AGENDA

June 21, 2011

Town Hall Auditorium - 6:30 PM

MINUTES:

1. Approval of minutes from the 5/17/11 meeting/public hearing.

NEW BUSINESS:

2. **Town of Milford/Conservation Commission and Anne M Zahn Rev Trust, Trustee – Hartshorn Mill and Mont Vernon Rd – Map 2, Lots 28-2 & 29.** Public Hearing for a lot line adjustment. (New application)

3. **Soiland, Inc. and State of NH, DOT – Hayden's Ln and Buxton Rd – Map 8, Lots 38, 39, 65, & 69-1.** (New application)
   - Public Hearing for multiple lot line adjustments, eliminating parcel 8/69-1, and
   - Waivers from Development Regulations Article V, Sections 5.06.K & I.

4. **James, Beverly & Scott Brown – Union St – Map 42, Lot 37.** Public Hearing for an amendment to a conditionally approved site plan to revise the phasing schedule. (New application)

5. **East Milford Self Storage/Birdland Properties LLC – Nashua St – Map 32, Lots 23-2, 23-3, & 23/5.** Public Hearing for a major site plan to construct a multi-building self storage facility with associated site improvements. (New application)

OLD BUSINESS:

6. **Pine Valley Subdivision/37 Wilton Road Milford LLC & Pine Valley Business Center-Wilton Rd –Map 6, Lot 14.** Design review of a proposed subdivision creating ten (10) residential lots. (Tabled from 5/17/11)

NEW BUSINESS (Cont'd):

7. **Pine Valley Subdivision/37 Wilton Road Milford LLC, 282 Route 101 LLC & Etchstone Properties, Inc. - Wilton Rd –Map 6, Lot 14.** Public Hearing for a proposed subdivision creating ten (10) residential lots. (New application for final plan)

OTHER BUSINESS:

Future meetings:

06/28/11 Worksession
07/12/11 Worksession
07/19/11 Regular meeting

The order and matters of this meeting are subject to change without further notice.

MILFORD PLANNING BOARD MEETING (Draft)
May 17, 2011 Board of Selectmen's Meeting Room, 6:30 PM

Members present:
Janet Langdell, Chairperson
Paul Amato
Kathy Bauer, BOS representative
Steve Duncanson
Judy Plant
Susan Robinson, Alternate member

Excused:
Tom Sloan, Vice chairman member
Gary Williams, Alternate
Chris Beer

Staff:
Sarah Marchant, Town Planner
Shirley Wilson, Recording Secretary
Feral McElreavy, Videographer

Rod Watkins, Perspective member

MINUTES:

1. Approval of minutes from the 2/15/11 meeting/public hearing.

NEW BUSINESS:

2. **Pine Valley Subdivision/37 Wilton Road Milford LLC & Pine Valley Business Center-Wilton Rd –Map 6, Lot 14.** Public Hearing for design review of a proposed subdivision creating ten (10) residential lots.

Chairperson Langdell called the meeting to order at 6:30PM, introduced the board members and staff and reviewed the ground rules for the meeting.

MINUTES:
P. Amato made a motion to accept the minutes from the 2/15/11 meeting. S. Duncanson seconded and all in favor.

NEW BUSINESS:
Pine Valley Subdivision/37 Wilton Road Milford LLC & Pine Valley Business Center- Wilton Rd –Map 6, Lot 14. Public Hearing for design review of a proposed subdivision creating ten (10) residential lots.
Abutters present:
Karen Legault, 24 Maple St

Chairman Langdell recognized:
Jay Heavisides, Meridian Land Services, Inc.
Kevin Anderson, Meridian Land Services, Inc.
Andy Prolman, Prunier & Prolman, PA
Kevin Slattery, Etchstone Properties, Inc.
Jaron Slattery, Etchstone Properties, Inc.
Eli Levine, Pine Valley Mill
Mark Prolman, 37 Wilton Road Milford, LLC

K. Bauer noted the close proximity of this project to the Wilton town line and business district and that the lots will be serviced by Wilton water. S. Duncanson made a motion that there was potential regional impact associated with this application to the town of Wilton. J. Plant seconded and all in favor. J. Langdell noted that the application was in order, according to the staff memo dated 5/17/11. S. Duncanson made a motion to accept the application. P. Amato seconded and all in favor. S. Wilson read the abutters list into the record.

J. Heavisides presented plans dated 4/18/11 and described the proposed 10- lot subdivision across from the Pine Valley Mill on parcel 6/14. The ZBA granted a variance for the ten (10) residential lots on 3.4 acres in the ICI zone. There will be a municipal through road and municipal utilities with Wilton water and Milford sewer coming off Wilton Rd. One of the unique features of this parcel is an eight (8') ft diameter penstock coming from the dam, going under the railroad, crossing the property, going under Wilton Rd, passing through the parking lot at Pine Valley Mill, and finally going into the turbine room. It's the former location of an open channel that back in the 70's or 80's was covered with an eight (8') ft steel pipe and this has presented some design challenges on the site. The property has very nice gravel soils and we do have good depth for the seasonal high water at seven (7) to eight (8) feet down. The problem is that, for drainage, we will have to either go over or under the penstock that is only down about two (2) ft. To go underneath, we would have to go down about fourteen (14') ft, so we are proposing to take some of the drainage structures and methods on individual lots. We are proposing storm chambers on the lots and within the ROW. These buried plastic structures will recharge the water back into the ground and they work well, but this will be the first instance proposed on a town road in this area. We have had discussions with the Wilton Water Commissioners about the line size and it was suggested that we put a 12" line in the subdivision like the proposed 12" main on Wilton Rd. Usually a 6" or 8" line is sufficient for a large subdivision, so there will be more discussion. There are two fire hydrants, one at each end so we already have a connection out to the main water line. We were thinking of just looping that around but it will come down to the capacity of the existing water main and the flow rates and pressures.

P. Amato inquired how far east Wilton water came. J. Heavisides said to the mill and noted that the Mill's fire protection system had been resolved. A. Prolman asked if Falcon Ridge was tied into the Wilton water system. J. Heavisides said no, because of the elevation those lots are on individual wells and Milford sewer. S. Marchant clarified that the Frog Pond dam has recently been fixed and is now a fully functioning pond that does feed down into the hydrant behind the mill.

K. Bauer inquired about the unbuildable area along the southern edge of the parcel. J. Heavisides said years ago there was a building there and when the railroad gave the land to the next owner, it was deeded with restrictions. It is still useable, just not buildable. P. Amato asked how much of the .25 acres was actually buildable and who

would own that land. J. Heavisides replied that the homeowner will own all the land and he was not sure of the size of the buildable area. He referenced sheets sp-1 & 2 for the lot layouts saying we've addressed the issue in that there is enough room for the houses and a deck with a big back yard. K Bauer said that the property owner wouldn't be able to put a shed in their backyards. J. Heavisides said not in the no-build area.

P. Amato asked about drainage on the four lots on the east side. J. Heavisides said Dennis LaBombard, a structural engineer from Hollis, has designed a concrete enforcement to be poured over and around the penstock at the driveway crossings. K. Anderson explained that we have permission to use the concrete bridge structures stored on site and the calculations were approved for residential loading. They are not considered a bridge because you can't see under the reinforced structure that will be laid within the ground. The compaction of soils and flowable fill will be used to support the structure so that there will be no pressure on the penstock; however, these will not able to hold the E-2 highway ratings of 66,000 pounds. The reinforcement feature will be about forty (40') feet long. P. Amato asked what would happen if a ladder truck drove over the penstock. K. Anderson said a typical driveway couldn't support a ladder truck and we haven't had to design other driveways for E100 loading. In the failure of a typical driveway a fire truck would stuck, here the concrete would break or crack but it would not a big failure as the span is only eight (8') ft. J. Langdell asked who's responsibility it would be to fix the concrete. J. Heavisides said there would be an easement or deed restrictions.

A Prolman said there is a working draft of a penstock agreement which will be submitted for review and approval by town counsel. The penstock is tied to the mill so the mill owner would ultimately be responsible for making sure the penstock is operating properly. The penstock runs the turbine to make electricity that is sold to PSNH and it would be in their best interest to do so. There will be an easement agreement in place which makes the mill owner responsible for maintenance, inspection, and repair. At the same time you can't have owners putting in a pool right over the penstock so there will have to be some reciprocity for use and responsibilities. K. Bauer inquired if the mill owner was in agreement with how the driveways were designed now. A. Prolman answered yes, because the owner is the same for both properties and together with the builder, we are working on this penstock agreement. Any future owner of the mill will have to agree with the rights and responsibilities of this agreement, by default. P. Amato said in as much as the entire penstock and all properties are controlled by one entity, why not leave it like a PSNH easement and just not do anything there but come in with a short dead end road for those lots. J. Heavisides said they've looked at a dead end road and didn't think the Town would want that. You end up with just as much pavement without gaining anything and there would be possible DPW plowing issues. The loop road makes more sense to be able to drive right through and it uses the location at the existing drive out to the back of the lot. He also referenced staff comments regarding the intersection with North River Rd. P. Amato said the language will have to be worked out so that the town is not liable when an oil truck or fire truck makes a mistake. It is important to not burden the future homeowners as the penstock becomes a detriment to their property. J. Heavisides said we are trying to address the foreseeable things that can happen.

P. Amato brought up the entrance across from North River Rd. J. Heavisides explained that back when this penstock was a canal, a bridge structure was built at North River Rd where the guardrail is. We tried to keep it as close to 90° as possible and there is improvement. The current radius between North River Rd and Wilton Rd is about 10'-15' and that radius will be increased so that fire apparatus can go around it and the striping on North River Rd will be realigned. J. Langdell said these improvements will actually swing North River Rd a little further away.

K. Slattery said we are all on the same team. Dennis LaBombard is a highly respected engineer that was also involved with Falcon Ridge. The existing pre-stressed structures are nothing but an eyesore right now and it is prudent to utilize them. Those structures, with additional reinforcement and with certified stamped plans will be able to cross that penstock. We'll never get to 66,000 lbs; we will get to 6,000 or 8,000 lbs and we are prepared to put a placard up stating that section of the driveway that will be limited. It will be clearly delineated as concrete where the rest of the driveway will be asphalt or aggregate. By way of visual awareness and placards, the limits to that panel will be quite evident. We will work with the Fire Department and Dennis feels confident we will meet their needs and most important for ambulatory access.

P. Amato inquired if it would support the construction vehicles. K. Slattery said they will access the site through the back where the sewer will be fed and we will be very careful. P. Amato then asked if the structure will

support fuel trucks. K. Slattery said the house will be accessible by hoses. It is not unusual to drag the hoses from the street and the sub-surface tanks will be placed for easy accessibility. Frankly, we have the same concerns because we have to sell the homes, so we are sensitive to limiting the homeowners' burdens. J. Langdell brought up weights for UPS and FedEx delivery trucks. K. Slattery said she raised a good point but there are existing bridges on public roadways that don't have that capacity and reiterated that this will be designed for everyday use and ambulatory access. We will meet with the Fire Department and try to come to a compromise. S. Duncanson also expressed concern with the penstock crossing for a wrecker or flatbed truck responding broken down vehicle. How would you get the car out because that would be over the weight limit? J. Plant brought up a motor home. P. Amato asked the applicant to do some research and come back with examples of the 6,000 pound weight limit. J. Heavisides said he will also ask Dennis what he used for a design vehicle. P. Amato said maybe we should not get too locked into using the existing structures because a new structure might get double the weight.

P. Amato suggested the possibility of a permanent access easement to the property through the rear along the back of the property. K. Slattery said grass over structural gravel could be a possibility. P. Amato said that future owners may not understand the restrictions and we don't want to lock somebody out of their property. K. Slattery said it will be very important that they make sure the appropriate disclosures are in place. J. Langdell reiterated concern for future owners.

J. Plant asked if the Wilton Fire Department should be involved in the discussion as well. J. Langdell agreed saying that they provide mutual aid and there should be communication between departments. This also plays into the potential regional impact which has already been determined.

J. Heavisides brought up item #1 from the MFD memo dated 5/2/11 and explained the problem with tapping into the penstock as a dry hydrant. There is not always water going through the penstock, it gets shut off at the dam. It generates best in fall, winter and spring if the high water doesn't back up at the outlet. Also, if there is water in the penstock, he is not sure what the pressure would be, so he would be very hesitant to even consider using the penstock as a fire cistern. There are two fire hydrants are on the street now. S. Marchant said that Water Utilities checked the pressure about two weeks ago and everything went well; there was sufficient pressure for the test. J. Heavisides requested a copy of the results. S. Marchant said there were reasons for an additional water source that were not detailed in the Fire Department's memo that may have had something to do with the existing, very old water main coming from Wilton. Information on both should be forthcoming and discussion followed.

J. Langdell asked what type of maintenance there would be for the individual stormwater drainage apparatuses. J. Heavisides said there would be very little that would have to be done to the proposed 12" diameter lawn catch basins. He explained the drainage flow and said the owner will occasionally have to check if sand is accumulating and clean it out with post hole diggers. They have a depth of about five (5') ft. P. Amato asked about the groundwater. J. Heavisides said the seasonal high is about seven (7') ft and we didn't hit water until nine (9') ft in December with snow on the ground. J. Langdell noted that there was an alternative drainage system suggested. S. Marchant said that was brought up by DPW and Fred Elkind during the interdepartmental review meeting and the idea was to just flow all the water along the back edges of the property into the parking lot and let it sheet flow over the parking lot to clean before it goes into the Souhegan River instead of all these catch basins. J. Heavisides said that's what they are doing for the four lots on the east side, but the penstock is a big obstruction; it's not like a normal drainage pipe that we can go around or reroute, we have to stay underneath. This design also avoids the Shoreland Protection area. If this were a commercial site plan, there wouldn't be a question about putting the recharge chambers underneath the parking lot, but problem here is that we're proposing the town to take over a part of this. That is why we met with DPW months ago to get their input. J. Langdell said it is very new and different to have the drainage catch basins and the concrete structures for the penstock on the individual lots. Homeowners will need to know what they can and cannot do and there is a maintenance issue.
J. Heavisides said rain gardens were suggested in the staff memo; however, because of the size of the lots, 10,000-15,000SF a rain garden would take up a lot of space and most likely the homeowner would not like the landscaping. With these basins, all you see is a one foot catch basin. The lawns will be nice and flat and there are no sharp swales or ditches. Once the lawn is established there shouldn't be any dirt getting into the basins and erosion control measures will be in place during construction. P. Amato asked if conventional drainage could be done on the three lots in back to reduce the number of systems. J. Heavisides said they could look at sheeting the

water back towards the non-buildable area. He then described the four (4) 30" catch basin systems in the town ROW and noted that there will possibly be a drainage easement on one of the lots. S. Marchant said, as a side note on drainage, NH DES released their new Homeowners Guide to Stormwater Management last week. This is the new way and homeowners are going to have LID stormwater features on their property and we will be seeing more and more of these types of things because you're not allowed to have runoff. A lot of our practices will have to change with the new MS4 stormwater permitting. J. Langdell asked what would have to be done for maintenance from a DPW perspective for these four systems in the ROW. S. Marchant replied that currently we clean 90-95% of our catch basins once a year with a clam digger, but with the new stormwater permit, it appears cleaning will become mandatory twice a year using a vacuum truck.

K. Bauer referenced the elevated driveway access on four lots to accommodate the penstock. J. H. said the driveways would be built up approximately two (2') ft and over about the length of one car. S. Marchant clarified that she used the word elevated instead of bridge. The lot is relatively flat; there are no slope issues whatsoever for the driveways and there are specific standards that the driveways will have to meet.

J. Langdell noted that the Board received a letter dated 2/23/11 from the abutters on the westerly side and tonight Chairperson Langdell read an additional email from Todd Goodnow dated 5/17/11 into the record, requesting a privacy fence along the property line. J. Langdell referenced the staff memo and asked who will maintain this fence. J. Heavisides said the plan shows an eight (8) ft. fence, but it will be reduced to six 6) ft. so that a building permit won't be required. Ultimately the new land owner would be responsible for maintenance of the fence. J. Langdell inquired if there would be deed restrictions for future owners. J. Heavisides said no it would be treated like any other fence and a brief discussion followed.

S. Duncanson inquired about the ownership of the roadway on lot 6/14-11. J. Heavisides said it provides access out to the dam and to the separate landlocked parcel on the other side of the railroad tracks. J. Langdell noted the zoning administrator's comments that there is the potential for development at some point in the future. J. Heavisides said we are required to provide access to the dam and this existing roadway provides access over a legal railroad crossing, so it could handle traffic for future development. A. Prolman clarified that lot 6/11 would stay in the ownership of the mill until such time as lot 6/15 becomes developed and then it would ultimately become a town roadway. Currently it is in the ownership of 37 Wilton Road Milford, LLC.

K. Bauer inquired if there has been consideration for a fence abutting the railroad tracks. K. Slattery showed the proposed fence styles envisioned for three (3) locations around the development. A black six (6') foot chain link fence would be most appropriate for the area along the railroad land. Rather than providing total privacy, it would be important for those homeowners to be able to see through it in the event a child would get on the other side. Along the front is another important area and a six (6') scalloped top, fence with spacing is proposed to serve as a buffer for the backyards for those lots that front the new road. The property line is about ten (10') feet from Wilton Rd and we may soften it periodically with an arborvitae. There would be a six (6') cedar fence on the western side for the abutter. There is a fair amount of fencing going on this small project. S. Duncanson asked if a fence was allowed in the no-build area. J. Heavisides said he believed so. J. Plant asked for clarification of what can and cannot be done in that no-build area; can a moveable shed or fence go in. A. Prolman said he will research the deeds and provide that information. K. Bauer asked if a fence fell under our definition of structure. S. Marchant replied yes, but not necessarily under that private agreement. The no-build clause on that land is strictly and only dictated by the private easement. The town will not be responsible for enforcement in any way and going forward it will not be the town's responsibility to police this no-build area.

J. Langdell stated that the applicant has elected to develop this site utilizing the new Open Space and Conservation District regulations. J. Heavisides referenced the staff memo and said there is the possibility for a bus stop area or sidewalks. S. Marchant noted that there is an existing sidewalk approximately 1,000ft to the west. J. Heavisides said he wasn't sure if a sidewalk made sense here because you would have to connect it without potential for development on all the lots in between and it would have to come out of the town's general improvement funds. J. Langdell said we are trying to be proactive and there are a significant number of people who walk along Wilton Rd from that neighborhood. J. Heavisides explained the logistics of working around the "bridge" at the penstock for a sidewalk and added that we'd have to figure out drainage if there will be curbing. P. Amato added that DPW would have to maintain that sidewalk. J. Langdell said there is a way to delineate

walking areas by striping. J. Heavisides said the gravel shoulder in the ROW could be paved, but inquired if they could get credit for open space if it wasn't on their property. K. Bauer asked if the applicant could do 0%. S. Marchant replied yes and noted that was part of the discussion during the zoning ordinance changes. It could be done if it met the criteria listed. J. Langdell inquired about on-site improvements and asked if this is an area where the Conservation Commission would want a trail going along the Souhegan River? S. Marchant said she could ask again, but they did not request anything at this time. J. Langdell brought up a potential transit/bus stop. J. Heavisides said there is room where the parking lot area is and not much would have to be done to designate that area as a stop with a shelter. P. Amato asked if there were any other bus stops in town. S. Marchant said the idea is to reserve an easement for that area, we are not requiring construction of a bus stop. The advantage of going with the open space design here is reduced frontages, not more density. The maximum 15% is in case there are specific features the Board is interested in preserving and although sidewalks in the ROW wouldn't count towards the 15% that would certainly be something for the public good. P. Amato noted that there wasn't any open space on the plan and having a place for a future bus stop makes complete sense, while he doesn't think sidewalks would accomplish a whole lot. J. Langdell noted that with a 50ft ROW, there is sufficient space to pave and stripe for sidewalks. A brief discussion regarding future development followed. There was also discussion pertaining to the existing bridge on Wilton Rd.

Chairperson Langdell opened the discussion for public comment.

K. Legault expressed concerns about the current unsafe walking conditions in that area of Wilton Rd and she would greatly appreciate any improvements. She would also rather see an attractive walking area going towards the river as we don't have that many people who would be looking at bussing. Walking space and the ability to enjoy the land would be an improvement for the neighborhood across the street. J. Langdell referenced the earlier discussion as to whether this was a high area for the Conservation Commission's trail system although it has not been shown on any of their maps. S. Marchant added that the question was posed to Conservation Commission and they did not respond that they wanted a trail, but she would certainly ask again. K. Legault asked if the commission could be invited down to see the pretty area. It is part of something that we should be looking to protect, preserve and be proud of. J. Langdell suggested that Ms. Legault call Fred Elkind of the Conservation Commission.

K. Bauer inquired if staff had received any comments from Water Utilities prior to the meeting. S. Marchant replied that she had not.

J. Langdell noted that these would be considered "more affordable" homes and asked if there were any styles yet. K. Slattery passed around the renditions that were used for the ZBA meeting. They will be smaller split level homes with two bedrooms upstairs and garages. The four lots on the other side of the penstock will be different, a conventional two story home and garage under, due to the topography. Upgrades to a three bedroom will be available at purchase or as an easy basement finish in the future. The designs will be 1,000 to 1,400 SF of finished space and the "Warren" model is very popular in our development in Pepperell.

S. Duncanson inquired how to stop teenagers from crossing over the railroad tracks and causing havoc with the dam and such. J. Heavisides said it is gated and currently in use, so nothing is new. S. Duncanson said there will be easier access with a new road and noted that the Fire Department is requesting a Knox Box.

P. Amato suggested that the applicant take the input from the Board to look at whether there are any options for the open space and what they'd like to bring back; possibly showing space on the plan for a future bus pull off on either lot and to speak to DPW to look into the possibility of extending and striping the pavement along Wilton Rd. S. Robinson suggested trail access. J. Heavisides said there is not really a good spot for trail access. P. Amato said we also have to be careful that we are not providing access to somebody else's property. The railroad owns that property not the developer. J. Langdell said she would be more inclined to move forward with trail access and water lookouts if our Conservation Commission had some plan for a connection to other areas such as the Frog Pond. J. Heavisides reiterated that the easement on the railroad's land is to access the dam, not for pedestrian or trail access and once you bring people over to the other side of that land, you are bringing them to the dam. There is also Shoreland Protection area to consider.

K. Legault asked if there was any way to include communication and cooperation between herself, the developer and Conservation to see what proposals can be brought about. Could the applicant check to see if there are options available, and maybe they could bring something forward. J. Langdell said that the developer and applicant's team can do so if they want and we will also put in a request to the Conservation Commission. P. Amato reiterated that we are looking only at the lot before us, 6/14. K. Legault said if the Board is considering a bus stop on the parking lot area and asking them to come forward with ideas, that we also say let's look at what else you have to offer right there that is potentially being ignored or dismissed because it may be steep. There are easements giving access across the railroad property for some things that are very vague to me that could be enlarged to include walking trails. If we got someone from the Conservation Board down there, we may find there are other options available. J. Langdell suggested contacting Sarah and Fred to develop some other ideas and if the applicant wants to connect, they can do so through Sarah.

