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CAPE COD
COMMISSION

Date: January 6, 2011

To: Falmouth Youth Hockey League, Inc.
9 Skating Lane
Falmouth, MA 02540

From: Cape Cod Commission

Re: Limited Development of Regional Impact Hardship Exemption
Cape Cod Commission Act, Sections 12 and 13

Applicant: Falmouth Youth Hockey League, Inc.

Project: Falmouth Ice Arena
Lot 10, Technology Park Drive, Falmouth, MA

Project #: TR10010

Book/Page: Book 23297 Page 63

Lot / Plan: Lot 10 Plan 386/47

DECISION OF THE CAPE COD COMMISSION

SUMMARY

The Cape Cod Commission (Commission) hereby approves with conditions, the application of Falmouth Youth Hockey League, Inc. (the Applicant) as a Limited Development of Regional Impact (DRI) Hardship Exemption pursuant to Sections 12 and 13 of the Cape Cod Commission Act (Act), c. 716 of the Acts of 1989, as amended, for the construction of a 56,962 square foot (s.f.) ice arena at Lot 10 Technology Park Drive in Falmouth, MA. This decision is rendered pursuant to a unanimous vote of the Commission on January 6, 2011.

PROJECT DESCRIPTION

Falmouth Youth Hockey League, Inc., proposes to redevelop the site and construct a new ice arena with a total overall floor area of 56,962 square feet. The arena is proposed with a full size ice surface (200' x 85') that will meet National Hockey League standards and a half size ice surface to be used for figure skating, recreational skating, and hockey schools. The arena is also proposed to have eight dressing rooms, including male and female designated high school varsity hockey team dressing rooms, male and female coach rooms and referee rooms, a Falmouth Figure Skating Room, an office, a skate shop and pro shop, concession area, seating/waiting areas, a learning center, mechanical and electrical rooms, staff offices, and an employee room. The ice arena development is proposed primarily within areas of the site that are clear of vegetation and are existing disturbed areas.

PROCEDURAL HISTORY

The project was referred to the Commission on July 20, 2010 by the Town of Falmouth Planning Board through Brian Currie, Town Planner. In a letter dated July 22, 2010, the Applicant was informed that the Commission had received a DRI referral, and that the project qualified as a DRI. The Applicant filed application materials with the Commission on July 20, 2010, August 3, 2010, October 8, 2010, and other dates as shown in the *Materials Submitted for the Record* below. The DRI / Limited Review, DRI Exemption, and DRI Hardship Exemption applications were deemed to be substantially complete to proceed to a public hearing in a letter dated November 8, 2010.

In accordance with the Cape Cod Commission Act, the DRI hearing period was opened by Hearing Officer on September 17, 2010. A site visit was conducted on November 8, 2010 and a duly noticed public hearing was held on the DRI / Limited Review, DRI Hardship Exemption, and DRI Exemption applications by an authorized subcommittee of the Commission on November 8, 2010 at 6:00 pm at the Falmouth Public Library in the Hermann Meeting Room. At this hearing, the subcommittee voted to leave the record open, and to continue the public hearing to December 2, 2010 at 1:00 pm at the Cape Cod Commission office. At the December 2, 2010 public hearing, the Applicant withdrew the DRI Exemption application. The Commission subcommittee voted to approve the Hardship Exemption request and directed staff to draft a Limited DRI Hardship Exemption approval decision with conditions. The public hearing was continued to 2:30 pm on December 15, 2010 at the Cape Cod Commission office.

On December 15, 2010, a Commission hearing officer closed the DRI public hearing period, continued the Limited DRI public hearing to December 22, 2010, and continued the Hardship Exemption public hearing to January 6, 2011. The Subcommittee held a public meeting immediately following the public hearing on December 15, 2010. At this meeting, the subcommittee reviewed the draft Hardship Exemption approval decision and voted unanimously to forward the decision to the full Commission for consideration at its meeting on January 6, 2011. On December 22, 2010, a Commission hearing officer closed the Limited DRI public hearing.

A final public hearing was held before the full Cape Cod Commission on January 6, 2011. At the close of this hearing, the Commission voted unanimously to approve the project as a Limited DRI Hardship Exemption, subject to conditions.

MATERIALS SUBMITTED FOR THE RECORD

In addition to the list of materials submitted for the record (see Table 1 below), the application and notices of public hearing relative thereto, Commission staff's notes and correspondence, the minutes of public meetings and hearings, and all other written submissions received in the course of the proceedings are hereby incorporated into the record by reference.

TABLE 1: Materials Submitted for the Record	
Materials from Cape Cod Commission	***Date Sent***
Email from Kristy Senatori (KS) to Laura Moynihan (LM) re: schedule a filing appointment	6/29/10
Email from KS to LM re: can file Hardship Exemption application concurrently with DRI Exemption application and fee waiver	6/29/10
Letter from Marianna Sarkisyan (MS) to LM re: attached DRI referral form, sixty day timeline	7/21/10
Letter from MS to LM re: revised letter and attached DRI referral form	7/22/10
Memo from KS to LM and Brian Currie (BC) – Falmouth Town Planner re: application incomplete, additional materials needed	8/2/10
Email from KS to Jeanne Moorehead re: fee waiver request form and abutters list	8/4/10
Email from KS to LM and BC re: dates for public hearing	10/13/10
Email from KS to LM and BC re: public hearing date	10/14/10
Memo from KS to subcommittee members re: • Staff Report dated 11/2/10 • Correspondence from state and local officials • DRI referral form • Materials from the Applicant	11/2/10
Email from KS to subcommittee members re: attached response to staff report from Applicant (dated 11/5/10)	11/5/10
Email from KS to Jay Zavala re: attached staff report	11/5/10
Email from KS to LM re: subcommittee meeting and withdrawal	12/3/10
Email from KS to LM re: full CCC meeting dates	12/6/10
Letter from KS to LM re: applications are complete, public hearing date	11/8/10
Email from KS to LM re: recording information	12/8/10
Email from KS to LM re: packets for Commission members	12/8/10
Email from KS to LM re: attached draft decision	12/10/10
Letter from Gail Hanley to LM re: attached hearing notice and billing	12/20/10
Email from KS to LM re: revised Water Resources Finding	12/23/10
Materials from Applicant	***Date Received***
Letter from Jack Vaccaro to KS re: attached revised NRI	5/11/10
Email from LM to Marianna Sarkisyan re: attached Natural Resource Inventory (NRI) and NHESP letter	5/14/10
Letter from LM to KS re: RPP standards and project	6/1/10
Letter from LM to KS re: attached DRI exemption application	7/20/10
Letter from LM to KS re: attached revised project lighting plan	7/26/10
Letter from LM to KS re: attached landscape Plan from Rapoza	7/27/10

Landscape dated 7/13/2010	
Letter from LM to KS re: attached fee waiver application	8/3/10
Email from Jeanne Moorehead to KS re: abutters list	8/4/10
Email from LM to KS re: attached 9/9/10 memorandum with additional requested information	9/13/10
Letter from LM to KS re: DRI HDEX request and limited review scoping checklist	10/8/10
Letter from LM to KS re: attached revised floor and elevation plans	10/23/10
Letter from LM to KS re: attached revised landscape plans	11/2/10
Email from Gabrielle Belfit to Michael Borselli re: bioretention plans	11/5/10
Letter from LM to KS re: response to staff report dated 11/2/10	11/8/10
Letter from Michael Borselli, P.E. to KS re: attached revised plans	11/8/10
Letter from LM to KS re: typographical errors on attached cover page of floor plans (sheet A0)	12/1/10
Memorandum from LM to KS re: attached supplemental transportation information	12/2/10
Email from LM to KS re: town requirements/submittals	12/6/10
Email from LM to KS re: recording information	12/8/10
DRI Exemption withdrawal	12/10/10
Email from LM to KS re: comments on draft decision	12/10/10
Email from LM to KS re: fourth issue economic development	12/10/10
Letter from Paul Moore (President of Falmouth Youth Hockey League, Inc) to KS re: request to withdraw DRI Exemption	12/13/10
Email from Randy Hart to Glenn Cannon re: attached revised trip generation calculations	12/13/10
Letter from LM to KS re: comments on draft decision	12/14/10
Materials from Public Agencies/Towns/State/Federal	***Date Received***
Referral form from Falmouth Planning Board from Brian Currie	7/20/10
Letter from Matthew C. Patrick (Third Barnstable District) and Timothy Madden (Barnstable, Dukes & Nantucket) to Chairman Royden Richardson in support of the project	7/29/10
Letter from Therese Murray to Paul Niedzwiecki in support of the project	8/30/10
Letter from BC to KS re: consistency with LCP and zoning	10/29/10
Letter from Brent Putnam (Chairman of Falmouth's Board of Selectmen) in support of the project	11/3/10
Letter from Jay Zavala to subcommittee in support of the project	11/8/10
Materials from Members of the Public	***Date Received***
Email from Robert Fitzpatrick re: concerns about non-motorized traffic on Thomas B. Landers Road	11/12/10
Email from Ted Rowan re: accommodating bicyclists	12/1/10

TESTIMONY

November 8, 2010 Public Hearing

Mr. Harding opened the hearing at 6:10 PM on November 8, 2010 and noted that the purpose of the hearing is to consider the Falmouth Youth Hockey League DRI Exemption, DRI Hardship Exemption, and Limited Review applications and take public testimony on the project.

Attorney Kristy Senatori then provided a power point presentation on the staff report which outlined the existing setting, a project description, a procedural overview, the standards of review and approval, Commission staff analysis, and conclusions and recommendations.

Attorney Senatori concluded her presentation by reiterating that based on the Commission's regulations, Staff suggests that the project does not qualify for a DRI Exemption in the areas of Transportation, Water Resources, Natural Resources and Energy because of the significant regional impacts but recommends that the Commission could grant a Hardship Exemption and waive all mitigation requirements.

Paul Moore, President of Falmouth Youth Hockey League, introduced the project. Mr. Moore stated that keeping hockey affordable is the organization's underlying goal. The organization has been talking about a new rink since 1980. They have looked at various sites but the current site would meet all of their needs. They have outgrown the current parcel and a new site would require 12-15 acres in order to be sufficient. There is a need for gender specific locker rooms and concessions and the current site is not big enough. The standard rink size is 200 x 85 and their current size is 185 x 80. They need more ice. The extra half sheet will provide greater opportunities and yield more profit.

Attorney Laura Moynihan spoke next on behalf of the Falmouth Youth Hockey League. Attorney Moynihan stated that what is unique about this project is that the building size is dictated by the ice surfaces. The building has about 54,000 square feet to it but about 68-70% of that is ice surface and the seating area. The seating area is composed of about 650 seats, but the seats will only be filled maybe once or twice a year. It is a capacity that has to be provided for but it is not a regular usage. The spirit of the volunteerism that is involved here has continued for over 45 years. The people in the community care about this project a lot. They have contributed to the cost of this project and it is appreciated.

Mr. Mike Borselli, Principal with Falmouth Engineering, explained the site design and engineering, the site layout and some aspects of the design. Mr. Borselli discussed the preliminary meeting that he had with the Commission Staff a few months ago and the feedback and recommendations that he received. He stated that they had incorporated most of the ideas and feedback into the plan and feels that it resulted in a superior plan.

Jack Vaccaro of Vaccaro Environmental Consulting noted that of the 7 acres of land on site, about 90% has been stripped of topsoil and vegetation, and the remaining 10% consists of forest some of which will be disturbed by the project at the proposed site entrance and southeast corner. Parts of the site are located in priority habitat and have been subject to review by the Natural Heritage Program in accordance with the Endangered Species Act. It has gone through that review and they have indicated that no further review would be required with some conditions related to the recharge basin and establishing a chain link fence.

Mr. Paul Cochinos of Arena Design Engineers explained that he worked alongside the project team in designing the facility. He stated that it is essentially a 54,000 square foot space which contains an entrance area, a lobby that includes a snack bar, pro shop, manager's office, secretary's office, learning center for the kids, and an elevator for handicap accessibility. The front foyer has glass windows with glass entrance doors, a pitch roof going into the lobby area with red brick casing and elevation changes. The rear of the building facing Technology Park Drive has the mechanical room with red concrete blocks and double paneled wall siding. The Thomas Landers Road side has vegetation covering the side of the building.

Ms. Lyons asked if the figure skating area he talked about is a separate rink.

Mr. Cochinos replied that it is a club room for changing and facilities.

Rick Crecco then presented a power point presentation on the landscape design of the project. He explained that the guiding principles were to use native or near native plants in the design of the project. For his design he used plants that require low water usage (no irrigation), are low maintenance and that have winter interest. He made sure they have low insect problems and can last through hot summers and cold winters. He made sure to include swales and to watch out for the turtle population.

Sia Karplus then provided a presentation on the energy plan. She noted the uniqueness of an ice arena and that in proceeding with complying with the standards they had to look at other ice arenas for comparison. She used an energy use index and looked at ice arenas in similar climates for comparison which normalizes energy use by square footage. In doing this she looked at the existing ice arena that is being replaced with this facility. That facility uses 190,000 btu's per square foot. The new arena will have an energy efficient roof system, landscaping, roof overhang and a waste heat recovery system that uses excess heat to heat the building. With these efficiency measures they have an energy use intensity of 85,000 btu's per square foot in the new ice arena, which is 2 ½ times less than the old facility and one of the best in the country and she believes demonstrates the League's commitment to energy efficiency.

Randy Hart of Vanasse Hangen Brustlin, Inc. (VHB) discussed the traffic study that he did and noted that he met with Commission staff prior to the study. Mr. Hart provided an overview of the study itself and the impacts of the project on traffic in the area. Prior to the evaluation he sat down with staff and looked at the areas under analysis which included Technology Park Drive and Route 28 in the northbound and southbound directions. They looked at an evening count between 4 and 6 p.m. and between 11 and 2 on Saturday, when traffic is most critical. According to his evaluation, during typical conditions the weekday traffic count is around 3700 trips and Saturday is around 2500 trips. Accident records were also gathered and all area intersections fall below a threshold which would make it a safety deficient location. Mr. Hart noted that this is a relocation of an existing facility. They are taking it out of a congested area and putting it in a less congested area, which is consistent with peak summer conditions. The facility operates differently than other facilities and usage is lighter in the summer when the traffic is heavier. The peak season is between January and March when traffic is lighter. The facility is also closed for a few months during the year. The new sheet of ice, which is the only new traffic generator of the facility, is anticipated to only create 23 trips during the evening peak time and 20 trips during the Saturday weekday. In looking at the volume collectively on a daily basis they anticipate 280 trips on a daily basis, not the 819 cited in the staff report. In terms of access to the site they are proposing 2 points of access to reduce traffic and the site lines will be safe. They have a traffic management plan which is included in the Staff Report that they have provided for high traffic generating events. They don't believe the plan will be necessary but it is there to be implemented if it is. Mr. Hart then reiterated that it is a relocation of an existing facility to a less congested area and that he believes Technology Drive to Route 28 will be the only impacted area. Anywhere outside of that will be below the 25 trip impact level. The roadway can easily accommodate the traffic of the facility. There are no red flags in terms of operational safety. He concludes his presentation by stating that he does not understand, based on his study, how the traffic caused by the new facility will impact roadways beyond the area, which is the test under the Regional Policy Plan.

Ms. Lyons asked whether this facility would create a more even flow of traffic rather than just people bringing trucks back and forth and employees of the industrial park. The use will increase to include, youth and parents, and more of a general public.

Mr. Hart agreed that those people will be relocated to this facility.

Ms. Lyons agreed that the reduced congestion from the existing facility will be a relief for people in that area but that it doesn't take away from the anticipated increase of traffic in the area of the new facility.

Mr. Hart added that the project will provide a benefit to the general community through travel time savings because the new location has great regional access and it is much less congested. He feels that the benefit should be considered in making this decision.

Ms. Lyons then commented on the difference in trip data between Commission Staff and Mr. Hart's calculation.

Mr. Hart stated that there are two ways to calculate trip generation. You can go through the white book, which is typically a very good resource, but in this case there is only one data point for similar facilities and it is not local data. In the book it warns you about that when using the data. Mr. Hart stated that the data he used was provided by NHL skate, which was better, more localized information and resulted in a lower trip calculation of 280 trips. You have to understand the characteristics of the site and that the traffic generation is seasonal and regional.

Ms. Lyons responded by addressing the fact that because it will be a larger facility that will provide classes and more ice that it will produce more traffic than it currently does.

Mr. Hart agreed but stated that the increase would be marginal because the new sheet of ice is the only component that has the ability to produce traffic.

Ms. Lyons then asked to hear from the Commission Traffic Engineer, Glenn Cannon.

Attorney Moynihan interjected to note that the main reason for the learning center was to get funding through grants and fundraising because if you have an educational component in your project you qualify for grants. It was not to bring more traffic to the facility; it is intended to be a place where a high school coach can bring the team in to show them the video or something like that.

Mr. Cannon stated that staff does not support the DRI Exemption because of the potential to create traffic outside of the town of Falmouth. He said that he cannot in good conscience stand in front of everyone and say that it will not have a significant impact outside of Falmouth, especially during peak events. He used the 819 as a number from ITE and he feels that the data point is a good data point. Mr. Cannon said he feels you have to think about it realistically. You have a 650 seat arena with 330 parking spaces to accommodate that arena. Mr. Cannon said he would be happy to continue the conversation with the applicant.

Ms. Lyons said that she was satisfied with the explanation.

Mr. Harding said that based on the impact on traffic at the current location and what it would be at the new location he feels that the new location would be a big improvement but that is not for him to decide. He said he would also be interested in knowing what other kind of facility could

be built there and what kind of impact that would have and what it's purpose would be. He stated that he feels that it seems like a skating rink for kids would provide a benefit to the community and that type of benefit far outweighs other considerations. He said that he thinks there is a balance there that nobody has spoken about.

Mr. Cannon said that he agrees and that the Commission staff felt that there was no point in moving on with the discussion and spending the time and money of the applicants if they could move forward with the Hardship Exemption. He did not want the Applicant to spend time or money on extra analysis, but he would be happy to pick up those discussions with the Applicant if necessary.

Attorney Moynihan stated that the traffic impact caused by the new facility is already in existence. They are moving the facility from one location to another. She feels that the impacts are local in nature now and will continue to be and she feels that that is the key issue here. She then stated that when discussing a Hardship Exemption, they have to go through a local permitting process as well. If we say there are 819 trips here just for the sake of moving it through the permitting process, at the local level we have a 20% trip mitigation as well. There is no hardship exemption at the local level. So there are other factors involved here in terms of trying to establish the criteria for the DRI Exemption. She cannot just go along with an 819 trip count. There is no guaranty that the full Commission would accept the mitigation either. She stated that at the local level they will look at the fact that the Commission found 819 trips and ask how the League plans to mitigate 20% of that, creating another potential cost to the Applicant. She feels that it isn't just as simple as granting a Hardship Exemption, there are other factors involved. There are two areas that the Staff has identified as having a substantial effect outside of the town of Falmouth, traffic and water resources. The impact on water resources has to do with the Buzzards Bay Watershed. Attorney Moynihan stated that the test is that there are significant impacts.

Attorney Moynihan stated that a DRI would accomplish the ability of the Staff to place conditions on this project. She stated that all the conditions that the Staff wishes to place on the project can be accomplished through a special permit. She believes a DRI is not necessary. Attorney Moynihan disagrees with the staff that there will be no additional costs associated with the Hardship Exemption. Attorney Moynihan states that she has been through the process and she knows what is involved. Before you can get a permit you have to apply for a preliminary certificate of compliance with the Commission Staff. There is Staff time involved, there are reports and plans that have to be produced and approved. That involves additional time and cost. There are compliance costs, contract costs, and potential plan modification costs. Attorney Moynihan concluded her presentation by stating that granting a DRI Exemption would be a time saver and a cost saver and asks that the Commission Subcommittee grant that Exemption.

Mr. Jay Zavala, President of the Falmouth Chamber of Commerce, stated that he is there to ask that the project be granted a full DRI Exemption. He feels that the project's location, character, and environmental effects will not significantly impact the resources, values and purposes protected by the Act outside of this municipality in which the development is to be located. He feels that the project will have a significant positive impact on the quality of life of children and their families throughout the community. As a recreational facility, it will rise as a project of great community benefit and help retain jobs. After reading the Staff Report, and listening to testimony, he feels the project merits full DRI Exemption, and all the compliance processes suggested in the Staff Report can and should be attended to at the local level. He says the Commission should admit that the town government can be the appropriate jurisdiction for

determining and administering compliance requirements, and that it is cost conscious to allow the town to do so and a common sense solution. Mr. Zavala noted the importance of the Subcommittee's decision, not only in its' recommendation to the full Commission, but for project time and costs, and the ability of the League to attract donors and supporters. He concludes by stating that he believes the Subcommittee can find that the probable benefits of this project are greater than the probable detriments and that they will be able to find that the project is worthy of and qualifies for a full DRI Exemption.

Ms. Lyons addressed the engineer of the project and asked if he could show other areas where he had taken on Staff recommendations other than wastewater treatment.

Mr. Borselli stated that the primary recommendation that he took on was in storm water management. The initial design had completely used subsurface recharge through the use of catch basins and leaching that would discharge into the gravel. Initially they had no bio-retention but they reworked the entire site to include bio-retention. They found the Staff's recommendations to provide for a better design because it helped to reduce nitrogen loading.

Mr. Harding then invited any questions or comments from any Federal, State, and Municipal Officials.

Mr. Brian Currie, the Town Planner noted that in the Subcommittee's packet they should have a letter from the Board of Selectmen dated October 20th. He asked to please note that they supported the Exemption. He also noted that he has taken the time to read the Staff Report and the Applicant's response to it and feels comfortable supporting a decision for Exemption.

Kevin Murphy, a local businessman, provided a historical overview of the rink. Falmouth is embracing the current site and wants the project to go forward. The community needs and wants to get the rink out of the congested area of town and it will cut down on travel time for everyone in the community. Although he doesn't have children who skate, he says he knows what is important for the Town of Falmouth and the people in it. He stated that time is money and that the League has shown to be a public benefit and an Economic Hardship Exemption will only stall the process and he hopes the Subcommittee will choose to grant the DRI Exemption because the arena would be a public benefit and good for the community.

Brett Sanidas, Vice President of Falmouth Hockey League and Chairman of the Fundraising Committee discussed the difference between this project and most that come before the Commission. He stated that he has worked on a lot of fundraising projects and this one is different because all of the others had full time staff working forty hours a week and this one was all volunteers. Everyone put in a ton of hours on this. This project consisted of 5.5 million dollars in private funds. Every dollar they have to spend to get the project through is another to be raised. There is no town involvement. A DRI Exemption would get this through a lot quicker. Sometimes people don't want to give to a project unless they know it is fully permitted and will come to fruition. Mr. Senitas commented on what a great organization Falmouth Youth Hockey is and that he hopes the Subcommittee will grant the Exemption.

Mr. David Viera, the Town Moderator, stated that there are only two towns to think about when it comes to this project, Bourne and Mashpee. Those are the two ways to get into Falmouth. People are already coming into Falmouth to play at the existing arena. There is the additional sheet of ice which may bring in a few more people, but he asked the Subcommittee to think about how many cars are going to drive through Bourne and Mashpee to come to the new arena. He believes it won't be many more than are currently coming into Falmouth. He stated that the

other area to address is the nitrogen loading, but he feels that surely the Town itself will address that issue. The Mass Estuaries Project already says the level of impact will be minimal. He also argued that as a resident that might have a "not in my backyard" attitude, he wants to see the facility there. He wouldn't mind waiting a few extra minutes because there is a game going on. He concluded by stating that people want this facility in their backyard.

Sheriff Cummings opened by saying that this is about families and community, not just in Falmouth, but in all of Barnstable County. Kids from across the Cape and all over the Cape will be coming here to play hockey. When they get done playing, they're very tired, and when they're tired they go home and go to bed, they don't get into trouble. This will give kids something to do, and if they're active and at the rink, they won't be anywhere else getting into trouble.

