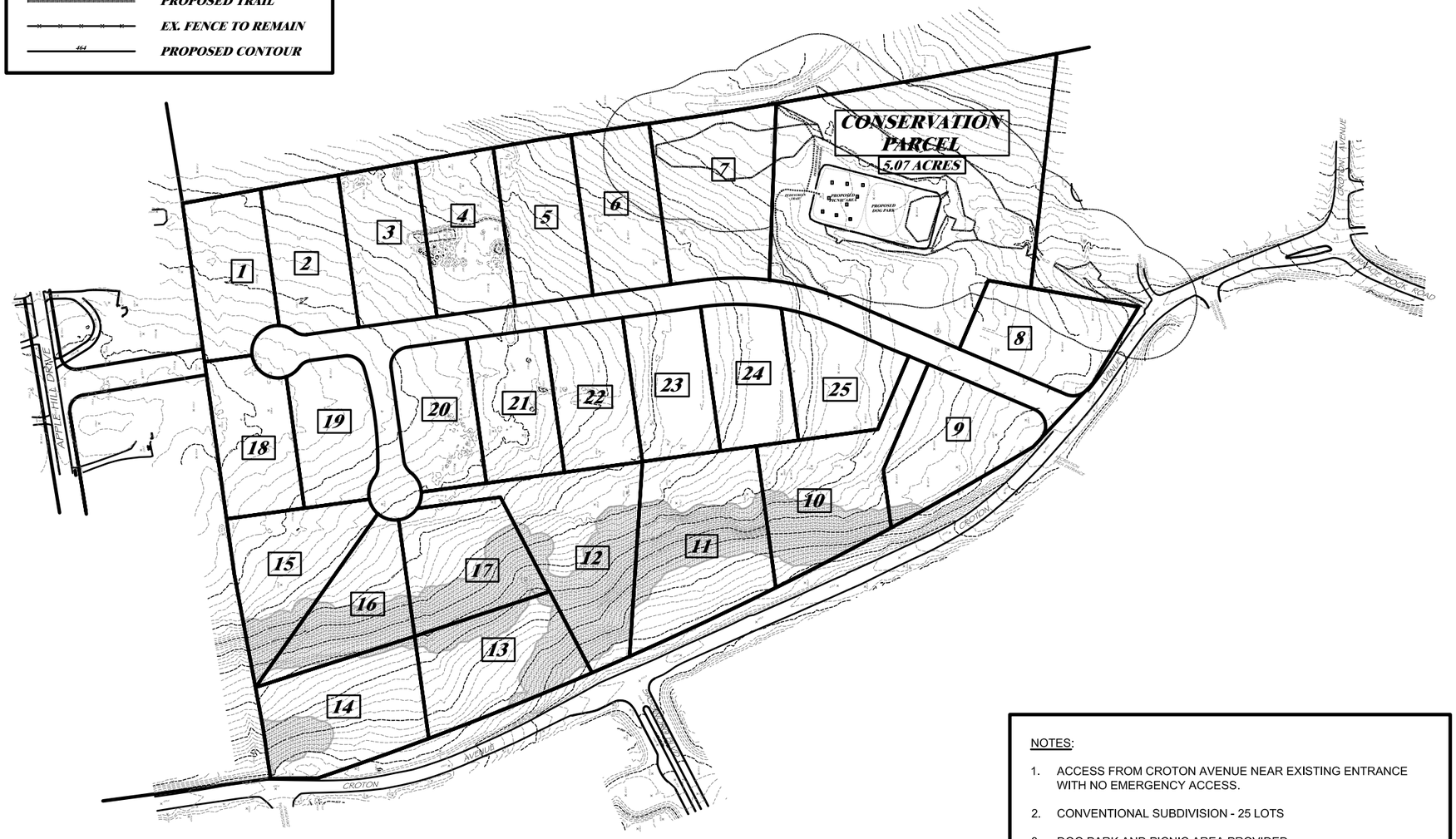

SUBDIVISION ALTERNATIVE 1

NOTES:

1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE WITH NO EMERGENCY ACCESS.
2. CONVENTIONAL SUBDIVISION - 25 LOTS
3. DOG PARK AND PICNIC AREA PROVIDED
4. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
5. 5.07 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)

DATE: OCTOBER 6, 2011

240 0 120 240

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CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 1

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 1

LEGEND

- EXIST. PROPERTY LINE
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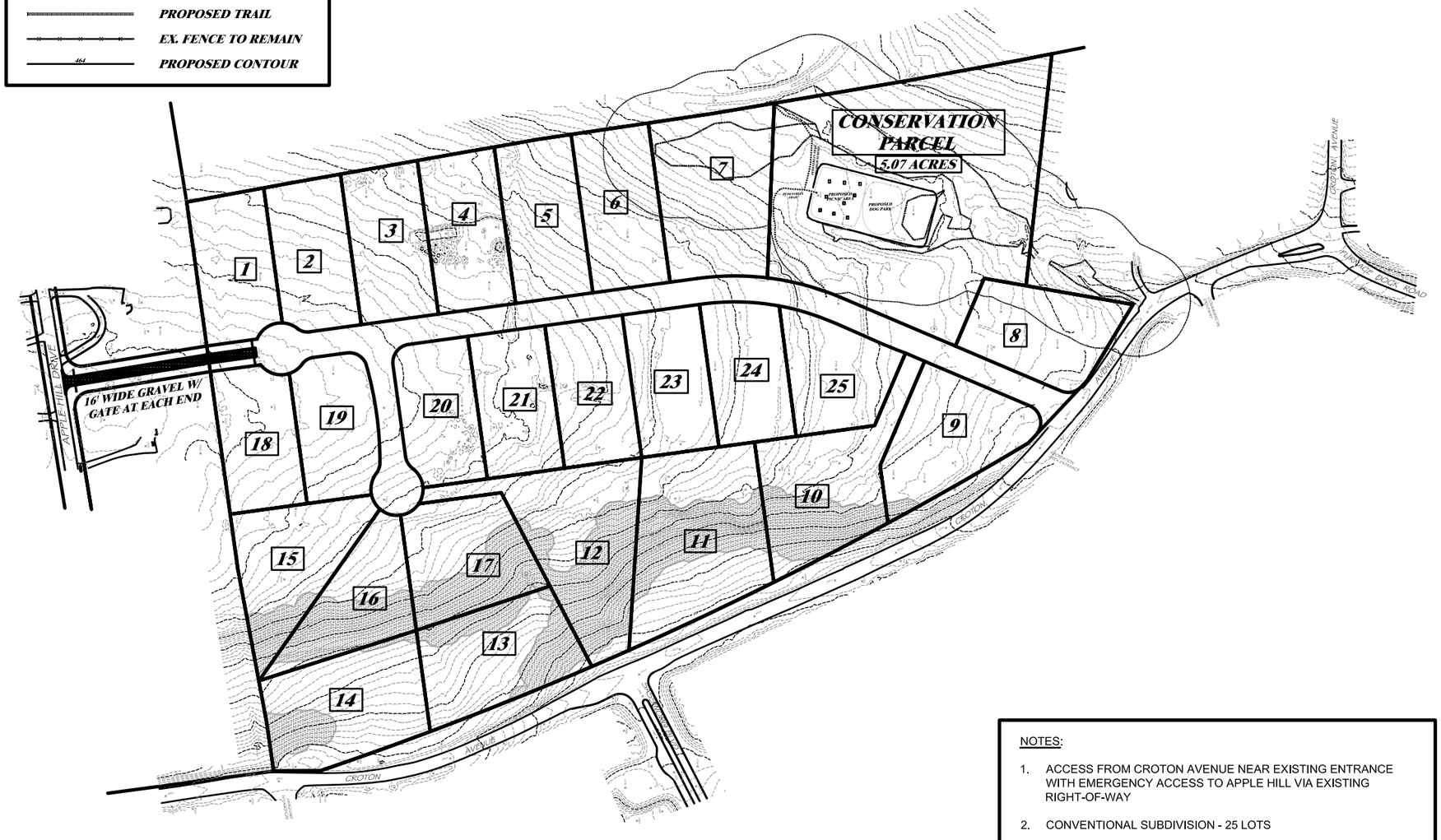

SUBDIVISION ALTERNATIVE 2

NOTES:

1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE WITH EMERGENCY ACCESS TO APPLE HILL VIA EXISTING RIGHT-OF-WAY
2. CONVENTIONAL SUBDIVISION - 25 LOTS
3. DOG PARK AND PICNIC AREA PROVIDED
4. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
5. 5.07 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)

DATE: OCTOBER 6, 2011

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SUBDIVISION ALTERNATIVE 2

HANOVER ESTATES

LOCATION:
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TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 2

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
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- EXISTING CONTOUR 2'
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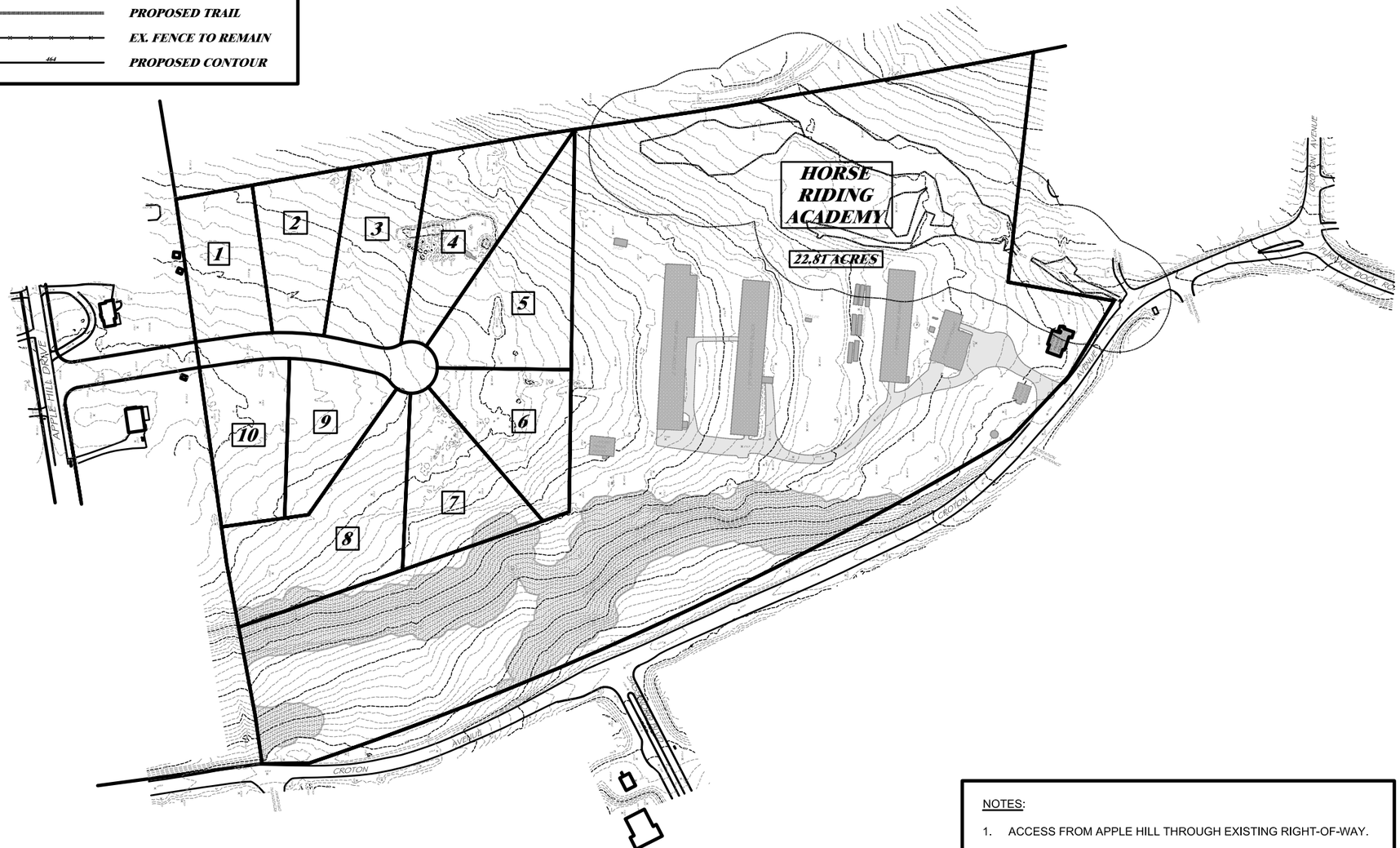
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 3

NOTES:

1. ACCESS FROM APPLE HILL THROUGH EXISTING RIGHT-OF-WAY.
2. CONVENTIONAL SUBDIVISION - 10 LOTS WITH COMMERCIAL DEVELOPMENT OF HORSE RIDING ACADEMY
3. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.

