Section 2 – Planning, Economic & Peer Review Services

Sebago Technics believes the keys to providing successful planning, economic development and peer review services are:

(1) An understanding of the municipal requirements, needs and vision of the community;

(2) A consistent, reliable and primary point of contact; and

(3) Experienced and knowledgeable technical staff to support the planner.

In performing the role of Town Planner, Sebago will assign a knowledgeable and experienced professional to provide a wide range of planning services. ***James R. Seymour, P.E.*** will be assigned as the Town Planner. In this capacity, Jim will work with the Town in all aspects of municipal planning including planning board, community economic development initiatives, evaluation of ordinances and development of strategies to promote the Town's land use and economic development vision. Jim is very experienced with municipal planning, ordinances, and regulatory requirements for development. Jim has worked extensively with special exception, land use, shoreland and municipal zoning ordinances. Currently, Jim serves as the town planner and peer review engineer for the Town of Casco, Maine and as the planning engineer consultant for the Town of Brunswick.

Jim's role will include coordination with the Raymond Town staff and preparation of review memorandums along with recommended actions/findings of facts. In this assignment, Jim will also coordinate directly with applicants (as deemed appropriate) and with the planning board chair and secretary. Jim will attend planning board meetings and serve as the Town's planning consultant and Planning Board Advisor.

Jim previously served on the Windham Planning Board as well as provided engineering peer review services for other communities, including the City of Portland and Town of Windham. It is common for him to attend site walks, public meetings, planning board meetings and providing technical guidance to the planning board. His thorough coordination with applicants and their technical consultants during the review and permitting process is a true benefit to our municipal clients and one of the reasons Jim is the ideal professional to assist the Town of Raymond.

Mr. Seymour is well versed in state and federal regulations, including the MeDEP Site Location of Development Act, Stormwater Management regulations and Natural Resources Protection Act. Additionally, Jim is experienced with the US Army Corps of Engineers permitting process and MDOT traffic regulations. Jim is an engaging, personable individual who understands his role to be an extension of the Planning Board and Town staff. Jim seeks to ensure engineering function, technical compliance in concert with regulatory intent and the Town's vision. Should the need arise, Jim will be supported by ***Owens A. McCullough, P.E., LEED AP*** who possesses an extensive

background in municipal work and has 24 years of experience in land development, municipal engineering/planning and permitting. Owens is responsible for STI's engineering and environmental services and leads our municipal practice development area. Owens' responsibilities include ensuring that client commitments are met and staff is assigned as needed to support the services provided to the Town of Raymond.

Owens has provided peer review and consulting services for several Maine communities. Among these communities includes the City of Portland, Towns of Gorham, Casco, Alfred, Kennebunkport and others. Owens has serviced as a planning board chairperson (Town of Limington) and as an Appeals Board chairperson for the Town of Gorham.

Our team is also fortunate to include Mark A. Adams, CEO/President of Sebago Technics, Inc. Mark previously served as the Assistant City Manager in Lewiston and Auburn. In this capacity, Mark was instrumental in guiding the community's economic development initiatives. Mark will serve as a technical advisor to Jim Seymour.

(Examples of Jim Seymour's Planning Correspondence follows)

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Memorandum

08348

To: Casco Planning Board, Donald Murphy, CEO

From: James Seymour, P.E., Planning Consultant, Sebago Technics, Inc.

Date: April 3, 2012

Subject: April 9, 2011 Planning Board Meeting
Kettle Cove Estates Subdivision –Lot 7 Building Envelope Amendment

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I. Background

Mr. James R. and Dorothy J Doyle have requested that the Approved Subdivision Plan for the Kettle Cove Estates Subdivision be amended to allow for their Lot 7 Building Envelope to be revised to meet allowed zone setbacks rather than the setbacks as was shown on the Original Approved plan to accommodate the construction of a Garage and to bring the existing home built in 2005 into compliance with setback.

There was an agreement letter from the Code Enforcement office recorded discussing the final located position of the existing home in 2005 which was though to allow the owners of Lot -7, to attain a proper mortgage survey and meet their loan requirements as part of the home financing. However sine this was a setback shown on the original subdivision the only correct way to eliminate it, was to have it amended by the Planning Board.

This proposed application wishes to revise the current setbacks to meet actual zoning setbacks allowed for side yard setbacks in the Residential Zone which is 25 feet from the adjacent property line. Based on conversations with the current Surveyor's from James D. Nadeau, LLC it appears that the original setbacks were arbitrary based on a "good fit for the lot" and based on a maximum clearing limit allowed per the Maine Department of Environmental Protection's requirements under its Phosphorus Standards in place at the time of approval. At that time each lot was allowed a certain area, of disturbance for lawn area, etc, to meet phosphorus export from the development. In this case Lot 7 was to not exceed 15, 000 SF.

II. Technical Review

Based on the information submitted a March 15 site plan with copies of the original Subdivision Plan for Kettle Cove Estates, and an amended plan addressing comments from a staff conference call, dated 3/19/12 we feel that the plan is acceptable for amending as follows:

1. The Board will also have to understand the need for the amendment.

2. It is recommended that the applicant present to the Board that they have stamped plan by a Licensed State of Maine Land Surveyor for Lot 7.

3. The Board may wish to require the applicant to properly mark the limits of disturbance to assure no further encroachment of disturbance occurs. Such limits may be marked with iron pins labeled "Buffer Limits".

III. Conclusion:

Due to the nature of this being a Plan Amendment it is a Public Hearing, and the Board should open the item for Public Comment, and request the Applicant to respond to nay questions raised. The Planning Board may handle this in a format with the full sized plan review and by creation of an affidavit where the text revisions and specific use revisions required are described individually, and the revised lot plan/scaled sketch with details is attached as an exhibit. The affidavit would need to be notarized, and have a signature and date block for the Planning Board to sign, along with a recording block for the Registry of Deeds.

We feel that this is a straight forward discussion, and advise the Board to approve the Plans following discussion of the items listed above, or as raised by the Public . The applicant has kept the intent of the original plan by maintaining a disturbed area under 15,000 SF, and has kept both the existing structure and garage with the allowed Zoning Setbacks. In addition the Board should note that this decision also supersedes the agreement note as was created with the Casco CEO in 2005. This will allow the homeowners financing and Mortgage Survey to meet town requirements and maintain a clear land title.

As always, the Planning Board has the final say and authority on the project's status and ultimate decisions for action on the proposed application.

Respectfully Submitted,

SEBAGO TECHNICS, INC.

James R. Seymour, P.E.
Planning Consultant

Sebago Technics
Engineering Expertise You Can Build On

Memorandum

08348

To: **Casco Planning Board,**
Elwin Thorpe, CEO

From: **James Seymour, P.E., Planning Consultant, Sebago Technics, Inc.**

Date: **June 7, 2009**

Subject: **Revised and Reconsideration of Conditionally Approved Lilac Lane Subdivision – Larry and Elizabeth Chute**

I. Background

Mr. and Mrs. Chute are proposing a revision to their conditionally approved 4-Lot Minor Subdivision off Meadow Road (aka Rt. 121), with the extension of Lilac Lane to be reduced to 2 lots. The proposed development has been before the Planning Board since March 2007, and was approved with several conditions on March 11, 2009. The subdivision had to acquire an after the fact Stormwater Permit from the Maine Department of Environmental Protection for the creation of 20,000 SF or more of impervious surface, in a Watershed most at Risk (Panther Pond), which was acquired in 2008. The applicant met with the Board on May 10, 2010 where several items for were discussed for a conditional approval, as well as the previous Final plan approval rescinded to allow for these revisions and project approval. The plans now being proposed eliminate two lots, and request a reconsideration of the conditions placed on the Subdivision when it consisted of two additional lots.

The following proposed project is located on a parcel owned by Larry R. and Elizabeth M. Chute, and is identified as Tax Map 6, Lots 6-5. The parcel of 19.46 acres is entirely located in the Residential (R) Zone.

The 2009 proposal was to approve the improvements and upgrades of Lilac Lane to accommodate the division for two existing home lots (6-9 and 6-10). The applicant submitted a Minor Subdivision Final Plan Application dated April 23, 2007, and a subsequent Findings of Fact from the MDEP dated October 22, 2008 for an approved

Stormwater Management Permit to construct a stormwater management system for the extension and expansion of the existing road, Lilac Lane.

Following the residential depressed home sale period of 2009, the Chutes have reconsidered their opportunity and have revised their final plan. Their revised proposal for Subdivision includes the creation of two lots, 6-9 and 6-10.

II. Technical Review

Upon review of the Minor Subdivision Checklist, and based on topics discussed from past meetings the following items appear to be not completed in the italic notes following the previous comments.

Item 5. A final plan signed and stamped by a Licensed Land Surveyor has not been submitted. ***Plan has not been sealed or signed, only submitted for review. We will expect final plans and mylar copies at the meeting.***

In addition the applicant requests to maintain the waivers as previously approved for the following Design Standards:

Section 9.4.3 Landscaping and buffering.
Section 9.4.5.B. All road angle monuments shall be constructed of 4-inch by 4-inch by 4-foot long stone (granite).
Section 9.4.7. Pavement width shall be 20 feet for a private minor street and include 6-foot wide gravel shoulders.

Waiver Discussion

(We anticipate that the reduction in the number of lots will not alter the waivers approved by the Board on March 10, 2009. My recommendation is to keep the waivers as previously approved)

Other Items of Review and/or Discussion

Other items requiring attention, which we feel the Board should discuss further, are the following:

1. The ownership of the road has been rectified, and there will be a proposed homeowner's road association and maintenance agreements. Such documents of proof should be submitted, agreements for responsible parties for road surface

conditions, drainage infrastructure, and winter maintenance, to assure emergency access is available at all times. The conditions shall meet the recommendations as discussed in a letter from Natalie Burns of Jenson-Baird-Garner-Henry Attorneys at Law dated June 7, 2010.

2. A past discussed concern of the Board stated that the Engineer shall certify that the road develop has met basic design Criteria of the Town and built in accordance with engineered plans. Since the applicant had previously installed much of the features and road sections, we recommend that the Road Commissioner confirm receipt and acceptance of a written report from the engineer of record stating that the road and drainage infrastructure has been installed in accordance with design plans.

Conclusion: The Board may approve the project with several conditions, or may place the project on the next available meeting, and having the applicant prepare a revised plan and documents clearly addressing all requests and concerns raised by the planner and Road Commissioner.

III. Recommendations

Upon review of the information provided in the submitted plans and documentations, I would recommend conditional approval of the reconsidered application with the above items having been addressed to the satisfaction of the Planning Board or planning staff. The Planning Board can take action on the revised application by accepting the previous waiver requests. The Planning Board has can include the waivers in their final approval motion.

The proposed application has one item at this time to consider for final approval. The application and drawings shall indicate the Conditions of Approval as determined by the Board and as set forth by the MDEP Find of Fact Order for this project's Stormwater Management Permit, prior to any signing by the Board or plan recording in the Registry of Deeds.

The following is a draft order which can used to establish the Final Motion for approval.

The Planning Board of the Town of Casco has reviewed the following subdivision requirements under Article 8 of the Town of Casco General requirements in accordance of M.R.S.A. Title 30 Section 4956 Subsection 3 the Chute Subdivision located off Lilac Lane for 2 lots as shown on submitted drawings dated 5/20/10:

8.1.1. Is in conformance with goals, policies and recommendations of the Comprehensive plan of the Town.

8.1.2. Will not result in undue water or air pollution.

A. The project is not located in a mapped floodplain

B. The project has evidence of suitable soils as provided by test pit information submitted.

C. The slope of the land and its effect on effluent will meet all State of Maine and local waste disposal rules and regulations.

