

COMMUNITY IMPACT ANALYSIS

Overview. Dominicus Crossing is a proposed residential subdivision to be constructed in one of Cape Elizabeth's designated Growth Areas (1993 Comprehensive Plan). The cluster design will preserve approximately 100 of its 205 acres as common open space for the new residents and the surrounding neighborhoods. The new community will be characterized by high quality homes appealing to a broad spectrum of buyers, an affordable housing components, a road systems designed to the new town standards, municipal sewer and water, five miles of sidewalks and walking trails, and town greens. With its location off Wells Road, Dominicus Crossing will be within easy walking, biking, or driving distance to schools, churches, the library, and the town center.

Upon completion, Dominicus Crossing will consist of 98 housing units on 97 lots. Of these, 95 will be new single-family homes. There will be 91 new detached single-family homes, and 4 attached zero lot-line single-family homes. Three residential units are included in the subdivision in existing structures: one single-family home (the residence of Juan Perez) and two rental units in an existing barn owned by Mr. Perez. The total project is expected to be completed over a period of approximately 8 years.

Home starts. Key to examining the impact of Dominicus Crossing is gaining a perspective on the number of Cape Elizabeth home starts in the past decade, and the number of other housing opportunities that currently exist or are in the planning/permitting pipeline. Over the past decade, Cape Elizabeth has seen between 16 and 62 new home starts per year, divided between isolated lots and homes in new single family subdivisions. The average of these ten years has been just over 35 starts per year. The largest bulge in the number of permits issued (1986-1988, with 163 starts) represents the period that Stonegate came on line.

For the year 2000, the 1993 Comprehensive Plan predicted a 15% growth in housing stock over the 1990 levels, from 3,456 to 3,966 units (an addition of 510 units). According to town records, 133 building permits were issued for the five year period between 1990 and 1994 inclusive, an average of just over 26 per year. At this rate of growth, the town would have 266 new units by the year 2000, or just over half the number predicted by the Comprehensive Plan. Using the construction schedule presented below, Dominicus Crossing will build 43 new units before the turn of the century. This number should account for 61% of the anticipated new homes built at the current rate. At the present time it is highly unlikely that the rate of growth will be appreciably higher, since there are no other major subdivisions in the planning stage and the supply of individual lots is diminishing.

With very few lots now available as isolated building sites or in subdivisions, it is expected that Dominicus Crossing will supply the demand forouselots at a rate that the town presently sees. At full build-out – expected in the year 2004 – Dominicus Crossing will increase the number of dwelling units in the community by approximately 2.6%.

A. DEMOGRAPHIC DESCRIPTION

1. BUYER PROFILE

Anastos & Lohnes (A&L), who will be building and selling the homes at Dominicus Crossing, are anticipating a variety of markets:

- existing Cape Elizabeth families wanting to move up to slightly larger homes within the same school system
- families within Cumberland county looking for quality homes in an attractive neighborhood setting
- transferees moving into the Greater Portland area, looking for larger lots and more privacy
- retirees attracted to the area by recreational opportunities and medical facilities
- individuals and families looking for estate lots for custom homes
- existing Cape Elizabeth individuals and families seeking affordable housing.

These expectations are based upon their experience in building over 80 homes over the past 6 years throughout Cumberland County, and the numerous inquiries that they have received since Dominicus Crossing has started the approval process.

2. AVERAGE FAMILY SIZE

The 1993 Cape Elizabeth Comprehensive Plan uses figures from the 1990 census which put the town population at 8854. There are no statistics on the population growth since that time, so for purposes of reference, this population number is used in future sections of the report for calculations of impact.

The population growth between 1980 and 1990 was 1016 persons. Number of housing units which were added in that same time period was 632. This growth reflects a household size of 1.6 persons per household. The growth brought the overall Cape population down to an average household size of 2.70. Based upon national statistics, anticipated family size should be

between 2.7 and 3.2 members per family, which translates into 260-307 additional residents in the community, and increase of 2.9 – 3.4% upon full build-out.

3. NUMBER AND AGES OF CHILDREN

A number of statistical sources were consulted to predict the numbers and ages of children that will be living in Dominicus Crossing. Based on surveys of local projects and national statistics, one could reasonably expect 70 school-aged children, plus or minus a dozen. If the children were distributed evenly throughout the thirteen grades (K-12), the schools would see an increase of 5-6 new children per grade at the conclusion of the last new home (estimated to take up to eight years).

Students in local residential projects. Two of the larger residential neighborhoods in Cape Elizabeth that have been built in the last decade are Stonegate (66 houselots) and Elizabeth Farms (45 lots). The only information which was available through the School Department was the number of students picked up on school bus routes in each subdivision. There may be some variants from these numbers, since students in the upper high school grades may drive themselves to school, rather than using the school transportation. Reported numbers of students by school are as follows:

STONEGATE (66 UNITS)

Elementary (K-4) 17

Middle School (5-8) 23

High School (9-12) 7

Total 47

Students/household .71

ELIZABETH FARMS (45 UNITS)

Elementary 11

Middle School 7

High School 5

Total 23

Students/household .51

The total number of houselots in these two subdivisions is 111, and the number of students in the Cape Elizabeth school system from these figures is 70. Averaged together, the number of students per household is 0.63. Even if one added 8 more students to allow for an approximate number of high school students who provide their own transportation, this would bring the number of students per household to 0.70. Applying this ratio to the 96 new housing units, Dominicus Crossing would generate approximately 67 students at build-out.

Falmouth comparisons. Data on seven new subdivisions in Falmouth was also reviewed, looking at actual numbers of children enrolled in the school system. Stapleford, a subdivision of 21 units with housing costs averaging \$253,557, had 19 students, 15 in grades K-8, and 4 in grades 9-12, for an average of 0.90 school students per unit. The Woodlands development of 49 units, averaging \$315,476 per unit averaged 0.71 students per unit. Of a total of 35 students, 28 were in the elementary and middle grades (K-8) and 7 in high school. In the 7 single-family subdivisions included in the Falmouth study, housing costs ranged from \$216,659 to \$358,062, while the number of school-aged children per unit varied from a low of 0.54 to a high of 0.96. The average of all 7 subdivisions was 0.8 children per unit.

The numbers from the Falmouth study are probably comparable to numbers which could be expected to be generated from Dominicus Crossing. Projected out over the entire 96 new units, this would correspond to a total of 77 (76.8) school-aged children. If the ratio of students by grade groupings which occurred in Falmouth were applied to Dominicus Crossing, it would suggest that of those 77, 61 students would be in grades K-8, and 16 in grades 9-12.

