5.0 ALTERNATIVES

Section 617.9(b)(5) of the regulations implementing SEQRA requires that a draft environmental impact statement include a description and evaluation of a range of reasonable alternatives to the proposed action that are feasible, considering the objectives and capabilities of the project sponsor. The range of alternatives must include the "No Action" alternative.

In addition to the No Action alternative, the Scoping Document for this DEIS requires an analysis of three alternatives:

- A No Zone Change Alternative, evaluating the impacts associated with development of only Single Family homes pursuant to the existing zoning designation.
- An Adult Student Housing Alternative, where the center 12 acres of the project are rezoned to accommodate Adult Student Housing at 16 units per acre.
- A Reduced Build out Alternative, where the proposed project is reduced by approximately twenty five percent.
- Cul-de-sac B-E Roadway Connection
- Cul-de-sac B-E Emergency Access Connection

These five alternatives are described and evaluated below. A summary matrix of the quantifiable impacts associated with each alternative is provided as Table 5-1 at the end of this section. It should be noted that with the proposed development plan, and with each alternative presented below, the existing wetlands would not be disturbed.

5.1 No Action Alternative

The No Action Alternative is the scenario that would occur if the site were to remain substantially undeveloped except for the existing single family homes, which would continue to be occupied and the Hasty Hills stables which would continue to be used. Under the No-Action alternative, none of the impacts identified in this report, whether adverse or beneficial, would occur. A summary of impacts of this alternative, as compared to the proposed Patrick Farm development, is presented below. Table 5-1 provides a summary of the quantitative comparison of this alternative compared to the proposed project.

Soils and Topography

No grading or other construction disturbance to 114.5 acres of the site would occur. There would be no construction-related impacts associated with site work or building construction phases.

Surface Water Resources

There would be no increase in the amount of surface water runoff from the site. There would be no further management of the rate of stormwater runoff which is currently occurring. Construction of the stormwater management system associated with the Patrick Farm project would not take place. Similar to the proposed project there would be no direct impacts to streams or wetlands.

Ecology and Wetlands

The site would continue to provide various habitats and areas of cover for local wildlife although, as described in Section 3.3 much of this habitat is considered to be of marginal quality due to its lack of diversity. No direct disturbance of wetlands or their regulated areas would occur under the No Action alternative, as is also the case with the proposed action with the exception of the disturbance to the wetland buffer due to the installation of a stormwater discharge pipe for the proposed detention pond No. 1.

Land Use and Zoning

There would be no changes in the existing land use of the project site. There would be no zoning map and text amendments to construct multifamily units on the central portion of the site to help meet the need for a diversity of housing in the Town of Ramapo. There would be no workforce condominium flat unit for sale or emergency service worker apartments for rent adjoining the Hillcrest Fire Station.

Transportation

Existing traffic conditions would remain the same. There would be no construction of left turn lanes on US Route 202 or NYS Route 306 to improve traffic flows along these corridors.

Historic and Archaeological Resources

Under this alternative there would be no impacts to historic or archaeological resources that are present on the project site.

Community Facilities and Utilities

No demand would be placed on community services or utilities under the No Action Alternative. There would be no increase in school enrollment, which is considered a beneficial impact by the East Ramapo Central School District and there would be no increase in tax revenue generated for the District which is anticipated as a result of the proposed development. There would be no additional calls to police, fire, and emergency service providers under the No Action Alternative. There would also be no increase in municipal property tax revenues generated by the project site to fund community services as compared to the significant increase projected from the proposed Patrick Farm development. The Rockland County Sheriff's Department would be able to continue leasing acreage on the southwestern quadrant of the property for the purpose of conducting horse mounted police training exercises.

Fiscal Impacts

There would be no increase in market value or property taxes as a result of this alternative. Annual property tax revenues would continue to accrue to various taxing jurisdictions serving the project site but the overall increase in property taxes projected for the proposed project would not occur.

Noise and Air Resources

There would be no introduction of new noise sources in the No Action alternative. Existing ambient noise levels at the site would remain unchanged. No changes to air quality resulting from site activities would occur. Short term impacts associated with construction, including dust and pollutants from construction traffic and construction-generated noise, would not occur.

Visual Resources

There would be no change to the visual environment as a result of this alternative. The site would remain in its current state as mostly vacant land and a small area of residential development.

Construction Related Effects

There would be no construction-related effects under the No Action alternative. There would be no short-term changes in ambient noise levels. There would be no positive economic benefits from construction expenditures and employment.

Given the viability of this site for development, and the ongoing tax burden associated with vacant land, the No Action Alternative is not a likely alternative.

Sustainability

Sustainability is broadly defined as the level of natural resource use that can be sustained over time. Sustainability is the capability to equitably meet the vital human needs of the present without compromising the ability of future generations to meet their own needs by preserving and protecting the area's ecosystems and natural resources. The concept of sustainability describes a condition in which human use of natural resources, required for the continuation of life, is in balance with Nature's ability to replenish them.[1] This definition acknowledges the concept of vital human needs, of which housing is one of the most basic, and balancing this need with the preservation of resources.

The PLACE^{3}S[2] methodology, measures the total energy consumption of a specific land use. The energy sectors that PLACE^{3}S[3] measures includes Transportation, Residential/Commercial/Industrial, Infrastructure and Energy Production. All of these measurements involve a variety of energy types and fuels that are measured in unique units. PLACE^{3}S converts the varied units of measurement into a standard Million British Thermal Unit equivalent (MMBtu). The PLACE^{3}S methodology assigns the following values for the Total Operating Energy use per household.

- Average Single Family Lot - 440 MMBtu - High Residential Energy Use
- Attached Townhouse - 380 MMBtu - Medium Residential Use
- Low Rise Apartments - 360 MMBtu - Low Residential Use

The No Action Alternative would allow for the preservation of the Patrick Farm site in its present condition, but would do nothing to meet the need for diversified housing in this area.

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[1] *Policy Guide on Planning for Sustainability*, American Planning Association, April 2000.
[2] The Energy Yardstick, PLACE^{3}S Methodology, developed for the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, August 1996.
[3] **PLA**nning for **C**ommunity **E**nergy, **E**conomic and **E**nvironmental **S**ustainability **(PLACE^{3}S)**

5.2 No Zone Change - Single Family Home Alternative

Under this alternative a development consistent with present zoning would be constructed. Alternative A, depicted in Figure 5-1. shows how the site could be developed with 136 single family homes under the existing zoning. Under this alternative there would be no notable change in the diversity of housing options available in the Town of Ramapo. There would not be 72 condominium flat units constructed nor would 24 apartment rentals for community service workers be constructed. A summary of the impacts of this alternative as compared to the proposed plan is discussed below. Table 5-1 provides a summary of the quantitative comparison of this alternative compared to the proposed project.