D. The subdivision meets State and local health and water resource regulations.

8.1.3. Has sufficient water available for the reasonably foreseeable needs of the subdivision based on the water need will be for domestic use with private well only. Two existing homes within the subdivision have wells that have adequately supplied potable water and is evidence that a reasonable supply of water is present to serve the subdivision.

8.1.4. Will not cause unreasonable burden on an existing water supply based on the subdivision providing private wells for two single family wells on land with an apparent satisfactory well yield based on historical use of private wells already in place within the subdivision.

8.1.5. Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. Based on the Maine DEP Stormwater Permit approval and submitted documents an acceptable erosion and sedimentation plan has been provided for the subdivision.

8.1.6. Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of highways or public roads existing or proposed. The subdivision will only provide sales two single family homes which will have no burden on highway or public roads. A Homeowners Maintenance Agreement will be executed and recorded in the Cumberland County Registry of Deeds within 30 days of any sale of property.

8.1.7. Will provide for adequate sewage disposal; based on designs are approved by the Code Enforcement Officer prior to the issuance of building permits as noted on the record drawing.

8.1.8. Will not cause an unreasonable burden on the ability of the Town to dispose of solid waste and swage if municipal/facilities are to be utilized. The site will not have a burden on municipal services with the potential for two new homes.

8.1.9. Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historical sites, rare and irreplaceable natural areas, or any public rights for physical or visual access to the shoreline. The subdivision has no visual or access to a shore, and will not alter the natural beauty of the area and has no impact on historical sites, or natural areas.

8.1.10. Is in conformance with the Casco Zoning Ordinance including Shoreland Zoning Standards and with other pertinent state and local codes and ordinances: based on the proposed subdivision the applicant meets the current zoning regulations for the Residential District and has acquired a Stormwater Management Permit through the Maine DEP.

8.1.11. The subdivider has adequate financial and technical capacity to meet the standards. The owner has completed Phase 1 of the road construction and has utilized the services of Mark Gray PE and Patrick Cayer LLS.

8.1.12. Whenever situated, in whole in part, within 250 feet of any pond, lake, or river, will not adversely affect the quality of such body of water or unreasonably affect the shoreline of such body of water. The development is not within 250 feet of a lake, pond or river.

8.1.13. Will not alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater. The subdivision will provide adequate separation of septic systems from existing drilled wells and meet state codes to assure adequate groundwater protection exists with wells on adjacent lots as shown on the plan.

8.1.14. In all instances, the burden of proof shall rest upon the applicant (A) to make all required submittals and (B) to demonstrate compliance with all applicable standards. Based on submittals and conditions if the Board so selects the applicant will have provided proof of compliance meeting all submittal requirements and standards. Until such conditions are deemed to be met, the board will not sign such recording plats

Conditions of approval for discussion:

A. The status of the Homeowner's Association maintenance agreement for the private road shall be revised per letter forwarded by letter from Natalie Burns of Jenson-Baird-Garner-Henry Attorneys at Law dated June 7, 2010. The Board shall strongly recommend a homeowners association for the road and require prompt recording at the Cumberland County Registry of Deeds no more than 30 days of a sale of the first lot.

The Board may wish to place additional conditions on the subdivision plan approval based on discussions which may occur at the Public Hearing on June 14th. By imposing a conditional approval on all the lingering items needed to complete to the Board's satisfaction. As always the Plan Board has the final say and authority on the project's status and outcome.

Respectfully Submitted,
SEBAGO TECHNICS, INC.

James R. Seymour, P.E.
Planning Consultant
JRS:jrs

Sebago Technics
Engineering Expertise You Can Build On

Memorandum

08348

To: **Casco Planning Board, Elwin Thorpe, CEO**

From: **James Seymour, P.E., Planning Consultant, Sebago Technics, Inc.**

Date: **December 30, 2010**

Subject: **January 10, 2011 Planning Board Meeting**

AT&T Mobility -Wireless Telecommunication/ New Tower Facility Site Plan Review Property located @ 190 Tamarack Trail

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I. Background

AT&T Mobility has made a final site plan submission to the Town of Casco with regards to a new tower and wireless telecommunications facility to be located on a parcel of the property currently owned by Robert and Shellie Symonds, located off 190 Tamarack Trail. At the November 8, 2010 Planning Board meeting the Application was reviewed under the requirements as it relates to the Town of Casco's Wireless Telecommunications Facilities Siting Article, and the Planning Board approved this portion of the review process. The application was tabled for the remaining review for conformance to the Site Plan Ordinance. As directed by the Board, the applicant was forwarded a list of conditions as derived from discussions held at the November 8th hearing. The Law Offices of Barry J. Hobbins, PA, has submitted updated plans to the Planning Board to address the site plan requirements, consolidate plan information for a plan to be recorded, and to clearly label draft conditions of approval on the plans. This hearing is the fifth meeting to review the project, and includes only new plans complimenting materials as distributed at the last presentation held on November 8, 2010.

The following proposed telecommunications facility project is located on a parcel owned by Robert and Shellie Symonds, and is identified as Tax Map 6, Lot 34-7. The parcel of 40 acres is located in the Rural (RU) Zone and is located at 190 Tamarack Trail, a private road, extending from Spiller Road. The site has restrictions of steep slopes, ledge outcrops, with access to the proposed site originating from the private road, Tamarack Lane. Land preservation in the form of no cut wooded buffers for visual and noise screening, has been requested by the Board.

The project application was deemed complete at the September 13th meeting. A site walk was conducted September 18th, with the applicant obliging the Board and public with a test balloon set at the proposed new tower height of 150 feet above grade. The project has been opposed and

disputed in hearings by abutting neighbors Horton and Cosgrove. A legal opinion from Natalie Burns dated September 17, 2010, was given to the Board for review, and it has been concluded by the Board following the October 6 hearing that the Board agreed with Ms. Burns opinion, that there is not an issue about creation of ground leases an it is not a lot division and nor does it require subdivision review, or does it create a separate lot for zoning purposes. It was also agreed that the dimensional and other zoning requirements will be met on the lot as a whole not just in the ground lease area. While the Board has accepted the information and documents submitted by this complaint, it is recommended that the Board continue its position, and allow this disagreement to be handled as a civil action between the parties listed.

II. Review of Wireless Telecommunications Facilities Siting Article 8 Items.

Under the Casco Land Use Ordinance there is a specific article dedicated to **Wireless Telecommunications Facilities Siting (Article 8).** The criteria and processes in place are to require that the applicant explore all options for siting towers, equipment, and antennas rather than install new facilities. If none are available, there are requirements and criteria for new tower installations. Previously under sections 8.8 & 8.8.1 the Planning Board approved the evidence that they meet the criteria for a new tower application. At the November 8th hearing the Planning Board by unanimous vote approved that the application met the standards under Section 8.8.1.a. Requirements for New Towers.

The Planning Board must complete their review under the Site Plan Ordinance and determine that all standards have been met. **Many of the requirements of the Site Plan Ordinance will match with the Tower Siting requirements, but for completeness must be discussed, and determined to have been adequately answered before granting approval. Below we have listed the individual requirements, have commented on the application submittals, and given suggestions for conditions of approval for the Board to consider:**

A. **Preservation of Landscaping**- The application discusses preservation of natural tree buffers, and a defined area buffer is noted as 125% of the Tower height on the drawings. There is also a profile showing reference of the average tree canopy, to relate how this will reduce visual impacts for the abutters. ***The planner recommended that the signed plat contain the buffer easement, and the Board agreed.***

B. **Relation of Proposed Buildings to the Environment** – While the building is of small size (230 SF), neutral materials, and color, the site placement is challenging and accessories of the building features are not typical for a rural location. The elevation placement is well screened but will likely require 5-6 feet of soil and ledge removal for positioning. Ledge removal and blasting may be a concern. The Building is in alignment with an assumed private trail, blocking the path, and site drainage is a concern following large rain events and snowfall melts from offsite contributing areas. Additionally the Building will have outdoor commercial air conditioners/coolers and emergency back up generators creating non-typical noise disturbances for the neighboring areas. Noise and Vibrations standards may be questioned and discussed. ***We recommend that the DEP standards for residential quiet zones along with State Mining and Blasting regulations be considered if standards are requested.***

C. **Vehicular Access**- The most concerning site construction issue is the access to the site. The ridge is generally steep (7-15% Grade) and access is from a narrow private road, with limited drainage capabilities, and sharp horizontal curves. The applicant's design was revised to provide better turning ability for construction equipment, future delivery/maintenance or emergency response vehicles into the 550 foot access driveway. There are some safety considerations for level vertical elevation transition into the existing private road, but a safer pull-off area for delivery, maintenance, or emergency response vehicles at the gated compound has been added. **A condition of approval will be required stating "It shall be the responsibility of the applicant to maintain reasonable access for the other residents of Tamarack Trail during construction, and that they shall be notified of scheduled construction material deliveries which could hinder or delay vehicle access. No other construction activities or operations other than for deliverables, shall take place in the Tamarack Trail travel way, unless so approved by the Town."**

Another condition of approval shall be added noting that, "The applicant shall be required to provide a construction performance bond to be approved by the Board of Selectmen, which shall also include consideration for costs to repair any portion of Tamarack Trail damaged as a result of construction activity associated with the development of the facility, to include but not limited to tree clearing, driveway construction, utility improvements, delivery of materials, or as created by contractors, sub-contractors, utility companies, or laborers providing services for the applicant."

D. **Parking and Circulation:** While the facility is unmanned parking for an employee or owner is not required, however provisions for emergency response, winter clearing of snow, and normal utility maintenance and fueling deliveries will be necessary. **A condition of approval will be added stating the following "The turnaround at the access road entrance/hill base shall be maintained and snowplowed to allow room for residents to easily pass during winter maintenance visits and/or emergency parking."**

E. **Surface Water Drainage-** The Site drainage plan as prepared by Dewberry, Goodkind Inc revised August 10, 2010 appears to be implying that the site is incorporated into a larger watershed, and that the impacts of the site are negligible. Latest calculation however at each of the existing culvert crossing Tamarack Trail show a slight increase of runoff as a result from the proposed project. The engineer has stated that the increases are minor and will have minimal effect on the culverts. Measures taken to reduce ditch velocities, impacts from shallow soils on bedrock, are stated to further reduce negative impacts on the culvert drain system. The increase is approximately 6% and we agree that it is a minimal impact, and the Board has previously agreed that the increase is marginal. **A condition of approval shall be added noting that "A failure of the driveway drainage infrastructure, or lack of maintenance which may result in damaging or adversely affecting downstream tributaries and/or the Tamarack Trail drainage**

infrastructure shall be the responsibility of the applicant and shall be repaired at the applicant's or leaser's expense."

F. **Utilities-** The facilities will have few demands on utilities other than telephone and electrical services. Questions raised are whether the existing telephone service lines will be adequate to serve the facilities, and the utility lines are shown to be overhead by a pole line along the driveway. Concerns for soil cover in areas of shallow bedrock will be reduced, but additional tree clearing to maintain wire clearance will be needed. **A condition of approval shall be added noting that "Any improvement to or for electrical service from Central Maine Power Co. over Tamarack Trail shall be the burden of, and at the expense of the applicant."**

G. **Advertising Features –** Not a concern, but adequate signage of the site operations contact in case of an emergency is appropriate.