National Perspective. The Develop Impact Assessment Handbook, published by the Urban Land Institute (1994) includes tables which summarize the results of the 1987 *American Housing Survey* (AHS) by the Bureau of the Census. The tables provide demographic multipliers which are used to predict the populations that will result from new housing developments throughout the country. While the statistics cited in the AHS are apt to be conservative (on the high side), they may be useful to get a sense of the outer limits of the impacts of the development.

The Study found that a 4-bedroom single family home in the Northeastern U.S. can be expected to generate an average of 0.8738 school age children per household, while a 3-bedroom home will produce an average of 0.7792 school age children. Anastos and Lohnes have predicted that 90% of the homes in Dominicus Crossing will be 4 bedroom homes, and 10% will have three bedrooms. Applying these ratios to the Census Bureau's statistics gives a blended average of 0.8643 school aged children per household, or a total of 82 children.

The *American Housing Survey* also provides demographic multipliers for school age children by age category, housing type, number of bedrooms, and region of the country. The following chart presents applicable multipliers for new single family home developments in the Northeast:

Grade	3 BR	4 BR	Blended 10/90	# children / 96 units
Pre-school	0.4235	0.4756	0.4704	45
K-6 (grades K-6)	0.5539	0.6188	0.6123	59
Junior High (grades 7-9)	0.1378	0.1285	0.1294	12
High School (grades 10-12)	0.0874	0.1265	0.1226	12
Total: School-Age Children	0.7792	0.8738	0.8643	83

SOURCE: Development Impact Assessment Handbook

The National Association of Home Builders (NAHB) analyzes statistics on new home buyers in its annual Profile of the New Home Buyer, based on surveys of actual home purchases in a given year. The 1992 report states that, nationwide, the average household that purchased a single-family detached home in 1991 consisted of 3.0 persons, 2 of which were adults, 0.5 children younger than 6 years old, and 0.5 children between the ages of 6 and 18. Breaking that down further into first-time and trade-up homebuyers, first-time buyers averaged 2.6 people with 2.0 adults, and trade-up buyer households averaged 3.2 persons with 2.1 adults.

Another comparison of buyers with sales price of homes shows that buyers of single-family detached homes in the range of \$150,000 and above averaged a family size of 3.2 persons, 2.1 of whom were 18 years and above, 0.6 less than 6 years, and 0.6 aged 6-17 years. From this data, it seems reasonable to predict that the subdivision will have a build-out population of approximately 300 people, with 100-112 of those being children. The NAHB ratio would give a total of 57 school aged children for the 96 new units.

4. BUILD-OUT

Dominicus Crossing will be completed in five phases which will spread out over 8 years. It is anticipated the development will add homes at the following rate, depending upon market conditions:

1997	16 units	2001	12 units
1998	16 units	2002	12 units
1999	11 units	2003	10 units
2000	9 units	2004	10 units.

5. PROJECTED INCOME LEVELS OF BUYERS

Above Median Income. The target market for the majority of the homes – those offered at market rate – will be families with earnings above 150% of the median family income. This would relate to an actual income in excess of \$61,800, based on the median family income of \$41,200 in the Portland Metropolitan Statistical Area.

Low Income. According to FMHA standards based on the 1990 census provided by Greater Portland Council of Governments, 'low income' for Cape Elizabeth corresponds to family income which is between 50% and 80% of median family income in the Portland Metropolitan Statistical Area. Adjusted annual income for these families would be in the range of \$20,600 to \$32,960.

Moderate Income. Moderate income, determined by the same standards referred to above, is between 80% and 150% of median family income in the Portland Metropolitan Statistical Area. This range would be between \$32,960 and \$61,800.

6. TYPE OF EMPLOYMENT

The majority of the buyers in Dominicus Crossing are expected to consist of families with two wage earners, working at blue or white collar positions in the Greater Portland area.

7. PROJECTED HOUSING COSTS

Examining the subdivision in its five projected phases, the anticipated range of housing costs is as follows:

- **PHASE I:** The total number of new homes in Phase I will be 32. Of these, 28 will be new single-family homes available at market rate, in the cost range of \$225,000 to \$250,000. One will be available for sale to homeowners of moderate income at a price of approximately \$150,000. Two attached single-family homes will be available at a purchase price of approximately \$75,000. Phase I also includes Juan Perez's existing single family home and two apartments in an existing barn, one existing, and one new. Phase I is expected to be built out over two years.

- **PHASE II:** Phase II will include 11 new homes, all of which will be single-family market rate in the range of \$250,000-\$300,000. It is anticipated that Phase II will take one year to complete.
- **PHASE III:** Nine single-family market-rate homes will be constructed in Phase III, selling in the range of \$250,000-\$300,000. This phase is expected to be completed in one year.
- **PHASE IV:** Phase IV will consist of 21 market-rate homes selling for about \$275,000, one moderate-income home at \$150,000, and two attached single-family homes selling for \$75,000 each. Construction of these 24 units will probably be completed over 2 years.
- **PHASE V:** The final phase of construction will include 20 homes with a selling price of about \$300,000-350,000. Phase V will take between 1 and 2 years.

B. COMMUNITY IMPACT

1. TRAFFIC SYSTEMS

The impact on the existing road system is detailed in a separate Traffic Impact Report prepared by John L. Murphy, P.E (Section 8 of the Application). New roads proposed for the subdivision have been designed to intersect with Wells Road and Sawyer Road at locations which have sight distances well in excess of the minimum required for the existing posted speeds on the roads.

The summary results of the study were as follows:

- No high accident locations (HAL's) were found within the boundaries of the study area
- The project will not result in any adverse traffic capacity impact which would decrease intersection capacity below level of service C in the design year
- The new project intersections are designed to ensure the safest possible intersection visibility.

Fred Morin of T.Y. Lin International has done an initial review of the study, asked for additional information which was supplied in January, and to date has stated that he "found the contents and conclusions acceptable."

Four alternate locations were examined for the entrance location off Wells Road in response to the concerns of abutting landowners. The results are illustrated on the accompanying table which led the design team to the

conclusion that the easternmost location offered the most favorable sight distance with the least community impact. The impacts that were noted can all be mitigated through proper site design (earth berms, fencing, planting) and continued discussions with abutting property owners.