S. Marchant said that internally, Police and DPW should sit down to discuss the roadway concerns because she didn't think that we are all internally on the same page and that is an important internal discussion for us to continue before the applicant comes back with a revised plan. J. Heavisides said he can provide a sight distance profile for where the centerline is now to help. J. Plant said there is a lot of traffic using that road to avoid the light and a discussion on Elm St traffic followed.

K. Bauer mentioned the access road discussed earlier for heavy vehicles like fire trucks for the houses behind the penstock and asked if that was a serious possibility. J. Heavisides said there will be a sewer line back there and typically the Town wants to have a sewer easement over it. Maybe we could do something like at the Falcon Ridge development; a gravel road with loam on top so it still looks like a lawn but can be driven across. Twelve (12') feet wide should be sufficient. P. Amato asked if the future owners would have access to that. J. Heavisides said we'd have to work that out. A. Prolman said it might not be on the homeowner's property. K. Bauer said that wouldn't help for fire trucks. J. Heavisides said it would be for the homeowner's use and we will find out what the weight limitations would be.

P. Amato made a motion to table the application to the June 21, 2011 meeting. J. Plant seconded and all in favor.

OTHER BUSINESS:
J. Langell noted that there will be a joint meeting on 5/24/11 with the BOS, Planning Board, Conservation Commission, TIFD, EDAC, ZBA, the School Board and the Water/Sewer Commissioners to entertain discussion on Milford's priorities for the CIP and regarding potential development regulations and guidelines for the Brox area in the west end of Milford.

The meeting was adjourned at 8:35PM.

MINUTES OF THE MAY17, 2011 PLANNING BOARD MEETING APPROVED ____, 2011

Motion to approve: _____

Motion to second: _____

_____ Date: _____

Signature of the Chairperson/Vice- Chairperson:

DRAFT

STAFF MEMO

Planning Board Meeting

June 21, 2011

Agenda Item #2: Town of Milford/Conservation Commission and Anne M Zahn Rev Trust, Trustee – Hartshorn Mill and Mont Vernon Rds – Map 2, Lots 28-2 & 29
Public Hearing for a Lot Line Adjustment

Background:
The applicants are before the Board to adjust the lot lines between Town owned lot 2-29 with Hartshorn Pond and the revitalized Lion's Park , and lot 2-28-2. The lot line adjustment will expand the Town's property to include a 2 acre parcel along the frontage of Hartshorn Pond on the western edge. There are no new lots being created.

As with the rest of lot 2-29 the 'Parcel A' will come under their management. When Conservation came to the Planning Board to discuss this potential lot line adjustment last year they noted that there are future plans to expand the picnicking area to the land on the western edge of the pond, if sufficient access can be made across the dam.

Please find the attached plan.

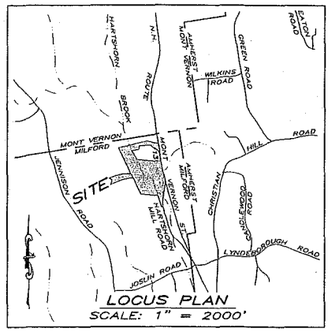
Interdepartmental Reviews:
Conservation Commission – Conservation supports the proposed LLA.

Water Utilities, Heritage Commission, Fire, Police, Code Enforcement and DPW all have no comment on the proposed LLA.

Staff Recommendation:
Staff has no issues with the proposed lot line adjustment. If the Board chooses to conditionally approve the lot line adjustment the following items will need to be updated on the plan prior to final approval:

1. The notes on the plan under the lot numbers 2-28-2 and 2-29 stating (see note 6) and (see note 7) should be updated to reference notes 7 and 8.
2. Notes be added stating this property is not within the Groundwater Protection District, and stating whether or not this property lies within the Floodplain.

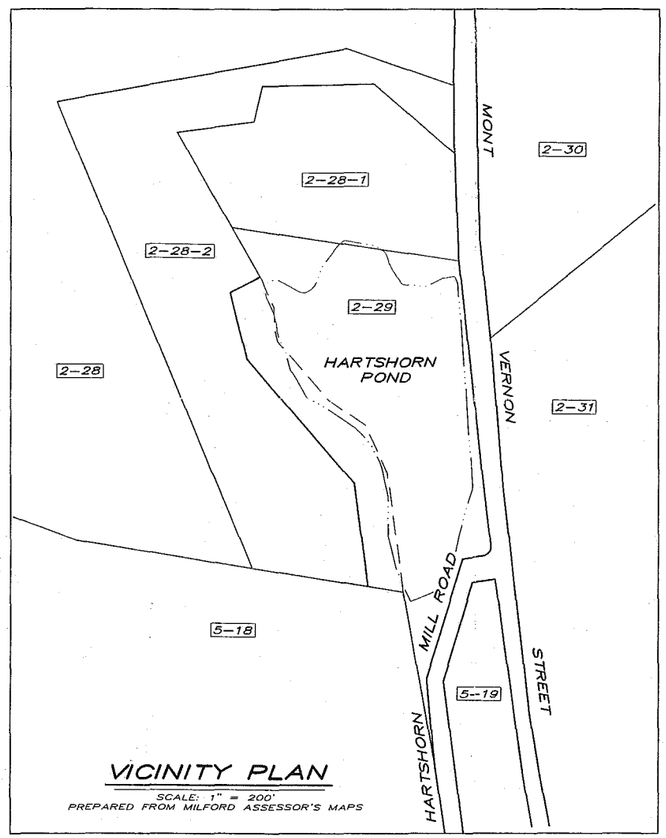
Image taken April 2010



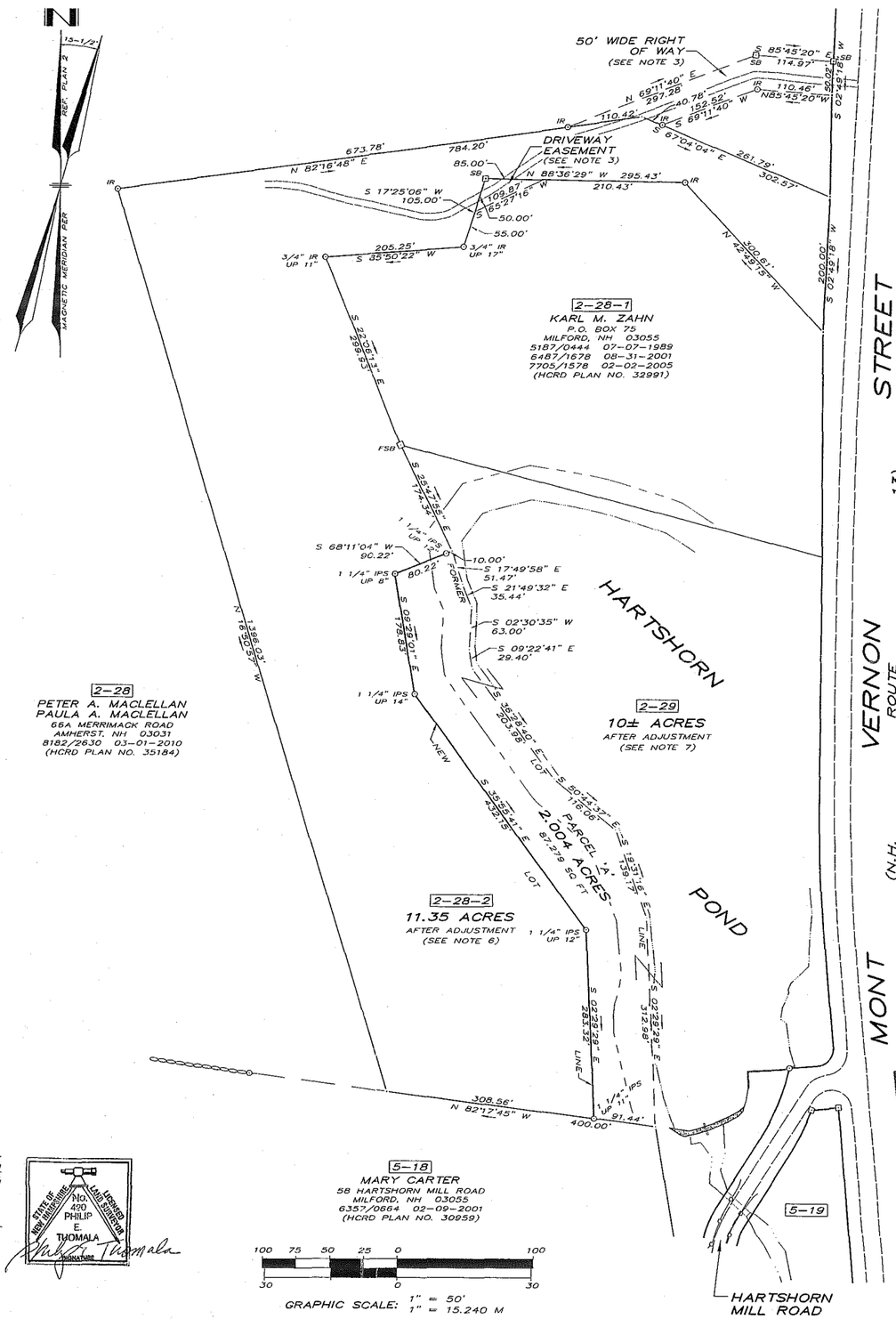
LOCUS PLAN
SCALE: 1" = 2000'

ADDITIONAL ABUTTERS

LOT #	NAME & ADDRESS
2–30 & 2–31	WILKINS LUMBER COMPANY P.O. BOX 393 AMHERST, NH 03031
5–19	THOMAS A. WILKINS SALLY E. D. WILKINS 28 GREEN ROAD AMHERST, NH 03031



VICINITY PLAN
SCALE: 1" = 200'
PREPARED FROM MILFORD ASSESSOR'S MAPS



REFERENCE PLANS:

1. "LOT LINE ADJUSTMENT AND ROAD RELOCATION PLAN, LOT 2–29 TOWN OF MILFORD CONSERVATION COMMISSION AND LOT 5–19 THOMAS A. WILKINS, SALLY E. D. WILKINS, MILFORD, NEW HAMPSHIRE" SCALE: 1" = 40' DATED NOVEMBER 17, 2008 REVISED APRIL 13, 2009 PREPARED BY THIS OFFICE (HCRD PLAN NO. 36394).
2. "LOT LINE ADJUSTMENT PLAN OF LAND SUBDIVISION PLAN OF LAND, TAX MAP #2 LOTS 28, 28–1, CHARLES T. & ANNE M. ZAHN, KARL M. ZAHN, MILFORD, NH" SCALE: 1" = 100' DATED NOVEMBER 23, 2003 REVISED JANUARY 5, 2004 PREPARED BY HILLSBOROUGH COUNTY LAND SURVEYORS (HCRD PLAN NO. 32991).
3. "PLAN OF LAND, PROPERTY OF TOWN OF MILFORD, MILFORD CONSERVATION COMMISSION, ROUTE 13, MILFORD, NEW HAMPSHIRE" SCALE: 1" = 100' DATED FEBRUARY 24, 1998 LAST REVISED MAY 5, 1998 PREPARED BY NEW ENGLAND FORESTRY CONSULTANTS, INC. (HCRD PLAN NO. 29206).

NOTES:

1. OWNER OF RECORD OF LOT 2–28–2 IS THE ANNE M. ZAHN REVOCABLE TRUST, ANNE M. ZAHN, TRUSTEE, P.O. BOX 75, MILFORD, NH 03055.
2. TITLE REFERENCE TO LOT 2–28–2 IS HCRD BOOK 7808 PAGE 2944, DATED FEBRUARY 8, 2007.
3. LOT 2–28–2 HAS THE BENEFIT OF A 50 FOOT RIGHT–OF–WAY ON LOT 2–28 (SEE BOOK 8182 PAGE 2630) AND A DRIVEWAY EASEMENT ON LOT 2–28–1 (SEE BOOK 7409 PAGE 0919). SAID EASEMENTS INCLUDE THE RIGHT FOR THE INSTALLATION OF UTILITIES.
4. OWNER OF RECORD OF LOT 2–29 IS THE TOWN OF MILFORD, 1 UNION SQUARE, MILFORD, NH 03055.
5. TITLE REFERENCE TO LOT 2–29 IS HCRD BOOK 2467 PAGE 0362, DATED JULY 15, 1976.
6. ZONING DISTRICT IS RESIDENCE 'R'. MINIMUM LOT SIZE IS 2 ACRES, MINIMUM LOT FRONTAGE IS 200 FEET ON A PRINCIPAL ROUTE OF ACCESS. MINIM SETBACKS ARE 30 FEET FROM THE FRONT LOT LINE AND 15 FEET FROM THE SIDE AND REAR LOT LINES. A 50 FOOT BUFFER SHALL BE MAINTAINED FROM HARTSHORN POND.
7. BOUNDARY INFORMATION FOR LOT 2–28–2 WAS OBTAINED FROM REFERENCE PLAN 2 AND IS NOT THE RESULT OF A SURVEY BY THIS OFFICE. PARCEL 'A' IS THE RESULT OF A SURVEY BY THIS OFFICE.
8. AREA OF LOT 2–29 BEFORE ADJUSTMENT (8± ACRES) WAS SCALED FROM THE TOWN OF MILFORD ASSESSOR'S MAPS.
9. THE INTENT OF THIS PLAN IS TO ADJUST THE LOT LINE BETWEEN LOTS 2–28–2 AND 2–29. PARCEL 'A' IS NOT TO BE CONSIDERED A SEPARATE BUILDING LOT, BUT IS TO BE ANNEXED TO AND BECOME A PART OF LOT 2–29.

OWNER'S SIGNATURE LOT 2–28–2

ANNE M. ZAHN, TRUSTEE _____ DATE _____

OWNER'S SIGNATURES LOT 2–29

TOWN OF MILFORD _____ DATE _____

APPROVED
MILFORD, NH PLANNING BOARD

SUBDIVISION #: _____

DATE APPROVED: _____

SIGNED: _____

LEGEND

	EDGE OF PAVEMENT
	EDGE OF GRAVEL
	EDGE OF WATER
	STONE WALL
DHF	DRILL HOLE FOUND
DHS	DRILL HOLE SET
IPS	IRON PIPE SET
SPF	STEEL PIN FOUND
FSB	FIELD STONE BOUND
IR	IRON ROD
SB	STONE BOUND

"I HEREBY CERTIFY THAT PARCEL 'A' IS THE RESULT OF AN ACTUAL SURVEY MADE ON THE GROUND AND HAS A MINIMUM RELATIVE ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND ON ALL PROPERTY LINES.

NOVEMBER 17, 2010
DATE

STATE OF NEW HAMPSHIRE — No. 420 — PHILIP E. THOMALA — LICENSED LAND SURVEYOR

Philip E. Thomala
Signature

GRAPHIC SCALE: 1" = 50'
1" = 15.240 M

TOWN OF MILFORD
RECEIVED
MAY 17 2011
PB ___ ZBA ___ Office: ___

LOT LINE ADJUSTMENT
PLAN OF LAND
LOT 2–28–2
ANNE M. ZAHN REVOCABLE TRUST
AND
LOT 2–29
TOWN OF MILFORD CONSERVATION COMMISSION
MILFORD, NEW HAMPSHIRE

SCALE: 1" = 50' NOVEMBER 17, 2010

MONADNOCK SURVEY, INC. LAND SURVEYORS AND PLANNERS
WILTON STATION – 99 MAIN ST. – PO BOX 607 – WILTON, N.H. 03086
TEL: (603) 654–2345 FAX: (603) 654–9894 WWW.MONADNOCKSURVEY.COM

REV.	DATE	DESCRIPTION	DR	CK

FILE	1596	TYPE	LLA	IDX	1596LLA420	FB	194

STAFF MEMO

Planning Board Meeting

June 21, 2011

Agenda Item #3: Soiland, Inc. and State of NH DOT – Hayden Ln and Buxton Rd – Map 8, Lots 38, 39, 65 & 69-1

Public Hearing for a Lot Line Adjustment

Background:

The applicants are before the Board to adjust the lot lines between several lots of the newly named Hayden Ln (private) and Buxton Rd. Lot 8/69-1 owned by the State of NH will be eliminated, by separating it into parcels A & B. Parcel A will become part of lot 8/38 and Parcel B will become part of lot 8/65. The applicant will also be reducing the size of lot 8/39 by removing 4.4 aces (Parcel C) and merging the land with lot 8/38. Note 11 on the plan details the changes in acres for each of the lots involved.

The final outcome will be to have significantly more acreage for lots 8/38 and 8/65, with the elimination of lot 8/69-1. There are no new lots being created at this time and future expansion of existing businesses on 8/38 will likely require further site plan review.

The applicant has requested waivers from Sections 5.06 I & K of the Development Regulations which require mapping of all wetlands and wetlands buffers on the property, and surveying of all property boundary lines. As the application is for a lot line adjustment with all lots over 5 acres in size and no new lots or structures proposed, the applicant has stated the lot line adjustments will not affect the wetlands on the property. The applicant has surveyed all lot lines in conjunction with the lot line adjustments but has noted some of the outer property boundaries by deed only.

Section 5.020 Waivers reads as follows:

The Planning Board may grant a waiver from a specific section of the Development Regulations in a special case when:

A. The strict application of these regulations would result in peculiar and exceptional practical difficulties or exceptional and undue hardship upon the owner of the affected property; or

B. An alternative site plan or subdivision design approach which meets the purpose of the regulations equally well or better than compliance with the existing regulations.

In either of the forgoing circumstances, the waiver may be granted so that justice may be done and the public interest secured, provided that such waiver will not have the effect of nullifying the intent and purposes of these Regulations, the Zoning Ordinance or the Master Plan.

Please find the attached plan and waiver form.

Interdepartmental Reviews:

Conservation Commission – The Commission has no specific concerns other than the apparent land-locked nature of some of the lots. Significant wetlands exist on lot 8-38 and will require consideration when alterations are proposed.

Zoning Administrator – Parcels 8/38, 8/39, 8/69-1 and 8/65 are currently legal lots of record. Lot line adjustments do not make lots less conforming due to size; lack of frontage on a Class V road or better; or grandfathered/approved uses. Lot line adjustment is appropriate as proposed.

Water Utilities, Heritage Commission, Fire, Police, Code Enforcement and DPW all have no comment on the proposed LLA.

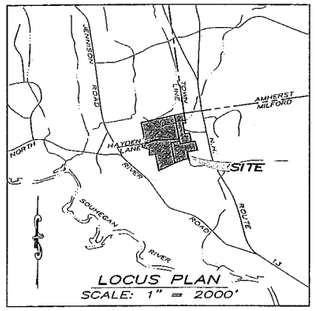
Staff Recommendation:

The Board should review the waiver requests and make a decision on both waivers in accordance with Section 5.020 Waivers. The attached waiver form touches on the hardship associated with both waivers but does not attempt to explain how the granting of this waiver will ensure the 'public interest [is] secured' as required by section. The Board should ask the applicant to clarify this portion of the requirements prior to making a decision.

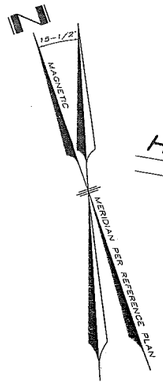
Staff has no issues with the proposed lot line adjustment. If the Board chooses to conditionally approve the lot line adjustment the following items will need to be updated on the plan prior to final approval:

1. New notes be added referencing the granting of waiver from Section 5.06I & K of the Development Regulations, if the Planning Board grants them.
2. If the Planning Board does not grant the waivers full wetlands, wetlands buffers and survey information on all boundaries will need to be displayed on the plans.
3. The roadway name on the plans be updated to Hayden Ln in accordance with the E-911 naming in process on the private way.
4. Notes be added stating this property is not within the Groundwater Protection District.

Image taken April 2010



LOCUS PLAN
SCALE: 1" = 2000'



COMPOSITE PLAN
LOTS 8-38, 8-39, 8-69-1 AND 8-65
SCALE: 1"=100'

ABUTTERS LIST

8-35	THOMAS E. CURTIS 41 JOSLIN ROAD MILFORD, NH 03055
8-37	RICHARD W. ALLTOP 7 JENNISON ROAD MILFORD, NH 03055
8-40	VITO ZILENSKI MAE PROVENCHER 34 JENNISON ROAD MILFORD, NH 03305-4210
8-41	CHARLES J. ALLISON JACQUELINE A. ALLISON 5 JENNISON ROAD MILFORD, NH 03055-4210
8-43	FAYE F. TANGUAY 165 NO. RIVER ROAD MILFORD, NH 03055-4217
8-46	STEPHEN H. TROMBLY, TRUSTEE SEAN S. TROMBLY, TRUSTEE TROMBLY LAND TRUST 198 NORTH RIVER ROAD MILFORD, NH 03055
8-62	RUTH E. GIONET 26 BUXTON ROAD MILFORD, NH 03055-4200
8-64	AREA AGENCY PROPERTIES, INC. 144 CANAL STREET NASHUA, NH 03060-2812
8-67	BRIAN J. RIENDEAU 242 MONT VERNON STREET MILFORD, NH 03055-4118
8-68	STEVEN G. LEWIS 6 STEVEN LANE MILFORD, NH 03055
8-69	TODD MORIN SHANNON ELIZABETH TUCK 5 STEVEN LANE MILFORD, NH 03055-4228
8-69-2	SEAN P. WILKERSON TARRYN WILKERSON 18 STEVEN LANE MILFORD, NH 03055-4228

REFERENCE PLANS:

1. "SUBDIVISION PLAN OF LAND IN MILFORD, N.H. BELONGING TO AQUILINE GRUGNALE" SCALE: 1" = 100' DATED DECEMBER 20, 1976 PREPARED BY ROLAND E. CAMPBELL, R.L.S. (HCRD PLAN NO. 10981).
2. SUBDIVISION PLAN OF LAND, IN, MILFORD, N.H., OWNED BY, MARSHALL LEWIS" SCALE: 1"=80' DATED NOVEMBER, 1961, PREPARED BY W. ROBERT NOLTE, LAND SURVEYOR, (HCRD PLAN NO. 2119).
3. "BOUNDARY PLAN OF LAND, PREPARED FOR, MARSHALL LEWIS" SCALE: 1"=50' DATED FEBUARY 23, 1996, PREPARED BY MERIDIAN LAND SERVICES, INC., (HCRD PLAN NO. 27986).
4. "BOUNDARY SURVEY, PLAN OF LAND, MILFORD, NH, OWNED BY: WILFRED AND LEONA R. THIBODEAU" SCALE: 1"=50', DATED JUNE 14, 1993, REVISED AUGUST 13, 1993, PREPARED BY AMHERST SURVEY ASSOCIATES, INC., (HCRD PLAN NO. 26534).