H. **Special Features-** Special operations for testing generators, noise from air conditioners and placement of fueling tanks for generators, are of special concern. Discussion on soils and ledge removal quantities, with specifics to blasting methods and any pre blast surveys of foundations and wells should be noted as well. The applicant has submitted a Noise Study by Callie Reis of Noise Control Engineering Inc. stating that the operation of air conditioners at night and the generators being tested during the daytime meet Maine Department of Environmental Protection Site Location Law standards. As Casco has no standards for noise operation from the use the standards of 55dBA daytime hours and 45 dBa for night time hours appear acceptable to meet the applications requirements. Levels are measured at 42 dBA for the AC handlers at the property line for nighttime operations, and 46dBA at the property line for the daytime operations of the generator testing. It must be noted that the residents are approximately the same distance as the northerly most property line, which is lower than the maximum which is noted above. In addition slope construction and directional orientation will assist in reducing noise. **A condition of approval shall be added noting that, "All future co-location applicants, or future operators, shall follow the Maine Department of Environmental Protections Noise Standards for Residential Quiet Zones for both nighttime and daytime operations of the generators and HVAC units. All measures shall be based on the cumulative affect of all the telecommunication equipment located at this approved facility"**

A second condition that, "The applicant shall utilize a Generac generator (Model SD 050, 50kW, in a level IIA enclosure, or approved equal and not exceed those noise levels as disclosed in the approved Noise Study as prepared by Noise Control Engineering dated October 14, 2010 for KJK Wireless, LLC (Casco ME, AT&T cellular equipment site). The generator must be operated by a propane fuel source, and the applicant will be responsible for maintaining adequate fuel supply for when the driveway is impassable due to winter conditions."

A third condition must be added that, "All routine testing of generators shall be conducted during normal business hours (8am-5pm) on weekdays exclusive of holidays, and shall not exceed 30 minutes in duration."

Blasting was discussed with concerns of the Board about vibrations and drinking well damages. No new materials were submitted regarding the anticipation of blasting. The Board has imposed a condition regarding blasting as follows; **"It shall be the applicant's responsibility to conduct pre-blast surveys, and well replacement for the abutting residences, and with homes located off Tamarack Trail within 1000 feet of the proposed blasting activity. All blasting shall be conducted in standards recommended by the Maine Department of Environmental Protection for Rock Blasting and Mining."**

I. **Exterior lighting-** While the shelter will be equipped with a door light, no further light impact is anticipated. Until receipt of FAA approval no absolute certainty is known about the Tower lighting requirements. Currently no lighting on the monopole is anticipated. **A condition of approval shall be added noting that, "The approval of the site plan is for an unlighted tower, any future requirement for lighting of the tower structure by the FAA, shall be considered to be an amendment to the approved site plan requiring the applicant to submit a revision of the plan to the Planning Board for approval."**

J. **Emergency Vehicle Access.** The site grades are steep and the Planning Board considered worst case scenario of winter conditions and felt the clearing is at the discretion of the owner/operators, but that the turnout area must be kept clear of snow during the winter and spring. The Board felt also that the built-in fire suppression of the equipment shelter will be adequate for health and safety of the unmanned site. The fenced compound will be combination locked with chain and can be cut for emergency response if necessary.

K. **Landscaping-** No landscaping is planned, or is likely needed. The applicant has indicated the use of natural buffers to adequately buffer abutters and public views.

L. **Environmental Considerations-** As discussed above, concerns of noise from generators being tested and the appropriate time for those tests during the week should be formally presented or determined, confinement of fuel storage areas, and security of the area by fencing details should be finalized by the Board.

M. **Other.** **The Board had requested that a note be added that, "Any transference of title, or ownership of the tower or leased areas, shall also include reference of this plan, and all conditions attached with the approval of the site plan. Since the site is unmanned it shall be the responsibility of the applicant to provide the Town with the current name and contact information for the site's supervisor, facility manager, or persons responsible for the care and maintenance of the facility."**

The Board requested a note be added to the site plan which states "All future telecommunication co-location applications for this site are required to submit a separate site plan application to the Planning Board for approval."

The Board also will require that the applicant will be responsible for posting a performance guarantee and a separate removal of abandoned wireless communication facilities guarantee for the proposed facility. The type and form shall

be approved by the Board of Selectmen. The Planning Board has approved an amount of $27,600.00 removal and restoration of the site to pre construction condition. Therefore the "removal guarantee" shall be 125% of the performance bond or $34,500.00.

Combination of Plans:

The applicant was requested by the Board to combine information on 24" x 36" plans. The combined information is that as shown on plans C-1, C-3, and C-3-B, such that all general notes, zoning information, and notes regarding land limitations and buffers be included on one plan. This plan shall also include a separate list of all conditions of approval, an approval block for the Planning Board to sign, and a recording block for the Registry of Deeds.

Recommendation:

Upon review of the information provided in the recent December 20, 2010 submitted plans, we would recommend acknowledgment of the new application materials received by the Board, and that the Board provides the applicant time for a public presentation of new materials. The Board should, at a minimum, discuss the projects process with the applicant and/or representative to assure that each is clear about any outstanding items.

The proposed application has only a few outstanding items at this time of this review, which need clarification or minor revision to assist the Board's review. We feel that applicant has adequately addressed the required items required within the Wireless Telecommunications Facilities Siting Article and the Site Plan Ordinance and should ultimately be considered for final site plan approval.

Items requiring attention are the actual plan presentation and organization, especially the plan to be recorded.

1. The Board should be careful in determining that the content shown on the plans is clear and concise for their judging of the projects approval. Any added conditions other than those listed and agreed to by the applicant, or required by the Board shall be included on the Final Site Plan.

2. The signature block shall remove the disclaimer note of the site development limits, and include room for all Board members in attendance to sign, and eliminate the secretary signature line. Both the signature block and recording block can be removed from the Title Sheet as only one sheet will be required to be recorded at the Registry of Deeds.

3. The Planning Board and staff were very clear that plans submitted to the Board for Final presentation shall be full size,(24"x 36") such that the scale is accurate and not reduced.

4. The Board was also clear about consolidating information from Sheets C-1, C-3, and C-3B, such that the content of the development could be captured on one plan to then be recorded. It should be noted that while the content is spread over three sheets, it was the applicant's responsibility to be responsive to the Board's request. We are hopeful, that the presentation of

the plan for recording can be prepared prior to the hearing. To assist the applicant we have prepared the following list of suggested revisions to obtain this goal

5. The plan title for sheet C-1 shall be called Final Overall Site Plan instead of Abutters Plan.

6. The plan shall indicate the required buffer as delineated on Sheet C-3B Tree Clearing Plan and as described in Note 10 on that Sheet.

7. Tamarack Trail is an easement which traverses across the entire lot. The plan shall show the full extent of Tamarack Lane easement across the subject parcel. This plan for recording shall also outline the proposed tower access easements, and leased area.

8. The plan shall reference that all grading activities, and physical improvements to the property for the proposed use shall be in accordance with the Site and Grading Plan Sheet C-3, and the Road Profile Sheet C-3-A, and the Tree Clearing Plan Sheet C-3B. Revisions to any plan, report, or supporting documentation submitted to the Planning Board as part of the Site Plan Application after final approval has been granted, shall be submitted to the Town Code Enforcement and/or Planning Board if applicable, for review and approval prior to any construction pertaining to the revision.

9. A note shall be added referencing Section 7.6 Time Limit For Construction or Change of Use.

" If construction of the approved new structure, building addition or site improvement is not commenced within one (1) year of the date that the approval is granted under this Article, or if the applicant does not commence the approved new use, then the Site Plan shall become null and void. This one (1) year period for commencement of construction or uses shall not be extended or affected in any way by any amendments, changes, erasures, modifications or revisions to the final site plan subsequent to the Planning Board's approval of the plan. The Planning Board shall have the authority to grant extensions of one(1) year increments to this approval limitation period by approving a waiver if the applicant demonstrates good cause for request for the extension. The planning Board may approve a waiver with conditions where applicable."

It should be noted that it is the applicant's responsibility to request and submit such waivers for an approval extension within a reasonable time such that the Planning Board may hear the request prior to the lapse of the one (1) year approval deadline. Failure to recognize the one year deadline and then request an extension will require the applicant to re-apply for Site Plan review. The signature block will be dated by the Planning Board Chairman based on the date that the Board voted for the approval, and not necessarily the date that the plan is actually signed.

10. Several iterations of these plans and revisions have been made, and records following the approvals need to be dated to assure that the approved dates are accurate. The applicant shall fill in all plan revision blocks with the date of final plan submissions.

We are confident that the applicant will be responsive to these final details for plan consolidation, and provide planning staff time to review prior to the hearing. The Board can approve the plans without the added minor revisions requests, and then upon completion as determined by the Planning Staff/ and or Planning Chairman, sign at a later date.

If the meeting is tabled, then the applicant shall be made aware of the items not in compliance or in order. They then should be made aware of a schedule the Planning Board will be following, such that the time limits for complete review, and the appropriateness and responsiveness for approvals is clear.

Conclusion:

The Board shall remove the item from a tabled status, and reference that the Board determined by vote, to approve the application under review of Section 8.1.a (Requirements for New Tower), only. This presentation and hearing is to determine if the application can be approved under the Site Plan Ordinance requirements separate from the Tower Siting Article.

The applicant has appeared to address most of previous concerns and submitted plans showing all relevant twelve (12) conditions of approval as discussed at the previous hearings. The Board should review these submittals, and determine if the applicant has indeed adequately addressed all the items, and listed the requested conditions adequately, and discuss whether the information clearly addresses all the Planning Board comments/concerns raised.

We feel the application and materials have addressed the Town's requirements and should be recommended for approval. We suggest that our recommendations if not ready at the hearing date, may be reviewed and handled at staff levels, such that the plan to be recorded can be presented for the Planning Board to sign at a later date.

If the Board feels there is missing, or lacking information to make a final decision then they shall identify the item(s) and assign an action for the applicant to fulfill the requirement. The application would then be tabled until such time the information has been submitted and reviewed either by Town staff or Third party reviewer. If the Board feels the information is present and what is lacking is minimal and will not have an affect on their decision, they can make a motion to approve with additional conditions above those listed on the drawings.

Respectfully Submitted,
SEBAGO TECHNICS, INC.

James R. Seymour, P.E.
Planning Consultant

Owens A. McCullough, PE, LEED-AP

Vice President, Engineering & Project Development

Education:

University of Colorado, Denver, CO
Bachelor of Science,
Civil Engineering, 1987

Two-Year Educational
Development Course

Leadership & Management, 2004

Registrations:

Professional Engineer: Maine

Certifications:

Maine DOT Local Project Administration
Certification Course, 2005
Re-certification, 2010

LEED Accredited Professional

Memberships:

American Society of Civil Engineers

Former -Town of Gorham, Maine, Appeals Board, Member and Chairman

Former - Town of Limington, Maine, Appeals Board, Member and Chairman

ACEC Maine - Board of Directors

Rotary International

SEBAGO
TECHNICS

Mr. McCullough joined Sebago Technics in August of 1987. He is responsible for the overall coordination and management of engineering, quality control, budgeting, planning and providing technical assistance to project managers and technical staff. His experience includes a broad range of civil engineering projects for both public and private clients. Mr. McCullough oversees the progress on projects and monitors budgets, schedules, and client satisfaction with a special focus on environmental permitting and construction management.

As a Senior Project Manager, he has focused on municipal and government sectors. Typical services have included engineering review services, land planning, site and civil design, solid waste transfer and disposal, street reconstruction, utility system designs, airport engineering, design-build projects, stormwater management, wetland mitigation, natural resources permitting, construction specifications and administration.

Owens has managed multiple General Services contracts including the City of Portland and several smaller communities. In addition, Owens has provided permitting for complex land development and marine projects along with environmental permitting associated with roadway and utility projects. Project experience has included design, environmental permitting and compliance for the following projects.