Edward Gross, Chairman of the Falmouth Bikeways Committee and member of the Transportation Committee, stated that he was astonished not to hear the word bicycle or pedestrian once. The existing facility is supported by sidewalks and bikeways. The current proposed location lacks any access for bikes and pedestrians. If the project is in fact one of regional impact, why not think about the transportation aspects beyond cars. Thomas Landers Road is currently used by mostly trucks that operate at relatively high speeds. The area is mapped for bikes but not designed for them. He suggests this could be improved with relatively easy measures such as paint. He would hope that the town would make a commitment to supporting this project with better pedestrian and bicycle access.

Attorney Moynihan then responded to Mr. Gross's comments by stating that since most of the use in the Arena is in the winter and the kids coming into the Arena would be carrying equipment, that it wouldn't be safe. They did however provide for sidewalks around the building and a drop off area. They do not anticipate that much pedestrian use however because they really don't have it now at the existing Arena.

Paul Niedzwiecki, Executive Director of the Cape Cod Commission thanked everyone for their testimony. He stated that as someone who grew up playing hockey he understands how important this is for the community. This is a great project and Falmouth Youth Hockey is a great organization. There is no lack of support for this organization. When it came to the Commission, the Staff tried to find the quickest and least costly way to push it through, but the Commission has to use the Act and apply the Act. He stated that what we have is a disagreement over the path to take. Which is the least expensive and the quickest route? The Staff recommends that the Hardship Exemption is the quickest and least expensive way to go about it. There is no disagreement over the benefit this project will have for this community. There are a lot of questions in people's minds now and the Staff can lay out for everyone the Exemption process. The Commission doesn't want it to be burdensome to people. He feels that the quickest and least expensive way is the Hardship Exemption. There are disagreements over what qualifies for an Exemption and what doesn't. After looking at the cost and length of time, he is not sure if this will be the fastest and least expensive way. Moving forward the Commission will deal with the facts and not opinions. Based on some of the issues brought up tonight, he feels the Commission and the Applicant do need to spend some time looking at the nature of the DRI Exemption.

The hearing was continued to December 2, 2010 at 1:00 PM at the Cape Cod Commission Office on Main Street in Barnstable.

December 2, 2010 Public Hearing

Mark Harding opened the hearing at 1:02 PM on December 2, 2010, and noted that it was being continued from November 8, 2010.

Attorney Kristy Senatori then provided a power point presentation on the project. She provided a procedural overview noting that because this is a continuation of a previous hearing she would outline the details of the project in brief. Attorney Senatori reviewed the requirements of a DRI Exemption citing Section 12(k) of the Cape Cod Commission Act and Section 8 of the DRI Enabling Regulations and noting that the proposed development qualifies as a DRI and that it may only be exempted if it will have no significant impacts on the values and purposes specified in section one of the Act outside of the municipality due to its location, character and environmental effects. Additionally, section one of the Act requires that the Commission shall review developments which will have impacts beyond their local community and determine the comparative benefits and detriments of those projects and their consistency with the Regional Policy Plan and local comprehensive plans and goals. Ms. Senatori noted that as previously stated in the last hearing, Staff is recommending that the project does not qualify for a DRI Exemption. The project will have significant regional impacts on the values and purposes of the Cape Cod Commission as identified in the Commission Act. The test is whether it will have any significant regional impacts and staff suggests that the project has significant regional impacts and should not be exempted from Commission review. Attorney Senatori noted that in the past the Commission may have granted exemptions to projects where the Commission members did not want the project to undergo a full DRI review when the review could be limited in scope to certain issue areas. The Commission now has a limited review process in place where the project does not need review in every issue area. Staff is supporting a Hardship Exemption for this project based on the financial hardship due to the Applicant being a non-profit organization and the $5.5 million project being fully funded by private donations and grants. This would allow the Commission to review the project but the review would be limited and Staff is supporting a complete waiver of all mitigation requirements. Attorney Senatori then introduced Glenn Cannon to present on the transportation aspect of the project.

Mr. Cannon began his presentation by discussing Section 12(k) of the Cape Cod Commission Act and Section 8 of the DRI Enabling Regulations and noted that they are not talking about daily impacts or hours of the day they are talking about any significant impacts. It is the opinion of the Staff that this project will have significant impacts on the transportation resources outside of and within the municipality. The project does not comply with the RPP as it stands now. There are impacts on Thomas B. Landers Road and outside of the Town of Falmouth. The most glaring non-compliance is that there is no pedestrian or bicycle access onto the facility. It is not in compliance with the pedestrian and bicycle safety standards, trip reduction standards, or RPP Congestion Standards. If this were a Hardship Exemption they could talk about reducing these standards. Also the parking lot is significantly overdesigned for what they need. That may be due to the Steamship Authority traffic that may be coming in the future. Mr. Cannon also wanted to discuss the traffic credit that runs with the land that was discussed during the last public hearing. There are also aspects of the moving of the facility that are not covered in the RPP, particularly livability and the economic impacts that may play into the benefits and detriments categories used for analysis. The traffic on Thomas B. Landers road will have more than 250 daily trips or more than 25 peak hour trips, as indicated in the Applicant's study, which is considered a significant impact. During the average season weekday there will 280 trips. That is the difference between the DRI Exemption test and a Hardship Exemption. The DRI Exemption focuses on any significant impacts. The Applicants focused on average season weekday, and 280 trips is above the 250 trip threshold. The 25 peak hour trips are also considered significant. For the safety and congestion areas of the Regional Policy Plan on either

local or regional roadways they look at the 25 or more peak hour trips. The Applicant has indicated that all trips to and from the Falmouth Ice Arena will impact Thomas Landers Road, which is a regional roadway carrying regional traffic and this is one of the areas protected by the Cape Cod Commission Act. The Institute of Transportation Engineers (ITE) has limited data on ice arenas but using their data, which is nationally recognized for the study of transportation, they came up with 819 daily and 78 afternoon peak hour trips. The applicant looked at average season weekday. The ITE urges people to be cautious with the data because there is only one data point and they usually look to multiple data points and use the average. It does not mean it is a bad data point, just something to be aware of.

Mr. Cannon then showed a map of the regional road network for the Upper Cape and showed route 28 and route 6, which are federally recognized roadways, and as such are available for federal funds because they are not just local roads. Thomas B. Landers is federally recognized and is regional in nature. The DRI Exemption test measures any significant impact on regional roadways and Thomas B. Landers is regional and the project will generate more than 250 daily trips and more than 25 peak hour trips which is a significant impact and therefore does not qualify the project for a DRI Exemption. The Applicant's study did not address peak season or peak event traffic impacts and so does not comply with the RPP requirements for traffic studies. This is a 650 seat arena with 330 parking spaces, which means potential for 330 trips. Mr. Cannon noted that at the November 8, 2010 public hearing Sherriff Cummings talked about how this facility is all about families and community, not just Falmouth. Kids come from across the Cape to come here to play hockey. Staff looked at the 2009-2010 Falmouth High School Boys Hockey Schedule obtained from the existing ice arena website and you can see that towns all over Cape Cod come here to play at this facility and off-Cape towns such as Bridgewater, Raynham and Taunton, etc. during the Canal Cup. There are regional tournaments and competitions taking place at this rink. If we only had 200 people coming from outside of Falmouth (less than 33% of the audience there), that would generate 100 peak hour trips if you're looking at 2 people per car, significantly exceeding the 25 peak hour trip threshold.

Mr. Cannon showed the high crash locations along route 28 and the potential for patrons coming from the town of Barnstable all along Route 28 to Thomas Landers Road, and also patrons coming from off-Cape along Route 25 (over the Bourne Bridge) and 28 would travel going through high crash locations. He discussed a typical Saturday schedule for Falmouth Youth Hockey and how many off-Cape towns travel to Falmouth on a typical day. Mr. Cannon summarized his presentation by saying that this is a good project and people want to see these events taking place but they will generate significant traffic in and around Falmouth and that is why Staff does not believe it qualifies for a DRI Exemption. He again discussed the non-compliance with the RPP and that Edward Gross, Chairman of the Falmouth Bikeways Committee, discussed in the last public hearing the lack of bike paths or sidewalks around the facility. Mr. Cannon also noted that the Arena's schedule shows that it will be open during summer months when people will be walking or riding bikes. The League also has not shown any trip reduction plan for employees, by matching up schedules for carpooling, providing a lunchroom, etc. Also, the total spaces required for the Arena is 217 and the proposed plan provides for 322 spaces, which is in non-compliance with the RPP. This may be because of a leasing agreement between the Arena and the Steamship Authority for summer months which could cause additional traffic which cannot be regulated if the project is given a DRI Exemption. Mr. Cannon discussed the fact that the League wished to see a credit for the fact that they are moving the traffic from one area of town to the other, but traffic credits run with the land. The Regional Policy Plan is designed to encourage development in downtown areas so that people can access them without driving. They want people who are coming to the Arena to be able to shop downtown, walk, or bike while the children are at practice, which parents are able to do at

the downtown location. The existing facility is what the guidebook for transportation looks for and the new facility is pure auto-oriented which is not what they look for. Mr. Cannon summarized by saying that he does not see any way this project would not have any impacts outside of the town of Falmouth. If you think about the rivalry games or the Canal Cup, they will generate a great deal of traffic outside the town of Falmouth and as such the project does not qualify for a DRI Exemption.

Jessica Wielgus, Commission Counsel reviewed the impacts of the project on Natural Resources. Attorney Wielgus noted that this is another area where the Commission feels the project will have significant regional impacts. The project is in a significant natural resources area due to the presence of rare species habitat as mapped by the Natural Heritage and Endangered Species Program and the RPP prohibits adverse impacts to rare species or their habitat and State listed species are a resource of not only regional but State significance. The area is mapped for Eastern Box Turtles which are listed as a species of Special Concern. Attorney Wielgus gave a brief background of the Natural Heritage and Endangered Species Program and showed their website and provided a brief description of the program. One of the purposes of the Cape Cod Commission Act is conservation and preservation of habitat of endangered species like the Box Turtle. Through the Commission process Staff is able to provide conditions or address concerns such as endangered species. If a DRI Exemption is granted, that is a statement that the project is not a Development of Regional Impact. By virtue of having rare species habitat on-site it is a Development of Regional Impact. Rare species habitat is on the entire site. Attorney Wielgus noted that the Applicant has approached Natural Heritage and received a letter dated May 11, 2010 that provided that they review the information provided and that the project would not result in a prohibited take of State-listed rare species. Between this letter and a subsequent letter the plans were resubmitted with modifications and in a letter dated August 23, 2010 where Natural Heritage said based on the review of the revised plan that their original no-take determination would remain in effect provided certain conditions were met. Attorney Wielgus concluded that the location and the character of the project do have impacts on the resources and values that are of state-wide and regional significance. Staff suggests that through a DRI Approval and specifically a Hardship Process any conditions that need to be implemented can be.

Attorney Senatori summarized the Staff presentation by noting that Staff does not recommend that the project be exempted from Commission review as it will have significant impacts on the values and purposes specified in Section 1 of the Cape Cod Commission Act outside of the municipality due to the location, character and environmental impacts of the project, specifically in the areas of transportation and natural resources but in others as well. Staff is suggesting that a Hardship Exemption would be an appropriate way to approve the project, as outlined in Section 9 of the Enabling Regulations. The Commission must find that (i) a literal enforcement of the provisions of the Act would involve substantial hardship, financial or otherwise; and (ii) desirable relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. Any relief granted shall relate directly to the nature of the identified hardship and shall be the minimum relief necessary to address the hardship. Ms. Senatori noted that if the Commission finds that Hardship exists, financial or otherwise, staff suggests the Commission can waive the following: $152,100 affordable housing mitigation payment, 20,000 square feet of open space requirement or corresponding payment, $400,000 traffic congestion mitigation payment, $149,490 fair share nitrogen mitigation payment, meeting Economic Development waiver requirements, rare species mitigation, and employee trip reduction plan. Staff is recommending approval with conditions and suggests these would be part of the planning and construction process and that they would result in no additional cost to the Applicant and no additional time requirement.

Mr. Harding asked the Subcommittee for any comments and then asked Attorney Moynihan if she'd like to speak.

Ms. Moynihan began by addressing the natural resources issue. Ms. Moynihan stated that the staff report indicated that there were no adverse impacts on the Eastern Box Turtle at the site. She stated that they knew of the Eastern Box Turtle's presence and that a rare species designation is an issue of regional concern, but she said you also have to look at the legislation which talks about the particular location and she feels that is really the key issue here. She said we have standards and arbitrary levels for what the staff thinks should be the standard of review but it's not the standard of review, the standard of review is looking at the particular location, so as far as natural resources go we have basically a site that is stripped of vegetation and no evidence of the turtle habitat. The staff also indicated in the report that in their opinion there are no adverse impacts from this project at this particular site. She said she thinks an exemption on the basis of natural resources is entirely appropriate in this case. She also noted that the Zoning Board of Appeals for the Town of Falmouth will have to incorporate the Natural Heritage conditions into their permit. That will be part of their review, so she doesn't think it is necessary for the Commission to review the project for natural resources merely so that they can incorporate the Natural Heritage conditions. She feels that is extreme because there will be a double level of review there. In regards to traffic, she feels it is unfortunate that the information was not given to her previously because they could have dealt with some of the issues in advance. They filed the application on July 15th and the traffic report was prepared in consultation with the transportation staff who reviewed what they should be providing in the traffic report and almost six months later and after over $100,000 was spent on the permitting process they hear that they haven't complied with certain standards. In terms of the merits of the traffic discussion, she says you have to look to the particular location of the project site. She stated that yes there is traffic coming from other towns, but kids are coming on a bus. She also pointed out that the maximum occupancy is there for the few games/events that occur each year. The parking is not provided for use of the Steamship Authority only, they need it. The Falmouth Zoning bylaw parking requirement for a place of public assembly does not address actual need. They will have maximum occupancy a couple of times per year and all that parking is necessary for those big events. Ms. Moynihan said yes, the Steamship Authority does lease the parking area at the current ice arena in the summer months and that arrangement is contemplated to continue at the new arena because of the revenue it generates. She feels that wanting to regulate what the Steamship Authority does at this arena is not a reason for the Commission to review this project and that she still has not heard what the impacts are outside of the town of Falmouth. Ms. Moynihan then provided information to show a comparison of daily trips on Route 28 (over 13,000 daily trips) to those generated by the project, which will add 98 to that.

Ms. Lyons noted that although the traffic generation will not be a daily occurrence, the fact of the matter is that whether children will be transported on a bus or by their parents, if it were her children she would want to take every measure to ensure their safety. She stated that when you consider Gillette Stadium, that is something that has maybe 8 games per year and about 8 rock concerts a year and the rest of the time it is there, but they built an entire roadway system for those 16 events a year. To say that it is not significant, you have to consider how traffic is looked at.

Attorney Moynihan stated that the key issue that has not been addressed is that the Applicant did actual traffic counts in February at the existing facility which is their peak period of time. They had a traffic study done, where people actually counted the cars coming and going and

that's how they came up with 280 trips a day, which is much lower than what Mr. Cannon suggested. When you look at when those one or two peak events occur, they are typically not during peak hour times. Even if you are going to have traffic congestion at a particular location you still have to be able to show how it impacts other towns. You have to show those impacts on other towns in a denial of the DRI Exemption. She asked what the impact is on Mashpee and Bourne from this particular location and stated that it has to be more than just bordering regional roadways.

Ms. Lyons stated that there will be people travelling from different parts of the Cape to go there and it doesn't matter who you are renting the parking area to, it is significant that it will be rented. She also addressed Mr. Cannon's statement about the Applicant asking for credit to be given because they are taking the arena out of a more congested area and putting it into a less congested area, and said that yes, it will be alleviating the downtown area, but the point of traffic manuals trying to keep congestion confined to a downtown area makes sense, so there should be credit given and credit taken away. She stated that however you look at it, whether the Applicant is renting to the Steamship Authority or someone else, it is increasing traffic on a daily basis. She said when you look at Gillette Stadium, why would they have to build a multi-million dollar highway interconnector if it wasn't going to be impacting the towns that people will be traveling through to get there? Ms. Lyons stated that to say the new arena won't have a regional impact on traffic is kind of a stretch.

Mr. Randy Hart of Vanasse Hangen Brustlin, Inc. (VHB) then spoke about the information being thrown around and said that in his mind it boils down to two or three things. He asked Ms. Senatori to put up a regional map for everyone to see. He began by discussing the 25 trip threshold. He stated that the study he provided shows that the increase above 25 trips during peak hour will exist for a section of road that extends 1000 feet from the site to the interchange. At that point, whether you travel north, south, or in any direction, the number will be less than 25. So in his mind he says the question is whether that strip can handle that increase and he feels that it can. Mr. Hart stated that the traffic study demonstrates that all the intersections in the area are safe not safety deficient according to Commission DRI standards. He stated that you must then look to see whether the roadway intersections can accommodate the additional traffic and the answer is defined in the traffic study that all locations will remain at the existing levels of operation, which are at good levels during both normal and peak season conditions. He said that to him it seems that the roadways in that area are underutilized and the difference between whether the project is there or it is not isn't going to be noticed by anybody and if it can be said for that stretch of roadway, how can anyone say that beyond that stretch where the increase is less than 25, it will be noticed. He then discussed all of the other towns and how traffic will come from those towns to this facility. Mr. Hart stated that of course that will happen and it is happening today. He stated that just because they are moving the facility does not mean the amount of traffic coming from other towns will increase, it will remain the same. He said that people coming down 28 will get off sooner instead of going all the way downtown, so the trip will be less, so he doesn't understand how traffic will increase. He said there hasn't been any technical information to support a traffic increase but he is providing information to say there won't be one. The third thing he wished to discuss was something he said they didn't feel at the onset was something they would have to deal with, and that was the credit for the facility that's already there today. He said the Applicant felt that the impacts of the project were so nominal that they didn't need to do anything more than what they have already done but now they realize they have a right to take a credit for the previous use of the project site. He said if they looked at the previous use and took credit for it, the credit that would be allowed would offset the 280 trip increase and that is one way to eliminate any of the discussion that they've

had to date. He stated that if that is something they need to do that is fine, but based on his preliminary discussions with staff he did not feel that it would be necessary.

Attorney Moynihan stated that what Mr. Hart discussed is in the memorandum she gave the Commission today in the second paragraph. The first page is a colored graph that shows a comparison of Thomas Landers Road and the intersection of Route 28, and then looking at the ITE rates that Mr. Cannon has talked about, and that the 6.1 acre site is part of a 22 acre operation, the ITE calculation for credit for manufacturing and industrial use would be 353 trips for manufacturing or 330 for light industrial which would wipe out the 280 trips that they calculated. Mr. Hart stated that the Regional Policy Plan does allow for trip credit for uses that have been in existence for the past 5 years. Ms. Moynihan showed a Google Earth image for 2007 and showed that it was full of commercial activity and was in conjunction with the 22 acre property used for storage and the Acme precast operation. She restated that they didn't feel they needed to go through all of this but that now it seems to be an issue as far as traffic goes. She said the Exemption request is one the Applicant brought forward not to waste anybody's time but because they truly felt it met the test. They really want to just move on with this project. She said Mr. Currie can verify what the review will be at the local level and that just because the project doesn't meet some of the Minimum Performance Standards is not a reason for denial of the Exemption. She wants to see what the significant impacts are outside of Falmouth and that there hasn't been any technical information to show these impacts. She said they have heard that the roadways are designated as being regional, and that the project doesn't meet the RPP standards, but these are not reasons for denial of the Exemption. She made note of the time limits and said the application has been deemed complete and the hearing was opened on September 17th and there is a 90 day time limit from that day. She also commented on the possible (and emphasized possible) Steamship Authority use of the parking lot because they don't know whether it will happen or not and that the Steamship doesn't know if they will need the site. If they do need it, it will be on a limited basis, in the summer months for overflow on the weekends only. The planning board and the zoning board of appeals will be looking at all of this and if they have concerns they can deal with them. Ms. Moynihan asked the Subcommittee if they had received the letter from Senator Murray and they had.

Mr. Harding asked Mr. Hart, as someone who knows the area fairly well and coming from Mashpee off of Sandwich Road, the route he would take, heading West on Thomas Landers Road, the intersection is fairly well taxed and doesn't rate very well at all, knowing it is a fairly busy road in the morning hours with a lot of truck traffic, has that all been taken into consideration?

Mr. Hart stated that he hadn't analyzed that as part of what they have done thus far. But he does know it well, and the only thing that would cause him concern is the truck activity. He doesn't see it being much different, but without full analysis he can't fully answer the question. He said the volumes are pretty light even in the morning hours, but it's really the trucks that factor in on that roadway. Mr. Hart stated that the trucks play into the role of pedestrians and bicycles on that roadway and that he would be concerned if he had a child that wanted to ride a bike on that road.

Mr. Harding noted the amount of school buses that park in that area also. Mr. Hart agreed.

Ms. Moynihan added that Dr. Gross, who came to the hearing and may have filed a letter, and the gentlemen on the Bikeways Committee in Falmouth, were talking about something that is a local issue. Where is that pedestrian access best served for bike path connection? Thomas Landers Road or another road that brings bikes off of 28a? She stated that in her mind it's a

local issue, an issue that the Planning Board, the Zoning Board, the Bikeways Committee and the Selectman should be sitting down and coming up with solutions together, and she expects that as part of this project they will have that at the local level. She also mentioned that the Applicant's traffic materials did supply information about mitigations, contrary to what was previously stated. She said the Applicant did talk about the new services in the ice arena, and how they will be providing new areas that don't exist now, such as kitchen areas and social areas, work areas for parents so they can stay and do work on their laptop or socialize instead of dropping off their kids, and the movement of the location to Thomas Landers Road which will stop the drop-off and errand run that occurs downtown. She said the Applicant felt that if they provided comfortable areas for people to stay, eat and sit, which they don't have now, people will stay. The new facility will have a concession area to allow this. Ms. Moynihan again asked the Subcommittee to consider the Exemption request. She said they understand the issues with the Hardship Exemption and they have applied for it as an alternative, but they feel with that route there are costs associated with compliance and construction processes and additional work to be done.

Ms. Lyons asked, if the Commission waives all mitigation fees, how is the timeline being changed with the Hardship Exemption and noted that by waiving all mitigation they are not increasing costs, they are only providing assistance. She asked if the Commission would somehow be increasing the fees that they would have to pay anyway. She said she knows they will have to go through all these other compliance processes and pay fees to the town, but maybe the town would waive some of the fees, but asked if there was any way that Commission involvement is increasing those fees. She said it sounds like Ms. Moynihan is implying that the Hardship Exemption would increase the Applicant's costs but she doesn't understand how it would do that.

Ms. Moynihan said it would be essentially in engineering fees and plan fees because there is a review process that goes on after the Hardship Exemption decision is granted. There are conditions that would be imposed for certain contracts to be provided, and it depends on what issue areas are being reviewed. For example, natural resources, or transportation would require conditions that would require the Applicant to meet the RPP and certain conditions. There will be staff visits and inspections.

Ms. Lyons stated that there was no fee for the technical input that went in to the change in the parking lot that actually mitigated some of the impact that it would have on the protected water body in the back of this and the Applicant's architect had said he just made minor changes which he felt made it a superior property and he was happy to make those changes and it was only technical assistance and input and it made it a better project so she's not sure what Ms. Moynihan is arguing.

Ms. Moynihan said that this is a different kind of project; it is not a commercial project where you have a very big budget.

Ms. Lyons said everybody loves and supports this project and that she hopes they have many events there.

Ms. Moynihan said that to make the change that requires the engineers time to talk with the staff member and revise the plans and have them reviewed again, that change costs a few thousand dollars, and they did it to try and work with the staff and comply with their regulations but every change they make is a cost. She said the Commission might not see those costs as significant and that is their decision.

Ms. Lyons said she understands that this is all privately funded, and that is why she thinks every one of those fees can be waived, but the project will be better from just a little assistance.

Mr. Cannon stated that he has done many transportation reviews on many projects and he can understand that some Applicants want to be with you when you review a project, but he assured Ms. Moynihan that for something like this they would be looking at the driveway locations, the layout of the parking lot, the lunch facility, but the manager or the janitor could open the door for him and he can review it without the Applicant being present. He said he literally has a checklist that he goes through and the only time you have to call back is if something is wrong, it is just a standard inspection. Most of these projects you can just drive through and check from your car.