Soils and Topography

The area of disturbance for this Alternative would be 81.9 acres compared to 114.5 for the proposed action. This would include disturbance to 37.0 acres of woodlands and 2.9 acres of slopes over 25 percent compared with 69.1 acres of woodlands and 3.8 acres of slopes over 25 percent in the proposed plan. The differences are largely attributable to the smaller building footprints and associated smaller areas of clearing.

Surface Water Resources

In this alternative, the development would result in a total of 27.9 acres of impervious coverage over the entire project site, compared with 46.1 for the proposed plan. This reduced area of impervious area would result in reduced storm water run-off generated by the site and reduction in the land area that would need to be devoted to stormwater detention and retention.

Ecology and Wetlands

This alternative would have reduced ecological impacts compared with the proposed action due to the smaller area of disturbance. Although both alternatives would disturb the upland portion of the site outside the wetland buffer limits, this alternative would have less impervious coverage associated with parking and internal roads. There would be no direct disturbance to wetlands, similar to the proposed project.

Land Use and Zoning

There would be no increase in the diversity of housing in the Town of Ramapo. No workforce housing would be available for sale. No community service worker apartments would be available for rent. There would be no zoning map and text amendments to construct multifamily units on the central portion of the site.

Transportation

This alternative would result in a reduction of 147 peak hour trips due to the smaller number of units--136 versus 497 in the proposed plan. However, the proposed left turn lanes on US Route 202 and NYS Route 306, which designed to improve traffic flow on these roadways would not be constructed. The direct site access from NYS Route 202 (Road B) would be located at a point south of the access in the proposed plan resulting in a significant earth cut. Proposed Road C would extend only to Old U.S. Highway 202.

Historic and Archaeological Resources

The potential impacts on historic and archaeological resources and the necessary mitigation measures would be similar as those required under the proposed plan.

Community Facilities and Utilities

Under this Alternative the total population projected would be 615 persons and 215 school age children as compared with a total population of 1,932 persons and 609 school age children under the proposed plan ; therefore this alternative would place a potentially lower demand on police, emergency, and other community services than the proposed action. Demands for water and wastewater generation would be 54,400 gallons compared to 198,800 gallons for the proposed action.

Fiscal Impacts

The No Zone Change Alternative would be expected to generate lower tax revenue due to the reduced number of units. . The total number of units in this alternative would be lower -- 136 compared with 497 in the proposed plan. Therefore the municipal tax revenue would be reduced to $613,301 compared to the projected tax revenue of $1,426,061 under the proposed alternative. A comparison of projected tax revenue to be generated by the single family proposal compared to the proposed project indicates the net revenue to the Town, after covering the costs for municipal services, would be reduced by more than $250,000 annually under the single family alternative.

Noise and Air Resources

No significant impacts to noise and air resources after construction are anticipated similar to the proposed project. Due to the reduced number of units, it is possible that there would be a reduced impact on noise and air resources occurring during construction related activities under the No Zone Change Alternative.

Visual Resources

Views of the development in this alternative would be similar to the proposed action on the north and south areas of the site, where single family residences are proposed in both cases. In three locations where multifamily units and associated parking areas would be visible in the proposed plan -- along portions of NYS Route 202, NYS Route 306, and Hidden Valley Drive and Scenic Drive -- only single family residences would be visible in the No Zone Change Alternative.

On the west, proposed Road C would originate on Old U.S. Highway 202. A single family house would be constructed on the crescent shaped land west of the entrance instead of the access road and landscaped ponds in the proposed plan. Two single family houses could also be sited on the 12 acre parcel west of Rt. 202. South of this on NYS Route 202 a site access (Road B) would be located.

Construction Related Effects

There would be fewer construction related impacts with this alternative as compared to the preferred action due the smaller number of units and smaller area of site disturbance.

Sustainability

As described above, sustainability is broadly defined as the level of natural resource use that can be sustained over time. Sustainability is the capability to equitably meet the vital human needs of the present without compromising the ability of future generations to meet their own needs. Under the Single Family Alternative, the Patrick Farm site would be developed in a pattern of typical urban sprawl, which is the least desirable alternative in relation to sustainability and wise use of renewable resources. According to the PLACE^{3}S methodology this alternative would be the highest consumption of energy resources, 440 MMBtu per unit.

Another definition of sustainability relates to the longevity of a community as a whole and it's ability to meet the needs of all members of the community. "To be sustainable over time, a community must include housing types and designs that will be desirable to buyers and renters decades from now. Those residents will be ethnically diverse, older, living in smaller households, and less likely to have children. The sustainable community must have many more housing choices than master planned communities in the past." [4] The single family alternative does not provide further opportunity for diversity of housing in the Town of Ramapo, as would the proposed project.

5.3 Adult Student Housing Alternative

Figure 5-2 shows the Adult Student Housing Alternative. The applicant wishes to be clear that there is no proposal to construct Adult Student Housing. This is not the preferred alternative and analysis of this alternative was prepared because it was a requirement of the adopted Scoping Document for this DEIS. Such a use was considered for this parcel several years ago. In this scenario, the central portion of the site would be developed with 192 adult student housing units and a post secondary educational institution occupying at least 10 percent of the project site, as defined in the Town of Ramapo Zoning Law § 376-1215. Access would occur from NYS Route 202. The remainder of the property would be developed with 127 single family residences. Under this alternative there would be no increase in the diversity of housing options available to the general population in the Town of Ramapo. This alternative would not represent housing for the general population but provide multifamily housing limited to full time religious students, faculty and their families. The student tenancy of these units would be limited to a maximum of six years. The 72 workforce condominium flat units would not be constructed nor would 24 apartment rentals for emergency service workers be constructed. A summary of the impacts of this alternative as compared to the proposed plan is discussed below. Table 5-1 provides a summary of the quantitative comparison of this alternative compared to the proposed project.

Soils and Topography

The area of disturbance for this Alternative would be 81.3 acres compared to 114.5 for the proposed action. This would include disturbance to 49.0 acres of woodlands and 3.2 acres of slopes over 25 percent compared with 69.1 acres of woodlands and 3.8 acres of slopes over 25 percent in the proposed plan. *This disturbance would occur without meeting the needs of the general population of the Town of Ramapo.*

[4] A Step-by-Step Guide to Sustainability, Karen Walz, FAICP, July 2007.

Surface Water Resources

In this alternative, a total of 30.7 acres of impervious coverage would be built over the entire project site, compared with 46.1 for the proposed plan. This reduced area of impervious area would result in reduced storm water run-off generated by the site and reduction in the land area devoted to stormwater detention and retention. The pond areas would not be constructed as a visual resource.

Ecology and Wetlands

This alternative would create impacts to ecology without meeting the needs of the general population. This alternative proposes to disturb the upland portion of the site outside the wetland buffer limits similar to the project proposal. This alternative would have less impervious coverage associated with the parking areas. There would be no direct disturbance to wetlands in either plan.