- **City of Portland, ME** - Planning, Design and Permitting for multiple projects including Roadway and Infrastructure Projects, Solid Waste and Landfill Closures, Marine Projects and Site Development Planning. Projects included multiple agency coordination and permitting.
- **Maine Wharf, LLC., Portland, ME** - Planning, State and Federal Agency permitting for a pier expansion on the Portland waterfront.
- **Portland International Jetport, Portland, ME** - Planning and design for multiple airport projects including Aviation Aircraft Aprons and a General Aviation Facility. Projects included local, state and federal permitting.
- **Maine Crossing, South Portland, ME** - Wetland mitigation planning and permitting through the MDEP and ACOE.
- **Eastman Meadows Condominium, Cape Elizabeth, ME** - Planning, permitting and design of a large site development and permitting project. Project included stormwater and infrastructure design and regulatory permitting through local, state and federal agencies.
- **WMTW Baldwin Tower, Baldwin, ME** - Planning , permitting and construction services for a 1667' tall communications tower. Project required local, state and federal approvals.
- **Town of Alfred, ME** - Planning, permitting, design and construction services for a new solid waste transfer and recycling facility. Project required local and state approvals.
- **Department of the Defense** - Site/Civil design on design-build projects at the former Brunswick Naval Air Station, Groton CT., Newport, RI and Fort Meade, MD.
- **Town of Brunswick, ME** - Principal for a general services contract supporting the Town Planning and Development office.
- **Town of Gorham, ME** - Planning, design and construction support for municipal roadway projects.
- **Grondin Commercial Properties, Gorham, ME** - Planning, design and permitting for large commercial developments and associated infrastructure. Projects included local and state permitting.

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Memorandum

08348

To: Casco Planning Board,

From: James Seymour, P.E., Planning Consultant, Sebago Technics, Inc.

Date: March 5, 2012

Subject: March 12, 2012 Planning Board Meeting

Camp Sunshine-Proposed Volunteer Housing Addition
Request for contract zoning property located @ 51 Acadia Road

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I. Background

Camp Sunshine had made a request for amending the contract-zoning for property located at 51 Acadia Road and abuts their current land holding for their facility located off 35 Acadia Trail. The current Camp Sunshine facility is zoned in the Contract Zone named South Casco Outdoor Resort Zone and falls under the Resort Commercial Overlay District. The parcel under consideration is located in the Residential Zone. None of the parcel is within Shoreland Zoning or 250 feet of Sebago Lake. A site walk was conducted September 27th to review the property in quest of the zone overlay change and contract zone expansion. The Board discussed the results of their site walk at the October Planning Board hearing. New plans were submitted in late December and were slated for a hearing in February. Unfortunately that hearing was postponed due to the Board not having sufficient attendance for a quorum. On February 7, I presented the project to the Town Selectmen along with an outline of the process necessary to approve the contract zoning. Some members of the Board of Selectmen (BOS)had concerns over the public benefit of rezoning the proposed parcel, from a monetary and physical standpoint. Camp Sunshine has been clearly made aware of the BOS, and also the impending shortening of a review window to coordinate text of the actual documents between the Planning Board and BOS.

During the last hearing, the Board requested to have clearer descriptions of uses, and understanding of how this change to the contract zone will affect neighbors, how the existing Contract Zone language can be altered by following Article 3, Section 3.3. C. Contract Zoning procedures and have plans typical of Article 7 section 7.4 Site Plan requirements. Some concerns raised were emergency access, improvements made to the existing structure, storage of materials, operation hours, noise, visual buffers, and closure of the driveway and daily use over this particular section of Acadia Trail.

New information has been submitted by Camp Sunshine in a documents dated December 28, 2011, which addressed several of the Boards concerns of the Site use and provided a plan indicating the planned improvements for the structure and land for their maintenance considerations. The Board shall consider the submitted information along with the questions raised by the BOS and determine if the application should be accepted as substantially complete from a site plan/development perspective. If the Board feels the application has addressed their site development concerns then the Board should emphasize that the contract zoning language be immediately submitted for both the Board and legal review. They could make such a completeness determination at the March meeting, and then schedule a joint meeting with the Town Selectmen in April or/as the schedule allows.

II. Review of Zone/ Contract Zone Request & Recommendations for Board

The previous information submitted depicts the parcel at 51 Acadia Road under consideration, and follows the requirements for contract zoning procedures, under Article 3 General Provisions, 3.3 Changes and Amendments 3.3.2 Contract Zoning, C. Procedure.

At the time of this application the Board should open the discussion for the Applicant to discuss the conversations and concerns with the BOS, and relevancy of the submitted information for purposes of their amendment, compatibility with the Comprehensive Plan' Goals and Policies, the impacts to neighbors, benefits and costs to the Towns general welfare and safety, and input from other town officials.

From this new information combined with results of the site plan and general discussion, Board members should decide if the use in their opinion is acceptable for the contract zone amendment and expansion, and should proceed to draft the formal contract zoning language requirements and decide whether they wish for the application to be created to addres an amendment for the Point Sebago and Camp Sunshine Contract Zone, or whether Camp Sunshine should create its own Contract Zone and Zone Resort Overlay.

It appears that the new layout can be amended for stormwater/ phosphorus export which is required as the original Camp Sunshine had an approved Site Location of Development permit from the Maine Department of Environmental Protection. The Board should examine the impacts that the site acquisition will have on their state permits, as well as what the change of use will have on the adjacent neighborhoods. The applicant has provided valuable pictures documenting the current views of the subject parcel as well as neighborhood characteristics and views or abutting properties. Based on discussion with the Board and the information submitted we have compiled a list of items below which the Board and applicant should carefully take under consideration:

- The current state of Acadia Road has been raised as far as pavement condition, drainage, and concerns of revised maintenance agreements with neighbors.
- The impact of the site acquisition of the 51 Acadia Road property and the impact it has on the current Camp Sunshine's Site Location of Development Permit from the Maine Department of Environmental Protection.

- The review of engineered plans by the Board to fully see all impacts from the additional driveway, grading, and runoff, as well as defined visual buffers and tree preservation to and for abutters.
- The response from the Camp Sunshine of how they plan to meet concerns of the BOS regarding Public Benefit. Our suggestion was for the applicant to offer improvements of drainage or to the pavement over the private road section along its newly acquired frontage as a measure showing benefit to access for the public. This is an important concern given that the Town feels the loss of tax revenue, burden on abutters, could result in a cost to the town. The applicant and Board need to agree on public benefits of this zone change and provide proof for the BOS. We understand that this requirement is subjective, but evidence that the requirement has been met is essential in our belief if this is to be accepted by the Town's citizens.

Conclusion:

We feel the applicant's application has been completed in accordance with the Town's Site plan / layout requirements and now the content shall be reviewed with the Board in a reasonable manner. It appears that the expansion could fit harmoniously with the character of the neighborhood under the proposed Camp Sunshine hours of operations but that finite details to address existing conditions such as roads, and public benefit will be the main focus of the application. The Board may also want more definitive notes and site plan information as required to clearly understand the limits of use and how the site will be maintained.

The Board needs to determine whether it agrees that the applicant has provided materials such that the application has been adequately completed and compliant with the Comprehensive Plan. The Board should review this submittal at this time as a continuation meeting aimed at determining that the site can facilitate with a zone change the proposed use and request immediate draft language for review , and discuss the schedule for the Contract Zone process as well as expansion of the Overlay Zone for the project. They should verify time constraints and set milestone dates to assure there is allowable time to move the project forward with the Town Selectmen and be made available for consideration on the Town Meeting agenda in 2012.

Recommendation:

The proposed application has prepared a detailed site plan and surveyed boundary plan, showing the property interconnection and driveway design. We feel that at this time, the Planning Board should review the applications based on site observations, the submitted application information, and from any comments from other town officials. The Board should allow the applicant time to present their materials and focus on the items previously raised and noted either by the Planning Board or the Board of Selectmen, and respond to the application's compatibility with the Comprehensive plan, neighboring surroundings, and public benefits for the Town.

At this time the Board needs to determine if the application and re-examine the re-zoning and expansion of the Resort Commercial Overlay is ready to be drafted in an official document by the Applicants legal representative. Furthermore they should discuss the schedule that the process will be following going forth, such that the time limits for complete review, and the information required are clearly defined.

We will suggest that the Board schedule a joint meeting with the Town Selectmen in April if documents have been submitted and reviewed in a workshop setting to assure the application is ready for a Public Hearing. In the interim we recommend that the applicant provide draft revision language to their current Contract zoning documents for the Planning Board and Selectmen to review. Failure to complete this step will cause unnecessary delay in the Final schedule and hearing dates. This is of a critical juncture given the available dates left for hearings and reviews.

On the following course it would be likely that the process could continue for a formal Public Planning Board Hearing in late April and then forwarded for final review in for the Town Selectmen to place on the Warrant for the next annual Town meeting held in 2012, where it would need approval by a town vote. The process is lengthy and thorough, but the application is behind to meet all required review and notification deadlines. There may be time for all Town Board's to provide complete review and have the item prepared and ready for a Town vote in 2012, but it is now on a critical path. The applicant should also discuss with the Town Manager the required deadlines that the BOS needs to assure it can get on the ballet for Town Vote. We believe that that needs to happen by early May, but dates need to be confirmed with the Town Manager.

Respectfully Submitted,
SEBAGO TECHNICS, INC.

James R. Seymour, P.E.
Planning Consultant

Sebago Technics

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10-99700006

TO: **Erick Giles –Planner**

FROM: **Jim Seymour – Development Review Coordinator, Sebago Technics, Inc.** JFS

RE: **184 Pearl Street - Pearl Place - Phase 2A & 2B, Avesta Housing**

DATE: **November 3, 2010**

We have reviewed the revised submitted Major Site Plan and Amended Subdivision Plan and Application for 184 Pearl Street - Pearl Place Phase 2 for Avesta Housing dated October 13, 2010. We were involved in the original peer review of Pearl Place in 2006. We feel the plan to develop Phase 2 from a site planning perspective is very similar to the original approval. Recent changes to the City's stormwater management and other requirements have changed under the City's Level 3 Site Plan review process. We feel the plan has a very good concept of the obstacles and challenges of Lancaster Street and then strategically fitting a dense residential project in the Bayside Community rea. Below we respectfully offer the following comments regarding the preliminary submission for site plan review and have attempted to assist the developer with comments we foresee will be concerns for the next level of review as well. They are as follows:

1. **Subdivision Plan**

The Applicant will be required to provide an amended subdivision plan, as this application is an alteration from the building/unit layout as approved in 2006. Based on the two sub construction phases proposed, we recommend the following:

A. The subdivision plat shall show the new structural outline, and the proposed number of units per phase. Included on the subdivision plan, the applicant shall indicate all cross easements for drainage, utilities, pedestrian access, and revised drainage maintenance agreements with the City of Portland will also be required.

B. The applicant's surveyor shall consult with the City Surveyor to determine if street monuments are necessary for the intersection of Pearl and Lancaster, and Pearl and Oxford Street prior to recording the plat and/or the City releasing the plat for recording.

2. **Stormwater/Drainage Analysis**

A. When Phase 1 was approved our concern was, if there was enough capacity in the CSO, and that the runoff entering does not increase the frequency of actual overflows, which bypass the treatment plant and discharge into Back Bay. The

applicant has presented managing the stormwater quality and quantity in such a manner that they do not increase runoff rate to exceed those approved in the Phase 1 design. However, the capacity issue with the CSO is still a relevant issue which needs further investigation. Discussion with the City Engineer, reveals that they have further investigated the stormwater capacity and connections to alleviate the loading on the CSO. This could entail that a new storm water sewer be extended from the existing separated storm water sewer at the intersection of Somerset and Pearl, up Pearl Street to the intersection of Pearl and Lancaster and along Lancaster Street where the stormwater drainage from both Pearl Place Phase 1 & 2 can be collected

B. Presently, there is no collection of street gutter flow on Lancaster Street to Pearl Street along this block or project frontage. The applicant shall consider a new basin near or below the sidewalk termination location for Phase 2A. We recommend a new basin at surveyed low point of Lancaster St. due to the limited pipe size and collection ability. Whether the City requires it for this phase or next can be determined by Public Works.

C. The parking lot on Lot 2 shall grade the parking edge to the new grass soil filter swale to adequately collect the parking lot runoff by removing the curbing so it will not run into Lancaster Street but will be collected in the existing Catch Basin.