DATE: OCTOBER 6, 2011

240 0 120 240

OWNER/DEVELOPER

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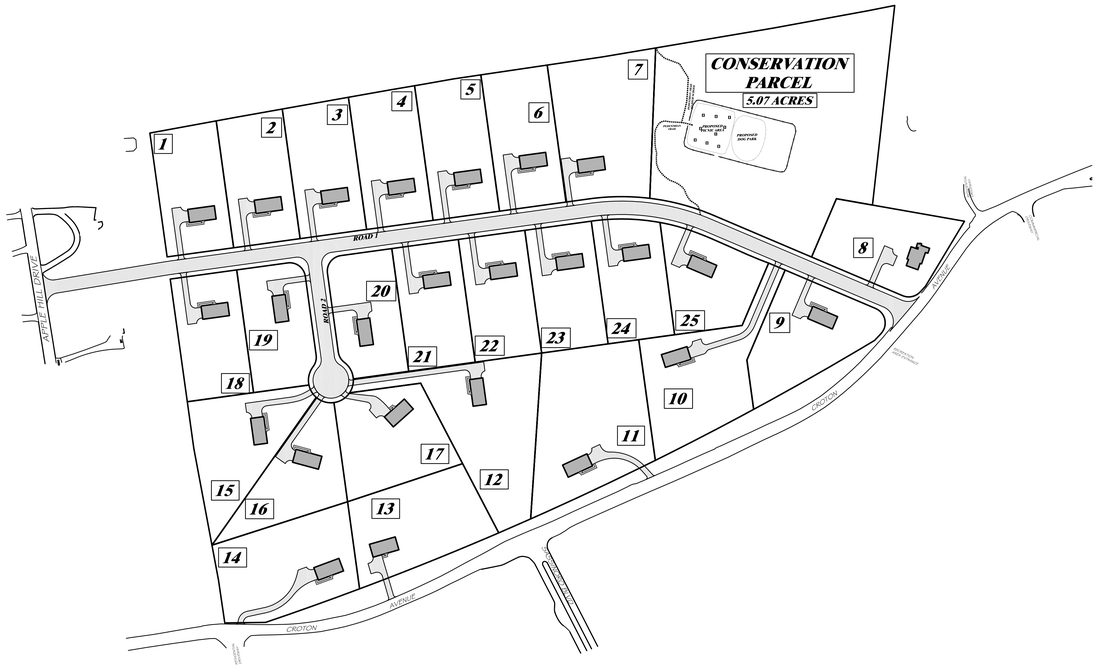
SUBDIVISION ALTERNATIVE 3

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

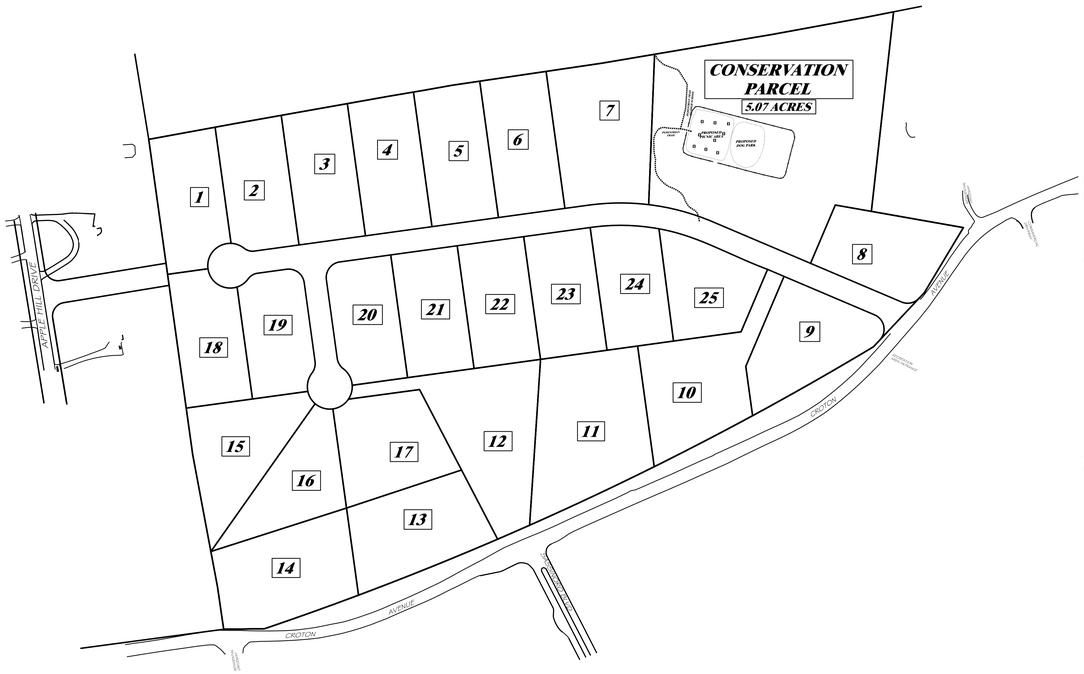
SHEET 1 OF 1

ALT 3



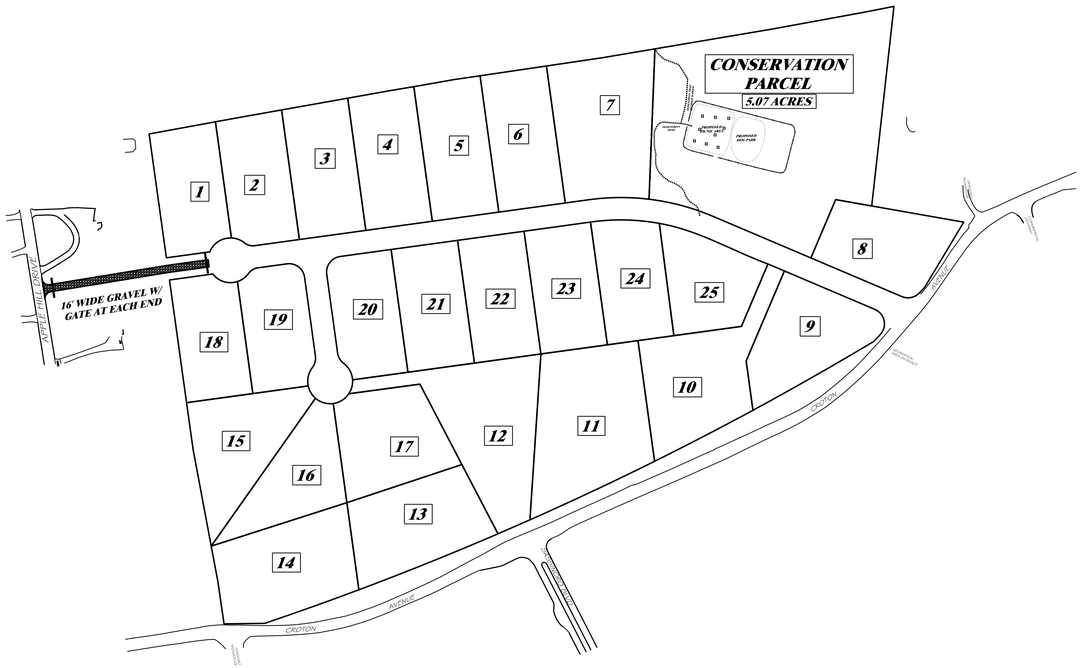
PREFERRED PLAN

SCALE: 1 IN. = 120 FT.



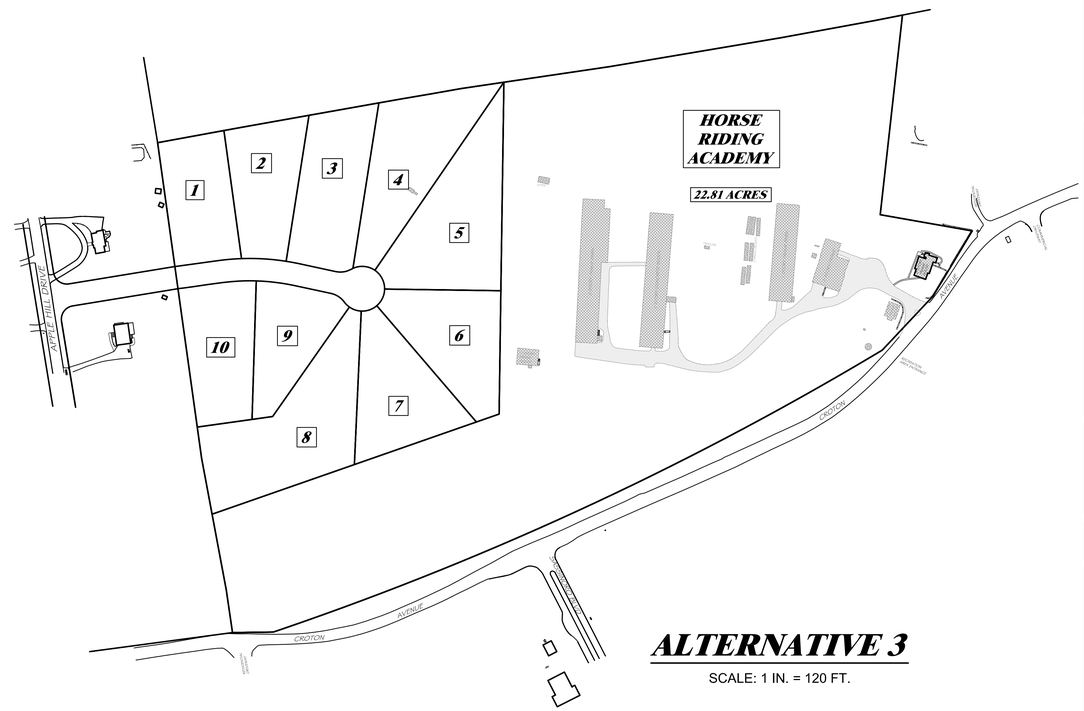
ALTERNATIVE 1

SCALE: 1 IN. = 120 FT.