Land Use and Zoning

This alternative would require zoning map and text amendments to construct 192 adult student housing units on approximately 12 acres in the central portion of the site. However, this zone change would not meet the needs for additional diversity of housing for the general population in the Town of Ramapo since the residents would be limited to adult yeshiva students . This alternative would not include 72 workforce condominium flat units for sale and 24 emergency service worker apartments for rent adjoining the Hillcrest Fire Station on NYS Route 306.

Transportation

This alternative would result in 256 peak hour trips compared to 288 for the proposed project. However, the proposed traffic mitigation measures, including the proposed left turn lanes on US Route 202 and NYS Route 306 which would benefit the community, would not be constructed. The direct site access from NYS Route 202 (Road B) would be located at a point south of the access in the proposed plan. Proposed Road C would extend only to Old U.S. Highway 202.

Historic and Archaeological Resources

The potential impacts on historic and archaeological resources and the proposed mitigation measures would be similar to the proposed plan.

Community Facilities and Utilities

The total population projected for this alternative would be 1,413 persons compared with 1,932 for the proposed action; This alternative would place demands on Community Services without meeting the needs of the general population. . Demands for water and wastewater generation would be 127,600 gallons without meeting the needs of the general population .

Fiscal Impacts

The Adult Student Housing Alternative would make housing available for adult students and it is likely that all of the children of these adult students would also attend private school Under this

Alternative the total population projected would be 1,413 persons and 848 school age children as compared with a total population of 1,932 persons and 609 school age children under the proposed plan, thus there would be an increase of 239 school age children. However total tax revenues to the town and the school district would be reduced based upon a reduced number of units, 319 compared with 497 in the proposed plan..

Noise and Air Resources

. No significant impacts to noise and air resources after construction are anticipated with this or any other alternative presented.

Visual Resources

Views of the development in this Alternative would be similar to the proposed action on the north and south areas of the site, where single family residences are proposed in both cases. The area where the student housing would be located, on the west facing slope along NYS Route 202 Landscaping efforts would be reduced compared to the proposed because fewer units are proposed for this area, and most would be situated where the topography would substantially limit views of them from Route 202. As in the proposed plan, the road frontage along Route 202 would be developed with single family residences only. Proposed Road C would originate on Old U.S. Highway 202. A single family house would be located on the crescent shaped land west of the entrance instead of the access road and landscaped ponds in the proposed plan. Two house sites could be located on the parcel on the west side of Rt. 202. South of this on NYS Route 202 a site access (Road B) would be located.

Construction Related Effects

There would be slightly less construction related impacts as a result of this alternative compared to the proposed project, due to the reduced number of units proposed.

Sustainability

The increased density of the Adult Student Housing alternative would be similar in benefit to the proposed project. According to the PLACE^{3}S^5 methodology, the Total Operating Energy use per household for attached townhouse units is converted into 380 MMBtu per year a medium consumption of energy resources.

5.4 Reduced Build-Out Alternative

Alternative C, shown in Figure 5-3, shows how the site might be developed at a density of 75 percent of the proposed project. This alternative would result in the construction of 269 market rate townhouses and 103 single family homes. Under this alternative there would be less diversity of housing options available in the Town of Ramapo compared to the proposed plan. Neither 72 workforce condominium flats nor 24 apartment rentals for community service workers would be constructed. A summary of the impacts of this alternative as compared to the proposed plan is discussed below. Table 5-1 provides a summary of the quantitative comparison of this alternative compared to the proposed project.

5

Soils and Topography

As shown in Table 5-1, the area of disturbance for this Alternative would be 76.6 acres compared to 114.5 for the proposed action. This would include disturbance to 46.0 acres of woodlands and 3.3 acres of slopes over 25 percent compared with 69.1 acres of woodlands and 3.8 acres of slopes over 25 percent in the proposed plan.

Surface Water Resources

In this alternative, the total impervious area for the development would result in a total of 34.6 acres of impervious coverage over the entire project site, compared with 46.1 for the proposed plan. This reduced area of impervious area would result in reduced storm water run-off generated by the site and reduction in the land area devoted to stormwater detention and retention.

Ecology and Wetlands

This alternative would have reduced impacts to ecology compared with the proposed action because it would have smaller development area. Although both alternatives propose to disturb the upland portion of the site outside the wetland buffer limits, this alternative would have less impervious coverage associated with the parking areas. Similar to the proposed project, there would be no direct disturbance to wetlands or adjacent areas.

Land Use and Zoning

This alternative would require zoning map and text amendments to construct 269 townhouse units on the central portion of the site to help meet the need for a diversity of housing in the Town of Ramapo. No workforce condominium flats nor any emergency service worker apartments for rent adjoining the Hillcrest Fire Station would be constructed.

Transportation

This alternative would have less impact on traffic due to the smaller number of units -- 372 compared with 497 in the proposed plan. As shown in Table 5-1, peak hour trips generated would be 245 compared to 288 trips from the proposed project. However, the proposed transportation mitigation measures may not be constructed. Proposed Road C would extend only to Old U.S. Highway 202 and would not connect with NYS Route 202.

Historic and Archaeological Resources

The potential impacts on historic and archaeological resources and the proposed mitigation measures would be similar to the proposed plan.

Community Facilities and Utilities

The total population projected for this alternative would be 1,496 persons compared with 1,932 for the proposed action; therefore this alternative would require less police, emergency, and other community service than the preferred action and there would be less water demand and wastewater generation.

Fiscal Impacts

The Reduced Build Out Alternative would be expected to result in both lower costs and less revenue due to the lower population projected and the reduced number of units. Under this Alternative the total population projected would be 1,496 persons and 483 school age children as compared with a total population of 1,932 persons and 609 school age children under the proposed plan. The total number of units in this alternative would be lower -- 372 compared with 497 in the proposed plan. Therefore the tax revenues generated by this alternative would be reduced compared to the proposed action.

Noise and Air Resources

Due to the smaller number of units, it is likely that there would be a less impact on noise and air resources occurring as a result of construction related activities with the Reduced Build Out Alternative. No significant impacts to noise and air resources after construction are anticipated with this or any other alternative presented.

Visual Resources

Views of the development in the Reduced Build Out Alternative would be similar to the proposed action on the north and south areas of the site, where single family residences are proposed in both cases. In three locations where multifamily units and associated parking areas would be visible in the proposed plan, single family houses are proposed in this Alternative.

Along NYS Route 306 south of proposed Road F, four residential lots only would be visible instead of one single family residence near the road and four community service worker apartment buildings, associated parking, community facility set back at least 200 feet.

Views into the site from the east along Hidden Valley Drive and Scenic Drive, would be similar to the proposed layout. While single family residences instead of townhouses would be situated around the lake on the property, views of this portion of the property would not be visible in either layout due to the topography and proposed construction and planting in the foreground.

From the west along NYS Route 202, only single family residences would be visible on the site north of the proposed access road (Road C) on NYS Route 202. No landscaped ponds would be located on Route 202.

