

**Town of Acton, Massachusetts**

**Final Report  
Morrison Farm Feasibility & Preliminary Design Study**



**Architect:** **Stephen Kelleher Architects**  
57 Alden Road  
Fairhaven, MA 02719

**Civil/Structural Engineer:** **Goldsmith, Prest & Ringwall, Inc.**  
39 East Main Street  
Ayer, MA 01432

**Economic Planning:** **ConsultEcon, Inc.**  
545 Concord Avenue, Suite 210  
Cambridge, MA 02138

**Mechanical, Electrical, &  
Fire Protection Engineers:** **Garcia, Galuska, DeSousa, Inc.**  
370 Faunce Corner Road  
Dartmouth, MA 02740



## **A. Project Overview**

Design team  
Committee / Advisory Group  
Project Description  
Continuation of previous work  
Assumptions

## **B. Existing conditions report**

Buildings  
Site

## **C. Design methodology**

Design process narrative  
Design process outline

## **D. Recreation Field Studies**

## **E. Resolution of ideas into a Final Preliminary Design**

## **F. Financial and cultural issues**

## **G. Building design concepts**

## **H. Construction cost estimate**

## **I. Synopsis of Feasibility**

## **J. Conclusions**

## **APPENDICIES:**

A. Copy of Power Point Presentation May 24, 2010.



### **Design Team:**

- Stephen Kelleher Architects, Fairhaven, MA
  - Stephen L. Kelleher, A.I.A.
  - Edwin A. Sargent, A.I.A., NCARB
- Goldsmith, Prest and Ringwall, Ayer, MA
  - Bruce Ringwall, President
  - Lynwood V. Prest, PE
- Garcia, Galuska and DeSousa, Dartmouth, MA
  - Carlos DeSousa, PE
  - Edward Galuska, PE
  - Christopher Garcia, PE
  - Domenic Puniello, PE, Leed Professional
- ConsultEcon, Cambridge, MA
  - Thomas Martin, AICP
  - James Stevens

### **Town of Acton Advisors to the Design Team**

- Thomas Tidman
- Dean Charter
- Walter Foster
- Andrew Magee
- Douglas Tindal
- Steven Ledoux
- William Mullin
- Terry Maitland
- Kathy Fochtman

### **Project Description:**

In accordance with the original request for qualifications, the design team was charged with the “evaluation of existing structures, preliminary space planning, conceptual design and budgeting for public use of the buildings, evaluation of the environmental constraints, associated with the future use of the 32 acre farm for agricultural use, and for the placement of a recreation field; and developing a preliminary site plan showing activity areas, vehicular and pedestrian access, and parking.”

The Design Team reviewed available drawings and documents related to the site and buildings. A topographic site survey was undertaken and wetlands were delineated. The buildings were surveyed by architect, structural engineer, mechanical, electrical and plumbing engineers. Existing conditions documentation and reports are included in this report. A variety of options were evaluated.

This reports contains a description of the design process undertaken, the findings, three options for development that were used to explore the range of issues, the evaluation of these options, the resolution, and the final preliminary design, conceptual design options for house and barn, a discussion of the financial and cultural issues relating to the proposed development, a synopsis of the feasibility of each element included in the final design and construction cost estimates for that development.

The Appendices include specific documents related to this study, including a copy of the power point presentation at the Selectman's meeting May 24, 2010.



**Buildings:**

- House
  - Architectural
  - Structural
  - Mechanical, electrical and plumbing
- Barn
  - Architectural
  - Structural
  - Mechanical
- Outbuildings

**Site:**

- Existing site plan
- Constraints

**Meeting Notes July 30, 2009 Regarding Existing Conditions**

# STEPHEN KELLEHER ARCHITECTS

## Feasibility Study Existing Conditions: Architectural

### House:

The house was built in the early 1930's. The structure is a two story with a full basement, attic and attached enclosed porch and enclosed front entry vestibule. A portion of the porch is over a full foundation the remainder is on concrete block partial foundation. There is a wood entry deck at the rear of the house. The foundation is poured concrete the wood frame is of dimensional lumber floor of the day. Siding is wood shingles, painted. Trim is painted wood. Roof is asphalt shingles. Windows are wood windows with combination aluminum storm windows. Exterior doors are wood.

### Condition:

Roof: visual inspection from the inside revealed no leaks or sign of wood deterioration. Viewed from the exterior, the shingles are moss covered and appear worn and near the end of their effective use.

Recommended repairs. Remove existing roofing shingles, flashing and underlayment. Replace with 30 - 40 year architectural style asphalt shingles with suitable underlayment and flashing.

Foundation: Visual inspection of the foundation from both inside and out revealed no leaks or signs of deterioration. The wooden bulkhead steps and doors are in disrepair. Replacement recommended.

Walls: The exterior walls appear original. With the exception of the front entry vestibule, the interior finish is intact. No signs of water damage. It is assumed that the walls have little or no insulation. Because the interior walls finish is in reasonably good repair installing blown-in cellulose insulation will increase the energy efficiency without the replacement of the interior wall board and plaster.

### Windows and doors:

The windows are in useable condition, however, they are in need of painting. New windows and doors are more energy efficient. Recommend replacement of all windows and trim.

Exterior decks and steps the wood deck at the rear entrance was deteriorated and unsafe when inspected. The deck should be repaired immediately and replaced with a new structure when building is upgraded for future use.

Interior finish. The ceiling and wallboard of the front entry vestibule are in disrepair and require replacement. The wall and ceiling in the main house are in serviceable condition. The kitchen is dated and will need upgrading once the building use is determined. The upstairs rooms are not accessible to disabled persons and therefore not able to be used as public space. The Engineers' existing conditions report addresses the systems and fixtures.

Plumbing, electrical and mechanical See Engineers report.

The siding: The exterior siding is painted wood shingles. The paint is peeling. Repainting of the siding and trim is overdue. When re-finishing the siding and trim any areas of deterioration should be repaired or replaced. As an option, for long term durability, the shingle siding should be replaced.

First floor: The first floor is framed with dimensional lumber actual dimensions are 1.75" x 7.5" at 24" o.c., the span is 10'-10" [ the max allowable span of 2x8 @ 24" o.c. for a 50#/s.f. uniform live load (office) is The center beam is 5.75" x 7.5". The maximum span of the beam is approx 9'-0" for a uniform live load of 50#/sf

## STEPHEN KELLEHER ARCHITECTS

Second floor : The second floor was not visible for inspection it is assumed to be framed with dimensional lumber actual dimensions are 1.75" x 7.5" at 24" o.c. , the span is 10'-10"

Attic floor joists were 1.75 x 3.75 @ 24" o.c.

Rafters are 1.75 X 5.5 @ 24" o.c.

### House feasibility:

As a residence: upgrade electrical and heating , insulation windows, doors and roof and siding. Re build Deck and bulkhead. Upgrade kitchen as needed. Upgrade plumbing fixtures as needed. Refinish interior surfaces. (Lead paint and asbestos assessment and abatement if required)

House building code requirements.

### House as an office:

New hvac

New electric service and wiring including tel/data.

Second floor not handicapped accessible. The extent of construction required to install a lift or an elevator is beyond the value of the space provided and therefore deemed unfeasible.

The use of the second floor for light storage must be verified by as structural engineer/

The attic cannot be used for any storage as – is. Use of this space (for any purpose) will require structural reinforcement.

Use of the house as an office /comfort station.

Historic: Upgrades to the house may require approval from Historic Commissions.

MAAB/ ADA change in use will require compliance with Mass AAB CMR521

No public spaces upstairs.

### Chapter 34 Existing Buildings:

If the hazard index increases 1 or less allows existing building to be repaired and or altered in accordance with Chapter 34 Existing Buildings and does not required strict adherence to the code for new construction. Allows existing building systems to remain and be continued.

Hazard index for existing single family residence = 2

Hazard index for office = 2

# STEPHEN KELLEHER ARCHITECTS

## **Barn :**

The barn is balloon framed, stick-built with interior posts and beams supporting mezzanines to either side of the main doors. Structural cable ties had been added to supplement the structure.

It was determined that the structure was not suitable for re-using as an assembly space. It would be less costly to build a new barn type structure should the space be used for assembly purposes.

See Structural Notes

Architecture:

Exterior finish need re finishing, window need repair or replacement.

Roofing appears recent

Use Storage:

Building Code issues:

Chapter 34 Existing Buildings:

Because the hazard index increases 2 or more a renovated barn would have to comply with the code for new construction subject o Section 3408. This section requires that buildings constructed prior to a building code be structurally reinforced to comply with the code for new construction.

Hazard index for existing Barn Storage use = 1

Hazard index for Assembly with stage = 6

Hazard index for Assembly lecture halls = 4

Based on this requirement, it would be much less costly and more efficient to build a new assembly barn that it would to attempt the upgrade the existing minimal structure of the barn. New foundations, walls and structural systems must address seismic and lateral loads well beyond the capability of the existing structure.

## **Out buildings:**

The outbuildings were not surveyed. They are suitable for storage only and should be replaced or upgraded. At least on of the building appeared to have been moved to the site and placed on a temporary foundation. The current location of the outbuildings inhibits the development of usable circulation that will be required for additional uses at the Farm. It is our recommendation that the outbuildings be removed and new buildings constructed in a style fitting of the Farm.

## Structural Assessment of House and Barn

LOCATION: Morrison Farm  
Concord Road  
Acton, MA 01720

July, 2009

Attachments:

- Drawing "A" - Existing Plan of Barn by Stephen Kelleher Architects, Inc.
- Drawing "B" - Existing Plan of House by Stephen Kelleher Architects, Inc.

GENERAL:

This structural assessment, based on a visual walk-through only, is for the house and barn at the Morrison Farm, Acton, MA. The shed structures are excluded. The assessment will focus on the general conditions of the house and barn and their appropriateness for re-use in any of three conceptual schemes being considered for the overall site. Scheme 1 - Buildings and site are used primarily for agriculture and historic preservation. Scheme 2 - Buildings and site are used primarily for agriculture and "passive" recreation. Scheme 3 - Buildings and site are used primarily for agriculture and "active" recreation and year round community events.

The locations of the house and barn are shown in the "Building Layout" plan on the attached Drawing "A". The elevations and floor plans of the house are shown on drawing "B". The main part of the house, approximately 24'x 26', is two stories high plus a basement and walk-up attic. The front entrance, on the south wall, is a small vestibule that leads to another entry door into the Living Room. On the right side (east side) of the house is an enclosed porch running the length of that side and wrapping partially around the rear wall to the rear exit. The northeast corner of the porch has some hidden degradation and a poor foundation condition so will probably need replacement. There is no exterior or basement access into the crawl space under this section of the porch floor.

The approximately 30'x50', timber-framed barn, shown on Drawing "A", is about 14.5' tall to its eaves. It has second level lofts to either side of the roughly 12' wide center aisle through the barn, running south to north. There are no lofts at the eave level to hold the walls plumb so they have bowed outwards a few inches and are currently stabilized by front-to-back (south-to-north) steel rods or cables at about the 1/4 points along the 50' length of the barn. Its floor is a concrete slab-on-grade. The foundation, shown in the following photos, is of concrete having large stones cast in and periodically visible on the surface.



← North side  
(Rear)

Far left photo  
is the South  
side. (Front)

**Goldsmith, Prest & Ringwall, Inc.**

## SPECIFICS:

### THE BARN:

In Schemes 1 and 2 the barn is to be used primarily for storage. The existing concrete floor slab appears to be adequate for that. The foundation walls would have to be more closely checked for their adequacy. Scheme 2 proposes that a pavilion-type addition be built for community events.

If, in either scheme, there is any attempt to remove the loft floors then the studs in the four walls would have to be sistered with new studs such that they could simultaneously sustain the vertical roof and horizontal wind loads. The walls would also have to be braced such that the overall building would remain stable against the wind loads. A fifty foot long x fourteen and a half foot high wall is too big to resist wind without intermittent, perpendicular bracing or walls along its length. The roof framing, tops of the walls, bracing and existing rod or cable ties would also have to be examined for their structural adequacy.

If the lofts are left in place there will still be a need to determine their live load capacities and physical conditions along with examining the roof framing, studs, existing lateral bracing, tops of the walls and existing rod or cable ties for their structural adequacy. The use of the lofts and need for upgrading will depend on the probable live loads that will occur.

If a building addition is connected to the barn then the mutual affects on each other has to be examined. That will require some level of modification to the barn. If the barn is *not used at all* it still needs a detailed structural review to be sure it remains a safe and stable structure against snow and wind loads. The planned use of the whole site is community oriented so every structure on the premises has to remain structurally sound for the uses intended.

In Scheme 3 the barn is to be demolished. That also, depending on cost comparisons, may be better than renovating it for the other scheme uses. The work and cost depends on the degree of renovation that will be needed for those purposes. A proper start is to determine what is needed just to restore its structural integrity as a *public* barn. Public use barns fall under the domain of the building code. Farm barns do not.

### THE HOUSE:

The house, like the barn, must be examined more carefully for its physical condition and the floor framing be analyzed for their respective, existing floor load capacities. Then determinations can be better made toward its re-use or not. At least part of the existing porch is in a degraded structural condition.

The house under Scheme 1, except for removal or restoration of the degraded porch and its foundation, can be left as is for use as a residence only. It needs cosmetic and energy conservation work along with plumbing and electrical upgrades. If structural changes are needed or made then that framing would have to be reviewed for its capacity under the current building code.

Under Scheme 2 the house is being considered for use as a farm stand/store. The existing framing, door sizes, bathrooms and room sizes are totally inadequate to that purpose. The floors that are open to the public have to be good for a 100 psf live load. None of these floors meet that criteria and the cost for upgrading floor framing and enlarging rooms and rest rooms would be more expensive than demolishing the house and replacing it with an appropriate building.

Under Scheme 3 the house is intended for office use and some possible public use. Any use by the public for gatherings and rest rooms puts the live load near or at the 100 psf live load and the attendant problems described in the previous paragraph. If the house is used strictly as an office the live load will be 50 psf. There is a possibility that the house could be economically renovated for that purpose. The attic

could not be used for storage of paper files. The two floors would need significant structural upgrading to attain a 50 psf live load capacity and the entry access, doors and bathrooms would have to be converted to accommodate the handicapped. Vertical access between floors may also be a requirement.