D. The Overflow in this treatment swale needs to show its connection into the existing stormdrain. A question of whether not an abandoned catch basin in the open lawn area now still connects to the infrastructure in Lancaster Street can be utilized, if not it shall be removed and all service connections into the street shall be plugged per Public Works requirements.

E. We agree the onsite approach discussed by the applicants engineer is the correct approach, however prior to final approvals we need to verify all quality, quantity, treatment storage volumes, and pipe capacities and considerations for larger storm events of at least 25 yr storm events or high intensity rain events.

F. We will need to review details of the treatment swales, showing typical cross sections of materials, as well as all drainage structures and materials selected.

G. We recommend that the applicant submit a maintenance plan of the various storm treatment systems discussing how and who will be responsible for routine inspections, regular maintenance, and repairs as necessary to operate these various measures both during and post construction.

3. **Utility Plans**

A. The proposed electrical transformer is however the connection to the existing electrical mains is unclear. Please coordinate with utility companies and provide acceptance of the separation of the service utilities.

B. There is an existing buried Telephone line under the proposed sidewalk. Verizon shall review and approve the new layout and resetting required of their manhole at Oxford and Pearl.

C. Will there be any outdoor parking lighting, for phase 2-A? If so, how will that interact with phase 2-B?

4. Grading / Erosion Control

A. The original geotechnical report has noted that some contaminated soils and ash may be encountered during construction. We believe a VRAP had been submitted but we had conformation of DEP conditions. An approved copy must be submitted prior to any construction beginning, to assure that excavation activities for the structure of drainage treatment measures will not interfere with contaminated soils, or a provision to handle any contamination is in place.

B. Newly seeded areas around the proposed parking on Lot 2 shall also be protected with Silt Fencing to keep sediment off Lancaster Street and away from the rain garden and filter with underdrain.

5. Access and Walks

A. The applicant has not indicated snow storage areas or methods for snow removal to assure no loss of parking spaces or creation of visual barriers for vehicular access or egress will occur. Please add not or indicate specifically where snow can be stored or under what circumstances it must be removed.

B. From the original approval there were concerns about the condition of Lancaster St in this section which is not in good shape. It has broken pavement and potholes, broken recessed curbing, and no sidewalks. It needs to be reconstructed to address several utility issues and better access. We recommended that this be addressed in Phase 2 originally. The street will need new sidewalks, and should consider at least one catch basin, and a new surface. The applicant should discuss with Public Works about reconstruction efforts, and protection from the construction of phase 2.

C. The access lanes associated with the parking garage proposed off Lancaster Street (Phase-2B) narrows to 23 ft. Standard aisle widths are 24 feet. We see no limitation to not allow that dimension be lessened to 23 feet. Of concern is the turning maneuverability of vehicles in the spaces closest to the residence after the garage is built. There is little space to adequately turnaround.

G. Please refer to the City Traffic Engineer comments for any concerns of traffic and pedestrian movements on Lancaster and Pearl Streets.

6. **Landscaping:**

The parking lot and street fronts appear to be well landscaped with a mix of large tree mixes and scrub and low plantings. While the applicant has calculated the required bicycle spaces (26) such amenities are not found on the preliminary plans.

7. **Construction Details:**

There are several construction details which will assist in understanding the entire stormdrain system. These should include elevations and pipe information. Other details for road sections, standard City of Portland detains for street and sewer work should also be included. At this time details were not available and we will expect that during the next review that these will be provided as the design is finalized.

8. **Mobilization and Construction Site Management :**

We have concerns with the construction activity which will occur with Phase 2, and how it will affect the existing residents. A plan should be submitted that shows how the site will be managed to indicate stockpile areas, security fencing and traffic controls. How will pedestrian and vehicle access be maintained during construction? What is the projected length of time that the project will be under construction? Where will equipment be stored during construction? Typically, we request such information to be discussed during the process, but realize each owner and/or contractor will create a specific plan.

Please feel free to contact me if you or the design-professional has questions with my comments or concerns. We feel the plan is consistent with the original phased approval addressing areas for concern with utilities, drainage and accesses. It will be necessary to review improvements to Lancaster Street, offsite improvements necessary as part of a storm sewer separation, drainage quality measures, and pedestrian improvements. I will be available to assist you and the applicant if warranted to address any further questions prior to the preliminary hearing. We look forward to assisting the City and applicant to work through issues with this challenging older street infrastructure and important development within the Bayside Community.

JRS:jrs

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Memorandum

08348

To: Casco Planning Board, Elwin Thorpe, CEO

From: James Seymour, P.E., Planning Consultant, Sebago Technics, Inc.

Date: October 25, 2010

Subject: November 8, 2010 Planning Board Meeting

AT&T Mobility -Wireless Telecommunication/ New Tower Facility Site Plan Review Property located @ 190 Tamarack Trail

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I. Background

AT&T Mobility has made a site plan submission to the Town of Casco with regards to a new Tower and wireless telecommunications facility to be located on a parcel of the property currently owned by Robert and Shellie Symonds, located off 190 Tamarack Trail. Reviewing the application materials, the site plans, and attached information as it relates to the Town of Casco's Wireless Telecommunications Facilities Siting Article and the Site Plan Ordinance as prepared by the Law Offices of Barry J. Hobbins, PA, has required the Planning Board to carefully adhere to the Town's telecommunication tower facility siting criteria and site plan requirements for the proposed land use, associated land disturbance due to development and private way/driveway access. This hearing is the forth meeting to review the project, and includes new materials missing or complimenting materials as distributed at the last presentation held on October 6 and as submitted to the Town of Casco on Monday October 18, 2010.

The following proposed telecommunications facility project is located on a parcel owned by Robert and Shellie Symonds, and is identified as Tax Map 6, Lot 34-7. The parcel of 40 acres is located in the Rural (RU) Zone and is located at 190 Tamarack Trail, a private road, extending from Spiller Road. The site has restrictions of steep slopes, ledge outcrops, with concerns for adequate access to the site and preservation of buffers for visual and noise screening.

The project application was deemed complete at the September 13th meeting. A site walk was conducted September 18th, with the applicant obliging the Board and public with a test balloon set at the proposed new tower height of 150 feet above grade. The project has been disputed in hearing by abutting neighbors Horton and Cosgrove. Within the recent packet a legal complaint as filed by the Law offices of Erica Frank on behalf of Hortan and Cosgrove was included indicating a legal disput of the land title with AT & T Mobility. Based on a recent legal opinion

from Natalie Burns dated September 17, 2010, it has been concluded by the bOard following the October 6 hearing that the Booard agrees with Ms. Burns opinion, that there is not an issue about creation of ground leases an it is not a lot division and does not require subdivision review, nor does it create a separate lot for zoning purposes. It was also agreed that the dimensional and other zoning requirements will be met on the lot as a whole not just in the ground lease area. While the Board has accepted the information and documents submitted by this complaint, it is recommended that the Board continue its position, and allow this disagreement to be handled as a civil action between the parties listed.

II. Review of Wireless Telecommunications Facilities Siting Article 8 Items.

Under the Casco Land Use Ordinance there is a specific article dedicated to **Wireless Telecommunications Facilities Siting (Article 8).** The criteria and processes in place are to require that the applicant explore all options for siting towers, equipment, and antennas rather than install new facilities. If none are available, there are requirements and criteria for new tower installations. Previously under sections 8.8 & 8.8.1 the Planning Board approved the evidence that they meet the criteria for a new tower application. As outlined above the planning Board must concurrently determine that all standards of the Site Plan ordinance have been met. Due to the fact that the Board also has more detailed criteria for new towers and telecommunications facilities, we feel it is appropriate to first discuss site plan requirements for Telecommunications and then precede through general site plans requirements.

Under each section of the Siting section below we have given an opinion of each requirement for the Planning Board to consider in italics.

Under Section 8.8.1.a. Requirements for New Towers

1.0) The Applicant has provided proof that no tower providers or alternative structures are available within the search area and therefore no notices can be sent to other tower, higher structural providers, or licensed communication providers since none exist according to their inventory.

The Board has reviewed this evidence discussing the lack of available known licensed wireless operators for this search area. The applicant has provided evidence to notify owners of available structures within their search, as documented by the response of communications from WGME TV.

Based on the submission of notices, correspondence dated from WGME TV the Board has stated that requirement has been fulfilled.

2.0) Evidence that existing or previously approved towers or alternate structures cannot be utilized is documented in Exhibit 17 Engineer's report and Coverage maps.

Proof has been submitted in the attached maps as documented in Exhibit 17 Engineer's report and Coverage maps,which under request of the Board now includes scaled search

rings to review the gauge distance showing improvement to previously poor signal receiving areas.
Based on the submission of the revised Exhibit 17 dated the Board has stated that requirement has been fulfilled.

3.0) The same data has been referenced to address evidence to co-locate on existing or previously approved tower sites.

Proof of the lack of collocation facilities was addressed in the previous Board hearings through the approval review process to allow a new Tower passed by unanimous vote, and is further evident by AT&T Radio Frequency Report dated May 6, 2010 , as prepared by Kevin m. Breuer RF Engineer for AT&T Mobility.

4.0) The professional engineer's report showing evidence for the tower design, to meet the antennae proposed, is also referenced in Exhibit 17 of their application.

The applicant has submitted a copy of a plan view and design sizing for the antenna and tower size. However, prior to the Board approving the applicant shall provide stamped Professional Engineer's documents as required, or require a condition that a full engineers design for the tower and foundation be submitted prior to construction. Currently this has not technically been completed as there is not proof of review by a professional engineer nor has their been a statement saying the design meets national building codes or local wind and seismic loadings

5.0) A letter of intent has been submitted committing the owner to respond in a timely comprehensive manner for co-location applicants, to negotiate in good faith for shared parties with FCC licenses, and allow co-location if the applicant is willing to pay reasonable charges, all have been attached in Exhibit 2.

This has been previously submitted in the Section 2 of the submitted application.

6.0) Adequate financial capability appears to be common knowledge by this large coprporation but there still has been no documents showing specific site reference . Proof is needed to indicate allocate funds for this tower construction, to maintain, or remove must be submitted.

A cost breakdown has been provided showing the description and costs breakdown for each site item. A letter has been submitted showing site specific financing with statements for allocated funds for the new tower projects by Mr. Hobbins on behalf of AT&T Mobility. They additionally have prepared an estimate for deconstruction estimates to remove the structure and associated facilities. In our opinion, the deconstruction estimate appears low as it only addresses the tower structure and does not appear to include all shelters equipment foundations, and access roads specifically constructed to service the tower as outline in Section 8.10 (b) Guarantee for Removal of Abandoned Wireless Communication Facilities.

7.0) Photo-simulations showing existing and adjacent structures have been submitted under Exhibit 19.

If the Board has discussion it would like to pursue with relevance to the balloon test and Section 8.9 Performance Standards (b.) Aesthetics, this is the portion of the meeting to discuss visual impacts and if any special buffering, or designs can be employed to minimize effects. This shall include discussion of impacts to public areas, historical locations, natural vistas, or neighbors. Based on the reduced mass proposed on the tower, less than maximum allowed without lighting reduced from 180 ft to 150 ft, and that the tower and associated antennae will consist of a neutral gray color, we feel the applicant has addressed this issue. However we recognize that abutters will have a slightly imperfect view to the southwest direction, more so in winter periods. The setting of the tower is mostly imposed on the landowner, (Symonds) However, the Cosgrove's have a view corridor to the tower top from their driveway, and the Horton's have a partial obstructed view through a stand of trees located on their property. While we recognize the impacts we do feel that the application has taken steps to mitigate this presence on their property. The Board shall weigh their decision for meeting this criteria following subsection e.) Planning Board Review page 116 of the ordinance and other sections referenced within.