Construction Related Effects

Construction related impacts with this alternative as compared to the proposed actions would be somewhat reduced, due to the reduction from 497 to 372 units overall.

Sustainability

As described above, sustainability is broadly defined as the level of natural resource use that can be sustained over time. Another definition of sustainability relates to the longevity of a community as a whole and it's ability to meet the needs of all members of the community. "To be sustainable over time, a community must include housing types and designs that will be

desirable to buyers and renters decades from now. Those residents will be ethnically diverse, older, living in smaller households, and less likely to have children. The sustainable community must have many more housing choices than master planned communities in the past." [6]

Under the Reduced Build-out Alternative the Patrick Farm site would be developed in a less intensive manner, however no workforce townhouses or emergency service worker apartments would be built as in the proposed plan. The need for a diversity of housing has been expressed as a stated goal in the Master Plan for the Town. The Reduced Build-out Alternative does not meet the need for emergency service worker and workforce housing. The proposed project, as designed, meets these goals while preserving open space areas of the site and provides a limited amount of single family development.

5.4 Cul-de-sac B-E Roadway Connection Alternative

Alternative D, shown in Figure 5-4, shows a roadway connection between cul-de-sac B and cul-de-sac E. This alternative was explored in light of the Town's recommendation to reduce the number of cul-de-sacs wherever feasible. This alternative provides a full roadway connection between the two cul-de-sacs, built to Town roadway specifications. This alternative would be similar to the proposed project in all other aspects. A summary of the impacts of this alternative as compared to the proposed plan is discussed below. Table 5-1 provides a summary of the quantitative comparison of this alternative compared to the proposed project.

Soils and Topography

As shown in Table 5-1, the area of disturbance for this Alternative would be 115.2 acres compared to 114.5 for the proposed action, an increase of disturbance of approximately 0.7 acres. This would include an additional disturbance to 0.5 acres of woodlands of 69.6 acres compared with 69.1 acres in the proposed plan.

Surface Water Resources

In this alternative, the total impervious area for the development would increase by 0.5 acres to a total of 46.6 acres compared with 46.1 acres for the proposed plan. This increased area of impervious area would result in increased storm water run-off generated by the site, and is in an area adjacent to the ACOE 5.75 acre wetland.

Ecology and Wetlands

This area had been avoided based upon proximity to the ACOE wetland area. This alternative would result in a wetland disturbance of approximately 0.1 acres, this amount of disturbance would be permitted under an ACOE Nationwide Permit #39. In addition to the direct wetland impacts there are indirect impacts on ecology and wetland resources possible based upon proximity to the wetland area.

Land Use and Zoning

This alternative is similar, with respect to Land Use and Zoning, to the proposed project.

[6] A Step-by-Step Guide to Sustainability, Karen Walz, FAICP, July 2007.

Transportation

This alternative would provide a loop road in the southern portion of the project, compared to two cul-de-sacs in this area. The loop road would provide increased circulation on the project site compared to the proposed plan.

Historic and Archaeological Resources

The potential impacts on historic and archaeological resources and the proposed mitigation measures would be similar to the proposed plan.

Community Facilities and Utilities

The potential impacts on *Community Facilities and Utilities* would be similar to the proposed plan.

Fiscal Impacts

The potential impacts on *Fiscal Impacts* would be similar to the proposed plan.

Noise and Air Resources

Due to the increased amount of new roadway to be constructed there would be an increased impact on noise and air resources occurring as a result of construction related activities with the this Alternative. No significant impacts to noise and air resources after construction are anticipated with this or any other alternative presented.

Visual Resources

This alternative will have an increased visual impact compared to the proposed project, especially from those properties along Scenic Drive. The views that would be into an undisturbed forest area under the project proposal, will be of a roadway connection under this alternative.

5.5 Cul-de-sac B-E Emergency Access Connection Alternative

Alternative E, shown in Figure 5-5, shows an emergency access roadway connection between cul-de-sac B and cul-de-sac E. This alternative was explored in light of the Town's recommendation to reduce the number of cul-de-sacs wherever feasible and in an effort to minimize potential impacts. This alternative provides a twenty foot wide emergency access connection between the two cul-de-sacs. This access could be constructed from pervious or impervious materials. This emergency access could be gated or not, at the discretion of the town. This alternative would be similar to the proposed project in all other aspects. A summary of the impacts of this alternative as compared to the proposed plan is discussed below. For the purpose Table 5-1 provides a summary of the quantitative comparison of this alternative compared to the proposed project. For the purpose of this analysis, in order to consider the maximum impact, an impervious surface was evaluated.

Soils and Topography

As shown in Table 5-1, the area of disturbance for this Alternative would be 114.8 acres compared to 114.5 for the proposed action, an increase of disturbance of approximately 0.3 acres. This would include an additional disturbance to 0.3 acres of woodlands for a total disturbance of 69.4 acres compared with 69.1 acres in the proposed plan.

Surface Water Resources

In this alternative, the total impervious area for the development would increase by 0.3 acres to a total of 46.4 acres compared with 46.1 acres for the proposed plan. This increased area of impervious area would result in increased storm water run-off generated by the site, and is in an area adjacent to the ACOE 5.75 acre wetland.

Ecology and Wetlands

This area had been avoided based upon proximity to the ACOE wetland area. Although there are no direct wetland impacts there are indirect impacts on ecology and wetland resources possible, based upon proximity to the wetland area.

Land Use and Zoning

This alternative is similar, with respect to Land Use and Zoning, to the proposed project.

Transportation

This alternative would provide an emergency access connection in the southern portion of the project, compared to two cul-de-sacs in this area. This connection would provide increased access in an emergency to this portion of the project site compared to the proposed plan.

Historic and Archaeological Resources

The potential impacts on historic and archaeological resources and the proposed mitigation measures would be similar to the proposed plan.

Community Facilities and Utilities

The potential impacts on *Community Facilities and Utilities* would be similar to the proposed plan.

Fiscal Impacts

The potential impacts on *Fiscal Impacts* would be similar to the proposed plan.

Noise and Air Resources

Due to the increased amount of new roadway to be constructed there would be an increased impact on noise and air resources occurring as a result of construction related activities with the this Alternative. No significant impacts to noise and air resources after construction are anticipated with this or any other alternative presented.

Visual Resources

This alternative will have an increased visual impact compared to the proposed project, especially from those properties along Scenic Drive. The views that would be into an undisturbed forest area under the project proposal, will be of an emergency access connection under this alternative , depending upon the manner of construction, the visual impacts of this alternative may be negligible.

5.5 Impact Comparisons

Table 5-1 below summarizes the quantitative impacts associated with No Action, the Single Family Alternative, the Adult Student Housing Alternative, the Reduced Development Alternative and the Cul-de-sac B-E Alternatives.

