

Feasibility Study  
For the Proposed  
Town of Norfolk Golf Course

# Final Draft Report

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# INTRODUCTION

National Golf Foundation Consulting, Inc., a subsidiary of the National Golf Foundation, was retained by the Town of Norfolk to assist in determining the feasibility of developing a new 18-hole public access golf facility. The site for the proposed golf course is located on Lawrence Street in the Town of Norfolk. The proposed course has the potential to serve a wide range of golfers, both Town and regional residents

Subsequent to this introduction the report is organized as follows:

- Executive Summary
- Statewide Trends in Golf
- Site Location and Economic / Demographic Trends
- Golf Market Potential
- Existing and Proposed Golf Courses
- Rounds Played Potential
- Environmental Permitting and Preliminary Development Cost Analysis
- Financial Analysis

Richard L. Norton of National Golf Foundation Consulting, Inc prepared this market feasibility report. Lawrence D. Carr of Earth Tech, an international engineering and environmental services firm, prepared the environmental permitting and preliminary development cost analysis section.

The Consultants spent the period of October 2 through 5, 2001 in and around the Town of Norfolk and the counties of Norfolk and Bristol. The consultants' activities included visits to selected golf facilities in the market area, meetings with Town management, the Town of Norfolk's golf committee and interested Norfolk residents who attended the golf committee meetings.

Every reasonable effort has been made to ensure that the data contained in this study reflect the most accurate and timely information possible as of the date the primary research was collected. This study is based on estimates, assumptions, and other information developed by the NGF Consulting and from its independent research effort and general knowledge of the industry. No responsibility is assumed for inaccuracies in reporting by its representatives or by any other data source used in the preparation of this study. No warranty or representation is made that any of the projected values or results contained in this study will be achieved.

# EXECUTIVE SUMMARY

This section presents the salient findings and recommendations from NGF Consulting's study process.

## WHY GOLF?

Golf courses have become community assets in hundreds of towns and cities across the United States. Golf courses provide recreational opportunities for a broad cross section of the community. People of all ages and abilities play golf. It is not uncommon for the game to be played by grandparents and grandchildren, families and spouses. Although golf can be played very competitively it is more often viewed as an opportunity to enjoy nature and to socialize with friends and family.

In recent years the environmental and wildlife facets of golf courses have been recognized. The New York Audubon's Sanctuary program assists golf course operators to enhance the environmental and wildlife attributes of golf courses.

Some municipal golf courses are able to contribute operating surpluses to help offset non-revenue generating programs and services. Golf courses tend to enhance nearby property values, thus helping to increase a locality's tax base and fiscal revenues.

By elevating the overall attractiveness and quality of life of a community, a golf course can be an important influence in both household and business location decisions that improve fiscal and economic potential.

## STUDY FINDINGS

### Site Location

The Lawrence Street site is reasonably good location for a golf course. Golf courses are not high auto traffic generators and are good residential neighbors. Specific environmental issues regarding the development of site were not within the scope of this study. The pre-development permitting and approval process will not be easy due to the environmental issues surrounding the site including: the presence of an old textile mill which has some contamination; the fact that the Mill River with its associated wetlands and floodplain, bisects the site; and the potential for the presence of important species habitat. A permitting and approval process list is shown on page 33 of this study.

Market potential is influenced by the confluence of Interstates 495 and 95. The site's location relative to both interstates places the site in a central location relative to more heavily populated areas northeast and south of the site. However, like many other golf courses in Norfolk County, the proposed Town of Norfolk golf course site is located in a residential neighborhood that requires winding through local streets to find. The site is located along Lawrence Street, which is residential. Park Street is also residential, but has a higher volume of traffic and connects to other major roads. The site is within 3 miles of Route 140 and downtown Franklin. Access from major roads, such as Interstate 495 and Route 1 is somewhat circuitous.

The site area provides a lot of contrast; the western portion is a former gravel pit while the eastern portion is heavily forested. The existing, mature vegetation over the eastern portion of the site has the potential to give a part of the golf course a park-like feel while the highly disturbed western portion of the site has the potential to give a links like feel. The site has the potential to yield a quality golf experience.

### **Demographic and Economic Factors**

The immediate market area surrounding the subject site (5 mile radius) is growing faster than areas further away. This is a testament to the relative attractiveness of the Norfolk market area. The proposed golf course will benefit from relatively higher household income levels in the surrounding market areas as compared to more urban areas further away.

The golf course must be attractive to families; e.g. junior golf and other programs designed to attract distinct family segments. The suburban lifestyle of the region surrounding the Town of Norfolk is characterized by larger household sizes indicative of a family orientation.

In the course of conducting this analysis NGF Consulting spoke to upwards of 40 to 50 people involved in golf course operations, management and construction. NGF Consulting learned that even before September 11<sup>th</sup>, overall golf rounds were generally down anywhere from 10 to 15 percent in 2001 due to the economic slow down and bad weather earlier in the year. After September 11<sup>th</sup>, as might be expected, there was a general decrease in rounds played as compared to previous years.

The outlook for the future, however, is cautiously optimistic. Both demographic trends and discussions with golf industry people support the case that golf will continue to grow in the Norfolk market region.

### **Competitive Market**

Market area public access golf courses are not expected to exceed 40,000 rounds this year. In years past Brookmeadow CC and Glen Ellen have exceeded 40,000 rounds. Market conditions and course renovations have limited rounds.

Compared to other metropolitan areas of the country golf is relatively inexpensive in Norfolk County. At the best courses green fees rarely exceed \$40 on weekdays and \$50 on weekends. Even guest fees at the better private courses are within this range.

Cart usage is optional at most clubs. Cart fees per person range from \$12 to \$14.

The existing golf course inventory is old. Of the nine public and semi-private regulation golf courses - five were built prior to 1967, two were opened in the 1980s and one (Wentworth CC was opened this year).

There are three golf courses that are currently under-construction that are located within a ten-mile radius of the proposed Town of Norfolk site. None of them is expected to have a direct competitive impact on the subject course

### **Rounds Played Potential**

Assuming market competitive rates at the proposed Town of Norfolk golf course and a well designed and operated golf course, achieving 35,000 to 40,000 rounds (stabilized year) at a well-designed golf course appears to be within reason.

NGF Consulting expects that the proposed Town of Norfolk golf course would ultimately have play divided into weekday (Monday through Thursday), weekend (Friday through Sunday), and afternoon (after 2:00 P.M.) categories.

As much as 10 to 20 percent of rounds played demand is anticipated to come from organized league play, community outings and/or tournaments.

Specific year by year rounds played estimates are presented below:

<b>The Town of Norfolk Golf Course - Projected Rounds</b>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Non-Resident</b>					
18-hole Weekday Rounds	7,000	7,100	7,100	7,200	7,600
18-hole Weekend Rounds	10,000	10,000	10,200	10,800	11,400
<b>Resident</b>					
18-hole Weekday Rounds	1,700	1,800	1,200	1,200	1,300
18-hole Weekend Rounds	2,500	2,600	2,000	2,300	2,400
<b>Other</b>					
Outings, Tournaments, Leagues	1,800	5,150	8,300	9,000	9,500
Discount / Twilight/9-hole	5,000	5,100	5,100	5,400	5,700
Complimentary play	500	250	100	100	100
<b>Total Rounds</b>	<b>28,500</b>	<b>32,000</b>	<b>34,000</b>	<b>36,000</b>	<b>38,000</b>
<b>Source: NGF Consulting, Inc.</b>					

NGF Consulting expects that residents from the Town of Norfolk will contribute about ten to 15 percent of overall rounds played.

### **Preliminary Development Cost Estimates**

Earth Tech has provided an estimate of \$6.0 million to design and build the proposed golf course and associated facilities. The detail supporting this estimate can be viewed on page 38 of this report. The estimate includes associated “soft” costs such as design, permitting, and project management.

## Cash Flow Analysis

The fee structure assumptions for the facility are as follows:

<b>FEE ASSUMPTIONS **</b>		
	<u>Initial year with Start-up discounts</u>	<u>Stable Year</u>
18-hole Weekday Fees Non-Resident	\$32.00	\$40.00
18-hole Weekend Fees Non-Resident	\$42.00	\$48.00
18-hole Weekday Fees Resident	\$25.00	\$25.00
18-hole Weekend Fees Resident	\$30.00	\$30.00
Golf Outing/Tournament Fees	\$40.00	\$40.00
League Fees	\$16.00	\$16.00
Average for Discount/9-hole/Twilight fees	\$20.00	\$20.00
Cart Fees	\$14.00	\$14.00
Average Food & Beverage Per Round)	\$3.50	\$3.50
Average Merchandise Sold Per Round	\$2.00	\$2.00
Other Revenue Per Round	\$1.50	\$1.50
<b>** All fees expressed in 2001 Dollars</b>		
<b>Source: NGF Consulting, Inc.</b>		

NGF Consulting provides the following cash flow summary for the proposed golf course:

<b>TOWN OF NORFOLK GOLF COURSE OPERATING CASH FLOW PROJECTIONS</b>					
(\$ millions of dollars)					
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
<b>Total Revenue</b>	\$1,280	\$1,539	\$1,591	\$1,717	\$1,845
Cost Goods Sold	74	86	94	102	111
<b>Gross Profit</b>	1,206	1,454	1,497	1,615	1,734
Operating Expenses	990	1,093	1,118	1,145	1,172
Reserve for Replacement	-	32	39	40	43
Operating Contingency	200				
<b>Total Expenses</b>	1,190	1,125	1,157	1,184	1,214
<b>Net Operating Income before Debt Service</b>	\$ 16	\$ 329	\$ 340	\$ 430	\$ 519
<b>Source: NGF Consulting, Inc; November 2001</b>					

Other than cost of goods, most all other golf course expenses are relatively fixed. Thus, increases or decreases in rounds played in any given year can have a significant impact on the cash flow of the facility and ultimately the cash flow needed to retire the capital investment.

NGF Consulting has run the operating cash flow model modifying rounds played by ten percent more or ten percent less than the expected scenario. By year five, the stabilized year, cash flows vary \$155,000 above or below the expected case simply by varying rounds played by ten percent.

## Warranted Investment Analysis

When considering the level of capitalization that a golf course can support, NGF Consulting **focuses** on the anticipated stable year of operations. This is the anticipated ongoing level of operating cash flow that can be used to retire long-term debt and capitalized interest incurred during the ramp-up period to stabilization.

The formula for the NGF's warranted investment analysis is:

- Identify the average stable year cash flow
- Decrease that cash flow by 1.25 times to meet the coverage requirements of bond indebtedness.
- Divide the covered cash flow by the anticipated cost of debt (the bond interest rate). This yields a warranted investment value that must be sufficient to cover land costs, the costs of the bond issue, the cost of planning/design/development and finally the anticipated capitalized cost of the interest expense in the early years that is not covered by operating cash flow.

This analysis is not as comprehensive as doing a twenty year detailed cash flow analysis that includes debt reduction and capitalized interest. That level of analysis can be done later once this level of analysis demonstrates that the major anticipated cash flow and capital expense items are in relative balance.

NGF Consulting has structured the warranted investment analysis at a cost of debt of 4.25 percent and 6.0 percent to show the impact on the level of warranted investment if rounds are ten percent higher than expected, as expected or ten percent lower than expected.

<b>TOWN OF NORFOLK GOLF COURSE</b>		
<b>Warranted Investment Analysis</b>		
Interest Rate on Debt	4.25%	6%
Income Coverage Ratio	1.25	1.25
Warranted Investment if rounds are 10 % higher than projected	\$ 12,700,000 <sup>1/</sup>	\$ 9,000,000 <sup>1/</sup>
Warranted Investment if rounds are as projected	\$ 9,800,000 <sup>2/</sup>	\$ 6,900,000 <sup>2/</sup>
Warranted Investment if rounds are 10 % less than projected	\$ 6,900,000 <sup>3/</sup>	\$ 4,900,000 <sup>3/</sup>
<sup>1/</sup> Stable Year NOI with Rounds plus 10 Percent = NOI of \$674,100; stable year rounds equal 41,800 <sup>2/</sup> Stable Year NOI with Expected Rounds = NOI of \$519,200; stable year rounds equal 38,000. <sup>3/</sup> Stable Year NOI with Rounds less 10 Percent=NOI of \$364,200; stable rounds equal 34,200.		
Source; NGF Consulting, Inc.		



## **Conclusions**

The level of warranted investment is very sensitive to the bond interest rate. The lower the bond interest rate the higher the capital investment that is warranted. At a 4.25 percent cost of debt the warranted investment level target is roughly \$9 to \$10 million. At a 6.0 percent cost of debt (figure used in June of 2001) the warranted level of investment would be more in the \$6 to \$7 million range. An investment level of \$7 to \$9 million would be considerably higher than the experience of other recent municipal projects in the state.

The challenge that Norfolk may have is finding a way to pay for the land. Given an anticipated construction and permitting process of \$ 5 to \$6 million range, a \$7 to \$9 million level of warranted investment may not leave sufficient room for land acquisition after setting aside funds for bond issuance costs and reserves to cover interest expenses in the early years of operations.

Because golf has the potential to add much to the community (open space, recreation, and bird and wildlife sanctuary), NGF Consulting encourages that additional creative ways be explored to acquire the land. State grants (like the Town of South Hadley obtained), environmental clean-up grants, perhaps even some form of mixed use development may need to be considered to help offset land costs.