NOTES:

1. OWNER OF RECORD OF LOT 8-38 IS SOILAND, INC., 5 JENNISON ROAD, MILFORD, NH 03055. TITLE REFERENCE TO LOT 8-38 IS HCRD BOOK 3088 PAGE 1947 DATED AUGUST 14, 1985.
2. OWNER OF RECORD OF LOT 8-39 IS THE TROMBLY LAND TRUST, 196 NORTH RIVER ROAD, MILFORD, NH 03055. TITLE REFERENCE TO LOT 8-39 IS HCRD BOOK 6105 PAGE 370 DATED MARCH 31, 1999.
3. OWNER OF RECORD OF LOT 8-69-1 IS THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF ADMINISTRATIVE SERVICES, STATE HOUSE ANNEX, CONCORD, NH 03301. TITLE REFERENCE TO LOT 8-69-1 IS HCRD BOOK 2392 PAGE 269 DATED MARCH 19, 1975.
4. OWNER OF RECORD OF LOT 8-65 IS THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF ADMINISTRATIVE SERVICES, STATE HOUSE ANNEX, CONCORD, NH 03301. TITLE REFERENCES TO LOT 8-65 ARE HCRD BOOK 1013 PAGE 223 AND BOOK 1013 PAGE 224 DATED FEBRUARY 13, 1941.
5. ZONING DISTRICT IS RESIDENCE R. THE SITE IS WITHIN THE GROUNDWATER PROTECTION DISTRICT LEVEL II.
   MINIMUM LOT AREA – 2 ACRES (87,120 SQ FT)
   MINIMUM FRONTAGE – 200 FEET ON A CLASS V OR BETTER ROAD
   MINIMUM BUILDING SETBACKS
   FRONT – 30 FEET
   SIDE – 15 FEET
   REAR – 15 FEET
   MINIMUM OPEN SPACE – 30% OF LOT AREA
   MAXIMUM BUILDING HEIGHT – 35 FEET
6. THE LOTS ARE NOT LOCATED WITHIN THE COMPREHENSIVE SHORELAND PROTECTION OR DESIGNATED RIVER PROTECTION ACTS.
7. THIS OFFICE HAS NOT DELINEATED WETLANDS FOR THE ENTIRE PROPERTIES.
8. BOUNDARY INFORMATION SHOWN FOR PARCELS A, B AND C WAS THE RESULT OF AN ON-SITE SURVEY BY THIS OFFICE. THE BOUNDARY INFORMATION FOR THE REMAINDER OF THE PARCELS SHOWN HEREON WAS TAKEN FROM THE REFERENCE PLANS AND IS NOT THE RESULT OF A SURVEY BY THIS OFFICE.
9. LOT 8-38 LIES PARTIALLY WITHIN A 100 YEAR FLOOD HAZARD AREA AS SHOWN ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS FOR HILLSBOROUGH COUNTY, NEW HAMPSHIRE, PANEL 456 OF 701, COMMUNITY-PANEL NO. 330110 0456D, EFFECTIVE DATE SEPTEMBER 25, 2009. THE PROPOSED FACILITY IS NOT WITHIN THE 100 YEAR FLOOD HAZARD AREA.
10. THE INTENT OF THIS PLAN IS TO ANNEX A PORTION OF LOT 8-69-1 (PARCEL 'A') TO LOT 8-38 WITH THE REMAINDER OF THE LOT (PARCEL 'B') TO BE ANNEXED TO LOT 8-65. A PORTION OF LOT 8-39 (PARCEL 'C') IS TO BE ANNEXED TO LOT 8-38.
11. AREAS OF LOTS BEFORE AND AFTER ADJUSTMENT ARE AS FOLLOWS:

LOT	AREA BEFORE ADJUSTMENT	AREA AFTER ADJUSTMENT
8-38	11.55 ACRES	20.16 ACRES
8-39	11.49 ACRES	5.55 ACRES
8-69-1	4.28 ACRES	TO BE ELIMINATED
8-65	5.81 ACRES	7.42 ACRES

OWNER SIGNATURE LOTS 8-69-1 & 8-65

STATE OF NEW HAMPSHIRE _____ DATE _____

OWNER SIGNATURE LOT 8-39

SOILAND, INC. _____ DATE _____

OWNER SIGNATURE LOT 8-38

THE TROMBLY LAND TRUST _____ DATE _____

MILFORD, NH PLANNING BOARD

SITE PLAN #: _____

DATE APPROVED: _____

SIGNED: _____

COVER SHEET
PREPARED FOR
LOT 8-38
SOILAND, INC.
LOT 8-39
THE TROMBLY LAND TRUST
LOTS 8-69-1 AND 8-65
STATE OF NEW HAMPSHIRE
MILFORD, NEW HAMPSHIRE

SCALE: 1" = 100' MAY 23, 2011

MONADNOCK SURVEY, INC. LAND SURVEYORS AND PLANNERS
WILTON STATION – 99 MAIN ST. – PO BOX 607 – WILTON, N.H. 03086
TEL: (603) 654-2345 FAX: (603) 654-9694 WWW.MONADNOCKSURVEY.COM

REV.	DATE	DESCRIPTION	DR	CK
2	2/15/11	REVISIONS PER STAFF RECOMM.	JRD	DBT
1	1/31/11	GENERAL REVISIONS	DBT	DBT

FILE	1575	TYPE	SITE	IDX	1575SITE	FB	209

Waiver Request Form

Department of Planning and Community Development

Name of Project STATE OF NH, SOILAND, INC AND THE TROMBLY LAND TRUST.

~~Applicant~~ PREPARED BY: MONADNOCK SURVEY, INC.

Date 5/23/2011 REVISED 5/24/2011

When a proposed subdivision plat or site plan is submitted for approval, the applicant may request in writing to waive specific requirements of these Regulations as they pertain to the subdivision or site plan. The applicant shall present reasons in writing why the waiver is needed by the application deadline for a regularly scheduled Planning Board meeting. The Board's publicly notice agenda for the particular meeting shall clearly indicate that a waiver request has been received, a copy of which is available at the planning office, and that the waiver request will be considered at the meeting.

Abutter notification is required for all waiver requests.

The Planning Board may grant a waiver in a special case, so that justice may be done and the public interest secured, provided that such waiver will not have the effect of nullifying the intent and purposes of these Regulations, the Zoning Ordinance or the Master Plan. The Planning Board shall not approve waivers unless it shall make findings based upon the evidence presented to it in each specific case.

All approved waivers shall be noted on the plans, indicating the paragraphs waived and a general description of the waivers.

Subdivision or Site Plan Regulation Section Number	Request and Rationale
1. 5.06K	DELINEATION OF ALL WETLANDS AND WETLAND BUFFERS. THE LOT LINE ADJUSTMENT ELIMINATES ONE LOT ENTIRELY AND ADJUSTS THE LINE BETWEEN ANOTHER CREATING A LARGER LOT. ALL LOTS WILL BE OVER 5 ACRES. THE LLA WILL NOT AFFECT THE WETLANDS.

Subdivision or Site Plan Regulation Section Number	Request and Rationale
5. 5.06 I	PROPERTY BOUNDARY LINES LOTS ~~[illegible]~~ AREAS BEING TRANSFERRED HAVE BEEN SURVEYED; EXISTING BOUNDARYS HAVE BEEN DRAWN BY REFERENCE PLANS AND DEED DIMENSIONS. THE AREAS OF THE PARCELS BEING CONVEYED ARE LARGE.
6.	

Please feel free to attach any other information as necessary.

Signature of Applicant

5/24/11
Date

STAFF MEMO

Planning Board Meeting

June 21, 2011

Agenda Item #4: James, Beverly & Scott Brown – Union St – Map 42, Lot 37

Amendment to a conditionally approved Major Subdivision

Background:

The applicant is before the Board to modify the phasing schedule for the conditionally approved 28 lot subdivision off of Union St. The plan was granted conditional approval in October of 2008 under the Growth Management Ordinance (GMO). As such, the phasing schedule detailed on the plan reflects the requirement of the GMO, which has since been repealed. The applicant would like to revise the phasing schedule to allow for a maximum of 10 lots per year in accordance with Section 5.017 Phasing of the Development Regulations.

Please find the attached conditionally approved plan and Section 5.017.

Staff Recommendation:

Staff has no issues with the proposed modifications to the phasing plan as the amendment will meet current phasing requirements.

Staff would like to note that this plan has been conditionally approved for several years beyond which would normally be allowed for, however the State has adopted one amendment allowing plans approved in 2007-2009 to have 36 months from the date of conditional approval to achieve final approval and substantial completion of improvements or October of this year.

If the Board chooses to conditionally approve the amendment to this subdivision plan the following items will need to be updated prior to final approval:

1. Note 10 shall be updated to reflect the new phasing schedule for a maximum of 10 lots per a year.
2. Note 11 be removed.
3. Abutting lot lines shall be updated to reflect subdivisions and/or abutting lot line adjustments to the property.

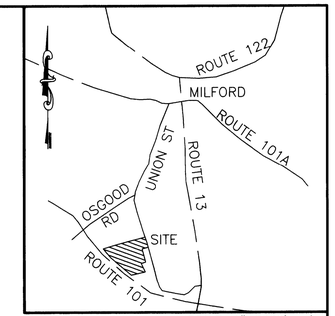
4. Abutters shall be updated to reflect current owners and addresses per the Assessing database.

Image taken April 2010

REFERENCE PLANS

1. SEE PLAN ENTITLED "LOT LINE ADJUSTMENT AND SUBDIVISION PLAN–PHASE 2" BY RIESLAND ENGINEERING FOR JAMES AND BEVERLY BROWN DATED APRIL 1994 AND RECORDED AS PLAN 26929 H.C.R.D.
2. SEE PLAN ENTITLED "SUBDIVISION PLAN–PHASE 1" BY RIESLAND ENGINEERING FOR JAMES AND BEVERLY BROWN DATED APRIL 1994 AND RECORDED AS PLAN 26928 H.C.R.D.
   FOR FURTHER PLAN REFS SEE THOSE LISTED ON ABOVE PLANS
3. DAVID PARK DEFINITIVE SUBDIVISION PLAN OF LAND MILFORD, NH JULY 7, 1983 BY AMHERST SURVEY ASSOCIATES, INC. H.C.R.D. PLAN #16203
4. SUBDIVISION PLAN MILFORD, NH PREPARED FOR MRS. ANNIE M. CURTIS BY HOWARD G. WATKINS H.C.R.D. PLAN #15823
5. SUBDIVISION PLAN OF LAND PREPARED FOR ARTHUR J. & ARLENE F. MORELL BY THOMAS F. MORAN INC, H.C.R.D. PLAN #20429
6. NH DOT PLAN FOR RTE 101 BY–PASS PROJ. NO. F010–1(11)
7. SUBDIVISION PLAN MILFORD WATERFALLS LLC – DAVID DRIVE – MILFORD, NEW HAMPSHIRE OWNED BY MILFORD WATERFALLS LLC AND RECORDED AS PLAN 36496 H.C.R.D.

18. TAX MAP 42, LOTS 37–11, 37–16 & 37–17 ARE SUBJECT TO A NON–DISTURBANCE AREA SHOWN ON THIS PLAN. NO STRUCTURE OR IMPROVEMENTS SHALL BE CONSTRUCTED OR PLACED IN THE NON–DISTURBANCE AREA. NO FILL SHOULD BE INTRODUCED, SOIL REMOVED OR TOPOGRAPHICAL CHANGES MADE TO THE NON–DISTURBANCE AREA, EXCEPT IN CONNECTION WITH THE GRADING AND BACK FILLING ACTIVITIES CONTEMPLATED BY THE APPROVAL OF THE PLANS AND RELATED TO THE CONSTRUCTION AND MAINTENANCE OF DWELLINGS TO BE BUILD ON SAID LOTS 37–11, 37–16 & 37–17. THE NATURAL FLOW OF GROUND OR SURFACE WATER IN THE NON–DISTURBANCE AREA SHALL NOT BE OBSTRUCTED. DISEASED AND DEAD VEGETATION MAY BE REMOVED FROM THE NON–DISTURBANCE AREA AND VEGETATION MAY BE MAINTAINED USING THE BEST MANAGEMENT PRACTICES ESTABLISHED BY THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES SO AS TO BE KEPT IN A NEAT AND ATTRACTIVE CONDITION. SILTATION FENCING IS TO BE LOCATED AT THE BOUNDARY OF THE NON–DISTURBANCE AREA WITHIN THE SAID LOTS.



LOCUS PLAN SCALE: 1"=2000' +/–

PLAN REF 1

CURVE TABLE		
CURVE	LENGTH	RADIUS
C1	41.66	25.00
C2	15.22	225.00
C4	27.66	225.00
C5	28.77	175.00
C6	33.18	425.00
C7	40.37	25.00
C8	39.27	25.00
C9	20.36	375.00
C10	30.18	225.00
C11	6.81	225.00
C12	31.66	175.00
C13	6.59	425.00
C14	51.08	375.00

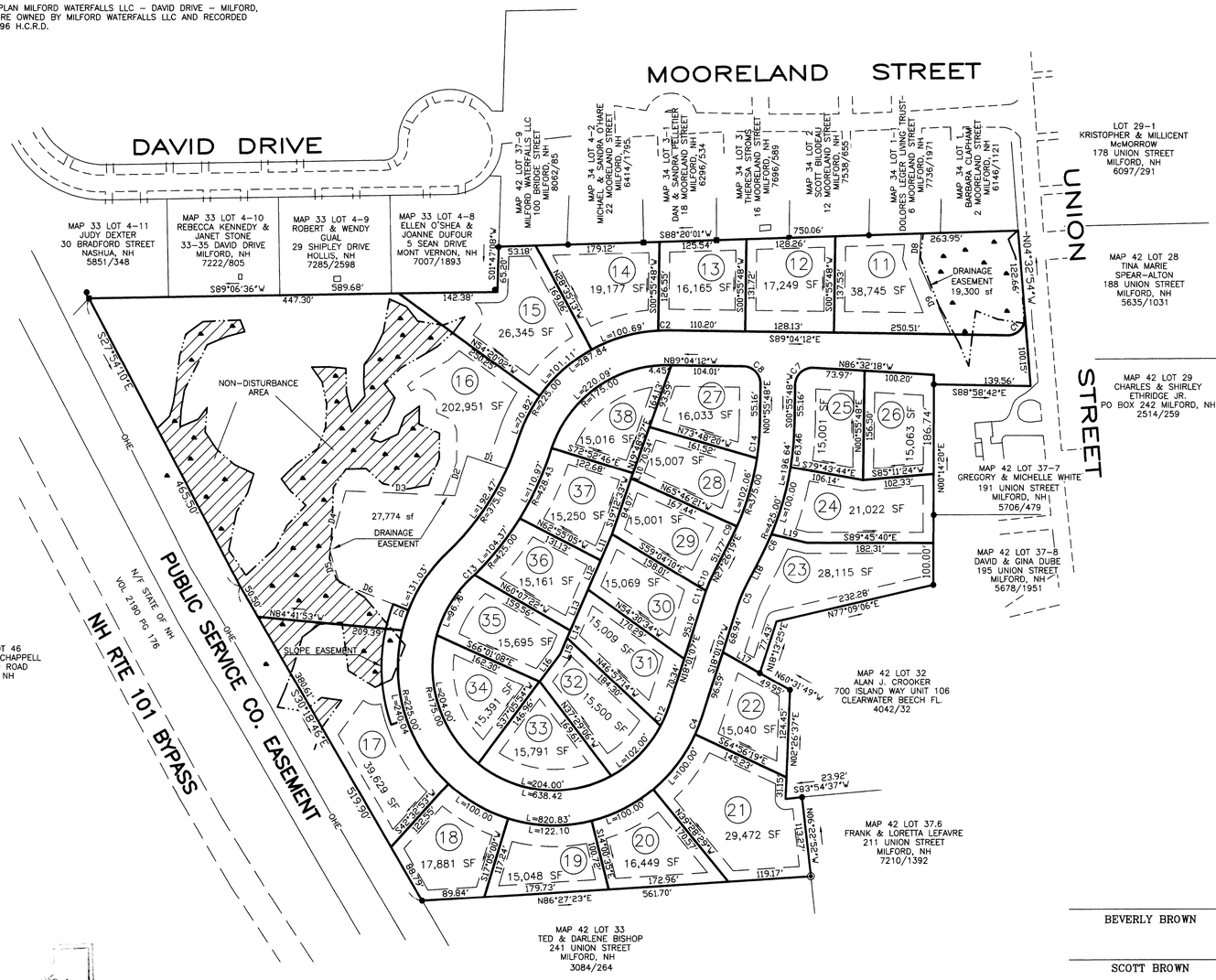
LINE TABLE		
LINE	LENGTH	BEARING
L10	7.95	S19°12'33"W
L11	40.69	S23°39'59"W
L12	45.91	S23°39'59"W
L13	63.89	S23°39'59"W
L14	11.47	S23°39'59"W
L15	25.13	S23°39'59"W
L16	49.16	S37°05'54"W
L17	61.29	N60°30'57"W
L18	51.77	N27°26'19"E
L19	52.99	S76°41'53"E

DRAIN EASEMENT LINE TABLE		
LINE	LENGTH	BEARING
D1	60.00	S71°56'38"E
D2	60.00	N17°17'35"E
D3	158.00	S87°36'13"E
D4	86.02	N15°42'01"E
D5	50.00	N15°51'06"W
D6	84.00	N68°35'12"W
D7	23.62	N68°38'54"W
D8	44.00	S03°45'48"W
D9	110.00	S24°24'16"E

SHEET INDEX:

1. SUBDIVISION PLAN
2. GEOMETRY PLAN
3. GRADING & DRAINAGE PLAN
4. PROFILE 0+0
5. PROFILE 11+50
6. SEWER & WATER PLAN
7. STORM WATER MANAGEMENT PLAN
8. DETAILS I
9. DETAILS II
10. DETAIL III
11. DETAILS IV

11A. PLANTING PLAN
12. CROSS SECTIONS 0+50 TO 5+50
13. CROSS SECTIONS 6+00 TO 10+50
14. CROSS SECTIONS 11+00 TO 14+50
15. CROSS SECTIONS 15+00 TO 19+00
16. CROSS SECTIONS 19+50 TO 22+50



NOTES

1. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE LOT 42–37 INTO 28 SINGLE–FAMILY RESIDENTIAL LOTS
2. OWNER OF RECORD IS
   JAMES & BEVERLY BROWN
   BOX 190 SCHOOL STREET
   HAVERHILL, NH 03765
3. DEED REFERENCE IS: H.C.R.D. B.5488/P.1881
4. ZONING OF THIS AND ABUTTING PARCELS IS RESIDENCE "A"
5. DIMENSIONAL REGULATIONS:
   MIN. AREA 15,000 sf
   MIN. FRONTAGE = 100'

   SETBACKS:
   FRONT YARD = 30'
   SIDE YARD = 15'
   REAR YARD = 15'
   WETLAND SETBACK = 25'
6. LOTS WILL BE SERVICED BY TOWN SEWER AND WATER.
7. TOTAL AREA OF PARCEL IS 832,870.9 sf / 19.12 ac
   WETLAND AREAS = 91,936 sf
8. PARCEL DOES NOT LIE WITHIN THE GROUNDWATER PROTECTION DISTRICT
9. PARCEL DOES NOT FALL WITHIN A 100–YEAR FLOOD PLAIN
10. SUBDIVISION TO BE PHASED AS FOLLOWS:
    YEAR 1 LOTS 11, 12, 13, 25, 26, 27
    YEAR 2 LOTS 22, 23, 24, 28, 29, 30
    YEAR 3 LOTS 19, 20, 21, 31, 32, 33
    YEAR 4 LOTS 14, 15, 16, 36, 37, 38
    YEAR 5 LOTS 17, 18, 34, 35
11. THE ISSUANCE OF BUILDING PERMITS FOR THESE LOTS ARE SUBJECT TO ARTICLE XII OF THE ZONING ORDINANCE, GROWTH MANAGEMENT & INNOVATIVE LAND USE CONTROL.
12. A SIGN SHALL BE POSTED AT THE ENTRANCE TO SUBDIVISION PRIOR TO THE ISSUANCE OF THE FIRST CO READING AS FOLLOWS: "THIS ROAD HAS NOT BEEN ACCEPTED BY THE TOWN OF MILFORD. UNTIL THE STREET HAS BEEN ACCEPTED, THE TOWN ASSUMES NO RESPONSIBILITY FOR MAINTENANCE, INCLUDING SNOW REMOVAL, NOR ANY LIABILITY FOR DAMAGE RESULTING FROM THE USE THIS ROAD. RSA 674;41"
13. EACH BUILDABLE LOT IS SUBJECT TO POLICE AND LIBRARY IMPACT FEES AND WATER AND SEWER CONNECTION FEES.
14. STATE APPROVAL NUMBERS:
    DREDGE AND FILL PERMIT # 2008–01416
    SITE SPECIFIC APPROVAL # AoT–0067
15. SLOPES EXCEEDING 25% – 7,540 SF
    WETLAND AREA – 90,800 SF (2.084 ACRES)
16. ALL FRONT LOT CORNERS AND ROAD GEOMETRY ARE TO BE MARKED WITH A 4"x4" STONE BOUND. ALL REAR ARE TO BE IRON PINS.
17. THE PLANNING BOARD GRANTED A WAIVER AT THE 10/21/08 MEETING TO REDUCE THE REQUIRED ROADWAY WIDTH TO 22 FEET WITH THE EXCEPTION OF THE DIVIDED ENTRANCE AT UNION STREET.

LEGEND

- REBAR TO BE SET
- DRILL HOLE FOUND
- GRANITE BOUND FOUND
- IRON PIPE OR REBAR FOUND
- FENCING
- STONE WALL

BEVERLY BROWN DATE

SCOTT BROWN DATE

NO.	DATE	DESCRIPTION	BY
10	12/30/09	ADD NOTES 16, 17 & 18	DED
9	12/29/09	REVISE EASEMENTS, & NOTE #14	DED
8	5/16/08	ADD EASEMENTS, REMOVE LOT	RGK

SUBDIVISION PLAN

MAP 42 LOT 37
UNION STREET
MILFORD, NH

PREPARED FOR

JAMES & BEVERLY BROWN

10/19/2007 1"=100'

SHEET 1 OF 16

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

DUVAL SURVEY INC.
14 DARTMOUTH STREET
HOOKSETT, NH
(603) 668–2125

"I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY, PERFORMED BY THIS OFFICE, AND THAT IT HAS AN ERROR OF CLOSURE NO LESS THAN 1 PART IN 10,000."