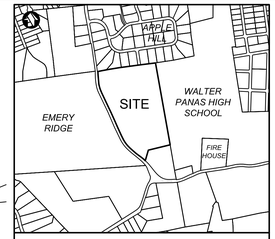
ALTERNATIVE 2

SCALE: 1 IN. = 120 FT.



ALTERNATIVE 3

SCALE: 1 IN. = 120 FT.



VICINITY MAP SCALE: 1" = 1000'

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www.digsafelynewyork.com

120 0 60 120

SCALE: 1" = 120 FT.

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REVISIONS

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DRAWN BY:	JWT
CHECKED:	KCS
PROJECT:	JACOBSON
DATE:	FEBRUARY 14, 2011
JOB #:	100210

STATE OF NEW YORK · TIMOTHY L. CRONIN III · 62980 · LICENSED PROFESSIONAL ENGINEER

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LICENSE #062980

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(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVES

SUBDIVISION PLAN FOR HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 6 OF 6 | ALT-5.1

Town of Cortlandt Traffic & Safety Advisory Committee

9/14/11

To: Linda D. Puglisi Town Supervisor
Town Board Members
Thomas Wood ESQ.
ED Vergano D.O.T.S. Director
Jeff Coleman D.E.S. ....Director
Planning Board
Jo-Ann Dyckman

From: Traffic Safety Advisory Committee (TSAC)

Date: 05/03/11

Re: **TS207/0511 Croton Ave and Rt. 202 submitted by TSAC**

Our Joseph Kampf visited with Fire Captain Lou Barbieri at the Lake Mohegan Fire Department to discuss any safety concerns that they might have for Cortlandt . We submit Joseph Kampf's report for your review.

We feel the main concern was Croton Ave and Rt.202 and a need to relieve the back up of traffic on Croton Ave. which slows down their response time for Fire Trucks and EMT vehicles.

The main concern is traffic backup as caused by the Walter Panas School students when they leave school.

They have recommended that the road be redesigned at this intersection to make this road more accessible for emergency vehicles. Currently this road is too narrow for the volume of traffic on this segment of the road.

In addition we recommend that the traffic light be provided with a left hand turn signal on Croton Ave. when the Rt.202 signal is red.

The bottleneck is severe because there are no margins on the side of the road and traffic cannot diverge to the side of the road to create a passage for emergency vehicles. The Fire Department has to re-route trucks to avoid this intersection which adds to response time.

A traffic monitor should also be provided by the school in the morning and afternoon dismissal time

Thank you in advance for considering our concerns. We hope to relieve some of their concerns for Cortlandt.

The Traffic Safety and Advisory Committee of the Town of Cortlandt

LMVFD / TSAC Report

Date: March 18, 2011

Attendees: Captain Lou Barbieri, LMVFD, Joseph Kampf, TSAC member

Acronym Definitions:

LMVFD –Lake MoheganVolunteer Fire Department	F.D. - Fire Department
TSAC – Traffic Safety Advisory Committee	B.M.P. – Bear Mountain Parkway

Introduction

On March 18, 2011 TSAC member Joseph Kampf conducted a meeting with Captain Lou Barbieri of the Lake Mohegan Volunteer Fire Department. The meeting was conducted at Headquarters located on Route 6 in Mohegan Lake. The agenda focused on the traffic issues that pertain to the Lake Mohegan Volunteer Fire Department. The fire department averages between 2,000 and 2,500 calls annually and responds to 6-7 emergencies daily. The following Traffic / Roadway items were discussed.

1. Route 6
2. Bear Mountain Parkway
3. Red Mill Rd.
4. Lexington Ave.
5. Route 202 & Croton Ave. Intersection
6. Westbrook Dr / Oregon Rd, Round-A-Bout
7. Rumble Strips & Speed Humps
8. Lafayette Ave. / 202 (Crompond Rd.) intersection

I. Route 6

Route 6 is a road that is utilized by the fire department on a daily basis. Their opinion was that the road is constantly congested and has a large volume of traffic on it. The fire department can maneuver through the traffic with great efficiency although if the congestion could be relieved it would make things easier for the fire department as well as other travelers. An idea was developed to put a possible fire lane on Route 6 so emergency vehicles and travelers know which h lane the emergency vehicles would travel.

II. Bear Mountain Parkway

Subsequent to the installation of the "No Left Turn" sign on Locust Ave. / Bear Mountain Parkway intersection, traffic incident have drastically decreased. No concerns with the Bear Mountain Parkway pertaining to the LMVFD. Noted that traffic has significantly improved at the intersection of the BMP with Crompond Rd./ Route 202 with the Traffic light sequencing between Croton Ave and the BMP/ Crompond Rd.

III. Red Mill Rd.

Ladder Trucks are typically re-routed off of Red Mill Rd due to the conditions of the Road. Trucks proceed down Westbrook Dr toward Oregon Rd versus Red Mill. Trucks are large and bulky and there are signs on the road for "local delivery only". Suggestion would include overall improvement of the road, i.e. make the road wider and smoother for traffic as well as fire trucks. Other improvement would include resurfacing the road to create more friction between tire and pavement for a safer driving terrain.

IV. Lexington Ave.

Improve road conditions, F.D. has noted that "ponding" occurs when snow melts and after rain storms. Consider evaluating drainage and run off design. F.D. mentioned that the road is significantly better than it used to be. Very comfortable driving on Lexington Ave (due to close proximity of headquarters).

V. Route 202 / Croton Ave. Intersection

During morning rush hour and after high school student leave school at the end of the day in the afternoon, Croton Ave. bottlenecks on Croton Ave. at the intersection with Route 202. The fire department has to re-route truck either to Catherine St. or Down Maple Ave. to avoid this intersection. The bottlenecking is severe because there are no margins on the sides of the road and traffic cannot diverge to the side of the road to create a passage for emergency vehicles. F.D. suggests redesigning the road or make the road more accessible for emergency vehicles. Currently the road is too narrow for the volume of traffic on that segment of roadway.

VI. Westbrook Dr. / Oregon Rd. Round-A-Bout

The F.D is very satisfied with the current Round-A-Bout design. The trucks do not have any problem maneuvering through the Round-A-Bout. The only suggestion would be to make it a little wider if possible for the larger emergency vehicles. The intersection is one of the best intersections in the Fire District.

VII. Rumble Strips/Speeds Humps

F.D. prefers rumble strips to speed bumps. F.D. has experience with speed bumps from Quinlan St in Yorktown. Not only do the bumps slow traffic down but they also slow emergency vehicles down and increase response times. Recommend the use of speed humps on tertiary roads and rumble strips on primary and secondary roads.

VIII. Lafayette Ave and Crompond Rd./ Route 202

The intersection seems dangerous because of the traffic volume. Turing right or left especially left from Lafayette onto Route 202/ Crompond is dangerous, they receive numerous calls to this intersection. Consider installing a traffic device at this intersection.

Notes, FYI:

The fire department and the ambulance service are two separate entities. The ambulance service is a for profit firm that performs services in the fire district. The Fire Department is a Volunteer organization with hires people to operate the firm and volunteers assist. They use to be one organization.

Conclusion/Summary

This report is the first report from the Lake Mohegan Volunteer Fire department. We (the TSAC) may follow up with the F.D. in the future to determine if they have any other recommendations or requests pertaining to traffic or road conditions in the Town of Cortlandt.

Mohegan Volunteer Fire Associate Volunteer Ambulance Corps

Meeting Date: March 23, 2011
Kristina McCarthy – EMS Assistant Chief
914.438.4875 / EMTgear353@yahoo.com

Ambulance corps at the Mohegan Fire department discussed the following comments pertaining to road conditions around their Fire district in Cortlandt Manor.

Road Construction:
Alert emergency agencies that road construction is occurring in specific areas and develop a plan to help emergency vehicles navigate through the construction project. In the past emergency vehicles have been held up by road construction.

Route 6 / Lexington Ave.
Would like to see the Mohegan Lake section of Route 6 expanded into 2 lanes going in each direction (2 eastbound – towards Jefferson Valley, 2 westbound – towards Peekskill)
Ambulance Dept is alerted of Traffic hazards on Route 6 and Lexington Ave. Traffic traveling eastbound at the top of the hill at Lexington merges over from the left hand eastbound lane into the right lane procedding into Mohegan Lake. There are a lot of near misses at this intersection because of this merging traffic maneuver.

Conklin Ave:
Very rough tertian, the "Box" on the ambulance gets bounced around while traveling on Conklin Ave.

Bear Mountain Parkway (Exiting From Taconic)
Automobiles roll over due to high rate of speed while entering the Bear Mountain Parkway and proceeding under the Taconic towards Rout 6. A suggestion to bank the road was made.

Reduce traffic at Route 6/Crompond Rd. and Bear Mountain Extension by closing Cortlandt Lanes egress onto Route 6 and installing egress on the BMP so traffic will go directly from the BMP into Cortlandt Bowling Lanes.

Croton Ave.
-High accident rate

Round-A-Bout Oregon Rd./ Westbrook Dr.
EMS like the Round-A-Bout they think it is very effective on traffic flow

EMS prefers rumble strips over speed bumps. Speed bumps require the ambulance to stop, rumble strips just make noise. Speed bumps impact response time.
-Ambulance does not have the best suspension system

October 12, 2011

Hanover Estates Charrette Participants

October 12, 2011

Sign-in Sheet

Name	Email	Affiliation	Signature
Rosemary Boyle Lasher	rosemaryb@townofcortlandt.com	Coordinator	
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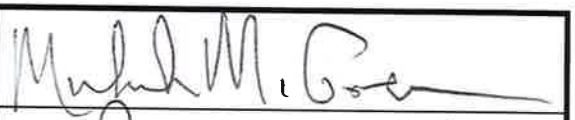
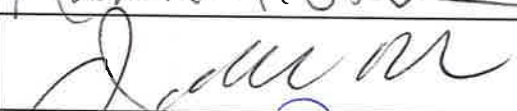
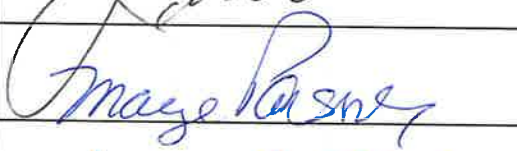
Peter Kalangis	Pkalangis@msn.com	Resident	
Dominick Lauria	PHONE ONLY: 739-8464 No Email	Resident	

Michele McGovern	michelemcgovern1@mac.com	Resident	
John Milmore	cortlandtcac@gmail.com	Resident/CAC	
Marge Parsons	wjmparsons@aol.com	Resident	
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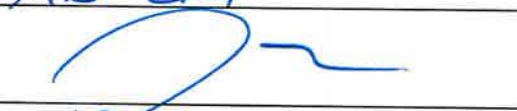
Jim Teed	jteed@croninengineering.net	Applicant Representative	
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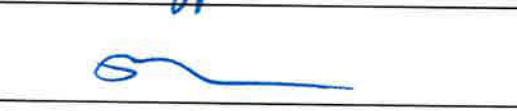
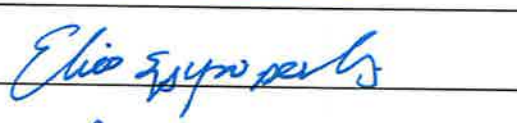
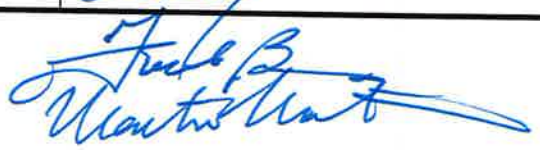
COLIN NARSINGH	cnarsingh@gmail.com	Resident	
ELIAS SPYROPOULOS		RESIDENT	
Stephen / Connie Badger	consci@msn.com	Resident #15 Apple	
Tom MALONEY	MALONEYTE@AOL.com	36 APPLE HILL	
FORREST BROWN MARTIN MASTROMONACO	fsbrown@optonline.net MARTIN MASTRO@VERIZON.NET	17 Apple Hill 2 11 APPLE HILL DR	