2. SCHOOL SYSTEM

Projected Number of Students

Enrollment projections. The 1992 Pre-application Planning for School Construction, which was submitted to the State as part of the construction funding request, estimated the enrollment for the current '95-'96 school year at 1799 students. A 1993 Demographic and School Enrollment Analysis prepared by Market Decisions for the Cape Elizabeth School Department projected the '95-'96 enrollment to be 1748. Actual enrollment as of May 1996 is 1755 for grades K-12. Next year's enrollment should be 1782 (with a stable kindergarten population and a larger incoming senior class).

Since the 1990-1991 Fiscal Year, the number of students in the schools has risen steadily:

Fiscal Year	Enrollment	Population Change	Growth Rate
1990-1991	1574	44	+2.8%
1991-1992	1618	4	+0.2%
1992-1993	1622	71	+4.3%
1993-1994	1693	25	+1.5%
1994-1995	1718	32	+1.9%
1995-1996	1750	30	+1.7%
1996-1997	1780		
Total		206	13.0%

SOURCE: Cape Elizabeth School Budget FY 1996-97

As noted in A.3 Number and Ages of Children, Dominicus Crossing should generate approximately 70 school aged children. Estimating the potential impact of new home construction on schools is an inexact science at best. There are many variables which cannot be predicted, such as the age breakdown of the students, in-migration rates and family sizes, the number of children with special needs, the number of children who will be attending private schools or who will be home-schooled.

The following chart indicates current enrollments for K-8, the number of classrooms for each grade, recommended classroom size from the School Department's Policy on Class Size, and the current average.

Grade	Classrooms	Total Students	Recomm. Class Size	Current Ave. Class Size
Kindergarten	8	137	18	17.12
Grade 1	6	131	20	21.83
Grade 2	9	169	20	18.77
Grade 3	6	123	20	20.50
Grade 4	6	130	22	21.66
Grade 5	6	153	22	25.50
Grade 6	7	125	22	17.86
Grade 7	6	138	22	23.00
Grade 8	6	141	22	23.50

SOURCE: Cape Elizabeth School Department

The enrollment in the High School is currently 508 (Seniors: 105; Juniors: 124; Sophomores: 130, and Freshmen: 149). The School Board's Policy on Class Size for secondary schools calls for a maximum class size of 22.

If in any one year the new students from Dominicus Crossing were to be spread fairly evenly among the 13 grade levels in the schools, the impact on teaching staff and facilities would be relatively easy to absorb. If, however, more than 5-6 students were concentrated at one grade level, there may be a more significant impact which might require adjustment of staff and teaching space.

The largest variable is the total number of students expected in the system. Recent newspaper reports have predicted a dramatic drop in the birth rate in Maine, which would result in fewer students in schools in another 5 or 6 years. The following charts compare the number of births since 1990 with the numbers from 1976-1986. The average number of births in the past six years has been 79, while the average for the prior time period was 86. Even though

the town's population has seen a steady increase, the decline in the birth rate should have a moderating effect on the school population.

Birth Yr.	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85	'86
# Births	71	86	63	97	80	97	97	82	93	95	88

Birth Yr.	'90	'91	'92	'93	'94	'95
# Births	81	81	88	76	72	78

SOURCE: Cape Elizabeth Building Inspector Records

A 1993 Demographic and School Enrollment Analysis, prepared by Market Decisions for the Cape Elizabeth School Department, projected a declining kindergarten enrollment for the years 1993-1996, based on birth rates from prior years. The 1993 Cape Elizabeth Comprehensive Plan, on the other hand, projected an increasing enrollment for the same period. School Department records indicate some variability between the actual numbers and the enrollment projections.

Entering Kindergarten	MDI Prediction	Comp. Plan Prediction	Actual Enrollment
Fall 1993	146 students	119 students	161 students
Fall 1994	140 students	135 students	120 students
Fall 1995	128 students	131 students	133 students
Fall 1996	113 students	140 students	135 students *
Fall 1997	127 students	150 students	

* School Department expects population to be stable for Fall 1996.

SOURCE: 1993 Comprehensive Plan; Demographic and School Enrollment Analysis; School Department Records

Many of the requests for information on Dominicus Crossing are coming from current Cape Elizabeth residents, so children may already be in the school system. However, net growth will still occur: if current residents move into new housing, the same number of dwellings will be available for new families who may move in from other communities.

The Market Decisions report was used to help plan for space needs prior to the recently completed construction project. This construction addressed renovations to substandard areas, and provided space for existing program needs. Current educational programming is occupying all the new spaces, but the construction was done to "allow for flexibility as the program evolves over the next 20 years." (1995 Annual Report, p. 17). A portion of the Market Decisions report is appended to this impact analysis.

Conclusion

The development of Dominicus Crossing will produce a significant number of children of school age as part of its population. While it is impossible to predict class sizes and future needs over the next decade, it appears that the town and the schools are reasonably equipped to handle the new growth.

- The Comprehensive Plan anticipated a 15% rate of growth between the years 1990 and 2000. Based upon the current development climate, the actual growth rate may be only half that amount. Dominicus Crossing should not be viewed as growth above and beyond the projected rates, rather it will be part of the growth that was predicted in the 1993 Comprehensive Plan and factored into the growth projections for the school system.
- There has generally been a decline in birth rates in Maine, which is seen reflected in recent birth rates in Cape Elizabeth. This will lead to a decrease in the size of entering classes in the next few years, tempered by the increase caused by in-migration.
- The development of 9-16 homes per year at Dominicus Crossing will increase the school population in very small increments, approximately 0.5% per year for up to eight years. Since 1990, the rate of growth in the schools has been approximately 2.0% per year.
- At full build-out the 1996 school population (1755) may be increased by approximately 4% by the school aged children from Dominicus Crossing.
- It appears that the schools have some capacity to absorb the additional students with some flexibility on the part of the school administrators.

Budget Impact

The Superintendent of Schools, Constance Goldman, has included figures in this year's school budget which show both the growth in the student body over the past seven years, and the current per pupil expenditure. The Superintendent feels that the annual per pupil expenditure of roughly \$6,000 (not including the expenditures towards retirement of the school construction bond) is a fairly accurate figure to use in order to predict the impact on the school budget of additional students in the future. Using this figure, and estimating both a moderately high prediction of 0.8 students per household, and a moderately low number of 0.7, the following chart reflects the projected impact on the school budget:

Dwellings Added	Est. # of students (high)	Est. # of students (low)	Annual growth of budget (high student number)	Annual growth of budget (low student number)
Phase 1 - 32: 1997, 16	13	11	\$78,000	\$66,000
1998, 16	13	11	\$78,000	\$66,000
Phase 2 - 11: 1999	9	8	\$54,000	\$48,000
Phase 3 - 9: 2000	7	6	\$42,000	\$36,000
Phase 4 - 24: 2001, 12	10	9	\$60,000	\$54,000
2002, 12	9	8	\$54,000	\$48,000
Phase 5 - 20: 2003, 10	8	7	\$48,000	\$42,000
2004, 10	8	7	\$48,000	\$42,000
Totals	77	67	\$462,000	\$402,000

These figures represent estimated total growth in budget dollars. The actual number to be supported by local dollars would be determined after the annual state subsidy is known. Currently, about 21% of the total budget is paid for by State subsidy.