# HISTORICAL AND REGIONAL CONTEXT FOR GOLF

In March of 2000 the NGF presented a landmark study on the economic contribution of golf on the Massachusetts' economy. Many of the trends and analyses conducted in the economic contribution study for the State of Massachusetts provide useful background for the Town of Norfolk study. This may be especially true for those who are new to the game and are considering the development of a golf course for the first time.

## **GOLF CONTEXT**

The game of golf has the distinction of being the oldest organized sport in the world. In the United States, golf has become an enjoyable activity for more than 26 million individuals.

Golf in Massachusetts is a major industry. Golf courses and golf related businesses directly account for an estimated \$1.6 billion in business sales within the Massachusetts' economy, 19,000 full and part-time jobs, and over \$400 million in yearly wages.

The golf industry gross output of \$1.6 billion is comparable to other significant Massachusetts industries, namely chemical products (\$1.8 billion), hotels and lodging (\$1.6 billion), trucking and warehousing (1.4 billion), personal services (\$1.3 billion), and paper products (\$1.2 billion).

The total effect of the golf industry on the economy of the state also includes the purchases made by employees within Massachusetts, as well the expenditures for goods and services made by golf-related companies from other in-state businesses. These total direct, indirect and induced effects within the economy of Massachusetts are estimated as follows:

- *Output*..... \$2.5 billion in net sales to Massachusetts businesses
- *Employment* .....28,800 full and part-time jobs in Massachusetts
- *Wages* .....\$700 million to residents of Massachusetts
- *State Taxes*.....\$69 million to the Commonwealth of Massachusetts
- *Local Taxes*.....\$44 million to Massachusetts municipalities
- *Federal Taxes*.....\$226 million paid by Massachusetts residents

Golf in Massachusetts:

- is played by an estimated 700,000 Massachusetts residents of all demographic segments,
- employs more than 19,000 full-time and part-time employees at golf facilities, golf course manufacturers (Titleist, Spalding etc.)and golf industry related businesses (retailers, architects, media, associations, accountants etc.)
- is enjoyed by upwards of 500,000 visitors per year.
- includes in excess of 400 golf facilities and ranges
- includes an additional 234 companies and organizations involved in the business of golf.

**Resident and Visitor Markets**

The golf market as it relates to resident and visitor golf participation trends is reviewed in the following paragraphs.

**Resident Market Golf Habits Compared**

Golf in Massachusetts has a long and fabled history. Some of the oldest courses in the nation let alone the state of Massachusetts are located in Norfolk County (Sharon CC 1888, Milton-Hoosic CC-1891, Norfolk GC - 1896 and Wampatuck GC - 1904). Golf participation rates (the percentage of the population older than five that play golf) in Massachusetts are among the highest in the northeast.

<b>GOLF PARTICIPATION RATES COMPARED FOR MASS, NEIGHBORING STATES AND US</b>					
<u>Massachusetts</u>	<u>Connecticut</u>	<u>New York</u>	<u>New Jersey</u>	<u>Pennsylvania</u>	<u>US</u>
12.7%	12.0%	9.2%	9.3%	9.9%	11.9%

Source: National Golf Foundation

**Age Demographics**

A comparison of the distribution of the golfing population and the Massachusetts resident population for selected age categories is presented in the table below. Although the age distribution of golfers is more heavily weighted to adults than is the general population distribution, all age groups enjoy golf. As compared to other individual sports, golf has the advantage of being able to be enjoyed by multiple generations on an equal basis. It is not uncommon to see grandparents playing and enjoying golf with their grandchildren. For the Town of Norfolk, NGF Consulting would expect to see a broad demographic make use of the proposed golf course.

<b>AGE DISTRIBUTION COMPARISONS OF GOLFER AND RESIDENT POPULATION</b>				
<b>Ages</b>	<b>Massachusetts Golfer Population</b>		<b>Massachusetts Resident Population</b>	
	<b>Population</b>	<b>Percent of Population</b>	<b>Population</b>	<b>Percent of Population</b>
<b>5-14 Years</b>	44,100	6%	859,900	15%
<b>15- 19 Years</b>	47,300	7%	368,200	6%
<b>20-24 Years</b>	45,500	7%	333,100	6%
<b>25-34 Years</b>	159,200	23%	979,600	17%
<b>35-44 Years</b>	158,700	23%	1,039,500	18%
<b>45-64 Years</b>	167,300	24%	1,336,400	23%
<b>65 and Over</b>	75,900	11%	870,900	15%
<b>Total</b>	698,000	100%	5,787,600	100%

Source: National Golf Foundation, Inc. Golfer population estimates for Massachusetts based on NGF's golf participation survey data; 2000 estimates. For more information please refer to Golf Participation in the U.S.; Jupiter, Florida: National Golf Foundation. [2001].

Rounds played increase with age. As individuals reach the empty nest, pre-retirement, and retirement stages of life their golf activity levels increase proportionately.

<b>ROUNDS PLAYED BY AGE CATEGORY FOR US GOLFERS</b>		
<b>Age</b>	<b>Average Number of Rounds Played Per Year</b>	<b>Percent of Total Rounds Played</b>
12 - 17	12.2	5 %
18 - 29	11.8	14 %
30 - 39	11.6	16 %
40 - 49	17.2	17 %
50 - 59	25.7	15 %
60+	44.5	35 %

Source: National Golf Foundation

The popularity of golf with adults, especially retirees, makes golf an important attribute in meeting the recreational needs of the resident market.

### ***Income Demographics***

The household incomes of Massachusetts's golfers are considerably higher than for the overall resident households. However, golf is not solely a game for the affluent. Golf also appeals to lower income households and households on a fixed income. Lower income households (less than \$25,000) account for 11 percent of all golfing households in Massachusetts.

<b>HOUSEHOLD INCOME COMPARED</b>		
<b><u>Household Income</u></b>	<b><u>Percent of Golfer Households</u></b>	<b><u>Percent of Massachusetts Households</u></b>
<b>Less than \$15,000</b>	4%	15%
<b>\$15,000-\$24,999</b>	7%	10%
<b>\$25,000-\$34,999</b>	8%	12%
<b>\$35,000-\$49,999</b>	19%	18%
<b>\$50,000-\$74,999</b>	24%	22%
<b>\$75,000-\$99,999</b>	18%	11%
<b>\$100,000 and Over</b>	19%	12%
<b>Total</b>	100%	100%

Source: National Golf Foundation and the US Bureau of the Census.

### ***Public versus Private Golfers***

Approximately 74 percent of all golfers in Massachusetts played at least one-half of their rounds on a public golf course. In the United States, since 1986, the percentage of public golfers has increased gradually each year. Massachusetts has a long history in providing public golf. Ponkapoag, a 36-hole golf complex operated by the State of Massachusetts and located in northern Norfolk County has been serving the public need since 1938.

### ***Visitor Market***

Golf and travel are big business. Based on an NGF 2000 nationally projectable sample<sup>1</sup> of golfing households, the NGF concludes that of the 24.1 million golfers in the United States over the age 18:

- forty-nine percent or 11.8 million, play golf while on vacation and
- nearly 12 percent or 2.8 million, play golf while on business travel.

Also, the income demographics of golfers that travel are much better than the population as a whole:

<b>GOLF AND TRAVEL – HOUSEHOLD INCOME COMPARISONS</b>	
<b>Golfer Segment</b>	<b>Average Household Income</b>
US Population	\$54,000
All Golfers	\$63,300
Golfers that Travel	\$67,500
Golfers that Play Golf on Business Trips	\$79,800

Source: National Golf Foundation

<sup>1</sup> The National Golf Foundation. Golf Travel in the U.S. Jupiter, Florida, [1999].

### ***Visitor and Tourism Trends to Massachusetts***

According to the Massachusetts Office of Travel & Tourism, domestic visitation to Massachusetts is estimated at 26.7 million visitors. Additionally, international visitors account for an estimated 1.9 million visitors. The importance of the visitor industry in Massachusetts is underscored by the fact that visitors are estimated to contribute nearly \$10.8 billion in direct spending to the Massachusetts Economy<sup>2</sup>.

### ***Visitor Golfers and Rounds Played***

Massachusetts is recognized nationally as an important destination for golf-related leisure and business travel. In order to assess the impact of visitors on rounds played and spending in Massachusetts, the NGF asked facility operators to estimate what percentage of their rounds played were by visitors<sup>3</sup>. Of the estimated 10.4 million rounds of golf played in Massachusetts, the NGF estimates that approximately 6 percent or 624,000 rounds were played by visitors. Applying national golfer survey information regarding the average number of golf rounds played per trip, the NGF estimates the number of visitors playing golf in Massachusetts to be in the 400,000 to 500,000 range.<sup>4</sup>

### ***Golf-Related Companies***

In addition to golf courses, Massachusetts is home to 234 additional companies and organizations involved in the business of golf. These companies breakout into the following major types:

*Golf product manufacturers.* These include 20 companies that make golf equipment, apparel, turf products, and golf range products. This industry segment is lead by Titleist & FootJoy Worldwide and Spalding Sports Worldwide. These two companies have dominant industry positions in the manufacture and sale of golf balls, golf clubs, shoes, gloves, and bags. Other major golf products companies include Dexter (golf shoes), Reebok (golf shoes), and MacNeil Engineering (golf products and accessories).

*Golf-related professional and services companies.* These consist of 118 companies including associations, publishing, turf services, graphics, architect/consultants, management companies, golf services, teaching schools, and golf tournaments.

*Off-course golf retailers.* These include 96 large and small off-course retailers that sell golf products at retail.

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<sup>2</sup>U.S. Travel Data Center, 1999

<sup>3</sup> National Golf Foundation. Survey of Golf Facility Owner/Operators in Massachusetts, [1999].

<sup>4</sup> The NGF estimate is based on applying the average number of rounds per vacation trip (1.7) for U.S. golfers to the total number of visitor rounds estimated by Massachusetts's golf facility owners/operators. For more information see *Golf Travel in the U.S.* 1999 edition, National Golf Foundation, Jupiter, Florida.

# SITE LOCATION AND ECONOMIC / DEMOGRAPHIC TRENDS

The purpose of this section is to address important factors that impact overall project feasibility of a golf course for the Town of Norfolk. These factors include site attributes, economic growth, and local population / demographic trends.

## SITE ATTRIBUTES

The Town of Norfolk is located in Eastern Massachusetts, bordered by Millis and Medfield on the north, Walpole on the east, Foxborough and Wrentham on the south, and Franklin and Medway on the west. Norfolk is 20 miles southeast of Boston; about 28 miles north of Providence, Rhode Island; and about 205 miles from New York City.

The proposed site for the golf course is to be located on approximately 200 acres off of Lawrence Street in the town of Norfolk. The parcel, which is primarily owned privately by Buckley and Mann (143 acres), is located in the Town of Norfolk, Massachusetts. The northern boundary is near the railroad. Lawrence Street forms the southern boundary this parcel. The eastern boundary extends from the corner of Lawrence and Park Streets, runs to the west of Timberline Drive, excludes Foley's Farm, and ends at Conrail. The western boundary is the town line of Norfolk and Franklin.



Market potential is influenced by the confluence of Interstates 495 and 95. The site's location relative to both interstates places the site in a central location relative to more heavily populated areas northeast and south of the site. However, like many other golf courses in Norfolk County, the proposed Town of Norfolk golf course site is located in a

residential neighborhood that requires winding through local streets to find. The site is located along Lawrence Street, which is residential. Park Street is also residential, but has a higher volume of traffic and connects to other major roads. The site is within 3 miles of Route 140 and downtown Franklin. Access from major roads, such as Interstate 495 and Route 1 is somewhat circuitous.

### Proposed Golf Course Property - Regional Context



The Consultants had an opportunity to walk the site. The site area provides a lot of contrast; the western portion is a former gravel pit while the eastern portion is heavily forested. The existing, mature vegetation over the eastern portion of the site has the potential to give a part of the golf course a park-like feel while the highly disturbed western portion of the site has the potential to give a links like feel. The site has the potential to yield a quality golf experience.

## SOCIO-ECONOMIC ENVIRONMENT

Socio-economic factors include general information, local area economic and employment trends, population growth trends and demographic comparisons.

### General Information

The Town of Norfolk is a rural suburban town on the periphery of metropolitan Boston, located on an upper valley of the Charles River. In the modern era, the town experienced a rapid increase in population after 1925 when the state built a state prison in Norfolk and a hospital. Major residential development has continued since.

**Weather:** Temperature and rain influence play days at a golf course. The typical golfing season in this part of Massachusetts extends from April through October. The shoulder



months of March and November may include some viable play days. December through February may offer also offer some play days depending on weather conditions.

- Normal temperature in January.....23.9°F
- Normal temperature in July.....70.8°F
- Normal annual precipitation.....46.6" .

**Population:** The Town of Norfolk is an attractive suburban residential area with a population of 10,490. The Town will only provide a small proportion of the anticipated support for the proposed golf facility. The remainder of the support will come from residents living within a reasonable drive radius of the subject site.

**Economic Growth:** The Norfolk area economy is a component of the Boston-Worcester-Lawrence-Lowell-Brockton regional economy. The overall economy has fared reasonably well with respect to current national economic downturns.