Ms. Senatori restated what she said at the last public hearing, that staff has outlined some of the potential conditions of the Hardship Exemption approval would be and that they are very minor and that they are plans that the Applicant is already going to be preparing in order to get a building permit, such as storm water plans and landscape plans, and it's really just staff taking a look at them and making sure they comply with the decision. It wouldn't require any additional cost to the Applicant; it's just submitting them to the Commission staff for review and approval.

Mr. Roy Richardson stated that the thing he is having trouble with is that it is a local project that will be utilizing regional resources and infrastructure and because of that it is a regional project that needs to be looked at from a regional point of view. As time goes forward there will be programmatic changes and other changes which will make it even more regional and there would be nobody looking at the regional impacts as time moved forward. Locally, they do not look at the regional approach. If one wants to develop a recreational, skating facility, it would only strengthen that facility to have regional input and there may be opportunities, rather than just talking about expenses. Even Thomas Landers Road you have to look at what that is used for. It is a way of getting from one side of Falmouth to the other, if you're late, in a timely manner, and the location of the skating rink would be right in the middle of that road which is used for regional purposes. He said that he has had a couple of skaters in the family and that this is not a little business. Hockey and ice skating is a big business and attracts a lot of things. He would imagine that the Applicant is good at program development and has goals and dreams, and wants the best for the young people, and having it as a regional project would help in that regard. He said he has great sympathy for the purpose because he has a daughter who is a skater and a grandson who plays hockey, but it is regional and he doesn't think there is any question about it.

Mr. Harding added that he has been on the Commission for ten years and has seen a lot of projects come and go and that every project that the Commission and the staff have taken on has been a better project because of it. There is no doubt in his mind that the Commission staff has made every project better. He said for an Applicant to come here and say this is a town issue is false in every sense. He said he looks at things holistically and whatever we do at one end of the pond is going to make a ripple on the other. With that he said he would like to finish the hearing and move forward.

Mr. Harding asked if there were any further comments from the Applicant.

Mr. Cannon said there were some transportation issues he would like to go over. Mr. Cannon said he wanted to emphasize the Commission staff's consultation with the Applicant's Traffic Engineer and Attorney. He said he had met with them early in the project review, and had

discussed with them the difference between a Traffic Study for a DRI Exemption and a DRI Hardship Exemption. Mr. Cannon said he told them exactly what was needed to be done for the Hardship Exemption. Mr. Cannon said he conveyed to them that if they chose to pursue a DRI Exemption, it would take more work, more time and more money. He said he wanted to make it clear that he had had this discussion with the Applicant's representative and Traffic Engineer. Mr. Cannon said the fact that there was no data was the Applicant's responsibility; it was the Applicant's responsibility to provide the traffic numbers. He said it was not in the Traffic Study. Mr. Cannon said it would take the Applicant more time and money to do this. Mr. Cannon said Commission staff felt the Hardship Exemption could move forward, and Commission staff could assist the Applicant. Mr. Cannon said he would like to see the Applicant provide a sidewalk on the Applicant's site that could accommodate pedestrians and cyclists, and alleviate the safety issues. He said Commission staff did not want to belabor the project and get into an extended back and forth. He said he would rather the project move forward under a Hardship Exemption. Conversely, he said if the Applicant chose to continue with a DRI Exemption, then further discussions were needed.

Mr. Paul Moore, President of Falmouth Youth Hockey, said he appreciated the Commission staff in that they had been easy to work with. Mr. Moore said the Commission review had been a learning experience for him, in that he was a car dealer and hockey coach. He said the Youth Hockey League/Applicant wanted to move the project forward. Mr. Moore said it was clear to him what the DRI Exemption outcome would be, given comments from Subcommittee members. He said the Applicant did not want to be confrontational, and instead wanted to work with the Commission to move the project forward.

Mr. Harding asked for any further comments from Commission staff. Hearing none, he asked for comments from public officials. Hearing none, he asked for comments from any members of the public. There were none.

Attorney Senatori said the project was under several different review timelines, including a DRI, DRI Exemption and Hardship Exemption. She said the DRI Exemption hearing period had to be closed by December 22, 2010. Attorney Senatori noted she had polled the Subcommittee and based on this, December 15, 2010 at 2:30 PM at the Commission office had been selected for a continued public hearing. She said if this was convenient for the Applicant, the Subcommittee could continue the hearing to that date, time and place. This would allow for further testimony on the project.

Mr. Harding asked for the opinion of the Subcommittee.

Ms. Lyons suggested it was not necessary to continue the hearing.

Attorney Senatori said if the Applicant was still seeking to move forward with a DRI Exemption, she suggested the hearing should be continued. Attorney Senatori said if the DRI Exemption application was to be taken off the table, then the Subcommittee could begin deliberation on the Hardship Exemption request.

The Subcommittee and Commission staff noted this decision was up to the Applicant.

Attorney Moynihan said the Commission had ninety (90) days from September 17, 2010 to make a decision on the Hardship Exemption and Limited DRI Review. She asked if this could be accomplished in this time period.

Attorney Senatori clarified that the Hardship Exemption review had been opened, and was now under an open-ended review timeframe. She said the DRI needed to be closed by December 15, 2010. Attorney Senatori said the Commission had sixty (60) days from December 15, 2010 to render a decision on the DRI.

Attorney Moynihan said she did not think there was an unlimited timeframe for the review.

Attorney Senatori clarified that the open timeframe related only to the Hardship Exemption request.

Mr. Cannon suggested that if the Applicant wanted to move forward with a Hardship Exemption, how fast could the Commission move it forward?

Ms. Lyons said it was her understanding that the Subcommittee could close the hearing today, or could continue the hearing, pending the Applicant's decision on whether or not they wanted to continue to seek a DRI Exemption.

Attorney Senatori suggested the Subcommittee should not close the DRI Exemption hearing today, but rather continue it to December 15, 2010. She said this would allow the Subcommittee more time to come to a decision as the regulations require the Commission to render a decision within 21 days of the close of the public hearing.

Ms. Lyons asked what if the Applicant chose not to pursue a DRI Exemption, but rather a Hardship Exemption. Could the Subcommittee begin deliberation on the Hardship Exemption today?

Attorney Senatori said yes.

Ms. Lyons and Attorney Senatori noted that withdrawing the DRI Exemption was not something the Subcommittee could decide.

Attorney Moynihan asked if Commission staff would require further information from the Applicant to complete this on December 15, 2010?

Attorney Senatori said for a Hardship Exemption, no. She also said for the Limited DRI Review, no. She said she believed Mr. Cannon was seeking further information related to the DRI Exemption request.

Mr. Cannon said that for any of the plans to move forward, there should be a sidewalk on the site from Thomas Landers Road into the facility. He said this is a plan change, but could be accommodated through a decision condition.

Mr. Moore said it seemed the remaining issue was the sidewalk. He noted the project site was remote.

Mr. Cannon said he saw this as the remaining Transportation related issue. He said he understood this concern, but suggested that persons on Thomas Landers Road be given the opportunity to get to the project site. He suggested this could also be accommodated through a Right of Way.

Mr. Moore questioned where people would be walking from?

Mr. Cannon said from neighborhoods along Thomas Landers Road.

Mr. Moore said the remoteness of the project site would make pedestrian and bicycle traffic to the site unlikely.

Mr. Cannon said the bicyclists could potentially use the existing roadway. He said his concern related more to pedestrians.

Mr. Moore said providing the sidewalk would incur more cost to the project.

Attorney Moynihan questioned the utility of a sidewalk.

Mr. Cannon said the decision rested with the Subcommittee, although the Commission looks for incremental increases in sidewalk coverage as a typical part of project reviews. He noted the Subcommittee could potentially consider the incremental cost of a sidewalk as part of the Hardship Exemption.

Mr. Harding asked for comments from the Falmouth Town Planner.

Mr. Brian Currie, Falmouth Town Planner, said the Town and Town Engineer would be happy to work with Commission staff on a sidewalk on Technology Park Drive, a Town-accepted road. Mr. Currie suggested there were relatively few homes on Thomas Landers Road, noting it was an industrial area.

Mr. Cannon said Commission staff could look to assist the Applicant in other ways, particularly if this was the only issue connected to the Hardship Exemption moving forward.

Mr. Richardson said he would like to move the project forward.

Attorney Senatori said Commission staff had information that would assist the Subcommittee in deliberating on the Hardship Exemption, if that is what the Subcommittee wanted to do. She said it was up to the Applicant as to whether or not they wanted to withdraw the DRI Exemption application.

Attorney Moynihan said the Applicant would withdraw the DRI Exemption application if there was some level of assurance that the review would not go on indefinitely. If there were an opportunity on December 15, 2010 to have this finalized, then the Applicant would withdraw the DRI Exemption. She said she believed there was a 90-day time limit. Attorney Moynihan said the Applicant's goal was to get to Town review in January.

Attorney Senatori said she would review the standards of approval for a Hardship Exemption for the Subcommittee if they wanted to make a decision today, and possibly direct staff to draft a written Hardship Exemption decision. Attorney Senatori said the Commission would need formal withdrawal of the DRI Exemption by the Applicant to move forward with the Hardship Exemption application.

Ms. Lyons noted the Subcommittee had received letters for the record from people saying they use the bicycle path. She suggested Mr. Currie bring this to the Town's attention.

Mr. Currie said that he had many conversations on bike paths with the Town staff and their advocates.

Attorney Moynihan asked if the Applicant were to withdraw the DRI Exemption, did the Subcommittee have a sense of what issue areas would be included in the project? She suggested the Hardship Exemption and Limited DRI Review did not need to address all of the Regional Policy Plan issue areas. She said the main issue should be Transportation.

Attorney Senatori said Commission staff was suggesting the project be reviewed in the issue areas outlined in the staff report. She said the decision would include findings with regard to these issue areas as outlined in the staff report. Attorney Senatori said the conditions would likely be minimal and limited to a few subject areas.

Attorney Wielgus said the Commission could not proceed until the matter of the DRI Exemption was resolved.

Attorney Moynihan said the Applicant would withdraw the DRI Exemption. She requested assurances with respect to the time limit.

Ms. Lyons said she thought the Applicant could get a sense that the Subcommittee was trying to make sure the project did not have an impact. She suggested the Subcommittee was interested in moving expeditiously. Ms. Lyons said some of the issues had been addressed, such as architectural improvements made through a telephone conversation.

Attorney Senatori said the Applicant needed to confirm its withdrawal of the DRI Exemption application in writing to the Commission. She said the Subcommittee could make decisions on the Hardship Exemption application and could review a draft written decision on December 15, 2010. Attorney Senatori said the project could go to the full Cape Cod Commission for a decision in January. She said the Commission needed confirmation that the Applicant was withdrawing the DRI Exemption application.

Attorney Moynihan said the Applicant was agreeable to this. She suggested the Subcommittee could make the motion to direct Commission staff to draft a written decision for the Hardship Exemption for December 15, 2010 subject to receipt of the formal written withdrawal of the DRI Exemption.

Ms. Lyons moved that the Subcommittee find that a literal enforcement of the provisions of the Commission Act would involve a substantial hardship, financial or otherwise, and that desirable relief from the requirements of the RPP may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act, and that the relief granted relates directly to the identified hardship, and is the minimum relief necessary to address the hardship. Mr. Richardson seconded the motion. The Subcommittee voted unanimously for the motion.

Attorney Senatori suggested the Subcommittee should make motions with respect to the RPP issue areas where mitigation would be required of the Applicant. She said staff suggests in these cases that the mitigation outlined can be waived as part of the Hardship Exemption approval.

Attorney Moynihan said the concern is that between now and December 15, 2010, Mr. Cannon could look at the $400,000 based on ITE rates, as the Town does not have a hardship exemption provision. She said that whatever the Commission finds in its decision in terms of the number

of trips, the project would have to pay 20% of that if the Falmouth Planning Board accepts it. She said this would be very difficult.

Mr. Cannon said he had been having this discussion throughout the Commission's process. He said the Traffic Study that Mr. Hart had submitted on behalf of the Applicant is for the average season. He said that is what the Commission would look for a Hardship Exemption review. He said the numbers from ITE are to demonstrate whether or not there would be *any* significant impacts, which is a different test. Mr. Cannon said that when the written decision was being drafted, he would include Mr. Hart's transportation numbers. He said he would be happy to also discuss this issue with the Town.

Attorney Moynihan said the concern was that the $400,000 linked to 819 trips. She said if Mr. Cannon was willing to accept 280 daily trips, then the $400,000 figure was not relevant.

Mr. Cannon said the $400,000 figure related to the 280 trips. He said the Commission staff was willing to suggest the Commission waive this.

Ms. Lyons moved that the Subcommittee find the Applicant met their burden of proving a hardship exists, and that relief from $162,000 mitigation for Affordable Housing, 20,000 square foot Open Space requirement or corresponding mitigation payment, $400,000 traffic congestion mitigation payment, $149,490 Fair Share nitrogen mitigation payment, the meeting of Economic Development waiver requirements, meeting rare species mitigation, and employee trip reduction requirements may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. Mr. Richardson seconded the motion. The Subcommittee voted unanimously for the motion.

Mr. Richardson moved to direct staff to draft a Hardship Exemption approval decision with conditions for the Subcommittee's review, subject to receipt of withdrawal of the DRI Exemption. Mr. Roy seconded the motion. The Subcommittee voted unanimously for the motion.

The public hearing was continued to December 15, 2010 beginning at 2:30 PM at the Commission's office in Barnstable.

<u>December 15, 2010 Public Hearing</u>
On December 15, 2010, a Commission hearing officer closed the DRI public hearing period, continued the Limited DRI public hearing to December 22, 2010, and continued the Hardship Exemption public hearing to January 6, 2011.

<u>December 15, 2010 Subcommittee Meeting</u>
The Subcommittee reviewed and approved the minutes from the November 8, 2010 and December 2, 2010 public hearings. Attorney Senatori then provided the Subcommittee with copies of a scoping checklist completed by the Applicant, which she explained can be used to limit the review to certain issue areas of the RPP and was provided in the materials by the Applicant. Ms. Senatori noted that based on the Scoping Checklist Staff is recommending that the project be reviewed in certain issue areas, and based on Ms. Moynihan's correspondence of the past week there was a question as to whether or not a few issue areas should be scoped and the Committee's intent on that, so Ms. Senatori suggested going through the checklist one area at a time so that it is clear what the Committee wanted to review as part of its decision.

Ms. Senatori noted that there is no check in any boxes pertaining to land use and staff would suggest this area not be reviewed. For Water Resources Ms. Senatori noted that there are several shaded boxes checked so staff would suggest it be reviewed for Water Resources. For Coastal Resources she noted that none of the boxes are checked and staff concurs that it does not need to be reviewed in this area. For Natural Resources and Open Space several of the boxes are checked off and staff suggests this area should be reviewed, as well as Energy and Economic Development.

In the area of Affordable Housing Ms. Senatori noted that none of the shaded areas are checked, however, since the project involves additional commercial development which is the third question on the list, staff feels that affordable housing should be included in the review. She noted that based on her latest correspondence with the Applicant, Ms. Moynihan did concur that this area should be included in review.

Ms. Senatori stated that in regards to the area of Transportation, under the question "Does the project have direct access on or does the project directly abut a regional roadway?" staff would suggest the property directly abuts Technology Park Drive which is in close proximity to a regional roadway which is Thomas Landers Road and so staff suggests the review include Transportation.

For Heritage Preservation and Community Character Ms. Senatori noted that staff concurs that this does not need to be included in review.

Ms. Senatori stated that with regards to Hazardous Materials and Waste, staff is suggesting that the project could use, handle, generate, treat or store hazardous waste and suggests that the project be reviewed for that issue area, and the project does involve greater than 25,000 square feet of new commercial development, so the second two questions would allow the Committee to review it in this issue area. She also noted that although Exterior Lighting and Landscaping are not listed on the Scoping Checklist, staff suggests those issue areas be eliminated from review.

Ms. Senatori summarized the Checklist by stating that staff suggests that review be limited to the areas of Economic Development, Natural Resources and Open Space, Water Resources, Waste Management, Energy, Transportation, and Affordable Housing.

Mr. Richardson moved to limit the review of the project to the Regional Policy Plan issue areas of Economic Development, Natural Resources and Open Space, Water Resources, Waste Management, Energy, Transportation and Affordable Housing. Richard Roy seconded the motion and it came to a unanimous vote.

Ms. Senatori then proceeded to review page by page a red-line version of the Commission's draft decision with the subcommittee noting that she had forwarded everyone correspondence from the Applicant in which Attorney Moynihan made suggested edits to the decision, some of which are incorporated into the red-line version.

Ms. Senatori noted that the Committee will need to discuss the probable benefits versus the probable detriments and staff suggests that the project meets Best Development Practice LU 1.3 and so that can be found as a probable project benefit.

The Subcommittee discussed the benefits and detriments of the project and Roy Richardson discussed the impact of the project on many generations in Falmouth by providing more opportunity for recreational activity because of the increased size and better facility. He also

mentioned the fact that it is being built on already disturbed land so there is no additional environmental damage to the area in which it is being built and that the relocation will relieve some of the traffic congestion in downtown Falmouth and place it in an area that may not be perfect but is more suitable for the traffic. Mr. Richardson noted that the Committee will be reviewing wastewater and all the other issue areas but he stated that the negative impacts from the project appear to be minimal.

Richard Roy stated that he feels there will be a positive regional impact from the new facility, not just for the town. He said there has been talk about other towns coming to Falmouth to play at the facility but he wouldn't be surprised to see State tournaments played there and said if they can be played at Gallo they can certainly be played there, so he feels the project will benefit the whole region.

Mark Harding stated that he also feels that this project will be beneficial for the region. He stated that he has had mixed feelings about moving the facility out of the downtown area. He said he noticed lots of people in town over the weekend for a skating tournament and that he still feels the center of town will be the recipient of a lot of the spillover because of people going to restaurants and staying at the lodging but it will still have a great benefit for the town and surrounding area and he hopes that the Town of Mashpee will move their team over to the new facility as well. Mr. Harding stated that he is certainly willing to overlook some of the impacts it may have, especially some of the previous things that were brought up in terms of traffic and other mitigating components because of the benefits it will provide.

Mr. Richardson noted that during one of the hearings someone made a statement about how this would provide an opportunity for the development of another economic center which would include participation of two municipalities and maybe even three, Falmouth, Mashpee and Sandwich, and he thinks that is a good thing.

Mark Harding agreed that regionalization is good for the Cape.

Attorney Moynihan noted the additional benefits in the area of energy technology that is going into the new facility and the economic benefits of being able to sustain this facility within the community because the existing facility requires so many repairs that it probably would have to close because it requires so much work in terms of repairs.

Mr. Harding stated that he had an opportunity to walk around the existing facility and agreed that it is quite ancient.

Ms. Moynihan noted that it is forty-five years old and they have been putting band-aids on it for the past few years.

Mr. Richardson moved that the probable benefits of the project as articulated by the subcommittee and including benefits noted by the Applicant as well as BDP LU1.3 outweigh the probable detriments. Richard Roy seconded the motion and it came to a unanimous vote.

Ms. Senatori noted that based on that finding General Finding 10 (GF10) will be revised accordingly and continued to review the draft decision. She then pointed to the revision in GF12 and specified the minimum performance standards where relief was granted and that it relates back to the corresponding findings. GF13 outlines the Limited Review issue areas as determined by the subcommittee. She noted the issue areas of Exterior Lighting and Landscaping were not issue areas the subcommittee voted to review and as such, should be removed from GF13.

Roy Richardson moved to approve the amendments and remove the corresponding issue areas. Richard Roy seconded the motion and it came to a unanimous vote.

Ms. Senatori continued reviewing the findings of the decision on pages 23-31. Mark Harding asked whether the committee members had any questions; there were no questions from the Subcommittee. Ms. Senatori continued reviewing the draft decision with the subcommittee including the conclusion and conditions.

Attorney Moynihan stated that condition GC5 on pages 32 and 33 lists the project plans and at the top of 33 it states "any deviations to the project from the plans" and she asked if it should say "within the issue areas" and state the issue areas that the review is limited to. Ms. Moynihan said that with a DRI Exemption you review all of the issue areas and the Exemption is tied to all of those areas but if the DRI is limited to certain areas and your plan changes presumably the Commission would not review changes in those areas.

Ms. Moynihan stated that she thinks it should say "any deviation from the proposed project from the approved plans within the issue areas subject to this decision" because the review has been limited to certain issue areas. She said she just wanted to know what they will have to do if for example there is a change to a building door; the Community Character section isn't being reviewed. She said she wants to clarify what plan changes would have to come back for review.

Mr. Richardson said he would assume they would want to protect the Community Character because he has seen changes in lighting have an absolute opposite affect than what the approvers had in mind and he doesn't think they are critical issues in terms of funding or that sort of thing and that it has more to do with taste and he doesn't see any need to make any changes here.

Ms. Senatori responded that the plans that are being approved conform to the Minimum Performance Standards and if there is a change they could come back through the modification process and that some minor changes could be a Staff level review as a minor modification approved by the Executive Director.

Mr. Richardson moved to approve the draft Limited DRI Hardship Exemption approval decision with conditions, as amended, for the Falmouth Youth Hockey League and forward the draft decision to the full Commission for consideration at its meeting on January 6, 2011. Richard Roy seconded the motion and it came to a unanimous vote.

December 22, 2010 Public Hearing
On December 22, 2010, a Commission hearing officer closed the Limited DRI public hearing.

JURISDICTION

The project was referred to the Commission on July 20, 2010 by the Town of Falmouth Planning Board through Brian Currie, Town Planner. The project qualifies as a Development of Regional Impact (DRI) pursuant to Section 3(e)(i) of the Commission's *Enabling Regulations* (Revised May 2010, corrected June 2010) as new construction of a commercial building with a Gross Floor Area greater than 10,000 square feet (s.f.).

FINDINGS

The Commission has considered the Limited DRI / Hardship Exemption application of Falmouth Youth Hockey League, Inc. for the proposed construction of a 56,962 s.f. ice arena. Based on consideration of such application and upon the information presented at the public hearings and submitted for the record, makes the following findings, pursuant to Sections 12 and 13 of the Act:

General Findings

GF1. As the date of the first substantive public hearing was November 8, 2010, this project was reviewed subject to the 2009 Regional Policy Plan (RPP), as amended in May 2010.

GF2. The project location is Lot 10 Technology Park Drive at the intersection of Thomas B. Landers Road and Technology Park Drive, in Falmouth, Massachusetts. The site is zoned industrial and is adjacent to the Falmouth Industrial Park.

GF3. The project site, as described in the application, is approximately 6.9 acres of land that is previously developed and is the site of the Acme Precast concrete products company. The existing Acme Precast concrete products company operates directly across from Technology Park Drive and uses the subject property in conjunction with those operations. The site is vacant of structures and the majority of the site is cleared of natural vegetation.

GF4. Falmouth Youth Hockey League, Inc. (the Applicant) proposes to redevelop the site and construct a new ice arena with a total overall floor area of 56,962 square feet. The arena is proposed with a full size ice surface (200' x 85') that will meet National Hockey League standards and a half size ice surface to be used for figure skating, recreational skating, and hockey schools. The arena is also proposed to have eight dressing rooms, coach rooms and referee rooms, a Falmouth Figure Skating Room, an office, a skate shop and pro shop, concession area, seating/waiting areas, a learning center, mechanical and electrical rooms, staff offices, and an employee room. The ice arena development is proposed primarily within areas of the site that are clear of vegetation and are existing disturbed areas.

GF5. The Commission finds that the estimated cost of construction for the new arena is $5.5 million dollars, all of which will be raised by the Falmouth Youth Hockey League, Inc. through private donations and grants.

GF6. The Commission finds that Falmouth Youth Hockey League, Inc. is a non-profit organization established pursuant to Section 501(c)(3) of the Internal Revenue Code.

GF7. The Commission adopts the October 29, 2010 written testimony of Mr. Brian Currie, Falmouth Town Planner, which states that the Falmouth Ice Arena "is consistent with the Town of Falmouth's 2005 Local Comprehensive Plan, more specifically the Land Use, Open Space & Recreation and Economic Development elements." As such, the Commission finds that the project is consistent with the Town's Local Comprehensive Plan (LCP).

GF8. The Commission adopts the October 29, 2010 written testimony of Mr. Brian Currie, Falmouth Town Planner, which states that "but for a special permit that may issue from the Board of Appeals, the application is consistent with the town of Falmouth's Light Industrial A zoning district in which it resides." As such, the Commission finds that so long as a special permit is issued through the Falmouth Zoning Board of Appeals, the project is consistent with local development by-laws.