Except for Scheme 1 the likelihood of re-using the house is remote and based strictly on what the costs will be for its conversion to the uses of Schemes 2 and 3. The required architectural, plumbing, HVAC, sprinkler and electrical upgrades just add more cost to that for the structural renovations. The physical size and configuration of the house may not lend itself to the desired uses for all of the Schemes.

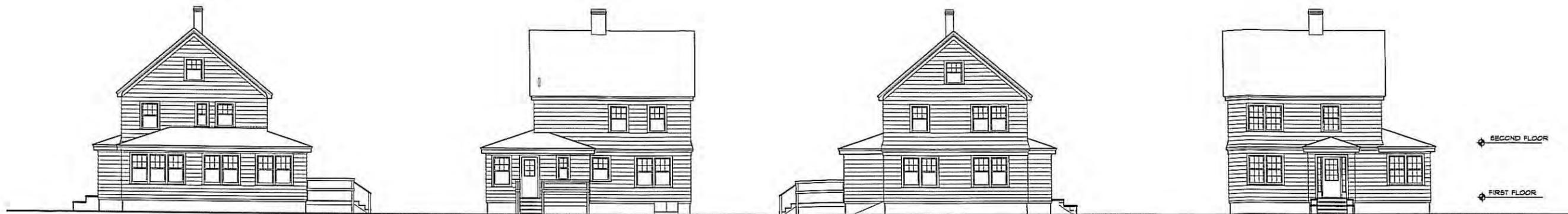
All in all, the initial requirement for both the barn and house is that they be reviewed and analyzed for their existing physical conditions and capacities. Then a better assessment can be made as to their suitability for re-use.

This completes the structural review report based purely on a visual, walkthrough process. No attempt was made to expose hidden conditions or look closely at the existing physical conditions of all framing. If there are any questions then please contact me.

Respectfully submitted,  
Goldsmith, Prest & Ringwall, Inc.

Lynwood V. Prest, P.E.  
President Emeritus & Member of the Board of Directors.

Cc: File



WEST ELEVATION

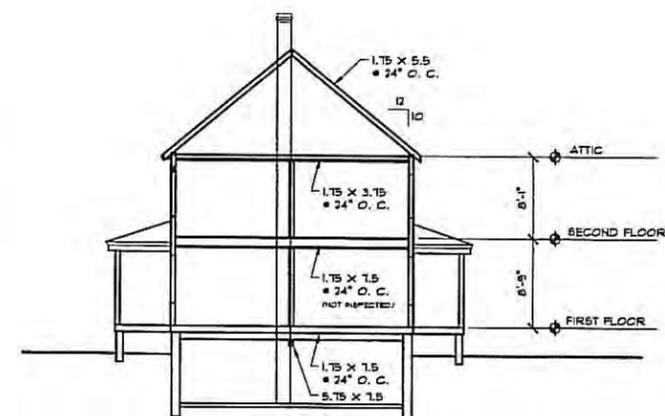
NORTH ELEVATION

EAST ELEVATION

SOUTH ELEVATION

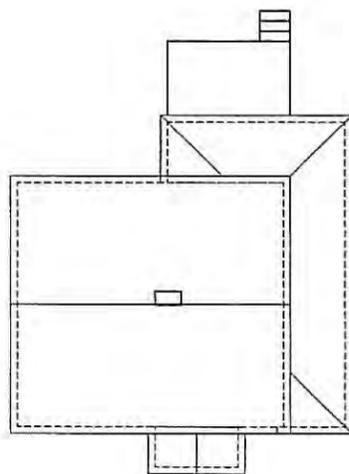
HOUSE ELEVATIONS

1/8" = 1'-0"

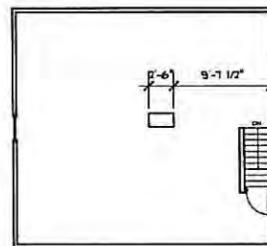


HOUSE SECTION

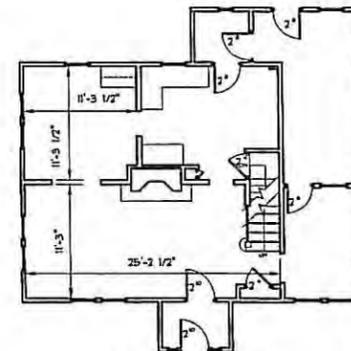
1/8" = 1'-0"



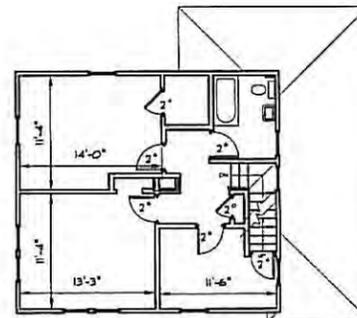
ROOF PLAN



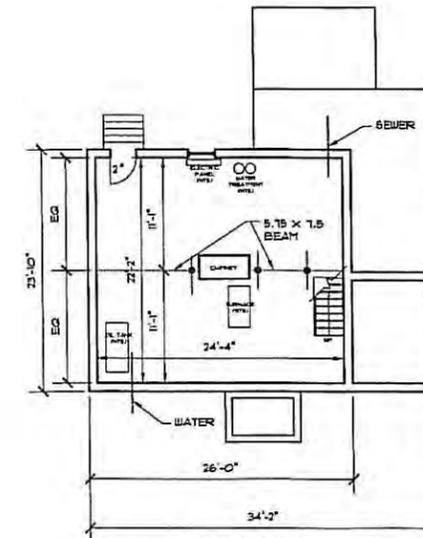
ATTIC PLAN



FIRST FLOOR PLAN



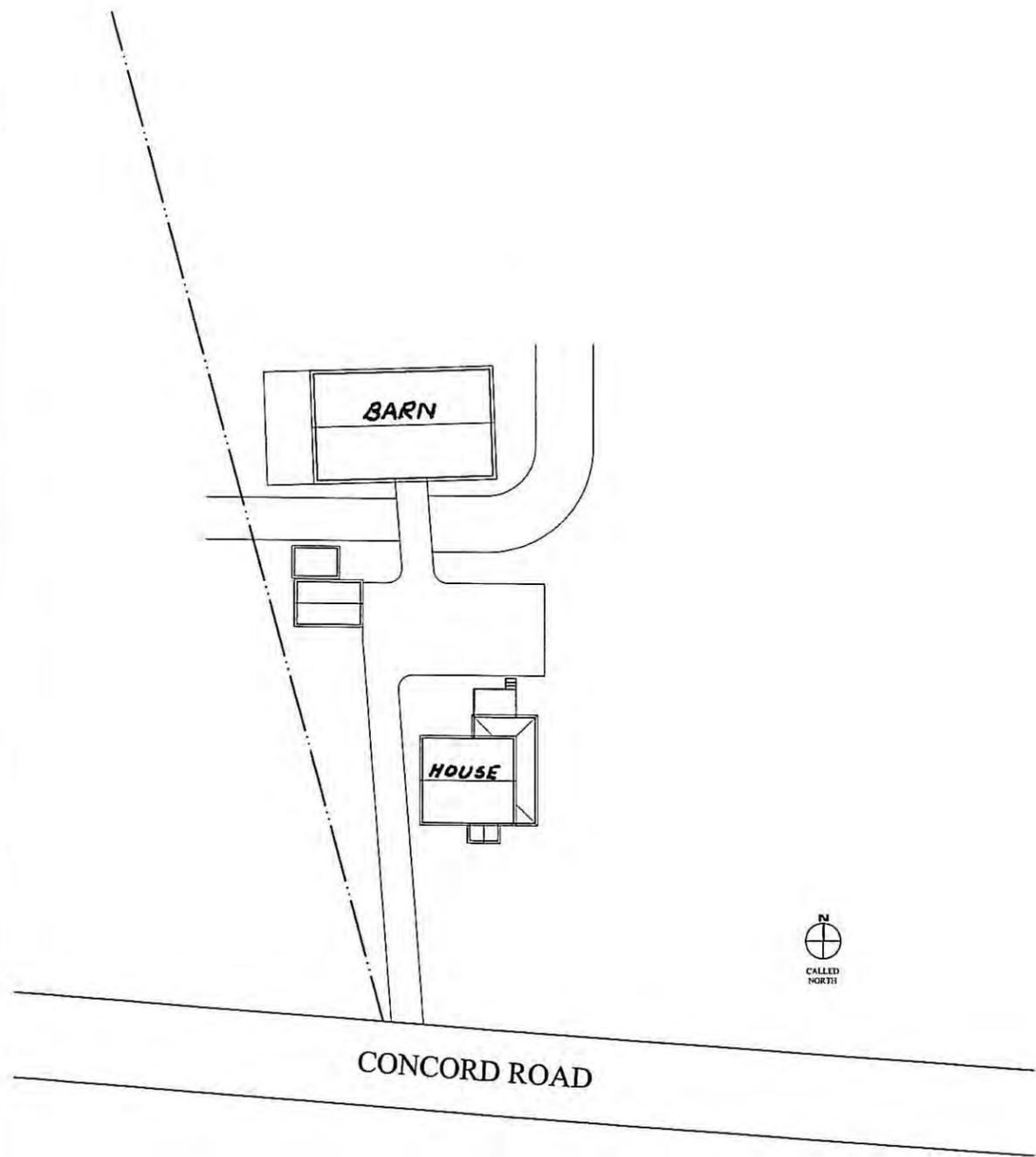
SECOND FLOOR PLAN



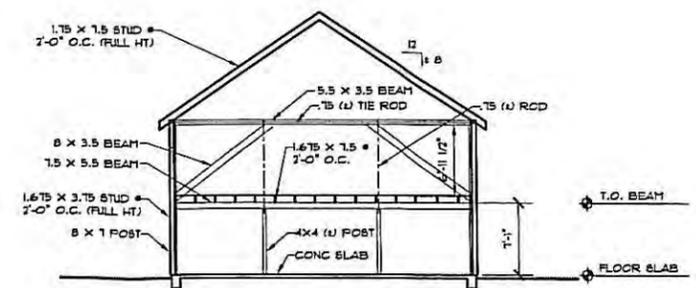
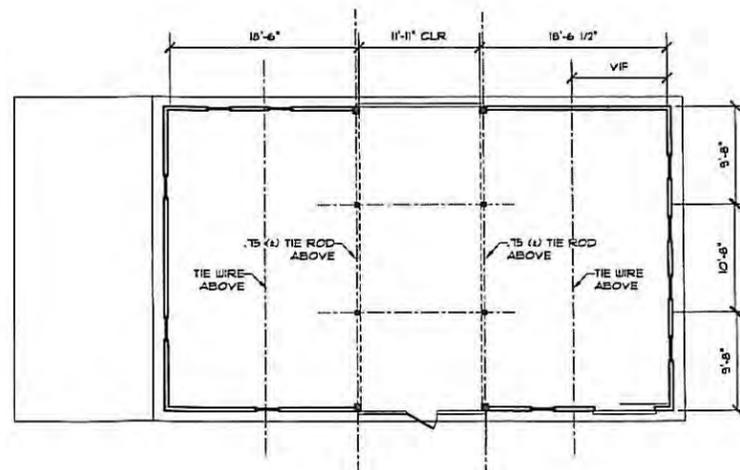
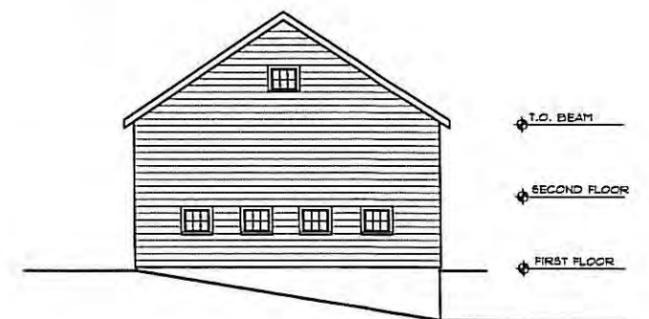
BASEMENT PLAN

HOUSE PLANS

1/8" = 1'-0"



BUILDING LAYOUT  
N.T.S.



BARN PLAN SECTION & ELEVATIONS  
1/8" = 1'-0"

Morrison Farm  
Acton, MA  
HVAC Existing Conditions Systems Report  
J#839 012 00.00  
L#28754/Page 1/June 19, 2009

## Existing HVAC Systems

### Executive Summary

Presently, the Heating and ventilation system serving the Farm House is an oil fired force hot air furnace system. The system appears to be in fair to poor condition. In general, the heating and ventilation system has served it's useful life. As part of a building renovation project, we recommend installing a complete new heating and ventilation system. Central air conditioning should also be considered as part of a system upgrade project.

### Existing Conditions

The Farm House is heated by an oil fired forced hot air furnace system. Warm air is delivered throughout the house by a combination of galvanized metal and flexible ductwork that is connected from the furnace and routed to floor supply air diffusers. Return air is typically ducted back to the furnace unit by a galvanized sheet metal duct system that is connected to wall return registers. The furnace is located in the basement and was manufactured by Hallmark Co. (Model #LBD85, w/ 0.57 GPH Carlin Burner). The furnace discharge temperature is controlled by a wall mounted line voltage space thermostat located in the first floor living room. The building is naturally ventilated by operable windows.



Illustration 1: Oil Fired Air Furnace



Illustration 2: Typical Floor Supply Diffuser



Morrison Farm  
Acton, MA  
HVAC Existing Conditions Systems Report  
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Illustration 3: Typical Wall Return Air Register

Fuel oil for the furnace is stored within a 277 gallon fuel oil tank located in the basement. Fuel oil vent and fill lines terminate outside the building as required by code. The fuel oil tank and piping appear to be in fair condition.



Illustration 4: Fuel Oil Tank

There is a fire place located in the central living room on the first floor. The brick work appears to be in fair condition. However, the chimney lining was not observed during this field visit.