DONALD E. DUVAL, LLS # 610 — 10/19/07 DATE

FILE	SIZE	TYPE		
4481	D	SUB	248	33–37
			FIELD BOOKS & PAGES	

5.017 PHASING

The Planning Board requires developments which qualify as Major Subdivisions to take place over a period of years, in stages, in order to promote orderly development with minimal impact on the provisions of Town services. The allocation of building permits shall be by the following method:

# of New Building Permits	Phasing (years)
1-10	None
11-20	2
21-30	3
31-40	4
40+	Minimum of 5

A. It is the intention of the phasing schedule to evenly distribute the number of building permits over the required number of years. However, if the Planning Board determines it is in the public's best interest (i.e. through-road connection, etc.) to allow an applicant to have a greater number of permits in the beginning or end of the allotted phasing period, the Planning Board may grant an allowance for more permits in a single year, as long as the project remains phased over the entire phasing period.
B. The approved phasing schedule shall be identified in a note on the plan or laid out as a phasing plan included in the final plan set.
C. If a development is not built out within the timeframe of the approved phasing plan, the development may continue to be built out at a rate not greater than the highest yearly rate in the approved phasing plan or at a rate mutually agreed upon by the applicant and Planning Board.

5.018 TAX LIEN DISCLOSURES

No subdivision shall be finally signed until the Planning Board is provided with confirmation, in writing, from the Office of the Tax Collector that all tax liens (other than those that apply to April 1 of the tax year in which the subdivision is being approved) have been paid and cleared; or that a written agreement between the Tax Collector and the applicant has been signed.

5.019 DEVELOPMENT AGREEMENT

The Planning Board may require the applicant to enter into a Development Agreement with the Town in which the timetable, off-site improvements, responsible parties and methods of payment of the proposed development will be laid out.

5.020 WAIVER APPLICATIONS

The Planning Board may grant a waiver from a specific section of the Development Regulations in a special case when:

STAFF MEMO

Planning Board Meeting

June 21, 2011

Agenda Item #5: East Milford Self Storage/Birdland Properties LLC – Nashua St – Map 32, Lots 23-2, 23-3 & 23-5

Public Hearing for a Major Site Plan

Background:

The applicants are before the Board for the development of a 19,980 SF, 3 phase Self-Storage Unit facility off of James Street. The proposed development consists of three lots which will need to be merged prior to final site plan approval. Two of the three lots (23-2 and 23-3) until recently had greenhouse structures on them. One greenhouse in the far northeastern corner of lot 23-2 is still functioning and will remain through phase I and II of the proposed project. The other greenhouses shown in the image below have been out of use for several years and were recently demolished and removed.

The lots are located in the Limited Commercial-Business District and meet all frontage and area requirements for the zone. The applicant received a variance from the ZBA on April 7, 2011 to permit a multi-building self-storage facility of no more than 20,000SF of storage space, with the condition that the facility be open between the hours of 7am and 9 pm daily (see Note 17). The intent of the site plan is to depict the multi-unit self-storage facility, with the temporary allowance for ongoing greenhouse operation, with the understanding that when the greenhouse operation is terminated the greenhouse will be razed and the self-storage unit buildings expanded through the phase III plan.

Site Layout

Access to the site is laid out from a single access point off of James St, across from the entrance to Nottingham Place, a 30 unit Senior Housing Complex, in the existing driveway. The driveway will lead into a limited access parking area serving Unit 1, which contains the Office and climate control storage. A rolling gate is positioned between Unit 1 and the rest of the facility to secure the rear seven units of the facility. There is a 6 ft high black chain link fence to be attached to the gate that will encircle all seven self-storage units. The existing stockade fence abutting lot 32-21 to the east would remain.

Units 2-8 are a combination of sizes all oriented north to south, with the south sides facing the abutting residential properties. To the north the land abuts the Ciardelli Fuel business operations off of Ciardelli Crossing and the eastern edge abuts several different businesses with frontage on Nashua St.

The site is to be built in three phases spanning ten years. Phase 1 includes Units 1-5 and the major retention basin for drainage, with Units 2 and 3 be constructed as 30'x80' units to allow space for the existing greenhouse to continue its operations. Phase II includes Units 6-8, with a start in 2015. Phase III includes the removal of the last greenhouse, razing of the former greenhouse area and the extension of Units 2 and 3 to 30'x 110' units (30 ft extensions) with a start date of 2021. The paving plan mirrors the phasing plan with each phase being paved as it is completed. Phase II and III will remain as gravel until the facilities are constructed.

As self-storage units have a very low traffic volumes and parking requirements the Development Regulations require just1 space per 1000 SF of building. This site, once completed will have about 20,000 SF of self-storage, requiring 20 parking spaces. The site plan details 7 parking spaces in front of Unit 1, including one handicapped van accessible space. The notes of the plan state the rest of the 13 spaces are "provided in the rear…by simple inspection there is ample room for more than 13 cars to park along the buildings while performing storage operations." The Development Regulations were written with some flexibility built into the parking regulations to allow for non-traditional parking arraignments.

There is sufficient width between all of the buildings and fence lines to accommodate a two-way flow of traffic. If cars were parked along the fence or buildings the design allows for one-lane of flowing traffic.

There is no outdoor storage allowed on site as detailed in Note 16.

Drainage

The lot is designed to sheetflow towards an existing low point in the lot, which received all drainage with the previous greenhouse development. The low point will be lined with large boulders and then slope into a large retention basin. The water will exit the basin on northwester edge through a controlled outlet on the owners abutting property. A stormwater permit has been applied for and Code Enforcement has noted no issues with the permit.

Outdoor Lighting

All lighting is shown as down cast per the regulations. It is noted on the plan that lighting will be on during normal business hours. After hours lighting will be operated on a motion-sensor basis only.

Landscaping
The applicant has submitted a landscaping plan for the property. The plan maintains much of the existing vegetation around the periphery of the property in so much as it exists. They have also shown 16 shrubs along the front of Unit 1 facing the entrance to the property, and 5 new proposed trees along the southern edge of the property in front of Units 5 -8. As this commercial use will be abutting residential properties the buffer between uses shall meet Section 6.08.5 Landscaping Buffers, which requires a landscaped buffer of at least 10 ft in width and 6 ft in height to effectively screen the adjacent property. The regulations allow the applicant to utilize existing vegetation to accomplish this however, if the vegetation is not sufficient the buffer will need to be enhanced.

The applicant has detailed 10 ft buffer line around the property to maintain the existing treed, vegetated buffer. The image below shows some details of the existing vegetative buffer. The landscaping plan has counts of the number of trees to remain (112 trees) along the outer edge to meet the buffer requirements.

The Landscaping requirements also require 1 shrub for every 5 feet of building frontage. In this instance the only buildings with frontage is Unit 1. Unit 1 at 96 ft in length is required to have 20 shrubs. The plan shows 16 shrubs along the building frontage and 7 arborvitaes to the east of the driveway entrance, meeting the minimum 20. The Regulations do not require landscaping along buildings without “frontage” so the rest of the units are not specifically required to be landscaped.

The plan details an extensive planting schedule that is not fully represented on the plan. The details on the plan and the Plant Schedule should align.

Lastly, the Regulations require landscaping be provided along parking lots that abut a right-of-way. The applicant should create a landscaped strip in front of the parking area abutting James Street with at least 1 tree every 30 ft, to be complimented with suitable ground cover and shrubs.

Architectural Details
No details were submitted with application. Applicant will bring architectural details to meeting.

Please find the attached plan and minutes from the ZBA meeting on April 7th.

Interdepartmental Reviews:
Water Utilities - Okay to hook up to water and sewer at this location.
Heritage Commission –

- How is the project incorporating the spirit of the Nashua and Elm Street Corridor Overlay District?
- The proposed change will change the Historic Nature of this Neighborhood.

Fire Department – Fire Dept. has no issues or concerns with this project.

Police – No comment

Conservation - The Commission is concerned that the drainage is directed onto another's property and that the proposed manner of handling of runoff may not be the best approach. Has pervious pavement, etc. been considered? The proposed basin may be designed as an effective infiltration structure.

Code Enforcement - Code enforcement has no objections to this project moving forward provided the owner/developer understands the need to supply fully engineered plans of the structures for permitting.

DPW – Where does the Controlled Outlet on the northwestern side of the property go? The central drainage area must not be used for snow storage, with the rocks it will be inviting.

Zoning Administrator – Plans and applications are very complete/through. Would recommend that Phasing Note on Sheet 1 of 6 be revised to allow for flexibility in start and completion dates for Phases I- III – i.e. "Phases II and III start/completion dates may be adjusted by developer based on development conditions. If site development extends past 09/31/2021 Planning Board approval will be required," or something similar.

Staff Recommendation:
Staff has no issues with parking as proposed. There is more than sufficient room to accommodate additional parking along fence lines and building, and still allow for a moving lane of traffic. If the Board is concerned with traffic flows in relation to the 13 parking spaces they could discuss with the applicant the need to designate one-way movements between storage units, with the necessary stripping, to ensure traffic flows maintained within the open parking policy.

As the applicant intends to outlet the retention pond to their abutting property Staff recommends a drainage easement be detailed and recorded to protect the outlet in perpetuity.

The Board should discuss the Landscaping plan in further detail to ensure adequate buffer will be provide to the abutting residences to the south from the facility, landscaping along the parking area and to align the Plant Schedule with the landscaping plan details.

No dumpster is currently shown on site. If a dumpster is to be located outside it should be detailed on the plan with proper screening.

This property is just outside of the Nashua Elm Street Corridor Overlay District, although the Board could discuss those guidelines in conjunction with the Architectural presentation and discussion.

If the Board chooses to grant conditional approval for the proposed site plan the following items will need to be updated on the plan prior to final approval:

1. A lot merger document be submitted for recording at the Registry of Deeds.
2. A drainage easement plan and deed be submitted for recording at the Registry of Deeds.
3. The fence line type should be the same all around the property (i.e. fencing on the eastern edge is a different line type than the rest of the area).
4. The Phasing Plan be adjusted as recommended by the Zoning Administrator.
5. Paving plan timeline and details be added to the Phasing plan.
6. If striping traffic flow is agreed to, it shall be detailed on the plan.
7. The Landscaping Plan be revised as discussed.
8. Architectural details be submitted for the files as discussed.
9. Modify Note 24 to include a prohibition against storing snow in drainage area and retention basin.
10. Modify Note 12 to reference Milford regulations.
11. Add a note defining what is and is not allowed within the 10’ Buffer line.
12. Add a note indicating “As-built plans shall be deliver to the Building Department prior to a Certificate of Occupancy being issued.
13. Add a dumpster and screening to the plan, as necessary.

Image taken April 2010

Town of Milford
Zoning Board of Adjustment Minutes
April 7, 2011
Birdland Properties, LLC
Case #4-11
Variance

Present: Kevin Johnson - Chairman
Fletcher Seagroves – Vice Chairman
Laura Horning
Zach Tripp – Alternate
Michael Unsworth – Alternate

Absent: Katherine Bauer – Board of Selectmen's representative
Steven Bonczar
Steve Winder

Secretary: Kathryn Parenti

The applicant, Birdland Properties, LLC, owner of 475 Nashua Street, Map 32, Lots 23-2, -3, -5 in the Limited Commercial "LC" district, is requesting a Variance from Article V, Section 5.07.1 to permit a multi-building self-storage facility of no more than 20,000 SF of storage space, a use not permitted in the district.

Motion to Approve: _____

Seconded: _____

Signed: _____

Date: _____

Kevin Johnson, chairman, read the notice of hearing into the record. He then read the list of abutters; Alexander Buchanan, representing Birdland Properties, the applicant and owner of 275 Nashua Street, Matthew and Andrew Ciardelli, also representing Birdland Properties, a representative of RC Properties of Milford, owner of 479 and 483 Nashua Street, Betsey Deasy, owner of 473 and 477 Nashua Street, several representatives from Nottingham Place, 16 James Street and Stoney Creek, 28 James Street were present. He then invited the applicant forward to present his case.

A. Buchanan began by stating he is an attorney with an office in Nashua, lives in Amherst and graduated from Milford High School and was representing Birdland Properties. He then handed out several exhibits and photographs to the board and to the audience so show everyone where this location is and what it is and will be. He asked the board to look at Exhibit A, which is an overhead view of the subject site and noted north is at the top of the and south is at the bottom of the page with Nashua Street on the east side and Powers Street on the left side. The letter A represents the Ciardelli Fuel complex and below that are the former Woodman's greenhouses. The site is where the greenhouses are along with an empty spot of land. The second supplement, B-1, is the zoning districts, the orientation of this map is opposite of the prior exhibit. This exhibit shows the rough boundaries of the lots and shows the location of the residential complexes to the south. The property in question is located in the Limited Business Commercial zone and consists of 2.44 acres. There is a mathematical error in a later exhibit, Mr. Rizzi, the appraiser, calculated the lot to be 2.326 acres; there is a part of the property that the appraiser was unaware of. He stated one (1) greenhouse may remain but that is not a final decision; that has to do with other people's desires for the property and will be a planning board issue. The square footage of the storage space has been calculated. Important to the variance is understanding where the property is situated. Referring again to exhibit B-1, the neighborhood is shown with all of its zoning districts. The property in question is outlined in black and abuts industrial property to the west, residential to the south and limited commercial to the north and east. This property is in among a mix of uses and many things in the area are not allowed by the current zoning ordinance but are grandfathered, such as offices, fuel storage, residences and retail to the north. Exhibit B-2 clearly shows the parcels in question, 32/23-2, 32/23-3, 32/23-5 are clearly in the Limited Business Commercial zone. Exhibit B-3 shows the uses in the Limited Business Commercial district, which are not consistent. The uses are residential and retail and 32/24-3 and 32/24-2 are marked as industrial and is a fuel storage area with its supporting garages. Parcel 32/25 could easily be characterized as industrial and has trucks stored on it but is marked as being in conformance with that zone. There are many competing uses and the lots are not just used for the allowed Limited Business Commercial uses. He noted the letter submitted by John Rizzi, licensed appraiser, addresses the diminution of values criteria and on page 2 describes the surrounding area not only within the immediate area of the proposed site but along the Nashua Street corridor. This is an area of a lot of different uses, not just a single type. Exhibit C-1 shows the proposed use and shows what can be done with the property based on the acreage of the lot and the requirements to maintain drainage, how much pervious area you have. Theoretically it shows how much storage area could be on the site; it could be up to 22,000 square feet of storage. They do not propose that. They are proposing something along the lines of exhibit C-2, which shows the location of seven (7) to ten (10) buildings on the site but that depends on the grade of the land and condition of the soil. This is an engineer's conceptual best guess of what will go on the site. It depends on if they maintain the old Woodman greenhouse or not. Many of those issues will be worked out with the planning board. This exhibit shows 15,200 square feet of storage and the access to the property is off of James Street at what is known on older plans as Victory Street, the hammerhead. It is a public way that never became a public way. There may have to be some things done with that later but it is nothing

that will concern the town. This is where they are with the project and what the proposal is all about. It's not a permitted use within this zone so a variance is required. In the state of New Hampshire, in order to get a variance there is a five prong test that must be met with the exception of hardship which has several sub-prongs.

A. Buchanan then went on to address those criteria:

1. The proposed variance would not diminish surrounding property values because:
He stated the proposed use is compatible with other uses in its District as a commercial activity next to an oil distribution facility, a hair salon and a florist shop. This is less intense than many of them and is consistent with those existing uses. Because it is consistent with existing uses, the values of surrounding property will not be diminished by the addition of this more consistent and compatible use with those around it. This is further supported by J. Rizzi's opinion; he has been a long time appraiser in the area and his qualifications and credentials are part of his presentation.

2. Granting the variance would not be contrary to the public interest because;
He stated public interest would be served because this use would: 1) this property is unique; it is an undeveloped property within a whole bunch of very well developed property and it has the opportunity to serve as a buffer between competing uses of a commercial district to the north and a residential district to the south; and 2) provide easily accessible storage availability to nearby single and multi family residences and to this area of town. In determining if the public interest of the town is adversely affected, the New Hampshire Supreme Court, 9A, LLC versus the Town of Chesterfield has stated: *"In order to be contrary to public interest a variance must be unduly and in a marked degree conflict with an ordinance such that it violates the ordinance's basic zoning objectives. In determining whether granting a variance violates an ordinance's basic zoning objectives, the court looks to, among other things, whether it would alter the essential character of the locality or threaten public health, safety or welfare."* We think it's evident that this property is located among several conflicting uses. Use for storage, as a proposal, would not alter the essential character of the neighborhood. The character of that neighborhood is already fixed. The addition of 7-10 storage buildings is not going to change it nor is the addition of 7-10 storage buildings going to threaten the public health, safety or welfare. We will be able to meet all the criteria that are required under the ordinance for the use of the property as self-storage, which will be addressed later on.

3. Denial of the variance would result in unnecessary hardship.

A. "Unnecessary hardship" means that, owing to special conditions of the property that distinguish it from other properties in the area:

i. No fair and substantial relationship exists between the general public purposes of the ordinance provision and the specific application of that provision to the property because:
He stated the property is different from others in the area because it is undeveloped. All of its abutting properties are developed with a variety of uses from single and multi-family residences to commercial retail operations to fuel oil storage and industrial warehousing and manufacturing. Further, this property is situated in the Limited Business Commercial District and abuts two different zoning districts, Residential B to the south and Industrial to the west. It has the unique characteristic of being able to serve as a buffer between these competing zoning districts.

The second prong of this test is there must be no connection between the "general public purposes" of the ordinances in restricting self-storage units in this zone. The ordinance itself is silent as to the general public purposes of restricting this use in the Limited Business Commercial District.

Accordingly then the general purposes of the Ordinance needs to be reviewed. Section 1.01.D of the Milford Zoning Ordinance states that *"[t]he regulations…are for the purpose of promoting the public health, safety, morals, general welfare and civil rights of the Town of Milford…"* It is difficult to understand that allowing this site, situated among such a variety of other uses, to be uses as a self-storage would somehow be a threat or damaging to the health, safety and general welfare of the citizens of Milford. In fact, we think it would better serve them by providing a place to store many of their goods and property.

ii. and; The proposed use is a reasonable one because (explain):

The use is reasonable for the site because it is relatively benign and less intensive in comparison to most of the other uses surrounding it. Exhibit C-3 show some of the other uses that could be done on the site and the intensity of those uses as compared with the use they are providing. Further, it would serve as a buffer between these uses, that other permitted uses in the Limited Commercial Business Zone cannot provide. As discussed below, these uses simply cannot provide the buffer that the proposed use can. Exhibit D-1, prepared by Sanford Survey, shows the traffic analysis per each use allowed by the ordinance on the parcel. Under the proposed use of approximately 15,000 square feet of storage, there would be 41 trips per day as compared with the allowed uses. This use is less intense, at least from a traffic standpoint, than the permitted uses and nothing will infringe on the protections set in place by the zoning ordinance so by that, they meet the condition of hardship. As indicated before, it you do not meet the first prong, then there is another way to obtain a variance.

B. If the criteria in Section A are not established, an unnecessary hardship will be deemed to exist if, and only if, owing to special conditions of the property that distinguish it from other properties in the area, the property cannot be reasonably used in strict conformance with the ordinance. A variance is therefore necessary to enable a reasonable use of the property because:

As indicated above, this parcel of less than three acres is located among several districts in their varying uses. As such, it is unique because it can be utilized as a buffer among these competing uses. This parcel is not developed and an owner has the right to develop their property within the confines of the ordinance but, this parcel is not conducive to the permitted uses in its zoning district, and as required "Cannot be reasonably used in strict conformance with the ordinance." The following uses are allowed in the Limited Business Commercial District (5.07.01): A. Offices; B. Hospitals and/or medical facilities licensed by the state of NH; C. Schools; D. Bed and Breakfast; E. Churches; F. Funeral homes; G. Single family dwellings and their accessory uses and structures, with their respective related conditions set forth in the Residence "A" district; H. Two-family and multi-family dwellings and their accessory uses and structures, with their related conditions set forth in the Residence "B" district; I. Home Occupations in accordance with Section 10.02.3; J. Telecommunication facilities (2000); K. Senior Housing Developments (2002); and L. Farm roadside stands (2010). None of these uses would be appropriate for this site due either to its size or proximity to many different uses. Due to its proximity to the fuel storage facility to the north, it is unsuitable for most of the uses allowed. The owners and/or occupants of these facilities would not want to be subject to the noise, lightings and occasional odor emanating from the site to the north. This is true of the enumerated uses A-H above. A home occupation (I) and senior housing (K) by definition connected to residential use which is included above. The site has never been identified as a suitable site for a telecommunication facility because it has no elevation requiring a tower height in

excess of the maximum allowed. The site is not suitable for a roadside farm stand because It is not along a highly traveled thoroughfare. The fact that this property can be used as a buffer is important and every landowner has the right to develop his property within the ordinance but in this case, the ordinance is too restrictive. Many of the allowed uses do not want to locate next to a fuel storage site. The parcel is not suitable for a roadside farm stand due to its proximity to traffic. For those reasons, it is a reasonable use and they do meet the criteria set forth in the ordinance. Exhibit D-2 is a simple analysis that shows how intense this use is in relation to the lot and to other self-storage units in the area. This use is 13% of the lot, at the lower half of the group but not an under intense use of the lot. The Old Wilton Road facility is at 7% because of the wetlands on the back part of the lot. It shows they are not asking for the world beyond what the lot and neighborhood can support.

4. Granting the variance would do substantial justice because:

Allows owner to develop its property in a reasonable manner with no negative impact on abutters and the surrounding neighborhood that wouldn't otherwise occur with any other development on the property.

5. The use is not contrary to the spirit of the ordinance because:

This use is allowed in other zones of similar uses as this zone is not contrary to the spirit because the spirit and intent of the ordinance is to promote orderly growth and the appropriate use of land. Considering all of the competing uses surrounding the subject site the Board's approval of this request will accomplish just that: promote the orderly growth and appropriate use of land.

The intent of the ordinance is hand in hand with the first prong of the variance. The courts have held that for a variance to be denied, the use would be contrary to the other uses allowed. Self storage is not permitted by right but by special exception and they do meet those requirements.

He continued with section F of the submitted application, Additional Considerations of the Milford Zoning Ordinance. The proposed use, self storage facility, is only permitted in one district [R] and only by special exception pursuant to section 10.02.4. The applicant believes it has demonstrated that variance should be granted because the proposal meets the 5 prong test of a variance and is not otherwise required to meet the requirements of Section 10.02.4. The proposal does meet the conditions imposed by Section 10.02.4. That Section has six enumerated requirements:

Subsection A1 requires the use to be located on certain property in the R district. By definition the compliance with the variance requirements for the subject district, LBCD, obviates this requirement. Subsection A2 requires a 15 foot perimeter landscaped buffer with specific requirements of planting of evergreen trees. This is consistent with the applicant's proposal and will be addressed at the Planning Board. Subsection A3 allows the ZBA to waive all or part of the screening. The applicant requests that screening be required only on the west, south and east sides of the premises. Subsection A4 requires no outside storage. The applicant's proposal does not provide for outside storage. Subsection A5 requires site plan approval by the Planning Board. The applicant will submit a site plan for approval by the Planning Board. Subsection A6 requires a fifty (50) foot front setback. This will be met by the approved site plan. In conclusion, he requested the Board grant the variance as requested.