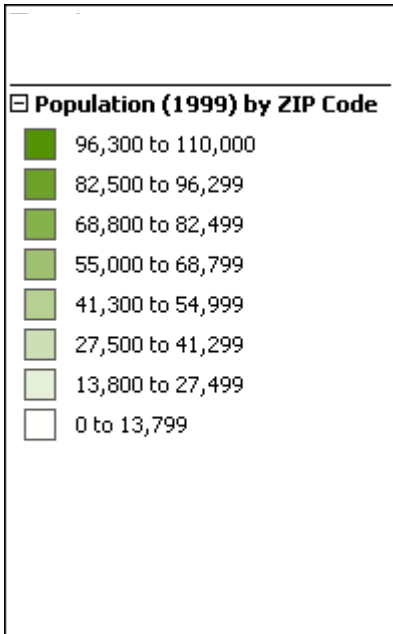
**Population Growth Trends**

Relying on information from the Bureau of the Census and Claritas, Inc, NGF Consulting provides reasonable estimates of local and regional population growth. Based on an analysis of transportation arteries, population densities and existing golf course supply NGF Consulting has broken down the market catchment area into three rings; 5-mile, 10-mile and 15-mile. In the table below, NGF Consulting summarizes population trend information for the Town of Norfolk, the market rings and the Boston MSA.

<b>HISTORICAL AND PROJECTED POPULATION GROWTH</b>					
	<b>Population Figures in (000s)</b>			<b>Annual Growth Rate</b>	<b>Annual Growth Rate</b>
	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>1990-2000</b>	<b>2000-2005</b>
Town of Norfolk	9.3	10.5	11.0	1.2%	1.0%
5-mile Ring	52.4	64.2	68.6	2.1%	1.3%
10-mile Ring	258.5	286.5	298.7	1.0%	0.8
15-mile Ring	718.4	763.7	785.8	0.6	0.6
Boston MSA	5,686.0	5,927.3	6,095.9	0.8	0.6

Source: Bureau of the Census, Claritas, Inc. and NGF Consulting

Residential population growth rates are higher closer to the site than they are further away. This trend speaks to the attractiveness of this area for new residences.



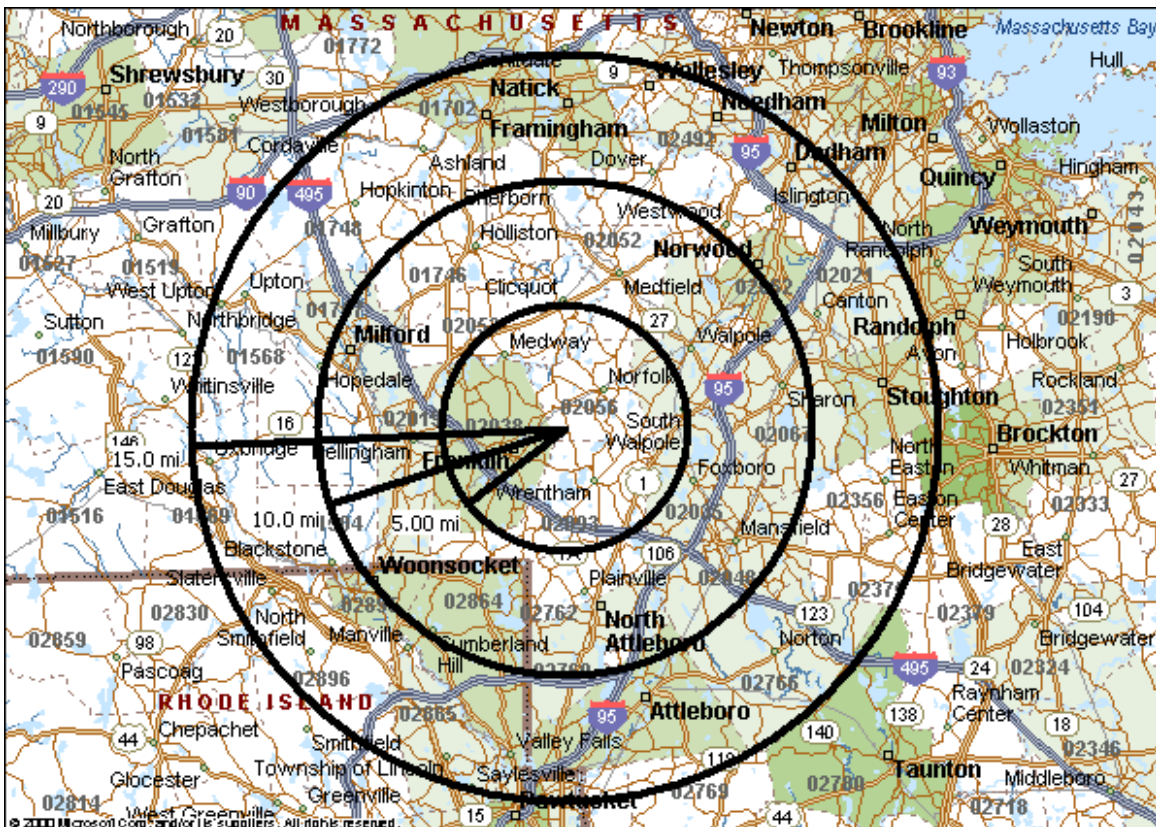
The chart below shows population density by zip code. This chart provides a visual idea as to origination of the market most likely to support the proposed golf course. The areas that are darker green in color represent higher density populations.

Note that the areas immediately north and east of the subject site including the Town of Norfolk have a very low population density.

Within a five-mile radius, the higher density population areas are located immediately east of the subject and site along the I-495 corridor.

Within a 5 - 10 mile radius the strongest population densities in the market region are located north and east of the subject site.

Beyond 10 miles population density is northeast and south.



## Demographic Comparisons

The incidence of golf participation is stronger among higher income households than lower income households. Age and family size impact golf participation and frequency patterns.

With the above statements in mind, NGF Consulting has made demographic comparisons for the Town of Norfolk, the 5-mile ring, the ten-mile ring, the 15-mile ring and the Boston MSA.

<b>DEMOGRAPHIC COMPARISONS</b>			
	<b>Median Household Income</b>	<b>Average Household Size</b>	<b>Median Age</b>
Town of Norfolk	Not Available	3.01	37.4
5-mile Ring	\$ 72,600	2.94	35.4
10-mile Ring	\$ 68,400	2.74	36.8
15-mile Ring	\$ 64,000	2.67	37.5
Boston MSA <sup>1/</sup>	\$ 58,100	2.61	36.9

<sup>1/</sup> Bureau of the Census and Claritas, Inc.

The implications of this demographic table on the proposed golf course development are:

- The proposed golf course will benefit from relatively higher household income levels in the surrounding community.
- The golf course must be attractive to families; e.g. junior golf and other programs designed to attract distinct family segments. The suburban lifestyle of the region surrounding the Town of Norfolk is characterized by larger household sizes indicative of a family orientation.

# GOLF MARKET POTENTIAL

The objective of this section is to define the golf market from which the proposed Town of Norfolk golf course is most likely to be supported.

## DEFINITION OF THE GOLF MARKET

The golf market is most frequently defined by drive time and by competitive forces. Factors considered in defining the market:

- The site location relative to I-495, Route 140, Route 1 and I-95.
- The location of existing golf courses in the market region
- The characteristics of the local and regional population
- The characteristics of the local golf course supply

The NGF has defined three markets from which the proposed golf course may draw:

**Core Market (5 mile ring):** the resident population residing within a five-mile radius of the subject site area and that is able to drive to the area within 10 to 15 minutes. This market is anticipated to provide the core support for the proposed golf course. People residing in this area have limited options for nearby quality golf experiences and will be most likely to use the golf course on a regular basis.

**Primary Market (5-10 mile ring):** resident populations within five to ten miles of the subject site that would be attracted to the proposed golf course because it may offer a more enjoyable golf experience than alternatives.

**Secondary Market (10-15 mile ring) and Beyond:** the secondary market consists mostly of the population living in a 10 to 15 mile band of the subject site. However, the secondary market may on occasion be expanded to include the densely populated areas of Boston.

## PARTICIPATION RESEARCH OVERVIEW

For over 50 years, the National Golf Foundation has served as the nation's leading information source for the golf industry. Throughout those 50 years, the NGF has provided the most current and complete assessment of the nation's interaction between supply and demand for the game.

In order to assess the growth of demand for the game, the NGF began a new method of determining the size of the golf population in 1985. Each year since 1985, the NGF has commissioned Market Facts, Inc., a market research company based in Chicago, to conduct a survey of American golf participation habits. In 1998, the size of the sample was increased to 60,000 households.

Because the sample is so large, NGF is extremely confident of its accuracy. In statistical terms, the national participation rate is estimated to be 11.7 percent of the population over the age of 12, plus or minus 0.2 percent at the 90 percent confidence level.

NGF has conducted annual participation surveys for the last fifteen years. Consequently, we have a database of over a quarter of a million individuals and their golfing or non-golfing behavior as well as their demographic and socioeconomic characteristics. NGF is capable of determining participation rates and frequency of play statistics for any of the nation's states and most metropolitan areas.

While the NGF is national in scope and its primary focus is the assessment of supply and demand across the United States, it also has the capability to evaluate specific markets. The breadth and depth of NGF's databases ensures that market assessments made by NGF Consulting are as accurate and valid as possible. The true value of the data is not only their detail and accuracy, but also their application to specific analyses conducted by NGF Consulting, such as for the Town of Norfolk market area.

## GOLF DEMAND POTENTIAL

The population estimates supporting golf demand come from NGF Consulting's review of various sources as identified in the population overview.

NGF Consulting, working closely with the NGF's research department, has developed golf demand models for the primary market area. NGF Consulting has used golf participation data from Massachusetts. This data reflects the golfing habits and trends of area residents, thereby presenting a reasonable estimate of potential demand for public golf rounds.

Using sophisticated demographic models to estimate potential demand, NGF Consulting estimates that the total golf demand potential from the identified markets is as follows:

<b>SUMMARY - GOLF DEMAND POTENTIAL PUBLIC GOLF ROUNDS</b>		
	<b>2000 Rounds (000s)</b>	<b>2005 Rounds (000s)</b>
<u>Town of Norfolk 1/</u>	<u>+/-13,500</u>	<u>+/-15,000</u>
Core Market (5-mile ring)	80,000	91,000
Primary Market (5-10 mile band)	290,000	318,000
<u>Secondary Market (10-15 mile band)</u>	<u>665,000</u>	<u>691,000</u>
Total	1,035,000	1,100,00
1/ Town of Norfolk is considered a subset of the 5-mile core market. This estimate is based on Norfolk's share of the 5-mile core market population.		

Source: NGF Consulting, Inc.

The subject property would need to compete for this potential demand. The subject property has the potential to capture a small share of this total potential demand.

## POTENTIAL GOLF MARKET DEMAND (AGE BASED MODEL)

### 5 Mile Ring Estimated Market Size - 2000

AGE	ESTIMATED POPULATION <sup>1</sup>	POTENTIAL NUMBER OF GOLFERS <sup>2</sup>	POTENTIAL NUMBER OF PUBLIC ACCESS ROUNDS OF GOLF <sup>2</sup>
5 - 14	9,443	484	1,550
15 - 19	4,793	616	6,719
20 - 24	4,344	602	4,091
25 - 34	8,377	1,361	11,979
35 - 44	11,276	1,722	12,397
45 - 64	<u>15,574</u>	1,950	27,103
65 +	5,794	<u>505</u>	<u>17,966</u>
<b>Total</b>	<b>59,601</b>	<b>7,240</b>	<b>81,805</b>

### 5 Mile Ring Estimated Market Size - 2005

AGE	ESTIMATED POPULATION <sup>1</sup>	POTENTIAL NUMBER OF GOLFERS <sup>2</sup>	POTENTIAL NUMBER OF PUBLIC ACCESS ROUNDS OF GOLF <sup>2</sup>
5 - 14	9,569	491	1,571
15 - 19	5,582	718	7,825
20 - 24	4,880	676	4,596
25 - 34	8,818	1,433	12,610
35 - 44	9,346	1,427	10,275
45 - 64	19,296	2,416	33,580
65 +	<u>6,560</u>	<u>571</u>	<u>20,341</u>
<b>Total</b>	<b>64,051</b>	<b>7,732</b>	<b>90,798</b>

1: Population estimates are provided by Claritas, Inc.

2: These figures are calculated from statistics compiled from NGF's golf participation surveys.

Source: NGF Consulting Inc.

**POTENTIAL GOLF MARKET DEMAND (AGE BASED MODEL)**

**5 to 10 Mile Band  
Estimated Market Size - 2000**

<u>AGE</u>	<u>ESTIMATED POPULATION</u>	<u>POTENTIAL NUMBER OF GOLFERS</u>	<u>POTENTIAL NUMBER OF PUBLIC ACCESS ROUNDS OF GOLF</u>
5 - 14	31,322	1,607	5,142
15 - 19	13,294	1,710	18,635
20 - 24	12,952	1,794	12,198
25 - 34	28,549	4,639	40,825
35 - 44	38,620	5,897	42,460
45 - 64	51,543	6,453	89,699
65 +	<u>26,404</u>	<u>2,300</u>	<u>81,872</u>
Total	202,684	24,400	290,832

**5 to 10 Mile Band  
Estimated Market Size - 2005**

<u>AGE</u>	<u>ESTIMATED POPULATION</u>	<u>POTENTIAL NUMBER OF GOLFERS</u>	<u>POTENTIAL NUMBER OF PUBLIC ACCESS ROUNDS OF GOLF</u>
5 - 14	31,049	1,593	5,097
15 - 19	15,951	2,051	22,359
20 - 24	14,351	1,988	13,516
25 - 34	28,274	4,595	40,432
35 - 44	32,467	4,958	35,696
45 - 64	64,047	8,019	111,460
65 +	<u>29,129</u>	<u>2,537</u>	<u>90,322</u>
Total	215,268	25,740	318,881

1. Population estimates are provided by Claritas, Inc.

2. These figures are calculated from statistics compiled from NGF's golf participation surveys.

Source: NGF Consulting, Inc.