Illustration 5: Living Room Fire Place

Morrison Farm  
Acton, MA  
Electrical Existing Conditions Systems Report  
J#839 012 00.00  
L#28752/Page 1/June 19, 2009

## **Existing Electrical Systems**

### **Executive Summary**

Presently, the Electrical Systems serving the Farm House are feed from overhead wiring between utility company poles 11/50 and 41 on Concord Road. The service runs down from a weatherhead to a 200 Amp meter socket and then into a 100 amp, single phase, 120/240 volt panel in the basement of the building.

The Telephone, Cable TV and Fiber Optic Systems come into the building the in same manor, overhead.

The general Lighting in the building is ceiling and wall mounted.

The general Power (receptacles) are wall mounted.

In general, the electrical systems have served their useful life. The Overhead Service can be reused

Complete new interior wiring, lighting and receptacle systems are recommended.

### **Existing Conditions**

#### **Wiring:**

The existing wiring in the buildings is a mix of Conduit with Wire, AC (armored cable), BX (armored cable) and Romex (cloth and plastic types). These wiring methods are coming to the end of their useful life.

#### **Power Devices (receptacles):**

Receptacles generally are residential wall type. They do not meet the code requirements of today's standards. These are in poor condition and should be replaced and added as required by code.

#### **Lighting Fixtures:**

Lighting fixtures generally are residential wall and ceiling type with incandescent light bulbs. These are in fair to poor condition.



*Existing lighting in basement with three methods of wiring.*



*Existing lighting on the wall.*

Morrison Farm  
Acton, MA  
Plumbing Existing Conditions Systems Report  
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L#28737/Page 2/June 19, 2009

**Incoming Electrical Systems:**

Installation of a new electrical wiring from the weatherhead is recommended. The panel is 100Amp with 20 poles and should be replaced.



*Incoming Electrical Service to the Meter*



*Electrical Service Panel with mixed wiring*

**Incoming Telephone, Cable and Fiber Systems:**

The incoming overhead Telephone service demark on the front of the building and then through the exterior wall into the basement. re-wiring of the interior telephone cable is recommended.

The incoming overhead Telephone service demark on the front of the building and then through the exterior wall into the basement. No action is required.

The incoming overhead Fiber Optic Cable service demarks in the basement and is new. No action is required.

Morrison Farm  
Acton, MA  
Plumbing and Fire Protection Existing Conditions Systems Report  
J#839 012 00.00  
L#28737/Page 1/June 19, 2009

## **Existing Plumbing Systems**

### **Executive Summary**

Presently, the Plumbing Systems serving the Farm House are cold water, hot water, sanitary waste and vent systems. The building was constructed in 1932-1933.

In general, the fixtures have served their useful life. The drainage piping can be reused where buried underground and where adequately sized for the intended new use.

Complete new water piping systems are recommended. The copper piping is in poor condition and has served its useful life.

### **Existing Conditions**

The Building is serviced by on-site septic. Rainwater from pitched roof areas is allowed to discharge directly to grade.

### **Fixtures:**

Plumbing fixtures generally are in poor condition and are not in use. Fixtures include a kitchen sink located on the first floor and a bathroom group on the second floor.

The water closet is tank type, floor mounted vitreous china.

Lavatory are wall hung vitreous china, with hot and cold water handle faucets, non-water conserving.

Bath tub is vitreous china with hot and cold water handle faucet with hand spray shower.



*Floor mounted water closet and wall hung lav*



*Tub/shower*

Morrison Farm  
Acton, MA  
Plumbing Existing Conditions Systems Report  
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Kitchen sink is counter mounted with single handle faucet; no hose spray.



*Kitchen Sink*

Installation of all new water conserving fixtures is recommended.

**Water Systems:**

Building is served by a 3/4" copper water service with a 5/8" water meter. The main domestic cold water distribution to the building is 3/4" in size.

Piping is copper with sweat joints. The piping is not insulated. There is a 1/2" cold water feed to a hose bibb located in the Barn from the basement.

Domestic hot water is generated through an electric tank type water heater; 50 gallon storage, 240 volt, single phase, 4.5 kW. There is no thermostatic mixing valve on the system to prevent scalding.



*Domestic water service*



*Domestic water heater*

Installation of a new hot water heater with thermostatic mixing valve is recommended.

Morrison Farm  
Acton, MA  
Plumbing Existing Conditions Systems Report  
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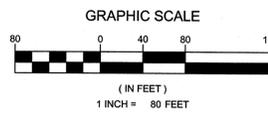
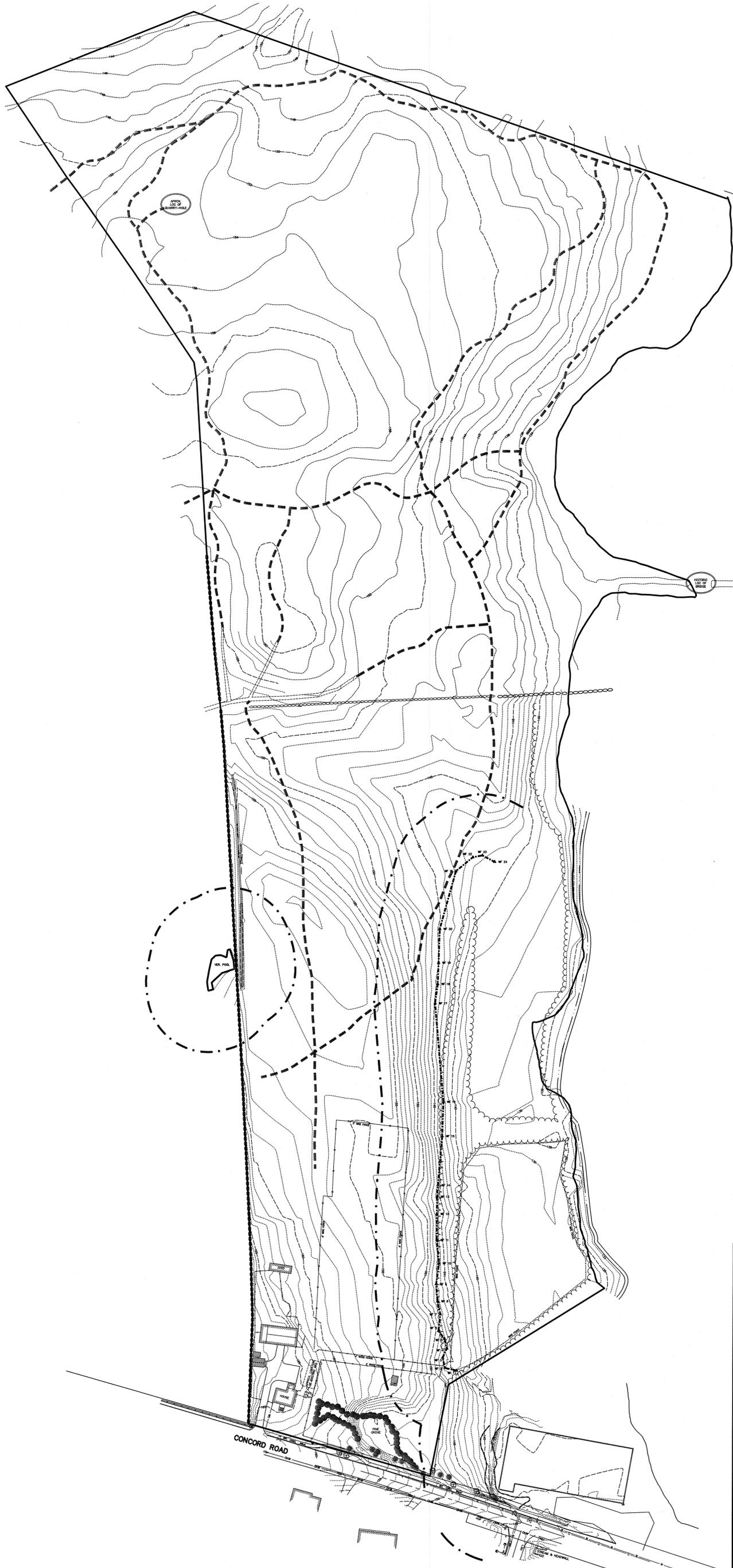
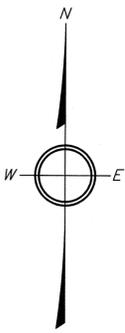
**Drainage Systems:**

There is a 4" cast iron sanitary service to the exterior septic system. Where visible, the cast iron pipe appears to be in fair condition. Smaller pipe sizes are copper.

Generally the cast iron could be reused even in a major renovation provided it is sized appropriately.



*Sanitary service*



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MUNICIPAL DEVELOPMENT

EXISTING CONDITIONS  
PLAN

MORRISON FARM  
ACTON, MA

PREPARED FOR:  
STEPHEN KELLEHER ARCHITECTS  
57 ALDEN ROAD  
FAIRHAVEN, MA 02719

DFT. BY: MKB DATE: OCTOBER 2009 JOB 091019 1 OF 1  
CHK. BY: BDR



Goldsmith, Prest & Ringwall, Inc.

## Morrison Farm

Acton, MA

Existing Site Conditions:

July 2009

### Wetlands

The wetlands were delineated on the Morrison Farm Site by B & C Associates in late May. B & C concentrated on the initial edges of wetlands due to budget constraints within the field areas. The first edge of the wetlands delineated on the eastern portion of the site follows closely to the hedgerow running north south roughly 220 feet from the edge of Ice House Pond. This delineation starts with flag WF-1 at the southern property line to flag WF-24 roughly 250 feet from the wooded portion of the site.

Along the western portion of the site is a ditch that did not have any water standing or flowing. East and southeast of the ditch is an area of wetland plants within the field that were not delineated as wetlands. This area does not contain any hydraulic soil indicators. To the west of the southern end of the ditch on the land of Woodlawn Cemetery is a vernal pool.

Off site in the southeastern corner on land of Ice House Pond are wetlands that are shown on the plan from a plan by the Acton Engineering Department titled "Proposed Sidewalk Construction Plan" dated 8/5/1997. GPR located several trenches within this area as well. Any work in this area will require additional wetland survey.

The Rivers edge and wetlands in the rear of the site were not delineated at this time. Any work in the northern half of the site will require additional wetland and River Front delineation.

### Site Conditions

GPR conducted topographic survey on the front portion of the site including part of Ice House Pond land and supplemented the survey of the balance of the meadow portion with additional detail and the addition of the vernal pool. The topographic data shown in the rear (northern) portion of the site is based on GIS data and other data. The boundary is from a series of plan referenced on the existing conditions plans and mostly from the October 14, 1976 plan by John Lymberg.

The house is currently uninhabited and the barn is currently used for equipment storage. The primary uses of the site currently are community gardens which have been expanded this year and passive recreation use of the trails both on this property and their connections to the Woodlawn Cemetery. Parking for the community gardens is done both on the existing paved portions of the site in front of the barn and behind the house and on the lawn area behind the barn.

The area of the historic Bridge crossing is over grown from the western river bank edge to the eastern river bank edge. The wetland edge appears to be at the rivers top of bank on the western side.

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# STEPHEN KELLEHER ARCHITECTS

July 30, 2009

Mr. Thomas Tidman  
Town of Acton  
472 Main St.  
Acton, MA 01720

Re: Morrison Farm  
Feasibility and Preliminary Design Study

## JOB MEETING NOTES

Present: Tom Tidman  
Bruce Ringwall, GPR  
Domenic Puniello, GGD  
Ed Sargent, SKA

Doug Tindal  
Jim Stevens, ConsultEcon  
Steve Kelleher, SKA

**Summary:** We met at the Town offices at 11 AM on Thursday July 16, 2009 to review the existing conditions reports and to begin the conceptual design process. The following items were noted and discussed.

1. Bruce of GPR presented the existing site conditions: including the wetlands survey report by B & C Associates and site drawings including contours, bounds and site features. Information included on the drawings came from a variety of available documentation and contour survey at the front portion of the property by GPR, as noted in the report.
2. Wetlands report states that the area of the ditch on the western portion of the property was not delineated as wetlands because it did not contain hydraulic soils indicators ( a state requirement of a wetland) However, the Town of Acton definition of a wetland includes areas that meet wetland vegetation requirements regardless of hydraulic soil indicators. Therefore, this area and the surrounding buffer were shown on the plan as wetlands.
3. Bruce noted that how a wetland was formed has no bearing on its' classification as a wetland.
4. Tom noted that it was permissible maintain farming in the area of the vernal pool, but any change in use would prevent development in that area.
5. Wetland delineation was not done at the rear of the site due to budget constraints, however, it is assumed that the existing embankments leading to the bridge floods, and that any re-construction of the bridge would require an elevated platform leading to the bridge that would allow water to pass under.
6. Evidence of an old quarry exists in the woodlands. This is one part of the "evidence old lifestyle" that exist at the Morrison Farm.
7. Tom noted that the parts of the trail are too close to the boundary and should be re-located.
8. Trails could be made accessible by grading and stone dust.
9. Dom presented the MEP existing conditions report.
  - a. The existing oil fired hot air heating system is in poor condition. Any renovation project should include and new HVAC system. Gas is available at the street.



## STEPHEN KELLEHER ARCHITECTS

- b. The existing electrical systems report recommends upgrades to the system for any proposed renovations to the house, and the replacement of all existing electrical equipment in the barn.
  - c. The existing plumbing fixtures are dated and it is recommended that they be replaced with water conserving fixtures. The existing sewer is an on site septic system.
- 10.** Existing condition drawings for the house and barn were presented by SKA.
- a. The house has a poured concrete foundation.
  - b. The construction is stick frame with dimensional lumber.
  - c. The widows, insulation, roofing, siding all require upgrading.
  - d. The rear deck is deteriorated and is currently a safety hazard.
  - e. A change in use will require compliance with Mass AAB CMR521
- 11.** The barn is balloon framed, stick-built with interior posts and beams supporting mezzanines to either side of the main doors. Structural cable ties had been added to supplement the structure.
- a. It was determined that the structure was not suitable for re-using as an assembly space. It would be less costly to build a new barn type structure should the space be used for assembly purposes.
- 12.** The outbuildings were not surveyed
- 13.** Although the architectural drawings contain information regarding the size of the existing structural members, it was requested that GPR provide an existing condition report for the structure of the house and barn.
- 14.** It was re-iterated that the Farm was purchased largely due the support of residents interested in utilizing the site for ball fields.
- a. It was agreed that the feasibility of both large and small soccer fields be presented in the development schemes.
  - b. Particularly, the costs and environmental impacts of ball fields should be presented.
  - c. Costs and benefits of ball fields vs open space should be provided.
- 15.** The use of the house for the Town recreation department or other agency was discussed and should be included in the development schemes.
- 16.** The problems of the visibility / safety of the existing drive was discussed.
- a. Widening of the entry by cutting back the stone wall and removing the large pine tree was suggested as in immediate solution.
  - b. Other location for ingress and egress will be proposed in the development schemes.
  - c. Areas for future parking were discussed in the area of the paddock, and behind the barn and increased parking in the icehouse lot with connection to the Farm.
  - d. Adequate parking areas will be included in the development schemes
- 17.** No schedule was set for the next meeting.