GF9. As the project is not located in a District of Critical Planning Concern, the Commission finds that the project is consistent with this criterion.

GF10. The Commission finds that the probable benefits of the project outweigh the probable detriments of the proposed project. The Commission finds that the project meets Best Development Practice (BDP) LU1.3; the Commission finds the satisfaction of this BDP is a probable project benefit. Other probable benefits of the proposed project include opportunities for recreational activities for many generations in Falmouth, redevelopment of an existing disturbed site, traffic relief in the downtown area of Falmouth, a positive regional impact, benefits to the Town of Falmouth and surrounding towns, development of another economic center within the region, energy technology, and the economic benefit of keeping the rink in the community.

GF11. The Commission finds that the project will be constructed in accordance with the following plans (attached to this decision as Exhibit A and incorporated by reference):

- Revised sheets A0 through A2 from the plan set entitled "Falmouth Ice Arena" designed by Arena Design Engineering, Inc., dated June 6, 2010 and received by the Commission on December 2, 2010
    - Cover Sheet (A0), 1st Floor (A1), and 2nd Floor (A2)
- Sheets A3 through A6 from the plan set entitled "Falmouth Ice Arena" designed by Arena Design Engineering, Inc., dated June 6, 2010 and received by the Commission on October 23, 2010
    - Roof Plans (A3), Front and Rear Elevation (A4), Left and Right Elevation (A5), Door and Window Schedule (A6)
- Landscape Plan designed by Rapoza Landscape, dated October 27, 2010 and received by the Commission on November 3, 2010
- Overall Site Plan (sheet 1 of 9), designed by Falmouth Engineering, dated June 17, 2010 and last revised October 22, 2010
- Site Layout Plan-North (sheet 3 of 9), Site Layout Plan-South (sheet 4 of 9), Septic System Details (sheet 7 of 9) designed by Falmouth Engineering, dated June 17, 2010 and last revised October 22, 2010
- Existing Conditions Plan (sheet 2 of 9), Standard Details (sheet 8 of 9), Highstrength Fast 4.5 Treatment System Details (sheet 9 of 9) designed by Falmouth Engineering, dated June 17, 2010
- Site Utility Plan-North (sheet 5 of 9), and Site Utility Plan – South (sheet 6 of 9) designed by Falmouth Engineering, dated June 17, 2010 and last revised November 5, 2010

The Commission finds that the above-referenced plans are in compliance with the Minimum Performance Standards as referenced in this decision unless otherwise specifically noted.

GF12. The Commission finds that the Applicant has met the burden of proving that a hardship exists in complying with Minimum Performance Standards AH3.1, ED1.3, OS1.3, E1.5, TR3.4, TR3.6, WR3.1, WR3.4, and WR3.5 of the Regional Policy Plan as outlined in Findings EDF1, EDF2, NRF5, EF2, TF8, AHF1, and WRF2 and that desirable relief from the standards may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission further finds that the relief granted relates directly to the nature of the identified hardship and is the minimum relief necessary to address the hardship.

GF13. The Commission finds that the project Limited Review should be limited to the issue areas of Economic Development, Natural Resources/Open Space, Water Resources, Waste Management, Energy, Transportation, and Affordable Housing.

Land Use

LUF1. The Commission finds that the project meets Best Development Practice LU1.3 Redevelopment/Reuse, as a project that is reusing an already developed site. The Commission further finds this is a probable benefit of the project.

Economic Development

EDF1. The Applicant is required under the 2009 RPP to meet the waiver requirements pursuant to MPS ED1.3 as the Town of Falmouth does not have a Land Use Vision Map. As a redevelopment project, the Applicant needs to meet two of the waiver requirements.

EDF2. The Commission finds that meeting two of the waiver requirements of MPS ED1.3 poses a substantial financial hardship to the Applicant and that relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission further finds that the relief granted relates directly to the nature of the identified hardship and is the minimum relief necessary to address the hardship.

Natural Resources / Open Space

NRF1. The Commission finds that the project is located in a significant natural resources area due to the presence of rare species habitat as mapped by the Natural Heritage and Endangered Species Program (NHESP). The site is completely cleared of vegetation and has been used most recently for construction material storage. The site does not contain wetlands or vernal pools (MPS WET 1.1-1.4, and WPH 1.5).

NRF2. The Applicant has submitted a natural resources inventory consistent with the requirements of MPS WPH 1.1.

NRF3. The project requires work within a state listed rare species habitat area, a resource of regional (state) significance. The RPP prohibits adverse impacts to rare species or their habitat (MPS WPH 1.4). The Falmouth Youth Hockey League, Inc. has worked with the NHESP through several plan iterations to configure the site plan to avoid adverse impacts to rare species habitat. The Applicant's most recent plan submittal (plan dated July 22, 2010) received a finding of "no take" from the NHESP, provided certain conditions are met. These conditions relate to the design and maintenance of the stormwater detention basin on the property. Based on the conditions stipulated

by NHESP, the Commission finds that the project is consistent with the requirements of WPH 1.4.

NRF4. Due to the proposed reuse of a significantly disturbed (cleared) site, the project is consistent with the requirements for minimizing clearing and grading (WPH 1.2) and minimizing the fragmentation of wildlife and plant habitat (WPH 1.3). Invasive species are not a management concern at the site (WPH 1.6).

NRF5. The open space requirement is based on the areas of additional clearing required to develop the project. As the site is nearly completely cleared, the proposed additional clearing near the site drives and along the site perimeter is relatively small, amounting to approximately 10,000 sq ft. Compliance with MPS OS 1.3 would require the Applicant to permanently protect an area equivalent to twice the new disturbed area proposed (~20,000 sq ft), or to provide a cash contribution toward the Town of Falmouth's acquisition of open space. Given the small area involved, and the substantial financial hardship that Falmouth Youth Hockey has demonstrated in needing to privately raise funds for all aspects of project development and mitigation, the Commission finds that relief may be granted from the open space requirement without substantial detriment to the public good and without substantially derogating from the intent or purpose of the Act. The Commission further finds that the relief granted relates directly to the nature of the hardship and is the minimum relief necessary to address the hardship.

NRF6. Given the project's location and design within a previously disturbed area, the project is found to be consistent with MPS OS 1.1 clustering of development, and OS 1.4 avoiding sensitive resources. MPS OS 1.5 and 1.6 do not apply to this project. Given the finding to grant relief from the requirements of MPS OS 1.3, MPS OS 1.2 does not apply to this project.

Water Resources

WRF1. The project is located in a marine embayment that contributes to the Mashapaquit Creek sub-embayment of West Falmouth Harbor. The TMDL published for Mashapaquit Creek is 6.86 kg/day. According to the Town of Falmouth mapping, the project is partially located in the Town's Coastal Overlay district. The proposed leaching field for the projects wastewater disposal system is located outside of the coastal overlay district, but wholly within the Commission's delineation for this marine embayment.

WRF2. The nitrogen loading calculations provided by the applicant are based on the full Title 5 flow of the project, or 3250 gpd. The Applicant submitted calculations that estimate a 5.06 ppm nitrogen loading concentration from the project.

Using revised figures, Commission staff re-checked the nitrogen loading calculations, noting that the project consultant used a lower recharge rate of 18 inches per year than the recommended value for Falmouth (21 inches per year). Using the correct recharge rate, and revised building size, nitrogen loading is estimated at 4.86 ppm, and a total nitrogen load of 132 kg. On a per acre basis, the nitrogen load would be 19.19 kg/year/acre. Based on the watershed target load published in the Massachusetts Estuaries Project Technical Report, the allowable fair share credit for this marine sub-embayment is 5.20 kg/year/acre. This results in an excess load of

96.67 that would need to be mitigated at an approximate cost of $149,490 pursuant to MPS WR3.1, WR3.4 and WR3.5.

The Commission finds that a literal enforcement of the provisions of these standards would involve a substantial financial hardship, and that relief from the requirements may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission further finds that the relief granted relates directly to the nature of the hardship and is the minimum relief necessary to address the hardship.

WRF3. The Commission acknowledges the Falmouth Wastewater Facility Plan and Comprehensive nutrient management planning underway with the town of Falmouth, including upgrades to the Wastewater Treatment Plant, and planned sewering of portions of the watershed to attain compliance with the West Falmouth Harbor TMDL. Over time, the balance of excess nitrogen from the watershed including new growth will be offset by sewering elsewhere in the watershed. The Regional Policy Plan allows local watershed nutrient management plans to be used in lieu of the Marine Water Recharge Area interim measures.

WRF4. The project stormwater design is consistent with the MPS of the RPP, including utilizing underground leaching system to recharge roof runoff, and providing additional nitrogen removal through the use of grasses swales and three vegetated bio-retention areas. The bio-retention areas are augmented with subsurface leaching pits to accommodate unusually large storms or frozen soil conditions.

WRF5. As required by MPS WR7.10 a stormwater system inspection and maintenance document was submitted to assure that the drainage system functions properly. The Commission finds that the bioinfiltration areas must be protected more specifically. In particular, the vegetation in the bioretention areas must be inspected to make sure coverage is established. Vegetation may require watering through the first growing season. Bioretention areas should not be fertilized beyond the grow-in period. Finally, to avoid killing the vegetation, stockpiling snow in or around bioretention areas must be prohibited.

WRF6. Also required by WR7.10, the Commission finds that one year from completion of the stormwater system, a Professional Engineer should inspect the system and submit a letter certifying that the system was installed and functions as designed.

Waste Management

Hazardous Waste

WMF1. MPS WM1.5 requires that *"[a]ny development or redevelopment that uses, handles, generates, treats, or stores Hazardous Waste..."* be in compliance with the state's Hazardous Waste and regulations specifies three items be provided to show this compliance: 1) notification or registration with the Massachusetts Department of Environmental Protection, 2) a written plan to manage the Hazardous Waste, 3) a signed disposal contract with a registered, licensed company. Based on information submitted during the Commission's review, Hazardous Wastes attributable to a skating facility can include waste from Zamboni machines, fluorescent bulbs or mercury containing high-intensity discharge lamps, computer monitors and solvent-based ice marking paint. The construction phase is likely to involve on-site storage

and handling of paints, solvents and similar products, all of which can result in generation of Hazardous Wastes.

Solid Waste

WMF2. MPS WM2.1 requires that *"[d]evelopment and redevelopment projects shall address the disposal of construction waste..."* and that *"a plan shall be provided to demonstrate how the applicant proposes to handle solid wastes, construction and demolition waste and recyclable materials currently categorized by the* [DEP] *as a waste ban material."* MPS WM2.2 describes the requirements of a construction and demolition (C&D) waste management plan. MPS WM2.3 requires a post-construction waste and recyclables management plan. Information submitted by the Applicant during the Commission's review did not sufficiently address MPS 2.1, MPS WM2.2 or WM2.3.

WMF3. MPS WM2.4 deals with post-construction management of food waste. This MPS targets *those developments (primarily supermarkets) generating significant amounts of food wastes* and requires them to provide a plan to demonstrate how they will recycle organic materials. Information from the Applicant dated 9/9/10 confirms that the facility will include a small area with a refrigerator, microwave, friolator, and sandwich making counter. Given the nature of the project, and the limited space and equipment dedicated to the onsite food service, the Commission finds MPS WM2.4 is not applicable to this project.

Energy

EF1. The Commission finds that the project will meet MPS E1.2 (Energy Star Certification) and MPS E1.3 (ANSI/LEED Standards) for Energy.

EF2. The Commission finds that the Applicant has requested partial relief in meeting MPS E1.5, waiver option C for the incorporation of renewable energy. The Applicant has indicated that due to their status as a non-profit organization, they are not eligible for tax credits that support renewable energy investment. As such, the Commission finds that a literal enforcement of the provisions of this standard would involve a substantial financial hardship, and that relief from the requirements may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission further finds that the relief granted relates directly to the nature of the hardship and is the minimum relief necessary to address the hardship.

EF3. The Commission finds that the project, as proposed meets all other applicable components of MPS E1.5.

Transportation

TF1. The Applicant proposes to construct a 650 seat ice arena (Falmouth Youth Hockey) off Thomas B. Landers Road in Falmouth.

TF2. The Applicant's transportation engineer (Vanasse Hangen Brustlin, Inc.) outlined the trip generation impact of the proposed 650 seat ice arena in a May 10, 2010 technical memorandum

TF3. Within the past three years, the site was previous developed as a pre-cast concrete manufacturing facility. The Regional Policy Plan allows a credit for past uses as

outlined in MPS TR0.2. Vanasse Hangen Brustlin, Inc calculated the daily traffic impacts from the previous facility in a technical memorandum dated December 2, 2010 and an email dated December 13, 2010.

TF4. The net change (daily decrease and peak hour increases) in traffic from the project (allowing for a credit from the previous use) during different time periods is as follows:

Weekday Daily	-50 trips
Evening Peak Hour	13 trips
Saturday Midday Peak Hour	-17 trips

TF5. Based on site driveway locations, the Commission finds that the projects' site driveways comply with the Level of Service (LOS) and Sight Distance requirements of the RPP.

TF6. Based on the Applicant's technical memorandum dated May 10, 2010, the proposed project will not have a significant increase in traffic at any known high crash location. Therefore, the Commission finds that the project complies with MPS TR 1.1.

TF7. All DRIs are required to reduce new vehicle trips in and out of the site by 25% over what is typically expected for the land use (MPS TR2.1). Based on the net decrease in average daily traffic, trip reduction requirement for this project are not required.

TF8. The proposed Falmouth Ice Arena is estimated to generate 13 Evening Peak Hour trips under average conditions. Twenty-five (25) or more peak hour trips is recognized as a significant impact on local or regional roadways. Commission transportation staff calculated the transportation mitigation to be $65,000 for this project to comply with MPS TR3.4 and TR3.6 the RPP. The Applicant has stated that transportation mitigation in the amount of $65,000 would be a financial hardship. The Commission finds that the a literal enforcement of these requirements would involve a substantial financial hardship to the Applicant and that relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act. The Commission further finds that the relief granted relates directly to the nature of the hardship and is the minimum relief necessary to address the hardship.

TF9. Thomas B. Landers Road does not have a sidewalk near the facility and is listed as a bike route on the Town of Falmouth Bikeways Map. The Commission finds that based on verbal testimony provided by the Applicant at the December 2, 2010 public hearing, that providing sidewalks on the project site without connecting to a regional network is not in the best interest of the public and that bicyclist can access the site from Thomas B. Landers Road and Technology Park Drive (as currently allowed). Therefore, the Commission finds that the Applicant has complied with MPS TR1.7 and TR2.7.

Affordable Housing

AHF1. As a non-residential, new construction development project, only the MPS' under AH Goal 3 apply. As an ice arena, the use falls under the "Other" category for MPS AH3.1, and the mitigation is calculated in accordance with the guidelines provided in

Technical Bulletin 10-001. The following information and charts follow the steps in the analysis described in Technical Bulletin 10-001.

1) Calculate Employment Density from 2003 U.S. Department of Energy data

Building Type	Building Square Footage	Mean Square Feet Per Worker	Number of Employees
Public assembly	56,962	1,645	35

2) Calculate Percentage of Jobs that Pay Less than the Average Wage from May 2009 U.S. Department of Labor data

NAICS Code	National Average Wage	Total # of Jobs	Total # of Jobs Less Than Average Wage	% of Jobs Less Than Average Wage
Fitness and Recreational Sports Centers-713940	$20.90	494,300	473,300	96%

3) Projected Number of Below Average Wage Jobs: 35 x .96= 34.

4) Calculate the per square foot mitigation based upon the formula for "Other" in AH 3.1:

$4.75 x (34/[56,962/1,000]= $2.84 per square foot

5) Calculate Total Mitigation: $2.84 x 56,962= $161,772.

The $161,772 affordable housing mitigation is approximately 3% of the new facility's projected total development costs of $5.5 million. As the project is being proposed by a non-profit organization that will raise all the funds for the project from private sources, the Commission finds that amount of affordable housing mitigation poses a financial hardship to the Applicant. The Commission further finds that desirable relief from this standard may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of the Act and that the relief granted relates directly to the nature of the identified hardship and is the minimum relief necessary to address the hardship.

CONCLUSION

Based on the above findings, the Commission hereby concludes:

1. That the probable benefits of the proposed project are greater than the probable detriments. This conclusion is supported by findings GF10 and LUF1.

2. That upon satisfaction of the conditions identified in this decision and with the specified relief granted, the proposed project is consistent with the 2009 (as amended) Regional Policy Plan.

3. Upon issuance of a Special Permit by the Zoning Board of Appeals, the project can be found consistent with Falmouth's Local Comprehensive Plan and its local development by-laws/ordinances, as outlined in findings GF7 and GF8.

4. The project is not located in a District of Critical Planning Concern and therefore can be considered to be consistent with this criterion.

CONDITIONS

The Commission hereby approves, with conditions, the Limited DRI / Hardship Exemption application of Falmouth Youth Hockey League, Inc. for the proposed project located at Lot 10, Technology Park Drive, Falmouth, MA provided the following conditions are met:

General Conditions

GC1. This decision is valid for a period of 7 years and local development permits may be issued pursuant hereto for a period of 7 years from the date of this written decision.

GC2. The applicant shall obtain all necessary federal, state, and local permits for the proposed project.

GC3. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, and remain in compliance herewith, shall be deemed cause to revoke or modify this decision.

GC4. No development work, as the term "development" is defined in the Cape Cod Commission Act, shall be undertaken until all appeal periods have elapsed or, if such an appeal has been filed, until all judicial proceedings have been completed.

GC5. All development shall be constructed in a manner consistent with the following plans and other information (attached to this decision as Exhibit A and incorporated by reference):

- Revised sheets A0 through A2 from the plan set entitled "Falmouth Ice Arena" designed by Arena Design Engineering, Inc., dated June 6, 2010 and received by the Commission on December 2, 2010
    - Cover Sheet (A0), 1st Floor (A1), and 2nd Floor (A2)
- Sheets A3 through A6 from the plan set entitled "Falmouth Ice Arena" designed by Arena Design Engineering, Inc., dated June 6, 2010 and received by the Commission on October 23, 2010
    - Roof Plans (A3), Front and Rear Elevation (A4), Left and Right Elevation (A5), Door and Window Schedule (A6)
- Landscape Plan designed by Rapoza Landscape, dated October 27, 2010 and received by the Commission on November 3, 2010
- Overall Site Plan (sheet 1 of 9), designed by Falmouth Engineering, dated June 17, 2010 and last revised October 22, 2010
- Site Layout Plan-North (sheet 3 of 9), Site Layout Plan-South (sheet 4 of 9), Septic System Details (sheet 7 of 9) designed by Falmouth Engineering, dated June 17, 2010 and last revised October 22, 2010

- Existing Conditions Plan (sheet 2 of 9), Standard Details (sheet 8 of 9), Highstrength Fast 4.5 Treatment System Details (sheet 9 of 9) designed by Falmouth Engineering, dated June 17, 2010
- Site Utility Plan-North (sheet 5 of 9), and Site Utility Plan – South (sheet 6 of 9) designed by Falmouth Engineering, dated June 17, 2010 and last revised November 5, 2010

Any deviation to the proposed project from the approved plans, including but not limited to changes to the design, location, or other site work, shall require approval by the Cape Cod Commission through its modification process, pursuant to the Commission's *Enabling Regulations*. The Applicant shall submit to the Commission any additional information deemed necessary to evaluate any modifications to the approved plans.

GC6. Prior to the issuance of a Building Permit for development, the Applicant shall obtain a Preliminary Certificate of Compliance from the Commission that states that all conditions in this decision pertaining to issuance of a Preliminary Certificate of Compliance / Building Permit have been met. Such Certificate of Compliance shall not be issued unless all conditions connected to the Preliminary Certificate of Compliance have been complied with.

GC7. Prior to the issuance of a Certificate of Use/Occupancy, the Applicant shall obtain a Final Certificate of Compliance from the Commission that states that all conditions in this decision pertaining to issuance of a Final Certificate of Compliance / Certificate of Use/Occupancy have been met. Such Certificate of Compliance shall not be issued unless all conditions connected to the Final Certificate of Compliance have been complied with.

GC8. The Applicant shall notify Commission staff in writing at least thirty (30) calendar days prior to its intent to seek each Preliminary and each Final Certificate of Compliance. Such notification shall include a list of key contact(s), along with their telephone numbers, mailing addresses, and email addresses, for questions that may arise during the Commission's compliance review. Commission staff shall complete an inspection under this condition, if needed, and inform the Applicant in writing of any deficiencies and corrections needed. The Commission has no obligation to issue any Certificate of Compliance unless and until all conditions are complied with.

GC9. The Applicant agrees to allow Commission staff to enter onto the property, which is the subject of this decision, after reasonable notice to the Applicant, for the purpose of determining whether the conditions contained in this decision including those required prior to issuance of the Preliminary and Final Certificates of Compliance have been met.

Natural Resources / Open Space

NRC1. Consistent with the requirements of the Natural Heritage and Endangered Species Program in their letter dated August 23, 2010, the following conditions shall be met prior to the issuance of a Final Certificate of Compliance from the Commission:

1. The recharge area west of the chain link fence at the rear of the property shall be constructed during the period October 15 – April 15, and no construction activities, stockpiling, equipment storage or any associated activities shall

occur in the area west of said fence, except as is minimally necessary to construct said recharge area.

2. The banks of the recharge area shall be finished with sandy subsoil and shall not be loamed or finished with topsoil.
3. The recharge area shall be accessed for maintenance through a gate which shall be kept locked at all times, and mowing or any other type of vegetation cutting in the area west of the chain link fence shall be limited to the period November 1 – April 15.
4. The chain link fence shall be maintained in good condition and/or replaced as necessary.

Water Resources

WRC1. Prior to the issuance of a Final Certificate of Compliance by the Commission, the Applicant shall indicate by signage on the property, where snow stockpiling is prohibited to protect the bioretention areas.

WRC2. One year from completion of the stormwater system, a Professional Engineer shall inspect the system and submit a letter certifying that the system was installed and functions as designed.

Waste Management

Hazardous Waste

WMC1. Prior to the issuance of a Preliminary Certificate of Compliance by the Commission, the Applicant shall provide for Commission staff review and approval a written plan to dispose of any Hazardous Waste generated by construction and operation of the facility, if any.

WMC2. Prior to the issuance of a Final Certificate of Compliance by the Commission, the Applicant shall provide for Commission staff review and approval: 1) written proof that the Ice Arena has notified or registered with the Massachusetts Department of Environmental Protection as a generator of Hazardous Waste, if necessary, and; 2) a signed contract with a registered, licensed company to dispose of Hazardous Waste or a written acknowledgement from the Town that the Ice Arena may dispose of the Hazardous Waste through the Town of Falmouth's Household Hazardous Waste events, if necessary.

Solid Waste

WMC3. Prior to the issuance of a Preliminary Certificate of Compliance by the Commission, the Applicant shall provide for Commission staff review and approval a written plan to address MPS WM2.1 and WM2.2 for site preparation that demonstrates how solid wastes recyclable materials currently categorized by the Massachusetts Department of Environmental Protection as Waste Ban items will be handled, separated from C&D and disposed of.

WMC4. Prior to the issuance of a Final Certificate of Compliance by the Commission, the Applicant shall submit for Commission staff review and approval a written plan that provides for recycling of solid waste consistent with MPS WM2.3.

Energy

EC1. Prior to the issuance of a Preliminary Certificate of Compliance, the Applicant shall submit final project plans for Commission staff review and approval to ensure compliance with MPS E1.2, E1.3 and E1.5.

SUMMARY

The Cape Cod Commission hereby approves with conditions the application of Falmouth Youth Hockey League, Inc. for the construction of a 56,962 s.f. ice arena at Lot 10, Technology Park Drive in Falmouth, MA as a Limited DRI Hardship Exemption as outlined in this decision pursuant to Sections 12 and 13 of the Act, c. 716 of the Acts of 1989, as amended.