Table 5-1
Alternative Impact Comparisons

Area of Concern	*Proposed Project Single Family and* Multi-family Housing	*No Action*	*Alternative A No Zone Change Single Family Homes*	*Alternative B Adult Student Housing and Single Family Homes*	*Alternative C Reduced Development*	*Alternative D Cul de Sac B and E Roadway Connection*	*Alternative E Cul de Sac B and E Emergency Access Connection*
Residential Units							
Total Units	**497**	**3**	**136**	**319**	**372**	**497**	**497**
Developed Area							
Impervious Surfaces (acres)	46.1	6.7	27.9	30.7	34.6	46.6	46.4
Lawn/Stormwater management (acres)	68.4	0	53.8	50.6	42.0	68.4	68.4
Natural Resources							
Total Site Area	208.5	208.5	208.5	208.5	208.5	208.5	208.5
Total Construction Disturbance (acres)	114.5	60.0	81.9	81.3	76.6	115.2	114.8
Total Undisturbed area	96.2	208.5	125.2	125.8	130.5	95.5	95.9
Woodland Disturbance	69.1	0.0	37.0	49.0	46.0	69.6	69.4
Wetland Disturbance (acres)	0	0	0	0	0	$\leq$ 0.10	0
Steep Slope Disturbance (>25%) (acres)	3.4	0.0	2.9	3.2	3.3	3.4	3.4
Housing Diversity							
Single Family Homes	87	3	136	127	103	87	87
Market Rate Townhouses	314	0	0	192	269	314	314
Workforce Condominium Flats	72	0	0	0	0	72	72
Emergency Service Worker Apartments	24	0	0	0	0	24	24
Total Units	497	3	136	319	372	497	497
Community Resources							
Population	1,932	14	615	1,413	1,496	1,932	1,932
School-age Children	609	10	215	848	483	609	609
Utility Demand							
Sewer/Water Demand (gpd)	198,800	1,400	54,400	127,600	148,800	198,800	198,800
Traffic							
Traffic Generation (Total PM Peak Hour Trips)	288	3	141	256	245	288	288

Source; Leonard Jackson Associates, Tim Miller Associates, 2008.

TOWN OF RAMAPO
TABLE OF BULK REQUIREMENTS
§ 376-41

ZONE	USE GROUP	MINIMUM LOT AREA	LOT WIDTH (FT)	FRONT SETBACK (FT)	FRONT YARD (FT)	SIDE SETBACK (FT)	TOTAL SIDE SETBACK (FT)	SIDE YARD (FT)	REAR SETBACK (FT)	REAR YARD (FT)	STREET FRONTAGE (FT)	MAXIMUM HEIGHT (FT)	DEVELOPMENT COVERAGE (%)	FLOOR AREA RATIO (FAR)
R-40	m	40,000 SF	160	50	50	25	70	10	50	10	100	35	40	0.40
RR-80	e1	80,000 SF	200	50	50	30	100	10	50	10	150	35	20	0.40

SUMMARY : BREAKDOWN OF PROPOSED USES

USE	NUMBER OF UNITS
SINGLE FAMILY HOMES	136

SINGLE FAMILY HOMES:
TYPICAL DIMENSIONS : 50' X 70'

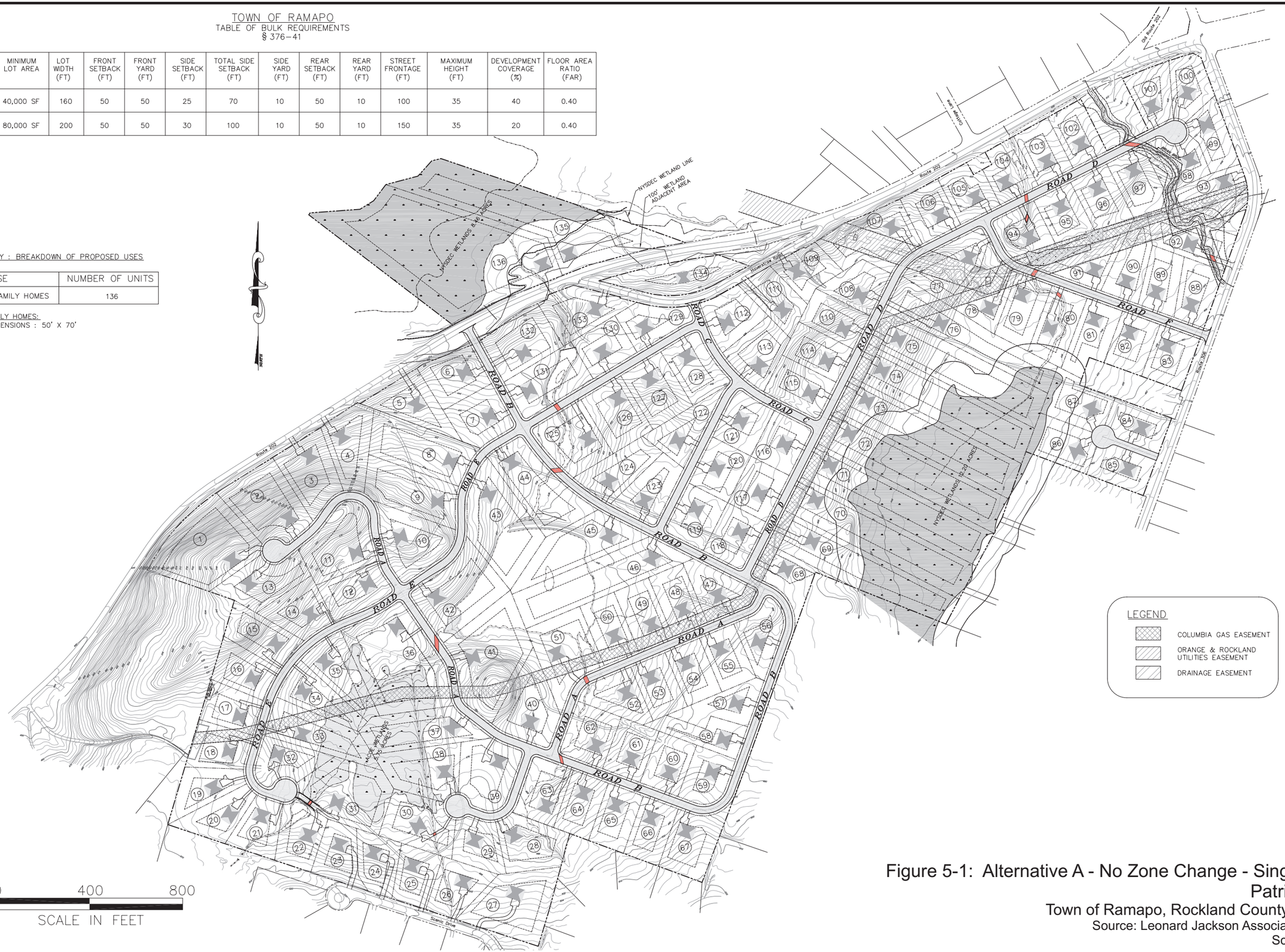

Figure 5-1: Alternative A - No Zone Change - Single Family
Patrick Farms
Town of Ramapo, Rockland County, New York
Source: Leonard Jackson Associates, 08/26/08
Scale: 1" = 400'