**\*End of Job Meeting Notes\***

cc: Attendees



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Studio: P.O. Box 107 • Mattapoisett, MA 02739



Our work on the feasibility and preliminary design study, is part of an on-going process that began with the Town's decision to purchase Morrison Farm in 1997, previous investigations, including the work of the Morrison Farm Re-Use Committee (MFRUC). We relied heavily on the Re-Use Committee's Recommendations to help us understand the broad range of interests in the development of Morrison Farm. We were guided by the conclusions of their report, especially the Selectman's goals for the project.

Our job, as stated in the original Request For Qualifications was, and I quote, "the evaluation of existing structures, preliminary space planning, conceptual design and budgeting for public use of the buildings, evaluation of the environmental constraints associated with the future use of the 32 acre farm for agricultural use, and for the placement of a recreation field; and developing a preliminary site plan showing activity areas, vehicular and pedestrian access, and parking".

An outline of the design process appears on the following pages.

Our first task was to determine the goals and priorities of the project. We did this through discussions with the Advisory Group and review of the Morrison Farm Re-Use Committee recommendations.

Next, our engineers and architects investigated the existing conditions of the buildings and site, and evaluated the opportunities and constraints. Existing Conditions reports are included in the final report we have submitted tonight.

As the next step, the design team developed three schemes for the preliminary plan. The plans ranged from low impact on the land to more extensive development. A list of opportunities and constraints and preliminary construction cost estimates were provided for each scheme. From the range of options presented and the review and comments of the Advisory Group, elements of the schemes were consolidated into what we are presenting tonight as our Final Preliminary Design.

It's important to note that this design represents what the design professionals believe to be a feasible plan. It is not intended to tell the Town what to do. Rather, our job was to tell the Town what it could do. It will be the work of those who take this information to the next level, and the residents of the Town of Acton, to determine the eventual development of the Farm.

# STEPHEN KELLEHER ARCHITECTS

February 12, 2010

Town of Acton, MA  
Morrison Farm  
Feasibility and preliminary design study

## **Design Process Outline:**

Determine project goals  
    Interested parties  
    Request for priorities

Existing conditions  
    Opportunities and constraints  
    Site  
    Buildings  
    Circulation

Feasible Development schemes  
    Impact  
    Cost Estimates  
    Operations and maintenance opportunities/

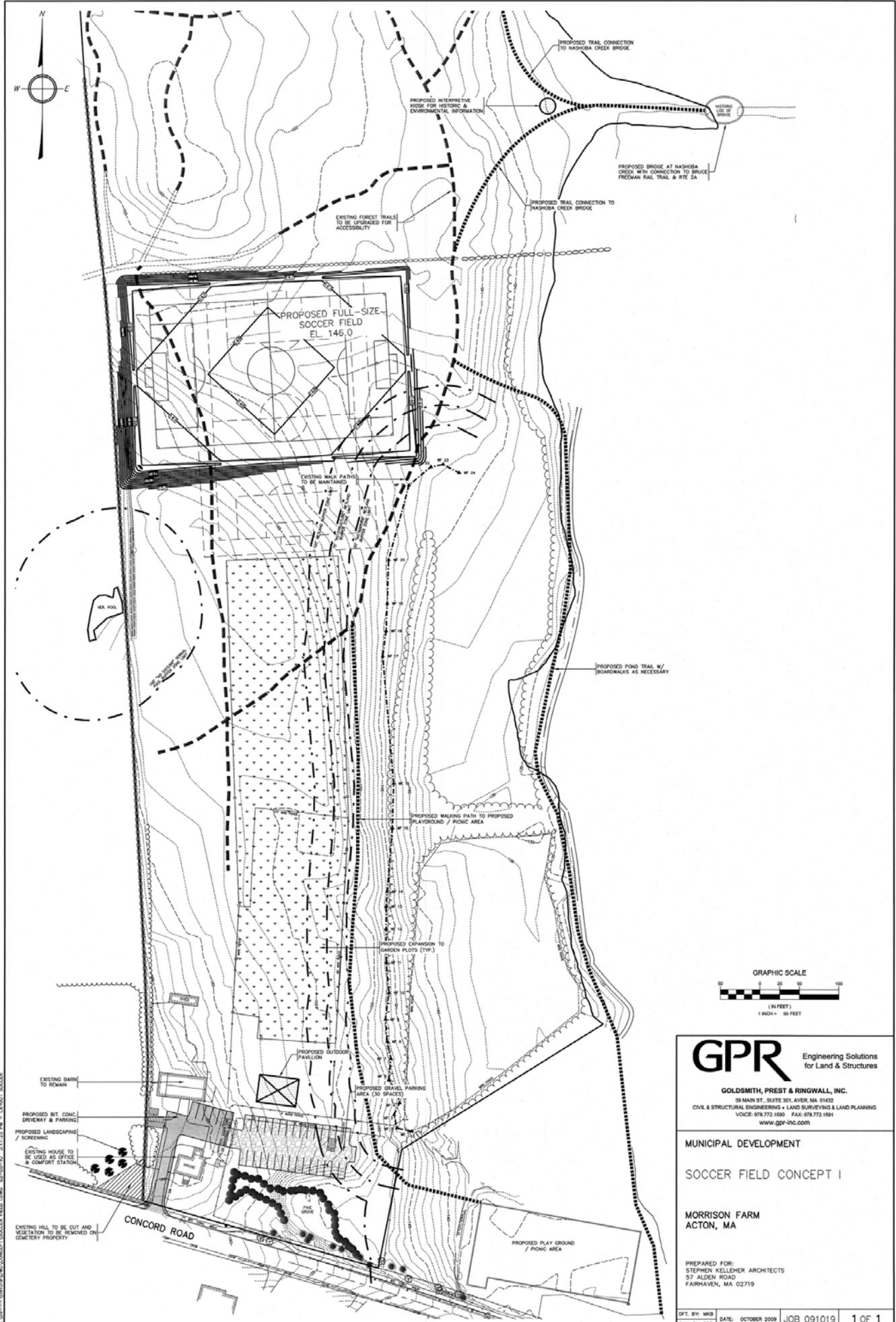
Resolution  
    Based on the committees review of three schemes presented  
    Re-visiting active recreation and soccer fields  
    Re-visiting connections to surrounding  
    Revisiting interest groups and designating areas of use

Final resolution  
    Connections diagram  
    Phase one  
    Phase two



In accordance with the Selectmen's goals, for Morrison Farm, locating one or more full sized soccer field was the initial goal. At first glance it would seem a simple task to locate a regulation sized soccer field in such a large expanse of land. However due to site conditions: a relatively narrow lot, the location of wetlands, a vernal pool, sloping contours, proximity to the pond, consideration of other uses, the necessity for ample parking for sports events, etc. all made the task all but impossible. Following are several site layouts with regulation sized fields positioned on the site. The final preliminary plan includes several small to mid sided recreation fields in a relatively flat portion of the site. This area is in the buffer, but it has been maintained with regular mowing. The land slopes gently enough to allow for fields without the need for grading. All of these issues made this area a good compromise for Recreation fields to be included in the Morrison Farm in a way that they will coexist synergistically with other uses.

Following are site plans for three options investigated that, after careful review, were ultimately deemed unfeasible.



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GPR

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MUNICIPAL DEVELOPMENT

SOCCER FIELD CONCEPT I

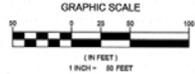
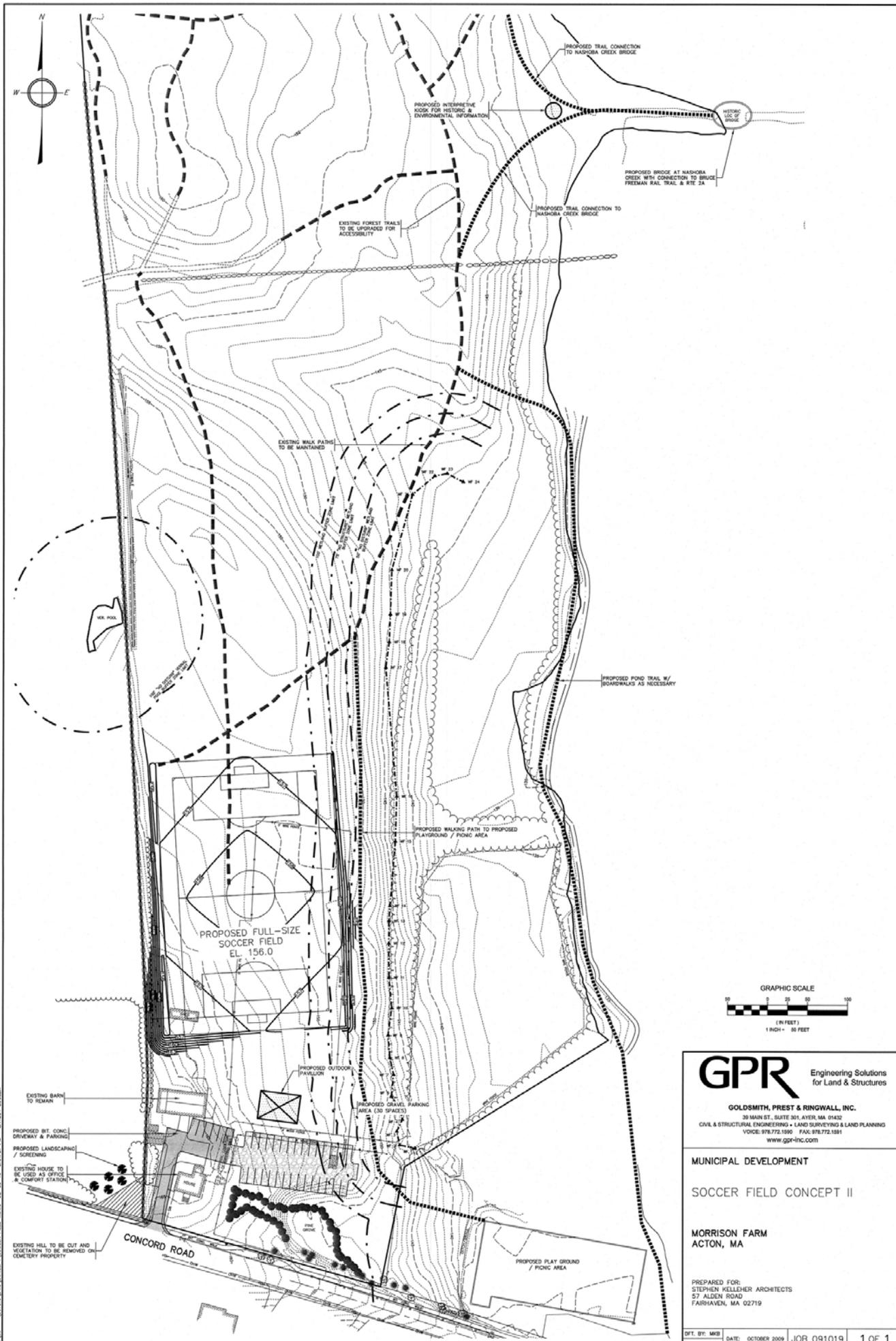
MORRISON FARM  
ACTON, MA

PREPARED FOR:  
 STEPHEN KELLEHER ARCHITECTS  
 57 ALDEN ROAD  
 FAIRHAVEN, MA 02719

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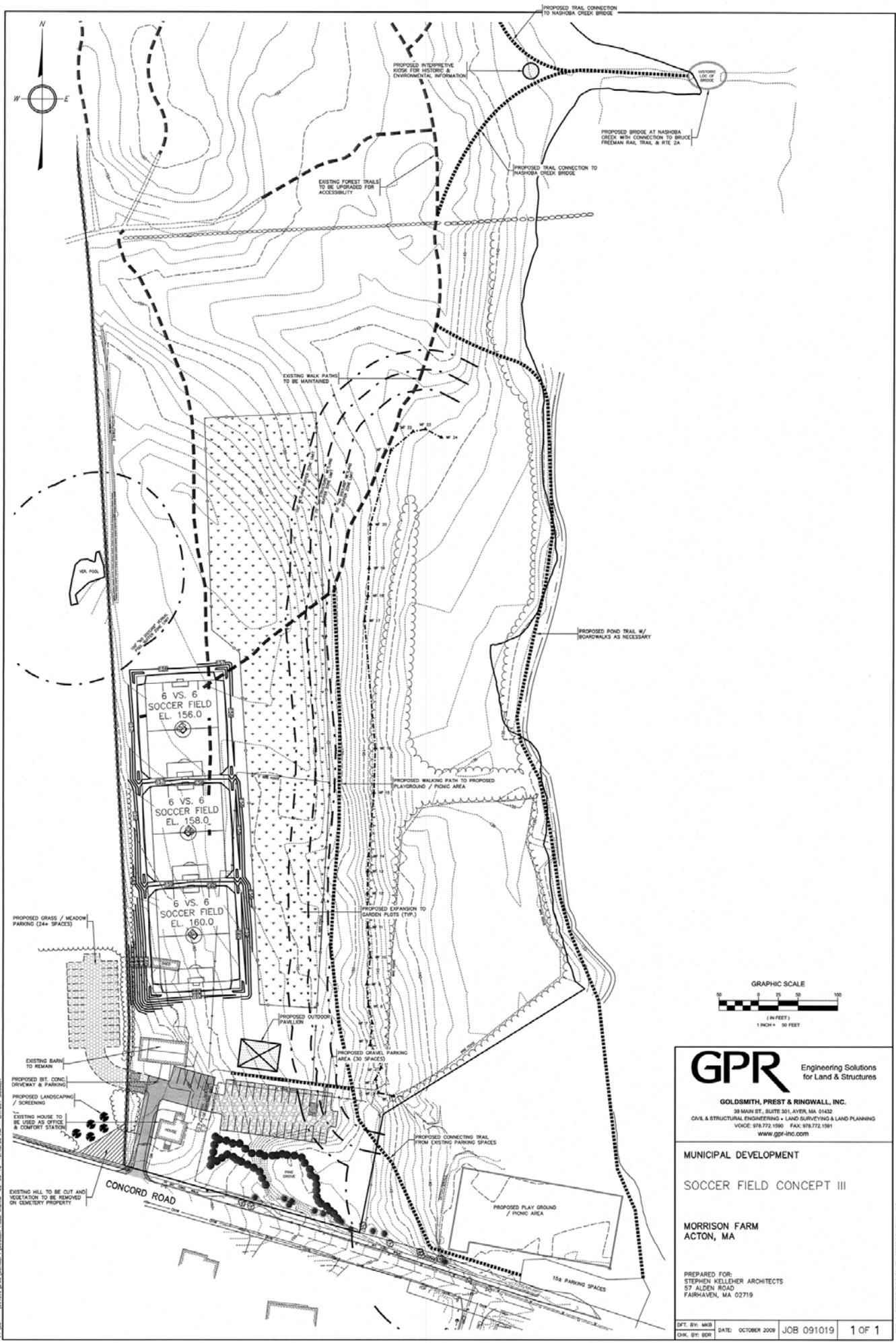
**MUNICIPAL DEVELOPMENT**  
**SOCCER FIELD CONCEPT II**  
**MORRISON FARM**  
**ACTON, MA**