8.0) No formal landscaping plan has been submitted as the applicant will be depending on existing vegetation to act as a screening. Fencing is shown on the attached plans. Buffers will need to be defined and placed in protective covenants or easements.

No new buffers were called out on the plan. To preserve natural buffers some strict limits should be considered. This should also be shown on the plan given the sensitivity of the views from residences. We recommend a no-cut restriction of natural buffer be shown on the plan and documented in the Landowner's agreement/deed.

9.0) Elevational drawings, cross sectional views and silhouettes have been provided in the site plan set.
We recommend that the average tree canopy elevation be added for elevation references.

10.0) Details of the Tower base have been shown in details associated with the site drawings. The Board may request that engineered structural calculations be provided to assure adequate structural capabilities in wind/icing conditions, and that the foundation is adequate to support the monopole type selected.

Details have been enhanced to show tower loadings but the drawings lack an engineers stamp. The Board shall discuss what it will need to meet this requirement, and if so the Board may discuss review by a third party structural engineer..

11.0) A visual analysis has been submitted as well as discussion of historic structures or places adjacent to the selected site. The Board may also request that the applicant show proof that they have addressed and are compliant with NEPA regulations for areas significant with cultural, wildlife habitats, endangered species or archeological findings.

Concurrently with the new tower application review, the following must be completed to additionally meet the Site Plan Requirements. Many of these items will match with the Tower requirements and some will be unique but still required;

A. **Preservation of Landscaping**- While the application discusses preservation of natural tree buffers, no actual defined area buffer is noted on the drawings nor is there any discussion of average tree canopy or effective buffer heights to protect impacts from abutters.

B. **Relation of Proposed Buildings to the Environment** – While the building is of small size (230 SF), neutral materials, and color, the site placement is challenging and accessories of the building features are not typical for a rural location. The elevation placement is well screened but will likely require 5-6 feet of soil and ledge removal for positioning. Ledge removal and blasting may be a concern. The Building is in alignment with an assumed private trail, blocking the path, and site drainage is a concern following large rain events and snowfall melts from offsite contributing areas. Additionally the Building will have outdoor commercial air conditioners/coolers and emergency back up generators creating non-typical noise disturbances for the neighboring areas. Noise and Vibrations standards may be questioned and discussed. We recommend that the DEP standards for residential quiet zones along with State Mining and Blasting regulations be considered if standards are requested. The Town of Casco has a standard of 65 dBA for light manufacturing at a property line, but I could not find another specific noise standard. The source of noise will be generators and HVAC for the equipment shelters.

C. **Vehicular Access**- The most concerning site construction issue is the access to the site. The ridge is generally steep (7-15% Grade) and access is from a narrow private road, with limited drainage capabilities, and sharp horizontal curves. The applicant's re-design has better turning ability for construction equipment, future delivery/maintenance or emergency response vehicles into the 550 foot access driveway. There are some safety considerations for level vertical elevation transition into the existing private road, but a safer pull-off area for delivery, maintenance, or emergency response vehicles at the gated compound has been added. Given the fact that the site will be difficult winter maintenance with ice and snow, winter maintenance and winter emergency access should be discussed. The Board may wish to also discuss yearly inspections of the associated road with inspections of the Tower itself.

D. **Parking and Circulation:** While the facility is unmanned parking for an employee or owner is not required, however provisions for emergency response, winter clearing of snow, and normal utility maintenance and fueling deliveries will be necessary. The turnaround at the hill base and at the fence compound has been improved to allow room for residents to easily pass during maintenance visits.

E. **Surface Water Drainage-** The Site drainage plan as prepared by Dewberry, Goodkind Inc revised August 10, 2010 appears to be implying that the site is incorporated into a larger watershed, and that the impacts of the site are negligible. Latest calculation however at each of the existing culvert crossing Tamarack Lane show a slight increase of

runoff as a result from the proposed project. The engineer has stated that the increases are minor and will have minimal effect on the culverts. Measures taken to reduce ditch velocities, impacts from shallow soils on bedrock, are stated to further reduce negative impacts on the culvert drain system. The increase is approximately 6% and we agree that it is a minimal impact, but the Board shall discuss the increase, and note how the applicant will be address annual maintenance of the driveway.

F. **Utilities-** The facilities will have few demands on utilities other than telephone and electrical services. Questions raised are whether the existing telephone service lines will be adequate to serve the facilities, and the utility lines are shown to be overhead by a pole line along the driveway. Concerns for soil cover in areas of shallow bedrock will be reduced, but additional tree clearing to maintain wire clearance will be needed.

G. **Advertising Features –** Not a concern, but adequate signage of the site operations contact in case of an emergency is appropriate.

H. **Special Features-** as noted above, operation/testing generators, air conditioners and placement of fueling tanks for generators, are of special concern. Discussion on soils and ledge removal quantities, with specific to blasting methods and nay pre blast surveys of foundations and wells. Screening needs defining with buffer widths, or conservation restriction methods.

I. **Exterior lighting-** While the shelter will be equipped with a door light, no further light impact is anticipated. Until receipt of FAA approval no absolute certainty is known about the Tower lighting requirements. Currently no lighting on the monopole is anticipated.

J. **Emergency Vehicle Access.** The site grades are steep and the Planning Board should consider worst case scenario of winter conditions. More consideration of leveling entrances is needed. Will Emergency departments have gate combinations or keys?

K. **Landscaping-** No landscaping is planned, or is likely needed. The applicant, though, needs to describe relative height of natural screening and measure to preserve adequate buffers for abutters and public.

L. **Environmental Considerations-** As discussed above, concerns of noise from generators being tested, recommendations of fuel types to be propane over diesel, with amenities to protect from vandalism, or show confinement of fuel storage areas, and security of the area by fencing should be detailed to the Board.

Conclusion:

The Board determined the applicant had provided adequate evidence that there was not another available licensed communication provider to co-locate on an existing or previously approved

facility. The Board determined by vote, to allow the application to proceed at this point under review of Section 8.1.a (Requirements for New Tower).

It is still the responsibility of the applicant to address previous concerns and submit documents and plans showing all relevant proof that the requirements have been satisfied. The Board should review these submittals, and determine if the applicant has adequately addressed all the items and whether the information clearly addresses all Town department concerns, Planning Board comments, and/or answers all Public comments/concerns raised. If the Board feels there is missing, or lacking information to make a final decision then they shall identify an action it desires for the applicant to fulfill the requirement, and then table the discussion until such time the information has been submitted and reviewed either by Town staff or Third party reviewer. If the Board feels the information is present and what is lacking is minimal and will not have an effect on their decision, they may make a motion to approve with conditions.

Recommendation:

Upon review of the information provided in the submitted plans and documentation, we would recommend acknowledgment of the new application materials received by the Board, and that the Board provides the applicant time for a public presentation of new materials. The Board should, at a minimum, discuss the projects process and whether it has met all the minimal criteria to be considered for a new tower site and should review the project with the applicant and/or representative to assure that each is clear about any outstanding items or concerns raised by the recent site walk.

The proposed application has few outstanding items at this time. The Board should not consider the project for a final approval under the Site Plan criteria, and those more specific items under Wireless Telecommunications Facilities Siting Article, section 8.8.2 until they feel the criteria has been fully satisfied. If any items need to be followed up on and or revised, the Board should be careful in deciding if new materials are necessary for their judging of the projects approval. Therefore, we feel that at this time, it is best for the Planning Board to request the applicant to continue project discussion and formally accept the new application materials. A deliberate item by item approach we feel is the best to gauge the Planning Boards concerns. Once a requirement item has discussed, the Board members shall state individually on each item (No Voting) to assure they feel the item has been substantially addressed. If the overall feeling is the items are in agreement with Town requirements then precede for an overall vote. If the meeting is tabled, then the applicant shall be made aware of the items not in order. They then should be made aware of a schedule the Planning Board will be following going forth, such that the time limits for complete review, and the appropriateness and responsiveness for approvals is clear. The next regular scheduled meeting if necessary, will be November 8, 2010.

Respectfully Submitted,
SEBAGO TECHNICS, INC.

James R. Seymour, P.E.
Planning Consultant

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June 7, 2005
05180

Deborah Fossum, Town Planner
Town of Gorham
270 Main Street
Gorham, ME 04038-1382

Engineering Review
USM Child Care Center, Husky Drive, University of Southern Maine, Gorham Campus

Project: USM Child Care Center
Location: Husky Drive, USM Gorham Campus
Applicant: USM
Engineer: Deluca - Hoffman Associates

Information Provided:

a. Bound site plan application with cover letter, development description, traffic study, stormwater calculations and other miscellaneous information dated May 16, 2005

b. Site Plans C1 through C10 dated May 16, 2005 and issued for Town review;

c. Landscape Plan prepared by TFH Architects.

d. Fire Chief Memo dated 5/20/05

Dear Deb:

At the request of the Town of Gorham, Sebago Technics, Inc. has reviewed the above referenced materials for the USM Child Care Center. Based upon the information submitted, we offer the following comments for consideration:

General Review Comments:

1. The project is being reviewed as a major site subdivision.

2. Development will occur on a side slope adjacent to Husky Drive and an existing parking lot. The topographical information suggests existing side-slopes in some areas approaching 2:1 slopes. Construction will require disturbance of the side slopes with areas of cut and fills. The erosion control plan includes a number of BMPs for site stabilization, drainage, and erosion control. The designer should be involved in the construction process to monitor slope stabilization and provide direction if additional measures are necessary to ensure slope stability.

3. A design approach has been selected to integrate the side-slopes into the design using a vegetated roof design. As a result, the building roof structure will be essentially at grade along Husky Drive with no apparent direct access from Husky Drive. The main access will be from within the existing parking lot where modifications will be made to accommodate parent pick-up and drop-off. Is it anticipated that there will be a need for pedestrian movement/access from Husky Drive? There does not appear to be any defined pedestrian paths from Husky Drive to the main entrance other then walking through the existing parking lot.

4. The Site Plan indicates a 4' high chain link fence will be installed partially on the roof and along Husky Drive. The plans make reference to the Architectural Plans that we did not receive. Is the fenced area on top of the building intended for a specific use?

5. Submittal information included a general cross-section of the proposed vegetated roof. The landscape plan provided by TFH architects includes a note stating "mixed groundcovers, grasses and low shrubs." We recommend that a detail be added to the plans specifying the thickness of the growing medium, type of growing medium, specifics of vegetative plantings, along with a maintenance plan (i.e., mowing, trimming, pruning, irrigation, frequency of maintenance, etc.).

6. The plans (Sheet C-4) included information regarding site lighting, but did not include any building lighting (probably on the Architectural plans). Please provide a plan indicating building light locations and type of lighting. Cut sheets with photometrics are also typically required by the Planning Board for both site and building lights.

7. A traffic assessment has been included in the submittal as prepared by Gorrill-Palmer Consulting Engineers, Inc. The study included estimated trip generations and a summary of current traffic volumes on Husky Drive and at Husky Drive/Route 25. The analysis concludes the slight increase in traffic is within the originally forecasted volumes used for the construction of Husky Drive. We did not complete a review of the traffic study and assume the Town Planner will review the study or retain a traffic consultant, if necessary.

8. We understand that a boundary survey was previously completed and is on file with the Town according to the cover letter. We suggest the Town verify that a copy is still on file. If not, the Town may want to request another copy.

9. The development description in the submittal includes a summary of the USM existing parking and how the new USM daycare will impact the parking. Since the facility currently exists on the campus, the applicant stated no additional parking for existing staff is proposed. The narrative also indicates the PROP staff will require six additional spaces and that there is currently excess capacity on the campus according to a study by Gorrill-Palmer Consulting Engineers (1,654 existing and 1,313 required by parking demand). The proposed child care facility will eliminate 14 existing spaces to accommodate the new drop-off and pick-up area. No new parking spaces are proposed. We have not reviewed the parking count analysis and assume this will be handled by the Planning staff.