## POTENTIAL GOLF MARKET DEMAND (AGE BASED MODEL)

### 10 to 15 Mile Band Estimated Market Size - 2000

<u>AGE</u>	<u>ESTIMATED POPULATION</u>	<u>POTENTIAL NUMBER OF GOLFERS</u>	<u>POTENTIAL NUMBER OF PUBLIC ACCESS ROUNDS OF GOLF</u>
5 - 14	62,963	3,230	10,336
15 - 19	31,368	4,034	43,970
20 - 24	30,928	4,284	29,128
25 - 34	63,450	10,311	90,734
35 - 44	77,750	11,872	85,481
45 - 64	113,271	14,182	197,123
65 +	<u>67,224</u>	<u>5,855</u>	<u>208,445</u>
Total	446,954	53,767	665,217

### 10 to 15 Mile Band Estimated Market Size - 2005

<u>AGE</u>	<u>ESTIMATED POPULATION</u>	<u>POTENTIAL NUMBER OF GOLFERS</u>	<u>POTENTIAL NUMBER OF PUBLIC ACCESS ROUNDS OF GOLF</u>
5 - 14	61,583	3,159	10,109
15 - 19	34,522	4,440	48,391
20 - 24	32,611	4,517	30,713
25 - 34	59,439	9,659	84,998
35 - 44	70,606	10,782	77,627
45 - 64	130,177	16,298	226,544
65 +	<u>68,624</u>	<u>5,977</u>	<u>212,787</u>
Total	457,562	54,831	691,169

1. Population estimates are provided by Claritas, Inc.

2. These figures are calculated from statistics compiled from NGF's golf participation surveys.

Source: NGF Consulting, Inc.



# EXISTING AND PROPOSED AREA GOLF COURSES

The objective of this section is to place the proposed Town of Norfolk Golf Course within a local and regional golf market perspective. What is the overall nature of the existing golf course market? Key factors to be reviewed include:

- Current Market
- Competitive Environment
- Distance from the proposed Town of Norfolk Golf Course
- Year opened
- Rounds played
- Fee levels
- Level of anticipated competitive impact with proposed Town of Norfolk course

Additionally, NGF consulting identified courses that are under-construction and are in planning. These courses will also impact the market feasibility of the proposed Town of Norfolk Golf Course.

## **CURRENT MARKET - NORFOLK MARKET AREA**

In the course of conducting this analysis NGF Consulting spoke to upwards of 40 to 50 people involved in golf course operations, management and construction. NGF Consulting learned that even before September 11<sup>th</sup>, overall golf rounds were down anywhere from 10 to 15 percent in 2001 due to the economic slow down and bad weather earlier in the year. After September 11<sup>th</sup>, as might be expected, there was a general decrease in rounds played as compared to previous years.

The outlook for the future, however, is cautiously optimistic. Everyone that we talked to believes that golf will continue to grow and that local golf courses may actually benefit if travel continues to be a concern.

## **COMPETITIVE ANALYSIS**

The competitive impact of golf courses within a 12-mile radius of the Town of Norfolk is summarized on the following page. The locations of these golf courses are shown on page 25. This analysis shows that there are four courses that are directly competitive with the proposed Town of Norfolk Golf Course. These include Maplegate CC, Glen Ellen CC, Brookmeadow CC and New England CC. The Ponkapoag State operated golf complex, with two classic Donald Ross designs, has the potential to be competitive but is in relatively poor condition.

## COMPETITIVE IMPACT OF GOLF COURSES WITHIN 12 MILES OF TOWN OF NORFOLK

Club Name / Date of Opening	Distance From Norfolk (miles)	Rounds	Green Fees	Cart Fees	Comments
<b>Primary Competitive Impact</b>					
<b>Public Access Regulation Length</b>					
Maplegate CC (1988)	5.7	35,000	\$42/\$52	\$14	
Glen Ellen CC (1963; Renovated 2001)	5.8	37,000	\$31/\$42	\$14	These courses represent the primary local area competition for a new golf course in Norfolk.
Brook Meadow CC (1967)	8.1	39,000	\$40/\$50	\$12	
New England CC (1987)	10.4	36,000	\$42/\$57	\$10	
Ponkapoag 36-holes (1938)	11.6	80,000	\$17/\$20	\$11.50	Classic layout - not well maintained
Subtotal		227,000			
<b>Secondary Competitive Impact</b>					
<b>Semi-Private- Limited Public Access</b>					
Foxboro CC (1960)	6.4	25,000	\$40/\$50	\$12	These courses generally restrict tee times to members on weekend mornings. They compete with fully public facilities for outings, week-day and off-peak play.
Wentworth CC (2001)	7.9	25,000	\$36/\$40	\$12.50	
Hopedale CC 9-holes (1955)	10.0	35,000	\$25/NA		
Norton CC (1955)	11.6	35,000	\$33/\$43	\$14	
Subtotal		120,000			
<b>Minimal Competitive Impact</b>					
<b>Public Access Shorter Courses - Lower Fees</b>					
Pinecrest GC (1930)	8.9	36,000	\$20/\$26	\$11	These courses offer less challenging layouts. They are not considered to be direct competition for a well-designed 18-hole regulation golf course.
Heather Hill CC 27-holes (1950)	8.9	50,000	\$20/\$27	\$11	
Willowdale GC 9-holes (1960)	9.0	30,000	\$18/\$25	NA	
Lost Brook GC Par -3 (1960)	9.7	30,000	\$20/\$24	NA	
Norwood CC (1975)	10.0	38,000	\$24/\$29	\$13	
Subtotal		184,000			
<b>Minimal Competitive Impact</b>					
<b>Private 18-hole Regulation Length</b>					
Franklin Country Club (1920)	4.2	30,000	These are 18-hole private and exclusive clubs with outside play limited to guests of members and occasional Monday outings. Excepting the TPC at Great Woods, guest fees are predominantly in the \$40 weekday and \$50 weekend with \$14 for a cart range.		
Walpole Country Club (1973)	4.9	32,000			
Spring Valley (1920)	7.2	18,000			
TPC at Great Woods (2002)	10.0	NA			
Blue Hill CC (1933)	10.9	32,000			
Dedham CC and Polo Club (1920)	11.2	23,000			
Subtotal		135,000			
<b>Not Competitive</b>					
<b>Private Courses 9-hole</b>					
Royal Crest Country Club (1972)	4.8	30,000	9-hole executive length		
Sharon CC (1888)	7.9	12,000			
Wampatuck CC (1904)	10.4	25,000	Some of these courses were among the first to be built in the USA. If you are invited to play, guest fees are generally very reasonable, less than \$40.		
Norfolk GC (1896)	10.7	23,000			
Milford CC (1985)	10.6	25,000			
Milton-Hoosic Club (1891)	11.6	16,000			
Subtotal		131,000			

Source: NGF Consulting, November 2001

## Golf Course Location Map

Semi-private golf courses located within 12-miles of the subject site represent the second level of competitive impact. However, these courses cater exclusively to members during peak demand periods on weekends and holidays. These semiprivate courses are most likely to compete for public play on week days and weekend afternoons. These courses include Foxboro CC, Norton CC, the new Wentworth CC and the 9-hole course at Hopedale CC.

Golf courses that offer minimal competitive impacts include short courses (par-3s and executive length golf courses open to the public), regulation length strictly private facilities and non-regulation length strictly private facilities.

The short public courses are not directly competitive because the golf course designs are less challenging and their fee levels are very low. These are good player development courses.

Private golf courses are not directly competitive with public courses because they do not allow non-members to play unless they are guests of members. Occasionally, these private courses will allow limited outside group outing play on Mondays.

Some of the oldest 9-hole private golf courses in the US are located in Norfolk County. These include Sharon CC (1888), Milton-Hosic CC (1891), Norfolk CC (1896) and Wampatuck CC (1904). They are testimony to the long heritage of golf play in this region of the country. These old clubs are not directly competitive with public golf courses.

### **Additional Conclusions**

Distances from the town of Norfolk to each of these golf courses are shown in the table on page 25. One of the key findings of this analysis is that there are no existing public golf courses within the immediate 5-mile radius of the Town of Norfolk. There are two private courses within 5 miles, Franklin CC and Walpole CC.

Other relevant conclusions from the table:

- Except for Ponkapoag, individual public courses did not exceed 40,000 rounds this year. In years past Brook Meadow CC and Glen Ellen have exceeded 40,000 rounds. Market conditions and course renovations have limited rounds.
- Compared to other metropolitan areas of the country golf is relatively inexpensive in Norfolk County. At the best courses green fees rarely exceed \$40 on weekdays and \$50 on weekends. Even guest fees at the better private courses are within this range.
- Cart usage is optional at most clubs. Cart fees per person range from \$12 to \$14.
- The existing golf course inventory is old. Of the nine public and semi-private regulation golf courses - five were built prior to 1967, two were opened in the 1980s and one (Wentworth CC was opened last year).

### **GOLF COURSES IN-PLANNING AND UNDER CONSTRUCTION**

There are three golf courses that are currently under-construction that are located within a ten-mile radius of the proposed Town of Norfolk site. None of them is expected to have a direct competitive impact on the subject course. The three are:

- **The Fore-kicks Golf Club** - this 9-hole par-three course is currently under construction near the intersection of Routes 115 and 1A near the eastern boundary of the Town of Norfolk. The course will only be 1000 yards in length and will cater to beginner golfers. The course is part of a recreational complex that will include an indoor soccer facility. This course is expected to open during the summer of 2002 and will not be directly competitive with the proposed Town of Norfolk Golf Course because of its length, degree of difficulty and fees. It may act as a feeder course by helping to develop golfers that will want to play a more challenging golf course as they improve in proficiency.
- **Second 9-holes of the Wentworth Country Club.** A second nine holes will open at the Wentworth County Club during the summer of 2002. This is a semi-private facility that located some 8 miles from the Town of Norfolk. Howard Mauer designed the golf course. This course will offer a degree of competition, especially for those living south of the Town of Norfolk. Fees are expected to be \$40 weekdays and \$50 weekend.
- **Bungary Brook Golf Course 9-hole Regulation Length:** Located in Bellingham near the Town of Franklin line, this nine-hole regulation course is slated to open next year - Spring 2002. Howard Mauer designed the golf course. The course is situated on 50 acres of land. It is located off I-495 and Kings Street on Locust Street. Fees are expected to be in the \$20 to \$25 range.
- **TPC of Boston at Great Woods.** This multi-million dollar real estate development includes a Tournament Players Club. This private 18-hole course is scheduled to open in the spring of 2002. The course will also command high fees for any outsiders who are able to play - probably in the neighborhood of \$100 - \$125 per round. This course will not be competitive with public courses in the area. The club has already sold 200 memberships. Memberships initiation fees currently range in price from \$70,000 for an individual up to \$135,000 for a corporate membership allowing 3 people.

Additionally, there are two other golf courses that are under construction that are outside the 15-mile radius of the subject site. These are Quarry Hills Golf Course in Quincy and Weathervane Golf Course in Weymouth. Quarry Hills is being built on an abandoned landfill six miles south of Boston. These courses are not expected to be directly competitive with the proposed course at the Town of Norfolk.

# ROUNDS PLAYED POTENTIAL

The objective of this section is to assess the rounds played potential for the proposed Town of Norfolk golf course.

The process begins by assessing population driven *potential* demand against the level of rounds currently being played and anticipated to be played in the market area. From this, NGF Consulting will determine what might be a reasonable market share for a new and well-designed municipal golf course. Such factors as quality of design, playability, fee levels, and accessibility will influence the viability of new courses entering an established market.

## CURRENT AND PROJECTED DEMAND / SUPPLY BALANCE

The Norfolk market area is a mature and well-established golf market. Support for a new golf course within the market area comes from both existing and new residents living in the market area. New courses generally compete well for rounds played especially in markets like the Norfolk area where most of the existing public golf courses are older.

### Unmet Demand Potential

NGF Consulting estimates that within 10 miles of the subject site there are approximately 78,400 rounds of unmet demand potential. Unmet demand potential is derived from the golf participation rate analysis presented in an earlier section of this report.

<b>SUMMARY - INCREMENTAL GOLF DEMAND POTENTIAL PUBLIC GOLF ROUNDS</b>				
	<b>Column A 2005 Rounds Potential 1/</b>	<b>Column B Currently Supplied 2/</b>	<b>Total Unmet Potential 3/</b>	<b>Proportion of Unmet Induced Solely From Population Growth 4/</b>
Core Market (5-mile ring)	91,000	60,300	30,700	11,000
Primary Market (5-10 mile band)	<u>318,000</u>	<u>270,300</u>	<u>47,700</u>	<u>18,000</u>
Subtotal growth from Core and Primary Markets	<b>409,000</b>	<b>330,600</b>	<b>78,400</b>	<b>29,000</b>
1/ From the table found on page				
2/ See Appendix Table 1				
3/ The difference between Column A and Column B				
4/ The difference in rounds played demand between 2000 and 2005 . See Appendix Table 2.				

Source: NGF Consulting, Inc.