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TOWN OF RAMAPO
TABLE OF BULK REQUIREMENTS
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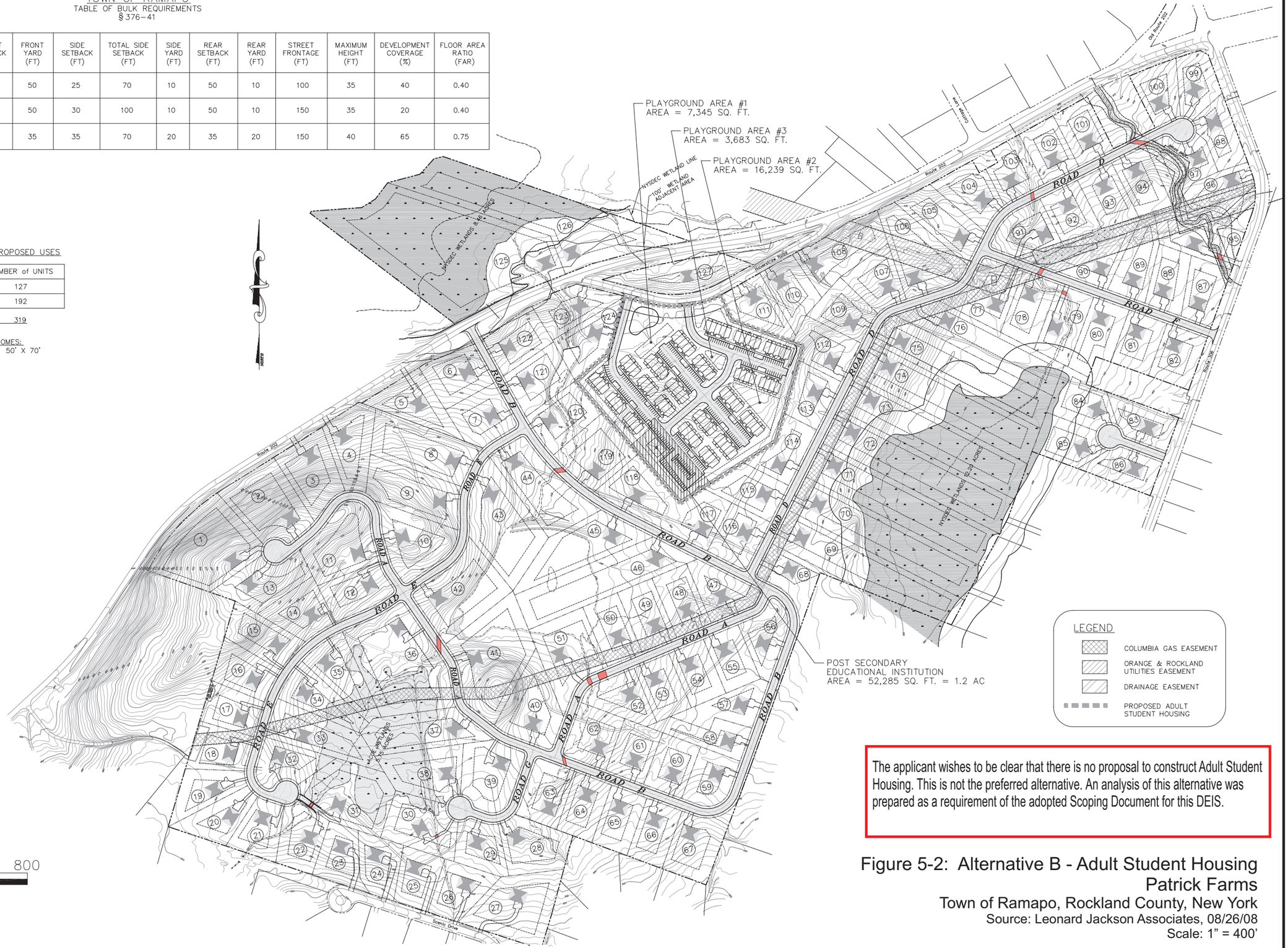
ZONE	USE GROUP	MINIMUM LOT AREA	LOT WIDTH (FT)	FRONT SETBACK (FT)	FRONT YARD (FT)	SIDE SETBACK (FT)	TOTAL SIDE SETBACK (FT)	SIDE YARD (FT)	REAR SETBACK (FT)	REAR YARD (FT)	STREET FRONTAGE (FT)	MAXIMUM HEIGHT (FT)	DEVELOPMENT COVERAGE (%)	FLOOR AREA RATIO (FAR)
R-40	m	40,000 SF	160	50	50	25	70	10	50	10	100	35	40	0.40
RR-80	e1	80,000 SF	200	50	50	30	100	10	50	10	150	35	20	0.40
R-40 (ASH)	X.5	4 AC	400	50	35	35	70	20	35	20	150	40	65	0.75

SUMMARY : BREAKDOWN OF PROPOSED USES

USE	NUMBER of UNITS
SINGLE FAMILY HOMES	127
ADULT STUDENTS HOMES	192

TOTAL UNITS: 319

SINGLE FAMILY HOMES:
TYPICAL DIMENSIONS : 50' X 70'



The applicant wishes to be clear that there is no proposal to construct Adult Student Housing. This is not the preferred alternative. An analysis of this alternative was prepared as a requirement of the adopted Scoping Document for this DEIS.

Figure 5-2: Alternative B - Adult Student Housing
Patrick Farms
Town of Ramapo, Rockland County, New York
Source: Leonard Jackson Associates, 08/26/08
Scale: 1" = 400'

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TOWN OF RAMAPO
TABLE OF BULK REQUIREMENTS
§ 376-41

ZONE	USE GROUP	MINIMUM LOT AREA	LOT WIDTH (FT)	FRONT SETBACK (FT)	FRONT YARD (FT)	SIDE SETBACK (FT)	TOTAL SIDE SETBACK (FT)	SIDE YARD (FT)	REAR SETBACK (FT)	REAR YARD (FT)	STREET FRONTAGE (FT)	MAXIMUM HEIGHT (FT)	DEVELOPMENT COVERAGE (%)	FLOOR AREA RATIO (FAR)	MINIMUM BUILDING SEPARATION (measured deck to deck)	DENSITY
R-40	m	40,000 SF	160	50	50	25	70	10	50	10	100	35	40	0.40	N/A	N/A
MR-8	X.4	4 AC	150	35	35	35	70	20	35	20	150	40	65	0.75	30 feet	No more than 8 dwelling units per acre.
RR-80	e1	80,000 SF	200	50	50	30	100	10	50	10	150	35	20	0.40	N/A	N/A