Royden Richardson, Commission Chair — Date: January 6, 2011

COMMONWEALTH OF MASSACHUSETTS

Barnstable, ss January 6, 2011

Before me, the undersigned notary public personally appeared Royden Richardson in his capacity as Chairman of the Cape Cod Commission, whose name is signed on the preceding document, and such person acknowledged to me that he signed such document voluntarily for its stated purpose. The identity of such person was proved to me through satisfactory evidence of identification, which was [_] photographic identification with signature issued by a federal or state governmental agency, [_] oath or affirmation of a credible witness, or [✓] personal knowledge of the undersigned.

Gail P. Hanley
Notary Public
My Commission Expires: 10/13/11

EXHIBIT A

FALMOUTH ICE ARENA

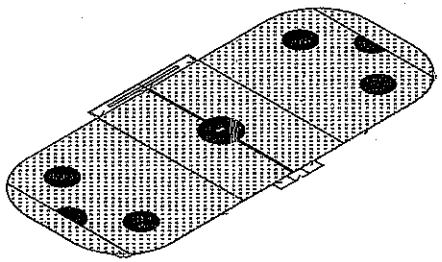
OWNER: FOUR STONES LLC.

LOT 10. AT TECHNOLOGY PARK DRIVE.
FALMOUTH, MA 02540

APPLICANT: FALMOUTH YOUTH HOCKEY LEAGUE INC.
9 SKATING LANE
FALMOUTH, MA 02540

DESIGNER: ARENA DESIGN ENGINEERS
1105 EAST ST.
DEDHAM, MA 02026

RECEIVED
DEC - 2 2010
Cape Cod Commission



1ST FLOOR SQ. FT. = 44,614 SQ. FT.
ENTRANCE SQ. FT. = 300 SQ. FT.
NHL ICE SQ. FT. = 16,252 SQ. FT.
NHL ICE PERIMETER SQ. FT. = 4,710 SQ. FT.
PRACTICE ICE SQ. FT. = 6,902 SQ. FT.
PRACTICE ICE PERIMETER SQ. FT. = 2,628 SQ. FT.
LOBBY SQ. FT. = 2,510 SQ. FT.
BOX OFFICE SQ. FT. = 49 SQ. FT.
LOCKER ROOMS SQ. FT. = 7019 SQ. FT.
MECHANICAL ROOMS SQ. FT. = 909 SQ. FT.
SNACK BAR SQ. FT. = 618 SQ. FT.
PRO SHOP SQ. FT. = 632 SQ. FT.
GENERAL MANAGER SQ. FT. = 378 SQ. FT.
SECRETARY SQ. FT. = 183 SQ. FT.
BATHROOM SQ. FT. = 144 SQ. FT.
HALLWAYS SQ. FT. = 473 SQ. FT.
ZAMBONI ROOM SQ. FT. = 889 SQ. FT.
COACHES ROOM SQ. FT. = 118 SQ. FT.
FIGURE SKATING ROOM SQ. FT. = 283 SQ. FT.
REFEREE ROOM SQ. FT. = 118 SQ. FT.
MEZANINE LEVEL SQ. FT. = 12,348 SQ. FT.
GRAND STAND SQ. FT. = 5,071 SQ. FT.
STORAGE SQ. FT. = 3,906 SQ. FT.
GYM SQ. FT. = 2,371 SQ. FT.
STAIRWELL ENTRANCE SQ. FT. = 1000 SQ. FT.

COMMONWEALTH OF MASSACHUSETTS
MOHAMMED ZADE
No. 27233
REGISTERED PROFESSIONAL ENGINEER

Arena Design Engineering Inc.
1105 East Street
Dedham, MA 02026
ph 617-653-8126
Arenadesignengineering.com
e-mail: www.adeprocorded.com

PROJECT TITLE
FALMOUTH ICE ARENA
TECHNOLOGY PARK DRIVE

DATE
6/6/10

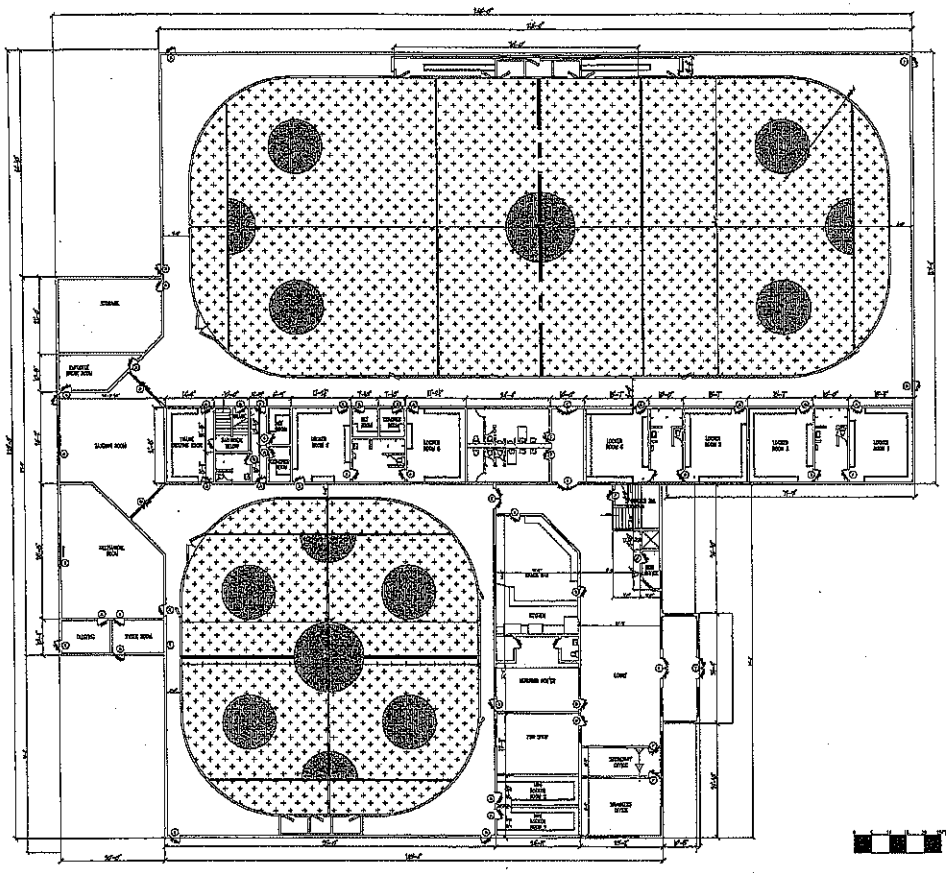
DRAWN BY
LFH DRAFTING

SCALE
AS SHOWN

DRAWING TITLE
COVER

SHEET NO.
A0

MECHANICAL
ADMIN
LOCKER ROOMS
LOBBY
ICE



CONSTRUCTION NOTES:

1. ALL INTERIOR WALLS IN WET AREAS SHALL BE 8" CMU BLOCK.

2. ALL FLOORING IN RINK AREAS AND LOCKER ROOM AREAS SHALL BE RUBBER MATTING.

3. ALL WALLS IN LOBBY AREA SHALL BE ⅝" FIRE RATED SHEETROCK.

4. ALL FLOORING IN LOBBY AREA SHALL BE CARPET TILE APPLIED WITH RELEASABLE GLUE.

5. ALL INTERIOR DOORS IN RINK AREAS SHALL BE STEEL WITH STEEL FRAMING.

6. ALL INTERIOR DOORS IN LOBBY AREA SHALL BE COMMERCIAL GRADE WOODEN DOORS

7. ALL INTERIOR GLASS SHALL BE TEMPERED

8. OVER HEAD DOORS IN ZAMBONI AREA AND MECHANICAL AREA SHALL BE INSULATED ALUMINUM OVERHEAD DOORS SHALL BE POWERED.

9. ALL INTERIOR STAIRS SHALL BE DESIGNED WITH STEEL RAILINGS, AND FRAMES.

10. ALL STAIRS TO HAVE STEEL PANS AND CONCRETE FLOOR.

11. ALL CONCRETE FLOORS SHALL BE SEALED W/ EPOXY COATING.

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COMMONWEALTH OF MASSACHUSETTS
MOHAMMED ZADE
No. 27233
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Arena Design Engineering Inc.
1103 East Street
Dedham, MA 02026
ph 617-853-6128
Arenadesignengineering.com
e-mail: www.adeparen@aol.com

PROJECT TITLE
FALMOUTH ICE ARENA
TECHNOLOGY PARK DRIVE

DATE
6/6/10

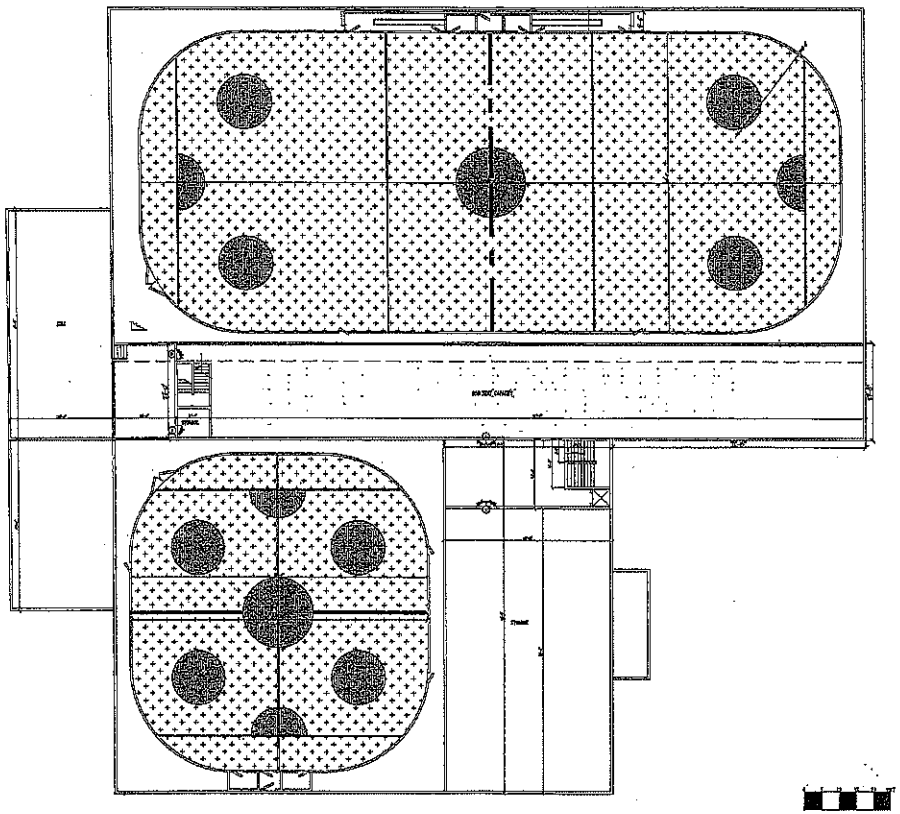
DRAWN BY
LFH DRAFTING

SCALE
1/16"=1'-0"

DRAWING TITLE
1ST. FLOOR

SHEET NO.
A1

ADMIN
GYM
1ST. FLOOR
LEARNING CENTER



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4. ALL FLOORING IN LOBBY AREA SHALL BE CARPET TILE APPLIED WITH RELEASABLE GLUE.

5. ALL INTERIOR DOORS IN RINK AREAS SHALL BE STEEL WITH STEEL FRAMING.

6. ALL INTERIOR DOORS IN LOBBY AREA SHALL BE COMMERCIAL GRADE WOODEN DOORS

7. ALL INTERIOR GLASS SHALL BE TEMPERED

8. OVER HEAD DOORS IN ZAMBONI AREA AND MECHANICAL AREA SHALL BE INSULATED ALUMINUM OVERHEAD DOORS SHALL BE POWERED.

9. ALL INTERIOR STAIRS SHALL BE DESIGNED WITH STEEL RAILINGS, AND FRAMES.

10. ALL STAIRS TO HAVE STEEL PANS AND CONCRETE FLOOR.

11. ALL CONCRETE FLOORS SHALL BE SEALED W/ EPOXY COATING.

MEZANINE LEVEL SQ. FT. = 12,348 SQ. FT.
GRAND STAND SQ. FT. = 5,071 SQ. FT.
STORAGE SQ. FT. = 3,906 SQ. FT.
GYM SQ. FT. = 2,371 SQ. FT.
STAIRWELL ENTRANCE SQ. FT. = 1000 SQ. FT.

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COMMONWEALTH OF MASSACHUSETTS
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TECHNOLOGY PARK DRIVE

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6/6/10

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LFH DRAFTING

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2ND. FLOOR

SHEET NO.
A2

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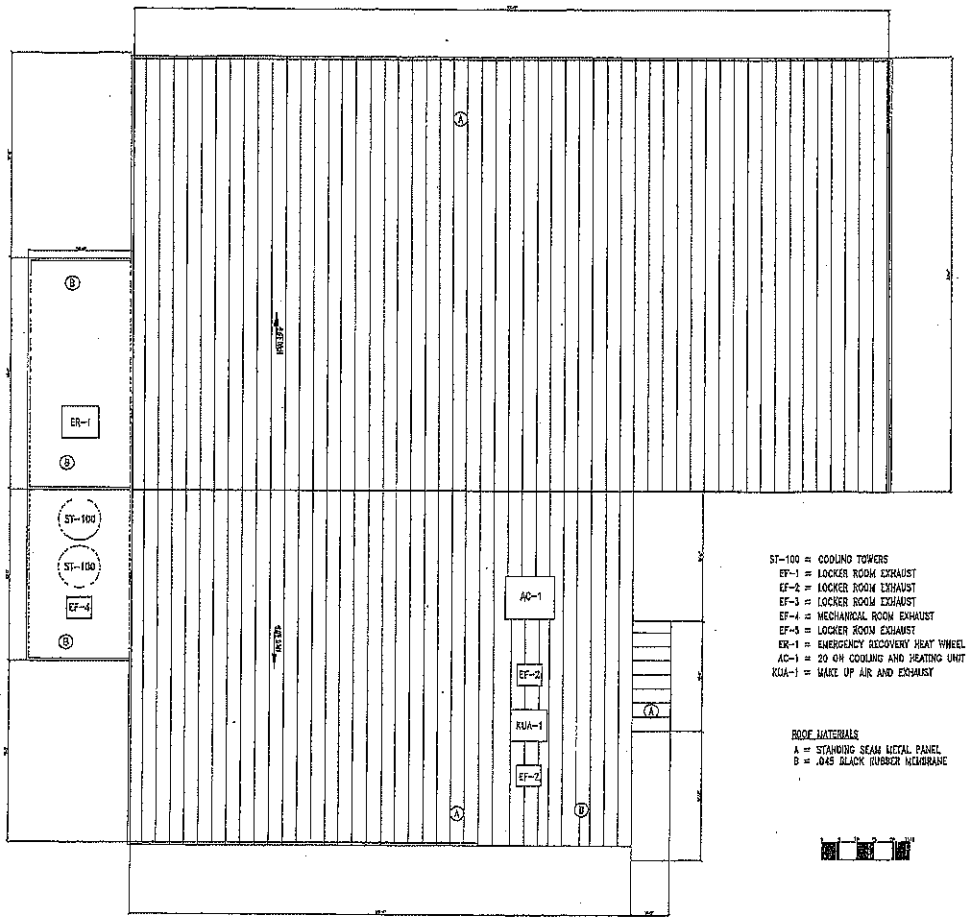

ROOFING NOTES:

1. ALL ROOFS ARE TO BE GUTTERED 7" INDUSTRIAL GUTTERS (COLORS T.B.D)
2. METAL TRIM ON ALL PANEL ROOFS TO BE INSULATED PRIOR TO INSTALLATION (COLORS T.B.D)
3. ALL DOWN SPOUTS SHALL BE 5 INCH DIAMETER. (COLORS T.B.D)
4. ALL ROOF INSULATION MUST MEET ENERGY CODES & BUILDING CODES.
5. RUBBER MEMBRANE ROOF SHALL HAVE ALL SLEEPERS FLASHED IN DURING INSTALLATION.
6. FLASHING SHALL BE INSTALLED PER MANUFACTURER'S SPECS.
7. ALL ROOFS TO HAVE 8" OVERHANG UNLESS SPECED IN DRAWING.

ST-100 = COOLING TOWERS
EF-1 = LOCKER ROOM EXHAUST
EF-2 = LOCKER ROOM EXHAUST
EF-3 = LOCKER ROOM EXHAUST
EF-4 = MECHANICAL ROOM EXHAUST
EF-5 = LOCKER ROOM EXHAUST
ER-1 = EMERGENCY RECOVERY HEAT WHEEL
AC-1 = 20 ON COOLING AND HEATING UNIT
KUA-1 = MAKE UP AIR AND EXHAUST

ROOF MATERIALS
A = STANDING SEAM METAL PANEL
B = .045 BLACK RUBBER MEMBRANE

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e-mail: www.adeprecedical.com

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TECHNOLOGY PARK DRIVE

DATE
6/6/10

DRAWN BY
LFH DRAFTING

SCALE
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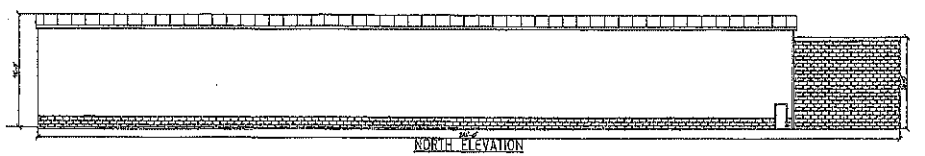
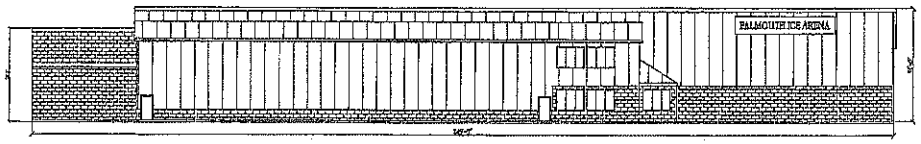
DRAWING TITLE
ROOF

SHEET NO.
A3



NORTH ELEVATION



SOUTH ELEVATION

RECEIVED
OCT 23 2010
Cape Cod Commission

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ph 617-353-3120
Arenadesignengineering.com
e-mail: www.adgcorp@aol.com

PROJECT TITLE
FALMOUTH ICE ARENA
TECHNOLOGY PARK DRIVE

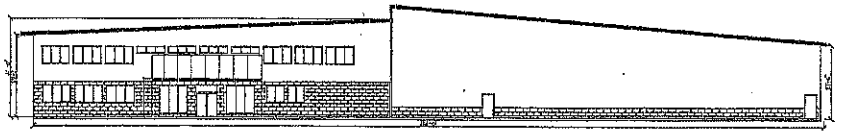
DATE
6/6/10

DRAWN BY
L.F.H. DRAFTING

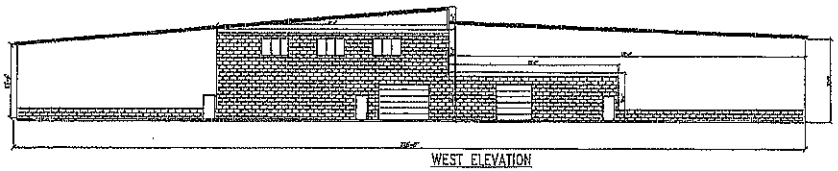
SCALE
1/16"=1'-0"

DRAWING TITLE
FRONT AND REAR ELEVATION

SHEET NO.
A4



EAST ELEVATION



WEST ELEVATION

RECEIVED
OCT 23 2010
Cape Cod Commission

Arena Design Engineering Inc.
1105 East Street
Bedford, MA 02020
ph 617-353-8928
Arenadesignengineering.com
e-mail: arenadesignengineering@aol.com

PROJECT TITLE
FALMOUTH ICE ARENA
TECHNOLOGY PARK DRIVE

DATE
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DRAWN BY
L.F.H. DRAFTING

SCALE
1/16"=1'-0"

DRAWING TITLE
LEFT & RIGHT ELEVATION

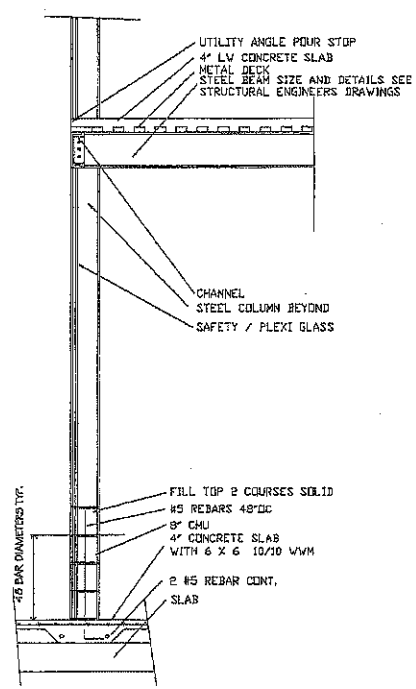
SHEET NO.
A5

DOOR SCHEDULE

MARK #	DOOR SIZE	MATERIAL TYPE	MATERIAL MATERIAL	MATERIAL FINISH	NOTES	MARK SET
A	3'-0" X 7'-0"		METAL	PAINTED	METAL DOOR	2
B	3'-0" X 7'-0"		METAL	PAINTED	INSULATED METAL DOOR	1
C	6'-0" X 7'-0"		METAL	PAINTED	METAL DOOR	2
D	3'-0" X 7'-0"		GLASS		6070 ALUMINUM	1
E	6'-0" X 7'-0"		GLASS		6070 ALUMINUM	1
F	3'-0" X 7'-0" X 1 3/8"		WOOD			4
G	10'-0" X 12'-0"		METAL		OVERHEAD DOOR	3
H	10'-0" X 12'-0"		METAL		OVERHEAD DOOR	3

HARDWARE PACKAGES

• HARDWARE PACKAGE #1	• HARDWARE PACKAGE #2	• HARDWARE PACKAGE #3	• HARDWARE PACKAGE #4
HINGES	HINGES	OHD DOOR LOCK	HINGES
PANIC HARDWARE	PUSH PULL	ELECTRIC OPERATOR	DOOR LEVER
WEATHER STRIPPING	KEYED DEADBOLT		DOOR LEVER W/ LOCKSET
THRESHOLD	CLOSER		
KEYED LOCKSET	KICK PLATE		
CLOSER			



3 WALL SECTION
1/4"=1'-0" AT MEZZANINE

NOTES

GENERAL NOTES:

- Contractor is responsible to follow all local, state, and applicable national codes and regulations.
- Contractor is responsible to obtain all necessary building permits and approvals for construction work and to pay all applicable fees.
- Contractor is responsible to visit the site to review all existing conditions and report any variations on the drawings to the architect for clarification.
- Contractor is required to verify all dimensions in the field and report any discrepancies to the architect for clarification. Do not scale off the drawings, use dimension notes. Notes such as Ceiling@ or Ckteor@ take precedence over dimension notes. Do not scale when ordering materials manufactured either on or off site, such as millwork, casework, fixtures, etc. that cannot be trimmed to fit on site – measure actual conditions in field.
- Unless indicated on the drawings as Not in Contract (N.I.C.) or as existing, all items, materials and installations of some are a part of the contract defined by the construction documents. The contractor shall provide and install all accessories, components and assemblies required for the work shown.
- Contractor is responsible for performing all work in a safe and satisfactory manner.
- Contractor is responsible for the stability of the structure during demolition, erection and construction.

Engineering Notes:

- Electrical, plumbing, fire protection and hvac sub-contractors shall be responsible for the design-build of the electrical, plumbing and heating, cooling and ventilation and fire protection work required for this project. General Contractor to provide enclosures to proper fire rating for any openings or shafts created by sub-contractors.

PARTITION TYPES

Type 1 — Interior office walls: 4" heavy gauge metal studs, 16" o.c., with ½" g.w.b. each side, taped, spackled and finished. Height of walls to match existing locker rooms. Provide metal stud kickers at top of walls to structure above. Insulate walls at toilet rooms and locker rooms. Provide blocking where directed by owner for furniture, shelving and grab bars. Provide mold and mildew resistant g.w.b. at new toilet rooms.

Type 2 — Chase Wall: 6" corrosion resistant metal studs with one layer 5/8" mold and mildew resistant g.w.b. on toilet room side. Provide blocking for grab bars.