**Market Justification for Rounds Played**

A new course located at the Lawrence Street location **cannot** be expected to capture all of the potential demand expected over the next 5 years. Existing golf courses as well as the new courses scheduled to be opened next year, the par-three 9-hole course (Fore-Kicks) and the 9-hole regulation length course at Bungary Brook, will also capture a portion of this demand. **However, assuming market competitive rates at the proposed Town of Norfolk golf course and a well designed and operated golf course, achieving 35,000 to 40,000 rounds (stabilized year) at a well-designed golf course at the Lawrence Street location appears to be within reason.**

<p>The new course will compete favorably for new rounds generated from population growth.</p>	<p>Pop Growth Induced: <math>29,000 * .30 = 9,000</math>  <u>Balance Unmet: <math>49,400 * .25 = 12,000</math></u>                  Total Share of Unmet <math>78,400 * .27 = 21,000</math></p>
<p>The new courses will compete favorably for anticipated <i>unmet demand</i> played potential, the difference between current rounds and potential rounds.</p>	
<p>Because it will be a modern design, more playable and more enjoyable than many of the existing golf courses, the new course will capture away rounds being played at existing courses in the market area.</p>	<p>5,000 to 10,000 rounds from this source would represent less than 3 percent of the rounds at existing golf courses</p>
<p>Because of a modern design, the new course should be able to draw from golfer populations living outside 10-miles, especially for outings and weekend rounds.</p>	<p>10,000 to 15,000 rounds from sources outside the market area is consistent with other well-managed public access courses in the market area.</p>

Lastly, other daily fee and municipal golf courses, located in and outside the market area but facing similar market conditions have achieved 35,000 to 45,000 rounds played.

<p><b>PRINCIPAL COMPARABLE GOLF COURSES</b></p>		
<p><b><u>Golf Course / Year Open</u></b></p>	<p><b><u>Rounds Played Range 1/</u></b></p>	<p><b><u>Fees</u></b></p>
<p>Maplegate CC 1988</p>	<p>35,000 to 40,000</p>	<p>\$42/\$52 plus \$14 cart</p>
<p>Glen Ellen CC 1963</p>	<p>35,000 to 40,000</p>	<p>\$31 / \$42 plus \$14 cart</p>
<p>Brookmeadow CC 1960</p>	<p>39,000 to 48,000</p>	<p>\$30 / \$35 plus \$14 cart</p>
<p>New England CC 1987</p>	<p>36,000to 42,000</p>	<p>\$42 / \$52 plus \$10 cart</p>
<p>Olde Scottish Links Bridgeport Muni 1997</p>	<p>40,000 to 45,000</p>	<p>\$39 / 39 plus 12.50 cart non-resident rates</p>
<p>Acushnet River Muni - 1998</p>	<p>34,000 to 36,000</p>	<p>\$30 / \$38 plus \$14 cart</p>
<p>Rounds estimates represent a range of historical results that illustrate the fluctuations of rounds played as explained by weather, economic recessions etc.</p>		

Source: NGF Consulting, Inc.

Maplegate, Glen Ellen, Brookmeadow and New England CC represent the principal market competition for the proposed Town of Norfolk golf course. The Town of Norfolk golf course must provide services equal to or better than these existing golf facilities.

Similar to Bridgewater and to Acushnet, the Town of Norfolk will provide a discounted rate for Town residents.

## **ROUNDS PLAYED LEVELS FOR THE PROPOSED THE TOWN OF NORFOLK GOLF COURSE**

It is expected that the proposed Town of Norfolk golf course would ultimately have play divided into weekday (Monday through Thursday), weekend (Friday through Sunday), and afternoon (after 2:00 P.M.) categories.

As much as 10 to 20 percent of rounds played demand is anticipated to come from organized league play, community outings and/or tournaments. Addressing these segments would require that Town of Norfolk create group outing areas (tented space and picnic tables).

NGF Consulting rounds played projections for the proposed Town of Norfolk golf course are shown below:

<b>The Town of Norfolk Golf Course - Projected Rounds</b>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Non-Resident</b>					
18-hole Weekday Rounds	7,000	7,100	7,100	7,200	7,600
18-hole Weekend Rounds	10,000	10,000	10,200	10,800	11,400
<b>Resident</b>					
18-hole Weekday Rounds	1,700	1,800	1,200	1,200	1,300
18-hole Weekend Rounds	2,500	2,600	2,000	2,300	2,400
<b>Other</b>					
Outings, Tournaments, Leagues	1,800	5,150	8,300	9,000	9,500
Discount / Twilight/9-hole	5,000	5,100	5,100	5,400	5,700
Complimentary play	500	250	100	100	100
<b>Total Rounds</b>	<b>28,500</b>	<b>32,000</b>	<b>34,000</b>	<b>36,000</b>	<b>38,000</b>

Source: NGF Consulting, Inc.

The origination of rounds is expected to be 10 to 15 percent Town of Norfolk residents, 40 to 60 percent from the 5-mile radius, 30 to 35 percent from 5 to 10 miles and 10-20 percent or so from beyond 10 miles.

This schedule of rounds has been prepared under the assumption that green fees will be positioned to be competitive with existing daily fee golf courses in the market area.

To meet this schedule of rounds, the proposed Town of Norfolk golf course must be maintained and operated to high standards in order to warrant the green fees. The golf facility must offer good service and focus on player development. An important source of play will be tournaments and community outings.



## MARKET SHARE CONCLUSIONS

NGF Consulting estimates of performance for the proposed facility could change should the following conditions occur.

<b>More Rounds</b>	<b>Less Rounds</b>
Future club closings	New course openings
Future club privatization	Incorrect price levels
Increased awareness of the new course	Poor customer service
Lack of loyalty to existing courses	Low quality facility
Unforeseen surge in golf interest	Poor yearly weather conditions
Excellent yearly weather conditions	Regional economic recession

# ENVIRONMENTAL PERMITTING AND PRELIMINARY DEVELOPMENT COST ANALYSIS

This purpose of this section of the report is to address environmental permitting requirements and provide a preliminary estimate of development costs associated with the proposed construction of an 18-hole municipal golf course to be located on the former Buckley & Mann and Lorusso / Plainville Quarry properties<sup>5</sup> off Lawrence Street in Norfolk, Massachusetts. The information and conclusions contained in this section of the report are based on the following documents and information:

- Proposed Golf Facility Suitability Report prepared by Cornish, Silva & Mungeam, Inc., (CSM) May 3, 2001.
- Proposed 18-hole Golf Course Feasibility Plan prepared by Cornish, Silva & Mungeam, Inc., February 23, 2001.
- Letter report from BSC Group to the Norfolk Golf Committee dated April 27, 2000.
- Class A-3 Response Action Outcome and Release Abatement Measure Completion Report prepared for Buckley & Mann, Inc. by Camp Dresser & McKee, Inc. (CDM), August 2001.
- Site reconnaissance visit accompanied by Mr. Stephen Mann on October 2, 2001.
- Two-foot contour interval (aerial) survey plans of the Buckley & Mann property.
- Information provided by CDM at a public information meeting in Norfolk on August 23, 2001.
- Personal communication with Tim Gerrish of Cornish, Silva & Mungeam, Inc., October 30, 2001.

## **PERMIT REQUIREMENTS:**

In the chart on the following page the Consultants have listed the principal environmental permits that are required for project development. The need for some of the permits listed include: the Dam Safety Permit, the authorization for use of former railroad lands under c. 40 §54A, and the conservation permit required under the Massachusetts Endangered Species Act. In the chart on the following page the Consultants have listed the principal environmental permits that are required for project development. The need for some of the permits listed in the following table, including the Dam Safety Permit, the authorization for use of former railroad lands under c. 40 §54A, the conservation permit required under the Massachusetts Endangered Species Act, and the Section 401/404 wetlands approvals, will be determined by the details of project design and other factors.

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<sup>5</sup> These are the principal parcels on which the golf course will be located. Other, smaller, parcels also may be assembled to complete the site.

**NORFOLK GOLF COURSE – LIST OF PRINCIPAL ENVIRONMENTAL PERMITS REQUIRED FOR PROJECT DEVELOPMENT:**

<b>STATE PERMITS</b>	<b>AUTHORITY</b>	<b>AGENCY</b>	<b>COMMENTS</b>
Environmental Site Assessment	M.G.L. ch. 21E	Massachusetts Department of Environmental Protection (DEP)	If further testing or clean up is required, additional DEP involvement / approvals and remedial action could be required.
Air Quality / Asbestos / Demolition Notification	M.G.L. c. 111	Massachusetts Department of Environmental Protection (DEP)	Notification is by Contractor 10 days prior to start of building demolition (310 CMR 7.09) and asbestos abatement under 310 CMR 7.15 and 19.
Water Management Act	M.G.L. c. 21G and 310 CMR 36.00	Massachusetts Department of Environmental Protection (DEP)	Existing riparian water rights could facilitate this permit.
Waterways Regulation	M.G.L. ch. 91	Massachusetts DEP Division of Wetlands & Waterways	License or permit will be required for bridges if it is determined that the Mill River is subject to 310 CMR 9.04(1)(e)
Planning for Growth	Executive Order 385	State permitting agencies. MEPA	Proponent required to show that project is consistent with state, regional, and local plans and policies. Compliance occurs through the MEPA process.
Conservation Permit	M.G.L. c. 131, §4 (the Massachusetts Endangered Species Act) and 321 CMR 10.00	Massachusetts Natural Heritage & Endangered Species Program	Required if rare species / species habitat are located on the site.
Historic Preservation	M.G.L. c. 9 s. 26 to 27C	Massachusetts Historic Commission	If buildings or site are eligible for listing on the National Register of Historic Places (including archaeological resources).
Water Quality Certificate	Federal Clean Water Act – Section 401 314 CMR 9.00	Massachusetts DEP [U.S. Army Corps has delegated permitting authority to DEP for Category I projects (i.e., <5,000 sf of cumulative disturbance)]	DEP can authorize up to 5,000 sf of fill in (discharge to) wetlands (“waters of the United States”) and/or up to 5,000 sf of clearing. Individual permit from U.S. Army Corps required >5,000 sf of cumulative effect.
NPDES for Construction / SWPPP	33 U.S.C.1251-1386 (the Federal Clean Water Act)	Massachusetts DEP (Authority transferred to DEP from U.S. EPA)	Required for construction site activities involving >5 acres of disturbance.
Dam Safety Permit	MGL c. 253, §44 302 CMR 10.00	Department of Environmental Management (DEM)	If existing dam is >6-feet high and its breaching would threaten public safety of property damage as determined by the Commissioner.
Former Railroad Lands	M.G.L. c. 40, §54A	Executive Office of Transportation and Construction	Authorization by Secretary of EOTC required if golf course is defined as a “structure” pursuant to M.G.L. c. 40, §54A.
MEPA Process	M.G.L. ch. 30, §61-62H	Executive Office of Environmental Affairs – MEPA Unit	Report (EIR) may be required for projects requiring state permits and / or using state funds.
<b>FEDERAL PERMITS</b>			
Army Corps Section 404	Section 404 of 33 U.S.C. 1344 (the Federal Clean Water Act) and 40 CFR Part 230	U.S. Army Corps of Engineers	404(b)(1) Guidelines require evaluation of Least Environmentally Damaging Practicable Alternative (LEDPA) vis-a-vis impacts to “waters of the U.S.”
Water Quality Certificate (WQC)	Section 401 of 33 U.S.C. 1251 (the Federal Clean Water Act)	U.S. Army Corps of Engineers	Individual permit for >5,000 sf (cumulatively) of fill in (discharge to) wetlands (“waters of the United States”) and/or clearing (secondary impacts).
<b>LOCAL PERMITS</b>			
RDA / Notice of Intent / Order of Conditions	M.G.L. c.131, §40 and M.G.L. 258 of the Acis of 1996 (the Rivers Act) Norfolk Wetlands Bylaw	Norfolk Conservation Commission	Superseding Order of Conditions (a state permit under Mass. DEP) is required if the Order of Conditions issued by the Norfolk Conservation Commission is appealed.
Site Plan Approval	Norfolk Bylaws	Norfolk Planning Board	
Earthwork Permit	Norfolk Bylaws	Norfolk Board of Selectmen	
Septic System Approval	Title 5 (M.G.L. 21A, §13) and 310 CMR 15.000	Board of Health	State (DEP) approval (Groundwater Discharge Permit) will be required if system inflow exceeds 10,000 gpd.

For example, provided that the golf course or any of its appurtenances such as irrigation lines are determined to be “structures” and provided that some portion of the golf course site is now or was formerly owned by a railroad<sup>6</sup>, pursuant to M.G.L. c. 40 §54A authorization by the Secretary of the Executive Office of Transportation and Construction will be required prior to the issuance of a building permit. Similarly, a Conservation Permit under the Massachusetts Endangered Species Act (MESA) will be required only if endangered species / species habitat are determined to be present at the site

The Section 401/404 wetlands approvals will be determined by the details of project design and other factors. For example, provided that the golf course or any of its appurtenances such as irrigation lines are determined to be “structures” and provided that some portion of the golf course site is now or was formerly owned by a railroad<sup>7</sup>, pursuant to M.G.L. c. 40 §54A authorization by the Secretary of the Executive Office of Transportation and Construction will be required prior to the issuance of a building permit. Similarly, a Conservation Permit under the Massachusetts Endangered Species Act (MESA) will be required only if endangered species / species habitat are determined to be present at the site.