K. Johnson asked if the members of the board had any questions.

M. Unsworth noted on one plan that one lot has greenhouses on it and one is empty; he wondered where the buildings are currently situated.

A. Buchanan showed him an older site plan of Woodman's Florist that showed the locations of all of the existing buildings. There are currently buildings on 32/23-2.
M. Unsworth asked how many storage units would there be per building.
M. Ciardelli replied they are not that far in the planning process.
L. Horning clarified that all of the greenhouses were on 32/23-2.
M. Unsworth asked if they had done traffic counts for the other self storage facilities in town.
A. Buchanan replied they did not. As explained by the engineer at Sanford Survey, there is a formula for the traffic number such as so many trips per day per 1000 square feet of storage. They didn't take that formula further.
F. Seagroves asked if they were saying there could be a possibility of 150 units.
A. Buchanan replied the units would be of varying sizes and they would engage a national firm that would survey the area to anticipate what the demand was for them. He feels they would be in sort of the medium range; he didn't think they would be the small or really big ones. They are trying to serve a more local area.
F. Seagroves asked what the hours of the facility would be.
A. Buchanan replied they have not planned that far but typically they are open 24 hours but they don't need to be. That is something that the Planning Board will deal with.
M. Unsworth stated that would indicate lighting needs.
A. Buchanan replied they are aware of that and will need to deal with it at the planning board stage.
M. Unsworth asked about signage.
A. Buchanan replied they had thought there would be some kind of signage somewhere but it might not be necessary.
M. Unsworth asked if they would place one on Nashua Street.
A. Buchanan replied they may not but would probably need one closer to the site. They don't have any rights to an off-site sign by may need to negotiate that in the future.
L. Horning asked about the size of the storage units; would they be a standard size, how many and what size?
A. Buchanan replied they have not calculated that yet.
M. Ciardelli replied they would probably be 10'x30' and 10'x15', backed up against each other.
A. Buchanan replied the buildings are oriented so the butt ends are facing south. It is probably the most pleasing view than the broad face. Garage doors would be along the sides and not on the gabled ends.
L. Horning asked how many units per block there would be.
A. Buchanan replied there would be about 2400 square feet per building.
K. Johnson replied the average unit would be 120 square feet and they would be of varying sizes, as in a typical self storage facility.
L. Horning asked if the lot would be all paved or would the surface be impervious and would there be any type of water detention pond.
A. Buchanan referred to Exhibit C-1 and noted the west side of the facility is pulled backed as part of the drainage plan. The engineer did not indicate a detention pond, just a recharge area.
L. Horning asked if in the future they address signage, would that incur more lighting issues.
A. Buchanan replied he didn't think there would be any signage that would require lighting. The only sign that would be present would be to mark the property; any other signs would be inappropriate. They are not asking for rights or easements for signage on Nashua Street.
Z. Tripp asked why they were not continuing with the greenhouses and using the lot as is.
A Buchanan replied only one has economic life left in it; the others are in disrepair.

M. Ciardelli stated they have not been used in the past five (5) to ten (10) years due to the cost of fuel and the maintenance required. The florist business isn't about growing and storing any more; it's just logistical.
Z. Tripp asked if there is demand for the commercial use that no longer exists.
M. Ciardelli replied no; no one was interested in taking the greenhouses or even the glass.
K. Johnson asked if there were any additional questions from the board; there were none so he opened the meeting for public comment.
Michael McGowen, 28 James Street, stated he had several concerns. His bedroom windows look out onto the proposed self-storage facility and he objects to the construction. He doesn't believe there would be minimal safety risks as there would be many strangers travelling in and out of the neighborhood. There have been very few incidents on Stoney Creek property and their lives will be changed. They are located in an almost rural area surrounded by woods with a pine lot to the left, a field and hardwood trees to the right. It will change their lives and the complexion of the neighborhood and who they are and they don't like that. He is not in favor of this and is vehemently opposed to this speaking for himself and many of his neighbors.
K. Johnson stated the parcel is located in the "Limited Commercial" district and those types of uses are allowed to go on that parcel. While he understands it is nice to see undeveloped lots remain undeveloped, this parcel is not undeveloped; there are some buildings on the parcel. In reality, many remaining undeveloped parcels will be developed. He asked if the speaker would prefer to see medical offices or other allowed uses on the site.
M. McGowen replied if the building is occupied, it will be supervised. There will not be a variety of strangers coming and going as with the self-storage units. He noted the applicants were asked how many units would be on site three (3) times and they responded once. The board doesn't know; there are a lot of unknowns. This is being presented in generalities.
K. Johnson stated it was not within the purview of the Zoning Board to make the determination whether to allow one (1) building with fifty (50) units or fifty (50) buildings with one hundred (100) units; that falls on the planning board. This is a two prong process. The planning board looks at what will fit, what size, what it will look like. If this was in a district where the use is allowed, it would go straight to the planning board. The zoning board needs to determine if this would be an appropriate use and as part of that process, they ask for abutter input.
M. McGowen stated he can't see how this will increase property values. The lack of security will diminish them. He doesn't see how a developer would put a residential use or multi family in there since it is right next to an oil company. There is too much noise there that they have to endure as it is. He doesn't want to see this near this community.
Jennifer Levin, 28 James Street, stated the increased traffic of this use would put many people at risk whether in their cars or on foot as there is limited room to maneuver there already. People going into the storage units at all times of the day and night would really increase that risk.
K. Johnson noted an office building, a permitted use, would have more traffic.
J. Levin stated that would be in a more controlled manner. With an office building there would be a sense of community; with a storage facility, there would be no sense of ownership. There would be break-ins, the storage of chemicals, the potential for illegal acts and break-ins and any building near by would be subject to that. It would also be a potential eye sore. If there is lighting for 24 hour access, it would impact all of the people in the area; they would be in daylight 24 hours a day.
Shelly Lockings, 16 James Street, asked if the facility would have someone on site 24 hours a day.
K. Johnson replied typical storage units do not have managers on site 24 hours a day. They are just self-storage units. At some sites, customers have access at all times and other facilities have gates with pass codes.
S. Lockings asked about the screening of the site.

K. Johnson replied that is a regulation of the ordinance and can be fencing, landscaping or trees and that is dealt with by the planning board.
S. Lockings stated there will be a traffic problem. There are thirty (30) units at Nottingham Place and sixty six (66) units at Stoney Creek and there are over one hundred (100) cars of residents that use the road every day. In winter the road becomes one lane. There is no room on James Street for additional traffic. Would the units have orange doors or would be they more upscale like the ones on Route 13 North, across from the Quarry condominiums?
K. Johnson replied specifics, such as the design of the building are not in line with what the zoning board controls; it is a planning issue. The zoning board will determine if this is an ok use in an area where the use is not allowed.
S. Lockings stated this request will negatively impact the property values; the values have dropped in the past year and this will make it worse.
Larry Nelson, 16 James Street, said the attorney stated there will be no drainage issues with the proposed use. There are plenty of drainage issues on James Street already; this will make it worse.
K. Johnson replied, not to reflect this question, this is also a planning board issue; they will look at the appropriate engineering reports, the number of buildings, the surface of the site, etc.
L. Nelson stated it was his understanding the developer went before planning when the condominiums were approved to go into the town sewer system but they are not hooked up and the town will not let them hook up. What happens one time will happen again. Property values will go down and he also wondered how many storage units were needed in Milford. He thought there must be enough for every house in town.
K. Johnson replied the number of units is not a concern of the zoning board; if they put up so many units and there weren't any customers, it would indicate there was no demand. Normally if someone comes before the zoning board, they have done the research on the need for self storage in the area before coming to the zoning board with this plan. They've researched how to operate such a facility, the color scheme, and how to build the units for the most part, is outside the reach of the zoning board. He did state the board could attach a condition to mitigate the impact on the neighborhood.
Maureen Roy, 16 James Street, stated she was concerned with the runoff. There is a serious problem with their building and there is no reason to think there won't with the proposed building and will be with the entire property in question. She was concerned that units would be large enough to put an entire homes' goods in one unit. She doesn't want moving vans coming on to James Street several times a day.
K. Johnson replied a typical self storage unit is the size of a one car garage or less. On the other hand, there is nothing to stop someone from renting five (5) units and storing an entire house full of stuff in them. From experience, living on a street near a self storage facility, moving vans are on site one or two times a year. It's not designed to get the larger tractor trailers in and out. More commonly, smaller moving vans are used.
M. Roy stated that can't be ruled out. She asked what the driveway finish would be.
K. Johnson replied that was a planning board issue; it could be partially paved or gravel.
M. Roy asked about the entrance and egress to the site.
K. Johnson replied the side nearest to Route 101, off of James Street would be both the entrance and the exit. The facilities typically do not have in and out traffic happening at the same time versus an office complex.
M. Roy asked if the entrance to the site would be across from the garage entrance at 16 James Street.
K. Johnson replied it would be another planning board issue.

Jean Duffy, 28 James Street, asked if the empty space shown on the plan would be for the storage of campers and boats. She thought this would definitely diminish her property values.
K. Johnson replied the ordinance is very specific and any new storage facilities will be put in place within the limits the ordinance. Many of the existing storage facilities were constructed before the ordinance was in place. In this specific case, the ordinance prohibits any outside storage.
J. Duffy asked if the site would be fenced.
K. Johnson replied that was a planning board issue.
Robert Moran, 16 James Street, stated the planning board and zoning board are two separate entities. They should stop this request here at this stage, if they don't want the rest of it to happen. He noted there have been numerous incidents where things have been changed when they should not have been. To put something in that is allowed by zoning is fine; to change the zoning to put something like this in will affect everyone else in the area. He noted the applicants may have more power in town and will get their way and it isn't right. Whatever is put on the site should comply with the zoning ordinance.
K. Johnson replied his concerns will be addressed in their discussions.
Christopher Kerrissey, 28 James Street, referred to image of the site with the yellow lines super imposed on it, asked if they can expand beyond what is shown.
K. Johnson noted the photo shows the boundary of the property and how they develop the site within the boundary is a planning board issue.
Susan Ingraham, 28 James Street, noted there were many questions that could not be answered because this request must go before the planning board, if the variance is granted. If they do not stop this tonight and it goes forward, there are so many things they will have no control over. She stated she supported the other uses the property is zoned for. She stated the attorney said this would not affect property values or the character of the neighborhood. It will; Nottingham and Stoney Creek are wooden residential structure. If an office or church and the like were built, they would be similar, more upscale.
K. Johnson replied he did not know what the units would be made of; they could be wooden in the shape of a barn. Assumptions are being made that fall within the realm of the planning board.
S. Ingraham replied that is why this is a public forum; there is a lot of unknown in this application. She didn't know the property on which she lives existed four (4) years ago it is appealing. What is allowed by the ordinance would be more appealing. If the facility was to operate 24 hours a day, units could be used for woodworking, for homeless people to live in. When the applicant was asked if they had any electrical options in mind, the answer was indefinite. She referred to Exhibit C-2 and noted the preliminary drawing shows the wooded area not being used. She noted there was a wetland area on this property was not sure how that would be dealt with if this is approved. In the planning board stage, if this plan does not work, they may have to cut down trees. She stated their condominiums are not worth much now. She noted some of the smaller units have a slider and two (2) windows, like hers, that look out onto trees. She was concerned if the trees were cut down, that it would diminish the value of her unit even further. If they don't oppose the plan now, it will leave themselves wide open for the unknown.
L. Horning wanted to clarify everything previously stated by the chairman. There is a vast difference between the zoning board and the planning board. This is a land use board; the planning board handles aesthetics. As the chairman has expressed, they can attach conditions if this variance approved. The board members do not have preconceived notions and the zoning ordinance is here, in part to protect property values and property owners and the board members ask questions to get a feel for the issue.
K. Johnson stated the zoning board has a responsibility for what goes where. The planning board has a responsibility for how it goes there. Does this request meet the requirements that are spelled

out in the ordinance, based on the application and the questions and answers received? He noted, in the previous equitable waiver case, they asked the same questions over and over. They are required to do that. They review the criteria and state their reasons why it has or has not met them. If they determine this is a reasonable project, it fits with the character of the neighborhood and it meets specific criteria as set by the state. Then they have the criteria of the town of Milford ordinance that need to be met. Only if all of that is met can they grant the variance. They take all of the public, the applicant and the board input and take it into consideration before voting.
Jean Dibenadetti stated questions have presented that have no answers so how can the variance be granted.
K. Johnson stated they have dealt with controversial cases in the past; the board does not make the determination of what it will look like, they can only determine if what they want to do will work. If it is ok, it then goes to the planning board for more requirements. The zoning board is the first step; if they say no, then the process stops. If the zoning board says yes, the planning board looks for certain things and the process goes forward. It is the way the process works. They are separate boards with separate procedures.
Bob Kokko, property manager for 16 and 28 James Street, asked about the conditions that were spoken about.
K. Johnson replied to quantify this, it is sort of vague; they have power in certain areas and not in others. They could, for example, attach a condition that the lighting be motion controlled but they don't have any ability to say there needs to be a manager on site 24 hours a day. There are specifics granted reasonable to the ordinance. They represent both the town and the developers and are trying to find the line between both.
B. Kokko noted most of the concerns were about property values and aesthetics. If they tabled the application, it would give the applicant time to design the facility and provide definitive answers to the questions asked.
K. Johnson replied they can't do that; they can't say it needs to look like colonial cottages. The planning board can override it; they can't do it.
B. Kokko stated they can't give conditional approval then.
B. Kokko stated the architectural design is too broad.
L. Horning reiterated this is a land use board and they do not deal with aesthetics. They can address lighting and ask questions on traffic. They could add a condition that the applicant must abide by. In this case, they must comply with the ordinance which deals with screening, run off and all other things listed in the ordinance.
B. Kokko stated, in an effort to stay neutral, they are tying the hands of the applicant and the people.
K. Johnson replied in essence, this is how the process of land use in New Hampshire works.
L. Horning stated the planning board can tell them to come back with something more conducive to the neighborhood.
K. Johnson stated the zoning ordinance is their guide; the planning board has its own criteria that must be met that has nothing to do with the zoning ordinance. If someone goes before the zoning board for an apartment building, they can't tell them how many parking places to put it; that is what the planning board does. The vast majority of the issues raised tonight fall under planning. If it is approved tonight, it will then go to the planning board and the same procedure will be followed with the notification of abutters and a public hearing. If the variance is granted, it is for a self-storage facility.
Alfred Dibenedetti, 16 James Street, asked if this variance is approved, will it go to the planning board and will they have another meeting.
K. Johnson stated, if approved, it would and the specific concerns would be addressed at that time.

A. Buchanan stated he assumed the residents, should the variance be granted, would meet with planning to get the general take on this before the engineering is done. They will want to meet with the abutters and they want to be good neighbors as well as being able to use their property. They may not be able to meet all of their concerns because of economic reasons but they will work with the neighbors. If they can make the buildings less obtrusive and won't make an economic hardship for the owner, they will do it. The Ciardelli's have tried to be good neighbors for the time they have been on their property and they won't stop now because of some concerns from the neighbors.
Joe Catalize, 16 James Street, asked if this is approved and it goes to the planning board, what is their recourse if it is approved, to stop it before it goes to the planning board?
K. Johnson stated there is a 30 day appeal period and within that time, anyone can appeal the board's decision.
J. Catalize replied, as a group, they could get together and appeal the decision.
K. Johnson replied as an individual, he can. They have to state specific reasons why they are appealing the decision and give evidence to that. As a hypothetical, the applicant provided information by a realtor who says the property values will not be impacted.
J. Catalize asked where the realtor was from.
K. Johnson replied it doesn't matter but they have provided that information. They could hire a real estate assessor to state the opposite, submit it and the board will take that into consideration.
J. Catalize asked if that would stop it from going to the planning board.
K. Johnson replied it would not; however, there are time constraints for the appeal process to occur. The only time it will not go forward to the planning board is if the supplied new information in the appeal is enough for the board to reverse its decision; there is another 30 appeal period for the applicant to respond. At the end of that process, if everyone is still unhappy, the court system exists.
J. Cataldi asked how soon a decision will be made by the zoning board.
K. Johnson replied a decision will be made tonight; if appealed, six weeks from tonight.
F. Seagroves stated the appraiser is from New Hampshire and is certified in New Hampshire.
A. Buchanan stated he lives in Mont Vernon.
J. Dibenedetti state if the variance passes and the planning board turns it down, what happens.
K. Johnson replied they have one year to begin substantial construction; if the planning board and applicant can't come to an agreement, they then have to come back to the zoning board.
S. Ingraham stated she did not agree with the applicant's statement regarding hardship. There are other options for the parcel that are less intrusive to their livelihood. She doesn't want to say they can't do anything with the property. She noted not everyone in the room had a chance to speak or chose to speak. She wondered if a show of hands would be appropriate since not everyone likes to stand up.
K. Johnson replied it was not; if an audience member has something to say, they must go to the microphone to speak.
S. Ingraham asked if this is approved, and they say yes to the self storage facility which could have 24 hour access and electricity. There could be inebriated people hanging out in the units, there could be big moving vans and trucks. A lighted sign could be there. In the likelihood the applicant will work with the neighbors, who will open and lock the gate. The board will be saying yes to something that is very general. There are 30 units at Nottingham Place, 66 units at Stoney Creek and not all the residents are present to voice their opinion. She thought it was interesting there was no one present to support this. If they approve this, they are affecting many people.
J. Duffy, 16 James Street, asked if any of the members of the zoning board were on the planning board.

F. Seagroves replied they cannot be on two (2) boards.
K. Johnson stated only one person may sit on both boards and in this case, none of the full or alternate members sit on the planning board.
A. Dibenedetti stated there were only a small portion of residents present but they do pay a lot in taxes; at the same time, this will make it harder for them to sell their properties.
R. Moran stated this was a witch hunt for residents. Once the zoning board makes their decision, it's a no win situation. This is where the residents have to stop this. The town has set up the zoning ordinance and places for these storage facilities; this is not one of them. But they can't say don't use the property just use it for what it is approved for.
K. Johnson stated, without going to The Board of Adjustment in New Hampshire, A Handbook for Local Officials, it defines the zoning board as a quasi judicial board. They are here to make a judgment of are these laws are correct. Does it make sense to strictly enforce them or can they make some accommodation in them. To do that, the applicant makes their case, the board accepts input from the public and no testimony carries more weight that another. They make the best determination if the applicant has met the criteria; if they have, they must grant it. If they haven't, they must deny it. If it doesn't meet the requirements, they can't say yes. He asked if there were any additional comments from the audience; there were none so he closed the public portion of the hearing.
There was some discussion regarding having the applicant read his responses to the criteria into the record again. Since all criteria were addressed previously, it was accepted as such.
L. Horning asked if there was any consideration to fence the site at all, just to clarify.
A. Buchanan stated they haven't discussed that and assumed it will be addressed during the planning board stage.
K. Johnson asked if they had checked with the police department regarding crimes at other self storage units.
L. Horning asked if they have looked into the pass code technology.
A. Buchanan replied they did not check with the police regarding crime and yes, they have looked into the pass code technology to defer unwanted traffic in the area.
L. Horning asked about the setback from the house and the distance from 101 and James Street.
A. Buchanan replied the closest building is probably seventy five (75) feet from the proposed units.
L. Horning asked how far from the lot line it would be.
A. Buchanan replied it would be the allowed setback for the zone and the frontage would probably be on James Street, it would be fifty (50) feet.
Z. Tripp asked if the applicant would entertain the idea of limiting the hours of operation.
M. Ciardelli replied he would, if necessary.
L. Horning asked about fencing.
M. Ciardelli stated they haven't thought about it yet. One side of the property is trees so no fence is needed there. They do need to put something up between the parcel and the fuel storage facility to limit foot traffic. If it was cost conducive, they would have no problem putting up a fence.
F. Seagroves asked about screening.
A. Buchanan replied the ordinance requires trees that will grow thick and tall.
F. Seagroves stated he asked that for the benefit of the audience.
K. Johnson read from Article X, Section 10.01.2 Variances: *"Every variance granted by the Board of Adjustment shall be based upon and accompanied by a specific find or findings that: A. There are special circumstances or conditions applying to the land or structure for which the variance is sought (such as, but not limited to, the exceptional narrowness, shallowness, or shape of the property in question, or exceptional topographical conditions), which are peculiar to such*

land or structure, and the application of the requirements of this Ordinance will deprive an owner of such property a reasonable use of it, and will impose upon such a hardship not shared by the owners of other property in the same district. B. The specific variance as granted is the minimum variance that will grant reasonable relieve to the owner and is necessary for a reasonable use of the land or structure. C. The granting of the variance will be in harmony with the general purposes and intent of this Ordinance, and with convenience, welfare and character of the district within which it is propose, and will not be injurious or otherwise detrimental to the public welfare." He then read from Section 10.02.4, Self Storage Facilities (1997): *"A. In all cases involving self-service storage facilities in the residence "R" District, the following shall be minimum performance conditions of approval, in addition to any other conditions the Board of Adjustment may require: 1. The self-storage facility shall be located specifically on, and have frontage on, Rte. 13 North, Rte. 13 South, and/or the following parcels of land on North River Road: Map 8, lots 11, 11-1, 19, 48, 49, 50, 51, 53, and 53-5. 2. In order to screen facilities and insure their compatibility with surrounding land uses, there shall be a minimum fifteen (15) feet perimeter landscaped buffer along all sides of the parcel, This buffer shall be planted and maintained with evergreen trees, minimum six (6) feet in height, at intervals fifteen (15) feet on-center, alternately staggered along the length of the buffers. The type of evergreen tree shall be subject to the approval of the Planning Board. 3. If the Board of Adjustment determines that existing landscaping and/or topographic conditions already create an effective perimeter screen, the Board of Adjustment may waive all or a part of the evergreen tree screening requirement. 4. There shall be no outside storage. 5. The use shall require site plan approval by the Planning Board. 6. Each structure shall be setback at least fifty (50) feet from the front lot line."* He asked if the board had any additional comments; there were none so they discussed the criteria for a variance.

1. Could the variance be granted without diminishing the value of abutting property?

Z. Tripp stated this was tricky but the applicant did supply evidence from and appraiser who did not feel there would be a diminution of property values. Self-storage units in themselves wouldn't reduce property values more than any other commercial use allowed in the district. He noted there was an industrial complex to the north of this site and with screening and the other self-storage requirements he felt it could be granted without diminishing the value of abutting property.

M. Unsworth agreed. Looking at Mr. Rizzi's qualifications, and although it is only one opinion, he felt the variance could be granted without diminishing the value of abutting property.

L. Horning stated looking at the application and the exhibits, and hearing what was stated before, as far as professional opinions go, and even though there are commercial uses that could be developed on this property, she felt the variance could be granted and would not diminish surrounding property values.

F. Seagroves agreed; reading from Mr. Rizzi's letter: *"…it is my opinion that property values in the area surrounding the subject may well increase …"* They are talking about tearing down neglected greenhouses, so yes, granting the variance will not diminish the value of surrounding properties.