PREPARED FOR:  
 STEPHEN KELLEHER ARCHITECTS  
 57 ALDEN ROAD  
 FAIRHAVEN, MA 02719

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MUNICIPAL DEVELOPMENT

SOCCER FIELD CONCEPT III

MORRISON FARM  
ACTON, MA

PREPARED FOR:  
STEPHEN KELLEHER ARCHITECTS  
57 ALDEN ROAD  
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**Adjacencies Image**

**Site plan**

**Aerial Image with plan overlay**

**Preliminary Design Phase I**

**Preliminary Design Phase II**

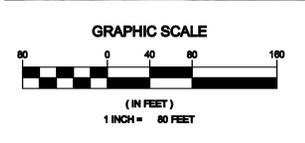
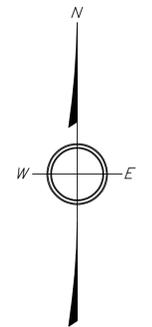
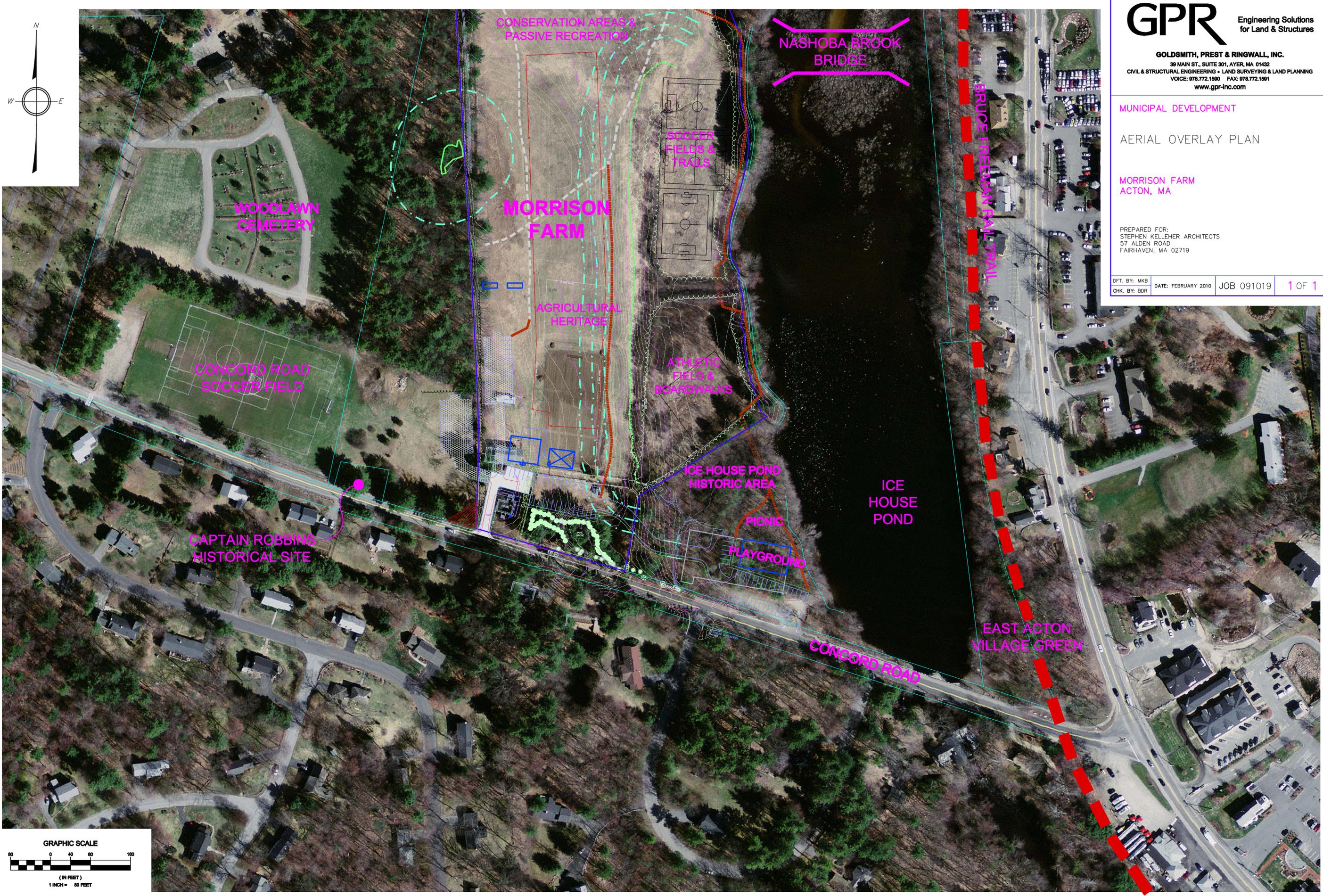
MUNICIPAL DEVELOPMENT

AERIAL OVERLAY PLAN

MORRISON FARM  
ACTON, MA

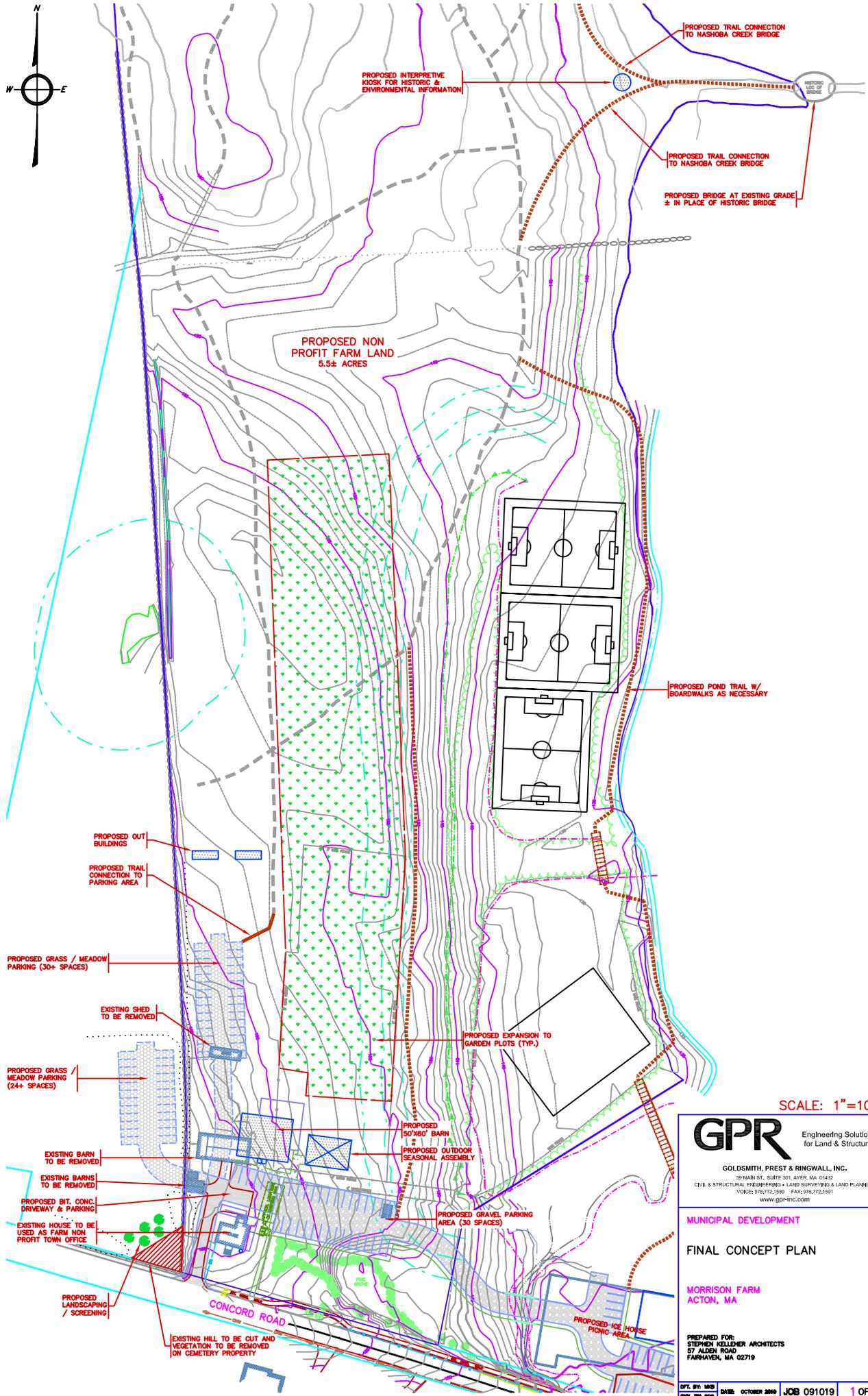
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SCALE: 1"=100'