Some of the listed “permits” are notifications required prior to the start of construction. These include the asbestos abatement / building demolition notifications required by DEP, which notifications generally are made by the contractor not less than 30-days prior to commencing work. If site clearance is completed by the current property owner prior to work by contractors on behalf of the town of Norfolk, these notifications will be the responsibility of the current Owners’ contractor. A final determination of the need for environmental permits and other permits by the Town of Norfolk can be made only after the execution of purchase and sale agreements for the parcels comprising the site, a thorough reconnaissance and evaluation of the site, and the progression of project design to not less than 50% completion.

Pursuant to the Massachusetts Environmental Policy Act (MEPA - M.G.L. c. 30 §§61-62H) projects that require the issuance of state permits or which will receive state funds are subject to review prior to the issuance of permits or funding. In effect, the MEPA process, which typically requires from nine months to one year to complete, functions a “gatekeeper” for state permits or funding. Of the various state agency issued permits / approvals required for the development of the proposed Norfolk Municipal Golf Course it is the Water Management Act permit required for the withdrawal of >100,000 gallons per day (gpd) of water for irrigation purposes that triggers the MEPA process. While other permits or approvals by state agencies may be required for project development, it is the WMA permit that exceeds the review thresholds of c. 30 §61-62H and gives rise to the need for MEPA review. If existing water supplies could be used to provide all or a significant component of the required water volume for irrigation such that either no new or amended withdrawal permit were required, then full MEPA review potentially could be avoided<sup>8</sup>. This circumstance also could occur if existing water rights held by the current property owners

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<sup>6</sup> Plans reviewed by Earth Tech in conjunction with its preparation of this report indicate that land in the northeast section of the site in the vicinity of the proposed 5<sup>th</sup> green, either currently or previously, may have been owned by the New Haven and Hartford RR, in which case c. 40 §54A may pertain.

<sup>7</sup> Plans reviewed by Earth Tech in conjunction with its preparation of this report indicate that land in the northeast section of the site in the vicinity of the proposed 5<sup>th</sup> green, either currently or previously, may have been owned by the New Haven and Hartford RR, in which case c. 40 §54A may pertain.

<sup>8</sup> Even if existing water lines can be extended to the site, the use of existing municipal supplies for golf course irrigation will be feasible only if the town currently has a sufficient water supply and it is well within the withdrawal limits set by its current WMA permit. If seasonal water use bans are in effect, the proposed use of existing supplies for golf course irrigation is likely to be controversial.

being conveyed to the Town could provide all or a significant portion of the required volume. Since it may be possible to eliminate a WMA permit requirement and thereby potentially eliminate the need for full MEPA review, exploration of the options for water supply, especially the nature and quantity of water rights reportedly held by the current property owners, will be an important early action in the design and permitting process. Also, since the WMA permitting process is inherently a lengthy one, in the interest of the overall project schedule, water supply options that might eliminate the need for a WMA permit warrant careful consideration.

The MEPA process is initiated by the filing of an Environmental Notification Form (ENF), a document that describes the project and environmental conditions at the site, and identifies the permits that will be required for project development. Pursuant to review of the ENF by the MEPA Unit of the Executive Office of Environmental Affairs, including consideration of comments received from state agencies and the public at large, the Secretary of Environmental Affairs will issue a determination (the "Secretary's Certificate") concerning the scope of review that is appropriate to the proposed project. Virtually all golf course projects that are subject to MEPA review (i.e., require a state permit, typically the WMA permit required for irrigation water supply) require the preparation of an Environmental Impact Report (EIR), since golf course development inherently requires the direct alteration of more than 50 acres of land, a threshold of site disturbance that automatically triggers the requirement for an EIR.

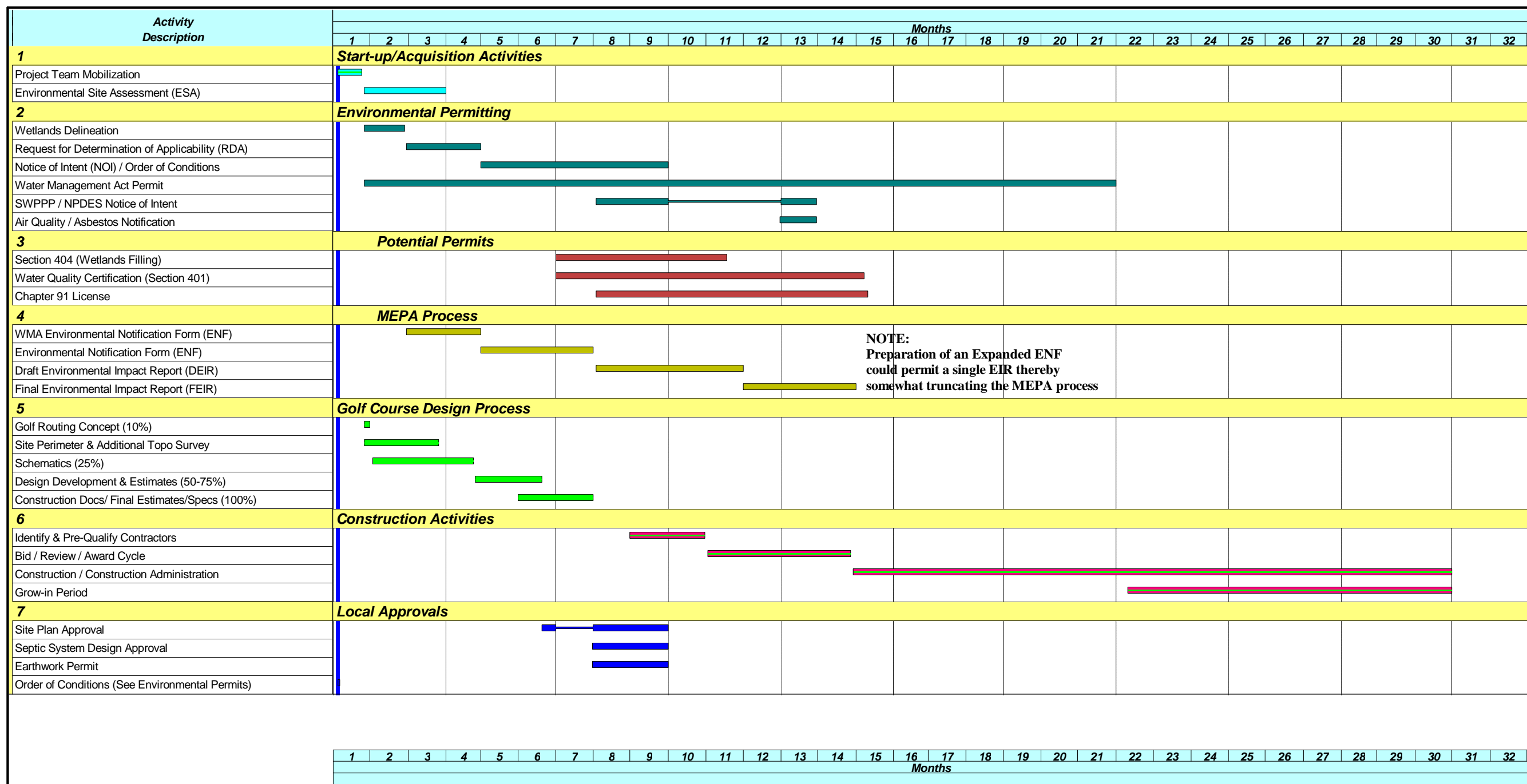
Whereas in the case of privately sponsored / funded projects, the scope of MEPA review is limited by the statute to the subject matter of the state permits required to develop the project, in the case of publicly sponsored projects, the scope of MEPA review is comprehensive and includes considerations well beyond the realm of the specific permits that are required for project development. Thus, the scope of MEPA review for a private golf course project that requires only a Water Management Act permit for the development of on-site irrigation wells would be limited to the potential effects of the proposed water withdrawal on the groundwater regime, potential impacts to resource area such as wetlands, and possible effects on other nearby water supply wells. On the other hand, the scope of MEPA review for the proposed publicly funded Norfolk Golf Course (assuming that a WMA permit is required) will include environmental concerns well beyond the interests of specific state permits including, but not limited to: traffic, air quality, archaeological resources, etc.

#### **Permit Schedule:**

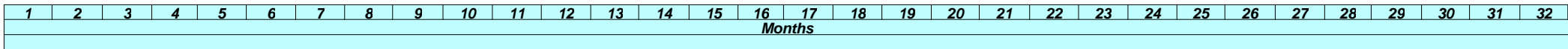
Whether or not required permits can be secured quickly enough to ensure a playable golf course by Summer 2004 is a function of numerous variables that are beyond the control of the Town or its consultants. Potential obstacles to meeting the permitting schedule include citizen appeals of permits such as the wetlands Order of Conditions, delays in the WMA permitting process, weather conditions affecting construction or the acquisition of information pertaining to wetlands or other natural resources, requirements regarding the seasonality of certain resource assessments (e.g., vernal pool identification in the early spring), protracted agency reviews, or problems associated with control of additional parcels required to complete the assembly of the site for the golf course. It also appears that additional perimeter and topographic survey will be required to complete the base mapping necessary to support project design and permitting. Delays in the acquisition of this information could precipitate delays in the design and permitting schedule.

Attached is a preliminary schedule for design, permitting, and construction of the golf course. This schedule is based on experience with similar projects. Nonetheless, the schedule is “optimistic” in that it predicts the acquisition of a WMA permit in less than two years and a construction / grow in period of 16 months duration (CSM estimates 20 months). This schedule also is predicated on the assumption that local boards and commissions charged with issuing permits and approvals for the project will adopt a “cooperative posture” with regard to this project. Additionally, the schedule presumes that public opposition to the project will be limited and that no appeals of permits or extensions to permitting timelines will occur.

Clearly, meeting the goal for a playable course by Summer 2004 requires immediate action on the WMA permit. If, as discussed above, there are viable water supply options that avoid the need for a WMA permit for the golf course irrigation system, this will have important positive implications for the project schedule. With no WMA permit requirement, it is likely that the MEPA process would conclude with the Secretary’s Certificate on the ENF. Once the MEPA process has been satisfactorily completed, state agencies may release permits for, or take other actions in support of (i.e., funding), the project.



**NOTE:**  
Preparation of an Expanded ENF could permit a single EIR thereby somewhat truncating the MEPA process



**Preliminary Design, Permitting  
& Construction Schedule**

**Norfolk Golf Course**



## PRELIMINARY DEVELOPMENT COST ESTIMATES

Cornish, Silva and Mungeam (CSM) has prepared a preliminary routing concept for the golf course. The course is designed to be a par 70 at 6560 yards from the back tees.



CSM has estimated the cost for its construction at \$3,750,000. Tim Gerrish of CSM has stated that this estimate reflects the added cost associated with the earthwork that will be required to construct the golf holes in the steeply sloped areas on the east side of the Mill River. Additionally, this estimate includes the cost of wetlands crossing as required to complete the course.

In addition to the cost of constructing the golf course itself, the project involves the construction of a turf management facility, a cart storage / charging building, and a clubhouse with associated parking. Utility requirements include a septic system, power supply upgrades, and water supply development, delivery, and distribution systems.

In the Table on the following page, Earth Tech has summarized the estimated cost for constructing the project, and provides an estimate for the associated "soft" costs including design, permitting, and project management.



**PRELIMINARY ESTIMATE TO CONSTRUCT A GOLF COURSE ON THE LAWRENCE STREET SITE**

ITEM / ACTIVITY	Cost Range (000s)	ASSUMPTIONS / COMMENTS
<b>Hard Costs</b>		
18-hole Golf Course*	\$ 3,425 - \$ 3,750	Includes two wetland crossings, dam crossing & earthwork premium
Water and Power Supplies	\$ 100 - \$200	Allowance for 3-phase power and irrigation pump system
Turf Management Building**	\$120 - \$ 350	Range includes allowance for renovation of existing 6,000 sf building to new 7,200 sf building with fuel and materials storage
Cart Storage Building***	\$0 - \$ 250	Range includes: allowance for cart vendor to remodel existing building at no charge to the Town to building a new 2,500 sf building for 65 carts with charging systems. Range includes: allowance for remodeling the 1500 sf existing building at \$25 / sf to building modular building(s) with M&F lockers, toilet facilities, pro shop, and snack bar / grill
Clubhouse****	\$ 37.5 \$ 250	Allowance
Septic System	\$ 7.5 - \$ 15	Allowance
Sitework (Parking and Landscaping)	\$ 75 - \$ 275	Range includes: allowance for 100 gravel parking spaces at \$400 per space + site landscaping to more elaborate paved parking spaces (150) at \$1,500 per space + site landscaping
<b>Hard Costs SubTotal</b>	<b>\$3,765 - \$5,090</b>	<b>TOTAL HARD COSTS</b>
<b>Soft Costs</b>		
Course Design, Survey & Engineering	\$ 225 - 250	Allowance
MEPA Process, Permits, local approvals	\$ 225 - 250	Allowance - Includes WMA pump tests for irrigation wells
Building Design & Site Engineering	\$25 - \$100	Lower range assumes use of existing buildings, higher range assumes new buildings.
<b>"Soft Costs " SubTotal</b>	<b>\$475 - \$600</b>	
Project / Construction Management	\$250	Allowance based on 2 -3 proposals received by Town of Norfolk
<b>Total</b>	<b>\$ 4,490 - \$ 5,975</b>	<b>SAY \$4.5 to \$6.0 Million</b>

\* Estimate by Cornish, Silva, Mungeam

\*\* Not including mowers and other equipment.