NOTE:

1. ALL WALLS ARE TYPICALLY 8" CMU BLOCK WALLS UNLESS NOTED DIFFERENT
2. ALL EXTERIOR WALLS TO BE SPLIT FACED BLOCK COLOR (T.B.D.) AS SHOWN ON DRAWINGS

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Arena Design Engineering Inc.
1105 East Street
Dedham, Ma 02026
ph 617-653-8120
Arena@designengineering.com
e-mail: www.adeprocoding.com

PROJECT TITLE: FALMOUTH ICE ARENA
TECHNOLOGY PARK DRIVE

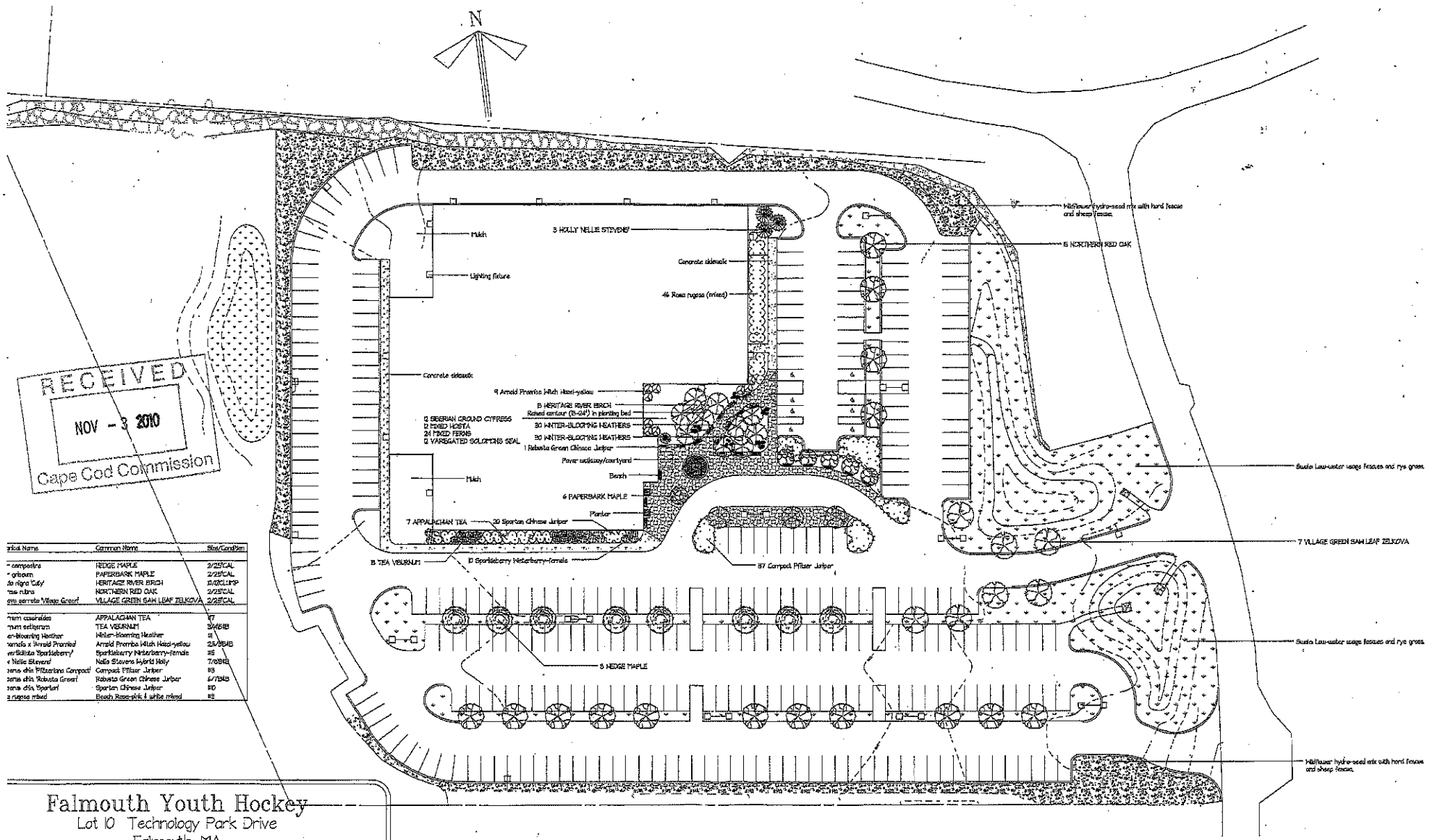
DATE: 6/6/10

DRAWN BY: L.F.H. DRAFTING

SCALE: 1/16"=1'-0"

DRAWING TITLE: DOOR AND WINDOW SCHEDULE

SHEET NO. A6



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...ical Name	Common Name	Size/Cond/Spc
...compestris	HEDGE MAPLE	2/2.5"CAL
...griseum	PAPERBARK MAPLE	2/2.5"CAL
...ta nigra 'Cully'	HERITAGE RIVER BIRCH	2/12'CLUMP
...sea rubra	NORTHERN RED OAK	2/2.5"CAL
...yra serrata 'Village Green'	VILLAGE GREEN SAW LEAF ZELKOVA	2/2.5"CAL
...rium cassinoides	APPALACHIAN TEA	#7
...rnum setigerum	TEA VIBURNUM	3/#18
...er-blooming Heather	Winter-blooming Heather	#1
...female x Arnold Promise'	Arnold Promise Witch Hazel-yellow	2.5/#18
...verticillata 'Sparkleberry'	Sparkleberry Winterberry-female	#5
...x Nellie Stevens'	Nellie Stevens Hybrid Holly	7/#18
...perus chin 'Pfitzeriana Compact'	Compact Pfitzer Juniper	#3
...perus chin 'Robusta Green'	Robusta Green Chinese Juniper	6/7#18
...perus chin 'Spartan'	Spartan Chinese Juniper	#10
...a rugosa mixed	Beach Rose-pink & white mixed	#2

Falmouth Youth Hockey

Lot 10 Technology Park Drive
Falmouth, MA

1" = 30'	date 10/27/2010	revision Landscape Plan
RC	checked by	drawing #

RAPOZA
LANDSCAPE
Design • Build • Maintain

DELAWARE 20

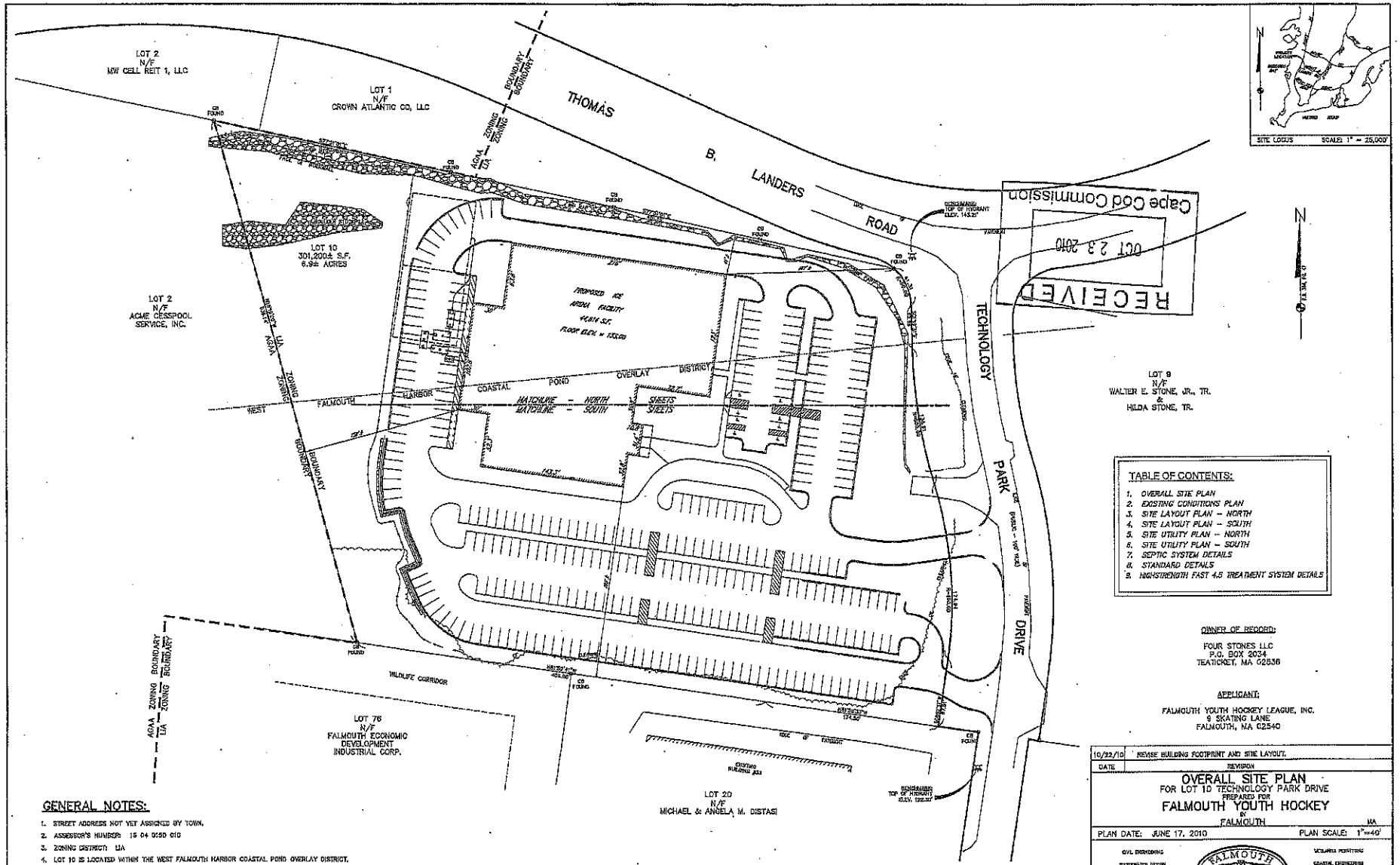

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TABLE OF CONTENTS:

1. OVERALL SITE PLAN
2. EXISTING CONDITIONS PLAN
3. SITE LAYOUT PLAN – NORTH
4. SITE LAYOUT PLAN – SOUTH
5. SITE UTILITY PLAN – NORTH
6. SITE UTILITY PLAN – SOUTH
7. SEPTIC SYSTEM DETAILS
8. STANDARD DETAILS
9. HIGHSTRENGTH FAST 4.5 TREATMENT SYSTEM DETAILS

OWNER OF RECORD:

FOUR STONES LLC
P.O. BOX 2034
TEATICKET, MA 02536

APPLICANT:

FALMOUTH YOUTH HOCKEY LEAGUE, INC.
6 SKATING LANE
FALMOUTH, MA 02540

GENERAL NOTES:

1. STREET ADDRESS NOT YET ASSIGNED BY TOWN.
2. ASSESSOR'S NUMBER: 15 04 0150 010
3. ZONING DISTRICT: LIA
4. LOT 10 IS LOCATED WITHIN THE WEST FALMOUTH HARBOR COASTAL POND OVERLAY DISTRICT.
5. FLOOD HAZARD ZONE: C
6. TOPOGRAPHIC INFORMATION COMPILED FROM AN ON THE GROUND SURVEY.
7. ELEVATIONS SHOWN ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM.
8. LOT COVERAGE BY PROPOSED STRUCTURES: 44,614 S.F./301,200 S.F. = 14.8% < 40%
9. LOT COVERAGE BY PROPOSED STRUCTURES/PARKING/PAVING: 172,370 S.F./301,200 S.F. = 57.22% < 70%

DATE	REVISION
10/22/10	REVISE BUILDING FOOTPRINT AND SITE LAYOUT.

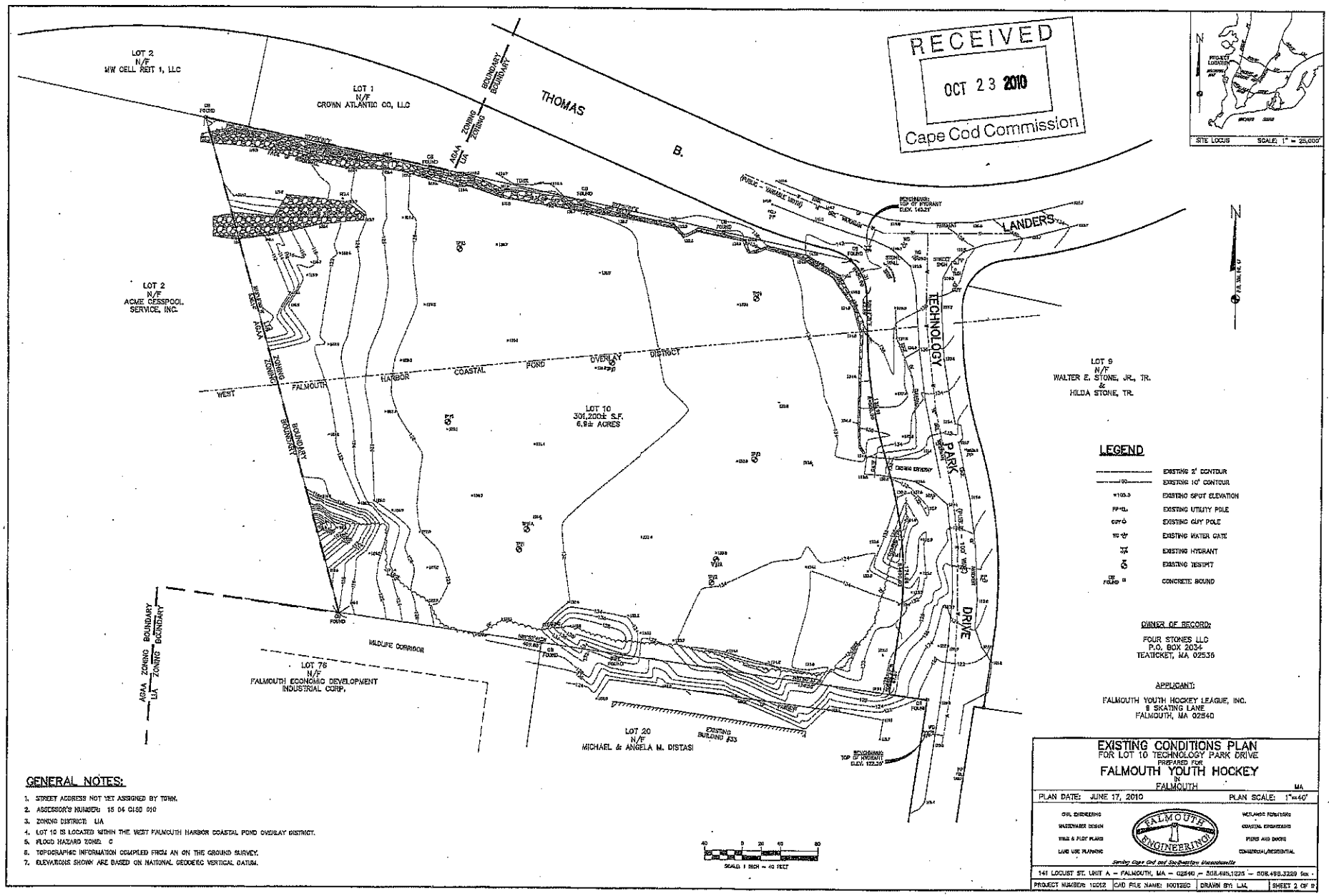
OVERALL SITE PLAN

FOR LOT 10 TECHNOLOGY PARK DRIVE
PREPARED FOR
FALMOUTH YOUTH HOCKEY
&
FALMOUTH, MA

PLAN DATE: JUNE 17, 2010 — PLAN SCALE: 1"=40'

CIVIL ENGINEERING
WASTEWATER DESIGN
SITE & POST PLANS
LAND USE PLANNING
SURVEYING PERMITTING
COASTAL ENGINEERING
PIERS AND DOCKS
COMMISSION/PROFESSIONAL
FALMOUTH ENGINEERING
Serving Cape Cod and Southeastern Massachusetts
141 LOCUST ST, UNIT A – FALMOUTH, MA – 02540 – 508.455.1228 – 508.495.3223 fax

PROJECT NUMBER: 10012 | CAD FILE NAME: 10012SP | DRAWN BY: LM | SHEET 1 OF 9



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Cape Cod Commission

LEGEND

- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING UTILITY POLE
- EXISTING GUY POLE
- EXISTING WATER GATE
- EXISTING HYDRANT
- EXISTING TESTPIT
- CONCRETE BOUND

OWNER OF RECORD:

FOUR STONES LLC
P.O. BOX 2034
TEATICKET, MA 02536

APPLICANT:

FALMOUTH YOUTH HOCKEY LEAGUE, INC.
8 SKATING LANE
FALMOUTH, MA 02540

GENERAL NOTES:

1. STREET ADDRESS NOT YET ASSIGNED BY TOWN.
2. ASSESSOR'S NUMBER: 15 04 C1SD 010
3. ZONING DISTRICT: LIA
4. LOT 10 IS LOCATED WITHIN THE WEST FALMOUTH HARBOR COASTAL POND OVERLAY DISTRICT.
5. FLOOD HAZARD ZONE: C
6. TOPOGRAPHIC INFORMATION COMPILED FROM AN ON THE GROUND SURVEY.
7. ELEVATIONS SHOWN ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM.

EXISTING CONDITIONS PLAN
FOR LOT 10 TECHNOLOGY PARK DRIVE
PREPARED FOR
FALMOUTH YOUTH HOCKEY
IN
FALMOUTH MA

PLAN DATE: JUNE 17, 2010 PLAN SCALE: 1"=40'

FALMOUTH ENGINEERING
CIVIL ENGINEERING · WASTEWATER DESIGN · TITLE 5 PLOT PLANS · LAND USE PLANNING
WETLANDS PERMITTING · COASTAL ENGINEERING · PIERS AND DOCKS · COMMERCIAL/RESIDENTIAL
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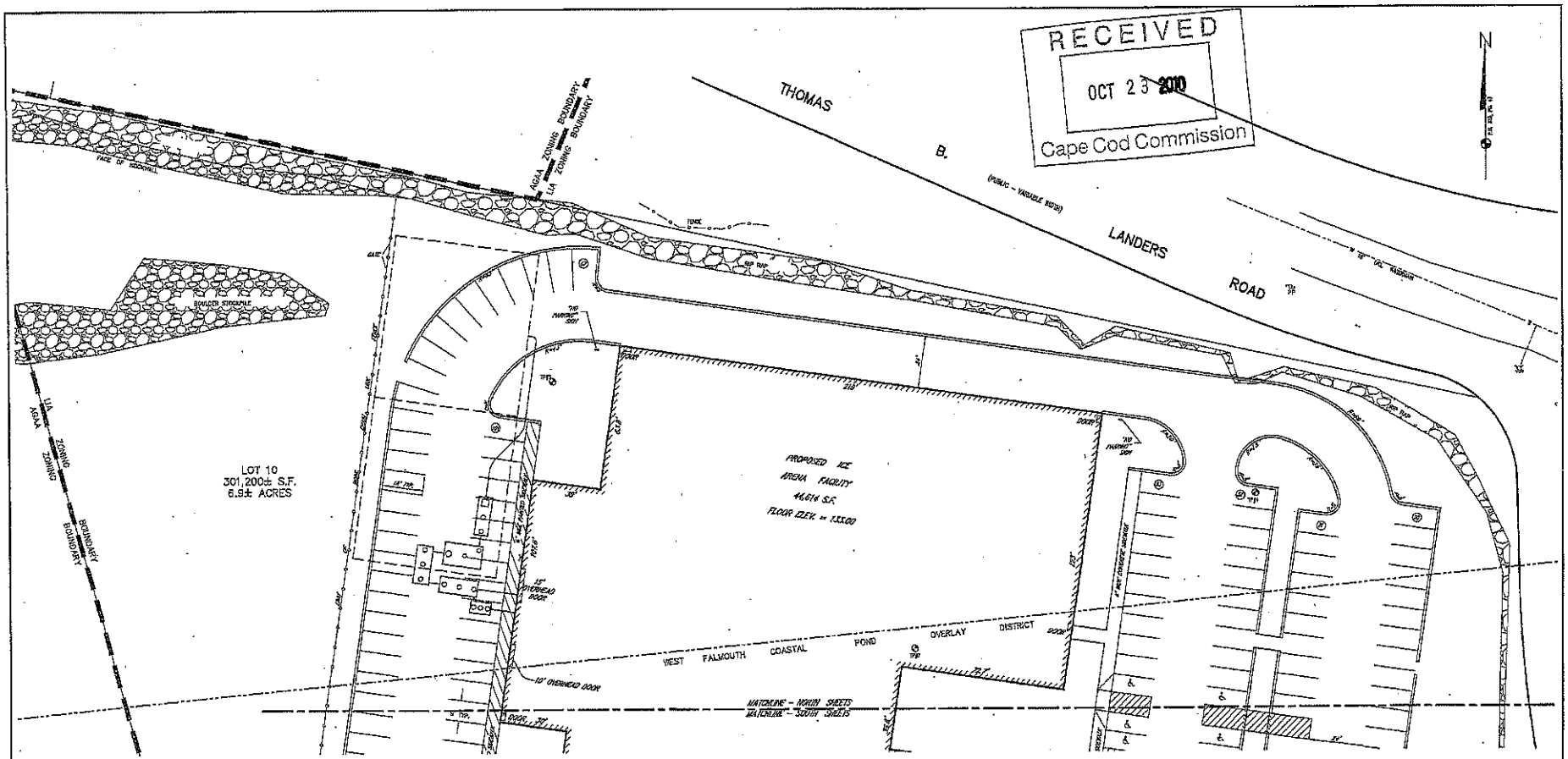
PROJECT NUMBER: 10012 | CAD FILE NAME: 10012EC | DRAWN BY: L.M. | SHEET 2 OF 8



PARKING REQUIREMENTS – AS PER FALMOUTH ZONING BY-LAW:

NO SPECIFIC CATEGORY FOR ICE ARENA USE

1. MINIMUM PARKING CALCULATIONS BASED ON PLACE OF PUBLIC ASSEMBLY: 1 SPACE/3 SEATS x 650 SEATS = 217 SPACES
2. TOTAL SPACES PROVIDED = 321 SPACES (BASED ON ANTICIPATED FULL OCCUPANCY DEMAND)

GENERAL NOTES:

1. STREET ADDRESS NOT YET ASSIGNED BY TOWN.
2. ASSESSOR'S NUMBER: 15 04 6150 010
3. ZONING DISTRICT: LIA
4. LOT 10 IS LOCATED WITHIN THE WEST FALMOUTH HARBOR COASTAL POND OVERLAY DISTRICT.
5. FLOOD HAZARD ZONE: C
6. TOPOGRAPHIC INFORMATION COMPILED FROM AN ON THE GROUND SURVEY.
7. ELEVATIONS SHOWN ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM.
8. LOT COVERAGE BY PROPOSED STRUCTURES: 44,614 S.F./301,200 S.F. = 14.8% < 40%
9. LOT COVERAGE BY PROPOSED STRUCTURES/PARKING/PAVING: (72,370 S.F./301,200 S.F. = 57.2% < 70%

LEGEND

- EXISTING UTILITY POLE
- EXISTING GUY POLE
- EXISTING WATER GATE
- EXISTING HYDRANT
- EXISTING TESTPIT
- PROPOSED CAPE COD BERM
- PROPOSED PRE-CAST CONCRETE CURB
- PROPOSED PAVEMENT SET FLUSH WITH GRASS

SCALE: 1 INCH = 20 FEET

OWNER OF RECORD:

FOUR STONES LLC
P.O. BOX 2034
TEATICKET, MA 02536

APPLICANT:

FALMOUTH YOUTH HOCKEY LEAGUE, INC.
9 SKATING LANE
FALMOUTH, MA 02540

DATE	REVISION
10/22/10	REVISE BUILDING FOOTPRINT AND SITE LAYOUT.