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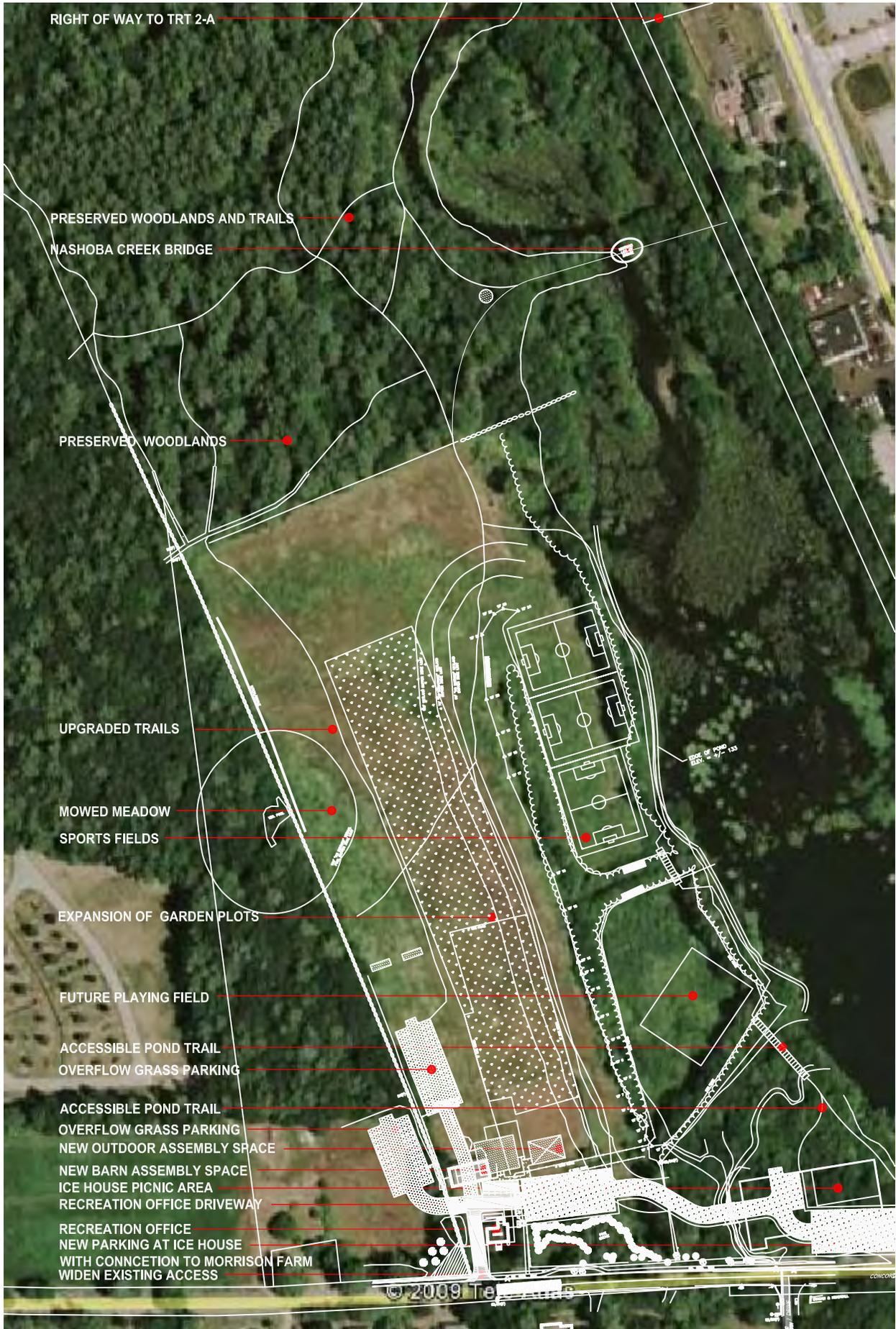
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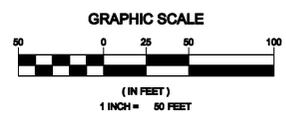
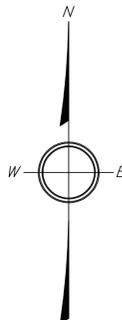
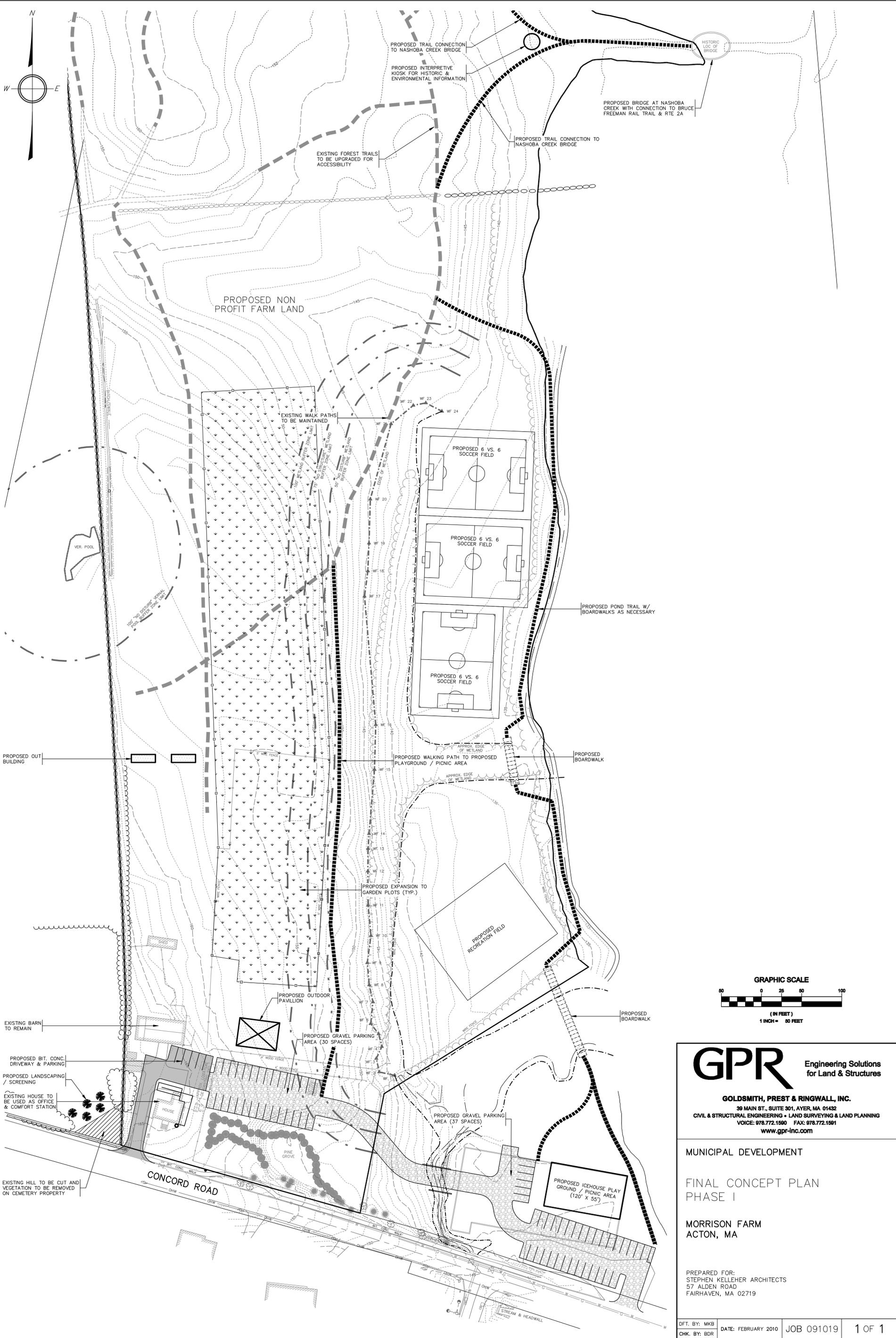
MUNICIPAL DEVELOPMENT

**FINAL CONCEPT PLAN**

MORRISON FARM  
ACTON, MA

PREPARED FOR:  
STEPHEN KELLEHER ARCHITECTS  
57 ALLEN ROAD  
FAIRHAVEN, MA 02719





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MUNICIPAL DEVELOPMENT

FINAL CONCEPT PLAN  
PHASE I

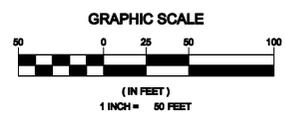
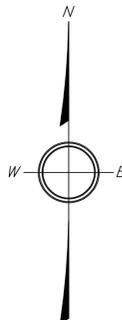
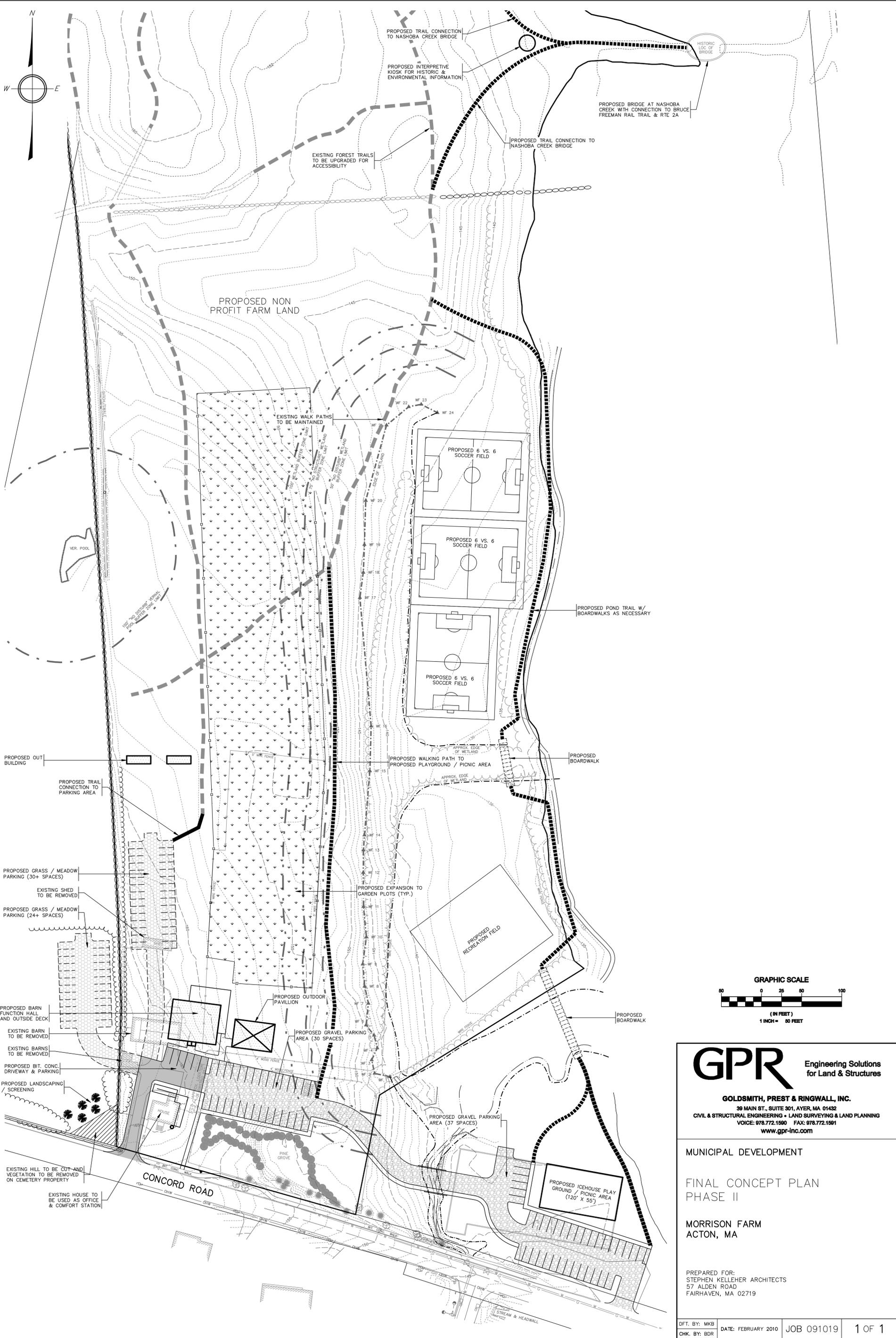
MORRISON FARM  
ACTON, MA

PREPARED FOR:  
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57 ALDEN ROAD  
FAIRHAVEN, MA 02719

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MUNICIPAL DEVELOPMENT

FINAL CONCEPT PLAN  
PHASE II

MORRISON FARM  
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## Memorandum

**To:** Stephen Kelleher Architects

**From:** ConsultEcon, Inc.

**Date:** May 20, 2009

**RE:** Operational Evaluation of Final Preliminary Design for Morrison Farm

---

This memorandum evaluates the operating potential of the final preliminary design for Morrison Farm. It focuses on identifying income potential, ongoing operating expenses required, and potential partners for the site. In addition, it identifies potential funding sources for capital improvements proposed as a part of the plan and evaluates the benefits derived from plan implementation.

Following is an overview of the planned Phase 1 and Phase 2 of the final preliminary design for Morrison Farm.

### Phase 1

The first phase maintains the existing walking trails and community garden plots onsite and enhances these recreational activities with additional trails, expanded community gardening plots, and new athletic fields, including three half-sized, “6 vs. 6” soccer fields and a multi-purpose field. The recreational trails onsite would be expanded with new pond trails, boardwalks over wetland areas and a bridge connecting to proposed Bruce Freeman Rail Trail and Route 2A/119 (easement at art gallery). The existing barn would be stabilized and used for storage by the Town of Acton’s Recreation Department. The house would be rehabilitated to provide publicly accessible comfort stations, as well as new office space for the Recreation Department. A new seasonal pavilion would be constructed for community programming and events during the spring, summer and fall. This pavilion would be available for school group usage, community programs, and for private event rentals. The pavilion and athletic fields would be reserved through the Recreation Department. Expanded parking onsite would support the new activity generated by the proposed uses onsite.

### Phase 2

The second phase would be implemented after a proposed new storage shed is constructed on the adjacent cemetery property. The existing barn onsite would be demolished and replaced with a new 3,000-square-foot, year round event facility that would be linked with the seasonal pavilion constructed as a part of Phase 1. This event facility would be available for community-related events, programs, and private event rentals. The Recreation Department would handle bookings and programming for the event facility.

## Income Potential

Data in **Table 1** derive estimates of annual income potential for Phase 1 and Phase 2 based on assumptions about rental rates for garden plots, athletic fields, and seasonal pavilion and level of use. The total annual income potential of Phase 1 is estimated at \$15,000. The total annual income potential of Phase 2 is estimated at \$69,400.

Rental rates are based on current rates published by the Town of Acton. Actual results, especially for seasonal pavilion and year round event facility, will be dependant upon level of marketing employed, quality of pavilion and facility design, integration with grounds, availability for private events, and extent of event services employed.

**Table 1**  
**Estimated Annual Income Potential of Final Preliminary Design for Morrison Farm**

	Phase 1	Phase 2
<i><b>Income</b></i>		
Number of Events	24	74
Avg. Net Income per Event	\$275	\$825
<b>Subtotal Events</b>	<b>\$6,600</b>	<b>\$61,050</b>
Number of Plots	36	36
Avg. Income per Plot	\$25	\$25
<b>Subtotal Plots</b>	<b>\$900</b>	<b>\$900</b>
Number of Fields	3	3
Annual Uses per Field	100	100
Avg. Income per Field Use	\$25	\$25
<b>Subtotal Fields</b>	<b>\$7,500</b>	<b>\$7,500</b>
<b>Total Income Potential</b>	<b>\$15,000</b>	<b>\$69,450</b>

Source: ConsultEcon, Inc.

## Operating Expenses

Data in **Table 2** present estimated annual operating expenses for the final preliminary design. Total Phase 1 operating expenses are an estimated \$14,800 per year. In Phase 1, the income potential represents 102 percent of the total estimated operating expenses. Total Phase 2 operating expenses are an estimated \$67,300 per year. In Phase 2, the income potential represents 103 percent of the total estimated operating expenses. Based on this evaluation, the operation of Morrison Farm as proposed in the final preliminary design has the potential to sustain itself through earned income.

It should be noted that this evaluation does not include expenses related to community programs and events that might be undertaken by the Town of Acton. Additional expenditures by the Town of Acton may be warranted in order to enhance Morrison Farm as a community

destination and provide additional quality of life benefits to residents. In addition, building and grounds maintenance and upkeep would be accomplished through existing Town staffing.

**Table 2**  
**Estimated Annual Operating Expenses of Final Preliminary Design for Morrison Farm**

	Phase 1	Phase 2
Building SF	1,565	4,565
Expense per Building SF	\$4	\$5
<b>Subtotal Building Expense</b>	<b>\$6,260</b>	<b>\$22,825</b>
Grounds Acres	17	17
Expense per Acre	\$500	\$500
<b>Subtotal Grounds Expense</b>	<b>\$8,500</b>	<b>\$8,500</b>
New Staff <sup>1/</sup>		\$30,000
Administrative Expense <sup>2/</sup>		\$6,000
<b>Total Operating Expense</b>	<b>\$14,760</b>	<b>\$67,325</b>

<sup>1/</sup> Assumes part-time event and program coordinator.

<sup>2/</sup> Administrative expense at 20% of staff expense.

Source: ConsultEcon, Inc.

### Potential Funding Sources

It is anticipated that the plan implementation, or components of the plan, can be funded through use of community preservation funds and potentially through an allocation of municipal funds for capital projects. In addition, these public funds may be supplemented with private donations.