Since parents will most likely park and walk their children into the child care center, the applicant should confirm there will be enough temporary parking within the drop-off/pick-up area for this condition. Additionally, where is it anticipated the new PROP staff will park? We assume they will be given stickers and have access to the general parking lot areas. It appears the existing parking lot through which the facility will be accessed has provisions for gated access. The current gated access appears to be damaged and not in use. Is it USM's intent to leave this as a non-gated access in the future? Lastly, will there be any designated parking for daytime visitors to the facility (i.e., family attendance for field trips, etc.)?

10. A stormwater analysis was provided in the submittal, including a narrative, pre and post-development runoff calculations, water quality calculations, watershed maps and erosion control narrative. Several watersheds exist in the pre and post-development conditions with one principal point of analysis. The development site is part of a larger watershed draining to an existing stormwater pond at the northerly end of the site. This pond receives drainage from the John Mitchell Center and adjacent parking lots. Drainage travels via sheet flow, shallow concentrated flow, and through a series of catch-basins, subsurface piping and open channel flow to the pond.

    Stormwater from the development area will be collected and routed through an existing water quality unit (pick-up/drop-off area), infiltration trenches (beneath the play area), wooded buffer, and through a rain garden (vegetated roof). Water quality calculations conclude the project will achieve 42.2 percent TSS removal.

    The runoff calculations suggest a slight increase in the peak rate of runoff for the 2-year storm event and a decrease in the peak rates for the 10 and 25-year storm events. The decrease in larger storms appears to be attributed to the infiltration trenches, rain garden, and routing of stormwater. We are in general agreement with the analysis, methodology and findings, but would request clarification on a few items as follows:

    a. The proposed rain garden will utilize a roof-top vegetative medium for treatment and collection. The grading, drainage and erosion control plan depicts the location of the rain garden with notation referencing the Architectural Plans. We would request additional information on the rain garden construction (see note 5 above) along with details of the roof top drainage collection and conveyance system. The size of the roof drain should also be noted on the plans and sized accordingly.

    b. Please add the location of the "Wooded Buffer" to the grading, drainage and erosion control plan. We suspect this will need to be deed restricted when the project is reviewed by the MDEP.

    c. The narrative refers to Pond 8 as a water quality pond. By virtue of the project draining to the pond, is there any additional water quality treatment anticipated not accounted for in the calculations?

d. Drainage within the play area (Subcatchment 20A) includes an infiltration system for 90% TSS removal. Please provide infiltration calculations and soils information to verify system capacity and ability to detain 1 inch of runoff over the entire area. Generally, this would include the storage volume of the piping/medium with estimated infiltration capacity based upon soil conditions. Since the infiltration system will occur in a cut area, it will be important to verify the subsoil conditions (i.e., depth to ledge). We understand a test pitting program will be completed in the near future to verify the soil conditions.

The grading and drainage plan depicts the layout of the infiltration system with invert information. It appears the inverts have been set to maintain positive drainage through the piping without a means to detain the drainage for infiltration. We would ask the designer to verify that the system will infiltrate the design storm without bypassing the system.

e. Please confirm that Segments DE and EF within Watershed 10B are correct. It appears there is a drainage swale running along the southerly side of the parking lot across from the John Mitchell Center. Field observations suggest the drainage swale may intercept runoff from Segment CD and convey Segments DE and EF through the swale. It may be that Watershed 10B should be separated into two sub-watersheds.

Plan Sheet C1 - Cover Sheet

1. No comments

Plan Sheet C2 – General Notes, Index and Legend

1. Since there will be some changes in the parking counts (see review note 9), an additional note should be added to the plan summarizing the current and proposed parking count summary.

Plan Sheet C3 - Existing Conditions and Demolition Plan

1. Since clearing and grading activities will occur up to the Alden property line, we suggest that notation be added requiring that the lot line be flagged prior to construction. This will ensure that the wood cutter and contractor are aware of the property line.

2. Are there any plans for designated construction access locations or restrictions along with contractor staging areas and material stockpiles? We assume that a portion of construction may occur during the school year, potentially restricting the use of the existing parking lot. The construction plans may want to include provisions addressing access, use of the parking lot, and lay down areas.

Plan Sheet C4 - Site Layout and Utility Plan

1. Will the Town's fire truck need to access the parking lot in the event of a fire emergency? If so, the parking lot entrance should be checked to verify if there is adequate turning movement area for the fire equipment (ladder truck?).

2. The building will be served by a sanitary sewer pump system conveying wastewater through a 1½ inch diameter force main to a new manhole. Will the new manhole include a force main terminus? Information regarding the pump system and sizing were not included in the submittal. We assume this will be a private internal pump system maintained by the University.

3. The plan depicts boulders to be placed along the slope. The details of the boulder wall were cross-referenced to the Landscape Plan. The Landscape Plan did not include any detailing of the wall. Please provide a section of the wall. The designer may want to have the project's geotechnical engineer review the wall for stability purposes.

4. The child care signage is shown as being located in the drop-off/pick-up island. The Town may want to request a detail of the proposed sign with any lighting.

5. Will a solid waste container be located on the site? If so, the location should be shown on the plan with screening.

Plan Sheet C4A - Overall Utility Plan

1. Since the sewer main will be extended from the project site to an existing sewer, some off-site work will be necessary. A portion of the sewer main will be installed within steeper side-slopes adjacent to Husky Drive and the existing parking lot. While the erosion control narrative provides provisions governing all site construction, the designer may want to add some additional notation for placement of specific E&S measures.

Plan Sheet C5 - Grading, Drainage and Erosion Control Plan

1. Given the size of the pipes, we suggest a new manhole be added at the new 12" perforated to 24" storm drain.

2. The grading includes several areas of 2:1 slopes. It appears the intent is to install erosion control blanket on these slopes according to a detail provided on Sheet C-10. Please add notation indicating the slopes are to be covered with erosion control blanket. We suspect the 2:1 slopes may be prone to erosion. Monitoring of these slopes will be important during and after construction until stabilized.

3. Will excavated materials (loam, cuts, etc.) be located on the site? Given the tight nature of the site, any location will most likely be in the existing parking lot. Please confirm.

4. Plan Sheet 10 depicts a Riprap Slope Detail, but we did not observe any riprap slopes on the grading plan. Please confirm.

5. The area immediately northerly of the proposed building depicts a small swale conveying surface drainage along the building to a slope. The area has moderate grades that could be prone to erosion, especially during and immediately after construction. We would ask the designer to review the area for the need of additional stabilization (i.e., erosion control blanket, check dams, etc.).

6. The roof drain and perimeter drain size should be indicated on the plan. Reference is made to the Architectural plans which were not included in the plan set.

7. The area next to a portion of the existing sidewalk from Husky Drive to the parking lot will be regraded to 2:1 slopes. Please review to determine if guardrail is needed along this section of sidewalk. The Landscape Plan includes some "large protective boulders" that appear to be intended as a barrier. Additional information (spacing and size) of boulders should be provided for the Town to determine if this approach is adequate in lieu of guardrail.

Plan Sheet C6 & C7 - Site Details

1. No comments.

Plan Sheet C8 - Utility Details

1. We assume the 15" nylocast drain basin is intended to be used for the catch basins. Please confirm.

2. A Casco Trap detail is provided on the sheet with reference to CB1, CB3, CB4, CB7 and CB8. There do not appear to be any catch basins within the development area with these numbers. We assume the Casco Traps are not intended for the nylocast drain basins. Please confirm the intent of the Casco Traps.

Plan Sheet C9 - Utility Details

1. No comment. Portland Water District should review and approve the water system details, layout and design.

Plan Sheet C9 - Erosion Control Details

1. We suggest the critical elements of the erosion control plan narrative be placed directly on the plan since it contains timing and sequencing information along with temporary and permanent erosion control requirements. This would provide for easier contractor reference during construction.

2. The designer should confirm that all details and the locations for their use are referenced on Plan Sheet C5.

Plan Sheet C9 - Landscape Plan

1. Some of the plantings are shown on 2:1 slopes. The Landscape Architect should confirm that plantings are appropriate for these slopes.

We offer the above comments for Planning staff and Planning Board consideration. If you have any questions or require clarification, please contact me.

Sincerely,

SEBAGO TECHNICS, INC.

Owens A. McCullough, P.E.
Sr. Project Manager

OAM:oam/jc

Sebago Technics
Engineering Expertise You Can Build On

01P289

TO: **Kandice Talbot - Planner**

FROM: **Jim Seymour – Development Review Coordinator, Sebago Technics, Inc.**

RE: **Ocean East and Eben Hill –PRUD, Ocean Avenue and True Street**

DATE: **July 3, 2002**

I have reviewed the Site Location Application, plans and supporting documentation for the Ocean East and Eben Hill PRUD located off Ocean Avenue and True Street dated June 24, 2002, and have provided the following comments as an initial review for the Planning Board Workshop to be held Tuesday, July 9, 2002:

1. **Stormwater Management**

   A. After reviewing the revised stormwater plans and calculations, I still found it very difficult to follow the modeling with the stormwater narrative and calculations. The report needs to be updated in written detail how the site maintains existing peak flow rates with the use of the proposed detention system.

   B. The calculations and plans indicate that a series of outlet controls are to be utilized in conjunction with an underground pipe detention system as manufactured by Advanced Drainage Systems, Inc. The applicant's engineer needs to prove with manufacturer's specifications or sizing charts that the design system is appropriate and matches the stormwater model. The applicant still needs to verify the hydraulic grade line of the system and the overall impact of the systems (controlled pipe sections) on a whole.

   C. The terminus of the pretreated storm drain from the Vortechnics Stormwater Treatment Tank exits into an existing catch basin. The applicant needs to show how an 18 inch pipe will enter the catch basin and not impact the existing 12 inch cast iron pipe exiting this structure. Public Works should be contacted to determine if there are flooding or plugged outlets that need replacing. (Same comment as 4/22.)

   D. It is difficult to determine if there are conflicts with other pipes or utilities because each sewer, storm drain, and road profile does not include all the utilities together with one common layout stationing. The multiple stationing for each utility run is confusing. One stationing with offsets from the centerline of the road should be used. The water main also needs to be shown in profile view. It appears that one entire storm drain section is missing from the set (Station 61+00 and beyond). Prior to final, we will need to check all pipe crossings to assure that proper separation is maintained.

E. All wetland or existing watercourses which traverse the site from or onto abutting land shall be delineated with a minimum 30 foot drainage easement. (Same comment as 4/22.)

F. There are three cross culverts and a few other field culverts that are shown. A brief calculation should be included to show that adequate sizing was performed, especially where it involves a stream, wetland crossing, or impact to a neighboring lot owner. An analysis shall be conducted to review the 100-year storm event for these cross culverts.

G. All of the study control points appear to be analyzed as concentrated or channel flows. The applicant's engineer should discuss even if there is no or little impact the receiving areas off site prior to entering the Presumpscot River. Are there road culverts to cross, private drainage structures or pipes to convey drainage through, etc.? (Same comment as 4/22.)

2. **Road Access/Circulation**

A. All horizontal curve information needs to be placed on the plans. The current plans do label curves, PC, or PT stations, but do not label return fillet curves when intersecting with an existing City street. Also, vertical elevations shall be shown for each 50 foot section on the Plan and Profile.

B. Several other areas will require ledge blasting or cuts through areas with a reasonably high water table. The sections of roadway being constructed in these areas prone to groundwater outbreaks or inundation shall require the installation of underdrains. These underdrains shall be deep enough (3 foot minimum) to drain the subbase material. Locations need to be shown in Plan and Profile view and detail is needed.

C. Street names will be required for the small sections stubbing of the main roadway. All road names shall be approved by the City of Portland and 911 Emergency Departments as soon as possible. Several of the road names appear to be in conflict with 911 policy for names that are similar to existing streets.