K. Johnson agreed for a number of reasons. Any development on the property will have some affect on the property values. There may be a dip in values for a short period of time. Speaking from personal experience, his appraisal went down by 5% and five (5) years later it was up 10%, living on a street where a self-storage facility was located. He understands the concerns of the abutters but he believes they are afraid of the potential that won't develop. This use will be less busy and will be used by the neighbors. He didn't believe property values would be negatively impacted.

2. Would granting the variance not be contrary to the public interest?
F. Seagroves stated yes, although many people disagree. This will be beneficial, the owner will pay more taxes and they are going to make the facility look nice and will help to keep it clean.
M. Unsworth agreed; there is no harm in putting up these buildings compared to what would be allowed on the site.
L. Horning agreed it would not be contrary, for the reasons stated before. The applicant went over, in great detail, the traffic count, etc.
Z. Tripp agreed. He read from page II-19 of The Board of Adjustment in New Hampshire, A Handbook for Local Officials: *"…it must unduly and to a marked degree violate the basic zoning objectives of the zoning ordinance."* The basic objective is for commercial uses. There are other business activities in the neighborhood. This is a low intensity use and is more compatible with the residential district than the recommended uses, like hospitals and schools. There is much public interest with traffic, namely strangers going into the facility, overall appearance with the addition of trees and safety but based on the submitted traffic formulas, there would be less than with other allowed uses. The empty lot nearby is a nice feature for the residents but he hopes the residents understand an industrial complex can go in on that site in the future. With regard to safety, he felt this would be a good spot to add a condition limiting hours, and with that in place, he would be able to say yes and leave the issues that need to be addressed up to the planning board.
K. Johnson agreed and said the statement is worded strangely but is that way to garner an affirmative answer. This question and the question on the spirit of the ordinance are very similar. Reiterating what Z. Tripp said, from the powers of the zoning board: *"For the variance to be contrary to the public interest, it must unduly and to a marked degree violate the basic zoning objectives of the zoning ordinance."* He stated this is what this question deals with. Further, with regard to the spirit of the ordinance, the handbook says: *"To determine this, does the variance alter the essential character of the neighborhood or threaten the health, safety, or general welfare of the public?"* It is very specific. He agreed with Z. Tripp on the safety aspect; James Street is narrow. He noted this is a place where the board can put conditions to help the variance, if granted, meet the safety requirements so he comfortably said yes.
3. Would denial of the variance result in unnecessary hardship taking the following into consideration:
A) i. No fair and substantial relationship exists between the general public purposes of the ordinance provision and the specific application of that provision to the property;
B) If the criteria in subparagraph (A) are not established, an unnecessary hardship will be deemed to exist if, and only if, owing to special conditions of the property that distinguish it from other properties in the area, the property cannot be reasonably used in strict conformance with the ordinance, and a variance is therefore necessary to enable a reasonable use of it.
ii. The proposed use is a reasonable one.
M. Unsworth stated yes, the proposal is reasonable as other businesses surround this site. It is very similar to what is already there. Assuming the applicant did his research and has a business plan, he felt this was a good business for this particular parcel as opposed to the dilapidated greenhouses.
F. Seagroves agreed and mainly dealt with B. Because of the nearby fuel storage facility, it would be hard to find any offices, hospitals, schools or churches that would want to build on that piece of property. With that condition, there is a hardship.

Z. Tripp stated relief could be granted without frustrating the purpose of the ordinance. As he stated earlier, the low intensity use is compatible with the surrounding neighborhoods. The proposed use is a reasonable one given the commercial uses already in the neighborhood. To address the concern there is another reasonable uses for the property, the applicant has submitted he doesn't believe the other uses are viable due to lot size or position of the lot. The only viable use he could see, due to lot size and position would be single or multi-family housing but it may not be reasonable with the current housing environment. The hardship must be shared by others in the district and forcing the applicant to use his land only as a residential use, with all the commercial use in the area, would be unreasonable and a hardship that wouldn't by shared by others. The use also has to be in harmony with the existing residential and business uses. It would be an unnecessary hardship to deny this request.

L. Horning stated Z. Tripp made a very good point. The traffic comparison entered into the record by the applicant shows this is by far one of the lesser impact uses, given the intense nearby residential use, there is no fair and substantial relationship that exists between the ordinance and the application of it to the property. The proposed use is a reasonable one. This use will have far less impact on traffic flow and land use. It's not a use that is being imposed on the surrounding landowners. Denial of the variance would be an unnecessary hardship, taking all of those things into consideration not just for the applicant but for the surrounding residents, considering what could be put there.

K. Johnson disagreed; he felt there would be no hardship in denying the variance. He felt it does not meet the criteria of hardship. There is a substantial relationship between the general purposes of the ordinance and their applicability to this particular parcel. The parcel is somewhat undeveloped because it does have development on it; that does not on its own, make it that unique. There are other uses allowed by the ordinance, which was created with the intent of allowing limited commercial use. When they created the ordinance, they knew there were other existing businesses in the area that did not fit within that zoning. They have specifically within the town's ordinance stated self-storage facilities are only allowed in the Residence "R" District but not just the specific district but specific lots on which this use is allowed. The proposed use is not a reasonable one given the nature of the neighborhood surrounding the parcel and the existing and future businesses going in the surrounding area. This property could easily be used in accordance with the ordinance and it is not up to the board to take in the applicant's economic considerations. Offices and medical buildings could be allowed on the site; it is not up to the zoning board to determine which would be the best alternative for the applicant. He does not see that there are any special conditions of the property that make it unique per the zoning ordinance.

4. Would granting the variance do substantial justice?

K. Johnson read from page II-10 of the Handbook: *"It is not possible to set up rules that can measure or determine justice. Board members must determine each case individually. Perhaps the only guiding rule is that any loss to the individual that is not outweighed by a gain to the general public is an injustice. The injustice must be capable of relief by granting a variance that meets the other four qualifications. A board of adjustment cannot alleviate an injustice by granting an illegal variance."* Those are the requirements; basically they have to balance public and private interest in the use of this land.

Z. Tripp stated granting the variance would do substantial justice. The gain to the public, in this case, is to not have a commercial development on the lot. As we know, there is commercial development allowed on that lot and is specifically called out in usage. Is

there any additional gain in not allowing this one as opposed to other ones? No. Yes, this can be granted.

L. Horning disagreed; granting the variance would not do substantial justice because the loss to the individual would not outweigh the gain to the public.

M. Unsworth stated granting the variance would do substantial justice. It enables the property owner to have a business they feel is appropriate in the area.

F. Seagroves stated yes; he was not sure what the public would gain if this was denied.

K. Johnson agreed with L. Horning; there would be no significant loss to the applicant if this was denied. The applicant still has a number of other possibilities by right, as allowed by the ordinance that they could use to develop the property. The gain to the public falls into not losing features they are concerned about such as safety. There could be a potential for an increase in crime and traffic and by not allowing the self-storage units it would eliminate the potential danger to the public. The potential loss is the applicant would be required to develop the property within the confines of the limited commercial district.

5. Could the variance be granted without violating the spirit of the ordinance?

M. Unsworth stated the variance could be granted without violating the spirit of the ordinance. There is a limited business listing in the ordinance; who's to say that self-storage facilities shouldn't be on this list as well. He didn't think the spirit of the ordinance would be violated nor would safety be an issue, for that matter.

L. Horning stated she didn't think the variance could be granted without violating the spirit of the ordinance because that is why we have the ordinance. As the chairman stated earlier and read from the Handbook: *"Perhaps the only guiding rule is that any loss to the individual that is not outweighed by a gain to the general public is an injustice."* As far as what she can read from the ordinance, it is governed by the criteria that are set before the board. She didn't believe granting this variance could be granted without violating the very intent and purpose of the ordinance.

Z. Tripp stated yes, the variance could be granted without violating the spirit of the ordinance and he alluded to the comments made before in a similar question. He read from page II-9 of the Handbook: *"…must promote the 'health, safety, or general welfare of the community'."* If this is built in accordance with the restrictions put forth in the ordinance plus the restriction he would like to propose with regard to limited hours, he thinks it satisfies both the safety and the welfare of the community aspects. He read again from page II-9: *"…determine the legal purpose the ordinance serves and the reason it was enacted."* That addresses activities that are compatible with the surrounding residential neighborhoods. This use is compatible with the surrounding residential neighborhoods.

F. Seagroves felt granting the variance would not violate the spirit of the ordinance. Referring to the Handbook, it talks about the *"health, safety or general welfare of the community."* He believes, going by the applicant's exhibit regarding traffic counts for this use, that 41 trips per month is not too many. His daughter once rented a self-storage unit and rarely visited it. He didn't think there would be that much traffic going in and out of the facility. He didn't really see that there would be any safety issues and although there is always a possibility for trouble, it is hard to control.

K. Johnson stated the variance could not be granted without violating the spirit of the ordinance. The self-storage units are very specifically defined and placed in the ordinance where the town, in its planning, wanted them to be. It put very specific restriction on where it wanted them to be. The statement, which has been referred to a couple of times, is about the intent of the Limited Commercial-Business District: *"The intent of the Limited Commercial-Business District is to provide areas for those business activities which are compatible with surrounding residential*

neighborhoods." He had two (2) comments on that, the first being these districts were created specifically to control development along the main arteries in and out of Milford. The second comment was with regard to the surrounding residential districts, which are Residence "A" and Residence "B". They are actually looking for business uses that would be compatible with those districts. When the ordinance was drafted and written by the planning department, they determined self-storage units were not compatible with the Residence "A" and "B" districts by specifically not allowing them in the ordinance as exceptions. He did not believe the variance could be granted without violating the spirit of the ordinance.

There was some discussion as to the placement of the discussion of conditions. It was decided to put forth the condition prior to the vote.

Z. Tripp proposed the condition that the hours of operation be limited to between 7 am and 9 pm.

F. Seagroves seconded the motion.

Z. Tripp – yes L. Horning – yes F. Seagroves – yes M. Unsworth – no
K. Johnson – no

The condition was granted by a 3-2 vote.

K. Johnson asked if there were any additional comments; there were none so he stated after reviewing the petition and after hearing all of the evidence and by taking into consideration the personal knowledge of the property in question, he called for a vote, to which the condition is added.

1. Could the variance be granted without diminishing the value of abutting property?

F. Seagroves – yes L. Horning – yes Z. Tripp – yes M. Unsworth – yes
K. Johnson – yes

2. Would granting the variance not be contrary to the public interest?

L. Horning – yes M. Unsworth – yes F. Seagroves – yes Z. Tripp – yes
K. Johnson – yes

3. Would denial of the variance result in unnecessary hardship taking the following into consideration:

A) i. No fair and substantial relationship exists between the general public purposes of the ordinance provision and the specific application of that provision to the property;
ii. The proposed use is a reasonable one.

B) If the criteria in subparagraph (A) are not established, an unnecessary hardship will be deemed to exist if, and only if, owing to special conditions of the property that distinguish it from other properties in the area, the property cannot be reasonably used in strict conformance with the ordinance, and a variance is therefore necessary to enable a reasonable use of it.

M. Unsworth – yes Z. Tripp – yes L. Horning – yes F. Seagroves – yes
K. Johnson – no

4. Would granting the variance do substantial justice?

F. Seagroves – yes L. Horning – no M. Unsworth – yes Z. Tripp – yes
K. Johnson – no

5. Could the variance be granted without violating the spirit of the ordinance?

L. Horning – no Z. Tripp – yes M. Unsworth – yes F. Seagroves - yes
K. Johnson – no

K. Johnson asked if there was a motion to approve case # 4-11, a request for a variance, with the attached condition.

Mike Unsworth made the motion to approve Case #4-11, with the above mentioned condition.

F. Seagroves seconded the motion.

Final Vote

M. Unsworth – yes Z. Tripp – yes L. Horning – no F. Seagroves – yes
K. Johnson – no

K. Johnson reminded the applicant of the thirty (30) day appeal period.

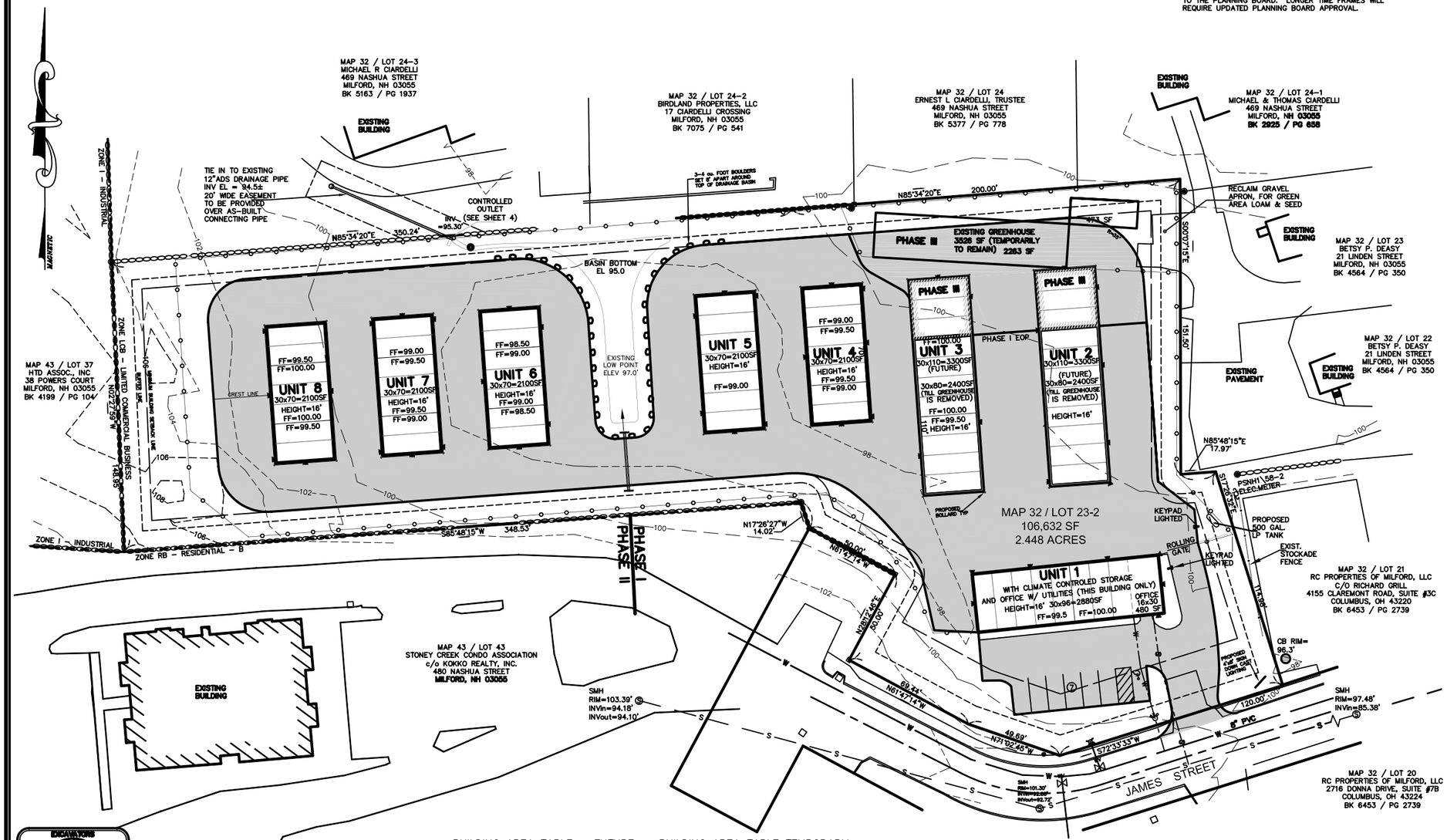
PHASING NOTE

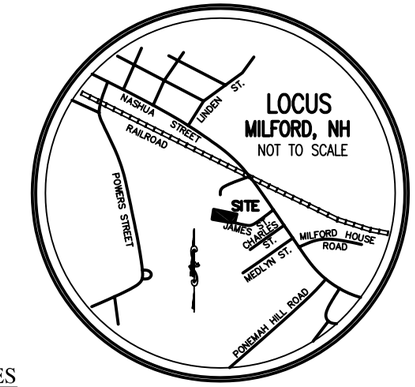
PHASE I) UNITS 1 – 5 & RETENTION BASIN
START 2011 COMPLETE BY END OF YEAR

PHASE II) UNITS 6 – 8
START 2015 SUMMER COMPLETE 2015 FALL

PHASE III) REMOVE EXISTING GREENHOUSE, EXTEND UNITS 2 & 3
START 2021 SUMMER COMPLETE 2021 FALL

SHORTER TIME FRAMES ARE ACCEPTABLE WITHOUT RETURNING TO THE PLANNING BOARD. LONGER TIME FRAMES WILL REQUIRE UPDATED PLANNING BOARD APPROVAL.





NOTES

1. REFERENCE THIS PARCEL AS MAP 32 / LOTS 23–3,23–3 & 23–5
2. OWNER: BIRDLAND PROPERTIES, LLC HCRD BK_8163/PG_271 LOT 32/23–2
   17 CIARDELLI CROSSING HCRD BK_8163/PG_271 LOT 32/23–3
   MILFORD, NH 03055–4919 HCRD BK_8163/PG_271 LOT 32/23–5
3. AREA OF PARCEL: 106,632 SF OR 2.448 ACRES
4. PARCEL IS ZONED: LIMITED COMMERCIAL– BUSINESS (LCB)
   ZONE REQUIREMENTS
   MIN. LOT SIZE– 20,000 SF (WITH MUNICIPAL SEWER AND WATER)
   FRONTAGE– 150 FEET
   MAXIMUM BUILDING HEIGHT: 35 FEET
   BUILDING SETBACKS:
   FRONT– 30', SIDE & REAR – 15'
5. THIS PARCEL IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON FIRM MAP 330096 0002 B DATED MAY 1, 1980.
6. THE PURPOSE OF THIS PLAN IS TO DEPICT THE CONSTRUCTION OF A NEW MULTI–BUILDING SELF STORAGE FACILITY, WITH THE ALLOWANCE FOR SHORT TERM ONGOING GREENHOUSE OPERATION, WITH THE UNDERSTANDING THAT WHEN THE GREENHOUSE OPERATION IS TERMINATED, THE GREENHOUSE WILL BE RAZED AND THE STORAGE BUILDINGS EXPANDED TO THE 20,000sf ALLOWED BY VARIANCE. THE INTENT IS TO ALSO DEPICT ALL REQUISITE SITE ENGINEERING AND DESIGN.
7. OPEN SPACE REQUIREMENTS (30%):
   106,632 SF x 0.3 = 31,990 SF REQUIRED
   34,222 SF PROVIDED = 32%
8. PARKING REQUIREMENTS:
   STORAGE:
   1 SPACE/1000 SF X 20,000 SF = 20 SPACES (1 VAN HANDICAP SPACE REQUIRED)
   6 SPACE'S + 1 HANDICAP SPACE IN FRONT + 13 SPACES IN REAR = 20 PROVIDED
   THE 13 SPACES IN THE REAR ARE NOT SHOWN BUT BY SIMPLE INSPECTION THERE IS AMPLE ROOM FOR MORE THAN 13 CARS TO PARK ALONG THE BUILDINGS WHILE PERFORMING STORAGE OPERATIONS.
9. THE SITE PLAN REGULATIONS OF THE TOWN OF MILFORD ARE PART OF THIS PLAT AND APPROVAL OF THIS PLAT IS CONTINGENT ON COMPLETION OF ALL REQUIREMENTS OF SAID REGULATIONS, EXCEPTING ONLY ANY VARIANCES OR MODIFICATIONS MADE IN WRITING BY THE BOARD.
10. ENTIRE PARCEL LIES WITHIN MILFORD LEVEL I GROUNDWATER PROTECTION AREA (CURTIS WELLHEAD) AND IS SUBJECT TO PERFORMANCE STANDARDS IN THE MILFORD GROUNDWATER PROTECTION DISTRICT AND WILL COMPLY WITH THE RULES AND REGULATIONS OF THAT DISTRICT.
11. THIS PLAN IS A COMPILATION OF EXISTING PLANS & DEEDS OF RECORD AND A SITE SURVEY DONE IN APRIL 2011.
12. ALL WORK TO CONFORM WITH DEPARTMENT OF PUBLIC WORKS INFRASTRUCTURE DESIGN, CONSTRUCTION & ADMINISTRATION STANDARDS, SEPTEMBER 2007: AND "SPECIFICATIONS FOR: TOWN OF MILFORD, NEW HAMPSHIRE GENERAL CONSTRUCTION STANDARDS, STORM DRAINAGE, WATER DISTRIBUTION SYSTEM, SANITARY SEWERS, AND ROAD CONSTRUCTION." PUBLICATION, REVISED JANUARY 1998.
13. THIS LOT IS TO BE SERVICED BY MUNICIPAL SEWER AND WATER.
14. UNDERGROUND UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. NO GUARANTY OF ACCURACY IS EXPRESSED OR IMPLIED. CONTRACTOR MUST NOTIFY DIG SAFE AND PROCEED AT HIS OWN RISK.
15. TEST PITS AND WETLAND EVALUATION PERFORMED BY EARL J. SANDFORD, CERTIFIED WETLAND SCIENTIST #209, NO WETLANDS FOUND ON SITE.
16. NO OUTSIDE STORAGE IS ALLOWED.
17. ON APRIL 7, 2011 MILFORD ZONING BOARD GRANTED A VARIANCE TO ALLOW A MULTI–BUILDING SELF–STORAGE FACILITY OF UP TO 20,000sf CONDITIONED ON HOURS OF OPERATION LIMITED TO 7am TO 9 pm DAILY. SEE CASE #4–11
18. HOURS OF OPERATION TO BE 7 AM TO 9 PM DAILY.
19. ALL SIGNAGE WILL COMPLY WITH MILFORD'S SIGN ORDINANCE.
20. THE FACILITY IS SUBJECT TO POLICE IMPACT FEES AND WATER AND SEWER ENTRANCE FEES.
21. CONSOLIDATION OF LOTS 32/23–2, 32/23–3 & 32/23–5 WILL BE A CONDITION OF APPROVAL OF THIS PLAN.
22. THIS PROJECT IS PROPOSED TO BE PHASED, SEE PHASING NOTE.
23. ALL CONTRACTS FOR STORAGE CUSTOMERS SHALL PROHIBIT ANY UNLAWFUL ACTIVITY OR USE ON THE PREMISES OR WITHIN THE UNITS.
24. SNOW STORAGE TO BE BETWEEN THE EDGE OF PAVEMENT AND THE FENCE.