Impact on State Funding towards School Expenditures

The school funding from the State is based on a complicated formula which takes into account median income of families in a municipality, total property valuation, and number of students enrolled in the schools. Currently, Cape Elizabeth receives 21.8% of its school budget from State funds.

Property valuation in the Town can be expected to rise approximately \$25,000,000 from the addition of all the homes in Dominicus Crossing. The total number of students expected to be added to the system according to calculations above is 77 by the year 2005.

Scott Poulin, the Financial Manager for the school system, has projected the impact on state funding as follows, applying the funding formula which is in place today. There is, of course, no guarantee that the formula will not be changed by future Legislatures.

3. PUBLIC SAFETY PROVIDERS

Rescue. Over the six-year period reported in the 1995 Annual Report for the Town of Cape Elizabeth, rescue calls ranged between a low of 305 and a high of 336, averaging 319 per year. Based on an approximate 3600 single-family households (3456 listed from the '90 Census, and adding 136 new single

family and condominium homes since that time), that would average .09 calls per household. If this rate of rescue service were applied to the increase in households resulting from Dominicus Crossing, it would add approximately 9 rescue calls per year after the entire subdivision is completed. The breakdown by years according to the planned phasing of the subdivision construction would be as follows:

Dwellings Added	Rescue calls per household	Added calls per phase	Total added calls
Year 1&2 - 32 new construction (34 total, 2 existing now)	.09	2.9	
Year 3 - 11 homes	.09	1	
Year 4 - 9 homes	.09	.8	
Year 5&6 - 24 homes	.09	2.1	
Year 7&8 - 20 homes	.09	1.8	8.6 (9)

In his review of this data, Chief Philip McGouldrick stated that he did not feel that the projected increase in calls would overtax either the fire or rescue programs. (Letter appended at the end of the report.)

Fire Department. The Cape Elizabeth Annual Report cited a range of 113 to 182 fire calls over the same six-year period, averaging almost 152 per year. The number of fire calls has been .042 per household per year. Adding 96 household units at this ratio would increase the projected number of fire calls to 156, adding about 4 per year at total buildout of the subdivision.

Dwellings Added	Fire calls per household	Added calls per phase	Total added calls
Year 1&2 - 32 new construction (34 total, 2 existing now)	.042	1.34	
Year 3 - 11 homes	.042	.46	
Year 4 - 9 homes	.042	.38	
Year 5&6 - 24 homes	.042	1	
Year 7&8 - 20 homes	.042	.8	3.98 (4)

The fire insurance rate for the Town has gone from a 4 to a 3 in the past year, resulting in a lower fee. The Fire Chief states that the additional of the homes in the Dominicus Crossing subdivision is not likely to have any effect on the fire insurance rating.

Police. The police department currently has 17 employees and 11 full-time police officers. Cape Elizabeth's low incidence of crime is one of the lowest in Cumberland County, according to the Annual Report. Police complaints and investigations averaged 661 per year between 1990 and 1995. Based on a

population of 8850, that corresponds to 0.075 incidents per person or 0.2 incidents per household. With a projected population increase of 300 in 96 new households, the town should anticipate a potential increase of between 19 and 22 complaints and/or investigations per year at full build-out.

Dwellings Added	Police investigations per household	Added calls per phase	Total added calls
Phase 1 - 32 new construction (34 total, 2 existing now)	.2	6.4	
Phase 2 - 11 homes	.2	2.2	
Phase 3 - 9 homes	.2	1.8	
Phase 4 - 24 homes	.2	4.8	
Phase 5 - 20 homes	.2	4.0	19.2

These statistics have been reviewed by Chief Pickering, who feels that the additional calls would not appreciably affect the delivery of police service. (See letter attached.)

4. PUBLIC WORKS DEPARTMENT

Roads. Cape Elizabeth currently has 58 miles of roads maintained by the Public Works Department. Dominicus Crossing will add two miles of public roads after completion of all phases. Provisions have also been made to extend the road right-of-way to the adjacent property to the east so that future development can be logically incorporated into a neighborhood circulation pattern.

The entire Public Works budget request for 1997 is \$699,706. Many of the line items in the budget are fixed costs related to personnel and operation of the basic facility, such as salaries, Social Security, insurance, and utilities which are unlikely to be changed with the incremental addition of new public roads. The Public Works Director indicated that the line items most impacted would be Storm Drain Cleaning, Gasoline, Diesel Fuel, and Sand and Salt. The following chart projects the impact of the new 2 miles of roads in Dominicus Crossing on the Public Works budget:

Budget Item	FY 1997 requested amt.	cost per existing mile	Added cost phase 1 (.54 mi.) 1997	Added cost phase 2 (.17 mi.) 1999	Added cost phase 3 (.21 mi.) 2000	Added cost phase 4 (.5 mi.) 2001	Added cost phase 5 (.58 mi.) 2003	Total Added Cost
Catchbasin Cleaning	\$9600	\$20*	\$440.00	\$40.00	\$120.00	\$220.00	\$360.00	\$1180.00
Gasoline	\$4275	\$73.70	\$39.80	\$12.53	\$15.48	\$36.85	\$42.75	\$147.41
Diesel Fuel	\$9000	\$155.00	\$83.70	\$26.35	\$32.55	\$77.50	\$89.90	\$310.00
Sand	\$11,000	\$189.66	\$102.42	\$32.24	\$39.82	\$94.83	\$110.00	\$379.31
Salt	\$53,075	\$915.00	\$494.10	\$155.55	\$192.15	\$457.50	\$530.70	\$1830.00
Annual Totals			\$1160.02	\$266.67	\$400.00	\$886.68	\$1133.35	\$3846.72
Cummul. costs for ea. Phase			\$1160.02	\$1426.69	\$1826.69	\$2713.37	\$3846.72	

*Catchbasin cleaning is figured at a cost of \$20 per catchbasin, rather than by a linear measurement. The figures on the chart represent actual numbers of catchbasins in each phase of the road development.