D. A pedestrian easement may be needed for the section of sidewalk that avoids a large tree along Ocean Avenue and meanders into the site. (Same comment as 4/22.)

3. **Grading/Erosion Control**

A. Several dwelling units have surrounding grounds that are proposed at very steep grades. My concern is that some come right to the rear of the units, and others have steep drop offs at the end of the yard. All areas shall be protected or landscaped to consider personal safety. If retaining walls exceed 3 feet, details are needed with an engineer's stamp of approval.

B. Many of the constructed slopes are to be built with fill material at slopes averaging 3:1 sideslopes. The applicant shall add details depicting materials,

compaction, and erosion control fabrics, or mulches to assure erosion will not occur during construction. (Same comment as 4/22.)

C. The erosion control notes shall include a section of erosion controls for construction across wetlands and watercourses during installation of culverts. Reference to the BMP Manual is not acceptable. Standards and notes shall be included on the plan sets.

D. The erosion control notes shall also include milestone dates or periods for key components of construction. This should include road development, unit construction, and off road grading. This should establish a crude timeline.

E. The erosion control notes shall also address dust control and street sweeping during construction phases where trucks will be entering and exiting the site frequently. (Same comment as 4/22.)

F. One section behind Building #13 has a ditch, which drains runoff from a ledge cut area and directs it out over the paved road entrance to this unit. This needs to be corrected, either by field inlet or culvert. (Same comment as 4/22.)

G. All aprons shall include calculations for riprap and dimensional sizing based on 25-year storm flow rate.

4. **Utility Installation/Location**

A. The sanitary sewer profiles show several drop manholes. Several of these still may not be needed if pipe slopes are adjusted accordingly. If, due to steep grades, some droop manholes are needed, the engineer needs to show by detail. The drop manhole will be constructed in accordance with Public Works standards.

B. A typical manhole for a sanitary sewer is needed. (Same comment as 4/22.)

C. A detail of the catch basin grate to be used is also required. (Same comment as 4/22.)

D. Will natural gas be extended on Ocean Avenue to serve the units?

E. The geotechnical report recommends foundation drains. They shall be indicated on the plans with their approximate outlet elevation. Back flow preventers may be needed in some areas where foundation drains discharge into a backed up system.

F. How will each building be served by electricity? Will each building have its own transformer? This will need to be worked out with Central Maine Power.

5. **Additional Concerns**

A. The landscaping plan is very difficult to read due to the scale of the plants on the drawing. Each pocket of individual plant species should be abbreviated with the

number proposed to be planted at one location. Please check with Jeff Tarling, City Arborist.

B. Prior to final plan, we need to verify that adequate finish floor elevations have been set appropriately on each unit.

C. Lighting fixtures need to be shown and approved by the planning staff. No details of the light fixture were shown. (Same comment as 4/22.)

D. A typical cross section of the recreational facility playing field is needed. (Same comment as 4/22.)

E. A detail is needed for the typical keystone marginal block wall construction. A long section of wall is proposed to assist grading and is required for review. Also, some plans indicate natural stone walls. Details, again, are required to assure stability.

F. The Blasting Plan shall be reviewed by a Geologist, or specialist in seismic vibrations as designated by the City to assure the relative safety of blasting procedures has been met. (In progress.)

G. Dumpsters have been located near the end of parking lots where it is likely that snow will be plowed into. Dumpster locations shall not be in the middle of the parking turnarounds, but off to one side.

H. Areas shall be designated on the plan for snow removal or stockpiling, or a plan for snow removal services shall be included.

I. Several details, such as the ones below, are needed:

1. Granite Curbing
2. Underdrain
3. Retaining Walls
4. Erosion Control Blanket
5. Riprap Sideslopes
6 Hydrant
7. Detention System with Elevations
8. Vortechnics Treatment Tank(s) with Elevations
9. Guardrail
10. Clarify Subbase Depths Between Parking Areas and Main Road Section, 21" Vs. 18".

J. Maintenance Plans and Agreements are needed for both the Vortechnics Stormwater Treatment System and the ADS Pipe Detention System.

There are several features of the project which need to be addressed in more detail. Understanding the components of the stormwater has become clearer, but details and specifications are needed from the manufacturers to verify the actual modeling numbers. Other utility situations, I believe, can be easily rectified, but have not been presented. The best way for

the applicant to address several of these issues is to go through the list individually and then review with both Tony Lombardo and myself.

Please forward to the designer and/or engineer as soon as possible so that they can at least have a chance to see our concerns prior to a meeting discussion.

JRS:jc

SebagoTechnics

Engineering Expertise You Can Build On

01P289

TO: **Kandice Talbot - Planner**

FROM: **Jim Seymour – Development Review Coordinator, Sebago Technics, Inc.**

RE: **Ocean East and Eben Hill –PRUD, Ocean Avenue and True Street**

DATE: **April 22, 2002**

I have reviewed the Site Location Application, plans and supporting documentation for the Ocean East and Eben Hill PRUD located off Ocean Avenue and True Street dated April 1, 2002, and have provided the following comments as an initial review for the Planning Board Workshop to be held Tuesday, April 23, 2002:

1. Stormwater Management

A. After reviewing the stormwater plans and calculations, I found it very difficult to follow the modeling with the stormwater narrative and calculations. The report needs to explain in written detail how the site maintains existing peak flow rates without the use of detention ponds.

B. The calculations and plans indicate that a series of outlet controls are to be utilized in conjunction with oversized storm drains. The modeling does not take into effect the backflow elevation of the weir located downstream. HydroCAD, in this case, assumes that each outlet from each section of pipe is free flowing, when in fact the pipe is obstructed by a flooded condition caused by the pipe being controlled downgradient in the same manner. The applicant needs to verify the hydraulic grade line of the system and the overall impact of the systems (controlled pipe sections) on a whole.

C. The actual control points need to be shown on the post-development drainage plan, along with the locations of the modeled ponds.

D. Several pipe sections appear to be running parallel to obtain the necessary storage. The applicant needs to show by detail how these pipes are to be joined and how the dead end sections (like those from CB-34) are going to be terminated or capped. Will there be clean out capabilities in all pipes?

E. The terminus of the pretreated storm drain from the Vortechnics Stormwater Treatment Tank exits into an existing catch basin. The applicant needs to show how an 18 inch pipe will enter the catch basin and not impact the existing 12 inch cast iron pipe exiting this structure. Public Works should be contacted to determine if there are flooding or plugged outlets that need replacing.

F. It is difficult to determine if there are conflicts with other pipes or utilities because each sewer, storm drain, and road profile does not include all the utilities together with independent stationing. Prior to final, we will need to check all pipe crossings to assure that proper separation is maintained.

G. All wetland or existing watercourses which traverse the site and exit onto abutting land shall be delineated with a minimum 30 foot drainage easement.

H. There are three cross culverts and a few other field culverts that are shown. A brief calculation should be included to show that adequate sizing was performed, especially where it involves a stream, wetland crossing, or impact to a neighboring lot owner.

I. All of the study control points appear to be analyzed as concentrated or channel flows. The applicant's engineer should discuss even if there is no or little impact the receiving areas off site prior to entering the Presumpscot River. Are there road culverts to cross, private drainage structures or pipes to convey drainage through, etc.?

2. <u>Road Access/Circulation</u>

A. All horizontal curve information needs to be placed on the plans. The current plans do not label curves, PC, or PT stations, nor do they label return fillet curves when intersecting with an existing City street.

B. A typical road cross section is also required to show material base depths, road cross slopes, sidewalk and esplanade widths.

C. Several areas are compounded with deep fill sections; these areas should be protected with guardrails for both the sidewalk pedestrians and vehicles.

D. Several other areas will require ledge blasting or cuts through areas with a reasonably high water table. The sections of roadway being constructed in these areas prone to groundwater outbreaks or inundation shall require the installation of underdrains. These underdrains shall be deep enough (3 foot minimum) to drain the subbase material.

E. Street names will be required for the small sections stubbing of the main roadway. All road names shall be approved by the City of Portland and 911 Emergency Departments as soon as possible. Will the main road be "True Street", or a new name? Currently, it exists on Ocean Avenue at a location where, if True Street were to be extended straight from Presumpscot Street, it would intersect Ocean Avenue. The new entrance off Ocean Avenue could be confusing.

F. The final grade of the proposed section of True Street where it intersects with Presumpscot Street shall be less than 3% for at least 50 feet from the Presumpscot Street edge of pavement. This makes for a safer and easier transition onto the existing street.

G. A pedestrian easement may be needed for the section of sidewalk that avoids a large tree along Ocean Avenue and meanders into the site.

3. **Grading/Erosion Control**

A. Several dwelling units have surrounding grounds that are proposed at very steep grades. My concern is that some come right to the rear of the units, and others have steep drop offs at the end of the yard. All areas shall be protected or landscaped to consider personal safety.

B. Many of the constructed slopes are to be built with fill material at slopes averaging 3:1 sideslopes. The applicant shall add details depicting materials, compaction, and erosion control fabrics, or mulches to assure erosion will not occur during construction.

C. The erosion control notes shall include a section of erosion controls for construction across wetlands and watercourses during installation of culverts.

D. The erosion control notes shall also include milestone dates or periods for key components of construction. This should include road development, unit construction, and off road grading.

E. The erosion control notes shall also address dust control and street sweeping during construction phases where trucks will be entering and exiting the site frequently.

F. One section behind Building #13 has a ditch, which drains runoff from a ledge cut area and directs it out over the paved road entrance to this unit. This needs to be corrected, either by field inlet or culvert.

G. A level-lipped spreader detail is indicated, but the location is not marked on the plans. Also, all aprons and level lipped spreader shall include calculations for riprap and dimensional sizing.

4. **Utility Installation/Location**

A. The sanitary sewer profiles show several drop manholes. Several of these may not be needed if pipe slopes are adjusted accordingly. If, due to steep grades, some are needed, the engineer needs to show by detail how the drop will be constructed.

B. A typical manhole for a sanitary sewer is needed.

C. A detail of the catch basin grate to be used is also required.

D. Will natural gas be extended on Ocean Avenue to serve the units?

E. The detail for the depth to the water main shows 5 feet; it should be 5.5 feet.

F. The geotechnical report recommends foundation drains. They shall be indicated on the plans with their approximate outlet elevation.

G. How will each building be served by electricity? Will each building have its own transformer? This will need to be worked out with Central Maine Power.

H. Does the owner/applicant have permission to blast and regrade under the existing power line easement?

5. **Additional Concerns**

A. The landscaping plan is very difficult to read due to the scale of the plants on the drawing. Each pocket of individual plant species should be abbreviated with the number proposed to be planted at one location.

B. Prior to final plan, we need to verify that adequate finish floor elevations have been set on each unit.

C. It appears that Buildings 1 through 4, 10 through12, and 15 through 18 may not have adequate dumpsters to serve them. The applicant needs to address waste removal locations for the units.

D. Lighting fixtures need to be shown and approved by the planning staff. No details of the light fixture were shown.

E. A typical cross section of the recreational facility playing field is needed.

F. A sidewalk or walk path should lead directly to the playing field from the main sidewalk network.

G. A detail is needed for the typical keystone marginal block wall construction. A long section of wall is proposed to assist grading and is required for review.

H. The Blasting Plan shall be reviewed by a Geologist, or specialist in seismic vibrations as designated by the City to assure the relative safety of blasting procedures has been met.

There are several features of the project which need to be addressed in more detail. Understanding the components of the stormwater is critical. Other utility situations, I believe, can be easily rectified. The best way for the applicant to address several of these issues is to meet with the staff and myself and go through them individually. I will try to attend the meeting and answer any questions you or the applicant may have. Please forward to the designer and/or engineer as soon as possible so that they can at least have a chance to see our concerns prior to a meeting discussion.

JRS:jrs/jc