AGENDA

Hanover Estates Planning Charrette

Cortlandt Town Hall

October 12, 2011

7:00 PM to 9:15 PM

Charrette Meeting 2:

7:00 PM **Review of Responses to Steep Slopes and Sewer Connection questions from 9/14/11 meeting**

7:05 PM **Review of Site Visit and Charrette Meeting 1**

- Summary of concerns, constraints and opportunities

7:15 PM **Applicant presentation of possible Alternatives**

7:30 PM **Workshop**

- Discussion of Cluster Alternative
- Open Discussion

8:45 PM **Summary of Workshop Discussion Topics**

8:55 PM **Comments/Questions**

9:10 PM **Schedule Future Meetings**

- Last Charrette Meeting (**November 2, 2011 at 7PM**, Town Hall)

SITE CONSTRAINTS

the proposed

Hanover Estates Subdivision

- **Site Access from Croton Avenue**
  - Traffic and safety concerns
  - Visual impacts
  - Three new driveways/site distance

- **Apple Hill Estates Access/Emergency Access**
  - Privacy
  - Neighborhood character/visual
  - Traffic
  - Resale values
  - Security
  - Noise

- **Emergency Access**
  - Town policy to have at least two access points in and out of subdivision

- **Horse Riding Academy Alternative**
  - Not economically feasible

- **Conservation Area**
  - Location on site
  - Active and/or Passive recreation areas (what types of uses should be allowed)
  - Parking
  - Access
  - Connection to Walter Panas High School/Firehouse
  - Priority Open Space Parcel

October 12, 2011

Constraints/opportunities discussed at the 9/14/11 meeting

Responses to Steep Slopes and Sewer Connection Questions from 9/14/11 Meeting

the proposed

Hanover Estates Subdivision

Steep Slopes: Under the Town's existing Steep Slopes Ordinance, the Planning Board may issue a Steep Slopes permit for any construction it sees fit within a steep slope area with mitigation.

Sewer Connection: According to the Town Engineer the existing pump station at Cortlandt Ridge has been sized to accept extra flow (including possible flow from future Hanover units). In addition, at the Charrette Mr. Cronin mentioned concerns at the Stephens Lane pump station. Mr. Vergano explained the issues at Stephens Lane will benefit from extra flow that could come from the sewering of the Hanover Estates project, i.e. sewage would be conveyed more frequently which will lessen the amount of decomposition that occurs with sewage sediment.

CLUSTER ALTERNATIVE

the proposed

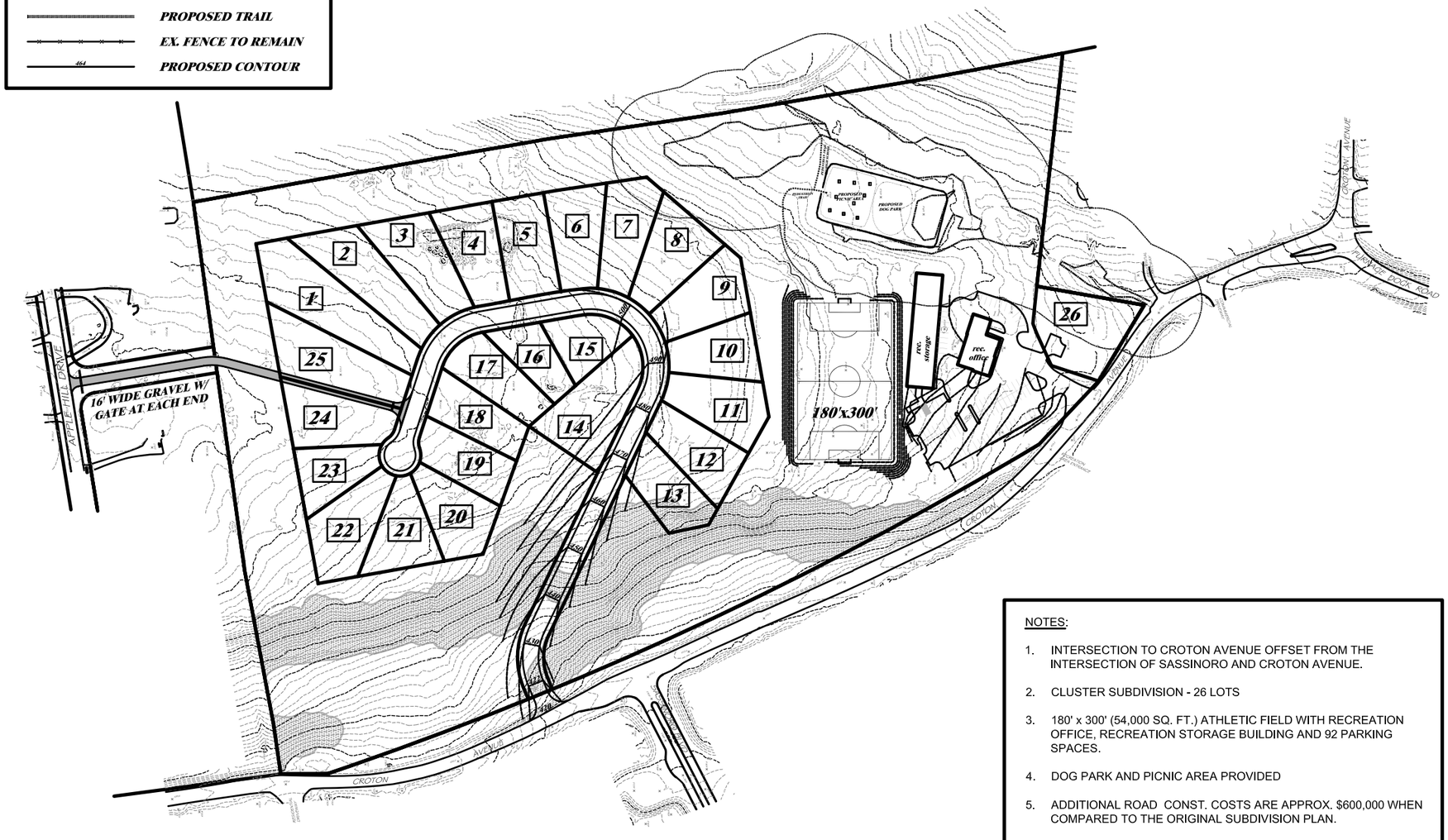
Hanover Estates Subdivision

- **Allows for greater flexibility with site design**
- **Requires sewer connection**
- **Smaller lot sizes—minimum 0.5-acre lots**
- **Would likely require disturbance to steep slopes for possible site access across from Sassinoro**
- **Possible emergency access at existing site driveway**
- **Would allow for Active and/or Passive Recreation Area(s)**

October 12, 2011

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 4

NOTES:

1. INTERSECTION TO CROTON AVENUE OFFSET FROM THE INTERSECTION OF SASSINORO AND CROTON AVENUE.
2. CLUSTER SUBDIVISION - 26 LOTS
3. 180' x 300' (54,000 SQ. FT.) ATHLETIC FIELD WITH RECREATION OFFICE, RECREATION STORAGE BUILDING AND 92 PARKING SPACES.
4. DOG PARK AND PICNIC AREA PROVIDED
5. ADDITIONAL ROAD CONST. COSTS ARE APPROX. $600,000 WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
6. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
7. 981,908 SQ. FT. (22.5 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
8. LOT SIZES ARE 0.3 AC. MIN. TO 0.73 AC. MAX.

DATE: OCTOBER 5, 2011

240 0 120 240

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

CRONIN ENGINEERING
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(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 4

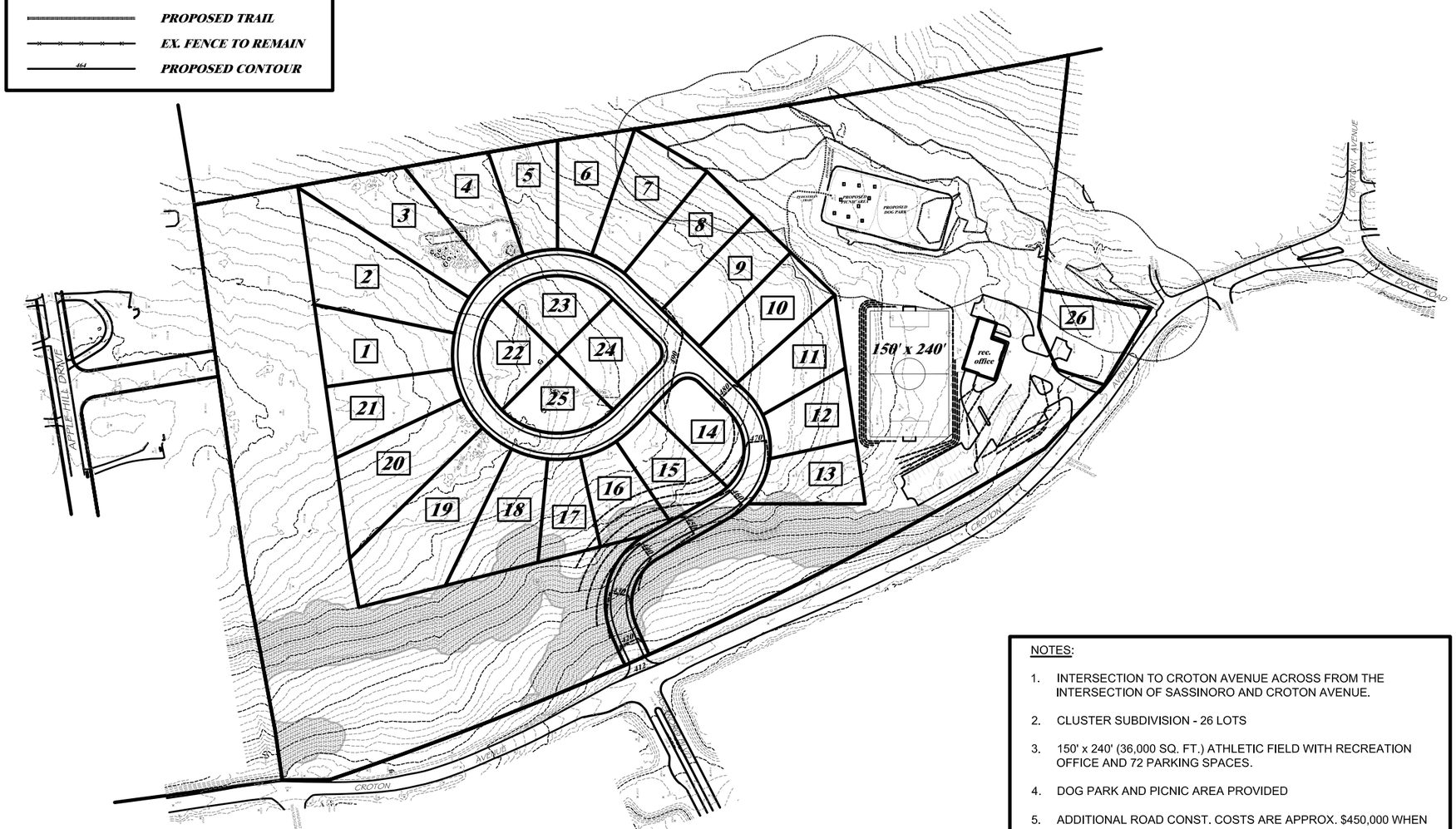
HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 4

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 5

NOTES:

1. INTERSECTION TO CROTON AVENUE ACROSS FROM THE INTERSECTION OF SASSINORO AND CROTON AVENUE.
2. CLUSTER SUBDIVISION - 26 LOTS
3. 150' x 240' (36,000 SQ. FT.) ATHLETIC FIELD WITH RECREATION OFFICE AND 72 PARKING SPACES.
4. DOG PARK AND PICNIC AREA PROVIDED
5. ADDITIONAL ROAD CONST. COSTS ARE APPROX. $450,000 WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
6. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
7. 813,572 SQ. FT. (18.7 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
8. LOT SIZES ARE 0.38 AC. MIN. TO 1.07 AC. MAX.