### Benefits of Morrison Farm

The Town of Acton and its residents will derive significant quality of life benefits from the reuse of Morrison Farm. The recreational enhancements onsite, including trails and athletic fields, will expand recreational opportunities. By connecting to the adjacent Ice House Pond recreation area and the planned rail trail, Morrison Farm will enhance Acton’s park system and emerging trail network. The community gardening activities onsite are directly connected with Acton’s agricultural heritage and offer formal and informal educational opportunities to youth and adults that promote knowledge of and interest in the environment and healthy foods. The preservation and conservation of open space contributes to the natural beauty and maintains the local ecosystems. Overall, these recreational, heritage and conservation benefits contribute to the overall quality of life in Acton and make the community a more attractive place to live, work and play.

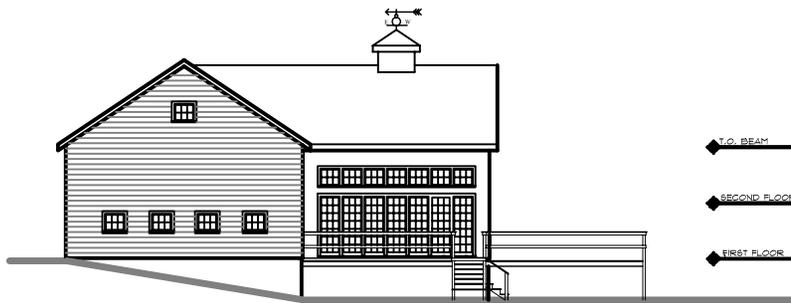


**House as office**

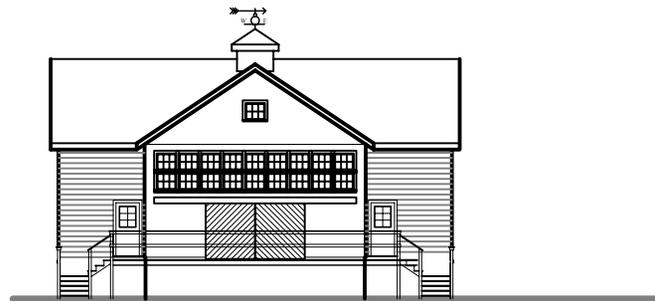
**House as office and comfort station**

**New Assembly Barn conceptual image**

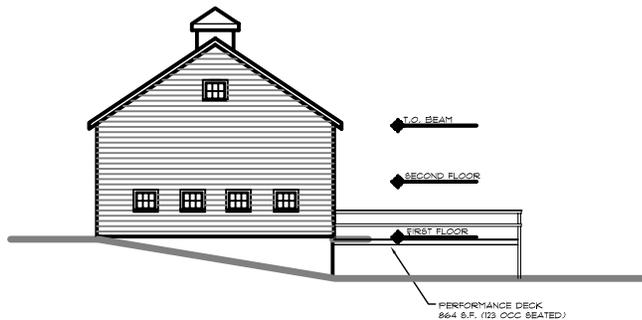
**New Assembly Barn conceptual options**



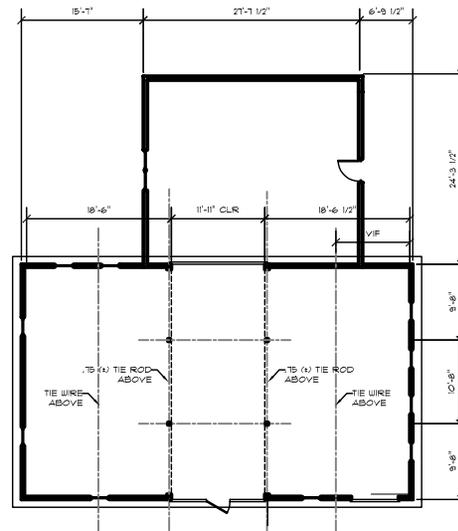
**BARN ADDITION**  
1/16" = 1'-0"



**BARN ADDITION**  
1/18" = 1'-0"



**RE-BUILT BARN W/ DECK ELEVATION**  
1/16" = 1'-0"



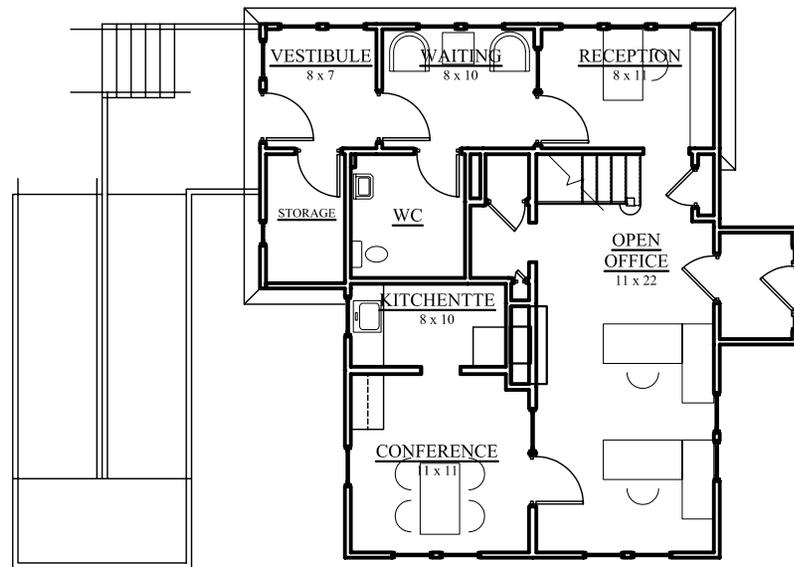
**NEW BARN PLANS**  
1/16" = 1'-0"



CONCEPTUAL IMAGE  
N.T.S.



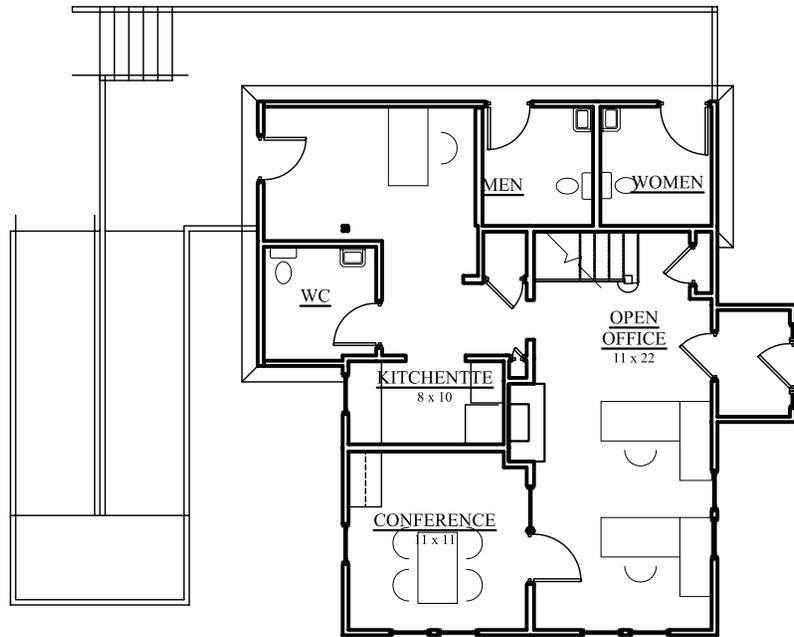
OFFICE ELEVATIONS  
1/8" = 1'-0"



OFFICE PLANS  
1/8" = 1'-0"



OFFICE NORTHELEVATIONS  
1/8" = 1'-0"

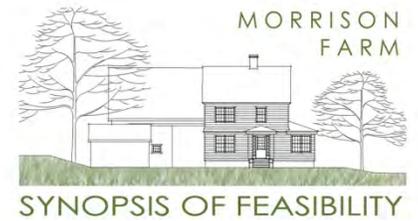


OFFICE PLANS  
1/8" = 1'-0"



**TOWN OF ACTON, MA Morrison Farm Preliminary Design and Feasibility****24-May-10****PRELIMINARY CONSTRUCTION COST ESTIMATE : Phase I and Phase II**

	Description of Work	Comments	Estimate	
<b>PHASE I</b>	<b>House:</b>	<b>Upgrade for Office use/ Add toilets for outdoor activities</b>		
	Upgrade roofing		\$10,000	
	Upgrade insulation		\$5,000	
	Upgrade interior to offices	paint, cabinets, etc.	\$50,000	
	New Deck		\$30,000	
	New windows	(existing lead paint)	\$20,000	
	Exterior Paint	(existing lead paint)	\$20,000	
	New electrical	plus tel data	\$28,000	
	New mechanical	air conditioning	\$30,000	
	New plumbing	3 new Accessible toilet rooms	\$45,000	
	Septic system upgrade		\$15,000	
		Subtotal	\$253,000	
		<b>Barn Upgrade for storage use</b>		
	Exterior Paint	(existing lead paint)	\$12,000	
	Replace Windows	(existing lead paint)	\$5,000	
	Upgrade doors		\$10,000	
	structural reinforcement		\$20,000	
	demo out buildings		\$5,000	
		Subtotal	\$52,000	
		<b>New Seasonal Assembly Space</b>		
	gazebo and grounds for outdoor activities		\$150,000	
	boardwalk to pond overlook		\$100,000	
		Subtotal	\$250,000	
		<b>Open Fields</b>	<b>Community plots and maintained open fields</b>	
	community garden plots	add up to 100% water, fence, etc,	\$20,000	
	Community Non-profit Farm	possible subsidy from Town	\$10,000	
	rain water reclamation	at existing buildings	\$10,000	
	Subtotal	\$40,000		
	<b>Woodlands</b>	<b>Walking trails maintained and upgraded</b>		
Construct Accessible trail(s)	1/4 mile @ \$30. /l.f.	\$40,000		
upgrade Existing add new	1/4 mile @ \$30. /l.f.	\$40,000		
Pond edge trail/ boardwalk	1/4 mile @ \$100. /l.f.	\$120,000		
	Subtotal	\$200,000		
	<b>Ice house picnic area</b>			
picnic area/ playground		\$80,000		
trail to Morrison Farm	300 l.f.	\$15,000		
upgrade existing parking	37 cars @ 1,500/space	\$55,000		
	Subtotal	\$150,000		
	<b>Circulation and parking</b>			
Upgrade Entry	Cut back Corner at Cemetery	\$30,000		
Gravel Parking in Paddock	37 cars @ 1,500/space	\$55,000		
Additional grass parking	50 sp for Outdoor Assembly	\$5,000		
New parking at office	5 cars @ 1,500/space	\$30,000		
New drive from Ice House	\$120/l.f. x approx 300	\$36,000		
Bridge over stream	Culvert	\$30,000		
	Subtotal	\$186,000		
	<b>New recreation fields</b>			
(3) 6v6 sized fields	on ungraded mowed meadow	\$30,000		
Additional grass paths to fields		\$5,000		
	Subtotal	\$35,000		
	<b>Phase I Total</b>	<b>\$1,166,000</b>		
<b>PHASE II</b>	<b>New Barn Year-round Assembly Space</b>			
	50x80 4,000 s.f. Barn	for indoor/outdoor activities	\$1,200,000	
	new septic system for assembly (assumes no mounding required)		\$90,000	
	new farm outbuildings		\$30,000	
		Subtotal	\$1,320,000	
	<b>Woodlands</b>			
	Year-round bridge @ Creek	w/ connection to ROW	\$500,000	
	paths to bridge and @ r.o.w.	1/4 mile @ 30./l.f.	\$40,000	
		Subtotal	\$540,000	
	<b>Circulation and parking</b>			
new drive @ new Barn	120lf drop off	\$30,000		
Grass parking in cemetery	30+cars	\$10,000		
Grass parking behind Barn	30+cars	\$10,000		
	Subtotal	\$50,000		
	<b>Phase II Total</b>	<b>\$1,910,000</b>		
	<b>TOTAL Estimate</b>	<b>\$3,076,000</b>		



The following is a summary of the feasibility of each of the elements included in the Final Preliminary Design for the Morrison Farm. Each element is reviewed with regard to:

- a. Opportunities
- b. Issues and Constraints
- c. Feasibility
- d. Hurdles
- e. Costs

## FARM HOUSE

### Opportunities

- Can be used as a town office.
- Chapter 34 (MSBC) existing buildings will allow change of use without meeting requirements for new construction.
- Renovating the existing building has the advantage of maintaining the historic look of the farm.
- Room for ramp to make accessible
- Recreation office at Town Hall is overcrowded
- The opportunity for the house as an office for the recreation department appeared to be most desirable to the Committee.
- Morrison Farm will have a significant recreational component
- Parking for office use can be attained without a great deal of expense
- Exterior look will be similar to the original house
- Can be modified to include toilet rooms accessible from the outside for use by visitors to the site.

### Issues/constraints

- Needs new roofing
- Needs new shingle siding
- New windows recommended
- New deck and ramp required for public space
- Upgraded or new insulation recommended
- New interior finishes required
- New telecom data required for office use.
- New plumbing fixtures and accessible toilet room required
- New electric service and wiring required
- New mechanical system recommended (soon to be required)
- New air conditioning required for office use.
- Second floor cannot be used as public space (it may be used for employees only per current MAAB)
- Attic is structurally unfit for storage.
- Recreation office would be removed from its proximity to other Town offices
- Driveway will require modification to provide safe exit onto Concord Rd.

## FARM HOUSE Continued

### Feasibility

- Very feasible
- No significant code or permitting issues
- No significant increase in traffic at site
- Although it may also be feasible to upgrade the house for residential use for a tenant or resident caretaker, this option was deemed undesirable by committee members due to liability issues as well as the problems that can be associated with having residential tenants on a property that will be used as a public space( i.e. conflict of use)

### Hurdles

- Zoning should allow for municipal building on site. This should be verified by Town Officials
- Vehicular ingress and egress should be upgraded for safety
- Modification of driveway may require agreement from the cemetery commission

### Cost

- The cost of converting the house to an office is equal to or less than the cost of constructing a new building.
- Construction of a new building for a Town office/comfort station at the site may be more cost effective. The space would be more efficient and operational costs may be less due to the more energy efficient new construction.
- Public Funding would be required to upgrade this building
- Town would receive no income for the use of the building as a Recreation office or other Town office.