SUMMARY : BREAKDOWN OF PROPOSED USES

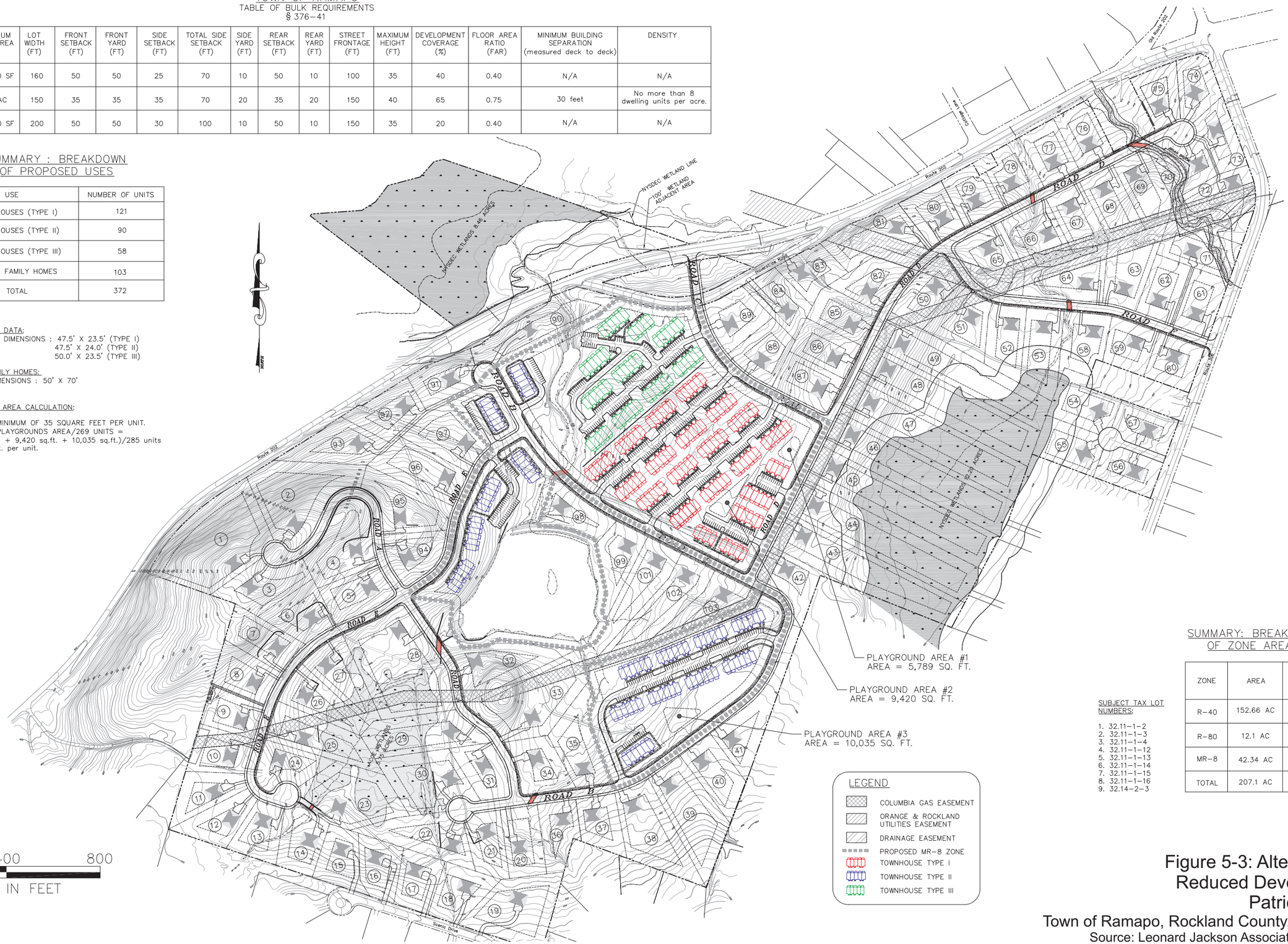
	USE	NUMBER OF UNITS
1	TOWNHOUSES (TYPE I)	121
	TOWNHOUSES (TYPE II)	90
	TOWNHOUSES (TYPE III)	58
2	SINGLE FAMILY HOMES	103
TOTAL		372

TOWNHOUSE DATA:
TOWNHOUSE DIMENSIONS : 47.5' X 23.5' (TYPE I)
47.5' X 24.0' (TYPE II)
50.0' X 23.5' (TYPE III)

SINGLE FAMILY HOMES:
TYPICAL DIMENSIONS : 50' X 70'

RECREATION AREA CALCULATION:

REQUIRED: MINIMUM OF 35 SQUARE FEET PER UNIT.
PROVIDED: PLAYGROUNDS AREA/269 UNITS =
(5,789 sq.ft. + 9,420 sq.ft. + 10,035 sq.ft.)/285 units
= 93.8 sq.ft. per unit.



SUMMARY: BREAKDOWN OF ZONE AREAS

ZONE	AREA	DENSITY
R-40	152.66 AC	0.67
R-80	12.1 AC	N/A
MR-8	42.34 AC	6.35
TOTAL	207.1 AC	

SUBJECT TAX LOT NUMBERS:

1. 32.11-1-2
2. 32.11-1-3
3. 32.11-1-4
4. 32.11-1-12
5. 32.11-1-13
6. 32.11-1-14
7. 32.11-1-15
8. 32.11-1-16
9. 32.14-2-3

Figure 5-3: Alternative C
Reduced Development
Patrick Farms
Town of Ramapo, Rockland County, New York
Source: Leonard Jackson Associates, 08/26/08
Scale: 1" = 400'