DATE: OCTOBER 5, 2011

240 0 120 240

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

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CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 5

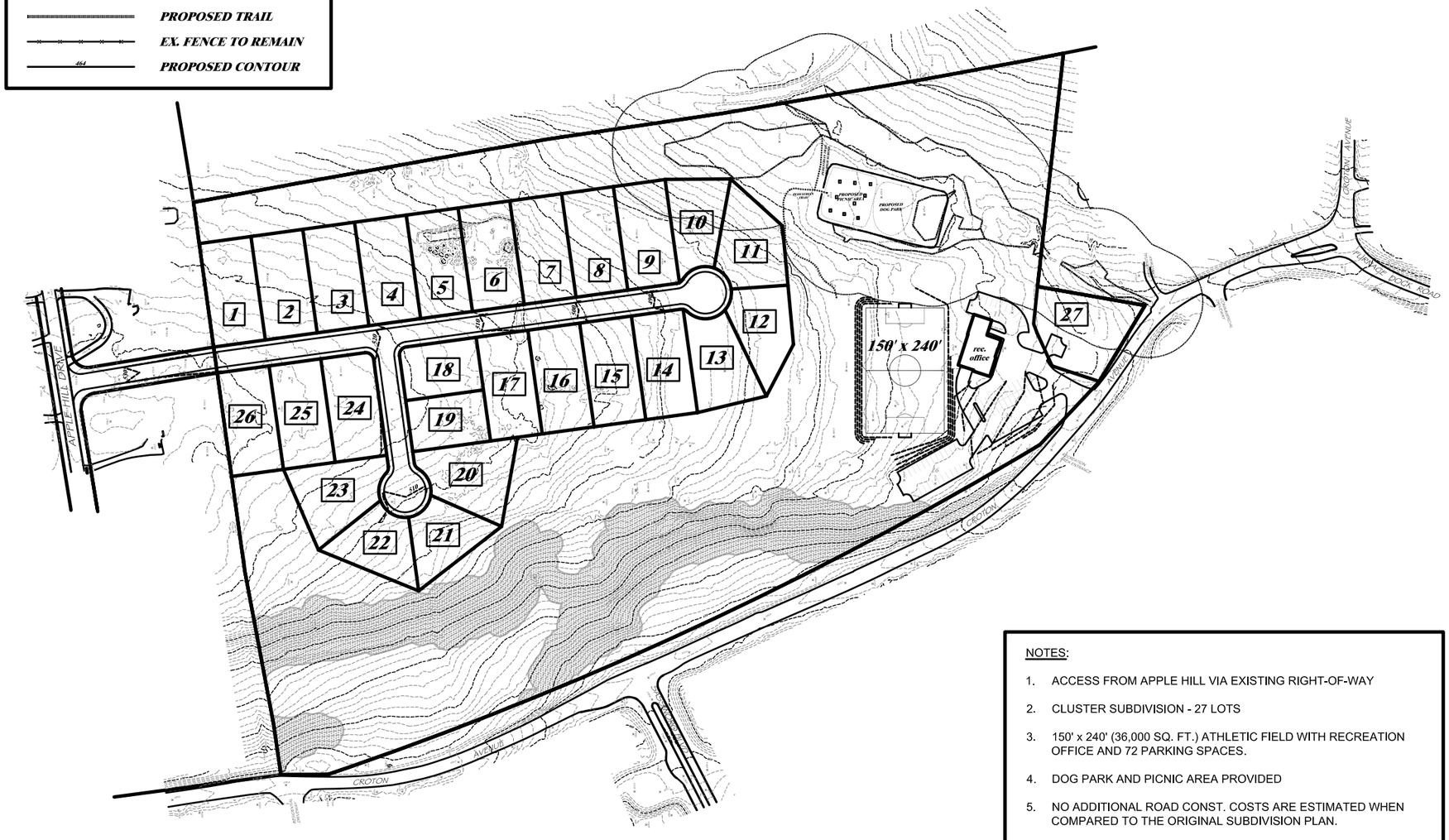
HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 5

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 6

NOTES:

1. ACCESS FROM APPLE HILL VIA EXISTING RIGHT-OF-WAY
2. CLUSTER SUBDIVISION - 27 LOTS
3. 150' x 240' (36,000 SQ. FT.) ATHLETIC FIELD WITH RECREATION OFFICE AND 72 PARKING SPACES.
4. DOG PARK AND PICNIC AREA PROVIDED
5. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
6. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
7. 969,371 SQ. FT. (22.3 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
8. LOT SIZES ARE 0.34 AC. MIN. TO 0.49 AC. MAX.

DATE: OCTOBER 5, 2011

240 0 120 240

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

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CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 6

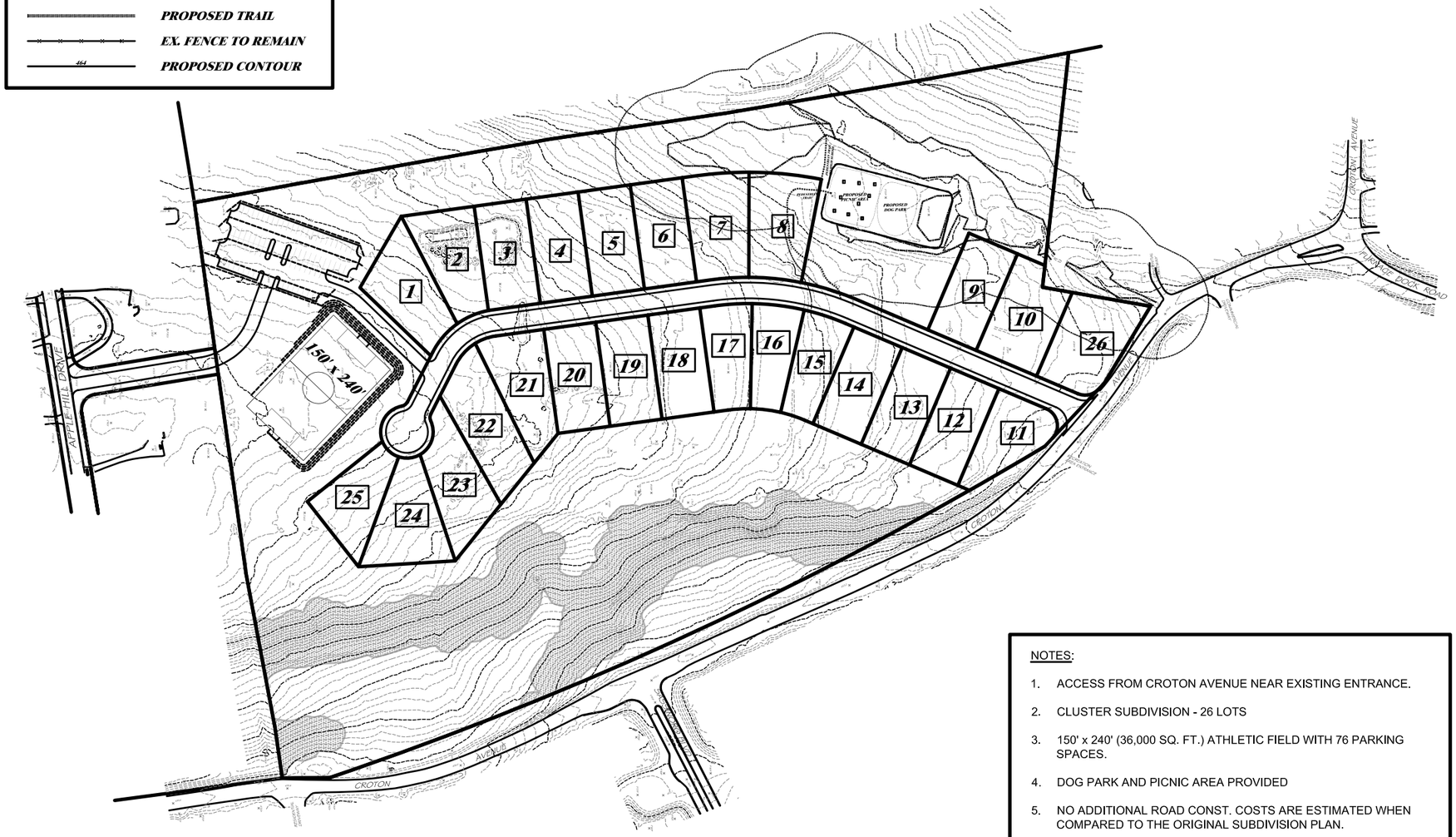
HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 6

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 7

NOTES:

1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE.
2. CLUSTER SUBDIVISION - 26 LOTS
3. 150' x 240' (36,000 SQ. FT.) ATHLETIC FIELD WITH 76 PARKING SPACES.
4. DOG PARK AND PICNIC AREA PROVIDED
5. NO ADDITIONAL ROAD CONST. COSTS ARE ESTIMATED WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
6. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
7. 948,684 SQ. FT. (21.8 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
8. LOT SIZES ARE 0.36 AC. MIN. TO 0.57 AC. MAX.

DATE: OCTOBER 6, 2011

240 0 120 240

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

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CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 7

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 7

November 17, 2011

Hanover Estates Charrette Participants

November 17, 2011

Sign-in Sheet

Name	Email	Affiliation	Signature
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Brad Schwartz	bschwartz@zarin-steinmetz.net	Applicant Representative	Absent
Jim Teed	jteed@croninengineering.net	Applicant Representative	
Forrest Brown	Fsbrown@optonline.net	Resident	

AGENDA

Hanover Estates Planning Charrette

Cortlandt Town Hall

November 17, 2011

7:00 PM to 9:15 PM

Final Charrette Meeting:

7:00 PM **Overview of Charrette Process Moving Forward**

- Final Report
- SEQR
- Site Plan Review

7:05 PM **Clarification on Emergency Access Road Issue**

7:10 PM **Discussion of Technical Areas**

- Natural Resources Discussion
- Traffic Discussion (signal warrant)

7:35 PM **Presentation of Alternatives 9 and 10**

7:40 PM **Open Discussion**

8:45 PM **Summary of Recommendations**

9:10 PM **Wrap Up/Comments/Questions**

Comprehensive Master Plan Policy 83
Town of Cortlandt Comprehensive Master Plan

the proposed
Hanover Estates Subdivision

Policy 83: Minimize the use of cul-de-sacs in new developments. The Town has a considerable number of existing lengthy cul-de-sacs which have proven to be difficult for garbage pickup, snow removal and most importantly for emergency response purposes.