## EXISTING BARN

### Opportunities

- The barn can be used as a storage space for town owned vehicles and equipment required for the grounds and building maintenance and other town owned vehicles.
- Continued use of the Barn for storage has the advantage of maintaining the historic look of the farm.
- The town has an immediate need for space to store vehicles and equipment.
- Until a new Town maintenance building is constructed the barn will fill the temporary needs of the town.
- Maintenance of the Farm will require farm vehicles and other equipment.
- A barn type structure for indoor assemblies was considered desirable by committee members. (SEE NEW BARN/ ASSEMBLY SPACE)

### Issues/constraints

- Chapter 34 (MSBC) existing buildings requires that a change of use from storage to assembly use requires meeting the requirements for new construction.
- The barn is structurally inadequate for use as an assembly space.

- The barn is in marginal condition structurally. It has been reinforced with structural ties.
- Continued use of the barn will require monitoring and structural upgrading as required.
- The requirements for an assembly space, accessibility, toilets, etc. would leave little room for actual assembly space if a new assembly barn were built on the existing foot print of the barn.
- Therefore if an indoor assembly space is desired it require the construction of a new larger building would be required.
- To maintain the barn as a storage building some maintenance will be required.
- New exterior paint
- The location of the barn presents an obstacle for vehicular access to the site. Roadways must loop around the barn to get to the center and back of the property.
- Maintaining the existing barn for storage will preserve the historic look of the Farm, however once an alternative space for storage is provided, it may be an unnecessary expense to maintaining the barn solely for the purpose of preserving the original look of the farm. A new traditional barn type structure with optional uses may be a better use of Town funds. (SEE NEW BARN/ ASSEMBLY SPACE)

#### Feasibility

- Very feasible to continue use as storage
- Unfeasible to convert barn into an indoor assembly space.
- It may be feasible to construct an addition to the existing barn that could support an outside assembly space (SEE NEW OUTSIDE ASSEMBLY SPACE)

#### Hurdles

- Vehicular ingress and egress should be upgraded for safety

#### Cost

- The cost of maintaining the barn as a storage facility will be minimal, paint, window upgrades, structural monitoring and upgrading, etc., will be normal for a building of its age.
- Could save the Town money by deferring the cost of constructing a new maintenance and vehicle storage building.

### EXISTNG OUT BUILDINGS

#### Opportunities

- The existing outbuildings can be used as a storage space for town owned equipment related to the maintenance of the Morrison Farm
- Maintaining the existing out building will preserve the historic look of the Farm

#### Issues/constraints

- The existing outbuildings are in poor condition.
- The existing outbuildings present obstacles for vehicular access to the site.

#### Feasibility

- Feasible to continue use as storage with Farm in its current state
- Unfeasible to continue use as storage in the development of the Farm per the FPD

#### Hurdles

- Preservationists must be convinced that buildings such as these are of little historic value.

#### Cost

- Maintaining and/or upgrading these buildings are not a cost effective.
- It would be a better use of money to raze these buildings and construct new out buildings, properly sited to support the FPD

### NEW OUTDOOR ASSEMBLY SPACE

#### Opportunities

- To enjoy the farm for mid to small sized group gatherings, weddings, corporate and family social events.
- May generate income for the Farm and/or the Town through rental fees.
- Improvements for an outdoor assembly space could provide improvements shared by other users, e.g. utilities, lighting, circulation, overflow parking, etc.

#### Issues/constraints

- There is currently space for outdoor gatherings being developed at the NARA.
- Requires moderate increase in parking.
- Must co-exist with farming interests
- Must co-exist with Soccer field use.
- Overflow grass parking
- Will increase traffic to the site.
- Requires some increase in infrastructure, utilities, toilets, etc.
- Will work well in conjunction with a new Barn/indoor assembly space.

#### Feasibility

- Feasible, moderately low impact on site
- Parking can be accomplished by shared parking with sports and farming with occasional overflow grass parking.

#### Hurdles

- Assembly use must be accepted by a reasonable number of residents because it may conflict with other interests: soccer, preservation, conservation.
- Assembly use may require zoning special permit (verify)

#### Cost

- The cost of providing an outdoor space for gathering of up to 100 people would be moderate.
- Verify

## NEW BARN FOR USE AS A YEAR ROUND INDOOR ASSEMBLY SPACE

### Opportunities

- Make Farm usable year round.
- To enjoy the farm for small to mid-sized group gatherings,
- Considered by many to be a major asset to the Town
- For educational, cultural and social events.
- May generate income for the Farm and/or the Town through rental fees.
- Improvements for an outdoor assembly space would provide improvements shared by other users, e.g. utilities, lighting, circulation, overflow parking, toilet facilities, meeting space, office, etc.
- New barn type structure will enhance the site, replacing the existing barn that is in marginally sound condition.
- These types of spaces have been successful at other community farms.
- May be operated by an independent non-profit farm organization, should such an entity be established.

### Issues/constraints

- Increased traffic to the site.
- Increase in hard surface parking for year round use
- May require overflow grass parking on site or in unused area in adjacent cemetery
- Must co-exist with gardening / farming interests
- Must co-exist with Soccer field use.
- Will work well in conjunction with a new outdoor assembly space.

### Feasibility

- Feasible,
- A new year-round Barn for assembly use on site in approximately the same location of the existing barn could be constructed without major issues.
- There are no major site issues in the area of the existing barn, wetlands, etc.
- Parking can be accomplished by shared parking with sports and farming and occasional overflow grass parking.

### Hurdles

- Assembly use must be accepted by a reasonable number of residents because it may conflict with other interests: soccer, preservation, conservation.
- Assembly use may require zoning special permit (verify)
- Funding approval from Town residents.

### Cost

- The cost of providing an indoor assembly space will be considerable.
- Estimates of \$300 to \$400 / s.f. of space. The size of an assembly space will be approx 15 s.f. per person (seated @ tables) plus approx 50% for support space, circulation, etc. Therefore an assembly space for 150 would be approximately 3,000 s.f. and the construction cost would be roughly \$1,200,000 dollars. This requires a considerable investment of municipal funds.

## NEW POND WALK

### Opportunities

- A connection to the future Bruce Freeman Rail Trail
- A connection to Rt. 2-A via ROW
- A possible connection to parking at the shopping plaza on Rt 2-A
- Connection to Ice house pond, parking and historic site.
- Connection to existing walking trails,
- Connection to the soccer and sports fields.
- Enhances the existing trails system
- Agrees with interest groups: passive and active recreation
- Nature overviews, boardwalk and pond access from the Farm and Ice house pond will provide a whole new dimension to activities connect with the Morrison Farm property.
- The one working pond will become an active recreation site for naturalists, fishing, canoeing and kayaking.

### Issues/constraints

- Development of resource areas permissible in a resource area.
- Requires conservation approval
- May require state approval
- Requires a considerable amount of clearing along the water's edge.
- Requires construction water's edge.
- Will include a boardwalk on pilings along certain sections.
- Possible use of CPC Funds for recreation

### Feasibility

- Feasible,
- Design and construction issues are complex but well within standard practice.
- Care must be taken to minimize the impact of construction.

### Hurdles

- Requires study of waterways, spring flows, etc.
- Requires conservation approvals
- Requires civil and structural engineering

### Cost

- The cost of providing a new pond walk will be considerable.
- Estimates range from \$300,000 to \$500,000. for design and construction

## 6V6 SOCCER FIELDS

### Opportunities

- Satisfies the desire of Soccer interests, whose support was instrumental in providing the votes needed to purchase the Morrison Farm Property.
- Increases the use of the site to a large number of Town residents, visitors and young people who might otherwise may never visit or utilize this beautiful property.
- Improvements for soccer fields would provide improvements shared by other users, e.g. utilities, better circulation, increased parking, better connections to adjacent sites.etc.

- Sports interests appear ready and able to develop the fields. This could spearhead the development of the site that has been in limbo for many years. And bring other improvements, such as the restoration of the house as a recreation office and comfort station, greater number of community farming plots, accessible trails, etc.

#### Issues/constraints

- Development of recreational use in a resource area is permissible.
- This area has been mowed for many years and will be maintained as such.
- Requires conservation approval
- The slope of the proposed area is minor and within acceptable limits for this type of recreation.
- Grading in this area may have a significant impact on the adjacent meadow, wetlands and pond and is not recommended. Therefore there will be a moderate grade change on the playing surface.
- Use of fertilizer may be restricted.
- Because of their location in the buffer, no parking will be adjacent to the fields. Players and spectators will have to walk from parking lots located near the front of the property and from the improved ice house pond parking area.
- Pedestrian connections to these parking areas will be in, and across wetland areas, requiring conservation approval, engineering and construction safeguards.
- Other interests, preservationists and conservationists, community farmers and passive recreationists may be concerned with impact that soccer fields will have on the property.
- Traffic, on and around the site, will increase significantly during game time and practice time.

#### Feasibility

- Feasible,
- Because of the gentle grades, the proposed fields will have minimal impact on the site.
- Never-the-less must be taken to minimize the impact of construction.

#### Hurdles

- Agreement among town residents to utilize the property for this use.
- Conservation approvals for fields and required circulation.

#### Cost

- The cost of providing new fields will be minimal
- The cost of providing new parking on site, upgrading the adjacent Ice House Pond parking area and providing pedestrian connections to the fields will be considerable.

## FUTURE OPEN SPORTS FIELDS

### Opportunities

- These fields are envisioned for casual recreation, sports such as Frisbee, touch football and other informal sports activities.
- Satisfies the desire of active recreational enthusiasts.
- Similar to the soccer fields, the use of the site for active recreation opens the use of the site to many residents, visitors and young people who might otherwise never visit the Farm.

### Issues/constraints

- These proposed fields are in an area of greater environmental sensitivity.
- Although development of recreational use in a resource area is permissible, this area has not been maintained for many years. The area will require significant clearing. Conservation interests may be more reluctant to accept the development of this area as a playing field.
- Requires conservation approval

The following issues are similar to those of the 6v6 soccer fields:

- The slope of the proposed area is minor and within acceptable limits for this type of recreation.
- Grading in this area may have a significant impact on the adjacent meadow, wetlands and pond and is not recommended. Therefore there will be a moderate grade change on the playing surface.
- Use of fertilizer may be restricted.
- Because of their location in the buffer, no parking will be adjacent to the fields. Players and spectators will have to walk from parking lots located near the front of the property and from the improved ice house pond parking area.
- Walkways and parking developed for the 6v6 fields will be utilized (shared) for this area.

### Feasibility

- Feasible, subject to required approvals
- The proposed fields will have a significant impact on the ecology of the site.
- Utmost care must be taken to minimize the impact of construction and use

### Hurdles

- Agreement among town residents to further develop the property for active recreation, because other sites may be available: NARA, School St., etc.
- Conservation approvals for fields and required circulation.

### Cost

- The cost of providing new fields will be minimal
- The cost of providing new parking on site, upgrading the adjacent Ice House Pond parking area and providing pedestrian connections to the fields will be considerable.
- Estimates range from \$50,000. to \$100,000.

## UPGRADED WALKING TRAILS / PRESRVATION OF THE WOODLANDS

### Opportunities:

Provide universally accessible trails for residents and visitors.

### Issues/constraints

Grading and compacted surface would be required.

### Feasibility

Feasible in areas of new work

More difficult to accomplish in existing woodland trails.

## EXPANSION OF INDIVIDUAL COMMUNITY GARDEN PLOTS

### Opportunities

This use of the farm has grown in popularity

It is in concert with the historical farm use at the site.

### Issues/constraints

More plots require more infrastructure: water, toilets, septic systems, electricity, although minimal

More parking required

Must co-exist with other uses

### Feasibility

Very feasible

An accepted and popular use

### Hurdles

Few

Cost Minimal, plus, some income is derived from users.

## Item: CONNECTION TO THE ICE HOUSE POND PARKING

### Opportunities

Parking is one of the most intrusive structures in open space.

Connection to an upgraded Icehouse pond parking area, provides overlap parking, reducing the required spaces for given uses.

### Issues/constraints

Ample parking is necessary for the successful operation of all uses at the Farm and adjacent properties and must be provided.

Parking requires access, and connections to existing circulation.

A route from the Ice House pond to the Morrison Farm is over sensitive land and must be constructed with due consideration for the land and the natural environment, historic views, etc.

Feasibility: Feasible

Hurdles: Conservation Approvals

Cost: Typical gravel road construction



The Morrison Farm is a valuable asset of the Town of Acton. The purchase of the property several years ago was accomplished by a vote of Town residents. The proponents of the purchase represented a broad range of interest in the property. The Morrison Farm Re-use Committee did an excellent job of identifying a comprehensive list of issues relating to the property and potential uses for the property. The Morrison Farm Re-Use Committee Report served as a basis for our study and design. Because of the number and variety of possibilities presented in the document, our committee agreed that it would be most appropriate to focus on the “Selectman’s goals”. This list appeared to be a distillation of the broad range of options.

In the beginning of our investigation the design team believed that, given to the allotted time and resources that it would be most valuable to focus on the Farm property itself, to determine what uses could feasibly be included in a Preliminary Design for the Farm.

The major issues were site constraints, the shape of the property, the location of wetlands, the contours, the buildings, located at the front of the lot, access to the property, the historic value of the property and its buildings, and the location of the site relative to other Town owned properties owned amenities. One of the biggest concerns of the design team was how one use might affect another, i.e. how could the various stakeholders be accommodated in a proposed preliminary design for the Farm. And was it feasible that these interests could co-exist comfortably with each other and with the land

The elements included in the final preliminary design have been ratified by members on the Design team Advisory committee from the Town. Members of this group represented a broad range of interests: conservation, farming, passive recreation and active recreation, including proponents of the farm being used for youth soccer fields.

We believe, that after many revisions, the final preliminary design presented in this package represents a viable, long range plan for the development of the Farm; a plan that includes a variety of uses that will not just co-exist, but will mutually benefit each another. In the final analysis, it was the role of the Morrison Farm as a central unifying element connecting several of the Town of Acton’s valuable historic and recreational and conservation properties that gives this design its power to be succeeded.

Perhaps the initial inward focus of the design team on the Farm itself, the opportunities and constraints within property lines, that allowed us to, in the end, branch out and make this preliminary design realize the full value of the Farm as a unifying element in the Town. We certainly hope so.



The Morrison Farm Feasibility and Design Study PowerPoint presentation can be found as a separate document on the Town of Acton's web site or by clicking [here](#).