\*\*\* Not including 65 golf carts. Cost carts are assumed to be leased.

\*\*\*\* This cost is for modular buildings (trailers). Costs for construction of a permanent clubhouse are estimated to be from \$100 to \$150 per square foot depending on building program (e.g., size of kitchen) and levels of finish.

**Notes:**

- Costs do not include land acquisition or legal fees.
- Phase and I II Environmental Site Assessment Costs are assumed to borne by current land Owners.
- Lower range of cart storage building assumes that cart vendor will renovate existing space for cart storage and recharging at no cost to Town.
- It is assumed that the current Owners will be responsible for building demolition (including removal of slabs / foundations), asbestos abatement, and any additional site cleanup as may be determined to be necessary pursuant to M.G.L. c. 21E.

**Source: Earth Tech, November 2001**

The low-end range estimate for project development is based on program information provided by the Norfolk Golf Committee. It includes the assumption that the parking lot will be gravel; that the “clubhouse” will consist of only a pro shop, toilet facilities, and a starter’s office; and that the cart storage, turf management, and pro shop will be housed in existing structures that can be adapted for these uses at nominal cost.

The low-end estimate of project cost assumes that the town will lease a fleet of approximately 65 electric golf carts that will be stored on site in an existing building that will be fit up and equipped with re-chargers by the golf cart vendor from whom the Town will lease the carts. The turf management building will require aboveground fuel storage facilities to permit on-site refueling of mowers and other maintenance equipment.

An environmental site assessment to ascertain if oil or hazardous materials are present will be required prior to the town’s acquisition of the site. This will include all parcels that are acquired to assemble the complete project site. It is assumed that a Phase II site investigation (soil corings, sample recovery and laboratory analysis) will be necessary in the soils beneath the existing buildings. The cost of these “due diligence” activities, which is assumed to be part of the land acquisition cost, has been estimated at \$10,000 and \$25,000, respectively.

The estimate of the costs for project management and construction supervision are based on two of three proposals received by the town pursuant to its September 2001 Request for Proposals (RFP).

The high-end estimate of project costs (\$6,000,000) assumes that the cost of course construction is at the high end of the range (\$3,750,000 as estimated by CSM) and that building renovation costs are higher than expected. Higher renovation costs could arise if it is determined, following a thorough interior inspection, that the condition of existing buildings is not as good as expected, or that the extent of the required renovations to convert the buildings to their proposed uses is greater than currently anticipated. Additionally, the higher end cost estimate assumes a larger and more fully equipped clubhouse including locker facilities and a snack bar, and it assumes that the cost for the renovation and electrical of the cart storage building would be the responsibility of the Town and not the vendor of the carts (as assumed in the lower end estimate).

Permitting costs, which are not materially affected by the project program, are based on experience in similar projects requiring a WMA permit and Environmental Impact Report under MEPA.

Course design, engineering, and survey is an allowance derived from the cost estimate prepared by CSM and Earth Tech’s experience with projects of similar scope and scale.

One final note...these estimates necessarily are based on the limited information currently available both with respect to site conditions as well was with regard to the town’s intentions for the construction of a clubhouse and related golf course facilities within existing buildings. A reliable estimate of actual line item costs must await additional information on site conditions, further design and facilities programming, a thorough assessment of the adaptability of existing buildings for proposed uses, and the specification of materials and finishes.

# FINANCIAL ANALYSIS

The objective of this section is to provide a reasonable range of operating performance parameters for the proposed Town of Norfolk 18-hole Golf Course.

NGF Consulting has prepared cash flow model(s) that are based on the assumption of the development of a good-quality affordable public golf facility. Development components should include an 18-hole regulation length golf facility, a quality short game/practice facility, (hopefully space can be created for a 20 to 30 tee golf range), clubhouse/pro-shop and outdoor tent or structured pavilion to accommodate group and community functions. Initially, the operation can be served out of a doublewide trailer. A more elaborate clubhouse should be assessed in context with the potential for outings, special events meeting and weddings etc. NGF Consulting would recommend that the demand for banquet and function space be more fully studied to determine optimal sizing and space requirements. Based on other studies that NGF Consulting has conducted, banquet and function space can be very profitable.

## ACTIVITY LEVELS

- All projections assume a golf course designed, constructed, and operated at or above the level of existing regulation length public access golf courses in the market area.
- Activity levels have been estimated based on current market characteristics.
- The 18-hole facility will have play divided by weekday, weekend, tournament/outing, league, 9-hole, twilight and other discounted play.
- Additionally, Town of Norfolk residents will receive a discount on green fees.

## PROPOSED FEE SCHEDULE

The following general assumptions have been used in the development of NGF Consulting's cash flow model:

- This golf facility is expected to generate approximately 38,000 rounds of golf on an annual basis once it reaches stabilization. However, ***it is not anticipated that this will occur immediately***. It is projected that rounds of play will stabilize by the ***fifth year of operation***.
- Green fees used to develop the cash flow estimates were established in context with existing facilities in the market area. The rate structure utilized in the financial projections is quoted in 2001 dollars, even though the facility is not likely to open before 2003 or 2004. The fee schedules may require some modification based upon market conditions and other factors at the point the proposed course is ready to open.

The fee structure assumptions for the facility are as follows:

<b>FEE ASSUMPTIONS **</b>		
	<u>Initial year with Start-up discounts</u>	<u>Stable Year</u>
18-hole Weekday Fees Non-Resident	\$32.00	\$40.00
18-hole Weekend Fees Non-Resident	\$42.00	\$48.00
18-hole Weekday Fees Resident	\$25.00	\$25.00
18-hole Weekend Fees Resident	\$30.00	\$30.00
Golf Outing/Tournament Fees	\$40.00	\$40.00
League Fees	\$16.00	\$16.00
Average for Discount/9-hole/Twilight fees	\$20.00	\$20.00
Cart Fees	\$14.00	\$14.00
Average Food & Beverage Per Round)	\$3.50	\$3.50
Average Merchandise Sold Per Round	\$2.00	\$2.00
Other Revenue Per Round	\$1.50	\$1.50
<b>** All fees expressed in 2001 Dollars</b>		
<b>Source: NGF Consulting, Inc.</b>		

- Green fees have been conservatively projected to increase by approximately five percent every other year after the first year.
- Cash flow from the various departmental income sources (pro shop, food and beverage, and the other) will accrue to the Town.
- Once the facility has reached a stable year of operation, assumed to be year five, the distribution of rounds is expected as follows:

<b>ASSUMPTIONS - STABLE YEAR ROUNDS DISTRIBUTION</b>	
<b>Category</b>	<b>Percent Distribution</b>
<b>Non-Resident</b>	
18-hole Weekday Rounds	20%
18-hole Weekend Rounds	30%
<b>Resident</b>	
18-hole Weekday Rounds	3%
18-hole Weekend Rounds	6%
<b>Other</b>	
Golf Outing/Tournament Rounds /Leagues	20%
Discount / Twilight / 9-hole	20%
Complimentary play	1%
Total Rounds	100% 38,000 rounds
<b>Source: NGF Consulting</b>	

Operating Cost Assumptions:

- NGF Consulting has assumed a moderate food and beverage operation that would include a grill, snack bar, full beverage selection and vending items. Cost of goods sold for the food and beverage concession is projected to be 40 percent of

revenues. Staffing (seasonal labor) for the snack/bar grill is assumed to cost \$40,000 including benefits.

- Soft goods, balls and other accessories will most likely be the primary merchandise sold in the proposed facility's shop. Cost of goods sold in the golf shop is estimated at 60 percent of the pro shop revenues.
- Golf shop expenses include staffing and management expenses to operate the golf course.
- General administrative expenses, insurance and marketing/promotion are consistent with industry norms for this type of facility. An ongoing marketing and promotional budget is critical to establishing a successful facility.
- Other expenses are projected at 25 percent of other revenues; primarily to cover the cost of ball replacement and other related expenses each year. Personnel related to the practice facility and short game area are reflected in the overall golf shop staffing.
- Golf course maintenance expense include staffing, management expenses and chemicals / supplies to maintain the golf course.
- The facility will lease 65 carts at an annual per cart rate of \$1000, including cart maintenance for the first year. The maintenance contract for the second year is projected at \$300 per cart, which will increase at 2.5 percent annually through the fifth year of operation.

<b>CART LEASE AND MAINTENANCE COSTS</b>	
Number of Carts	65
Lease Rate Per Cart	1000
Cart Lease Payment	\$65,000
Maintenance Per Cart	\$300
Cart Maintenance Total	\$19,500
<b>TOTAL</b>	<b>\$84,500</b>

- Expected cart utilization is estimated to be at 60 percent of all 18-hole play and 25% of all 9-hole, twilight and discount play. Thus, overall cart utilization is estimated to occur on approximately 50 percent of total rounds.
- A reserve for capital improvements has been estimated at 2.5 percent of gross revenue starting in Year 2 of operation. This reserve is for the replacement of short-lived items such as furniture, fixtures, and equipment associated with the operation of the facility, as well as improvements/modifications to the course.
- A year-one contingency of \$200,000 has been added to account for any problems that may occur relative to grow-in and allowing for coverage of typical first year problems and adjustments.

## **CASH FLOW FROM OPERATIONS**

On the following page, NGF Consulting's estimate of operating performance is presented:

<b>Town of Norfolk Golf Course (Expected Case Scenario)</b>					
<b>18-hole Public Course</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Revenue</b>					
Green Fees	901,500	1,109,000	1,129,500	1,223,500	1,310,800
Cart Fees	178,710	199,710	208,834	218,239	234,683
Merchandise	57,000	65,920	72,141	78,676	85,539
Food & Beverage	99,750	115,360	126,247	137,684	149,693
Practice Center/ Range/Other	42,750	49,440	54,106	59,007	64,154
<b>Total Revenue(1)</b>	<b>1,279,710</b>	<b>1,539,430</b>	<b>1,590,828</b>	<b>1,717,106</b>	<b>1,844,868</b>
<b>Cost Goods Sold</b>					
F&B 40%	39,900	46,144	50,499	55,073	59,877
Merchandise 60% (2)	34,200	39,552	43,285	47,206	51,323
<b>Gross Profit</b>	<b>1,205,610</b>	<b>1,453,734</b>	<b>1,497,044</b>	<b>1,614,827</b>	<b>1,733,668</b>
<b>Expenses</b>					
Golf Shop	250,000	275,000	281,875	288,922	296,145
Food & Beverage	40,000	41,200	42,230	43,286	44,368
General and Administrative	65,000	66,950	68,624	70,339	72,098
Marketing	40,000	44,000	45,100	46,228	47,383
Insurance	30,000	30,900	31,673	32,464	33,276
Golf Car Lease and Maintenance	65,000	84,500	84,988	85,487	85,999
Golf Course Maintenance	500,000	550,000	563,750	577,844	592,290
Reserve for Replacement (2.5% of Revenues)	0	32,000	38,500	39,800	42,900
Year One Operating Contingency	200,000				
<b>Total Expenses</b>	<b>1,190,000</b>	<b>1,124,550</b>	<b>1,156,739</b>	<b>1,184,370</b>	<b>1,214,459</b>
<b>Net Operating Income before Debt Service</b>	<b>\$15,610</b>	<b>\$329,184</b>	<b>\$340,306</b>	<b>\$430,457</b>	<b>\$519,209</b>
<b>Assumptions:</b>					
<b>Rounds (3)</b>					
<b>Non-Resident</b>					
18-hole Weekday Rounds	7,000	7,100	7,100	7,200	7,600
18-hole Weekend Rounds	10,000	10,000	10,200	10,800	11,400
<b>Resident</b>					
18-hole Weekday Rounds	1,700	1,800	1,200	1,200	1,300
18-hole Weekend Rounds	2,500	2,600	2,000	2,300	2,400
<b>Other</b>					
Golf Outing/Tournament Rounds (4)	1,000	3,000	3,400	3,600	3,800
Leagues	800	2,150	4,900	5,400	5,700
Discount / Twilight/9-hole	5,000	5,100	5,100	5,400	5,700
Complimentary play (5)	500	250	100	100	100
<b>Total Rounds</b>	<b>28,500</b>	<b>32,000</b>	<b>34,000</b>	<b>36,000</b>	<b>38,000</b>
	28,500	32,000	34,000	36,000	38,000
<b>Fees (6)</b>					
18-hole Weekday Fees Non-Resident	\$32.00	\$40.00	\$40.00	\$42.00	\$42.00
18-hole Weekend Fees Non-Resident	\$42.00	\$48.00	\$48.00	\$50.00	\$50.00
18-hole Weekday Fees Resident	\$25.00	\$25.00	\$30.00	\$30.00	\$32.00
18-hole Weekend Fees Resident	\$30.00	\$30.00	\$35.00	\$35.00	\$38.00
Golf Outing/Tournament Fees	\$40.00	\$40.00	\$42.00	\$42.00	\$43.00
League Fees	\$16.00	\$16.00	\$17.00	\$17.00	\$18.00
Average for Discount/9-hole/Twilight fees	\$20.00	\$20.00	\$21.00	\$21.00	\$22.00
Cart Fees	\$14.00	\$14.00	\$14.25	\$14.25	\$14.50
Cart Ridership Percentage 18-hole play	60%	60%	60%	60%	60%
9-hole, league and twilight	25%	25%	25%	25%	25%
Average Food&Beverage Per Round (7)	\$3.50	\$3.61	\$3.71	\$3.82	\$3.94
Average Merchandise Sold Per Round	\$2.00	\$2.06	\$2.12	\$2.19	\$2.25
Other Revenue Per Round	\$1.50	\$1.55	\$1.59	\$1.64	\$1.69
<b>Average Revenue Per Round</b>	<b>\$44.90</b>	<b>\$48.11</b>	<b>\$46.79</b>	<b>\$47.70</b>	<b>\$48.55</b>
1) Assumes experienced management team is in place at opening; management fees are implicit in golf shop and maintenance figures.					
2) Projections assume mostly soft goods are sold in golf shop.					
3) Annual rounds estimates reflect resident population levels and growth, location, course quality, management, and market comparables.					
4) Golf outings and tournament rounds will require a marketing effort.					
5) Complimentary rounds higher at inception than lower as the facility operation matures.					
6) Fees represent April 1 to November 30 operating season.					
Fee Increases every other year as noted; Expenses at 2.5% annual growth.					
(7) Food and beverage and merchandisespending per round increase at 3.5%per year.					
Source: NGF Consulting, November 2001					

Concluding points from the cash flow from operations table:

- Gross revenue potential from \$1.3 million in year one to \$1.8 million in year five. Other recently constructed municipal golf courses in the State of Massachusetts provide context:
  - Acushnet River Valley at Acushnet - year 3 of operations: \$1.3 million
  - Olde Scottish Links at Bridgewater - year 4 of operations: \$1.6 million
  - Old Barnstable - year 9 of operations: \$1.7 million
- Total operating expenses from \$1.19 million (because of high first year contingency) in year one to \$1.2 million in year five. These levels appear to be in line with similar municipal golf course operations in other parts of the state of Massachusetts as shown below.
  - Acushnet River Valley at Acushnet - \$1.4 million
  - Olde Scottish Links at Bridgewater - \$1.1 million
  - Old Barnstable - \$1.2 million
- Cash flow from operations is expected to grow from \$15,000 in year one to \$519,000 by year five.