The Plan encourages the Town to minimize any future construction of cul-de-sacs, which should be limited to no longer than 500 feet and to create linkages in local roadways wherever possible.

NATURAL RESOURCES:

Tree Removal and Protection

the proposed

Hanover Estates Subdivision

• Tree Removal and Protection

- According to the tree report, the sloped area along Croton Avenue has highest value for tree preservation.
- A few individual trees of value were noted within the developed former egg farm. It was noted that some of these trees could be protected with tree preservation zones.
- Northeast corner of the site contains an area of Tulip trees and smaller Maple trees noted as worth preserving if possible.

Alternative 9

- Would largely avoid disturbance to the sensitive sloped area along Croton Avenue
- Would result in disturbance to the northeast corner of the site and to the previously developed egg farm portion the site.

Alternative 10

- Would result in disturbance to the sloped area along Croton Avenue for an access drive.
- Would result in disturbance less disturbance than Alternative 10 in the northeast corner of the site and a similar amount of disturbance to Alternative 9 in the previously developed egg farm portion the site.

NATURAL RESOURCES:

Steep Slopes, Wetlands, Habitat, and Stormwater

the proposed

Hanover Estates Subdivision

- ## Steep Slopes

Alternative 9:

- No steep slope disturbance proposed

Alternative 10:

- Would require disturbance to steep slopes

- ## Wetlands

Alternative 9:

- Disturbance to town regulated wetland buffer proposed for entrance drive

Alternative 10:

Disturbance to town regulated wetland buffer proposed for entrance/parking to sports field, sports field, and emergency access/connection.

- ## Habitat

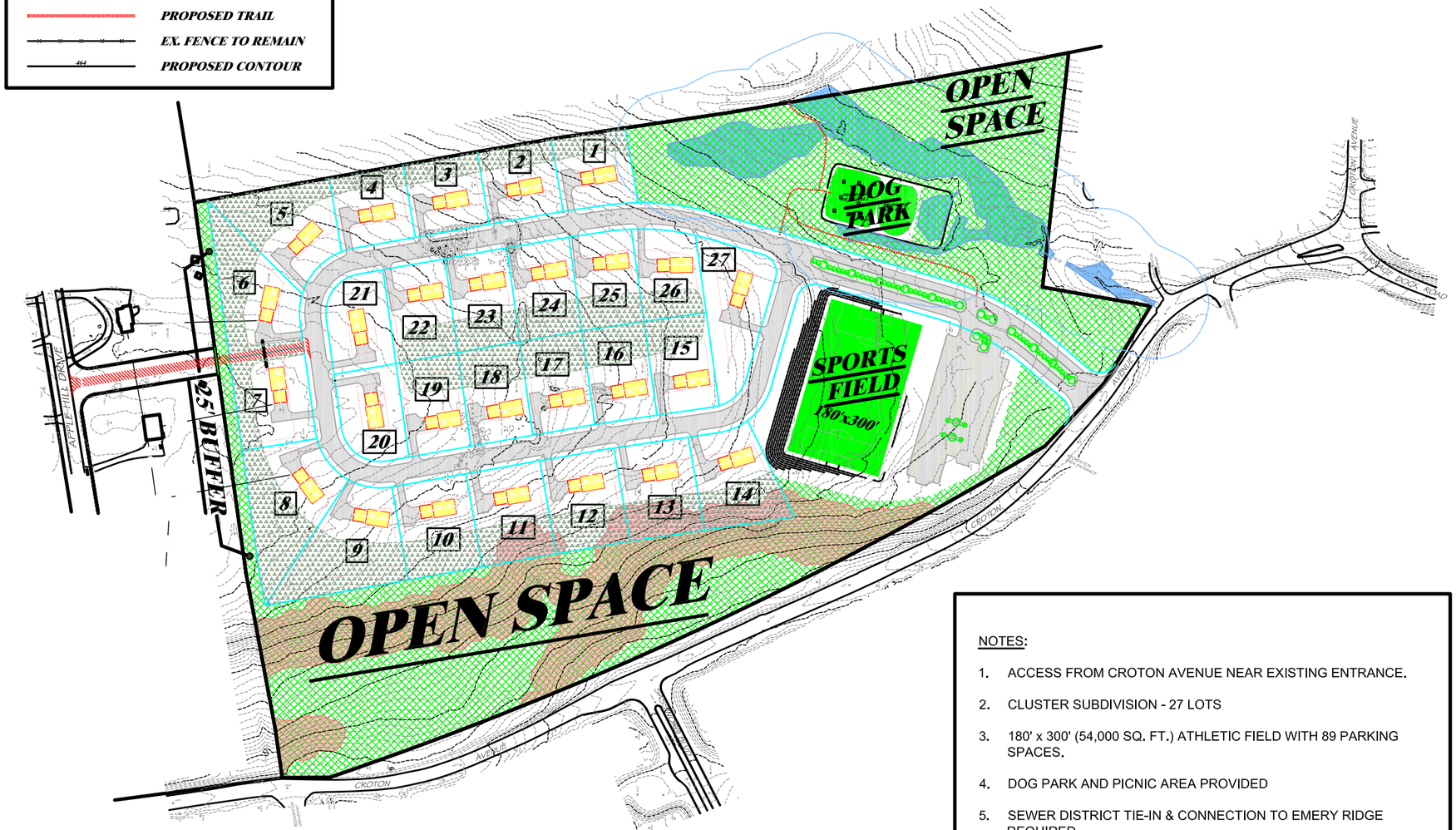
- Alternatives 9 and 10 would both provide conservation areas of similar size and would require a similar amount of site disturbance. Alternative 9 would not result in disturbance to steep slopes.

- ## Stormwater

- Additional disturbance would be required under both alternatives for stormwater facilities
- Disturbance to steep slopes increases the potential for runoff and erosion

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 9

NOTES:

1. ACCESS FROM CROTON AVENUE NEAR EXISTING ENTRANCE.
2. CLUSTER SUBDIVISION - 27 LOTS
3. 180' x 300' (54,000 SQ. FT.) ATHLETIC FIELD WITH 89 PARKING SPACES.
4. DOG PARK AND PICNIC AREA PROVIDED
5. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
6. 748,042 SQ. FT. (17.2 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
7. LOT SIZES ARE 0.46 AC. MIN. TO 0.81 AC. MAX.

DATE: NOVEMBER 3, 2011

240 0 120 240

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

CRONIN ENGINEERING
PROFESSIONAL ENGINEERING & CONSULTING
(914) 736-3664

39 ARLO LANE
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 9

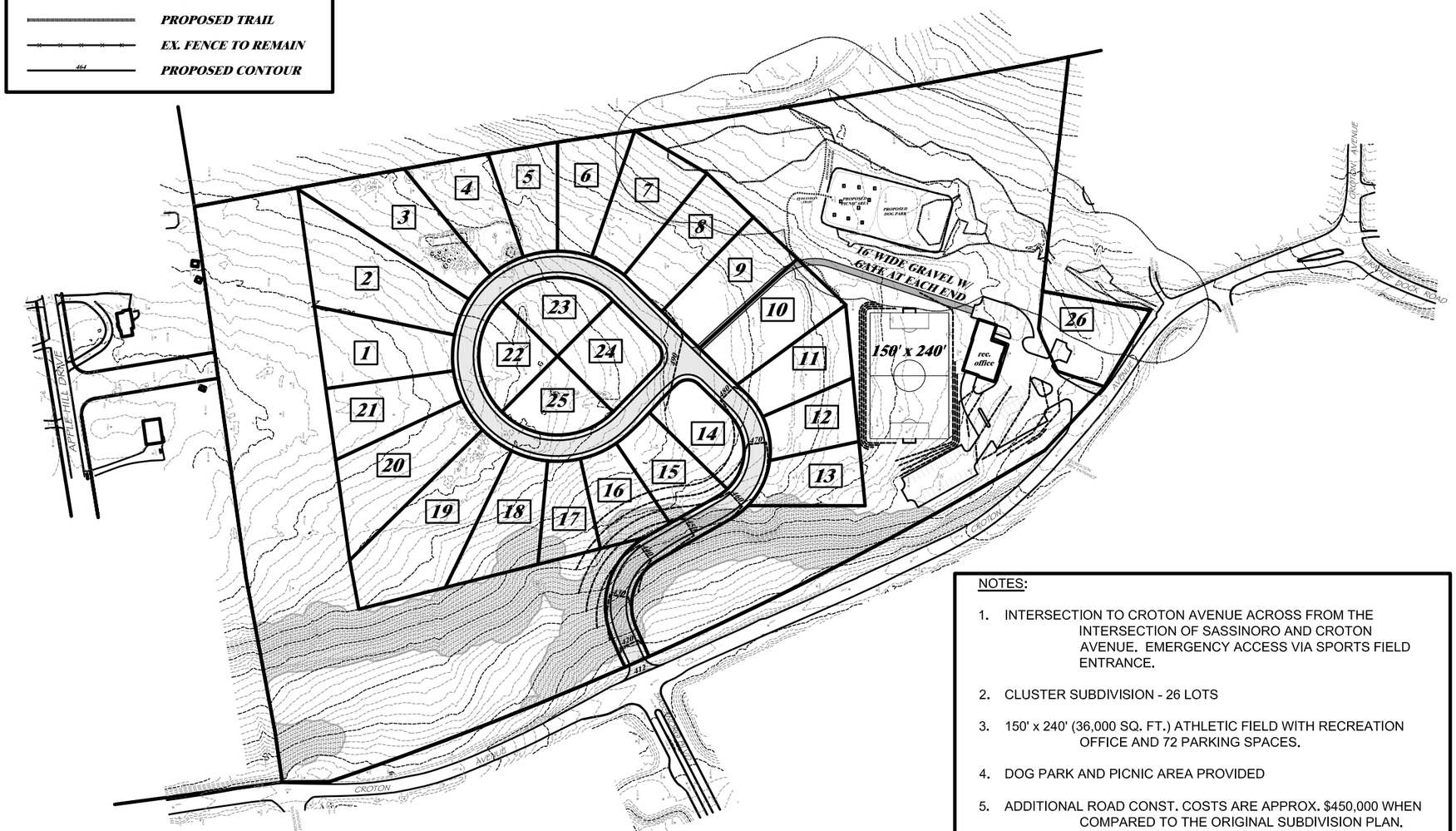
HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 9

LEGEND

- EXIST. PROPERTY LINE
- EXIST. EASEMENT LINE
- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- EXIST. WATERCOURSE
- EX. WETLAND BNDRY.
- EX. 100' WETLAND BUF.
- EX. SLOPE > 20%
- PROP. PROPERTY LINE
- PROPOSED TRAIL
- EX. FENCE TO REMAIN
- PROPOSED CONTOUR



SUBDIVISION ALTERNATIVE 10

NOTES:

1. INTERSECTION TO CROTON AVENUE ACROSS FROM THE INTERSECTION OF SASSINORO AND CROTON AVENUE. EMERGENCY ACCESS VIA SPORTS FIELD ENTRANCE.
2. CLUSTER SUBDIVISION - 26 LOTS
3. 150' x 240' (36,000 SQ. FT.) ATHLETIC FIELD WITH RECREATION OFFICE AND 72 PARKING SPACES.
4. DOG PARK AND PICNIC AREA PROVIDED
5. ADDITIONAL ROAD CONST. COSTS ARE APPROX. $450,000 WHEN COMPARED TO THE ORIGINAL SUBDIVISION PLAN.
6. SEWER DISTRICT TIE-IN & CONNECTION TO EMERY RIDGE REQUIRED.
7. 813,572 SQ. FT. (18.7 ACRES OF TOTAL SITE AREA AVAILABLE FOR TOWN USE)
8. LOT SIZES ARE 0.38 AC. MIN. TO 1.07 AC. MAX.