SITE LAYOUT PLAN – NORTH

FOR LOT 10 TECHNOLOGY PARK DRIVE

PREPARED FOR

FALMOUTH YOUTH HOCKEY

IN FALMOUTH, MA

PLAN DATE: JUNE 17, 2010 PLAN SCALE: 1"=20'

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FALMOUTH ENGINEERING
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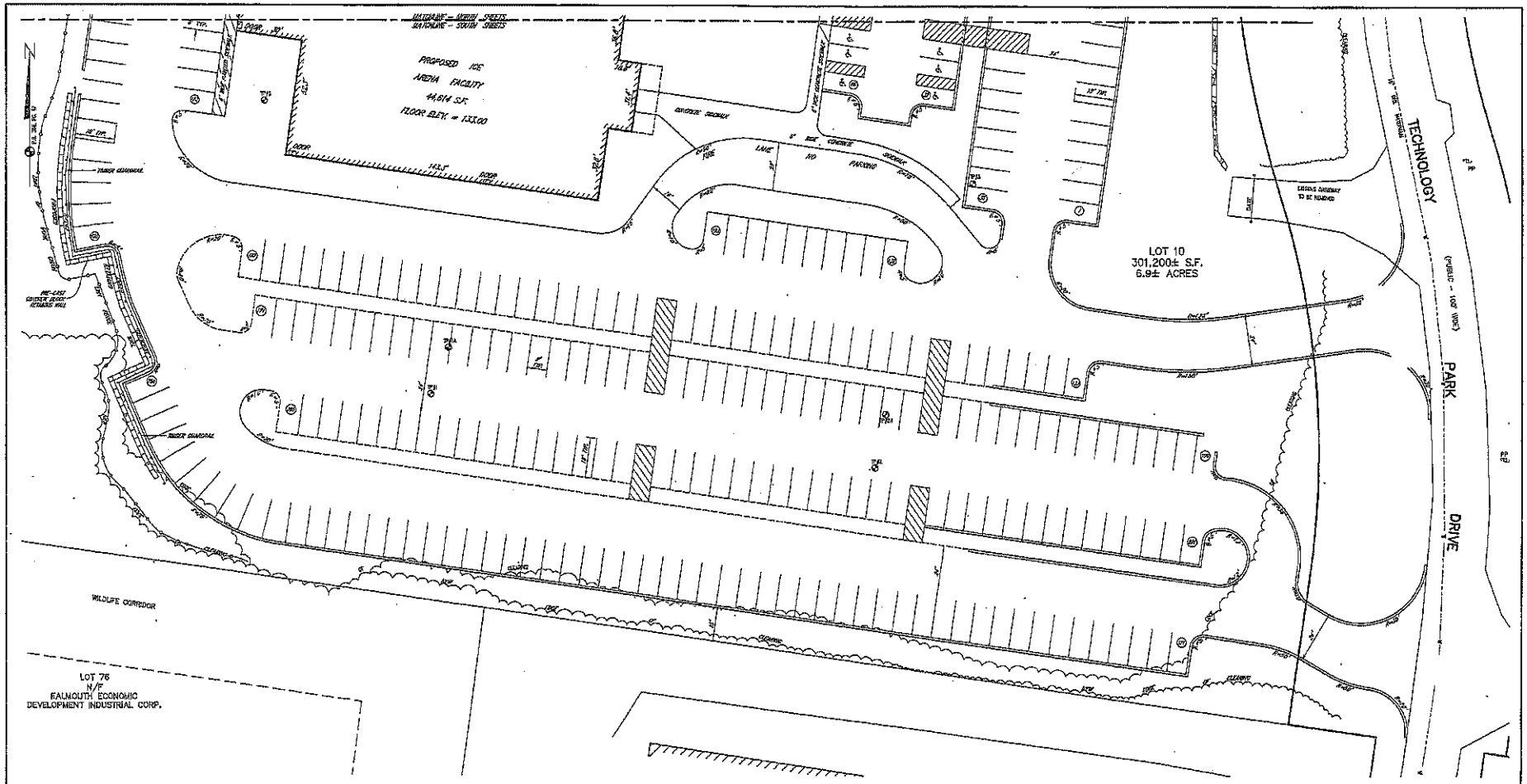
PROJECT NUMBER: 10012 | CAD FILE NAME: 10012SP | DRAWN BY: L.N. | SHEET 3 OF 9



PARKING REQUIREMENTS – AS PER FALMOUTH ZONING BY-LAW:

NO SPECIFIC CATEGORY FOR ICE ARENA USE

1. MINIMUM PARKING CALCULATIONS BASED ON PLACE OF PUBLIC ASSEMBLY: 1 SPACE/3 SEATS x 650 SEATS = 217 SPACES
2. TOTAL SPACES PROVIDED = 321 SPACES (BASED ON ANTICIPATED DEMAND)

GENERAL NOTES:

1. STREET ADDRESS NOT YET ASSIGNED BY TOWN.
2. ASSESSOR'S NUMBER: 16 04 0150 010
3. ZONING DISTRICT: LIA
4. LOT 10 IS LOCATED WITHIN THE WEST FALMOUTH HARBOR COASTAL POND OVERLAY DISTRICT.
5. FLOOD HAZARD ZONE: C
6. TOPOGRAPHIC INFORMATION COMPILED FROM AN ON THE GROUND SURVEY.
7. ELEVATIONS SHOWN ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM.
8. LOT COVERAGE BY PROPOSED STRUCTURES: 44,614 S.F./301,200 S.F. = 14.8% < 40%
9. LOT COVERAGE BY PROPOSED STRUCTURES/PARKING/PAVING: 172,370 S.F./301,200 S.F. = 57.2% < 70%

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LEGEND

- EXISTING UTILITY POLE
- EXISTING GUY POLE
- EXISTING WATER GATE
- EXISTING HYDRANT
- EXISTING TESTPIT
- PROPOSED CAPE COD BERM
- PROPOSED PRE-CAST CONCRETE CURB
- PROPOSED PAVEMENT SET FLUSH WITH GRASS

OWNER OF RECORD:

FOUR STONES LLC
P.O. BOX 2034
TEATICKET, MA 02536

APPLICANT:

FALMOUTH YOUTH HOCKEY LEAGUE, INC.
9 SKATING LANE
FALMOUTH, MA 02540

SCALE: 1 INCH = 20 FEET

DATE	REVISION
10/22/10	REVISE BUILDING FOOTPRINT AND SITE LAYOUT, ADD GUARDRAIL

SITE LAYOUT PLAN – SOUTH

FOR LOT 10 TECHNOLOGY PARK DRIVE
PREPARED FOR
FALMOUTH YOUTH HOCKEY
IN
FALMOUTH, MA

PLAN DATE: JUNE 17, 2010 PLAN SCALE: 1"=20'

CIVIL ENGINEERING
WASTEWATER DESIGN
TITLE 5 PLAT PLANS
LAND USE PLANNING
FALMOUTH ENGINEERING
WETLANDS PERMITTING
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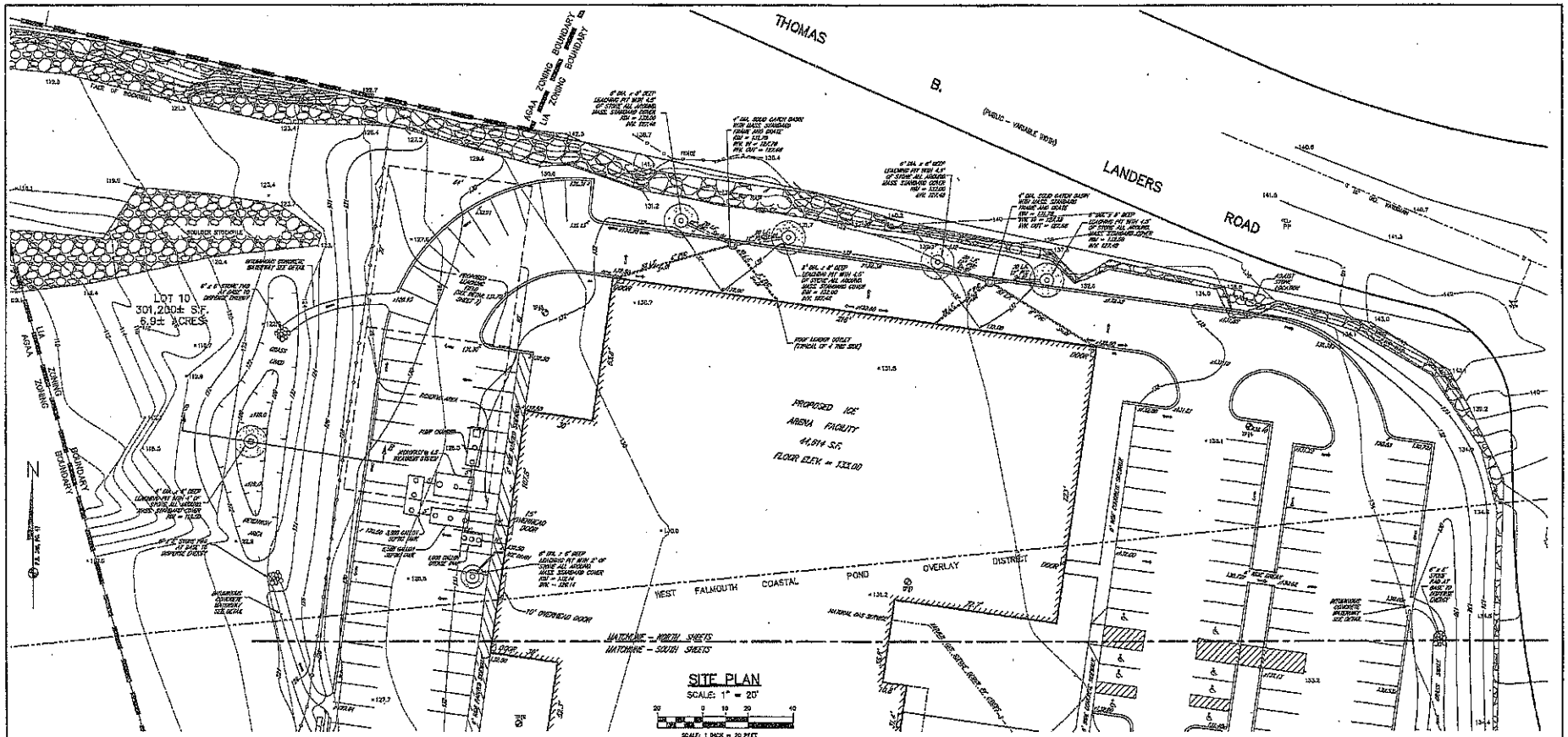
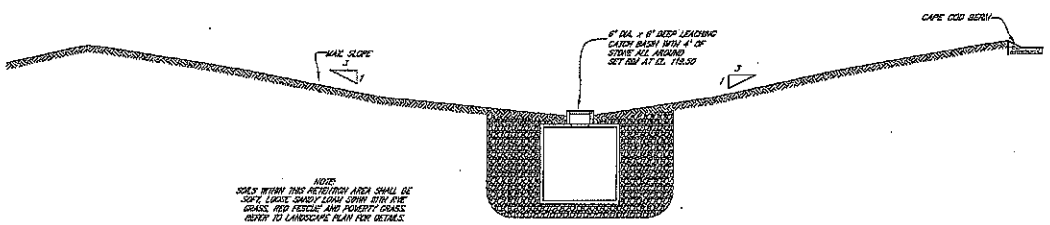
PROJECT NUMBER: 10012	CAD FILE NAME: 10012SP	DRAWN BY: T.M.	SHEET 4 OF 9

rec'd 11-8-10





SECTION B-B
TYPICAL GRASS LINED RETENTION AREA
SCALE: 1"=4'

LEGEND

- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING UTILITY POLE
- EXISTING GUY POLE
- EXISTING WATER GATE
- EXISTING HYDRANT
- EXISTING TESTPIT
- PROPOSED DRAINAGE FLOW
- UNDERGROUND ELECTRIC SERVICE DESIGNED BY OTHERS
- WATER SERVICE DESIGNED BY OTHERS
- FIRE SERVICE DESIGNED BY OTHERS
- NATURAL GAS SERVICE DESIGNED BY OTHERS

APPLICANT:
FALMOUTH YOUTH HOCKEY LEAGUE, INC.
9 SKATING LANE
FALMOUTH, MA 02540

OWNER OF RECORD:
FOUR STONES LLC
P.O. BOX 2034
TEATICKET, MA 02536

DATE	REVISION
11/3/10	ADD SOIL AND VEGETATION NOTE.
10/22/10	REVISE BUILDING FOOTPRINT, SITE LAYOUT, GRADING AND DRAINAGE.

SITE UTILITY PLAN - NORTH
FOR LOT 10 TECHNOLOGY PARK DRIVE
PREPARED FOR
FALMOUTH YOUTH HOCKEY
IN
FALMOUTH MA

PLAN DATE: JUNE 17, 2010 PLAN SCALE: AS SHOWN

CIVIL ENGINEERING
WASTEWATER DESIGN
TITLE 5 PLOT PLANS
LAND USE PLANNING
TECHNICAL FEASIBILITY
COASTAL ENGINEERING
PERMITTING
COMMERCIAL/RESIDENTIAL
FALMOUTH ENGINEERING
Surveying Also Available Through Sturtevant Associates
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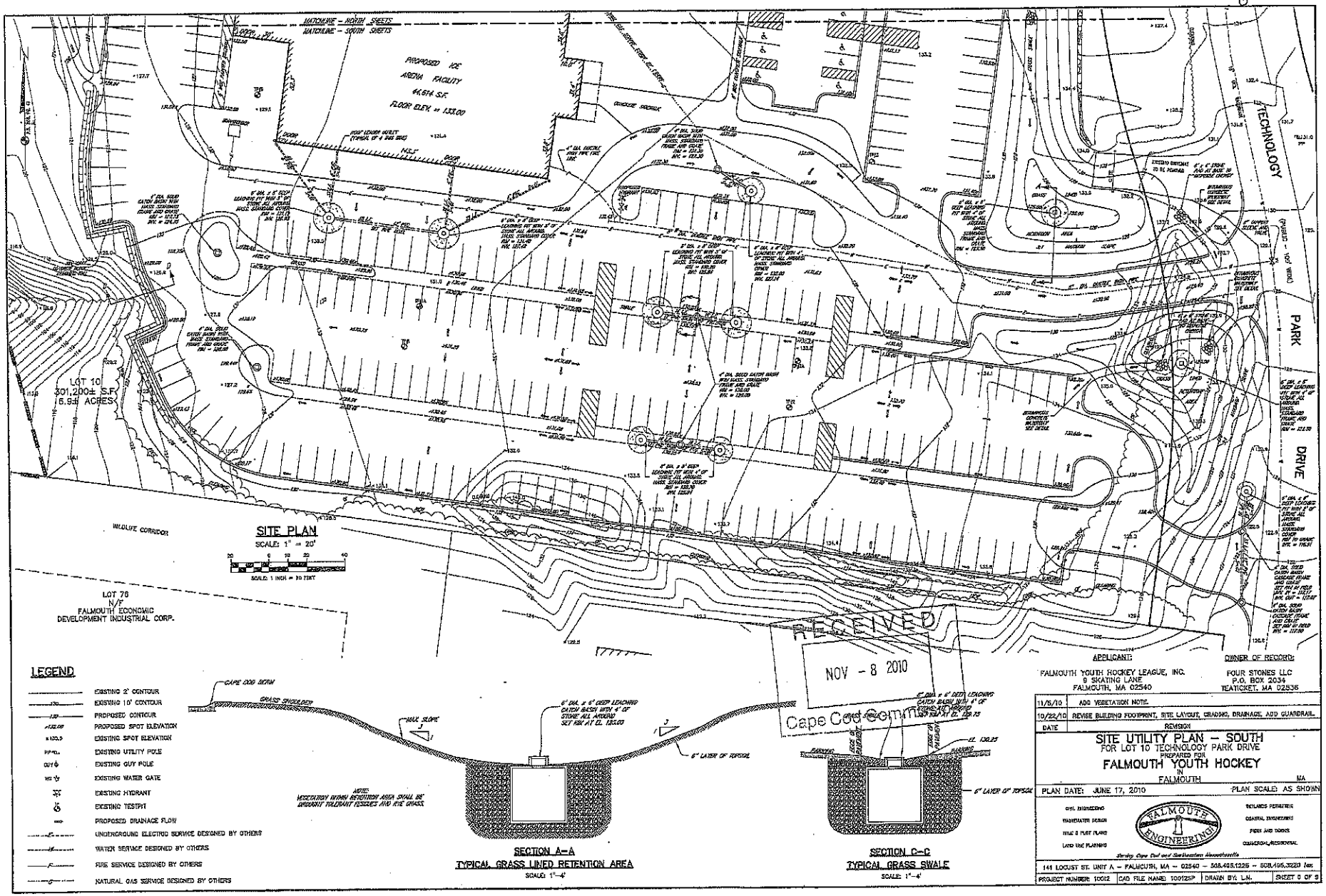
PROJECT NUMBER: 10012 | CAD FILE NAME: 10012SP | DRAWN BY: L.M. | SHEET 5 OF 9

rec'd 11-8-10


PROPOSED ICE ARENA FACILITY
44,614 S.F.
FLOOR ELEV. = 133.00
LOT 10
301,200± S.F.
6.9± ACRES
TECHNOLOGY PARK DRIVE
WILDLIFE CORRIDOR
LOT 76
N/F
FALMOUTH ECONOMIC DEVELOPMENT INDUSTRIAL CORP.
SITE PLAN
SCALE: 1" = 20'
SCALE: 1 INCH = 20 FEET
RECEIVED
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Cape Cod Commission
LEGEND
EXISTING 2' CONTOUR
EXISTING 10' CONTOUR
PROPOSED CONTOUR
PROPOSED SPOT ELEVATION
EXISTING SPOT ELEVATION
EXISTING UTILITY POLE
EXISTING GUY POLE
EXISTING WATER GATE
EXISTING HYDRANT
EXISTING TESTPIT
PROPOSED DRAINAGE FLOW
UNDERGROUND ELECTRIC SERVICE DESIGNED BY OTHERS
WATER SERVICE DESIGNED BY OTHERS
FIRE SERVICE DESIGNED BY OTHERS
NATURAL GAS SERVICE DESIGNED BY OTHERS
CAPE COD BERM
GRASS SHOULDER
HAUL SLOPE
6" LAYER OF TOPSOIL
NOTE: NECESSARY WHEN RETENTION AREA SHALL BE UNDERMIT TOLERANT FESCUES AND RYE GRASS.
SECTION A-A
TYPICAL GRASS LINED RETENTION AREA
SCALE: 1"=4'
SECTION C-C
TYPICAL GRASS SWALE
SCALE: 1"=4'
APPLICANT:
FALMOUTH YOUTH HOCKEY LEAGUE, INC.
9 SKATING LANE
FALMOUTH, MA 02540
OWNER OF RECORD:
FOUR STONES LLC
P.O. BOX 2034
TEATICKET, MA 02536
11/5/10 ADD VEGETATION NOTE.
10/22/10 REVISE BUILDING FOOTPRINT, SITE LAYOUT, GRADING, DRAINAGE, ADD GUARDRAIL.
DATE REVISION
SITE UTILITY PLAN - SOUTH
FOR LOT 10 TECHNOLOGY PARK DRIVE
PREPARED FOR
FALMOUTH YOUTH HOCKEY
IN
FALMOUTH MA
PLAN DATE: JUNE 17, 2010 PLAN SCALE: AS SHOWN
CIVIL ENGINEERING
WASTEWATER DESIGN
TITLE 5 PERC PLANS
LAND USE PLANNING
FALMOUTH ENGINEERING
WETLANDS PERMITTING
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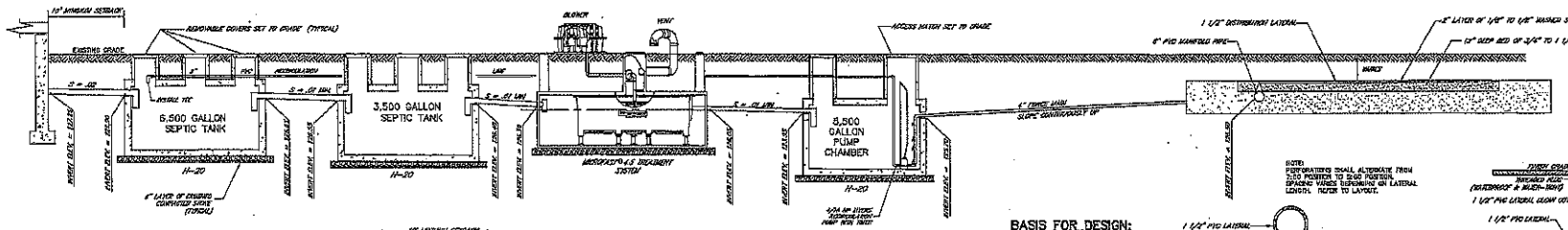
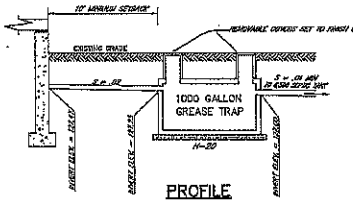
PROJECT NUMBER: 10012 CAD FILE NAME: 10012SP DRAWN BY: L.M. SHEET 6 OF 9



NOTE:

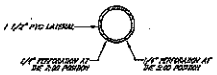
ALL PRECAST CONCRETE TANKS AND PUMP CHAMBERS SHALL BE CERTIFIED WATERTIGHT AND WATERRIGHT BY THE MANUFACTURER.
ALL ACCESS MANHOLE COVERS AND RISERS FOR SEPTIC TANKS AND PUMP CHAMBERS SHALL BE RAISED TO FINISHED GRADE WITH BRICKS.
ALL COVERS AND HATCHES SHALL BE WATERPROOF AND WATERTIGHT.



PROFILE
NOT TO SCALE

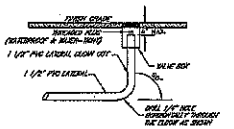
BASIS FOR DESIGN:

650 SEATS @ 5 GPD/SEAT = 3,250 GPD
LEACHING AREA -- CAPACITY 800 SQ.FT./GPD = 4,550 S.F.
PROPOSED LEACHING CAPACITY: 5,410 GPD
1 FIELD @ 64' X 72' = 4,608 S.F.
WATER SUPPLY: TOWN
PRECAST CONCRETE UNITS: H-20 LOADING DESIGN

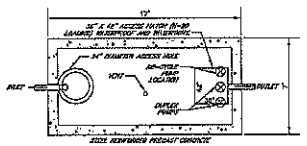


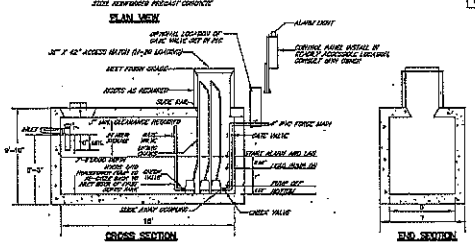
NOTE:
PERFORATIONS SHALL ALTERNATE FROM 2:00 POSITION TO 10:00 POSITION, SPACING VARIES DEPENDING ON LATERAL LENGTH. REFER TO LAYOUT.

LATERAL PIPE PERFORATION
NOT TO SCALE



LATERAL PIPE: VENT & CLEAN OUT
NOT TO SCALE

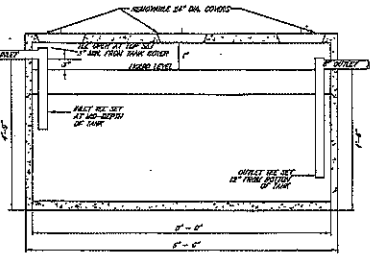


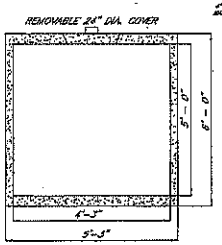


TYPICAL 5,500 GALLON PUMP CHAMBER (H-20)
NOT TO SCALE

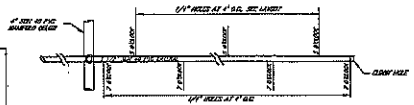
PUMP CHAMBER INVERTS AND REQUIREMENTS	
	PUMP CHAMBER
INLET INVERT	139.86
OUTLET INVERT	139.70
START LAG AND ALARM	121.80
START LEAD	121.60
ALL PUMPS OFF	120.00
FLOOR OF TANK	116.78
GRID	313
TANK DIA (FEET)	10.5

2 PUMPS REQUIRED, PUMPS MUST ALTERNATE. PRIMACE PUMPS SPECIFICATIONS AND PUMP CURVE TO ENGINEER PRIOR TO CONSTRUCTION FOR APPROVAL.