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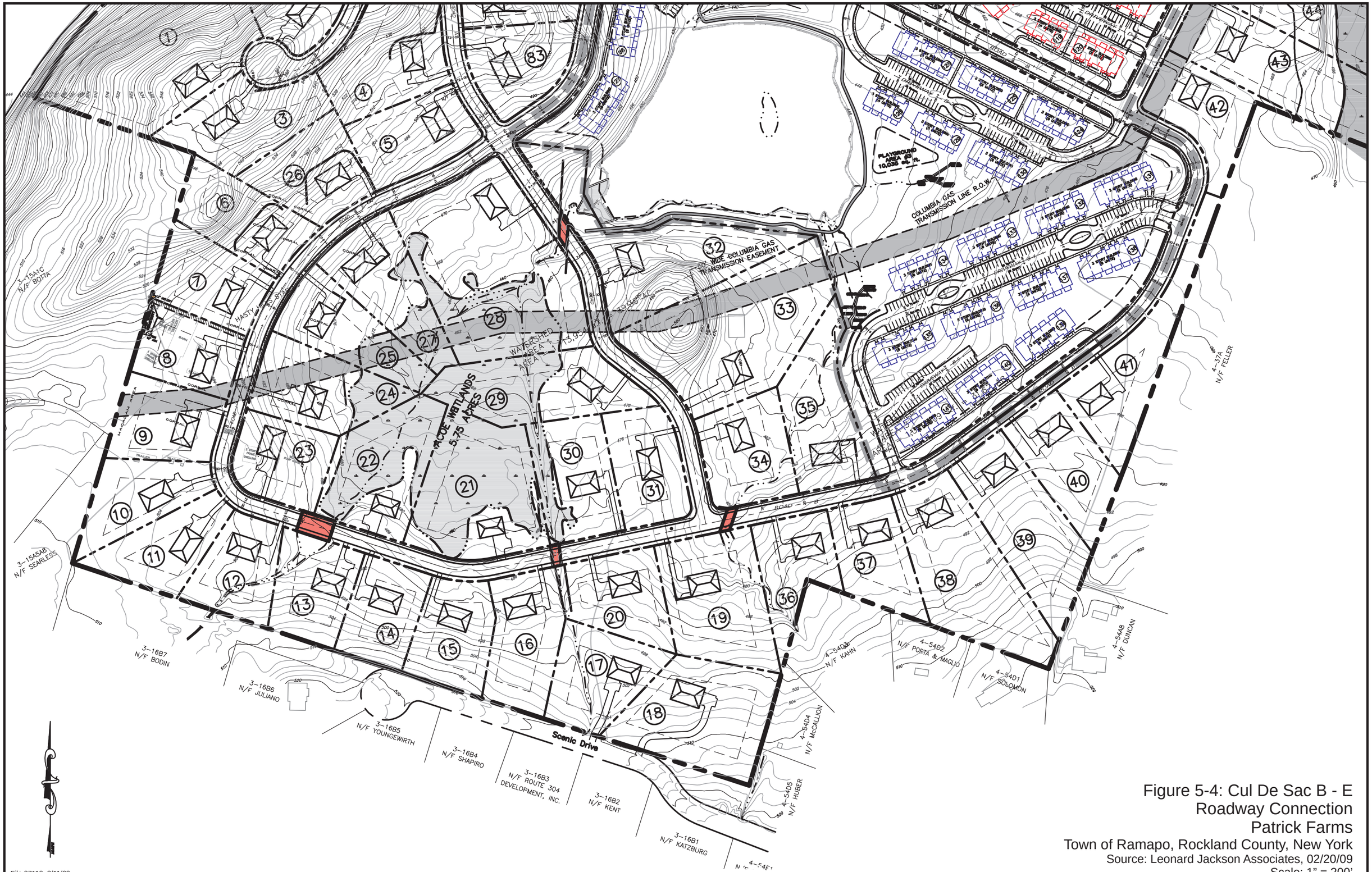

Figure 5-4: Cul De Sac B - E
Roadway Connection
Patrick Farms
Town of Ramapo, Rockland County, New York
Source: Leonard Jackson Associates, 02/20/09
Scale: 1" = 200'

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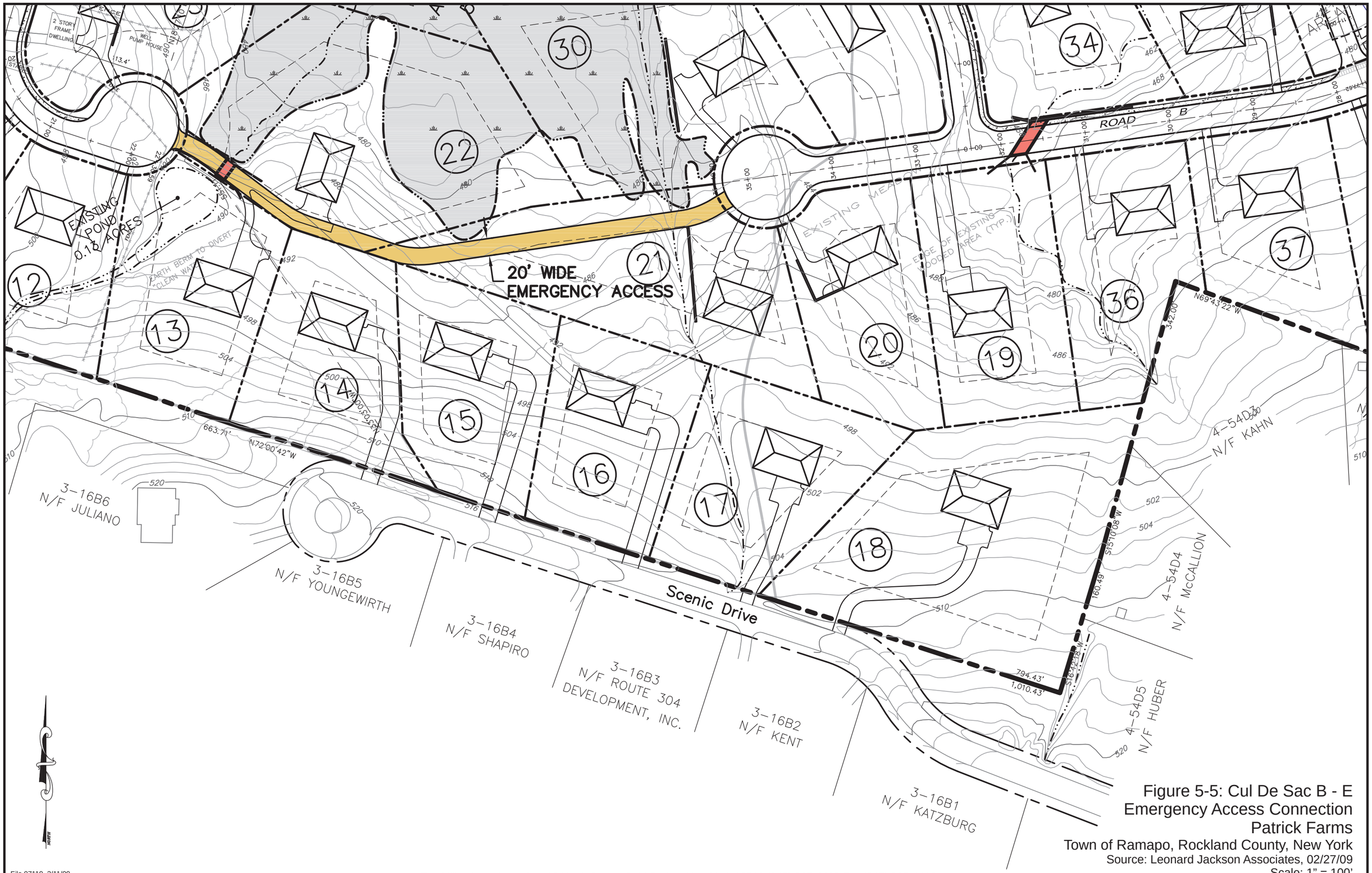

Figure 5-5: Cul De Sac B - E
Emergency Access Connection
Patrick Farms
Town of Ramapo, Rockland County, New York
Source: Leonard Jackson Associates, 02/27/09
Scale: 1" = 100'

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