SHEET INDEX

1. SITE PLAN BUILDING LAYOUT
2. LANDSCAPE AND LIGHTING PLAN
3. GRADING AND DRAINAGE PLAN
4. DRAINAGE BASIN & PROFILE PLAN
5. DETAIL PLAN
6. EXISTING CONDITIONS PLAN

BUILDING AREA TABLE – FUTURE
(WHEN GREENHOUSE IS REMOVED)
5 BUILDINGS AT 2100sf = 10500sf
2 BUILDINGS AT 3300sf = 6600sf
1 BUILDING AT 2880sf = 2880sf
TOTAL = 19,980sf

BUILDING AREA TABLE TEMPORARY
(WHILE GREENHOUSE REMAINS)
5 BUILDINGS AT 2100sf = 10500sf
2 BUILDINGS AT 2400sf = 4800sf
1 BUILDING AT 2880sf = 2880sf
TOTAL = 17580sf
(PLUS 2736sf GREENHOUSE)

EXCAVATORS
Telephone 1-888-344-7233
DIG SAFE
BEFORE YOU DO CONTACT DIG SAFE-CENTER TO PREVENT DAMAGE TO TELEPHONE, GAS OR ELECTRIC UNDERGROUND FACILITIES OF MEMBER UTILITIES, CALL TOLL FREE 1-888-344-7233. NEW HAMPSHIRE STATE LAW REQUIRES NOTIFICATION AT LEAST THREE BUSINESS DAYS BEFORE YOU START DIGGING OPERATIONS. IN AN EMERGENCY, CALL IMMEDIATELY.

REVISIONS

NO.	DATE	DESCRIPTION	BY

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

OWNERS APPROVAL

I, THE UNDERSIGNED, HAVE REVIEWED THIS PLAN AND DO HEREBY AGREE THAT THIS PLAN REPRESENTS OUR LAND AS WE KNOW IT, AND THAT ALL PROPOSED IMPROVEMENTS SHOWN HEREON MEET MY APPROVAL.

OWNER _____ DATE _____

PLANNING BOARD
TOWN OF MILFORD, NEW HAMPSHIRE

SUBDIVISION PLAN REVIEW: # _____
APPROVED: DATE: _____

SIGNED _____ CHAIRMAN DATE
SIGNED _____ MEMBER DATE
SIGNED _____ MEMBER DATE
SIGNED _____ MEMBER DATE
SIGNED _____ MEMBER DATE
SIGNED _____ MEMBER DATE

SITE PLAN BUILDING LAYOUT
MAP 32 / LOTS 23–2, 23–3 & 23–5
EAST MILFORD SELF STORAGE
JAMES STREET
TOWN OF MILFORD
HILLSBOROUGH COUNTY, NEW HAMPSHIRE

SANDFORD
SURVEYING AND ENGINEERING
TEL (603) 472–2265 FAX (603) 472–6604
597 NEW BOSTON ROAD, BEDFORD, NH 03110
BOUNDARY SURVEYS ~ SUBDIVISIONS ~ SITE PLANS ~ STRUCTURAL ~ SEPTIC DESIGNS

PROJ. MAN.: RPS	CADD: LPN	PROJ: CIA01M10035
CONTACT: M. CIARDELLI	CHK BY: RPS	DWG#: CIA01M10035
SCALE: 1" = 30'	DATE: 5–16–11	SHEET 1 OF 6

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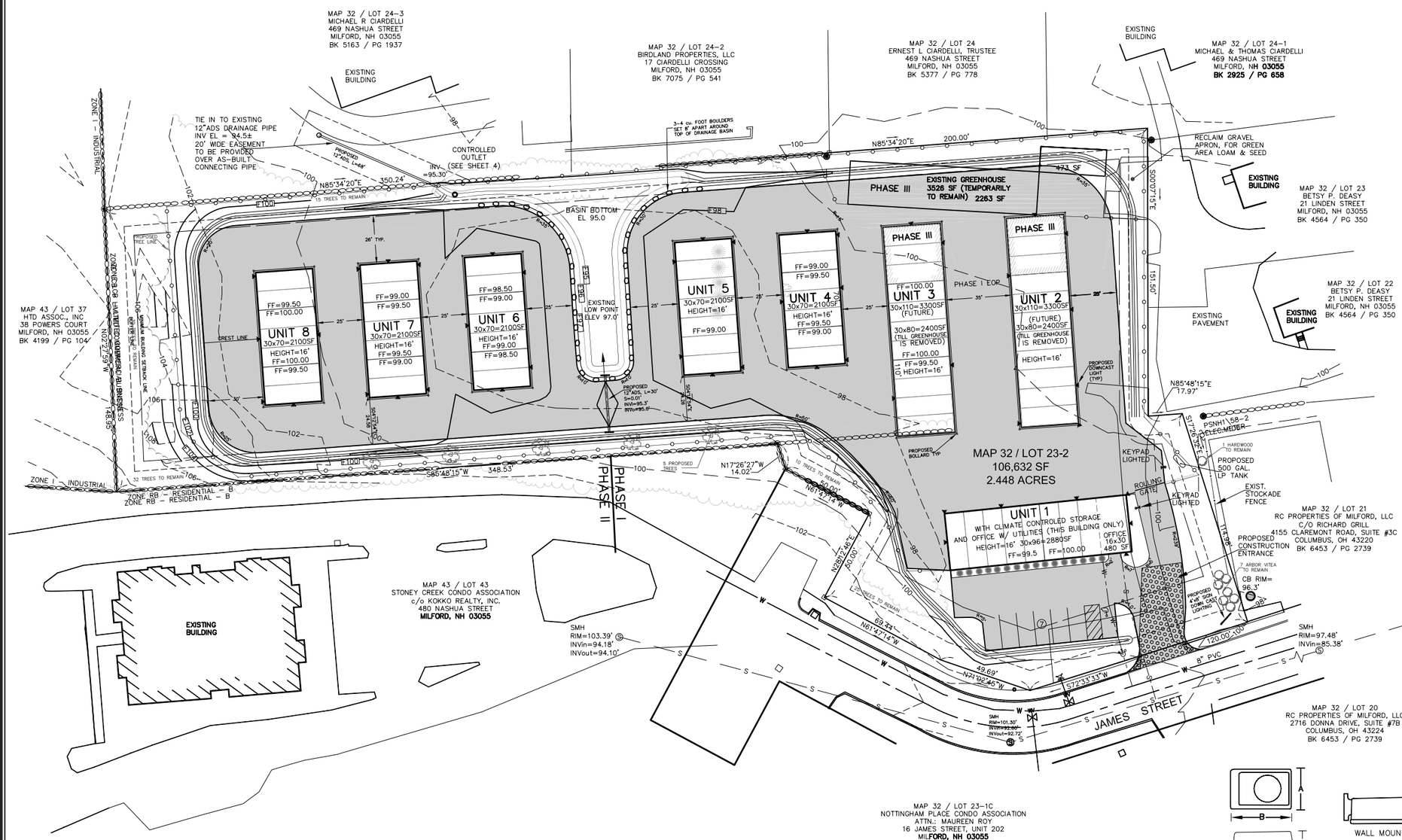

PLANT SCHEDULE

19	coniferous tree–	white pine	(*Pinus strobus*)
2	crabapple–	american crabapple	(*Malus coronaria*)
5	deciduous tree–	river birch	(*Betula nigra*)
7	coniferous tree–	austrian pine	(*Pinus nigra*)
9	shrub–	pjm rhododendron	(*Rhododendron pjm*)
7	shrub–	miss kim lilac	(*Syringa patula "miss kim"*)
16	shrub–	**erie viburnum**	**(*Viburnum d. "erie"*)**

Detention Pond Notes:
love grass and sedges scattered throughout all bottoms of detention ponds (dp).
joe-pye weed in dp #2 and dp #3 clumped in wide areas.
switch grass on uppermost edges.
shrubs scattered throughout all.
9 shrubs in dp #1 plus 10 lowbush blueberries on south edge.
3 shrubs in dp #2 plus 7 joe-pye weed.
3 shrubs in dp #3 plus 7 joe-pye weed.

shrub–	highbush blueberry	(*Vaccinium corymbosum*)
shrub–	arrowwood	(*Viburnum denatum*)
shrub–	winterberry	(*Ilex verticillata*)
shrub–	lowbush blueberry	(*Vaccinium angustifolio*)
herb–	joe-pye weed	(*Eupatorium purpureum*)
herb–	switch grass	(*Panicum sp.*)
herb–	love grass	(*Erigrostis sp.*)
herb–	sedges	(*Carex sp.*)

NOTES

1. THE AREA OF OPERATION IS TO BE GATED AND FENCED WITH 6' HIGH CHAINLINK FENCE
2. LIGHTING IS TO BE DOWN CAST WITH MINIMUM OF 1 LUMIN FOR PAVED AREAS. LIGHTS ARE TO BE SWITHCHED TO MOTION SENSOR ACTIVATION AFTER CLOSING TILL DAWN.
3. SECURITY CAMERAS ARE TO BE PLACED AT STRATEGIC LOCATIONS PER OWNERS SECURITY CONSULTANT.

SECURITY NOTES

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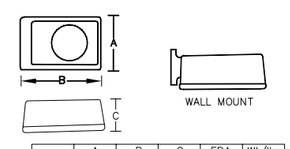
2. LIGHTING IS TO BE DOWN CAST WITH MINIMUM OF 1 LUMIN FOR PAVED AREAS. LIGHTS ARE TO BE SWITHCHED TO MOTION SENSOR ACTIVATION AFTER CLOSING TILL DAWN.
3. SECURITY CAMERAS ARE TO BE PLACED AT STRATEGIC LOCATIONS PER OWNERS SECURITY CONSULTANT.

LANDSCAPING NOTES

1. PLANTINGS SHALL CONFORM TO THE TOWN OF MILFORD SITE PLAN REGULATIONS.
2. PLANTINGS SHOWN HEREON ARE SUBJECT TO REVISIONS UPON MUTUAL CONSENT BETWEEN THE TOWN OF MILFORD CODE ENFORCEMENT OFFICER AND THE DEVELOPER
3. PLANTINGS ALONG THE BUILDING ARE TO BE INSTALLED IN SUCH A WAY AS TO ACCENT THE BUILDING WITH BOTH DECIDUOUS TREES AND EVERGREENS, AND TO SCREEN AND BEAUTIFY THE PREMISES RELATIVE TO ADJACENT PARCELS. PLANTINGS ARE TO COMPLIMENT EXISTING PLANTINGS ON ABUTTING PARCELS.
4. ALL REGRADED SURFACES SHALL HAVE A MINIMUM OF FOUR (4") INCHES OF LOAM EVENLY DISTRIBUTED TO ALL DISTURBED AREA OF THE DEVELOPMENT AND SHALL BE STABILIZED BY SEEDING OR PLANTING.
5. DECIDUOUS TREES SHALL HAVE AT LEAST A TWO (2") INCH CALIPER AT PLANTING. SIZE OF EVERGREENS AND SHRUBS SHALL BE A MIN. OF 5 GAL. IN SIZE, OR OF COMPARABLE SIZE. ALL TREES, SHRUBS, AND GROUND COVER SHALL BE PLANTED ACCORDING TO ACCEPTED HORTICULTURAL STANDARDS. DEAD AND DYING PLANTS SHALL BE REPLACED BY THE DEVELOPER DURING THE **FOLLOWING PLANTING SEASON.**
6. THE PLANT SPECIES SELECTED SHOULD BE HARDY FOR THE PARTICULAR AREA IN WHICH THEY WILL BE LOCATED.
7. THE OWNER AND THEIR AGENT SHALL BE RESPONSIBLE FOR PROVIDING, PROTECTING, AND MAINTAINING ALL LANDSCAPING IN HEALTHY AND GROWING CONDITION, REPLACING IT WHEN NECESSARY TO INSURE CONTINUOUS CONFORMANCE WITH THESE GUIDELINES. IN ADDITION, THOSE AREAS SHALL BE KEPT FREE OF ALL DEBRIS, RUBBISH, WEEDS, AND TALL GRASS.
8. GREEN AREA PERCENTAGES PROPOSED ARE GREATER THAN 32% (80% ±)
9. CONTRACTOR TO STOCKPILE LOAM AND SPREAD TO A MINIMUM THICKNESS OF 6 INCHES IN LANDSCAPED AREAS AND A MINIMUM THICKNESS OF 4 INCHES ON ALL DISTURBED AREAS AND HYDRO SEED.
10. EXISTING TREES ALONG BOUNDARY ARE TO BE RETAINED UNLESS UNSAFE OR NOT VIABLE.
11. 1 TREE / SHRUB / BUSH FOR EVERY 5' OF BUILDING FRONT (UNIT 1 **ONLY).**



	A	B	C	EPA	Wt/lbs
CEI	16"	21.75"	8.9"	1.6	37
CEII	21"	30"	10"	2.9	82

EXTERIOR LIGHTING FIXTURE

LANDSCAPE & LIGHTING PLAN

MAP 32 / LOTS 23-2, 23-3 & 23-5

EAST MILFORD SELF STORAGE

JAMES STREET

TOWN OF MILFORD

HILLSBOROUGH COUNTY, NEW HAMPSHIRE

SANDFORD
SURVEYING AND ENGINEERING
TEL (603) 472-2265 FAX (603) 472-6604
597 NEW BOSTON ROAD, BEDFORD, NH 03110
BOUNDARY SURVEYS ~ SUBDIVISIONS ~ SITE PLANS ~ STRUCTURAL ~ SEPTIC DESIGNS

PROJ. MAN.: RPS	CADD: LPN	PROJ: CIA01M10035
CONTACT: M. CIARDELLI	CHK BY: RPS	DWG#: CIA01M10035
SCALE: 1" = 30'	DATE: 5-16-11	SHEET 2 OF 6

REVISIONS

NO.	DATE	DESCRIPTION	BY

GRAPHIC SCALE

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(IN FEET)
1 inch = 30 ft.

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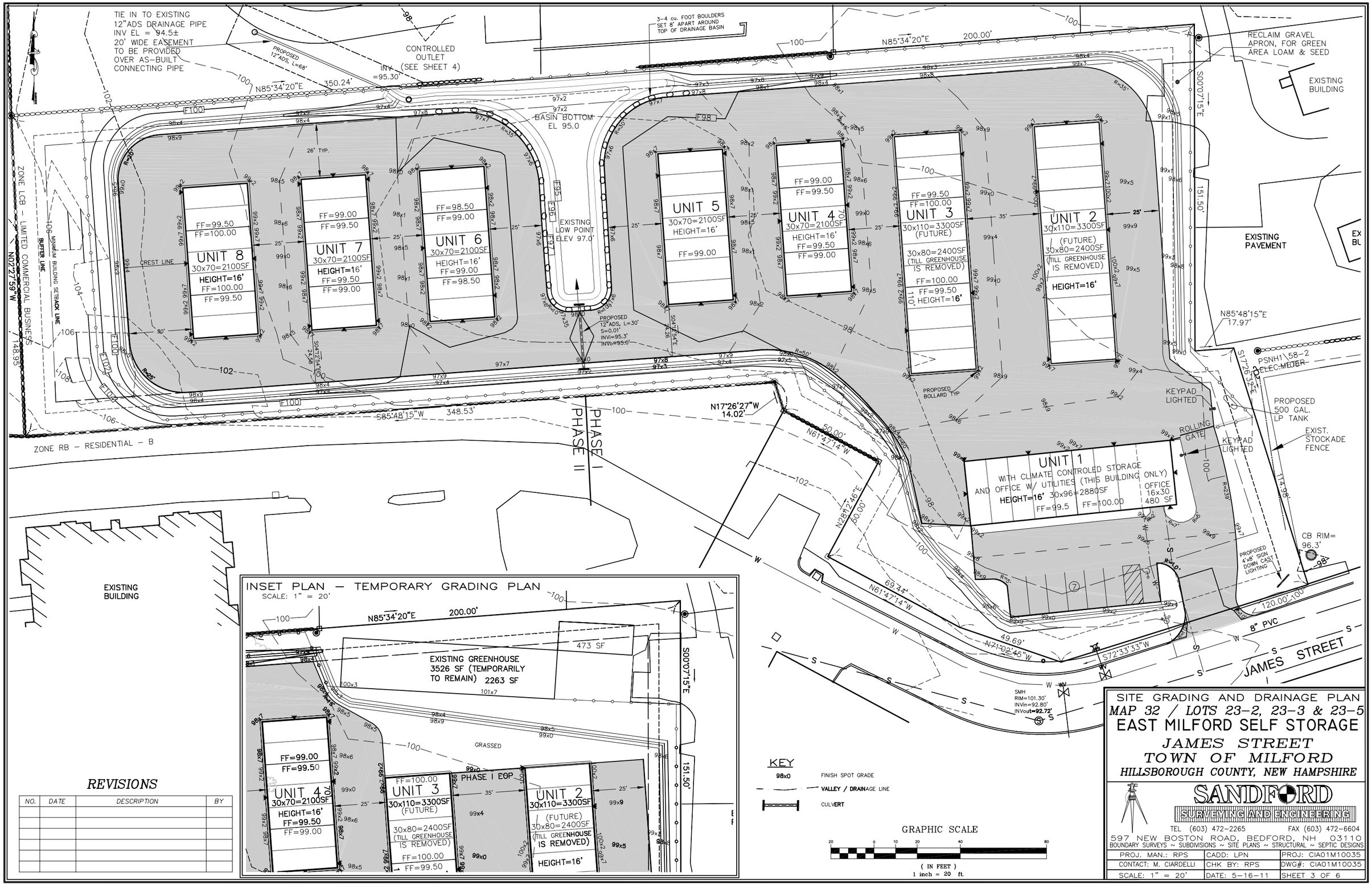

REVISIONS

NO.	DATE	DESCRIPTION	BY

SITE GRADING AND DRAINAGE PLAN
MAP 32 / LOTS 23-2, 23-3 & 23-5
EAST MILFORD SELF STORAGE
JAMES STREET
TOWN OF MILFORD
HILLSBOROUGH COUNTY, NEW HAMPSHIRE

SANDFORD
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BOUNDARY SURVEYS ~ SUBDIVISIONS ~ SITE PLANS ~ STRUCTURAL ~ SEPTIC DESIGNS

PROJ. MAN.: RPS	CADD: LPN	PROJ: CIA01M10035
CONTACT: M. CIARDELLI	CHK BY: RPS	DWG#: CIA01M10035
SCALE: 1" = 20'	DATE: 5-16-11	SHEET 3 OF 6

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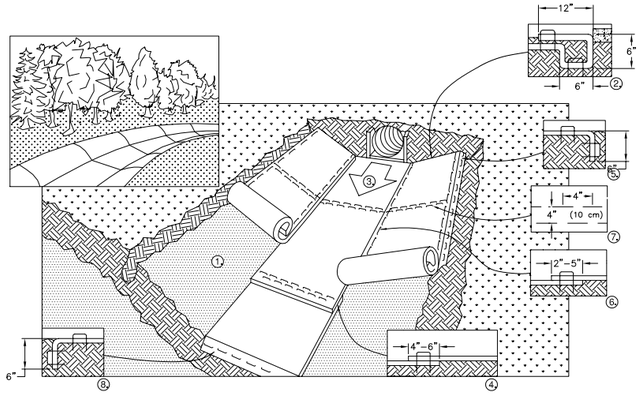
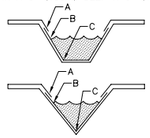


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL–O–SEED DO NOT SEED PREPARED AREA. CELL–O–SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"–6" (10cm–15cm) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"–5" (5cm–12.5cm) (DEPENDING ON BLANKET TYPE) AND STAPLED. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH™ON THE BLANKET BEING OVERLAPPED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9m–12m) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10cm) APART AND 4" (10cm) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



CRITICAL POINTS

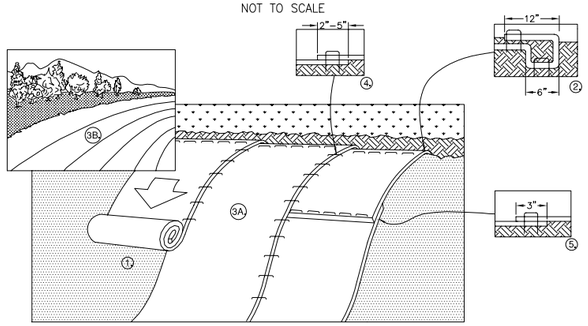
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

EROSION CONTROL MATTING TYPICAL CHANNEL DETAIL

NOT TO SCALE

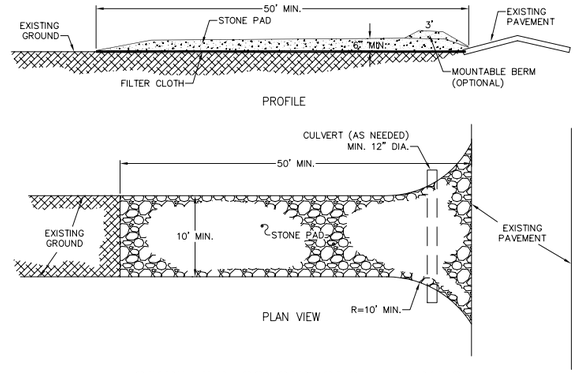


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL–O–SEED DO NOT SEED PREPARED AREA. CELL–O–SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"–5" (5cm–12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH™ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL MATTING TYPICAL SLOPE DETAIL

NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

MAINTENANCE

MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOPDRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.

CONSTRUCTION SPECIFICATIONS

1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.

2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET,EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.

3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.

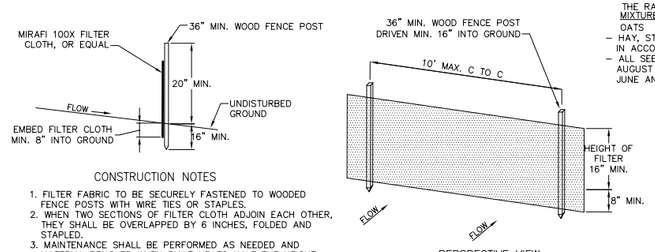
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.

5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.

6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.

7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT–OF–WAY MUST BE REMOVED PROMPTLY.

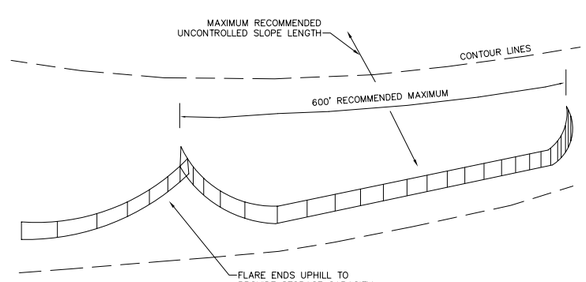
8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.



CONSTRUCTION NOTES

1. FILTER FABRIC TO BE SECURELY FASTENED TO WOODED FENCE POSTS WITH WIRE TIES OR STAPLES.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BUILT UP TO HALF THE HEIGHT OF THE SILT FENCE.