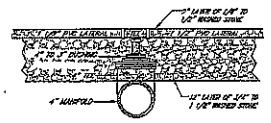




1,000 GALLON GREASE TRAP H-20
NOT TO SCALE



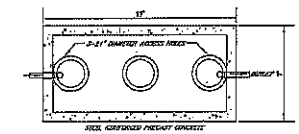
LATERAL PIPE PERFORATION LAYOUT
NOT TO SCALE

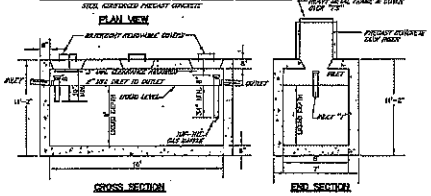


MANIFOLD & LATERAL ASSEMBLY A-A
NOT TO SCALE

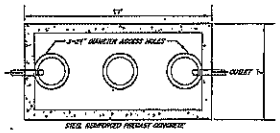
RE-CYCLE PUMP NOTES:

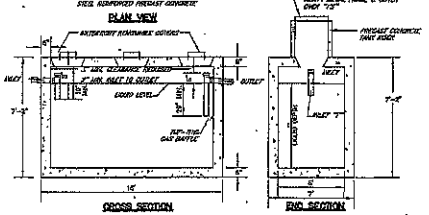
1. SET PUMP IN NEARBY ACCESSIBLE LOCATION ON STAINLESS STEEL SLIDE RAILS WITH LIFTING BRACES.
2. DISCHARGE LINE SHALL BE 2" PVC.
3. SWAP DISCHARGE PIPE WITH CAST VALVE AND CHECK VALVE.
4. PUMP SHALL BE CONNECTED TO A TIMER THAT IS SET TO MANUFACTURERS SPECIFICATIONS.
5. USE MYERS 4/10 SUBSTRUCTURE PUMP OR APPROVED EQUAL.



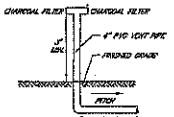


TYPICAL 6,500 GALLON SEPTIC TANK (H-20)
NOT TO SCALE

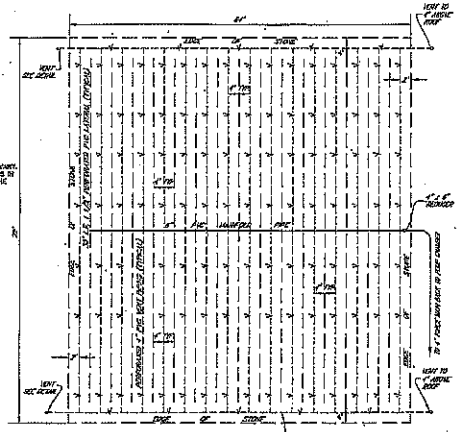




TYPICAL 3,500 GALLON SEPTIC TANK (H-20)
NOT TO SCALE



VENT PIPE DETAIL
NOT TO SCALE



PRESSURE DISTRIBUTION LEACHING FIELD LAYOUT
SCALE: 1"=10'

CONSTRUCTION NOTES:

1. INSTALLATION OF THE PROPOSED SEPTIC SYSTEM SHALL BE IN ACCORDANCE WITH TITLE 5 AND THE BOARD OF HEALTH REGULATIONS.
2. A COPY OF THE PLANS SHALL BE AVAILABLE ON SITE FOR REFERENCE AT ALL TIMES DURING THE INSTALLATION OF THE SEPTIC SYSTEM.
3. NO CHANGES TO THE DESIGN SHALL BE PERFORMED WITHOUT THE APPROVAL OF BOTH FALMOUTH ENGINEERING INC AND THE BOARD OF HEALTH.
4. THE SEPTIC SYSTEM IS SUBJECT TO INSPECTION BY FALMOUTH ENGINEERING INC AND THE BOARD OF HEALTH.
5. THE CONTRACTOR SHALL NOTIFY FALMOUTH ENGINEERING INC AND THE BOARD OF HEALTH TO INSPECT THE SEPTIC SYSTEM PRIOR TO BACKFILL. IN SOME INSTANCES, MORE THAN ONE INSPECTION MAY BE NEEDED. THE CONTRACTOR SHALL NOT BACKFILL THE PORTIONS OF THE SYSTEM THAT HAVE BEEN INSPECTED AND APPROVED BY FALMOUTH ENGINEERING INC AND THE BOARD OF HEALTH.
6. IF THE CONTRACTOR ENCOUNTERS ANY UNANTICIPATED OR UNFORESEEN SITE CONDITIONS, SUCH AS DIFFERING SOILS, TOPOGRAPHIC ALTERATIONS OR OTHER CONDITIONS THAT MAY REQUIRE RE-EVALUATION OF THE DESIGN, THE CONTRACTOR SHALL IMMEDIATELY CONTACT FALMOUTH ENGINEERING, INC.

OWNER OF RECORD:
FOUR STONES LLC
P.O. BOX 2034
TEATICKET, MA 02536

APPLICANT:
FALMOUTH YOUTH HOCKEY LEAGUE, INC.
9 SKATING LANE
FALMOUTH, MA 02540

DATE	REVISION
10/22/10	REVISE INVERTS.

SEPTIC SYSTEM DETAILS
FOR LOT 10 TECHNOLOGY PARK DRIVE
PREPARED FOR
FALMOUTH YOUTH HOCKEY
IN
FALMOUTH MA

PLAN DATE: JUNE 17, 2010 PLAN SCALE: 1"=20'

CIVIL ENGINEERING
WASTEWATER DESIGN
TITLE 5 PLOT PLANS
LAND USE PLANNING
WETLANDS PERMITTING
COASTAL ENGINEERING
PIERS AND DOCKS
RESIDENTIAL/COMMERCIAL
FALMOUTH ENGINEERING
Serving Cape Cod and Southeastern Massachusetts
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PROJECT NUMBER: 10012 | DAD FILE NAME: 10012SP | DRAWN BY: LM | SHEET 7 OF 9

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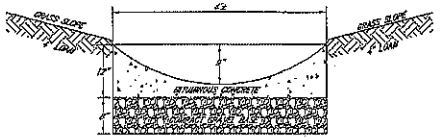
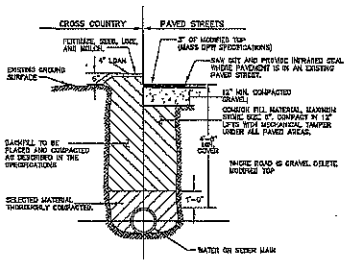


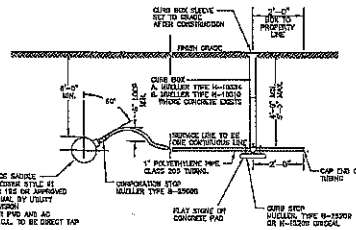
TYPICAL SECTION – BITUMINOUS CONCRETE WATERWAY

SCALE: 1"=1'



TRENCH SECTION

NOT TO SCALE



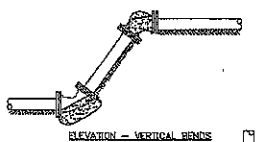
1" WATER SERVICE INSTALLATION

NOT TO SCALE

NOTES:

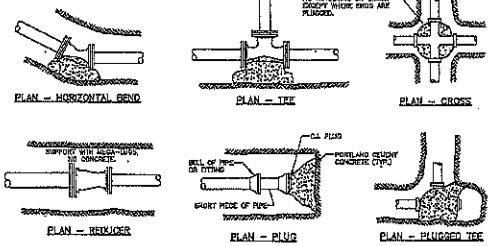
A. BACKFILL SHALL BE NATIVE MATERIAL COMPACTED TO A DENSITY OF NOT LESS THAN SIDE RELAXING COMPACTION.

B. SPECIAL ATTENTION MUST BE GIVEN TO BACKFILL AROUND WATER MAIN AND UNDER SERVICE PIPE.



ELEVATION – VERTICAL BENDS

NOMINAL THRUST BLOCK BEARING AREAS IN SQUARE FEET					
PIPE SIZE	90°	45°	22½°	11¼°
6"	4	2	2	1
8"	4	3	3	1
10"	4	3	3	1
12"	5	4	3	2
14"	10	7	4	3
16"	16	10	6	4



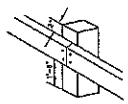
NO TERMINATIONS OR BENDS CAN EVER WHERE ENDS ARE PLUGGED.

ANCHORAGE DETAILS

NOT TO SCALE

NOTES:

1. CONCRETE SHALL BE 2000 PSI MINIMUM AT 28 DAYS.
2. THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED EARTH.
3. ALL FITTINGS (EXCEPT AS INDICATED) SHALL BE SUPPORTED AND ANCHORED IN CONCRETE AND WITH "MEGALUG JOINT RESTRAINTS" OR APPROVED EQUAL.
4. FIRE FIRE HYDRANT WITHDRAWING SEE HYDRANT CONNECTION DETAIL.
5. POURED CONCRETE SHALL BE KEPT 6" CLEAR OF MECHANICAL JOINTS TO ALLOW FOR FUTURE REPAIR OR REMOVAL.
6. RETAINER GLANDS REQUIRED ON ALL BENDS.
7. CLOW F-1656 OR EQUAL RETAINER GLANDS USED WITH D.I.C.L. PIPE ONLY.

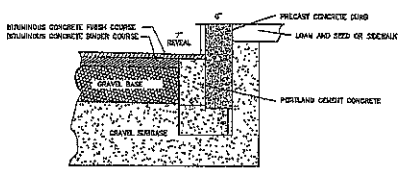


WOOD GUARDRAIL DETAIL

NOT TO SCALE

NOTES:

1. POSTS 6"x8"x5'
2. RAILS: 4"x10"x16'
3. GALVANIZED NUTS & BOLTS 5/8"ø
4. POSTS TO BE SET 3'-6" INTO GROUND.
5. POST C TO BE 6'-0".



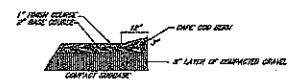
DETAIL OF CONCRETE CURB

SCALE: NTS

NOTE: REFER TO PLAN FOR LOCATION OF PRE-CAST CONCRETE CURB

TYPICAL PAVED SURFACE

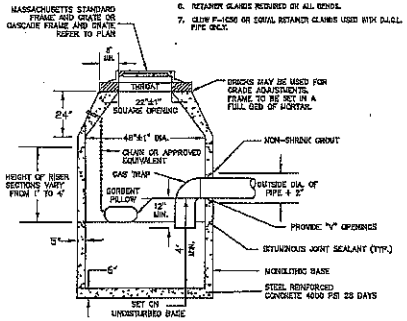
NOT TO SCALE



TYPICAL PAVED SURFACE

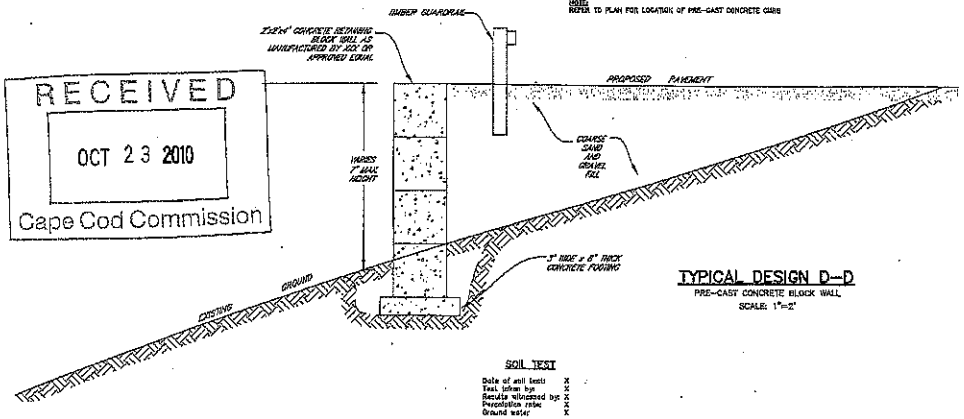
NOT TO SCALE

NOTE: REFER TO PLAN FOR LOCATION OF CAPE COD BERM



TYPICAL SOLID CATCH BASIN

NOT TO SCALE



TYPICAL DESIGN D–D

PRE-CAST CONCRETE BLOCK WALL

SCALE: 1"=2'

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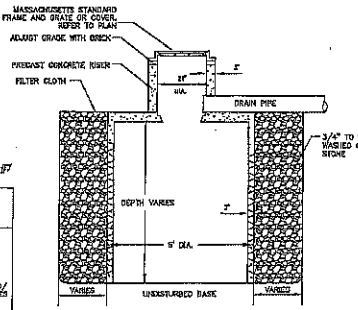
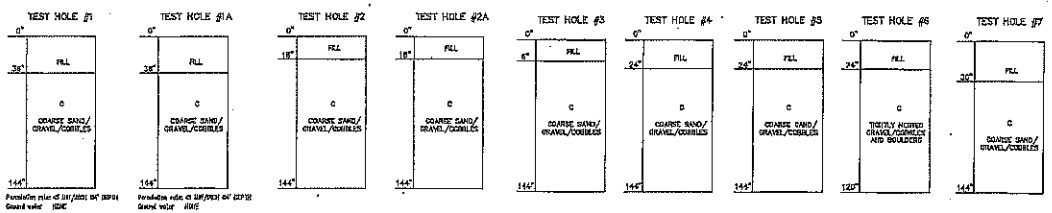


TYPICAL LEACHING PIT

NOT TO SCALE

SOIL TEST

Date of soil tests	X
Test pit/perc hole	X
Results witnessed by	X
Percolation rates	X
Ground water	X



Percolation rate of 1in/min or less
Ground water NONE

Percolation rate of 1in/min or less
Ground water NONE

APPLICANT:

FALMOUTH YOUTH HOCKEY LEAGUE, INC.
9 SKATING LANE
FALMOUTH, MA 02540

OWNER OF RECORD:

FOUR STONES LLC
P.O. BOX 2034
TEATICKET, MA 02536

STANDARD DETAILS

FOR LOT 10 TECHNOLOGY PARK DRIVE

PREPARED FOR

FALMOUTH YOUTH HOCKEY

IN FALMOUTH, MA

PLAN DATE: JUNE 17, 2010 PLAN SCALE: 1"=20'

CIVIL ENGINEERING
WASTEWATER DESIGN
TITLE 5 PERC PLANS
LAND USE PLANNING
WETLANDS PERMITTING
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PROJECT NUMBER: 10012 | CAD FILE NAME: 10012SP | DRAWN BY: L.N. | SHEET A OF B

Specifications for HighStrengthFAST 4.50 Wastewater Treatment System

1. GENERAL
The contractor shall furnish and install (1) HighStrengthFAST 4.50 treatment system as manufactured by Bio-Microbics, Inc. The treatment system shall be complete with all needed equipment as shown on the drawings and specified herein.
The principal items of equipment shall include FAST System insert, leg extensions, blower assembly, blower controls and alarms. The HighStrengthFAST 4.50 unit shall be situated within a 4220 Gallon (16000L) minimum tank, as shown on the plans. Prior to the FAST treatment zone settling, tank(s) equaling ½ to 1 x daily flow must be utilized. Tank(s) must conform to local, state, and all other applicable codes. The contractor shall provide coordination between the FAST system and tank supplier with regard to fabrication of the tank, installation of the FAST unit and delivery to the job site.

2. OPERATING CONDITIONS
The HighStrengthFAST 4.50 treatment system shall be capable of treating the High strength wastewater produced by commercial facilities producing appropriate waste to develop and sustain a viable biomass. Waste containing inhibitory substances is not recommended for treatment in the FAST system. Consult factory for proper sizing and usage.

3. MEDIA
The FAST media shall be manufactured of rigid PVC, polyethylene, or polypropylene and it shall be supported by the polyethylene insert. The media shall be fixed in position and contain no moving or wearing parts and shall not corrode. The media shall be designed and installed to ensure that sloughed solids descend through the media to the bottom of the septic tank.

4. BLOWER
The HighStrengthFAST 4.50 unit shall come equipped with a regenerative type blower capable of delivering 100-230 CFM [190-390 m³/h]. The blower assembly shall include an inlet filter with metal filter element.

5. REMOTE MOUNTED BLOWER
The blower shall be installed up to 100 feet [30.5 meters] away and a maximum of 4 elbows from the HighStrengthFAST unit on a contractor supplied concrete base. The blower elevation must be higher than the normal flood level. A two-piece, rectangular housing shall be provided with tamper-proof screws. The discharge air line from the blower to the HighStrengthFAST shall be provided and installed by the contractor.

6. ELECTRICAL
The electrical source should be within 150 feet [45.7 meters] of the blower consult local codes for longer wiring distances. All wiring must conform to all applicable codes (IEC, NEC, etc.). Wiring distances must prevent significant voltage loss. Input power on 60Hz electrical system is 270 VAC, single phase, 13.9-15.2 amps. Input power on 50Hz electrical systems 230 VAC, single phase 3.22 kw/hr. 60 Hz three phase 220/460VAC (10.6/5.1 amps) & 50 Hz three phase 190/380VAC (2.06 kw/hr) are also available. All conduit and wiring shall be supplied by contractor.

7. ALARMS
The alarm system shall consist of a visual and audible alarm to indicate loss of power to the blower. A manual silence switch is included.

8. INSTALLATION AND OPERATING INSTRUCTIONS
All work must be done in accordance with local codes and regulations. Installation of the HighStrengthFAST 4.50 shall be done in accordance with the written instructions provided by the manufacturer. An operation and maintenance manual shall be furnished, which will include a description of system installation, operation, and maintenance procedures.
Module weighs approximately 1000 pounds. Four holes for lifting the FAST liner are supplied. Spreader bars are to be used in lifting the unit. Place spreader bars between lifting holes.

9. FLOW & PIPE SIZING
Each FAST module is provided with a standard (4) four inch effluent pipe hole and gasket. The maximum free or unrestricted flow, with a four inch effluent pipe is 90 U.S. Gallons per minute (341 LPM), or 45 U.S. GPM (170 LPM) with a 2.0 design safety factor. An optional (6) six inch hole and gasket can be utilized on the same centerline dimension or up to 2 inches (5 cm) higher. Maximum free or unrestricted flow with a 6 inch effluent pipe is 260 GPM (984 LPM) or 130 GPM (492 LPM) with a 2.0 design safety factor.
FAST systems have been successfully designed, tested and certified receiving gravity, demand-based influent flow. When influent flow is controlled by pump or other means to help with highly variable flow conditions, then multiple dosing events should be used to help ensure even flow. When influent flow is controlled (either by pump or other means) to the FAST system to help with highly variable flow conditions, then multiple feeding events should be used to help ensure even flow, optimum performance, and reliability.

10. WARRANTY
Bio-Microbics, Inc. warrants all new HighStrengthFAST® models (HighStrengthFAST® 1.0, 1.5, 3.0, 4.5, and 9.0) against defects in materials and workmanship for a period one (1) year after installation or eighteen (18) months from date of shipment which ever occurs first, subject to the following terms and conditions:
During the warranty period, if any part is defective or fails to perform as specified when operating at design conditions, and if the equipment has been installed and is being operated and maintained in accordance with the written instructions provided by Bio-Microbics, Inc., Bio-Microbics, Inc. will repair or replace at its discretion such defective parts free of charge. Defective parts must be returned by owner to Bio-Microbics, Inc.'s factory postage paid, if so requested. The cost of labor and all other expenses resulting from replacement of the defective parts and from installation of parts furnished under this warranty and regular maintenance items such as filters or bulbs shall be borne by the owner. This warranty does not cover general system misuse, aerator components which have been damaged by flooding or any components that have been disassembled by unauthorized persons, improperly installed or damaged due to altered or improper wiring or overload protection. This warranty applies only to the treatment plant and does not include any of the structure wiring, plumbing, drainage, septic tank or disposal system. Bio-Microbics, Inc. reserves the right to revise, change or modify the construction and/or design of the FAST system, or any component part or parts thereof, without incurring any obligation to make such changes or modifications in present equipment. Bio-Microbics, Inc. is not responsible for consequential or incidental damages of any nature resulting from such things as, but not limited to, defect in design, material, or workmanship, or delays in delivery, replacements or repairs.
THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. BIO-MICROBICS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
NO REPRESENTATIVE OR PERSON IS AUTHORIZED TO GIVE ANY OTHER WARRANTY OR TO ASSUME FOR BIO-MICROBICS, INC., ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS. Contact your local distributor for parts and service.

HIGHSTRENGTHFAST 4.5 TREATMENT SYSTEM

NOT TO SCALE

NOTES
1. Blower piping to FAST® may not exceed 100 FT [30.5m] total length and use a maximum of 4 elbows in the piping system (@ 100FT [30m]). For distances greater than 100 FT [30m] consult factory. Blower must be located above flood levels on a concrete base 56.8" X 35.6" X 2.5" [144 X 91 X 6.35 cm] minimum.
2. Vent to be located above finish grade or higher to avoid infiltration. Cap with a vent grate with at least 39 sq in [252 sq. cm] open surface area. Secure with stainless steel screws (see sheet 3 of 3 HSFAST® 4.50 detail).
or
Run Vent to desired location and cover opening with a vent grate with at least 39 sq in [252 sq. cm] open surface area. Secure with stainless steel screws. Vent piping must not allow excess moisture build up or back pressure.
3. All appurtenances to FAST® (e.g. tank pump outs, etc.) must conform to all applicable country, state, province, and local plumbing and electrical codes. Blower control system by Bio-Microbics, Inc.
4. Must increase tank size by 20 % if the minimum of 15 inches [38.5cm] is used between the unit and the base of tank. Consult factory for approval.
5. The primary compartment may be a separate tank.
6. Either the influent pipe tee shall be fitted with a pipe cap or the baffle separating the two zones shall be extended all the way to the top of the tank. If choosing to use the pipe cap, Then the baffle shall be at least 3" [8cm] higher than the water level as shown on the drawing.
7. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
8. Tank, piping, conduit, blower housing pad and vents are provided by others.
9. All piping and ancillary equipment installed after FAST must not impede or restrict free flow of effluent.
10. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2'[0.6m] minimum. See Alternate Air Supply Option on sheet 3 of 3 HSFAST® 4.50 Details.
11. Minimum height may be reduced, consult factory and reference "Short-FAST-Module-Procedure.pdf".

BLOWER HOUSING

DIMENSIONS

Minimum leg extension assembly see note 4

LEG EXTENSION

Notes:
1. Secure leg extension to the FAST® unit by placing two screws on each side of the leg extension (4 screws per foot are included).
2. To obtain the desired leg height cut 4" schd. 40 PVC pipe (not included). Minimum pipe length of 11 1/8" [28.26cm]; For heights greater than 18" [45.7cm] use schd. 80 PVC pipe (not included). Consult factory for extending leg beyond 36"[91cm].
3. Anchor the leg extensions to the tank with non-corrosive hardware (not included) at the provided mounting points.
4. Increase minimum tank volume by 20 % if the minimum leg extension is used.
5. The air supply line into the FAST® unit must be secured so as to prevent damage from pipe vibration. See all notes on HSFAST® 4.50 drawing.
6. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. Unit is supplied with 3" Ø semi-flexible airline connections with stainless steel MPT fittings and sample U-shape pipe clamps.
7. Tank, anchors, piping conduit, blower, housing pad and vents are provided by others.

OWNER OF RECORD:

FOUR STONES LLC
P.O. BOX 2034
TEATICKET, MA 02536

APPLICANT:

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9 SKATING LANE
FALMOUTH, MA 02540

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HIGHSTRENGTH® FAST 4.5 TREATMENT SYSTEM DETAILS
FOR LOT 10 TECHNOLOGY PARK DRIVE
PREPARED FOR
FALMOUTH YOUTH HOCKEY
IN
FALMOUTH MA

PLAN DATE: JUNE 17, 2010 PLAN SCALE: AS SHOWN

CIVIL ENGINEERING / WASTEWATER DESIGN / TITLE & PLOT PLANS / LAND USE PLANNING
FALMOUTH ENGINEERING
WETLANDS PERMITTING / COASTAL ENGINEERING / PIERS AND DOCKS / COMMERCIAL/RESIDENTIAL

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PROJECT NUMBER: 10012 | CAD FILE NAME: 10012 FAST 45 DET | DRAWN BY: L.M. | SHEET 9 OF 9

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