SOURCE: Cape Elizabeth FY 1997 Budget

Based on these projections, the added burden to the Public Works Department at the end of the entire project for all items listed will be \$3,846.72 (1996 dollars). The first phase is expected to take 2 years for buildout, but road improvements will most likely to be completed in the first year. (The years stated for completion dates are approximate.) The next two phases would be added in approximately 1-year intervals, and Phase 4 and 5 will take two years each. The totals at the bottom of the 'phase' columns are the amounts which would be added over the next 7 fiscal years. The increase in the total road length is 3.4%, and the projected costs in the line items above reflect an increase of .42% to the department budget.

There will be other minor added costs related to street sweeping, mowing of public space, and additional time for plowing, but Bob Malley felt that these would be very difficult to quantify in dollars, and not an undue burden on the department.

Solid Waste. The 1993 Comprehensive Plan estimated that 3500 tons of solid waste were generated per year, approximately .4 tons per person (using the population figure of 8854 from the 1990 census). Using this ratio, the 300

additional residents from Dominicus Crossing could be expected to generate an additional 118 tons of solid waste a year. The 1995 Annual Report cited 3013 tons of solid waste generated for fiscal year 1995, reflecting a trend that has seen the actual tonnage decrease in each of the past 5 years. Based on an estimated 3600 single family residences in the town, this number would correspond to .84 tons per dwelling per year. Using this ration, the solid waste generated by Dominicus Crossing would be closer to 81 tons. It is reasonable to expect the actual number will be between 81 and 118 tons per year - somewhere around 99 tons per year.

Cape Elizabeth has traditionally had a very strong recycling program, and it can reasonably be expected that new residents would participate equally in recycling. Since the development is close to the center of town, residents have relatively easy access to the Recycling Center off Spurwink Road.

The main line item in the projected 1997 solid waste budget which would be impacted by Dominicus Crossing is the amount for tipping fees at RWS. As with the Roads section of the Public Works budget, there are many line items relating to personnel, equipment, maintenance, and utility costs which would not be measurably impacted.

Assuming the currently projected RWS tipping fee of \$105 per ton, the line item of \$333,040 would translate into 3171.8 tons of trash anticipated for disposal in 1997 with current housing numbers. The following table reflects the projected impact of each phase of Dominicus Crossing, using the figure of 1.02 tons of solid waste per new dwelling.

Budget Item	1997 Amt.	Cost added Phase 1	Cost added Phase 2	Cost added Phase 3	Cost added Phase 4	Cost added Phase 5	Total added costs
		32.6 tons	11.2 tons	9.2 tons	24.5 tons	20.4 tons	
Tipping Fees	\$333,040	\$3423	\$1176	\$966	\$2572	\$2142	\$10,279

SOURCE: Cape Elizabeth FY 1997 Budget

Since the developers are anticipating buildout in 8 years, with Phases 1, 4, and 5 taking two years each, the impact per year would be spread out as follows, based upon current tipping fees:

YEAR	ADDED SOLID WASTE COSTS	CUMULATIVE COST INCREASE
1998	\$1712	\$1712
1999	\$1711	\$3423
2000	\$1176	\$4599
2001	\$966	\$5565
2002	\$1286	\$6851
2003	\$1286	\$8137
2004	\$1071	\$9208
2005	\$1071	\$10,279

5. EXISTING STORMWATER MANAGEMENT SYSTEMS

A Stormwater Management Plan, by BH2M Engineers, is included in Section 13 of the Preliminary Subdivision Application. Drainage easements obtained from abutters William Jordan and Ralph Leighton will permit the use of existing ponds as part of the stormwater management plan. Water quality will be maintained through the preserved buffer strips, the use of filter strips, and flow control. The discharge structure at Jordan Pond will be reconstructed, the embankment elevation raised, and the outfall rip-rapped to provide for long-term stability of the water body.

Added costs to the Town for maintenance of storm drains are included in the description of Roads.

6. RECREATION RESOURCES

Open Space. The Town requires that either land as open space or a fee in lieu of a land donation be assessed on any developer proposing new residential subdivisions. Based on the formula in the Open Space Impact Fee Fact Sheet, Dominicus Crossing would be required to preserve and donate a total of 19.6 acres (0.208 acres per lot) to the town to maintain the existing ratio of accessible open space per capita. Dominicus Crossing LLC is exceeding this requirement by a factor of five by dedicating 100 acres to the Town as open space.

With the additional 100 acres, the total number preserved accessible land in Cape Elizabeth will increase to approximately 782 acres. If the current formula continues to be used to calculate the open space impact fee or land donation (using 1990 census figures for population, plus the 300 additional

residents of Dominicus Crossing), future developments will be required to contribute 0.23 acres per household (a 10% increase over the current requirement of 0.208 acres per household) or higher fees. This will result in a net fiscal benefit to the Town.

If the developer had chosen to pursue this development as a 'traditional' subdivision (i.e., no common open space), the open space impact fee would have been \$196,000, according to the formula in the Open Space Impact Fee Fact Sheet. Based upon the information in the Fact Sheet, the value of the donated land will be in excess of \$1,000,000.

Active Recreation Areas. Community-wide recreation standards from the Maine Department of Economic and Community Development recommend a neighborhood park within 1/4 mile of a development of 50 houses or more. Dominicus Crossing is providing a number of opportunities for more active recreation areas as part of the 100 acres.

In Phase I, a community green, approximately 150' x 250', has been designed as a focal point between Dominicus Crossing and Alicia Circle. A trail will be constructed from Alicia Circle to Wells Road to connect to the Joy Foundation land on the south (managed by the Cape Elizabeth Land Trust). This land in turn connects to trails leading to the Spurwink River. An existing trail connection to the CMP right-of-way and the trails that exist along it will be preserved.

In Phase II, the trail at the end of the cul-de-sac on Lorenzo Lane will be relocated to connect to the trails along the CMP right-of-way.

Between sections of Phase I and Phase III, a trailhead overlooking the wetlands will be selectively cleared, planted to grass, and used as a neighborhood picnic area.

In Phase III, a dry upland area in the common open space can be developed by the town as a small recreation area for court games, a playground, or similar facilities.

In Phase IV, a common green – similar in size to the Phase I green – is planned between Dominicus Crossing and Chesterwood Trail. A 25 foot easement is being provided through the open space to the property owned by the Pine Tree Council, Troop 30 of the Boy Scouts of America.

During Phase V, a footbridge over the wetland above Jordan Pond will connect the CMP trail to the end of Leighton Road. Trails to be built in conjunction with the Boy Scouts and/or other service organizations around Phase V will connect to the town-owned Hinckley Property off Sawyer Road.