DATE: NOVEMBER 3, 2011

240 0 120 240

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SUBDIVISION ALTERNATIVE 10

HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 10

BARTLETT TREE EXPERTS
2240 SAW MILL RIVER ROAD, ELMSFORD, NY 10523-2501 • (914) 592-4520 • FAX (914) 592-5068

October 31, 2011

Town of Cortlandt Planning Board
ATTN: Chris Kehoe
1 Heady Street
Cortlandt NY 10567

Work Location: Hanover Estates Development Croton Avenue

Dear Mr. Kehoe

An inspection was done of the proposed site of the Hanover Estates subdivision being discussed on Croton Avenue in the Town of Cortlandt. As requested I looked to determine the extent of impact on the trees located at the property and assess the projected loss of forest cover if the development moves forward as laid out on the plans.

The plans given to me show 3 alternatives with anywhere from 25 to 10 building lots, new main road through the site, entrance from Apple Hill Road and a proposed conservation area. Each lot is not specifically marked in the field and so determining the exact impact of each building lot is not really feasible and so I have broken them into groups of lots based on similar tree groupings and existing conditions. Some of the things we look to determine are the species make up of the forest, size and condition of the trees and any significant groupings. Aside from trees, which would be removed because they are in the footprint of an individual site we also need to take into account the trees which would be damaged to an unacceptable level by root disturbance or other disturbances like erosion. There was a tree inventory completed but it does not include any trees less than 8" in diameter, which includes some significant trees such as Dogwoods, Ironwoods and Hickories. Some recommendations will be proposed, which may help reduce or minimize damage if the project moves forward. Each proposed area of the plan shown on the drawings will be addressed here.

SUBDIVISION ALTERNATIVES 1 AND 2 DRAWINGS

APPLE HILL DRIVE
There are two alternatives that appear to be only separated by the type of entrance used to gain access off of Apple Hill Drive. The option for a gravel road would generally cause the least impact for the trees in this area. The area is a swath between houses 16 and 18 Apple Hill Drive and is comprised primarily of Oaks and Maples and some smaller trees. It is a narrow area and in all likelihood any roadway put through here would require the removal of all or most of the trees. If a road is dug it would damage the roots of the adjacent trees and likely cause decline of those trees going forward. There are not a great number of trees in this area but they do provide a buffer between the two houses.

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Alternative 1 and 2 drawing cont:

CONSERVATION AREA
This area appears to roughly overlap what is the existing wetland. The trees in this area are of the typical type to wetland areas. There are not a large number of trees in this zone which is typical for some wetlands. There is an extensive problem with invasive vines affecting the trees in the zone as well. Some trees are in very poor condition due to the suffocating vines. If this remains the area to be preserved some work should be done to curb the invasive plants.

BUILDING LOTS 1 THRU 4
These lots run along the border of the property with the school from the rear of 18 Apple Hill. This area primarily consists of large Tulip trees and smaller Maple trees. The trees are large and would not be able to remain along with the home construction as too many roots would be damaged and they would likely decline in subsequent years. The trees are in good health and if possible this would be a group of trees worth trying to preserve.

BUILDING LOTS 5 THRU 7
There are very few trees in this area that are in good condition or are highly desirable. The area has a lot of meadow and the few trees that exist are in poor health or are covered in vines. There is a group of invasive Ailanthus trees in the center of this area that would not be beneficial to the site. There are a few individual Oak and Tulip trees that could remain if provided good protection measures during construction leaving some mature trees that would benefit the site. There are really no significant tree related conflicts in these sites but they do appear to get close to the wetland at the one end.

BUILDING LOTS 8 THRU 9
These 2 lots are located directly adjacent the current entrance off Croton Ave. and are already developed with houses and drives. There are not a large number of trees that would be affected in development but there are some existing trees. There are several mature Maples and Spruces that are in good condition and should be preserved if possible in the development with proper tree protection zones. Depending on the size of houses this could be feasible for some of them to remain.

BUILDING LOTS 10 THRU 17
These lots currently consist of a young forest directly alongside Croton Avenue. This area was cleared at some point in the too distant past as almost all the trees are in the range of 6 to 14 inch in diameter. There are several places where larger individual trees exist and several very nice larger trees. The species makeup is primarily Sugar Maple which is a very desirable species and different from most locations where the invasive Norway Maple species takes over a cleared site. Other species include Sassafras, Hickory, White Oak and Black Locust. There are pockets where invasive Grape Vine is damaging trees but this can usually be controlled with some cutting. The area has a slope and if trees were removed it would likely increase runoff and erosion significantly. The top of the hill is where the quality of trees diminishes but there should be some buffer at the top to help prevent erosion. This is definitely the area most worth preserving of the whole site.

BARTLETT TREE EXPERTS
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BUILDING LOTS 18 THRU 25
This area extends from the rear of 16 Apple Hill Drive down through the existing egg farm. This area is mainly meadow and buildings occupied by the egg farm. There are very few trees in this area and of the entire site this is the best area for construction from a tree preservation standpoint. There are a few nice individual trees which could be protected with tree preservation zones but really no groups of specimen plants.

SUBDIVISION ALTERNATIVE 3 DRAWING

BUILDING LOTS 1 THRU 4
These lots run along the border of the property with the school from the rear of 18 Apple Hill. This area primarily consists of large Tulip trees and smaller Maple trees. The trees are large and would not be able to remain along with the home construction as too many roots would be damaged and they would likely decline in subsequent years. The trees are in good health and if possible this would be a group of trees worth trying to preserve.

BUILDING LOTS 5 THRU 10
This area extends from the rear of 16 Apple Hill Drive down through the existing egg farm. This area is mainly meadow and buildings occupied by the egg farm. There are very few trees in this area and of the entire site this is the best area for construction from a tree preservation standpoint. There are a few nice individual trees which could be protected with tree preservation zones but really no groups of specimen plants.

Conclusions

1. The portions of the site with existing forest are a healthy mix of hardwood trees consistent with this area including Black Birch, Oaks, Sugar Maples and Hickories. There is also a mix of invasive species, like Bittersweet, Norway Maple & Barberry which are common in this area and are often the first plants to thrive once the forest canopy is opened up. The deer have eaten most of the low growing foliage leaving no evergreens to speak of.

2. The bulk of the site is mostly already disturbed or currently in use. Trying to develop within these areas will always help minimize the impacts on the forest and existing trees. The development of plots listed as 1 thru 4 and 10 thru 17 are the ones that would result in the worst impact on the trees and likely cause erosion issues.

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3. If construction moves forward there are individual tree's located within plots that will need protection of the root zones to prevent mechanical damage, soil compaction, root cutting and grade changes all of which will harm trees that are meant to remain. Most tree mortality will not be a result of clearing for the site but from tree decline due to stress caused from the construction. This can easily raise the loss of trees from 20 % to 40% within a few years of construction.

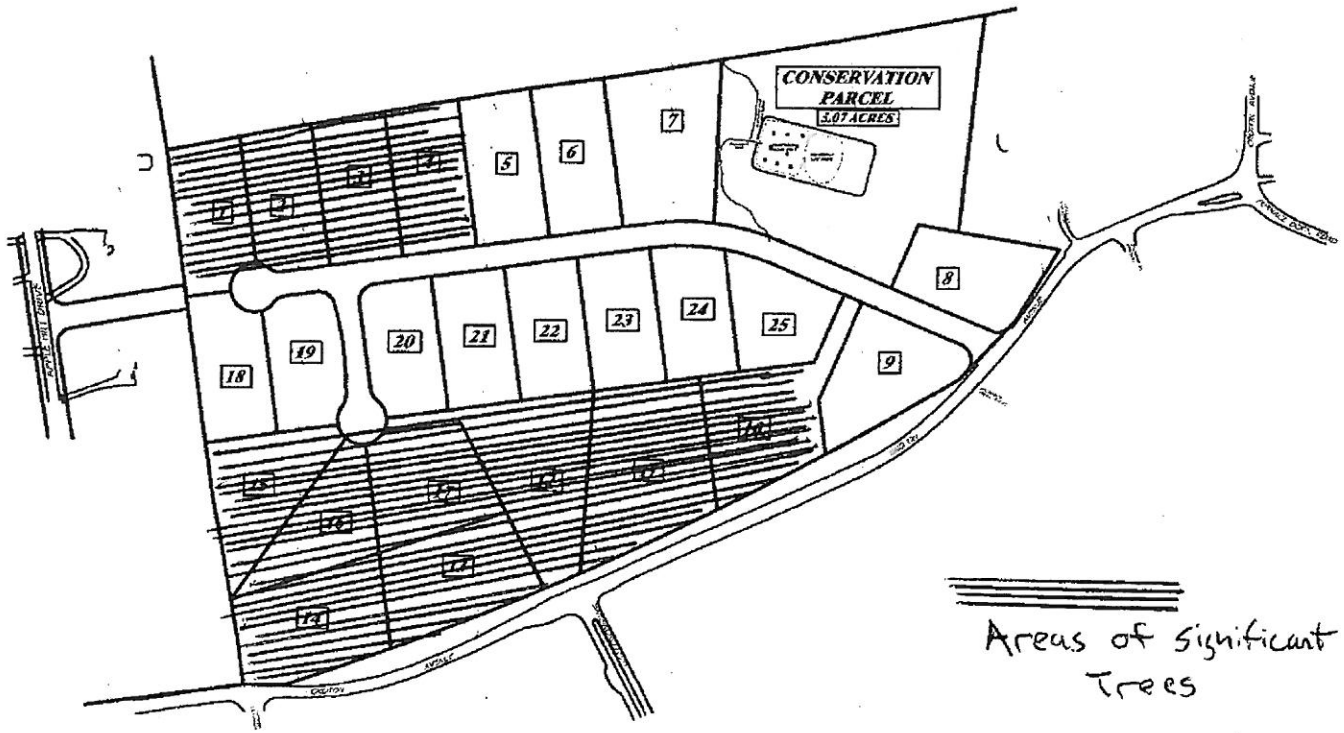
4. The better of the 2 plans from the tree loss point of view is the Alternative 3 drawing but it leaves out some areas where building could occur with little to no impact on the trees. I have marked up a drawing and attached it with the areas that I feel are most worthy of protection. In prioritizing the site I would say the area along Croton Ave. would be more important to preserve then the area at the rear of 18 Apple Hill Drive.

If you have any questions please feel free to give me a call.

Sincerely

T Hall

Trevor Hall
Bartlett Tree Experts
ISA PD0269



SUBDIVISION ALTERNATIVE 1

SCALE: 1 IN. = 240 FT.

DATE: FEBRUARY 14, 2011

240 0 120 240

SCALE: 1" = 240 FT.