A breakeven operational analysis is presented below:

<b>OPERATIONAL BREAKEVEN ANALYSIS</b>					
	Year 1	Year 2	Year 3	Year 4	Year 5
Total Projected Expenses (incl. Cost of Sales)	\$1,264,100	\$1,210,246	\$1,250,522	\$1,286,649	\$1,325,659
Total Projected Rounds	28,500	32,000	34,000	36,000	38,000
Average Expense Per Round	\$44.35	\$37.82	\$36.78	\$35.74	\$34.89
Total Projected Revenues	\$1,279,710	\$1,539,430	\$1,590,828	\$1,717,106	\$1,844,868
Total Projected Rounds	28,500	32,000	34,000	36,000	38,000
Projected Revenue Per Round	\$44.90	\$48.11	\$46.79	\$47.70	\$48.55
Total Projected Expenses	\$1,264,100	\$1,210,246	\$1,250,522	\$1,286,649	\$1,325,659
Projected Revenue Per Round	\$44.90	\$48.11	\$46.79	\$47.70	\$48.55
Breakeven Rounds Required	28,152	25,157	26,727	26,975	27,306

Source: NGF Consulting, Inc. November 2001

## SENSITIVITY AND WARRANTED INVESTMENT ANALYSIS

Other than cost of goods, most all other golf course expenses are relatively fixed. Thus, increases or decreases in rounds played in any given year can have a significant impact on the cash flow of the facility and ultimately the cash flow needed to retire the capital investment.

NGF Consulting has run the operating cash flow model modifying rounds played by ten percent more or ten percent less than the expected scenario. By year five, the stabilized year, cash flows vary \$155,000 above or below the expected case simply based on varying rounds played by ten percent.

It is not unrealistic to expect that rounds could vary by as much as ten percent in any given stabilized operating year due to uncontrollable conditions such as weather, economic recession, poor turf conditions due to disease or frost, renovations, etc. According to NGF Consulting's interviews, the golf courses pertaining to the Town of Norfolk's market area are down about 10 percent this year due to precisely these types of uncontrollable conditions. The corollary is also true, in years past courses have also been up 10 to 15 percent when conditions were very favorable.

<b>TOWN OF NORFOLK GOLF COURSE - NOI SENSITIVITY TO ROUNDS PLAYED</b>					
<b>18-hole Public Course</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b><i>NOI Before Debt Service</i></b>					
Rounds Played plus 10 Percent over Expected = 41,800 rounds	\$28,200	\$343,200	\$442,200	\$576,400	\$674,100
Expected Case = 38,000 rounds	\$15,600	\$329,200	\$340,300	\$430,500	\$519,200
Rounds Played minus 10 Percent under Expected= 34,200 rounds	\$3,100	\$315,200	\$238,400	\$284,500	\$364,200

Source: NGF Consulting, Inc.

When considering the level of capitalization that a golf course can support, NGF Consulting **focuses** on the anticipated stable year of operations. This is the anticipated ongoing level of operating cash flow that can be used to retire long-term debt and capitalized interest incurred during the ramp-up period to stabilization.

The formula for the NGF's warranted investment analysis is:

- Identify the average stable year cash flow
- Decrease that cash flow by 1.25 times to meet the coverage requirements of bond indebtedness.
- Divide the covered cash flow by the anticipated cost of debt (interest rate of debt). This yields a warranted investment value that must be sufficient to cover land costs, the costs of the bond issue, the cost of planning/design/development and finally the



anticipated capitalized cost of the interest expense in the early years that is not covered by operating cash flow.

This analysis is not as comprehensive as doing a twenty year detailed cash flow analysis that includes debt reduction and capitalized interest. That level of analysis can be done later once this level of analysis demonstrates that the major anticipated cash flow and capital expense items are in relative balance.

NGF Consulting has structured the warranted investment analysis at a cost of debt of 4.25 percent and 6.0 percent to show the impact on the level of warranted investment if rounds are ten percent higher than expected, as expected or ten percent lower than expected.

<b>TOWN OF NORFOLK GOLF COURSE</b>		
<b>Warranted Investment Analysis</b>		
Interest Rate on Debt	4.25%	6%
Income Coverage Ratio	1.25	1.25
Warranted Investment if rounds are 10 % higher than projected	\$ 12,700,000 1/	\$ 9,000,000 1/
Warranted Investment if rounds are as projected	\$ 9,800,000 2/	\$ 6,900,000 2/
Warranted Investment if rounds are 10 % less than projected	\$ 6,900,000 3/	\$ 4,900,000 3/
1/ Stable Year NOI with Rounds plus 10 Percent = NOI of \$674,100; stable year rounds equal 41,800		
2/ Stable Year NOI with Expected Rounds = NOI of \$519,200; stable year rounds equal 38,000.		
3/ Stable Year NOI with Rounds less 10 Percent=NOI of \$364,200; stable rounds equal 34,200.		

Source: NGF Consulting, Inc.

NGF Consulting concludes that the most prudent level of capitalization for the proposed Town of Norfolk Golf Course would be in the \$6 to \$8 million range. Development and permitting costs are estimated at \$5.0 million. Additional costs that must be capitalized include land, bond issuance costs and capitalized interest expense.

Certainly arguments could be made that a running level of \$675,000 to \$750,000 in NOI could be obtained and that this course could generate sufficient income to retire \$ 9 to 12 million of capitalized debt. However, in NGF Consulting's opinion, the risks do not warrant the rewards. Additional perspective is drawn from municipal golf courses built and operated in communities that are not too different from the Town of Norfolk; Acushnet, Bridgewater and South Hadley.

### **Town of Acushnet**

The Town of Acushnet, located outside of New Bedford, is about the same size as Norfolk, with a 2000 population of 10,161. The Acushnet River Valley Golf Course opened in 1998. The Town paid \$1.6 million for the land. The golf course is beautiful and is in good condition. The course is operated out of a temporary clubhouse until such time as revenues warranted construction of a golf clubhouse.

The total capitalized costs were \$6.8 million that included the land purchase and the golf course construction. After a couple of years of outside management and less than desired results, the course is now being operated by the Town.

Acushnet operating results through the last fiscal year ending June 30 (2001) were not as good as hoped for or expected. On gross revenues of \$1.3 million the Town expended over \$1.4

million. Golf is very much a service business. Developing a strong operational team is paramount to success. Acushnet is struggling to find that successful operational team.

### **Olde Scottish Links at Bridgewater**

In contrast to Acushnet, the Town of Bridgewater has enjoyed a very successful golf course operation. The course is close to Route 24 and enjoys a large market area. The Town of Bridgewater is larger than Norfolk, population 25,185. Since opening in 1997, the course has improved operating performance every year. In 2000, the course played 41,000 rounds, generated \$1.6 million in revenues and 1.0 million in expenses. This year the golf course is reportedly doing even better and is expected to achieve 43,000 rounds. Strong operating results have led to the Town evaluating the addition of a 10,000 square foot clubhouse that will cost \$2.0 to \$2.4 million. The clubhouse would not be considered if the course were not performing well.

The land for the golf course was acquired in 1979 for \$2.5 million. The cost to develop the golf course, turnkey was \$5.0 million. Since the land was acquired years ago, the capitalized debt is only \$5.0 million. The golf course is flourishing.

### **South Hadley**

The Town of South Hadley, with a population of 17,125, has just opened a new golf course. The golf course was built for \$3.6 million. The land was acquired through the assistance of the Massachusetts State Office of Environmental Affairs. Total capitalized costs for the course subject to the bond issue are \$5.6 million. Although too early to tell, this level of capitalization with a quality golf course has all the earmarks for success.

### **Conclusions**

The level of warranted investment is very sensitive to the bond interest rate. The lower the bond interest rate the higher the capital investment that is warranted. At a 4.25 percent cost of debt the warranted investment level target is roughly \$9 to \$10 million. At a 6.0 percent cost of debt (figure used in June of 2001) the warranted level of investment would be more in the \$6 to \$7 million range. An investment level of \$7 to \$9 million would be considerably higher than the experience of other recent municipal projects in the state.

The challenge that Norfolk may have is finding a way to pay for the land. Given an anticipated construction and permitting process of \$ 5 to \$6 million, a \$7 to \$9 million level of warranted investment may not leave sufficient room for land acquisition after setting aside funds for bond issuance costs and reserves to cover interest expenses in the early years of operations.

Because golf has the potential to add much to the community (open space, recreation, and bird and wildlife sanctuary), NGF Consulting encourages that additional creative ways be explored to acquire the land. State grants (like the Town of South Hadley obtained), environmental clean-up grants, perhaps even some form of mixed use development may need to be considered to help offset land costs.

# Appendix

APPENDIX TABLE 1

## ESTIMATE OF PUBLIC ACCESS ROUNDS IMPACT BY MARKET RING

Club Name	Distance From Norfolk (miles)	Rounds	Core (5-Mile)		Primary (5 - 10 miles)		Secondary (10 - 15 miles)		Total
			%	#	%	#	%	#	
<b>Public Access Regulation Length</b>									
Maplegate CC	5.7	35,000	20%	7,000	60%	21,000	20%	7,000	35,000
Glen Ellen CC	5.8	37,000	20%	7,400	60%	22,200	20%	7,400	37,000
Brook Meadow CC	8.1	39,000	10%	3,900	50%	19,500	40%	15,600	39,000
New England CC	10.4	36,000	10%	3,600	50%	18,000	40%	14,400	36,000
Ponkapoag 36-holes	11.6	80,000	10%	8,000	20%	16,000	70%	56,000	80,000
Subtotal		227,000		29,900		96,700		100,400	227,000
<b>Semi-Private- Public Access</b>									
Foxboro CC	6.4	25,000	10%	2,500	70%	17,500	20%	5,000	25,000
Wentworth CC	7.9	25,000	10%	2,500	70%	17,500	20%	5,000	25,000
Hopedale CC 9-holes	10.0	35,000	10%	3,500	50%	17,500	40%	14,000	35,000
Norton CC	11.6	35,000	10%	3,500	50%	17,500	40%	14,000	35,000
Subtotal		120,000		12,000		70,000		38,000	120,000
<b>Public Access Shorter Courses - Lower Fees</b>									
Pinecrest GC	8.9	36,000	10%	3,600	60%	21,600	30%	10,800	36,000
Heather Hill CC 27-hole:	8.9	50,000	10%	5,000	60%	30,000	30%	15,000	50,000
Willowdale GC 9-holes	9.0	30,000	10%	3,000	60%	18,000	30%	9,000	30,000
Lost Brook GC Par -3	9.7	30,000	10%	3,000	50%	15,000	40%	12,000	30,000
Norwood CC	10.0	38,000	10%	3,800	50%	19,000	40%	15,200	38,000
Subtotal		184,000		18,400		103,600		51,200	184,000
Total		531,000		60,300		270,300		189,600	531,000

Source: NGF Consulting, November 2001

**APPENDIX TABLE 2**

**PORTION OF ROUNDS POTENTIAL THAT IS INDUCED BY  
POPULATION GROWTH**

	<b>2000 Rounds (000s)</b>	<b>2005 Rounds (000s)</b>	<b>Change 2000 -2005</b>
Core Market (5-mile ring)	80,000	91,000	11,000
Primary Market (5-10 mile ring)	290,000	318,000	<u>18,000</u> 29,000
<u>Secondary Market (10-15 mile ring)</u>	<u>665,000</u>	<u>691,000</u>	<u>26,000</u>
Total	1,035,000	1,100,00	55,000

1/ Town of Norfolk is considered a subset of the 5-mile core market.

Source: NGF Consulting, Inc.