The end result will be an interconnected system of north-south trails (some existing, some relocated, some new), and the preservation of the east-west connector through the CMP right-of-way.

The addition of more families will likely result in more children participating in community services activities, which are fee-based. The Director of Community Services feels that more families will generate an increase in program enrollment, which will in turn generate additional revenues to offset program costs. However, this will not necessarily reduce the Town subsidy.

7. WILDLIFE HABITAT AREAS

None of the documented areas of significant wildlife habitat as identified in the Comprehensive Plan are located in the proposed subdivision. Additional contact was made with the Department of Inland Fisheries and Wildlife to request documentation of any known sites of rare, threatened or endangered species. Response received on October 17, 1995 from Warren Eldridge, Assistant Regional Wildlife Biologist, indicated that there were no records of any rare, threatened or endangered species or habitats in the project site. Similarly, the U.S. Fish and Wildlife Service confirmed no federally listed sites in the area, and commented that they did not feel that the subdivision would have any impact on the piping plover colony at Higgins Beach. Follow-up with Sarah Holbrook of the Maine Natural Areas Program (Department of Conservation) revealed no known rare botanical features or Registered Critical Areas. Section 6 contains the review comments from the various agencies. Woodlot Alternatives Inc. has completed a functional value assessment for the wetland systems on the site, which is presented in Section 11.

The subdivision has been designed to cluster the developed areas and provide buffers around the critical wetlands designated by the Town. All critical wetland areas over 2 acres are protected by a buffer of at least 250', and those of 1-2 acres, by a buffer of 100'. All wetland buffers will be preserved as part of the common open space that will be dedicated to the Town. These wetland buffers are most likely to be prime habitat areas, especially the large wetland between the first two phases and Phase V areas of the subdivision.

8. GOALS AND OBJECTIVES OF COMPREHENSIVE PLAN

Directing growth to areas best suited for development. The 1993 Comprehensive Plan anticipated that single-family housing would be the continuing growth trend for the development of the community and

designated several areas which seemed most suitable to accept this residential growth. These areas were chosen because of their proximity to sewer and the core public services of the Town, and because they did not have the natural and cultural resource attributes that characterized the rural protection areas. Dominicus Crossing occurs within the largest new "growth area" as designated in the Plan.

The subdivision will be served by public sewer for all but one of its lots (#63). This lot meets the requirements of the State Plumbing Code for on-site disposal and is not expected to be any threat to natural resources in the area.

Preservation of significant historical and archaeological sites. The Maine Historic Preservation Commission was contacted to check for any properties in the area which might be of historic, architectural or archaeological significance. The 206-acre development site was reviewed by Earle Shettleworth, State Historic Preservation Officer, and he found no properties which had any significant characteristics as defined by the National Historic Preservation Act of 1966. See Section 6 for copy of letter from Mr. Shettleworth.

Open space and natural resources. Dominicus Crossing has been designed to be consistent with the open space goals of the Comprehensive Plan. The most significant natural resources on the property, i.e., the large wetland systems, are protected by the buffers described above. Approximately 80% of the 44 acres of wetlands found on the property will be included in the common open space. Over 100 acres of dedicated open space will provide both areas of passive preserve and areas for active recreation, as detailed in Recreation Resources.

Provision of variety of housing types. Dominicus Crossing is planned to include an affordable housing component in compliance with the Cape Elizabeth Zoning Ordinance. Two units will be available to buyers of moderate income and four to buyers with low income. These homes will be scattered among the first four phases of the development. Provisions will be made for the preservation of long-term affordability of these units.

9. SEWER FACILITIES

Dominicus Crossing will extend the public sewer system along Spurwink Avenue and Wells Road for 3600 linear feet and provide approximately two miles of sewer service within the development. The developer will bear the cost of the sewer extension as well as the construction of the pump station. Each home will be assessed a sewer hook-up fee of \$2700. With 97 new sewer hookups (Lot 63 will use an on-site disposal field), the total hook-up fees

will amount to \$261,900. This assessment goes into a Town fund for equipment renewal and replacement.

The estimated daily flow of 23,000 gallons at full build-out was evaluated by Robert Hunter, P.E. who concluded that the treatment plant at the Southern Cape system could adequately handle this volume without exceeding its license conditions. (See correspondence in Section 16 of the Preliminary Subdivision Application.)

Homes are assessed a monthly sewer and water fee by the Portland Water District for operations and maintenance of the collection systems and pump stations. This fee is based on the volume of water usage in each home. This assessment, as well as the initial hook-up fee, provide the revenues to adequately support costs of operating the system. With new service built to current PWD standards, the sewer lines at Dominicus Crossing are expected to have an above average maintenance record.

10. PROJECTED REVENUES

Additional revenues created by the addition of Dominicus Crossing will come primarily from two sources: excise taxes, and municipal taxes.

Excise Tax. Excise taxes in Cape Elizabeth currently represent \$292 per household, based on 3600 households and the 1996 projected income (\$1,050,000). New household in Dominicus Crossing could be expected to contribute new excise taxes as follows:

Phase / Year	# of Units	Added excise tax	Cumulative Projected Annual Excise Taxes
Phase 1, yr. 1	16	\$4672	\$4672
Phase 1, yr. 2	16	\$4672	\$9344
Phase 2, yr. 3	11	\$3212	\$12,556
Phase 3, yr. 4	9	\$2628	\$15,184
Phase 4, yr. 5	12	\$3504	\$18,688
Phase 4, yr. 6	12	\$3504	\$22,192
Phase 5, yr. 7	10	\$2920	\$25,112
Phase 5, yr. 8	10	\$2920	\$28,032

SOURCE: Cape Elizabeth FY 1997 Budget

Municipal Tax Revenues. The projections of municipal tax revenues are based on the current tax rate of 18.6 mils and on the tax value of an assumed average sales price as listed. Of the 98 units in the subdivision, 3 exist at this time – 1 single family dwelling and one structure which will house 2 living units. Therefore new tax revenues are projected on 95 new units.