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

150 CROTON AVENUE
CORTLANDT MANOR, NY 10567

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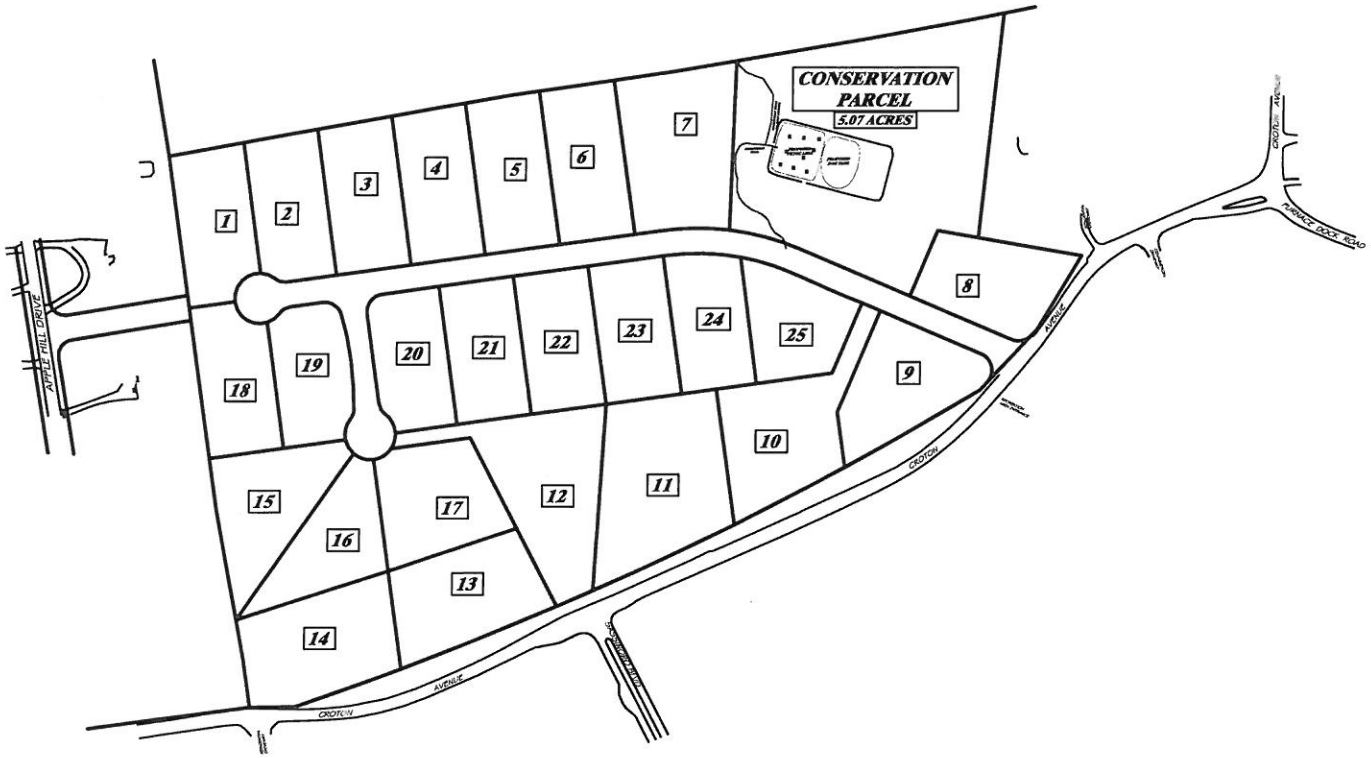
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 1

SUBDIVISION PLAN FOR HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 1



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SCALE: 1 IN. = 240 FT.

DATE: FEBRUARY 14, 2011

240 0 120 240

SCALE: 1" = 240 FT.

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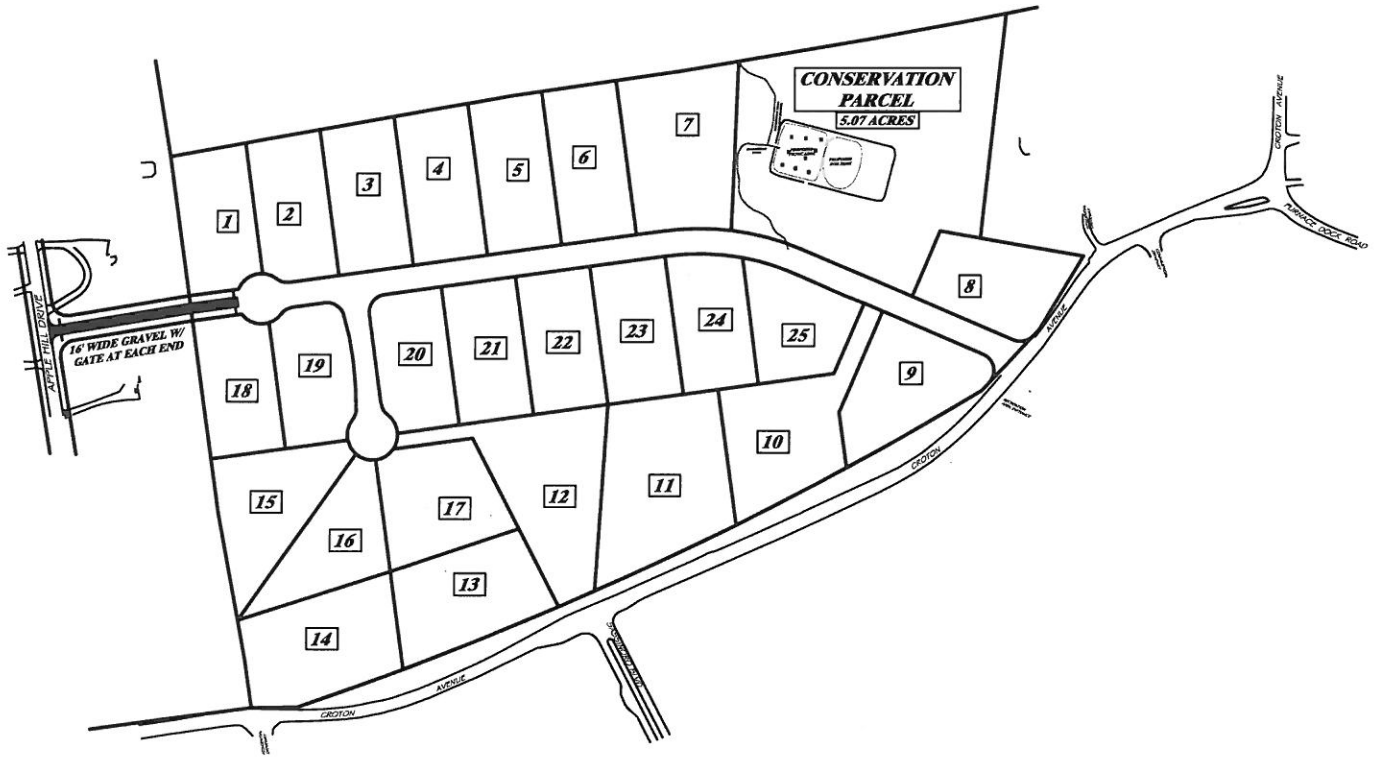
SUBDIVISION ALTERNATIVE 1

SUBDIVISION PLAN FOR HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 1



SUBDIVISION ALTERNATIVE 2

SCALE: 1 IN. = 240 FT.

DATE: FEBRUARY 14, 2011

240 0 120 240

SCALE: 1" = 240 FT.

OWNER/DEVELOPER

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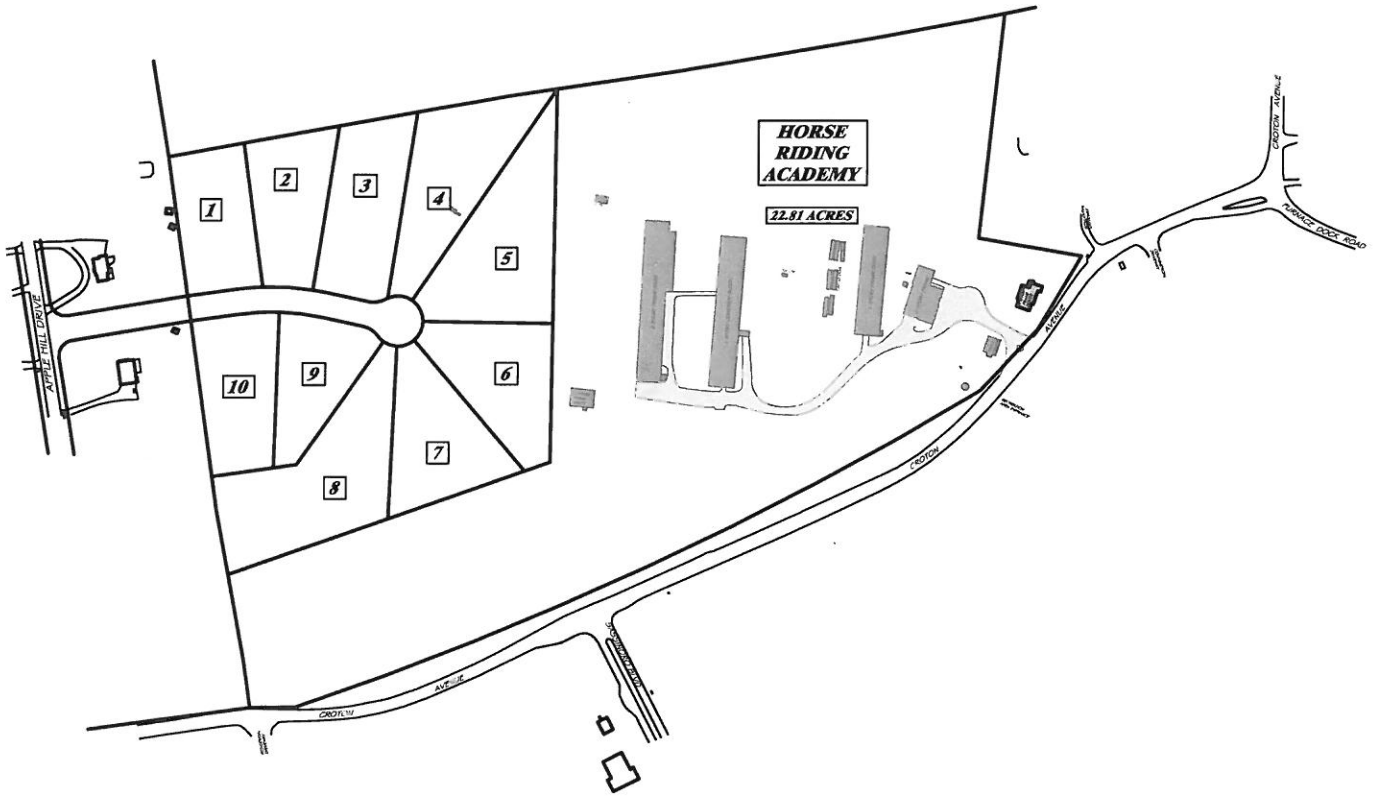
CORTLANDT, NEW YORK 10567

SUBDIVISION ALTERNATIVE 2

SUBDIVISION PLAN FOR HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 2



SUBDIVISION ALTERNATIVE 3

SCALE: 1 IN. = 240 FT.

DATE: FEBRUARY 14, 2011

240 0 120 240

SCALE: 1" = 240 FT.

OWNER/DEVELOPER

HANOVER ESTATES

PROPERTY OWNER
CROTON REALTY & DEVELOPMENT, INC.

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SUBDIVISION ALTERNATIVE 3

SUBDIVISION PLAN FOR HANOVER ESTATES

LOCATION:
150 CROTON AVENUE
TOWN OF CORTLANDT, NEW YORK 10567

SHEET 1 OF 1 | ALT 3