Phase & Year	Market Rate Homes	Aff. Hsg. Low Income	Aff. Hsg. Mod. Income	Total Value	Annual Taxes	Cumulative Taxes
I (1997)	14 @ \$225,000	2 @ \$75,000		\$3,300,000	\$61,380	\$61,380
I (1998)	14 @ \$225,000	0	1 @ \$150,000	\$3,300,000	\$61,380	\$122,760
II (1999)	11 @ \$275,000	0	0	\$3,025,000	\$56,265	\$179,025
III (2000)	9 @ \$275,000	0	0	\$2,475,000	\$46,035	\$225,060
IV (2001)	11 @ \$275,000	2 @ \$75,000	1 @ \$150,000	\$3,325,000	\$61,845	\$286,905
IV (2002)	10 @ \$275,000	0	0	\$2,750,000	\$51,150	\$338,055
V (2003)	10 @ \$350,000	0	0	\$3,500,000	\$65,100	\$403,155
V (2004)	10 @ \$350,000	0	0	\$3,500,000	\$65,100	\$468,255

State Revenue Sharing. State revenue sharing is calculated by multiplying town population by tax commitment, then dividing by valuation. Because both population and valuation are expected to rise, the Town Manager does not see a significant proportionate change in revenues from this source.

C. SUMMARY OF PROJECTED MEASURABLE FISCAL IMPACT

The quantifiable costs to the Town as detailed in previous sections is summarized in the following table. This is not intended to represent an assumption of complete costs of the addition of 96 dwelling units to Cape Elizabeth, since many costs are difficult to identify. The numbers do represent the most significant costs that will be incurred.

By the same token, the summary of projected revenues are not representative of all the benefits that will result from the addition of these homes and families, but are the most significant measurable amounts. New families are a source of fresh blood. In any town the recent arrivals contribute to the local

economy, become active members of religious and civic organizations, and perform volunteer work on boards and in the schools. Students contribute to the dynamics of school events such as sports, the arts and drama.

SUMMARY OF COSTS

Year	School	Roads	Solid Waste	Annual Totals	Cumulative Annual Costs
1997	\$66,000	\$1,160	\$1712	\$68,872	
1998	\$66,000	\$ 266	\$1711	\$69,977	\$138,849
1999	\$48,000	\$ 400	\$1176	\$49,576	\$188,425
2000	\$36,000	\$ 886	\$ 966	\$37,852	\$226,278
2001	\$54,000		\$1286	\$55,286	\$281,564
2002	\$48,000	\$1,133	\$1286	\$50,419	\$331,983
2003	\$42,000		\$1071	\$43,071	\$375,054
2004	\$42,000		\$1071	\$43,071	\$418,125

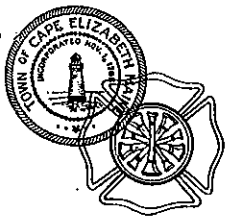
County tax was considered as possibly being affected by the additional of new property values. The Town Manager calculated that the potential increase could be \$8308 after buildout of all units if calculations were based on today's valuation. However, he said that this was assuming that no other construction took place in other communities in Cumberland County. He stated that other towns can reasonably be expected to grow at a similar rate as Cape Elizabeth, so he does not expect any net effect on the County tax.

SUMMARY OF REVENUES

Year	Property Tax	Excise Tax	State School Subsidy *	Annual Totals	Cumulative Total Revenues
1997	\$61,380	\$4,672	\$13,200	\$79,252	\$79,252
1998	\$61,380	\$4,672	\$13,200	\$79,252	\$158,504
1999	\$56,265	\$3,212	\$9,600	\$69,077	\$227,581
2000	\$46,035	\$2,628	\$7,200	\$55,863	\$283,444
2001	\$61,845	\$3,504	\$10,800	\$76,149	\$359,593
2002	\$51,150	\$3,504	\$9,600	\$64,254	\$423,847
2003	\$65,100	\$2,920	\$8,400	\$76,420	\$500,267
2004	\$65,100	\$2,920	\$8,400	\$76,420	\$576,687

* estimated at 20% of total school expenditures.

SOURCE: Cape Elizabeth School Department; Town Budget



Cape Elizabeth Fire Department

PUBLIC SAFETY HEADQUARTERS

325 Ocean House Road
FAX 207-799-7141

Cape Elizabeth, Maine 04107
TEL. 207-799-6409



Phillip McGouldrick
Chief

Joy Ahrens
Terrance J. DeWan & Associates
Yarmouth, Maine
04096

I have reviewed your analysis of fire and rescue calls in relation to the study on Community impact for the planning board.

Studies that I have generally seen usually relate to population increases for fire calls and population and age of population for rescue calls.

Either way I don't take exception to your predictions and feel that the increase in calls is not going to overtax either the fire or rescue.

As I stated to you we just improved our Insurance Service rating from a marginal four to a strong three and I don't feel this growth will jeopardize the towns rating.

Sincerely,

Phillip D. McGouldrick
Fire Chief



POLICE DEPARTMENT



325 Ocean House Road
Cape Elizabeth, Maine 04107

David W. Pickering
Chief of Police

TEL (207) 767-3323
FAX (207) 767-0681

Ms. Joy Ahrens
Terrence J. DeWan & Associates
61 West Main Street
Yarmouth, Maine 04096

BY FAX 846 - 0675

May 1, 1996

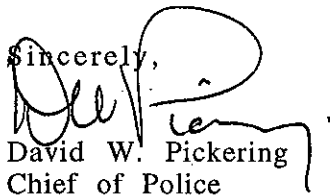
Dear Joy:

I have reviewed the community impact analysis you provided to me on April 23, 1996 and have determined that a proposed increase of 19.2 police calls per year at build out will not appreciably effect the delivery of police services.

At present, I would not anticipate that the budget would increase solely as a result of these additional calls for police service.

If you have further questions, please don't hesitate to call.

Sincerely,



David W. Pickering
Chief of Police

cc: Maureen O'Meara
file



**MARKET
DECISIONS**

Research & Planning

**DEMOGRAPHIC
AND SCHOOL ENROLLMENT ANALYSIS
TOWN OF CAPE ELIZABETH**

Prepared for:

Constance Goldman, Superintendent
Cape Elizabeth School Department
Cape Elizabeth, Maine 04107

March 1993

Given the strong influence of net migration on entering class over the past decade, the school department should carefully monitor the size of the kindergarten and first grade classes over the next 2 to 3 years, to establish the relationship between births and class sizes. The department should also consider conducting a preschool survey to confirm the number of 2, 3 and 4 year olds currently residing in Cape Elizabeth.

2. Elementary Enrollment Projections

In the fall of 1992, there were 531 students in grades 1 through 4 (Table 9). Market Decisions projects that enrollment in the fall of 1993 will drop slightly and then rise to 550-560 students for the next four years (Figure 3).

Enrollment after the 1997-98 school year will depend on the level of births in the community and migration impacts. On a state and national level, the number of births peaked in 1989-1990 and has been declining very gradually. It appears that births in Cape Elizabeth peaked in 1987-1988, but have remained at high levels over the past four years. The school department should monitor births carefully over the next 2 to 3 years.

3. Intermediate - Middle School Enrollment

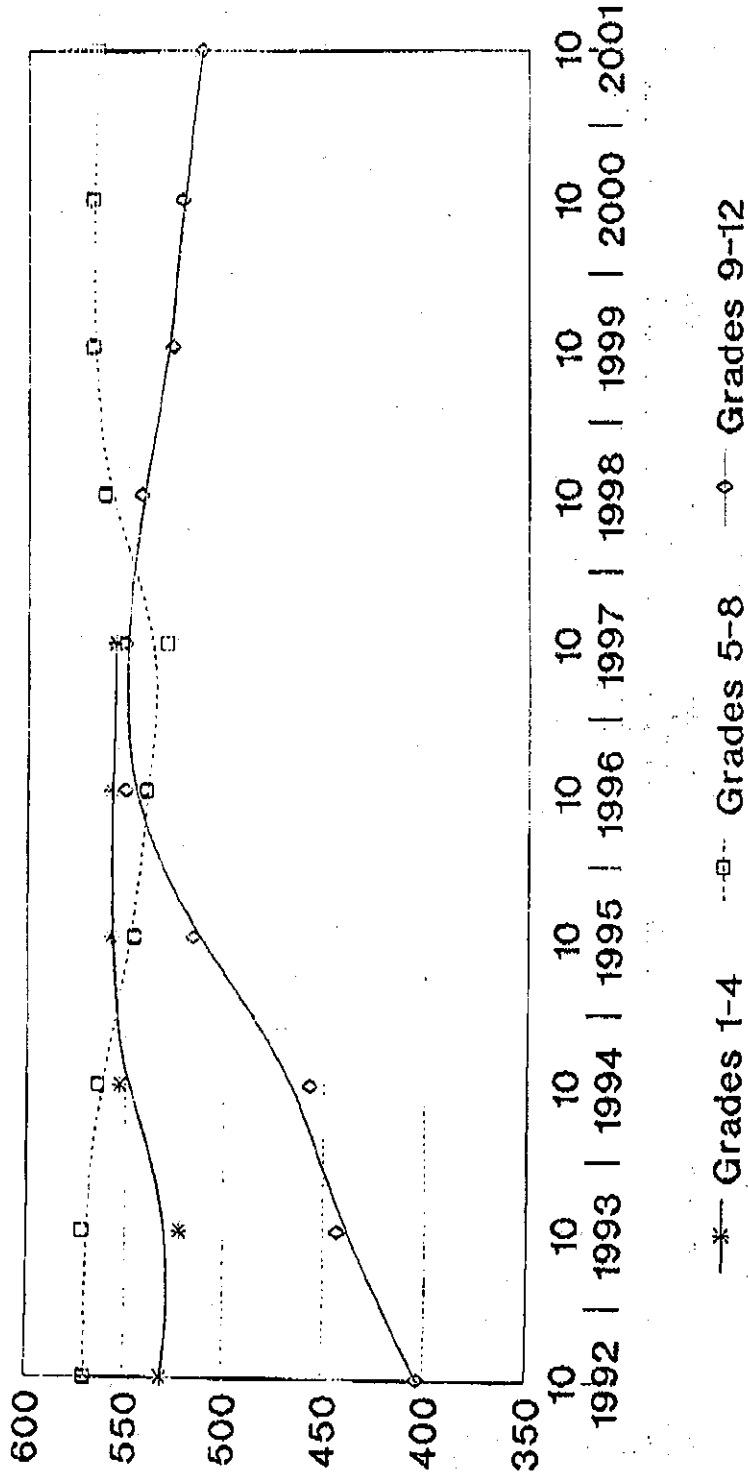
In the fall of 1992, there were 304 students in grades 5 and 6, and 266 students in grades 7 and 8 for a total of 570 in this grade grouping (Tables 9 and 10). Over the next decade, Market Decisions projects that the combined enrollment in grades 5 through 8 will fluctuate somewhat from year to year but will remain within the range of 530 to 575 students with most years seeing between 560 and 570 students in these 4 grades (Figure 3).

The lower grades of 5 and 6 will fluctuate from year to year as well, but will have a combined enrollment in the range of 260 to 300 students (Table 9). The junior high school grades (7 and 8) will similarly see year to year fluctuations with combined enrollment between 260 and 305 students (Table 10).

4. High School Enrollment Projections

In the fall of 1992, there was a combined enrollment of 430 students in grades 9 through 12. Market Decisions projects that high school enrollment will rise significantly over the next 5 years (Figure 3) as the larger classes age into the high school, reaching a peak of approximately 550 students in 1996-1998 (Table 10). Beginning in the fall of 1998, enrollment in the high school should begin to drop slightly but total enrollment will remain above 500 students into the next century.

Projected School Enrollments By Grade Groupings Town of Cape Elizabeth



Market Decisions, Inc.

	Preferred Site	Perez Driveway	100' West of Drive	West Boundary
Site Distance	480' West / 680' East	Less than 350' West / 300' East	300' West / 350' East	350' west / difficult to measure to east
Impact on Wells Road	None	Major clearing / regrading outside ROW 200' ±	Minor clearing	Minor Clearing Ledge removal
Trees to be removed along Wells Road	None	4 or 5 mature trees within / outside of ROW	Light tree removal	Major tree removal (10± mature trees)
Nearest residence	170' and 185'	150'	80'	80' and 100'
Driveways w/in 100'	None	2	2	2
Headlight wash	None	None	1 home	2 or 3 Homes
Wetland impact	0.21 acres of fill	None	Small drainageway on Wells Road	None
Expectation of intersection	On road tangent Strong visual cues	Inside of curve Unexpected location	Inside of curve - unexpected location	Horizontal curve, on crest of hill, blind spot West/East
Entrance sequence	5'± high max. ledge cut on left, 1st 100' of road, Sweeping curve into Dominicus Crossing	Ten foot maximum ledge cut; 5' average for 1st 300' of rd. Steep grade at entrance.	Curving alignment into Dominicus Crossing	Opposite access to Joy Foundation crossing; wooded roadway
Right of way characteristics	Edge of open fields	Existing drive-ways could block view; Old foundation across road	Edge of existing homes Rock outcrops Existing street trees	Rock outcrops, and mature trees; cluster of 4 homes
Mitigation	Wetland pres. Berms, fencing, and evergreen screening for privacy. Work with abutter	Difficult to achieve optimum sight distance; Regrading	Difficult to achieve optimum sight distance	Difficult with driveways and homes directly across road