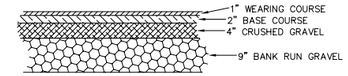
PERSPECTIVE VIEW



SILT FENCE LAYOUT

SILT FENCE DETAIL

NOT TO SCALE



TYPICAL PAVEMENT SECTION DRIVE & CAR PARKING AREAS

SCALE: NONE

NOTE: PAVEMENT SECTION MATERIALS SHALL CONFORM TO CURRENT N.H.D.O.T. SPECIFICATIONS FOR BITUMINOUS CONCRETE PAVEMENT AND SUBGRADE.

GENERAL NOTES:

(1) ALL CONSTRUCTION TO MEET OR EXCEED, GUIDLINES IN' "SPECIFICATIONS FOR TOWN OF MILFORD, NH STORM DRAINAGE, WATER DISTRIBUTION, SANITARY SEWER, AND ROAD CONSTRUCTION."

WINTER CONSTRUCTION NOTES

(1) ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15th, OR WHICH ARE DISTURBED AFTER OCTOBER 15th, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
(2) ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15th, OR WHICH ARE DISTURBED AFTER OCTOBER 15th, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
(3) AFTER NOVEMBER 15th, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF GRAVEL PER NHDOT ITEM 304.3.

CONSTRUCTION SEQUENCE

(1) PRIOR TO ANY OTHER SITE WORK, THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED, THEN STONE CHECK DAMS AND SILTATION FENCING ARE TO BE CONSTRUCTED AS SHOWN, AND ARE TO BE MAINTAINED THROUGHOUT CONSTRUCTION UNTIL THE AREA IS COMPLETELY STABILIZED.
(2) THE PERMANENT STORM WATER TREATMENT SYSTEMS INCLUDING LEVEL SPREADERS, TREATMENT SWALES AND DETENTION BASIN ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO ROUGH GRADING OF THE SITE.
(3) ALL EARTH STOCKPILES ARE TO BE STABILIZED WITH HAY MULCH AND SEEDED WITH RYE GRASS. SILTATION FENCING TO BE PLACED AROUND THE BASE OF ALL STOCKPILES WHEREVER PRACTICAL.
(4) GRADING OPERATIONS FOR AREAS TO BE PAVED OR OTHERWISE DISTURBED WILL THEN BE COMPLETED AND UNDERGROUND UTILITIES INSTALLED. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED DURING CONSTRUCTION UNTIL ALL AREAS ARE STABILIZED.
(5) ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY OR AFTER EVERY RAINFALL OF 0.5" OR MORE.
(6) DURING CONSTRUCTION, THE CATCH BASINS, CULVERTS AND HEADWALLS SHALL BE SET TO A GRADE WITH SEDIMENTATION BASINS FORMED AT THE INLET, SUCH THAT STORM WATER RUNOFF CONTAINING ACCUMULATED SILT, OR OTHER ERODED MATERIAL FROM THE CONSTRUCTION SITE WILL NOT ENTER THE STRUCTURE AND SHORT CIRCUIT THE TEMPORARY EROSION CONTROL SYSTEMS.
(7) AFTER CONSTRUCTION IS COMPLETED AND VEGETATION IS ESTABLISHED IN THE DISTURBED AREAS, THE AREAS IN AND AROUND THE TEMPORARY EROSION CONTROL SYSTEM SHALL BE CLEANED UP, CARE BEING TAKEN NOT TO ALLOW THE ACCUMULATION SILT TO RUN INTO THE WETLANDS AND/OR PROTECTED AREAS. THEN THE TEMPORARY CONTROL SYSTEMS SHALL BE REMOVED AND THE AREA RETURNED AS NEAR AS POSSIBLE TO ITS NATURAL STATE.

SEEDING SPECIFICATIONS

*ALL TEMPORARY AND PERMANENT SEEDING SHALL BE DONE IN ACCORDANCE WITH "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE", AUGUST 1992, BY THE USDA–SCS (SECTION 7–243 AND 7–247).

ALL DISTURBED AREAS TO BE SEEDED SHALL BE TREATED AS FOLLOWS:

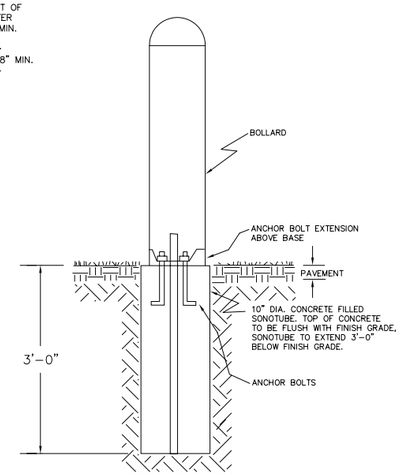
– WATER TO BE DIVERTED FROM SITE TO PREVENT KILLING PLANTS.
– ALL STONES AND TRASH LARGER THAN 4" TO BE REMOVED.
– WHERE FEASIBLE, TILL SOIL TO 4" DEPTH.
– A MINIMUM OF 4" OF TOPSOIL SHALL BE PLACED ON ALL DISTURBED AREAS.
– 10–20–20 FERTILIZER SHALL BE PLACED AT A RATE OF 500 LBS. PER ACRE.
– THE FOLLOWING SEED MIXTURE SHALL BE SPREAD EVENLY OVER THE TOPSOIL AT THE RATES SHOWN (FOR LONG TERM COVER).

MIXTURE	POUNDS/ACRE	POUNDS/1,000 Sq.Ft.
TALL FESCUE	20	.45
CREEPING RED FESCUE	30	.75
TOTAL	50	1.20

– THE FOLLOWING SEEDING SHALL BE SPREAD EVENLY OVER THE TOPSOIL AT THE RATES SHOWN (FOR TEMPORARY PROTECTION DURING THE SPRING).

MIXTURE	POUNDS/ACRE	POUNDS/1,000 Sq.Ft.
OATS	80	2

– HAY, STRAW OR OTHER MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING IN ACCORDANCE WITH THE ABOVE REFERENCE MANUAL.
– ALL SEEDING SHALL BE COMPLETED BEFORE JUNE 1ST IN THE SPRING BETWEEN AUGUST 15TH AND EARLY OCTOBER IN THE FALL. SEEDING MAY EXTEND INTO JUNE AND JULY IF CONSIDERATIONS ARE MADE FOR WATERING.



BOLLARD DETAIL
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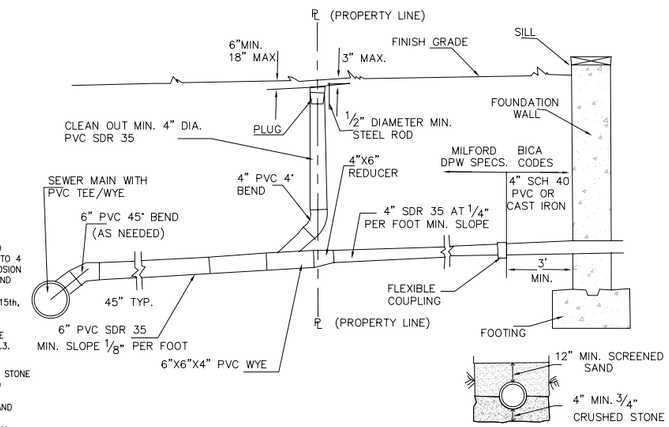

TYPICAL SEWER SERVICE DETAIL

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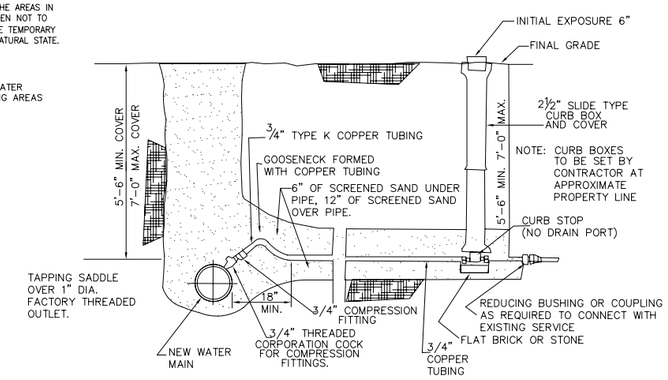

TYPICAL SERVICE CONNECTION DETAIL

NOT TO SCALE

DETAIL PLAN
MAP 32 / LOTS 23–2, 23–3 & 23–5
EAST MILFORD SELF STORAGE
JAMES STREET
TOWN OF MILFORD
HILLSBOROUGH COUNTY, NEW HAMPSHIRE

SANDFORD
SURVEYING AND ENGINEERING
TEL (603) 472–2265 FAX (603) 472–6604
597 NEW BOSTON ROAD, BEDFORD, NH 03110
BOUNDARY SURVEYS ~ SUBDIVISIONS ~ SITE PLANS ~ STRUCTURAL ~ SEPTIC DESIGNS

PROJ. MAN.: RPS	CADD: LPN	PROJ: CIA01M10035
CONTACT: M. CIARDELLI	CHK BY: RPS	DWG#: CIA01M10035
SCALE: 1" = 30'	DATE: 5–16–11	SHEET 5 OF 6

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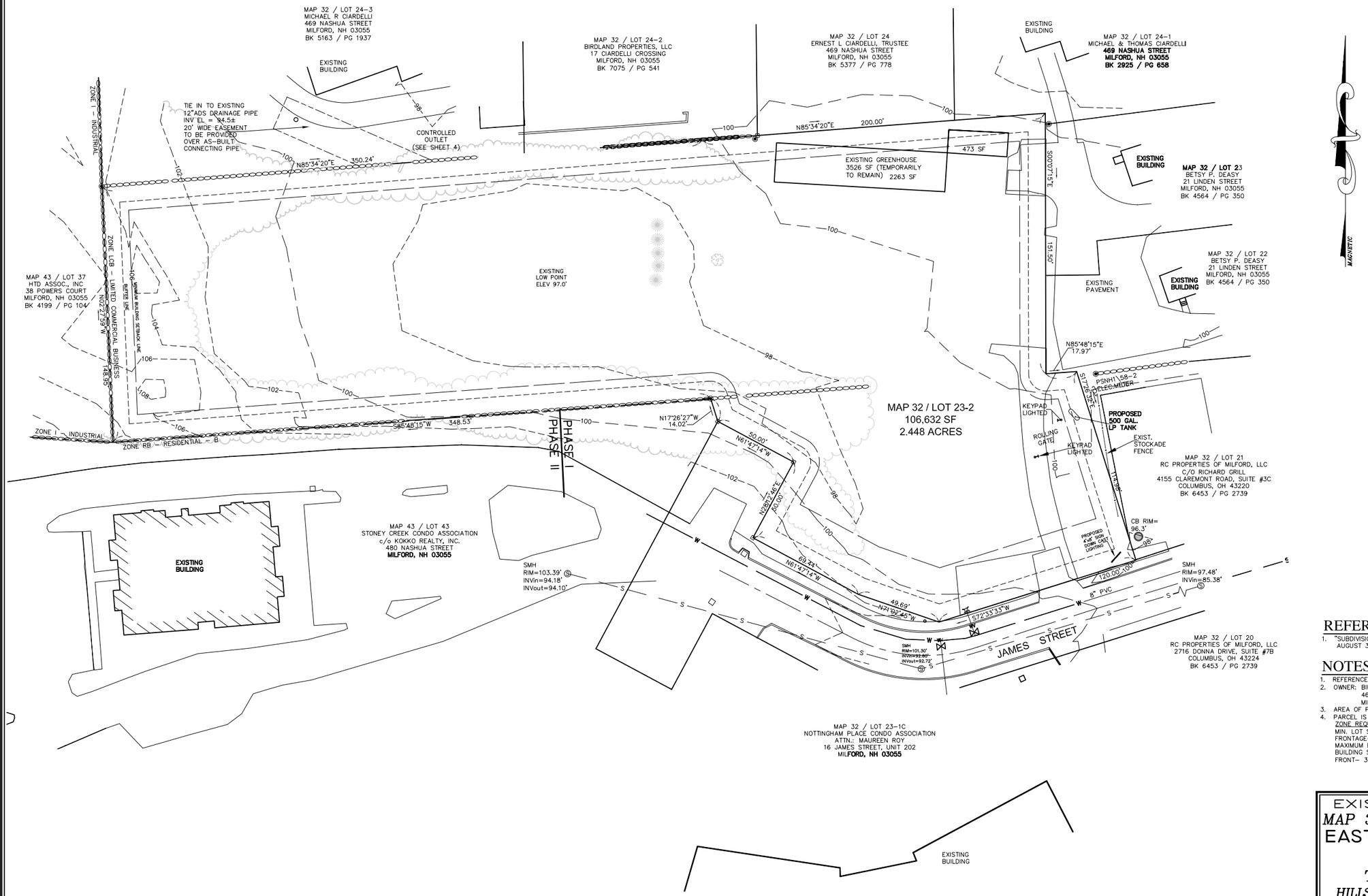

REFERENCE PLAN:

1. "SUBDIVISION PLAN; RODNEY C. WOODMAN, INC.; MILFORD, N.H." SCALE: 1"=50' DATED: AUGUST 3, 1984; BY THOMAS F. MORAN INC. RECORDED H.C.R.D. PLAN NO. 22362.

NOTES

1. REFERENCE THIS PARCEL AS MAP 32 / LOT 23-2, 23-3 & 23-5
2. OWNER: BIRDLAND PROPERTIES, LLC — HCRD BK_8163/PG_271 LOT 32/23-2
   467 NASHUA STREET — HCRD BK_8163/PG_271 LOT 32/23-3
   MILFORD, NH 03055-4919 — HCRD BK_8163/PG_271 LOT 32/23-5
3. AREA OF PARCEL: 106,632 SF OR 2.448 ACRES
4. PARCEL IS ZONED: LIMITED COMMERCIAL- BUSINESS (LCB)
   ZONE REQUIREMENTS
   MIN. LOT SIZE- 20,000 SF (WITH MUNICIPAL SEWER AND WATER)
   FRONTAGE- 150 FEET
   MAXIMUM BUILDING HEIGHT: 35 FEET
   BUILDING SETBACKS:
   FRONT- 30', SIDE & REAR - 15'

REVISIONS

NO.	DATE	DESCRIPTION	BY

EXISTING CONDITIONS PLAN
MAP 32 / LOTS 23-2, 23-3 & 23-5
EAST MILFORD SELF STORAGE
JAMES STREET
TOWN OF MILFORD
HILLSBOROUGH COUNTY, NEW HAMPSHIRE

SANDFORD
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BOUNDARY SURVEYS ~ SUBDIVISIONS ~ SITE PLANS ~ STRUCTURAL ~ SEPTIC DESIGNS

PROJ. MAN.: RPS	CADD: LPN	PROJ: CIA01M10035
CONTACT: M. CIARDELLI	CHK BY: RPS	DWG#: CIA01M10035
SCALE: 1" = 30'	DATE: 5-16-11	SHEET 6 OF 6

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STAFF MEMO

Planning Board Meeting

June 21, 2011

Agenda Item #7: Pine Valley Subdivision/37 Wilton Rd LLC & Pine Valley Business Center – Wilton Rd – Map 6, Lot 14

Public Hearing for Final Application of a Major Open Space Subdivision

Background:

The applicant is back for Final Application of a two part subdivision of lot 6/14 on Wilton Rd. The lot is situated across the street from the Pine Valley Mill Business Center on the west side of Milford. The subdivision land is currently and has historically been tied to the Mill. The applicant is proposing to first subdivide the 7.7 acre lot into two pieces. The eastern 3.3 acres of the property will remain as a parking lot for the adjacent Pine Valley Business Center and the western 3.4 acres will be subdivided into 10 residential dwelling units on a new loop roadway.

The applicant's parcel abuts Wilton Rd to the north and the railroad to the south. Several of the proposed new house lots will abut the railroad, similar to the houses further west on Wilton Rd. The roadway layout provides a ROW connecting the proposed neighborhood to the land on the south side of the rail road tracks, which is under the same ownership. The back lot, 6/15, is surrounded by the Souhegan River and contains the buildings which provide power and access to the dam. The back lot also historically supported several houses for the Mill workers. The Planning Board should keep in mind the possibility the eventual development of the back lot into a residential neighborhood. Any development on lot 6/15 is contingent upon an agreement by the land owner and the railway company, to allow the construction of a road over the railroad bed, which is a significant hurdle to cross.

Regional Impact

At the May Planning Board meeting the Planning Board made a motion to declare the subdivision has potential regional impact due to it connection to a water line owned and operated by the Town of Wilton. For the purpose of Regional Impact both the Town of Wilton and the Nashua Regional Planning Commission were notified of the application and their status as abutters to the application. No comments have been submitted by either the Town of Wilton or the NRPC as of 6/16/11, however Staff has been in contact

with Wilton Water Commissioners and the Water Department. The applicant has been working with the Commissioners to come to an agreement on the necessary water line improvements attributable to this 10 lot subdivision. Mr. Jim Tuttle, Chair of the Wilton Water Commissioners assured Staff that we would have a letter outlining their agreement with the applicant in time for the meeting.

Subdivision Design

The subdivision is designed for 10 single family dwelling units with one remainder parcel containing the ROW to the railroad lines and other utilities. The dwelling unit lots vary in size from 0.23 to 0.35 acres or approximately 10 to 15,000 SF. Each lot will be served by Milford sewer and Wilton water.

The subdivision plan details a new loop road off of Wilton Rd. The new road entrance, closest to the Pine Valley Business Center is a 24' wide roadway which connects to a gravel access towards the rear of the property and the railroad tracks. After intersecting with the gravel access way, the road width tapers down to 20' through to its intersection with Wilton Rd. The larger 24' wide entrance is designed to accommodate future development on lot 6/15 and access to the railroad tracks, dam structures and property beyond.

A unique feature of this site is the 8' penstock that runs just below the ground from the Pine Valley Business Center through lot 6/14, under the railroad tracks and out to the dam on the Souhegan River. This feature was historically an open canal used to bring water to the Mill building which was later converted to an 8' pipe which runs through the proposed development. To accommodate the penstock, the four lots on the eastern edge of the property will be accessed by structurally engineered driveway crossings from the proposed roadway. Please see the attached letter from Dennis LaBombard, Structural Engineer, regarding the loading of these crossings. The crossings have been redesigned since the Design Review Hearing to meet NH State highway load capcities.

The four lots accessed by the driveway crossings will also have separate water and sewer service lines from the rest of the development, served by sewer and water easements.

Currently in existence on the property are overhead electric lines which follow the penstock across the property, over the railroad lines and out to the buildings for the dam facilities. The applicant is undergrounding all utilities servicing lots along the new roadway but will leave the overhead lines in place. The overhead lines will service the four lots to the east of the penstock as well.

The stormwater design for the site proposes to treat and infiltrate all stormwater onsite through a series of public and private underground infiltration chambers. Runoff from

the roadway is conveyed through swales to one of three deep sump catch basins, and outleting to three underground infiltration chambers within the future Town ROW. As this road will become part of the Town's roadway system, the infiltration systems will also become the Town's responsibility to maintain. Each dwelling unit lot is proposed to be graded to direct stormwater to lawn basins which then feed into private underground infiltration chambers. As discussed at the May meeting the applicant has provided Staff with example easements for Site Maintenance Plans that will be developed for each private lot with an infiltration chamber. The Easements for Site Maintenance Plans specific to this subdivision have not yet been submitted however these documents can be finalized prior to final plan signing with input from Code Enforcement and Stormwater.

Several detailed easements as discussed at the May meeting have been submitted to the Town and reviewed by Staff, including a Penstock, Pedestrian Access, Sewer, and Water Utility Easements. All easements submitted thus far have been revised to the satisfaction of the Town. The two remaining easements to be furnished are a Drainage Easement on lot 6/14-7 and the Site Maintenance Plan Easements for the individual lots.

Open Space

As this lot is zoned ICI it is generally exempt from the open space regulation, however the applicant was granted a density by the ZBA variance in line with Residence A zoning and the applicant has elected to utilize the new Open Space and Conservation District, with the benefit of reduced setbacks and frontage requirements. The OSCD requires a maximum of 15% of the land be placed into protected open space to serve the public's interest. At the May meeting the Planning Board discussed reserving some land along Wilton Rd to provide for a future public transit stop to accommodate the Pine Valley Business Center and the need for a sidewalk where the ROW gets smaller over the Penstock.

There was also discussion to pave a wide shoulder along Wilton Rd with stripping or a "rumble strip" to allow for it to function more as a sidewalk. Staff discussed this idea with DPW and they feel the ROW is sufficiently wide enough to accommodate widening the road at some point in the future. At this time including sidewalks along the interior roadway of the subdivision does not make sense however sidewalks should be included if and when lot 6/15 is developed. Staff recommends the Board discuss designing the ROW along the new road on the east side of the subdivision and into lot 6/14-11 (ROW) to accommodate future sidewalk construction in conjunction with the build-out of lot 6/15.

The applicant has submitted a Bus Stop Access Easement in accordance with discussions at the May meeting to allow for a future bus stop to be developed on the remaining portion of lot 6/14, to help address the "public interest" issue.

Interdepartmental Reviews:

Water Utilities – The Water Utilities Department has no issues with this request and appreciates the improvements made to the sewer system at our request in Design Review.

Heritage Commission –

- Since this was Historically a former Industrial Site which is being converted to a residential Site we hope that that the developer would include an Engineering assessment of any hidden underground pollutants that could affect future occupants.
- We also point out that once converted to residential use we shrink the Historic Use of a prime Industrial Site which has access to Rail Water Sewer and a Main Truck Route. Historically this area was Mill oriented and this change becomes a precipitous event.
- Proper Permanent Fencing along the Rail Right of Way should be required of the developer to protect residential occupants from all Rail Activity now and in the future.

Fire Department – Fire Dept. has no concerns (both water service and driveway crossings have been addressed)

Police – This is the proposal that I had concerns with relative to the exit being on top of the "canal" area. The sight distance is a serious concern of mine.

Code Enforcement - The remaining pending item, engineering for driveway/penstock crossings, is adequately addressed as of 06-14-2011.Code Enforcement and Health will continue to work with developer to obtain proper easements and maintenance agreements for individual lot infiltration systems prior to C-O's being issued

Conservation - The Commission is very concerned that infiltration on private lots in the manner presented may result in future flooding and maintenance costs, especially if not adequately maintained. A detailed maintenance procedure, at the least, should be required and become a known responsibility of the buyer. The Commission is concerned that unknowledgeable owners will have problems and seek solutions from the town. The Commission suggested that the town’s attorney review the concept of these systems and the town’s future risks.

The Commission requests that the Planning Board seek a conservation easement along the river now or during future development of the parcel.

Zoning Administrator – The following is my input on the final plan set for the Pine Valley Subdivision received in our office on 05/27/11 (plan set dated latest revisions 05/27/11). Recommendations are in **BOLD.**

1. As this subdivision, as approved for 10 lots by the Zoning Board on 10/10/10 is being approved as an Open Space and Conservation subdivision. **A note should be placed on the subdivision plan stating this to state for future reference that the Pine Valley Subdivision is an Open Space Conservation subdivision as it differs from 'standard' subdivisions due to lot size, requirements, setbacks, etc.**

2. **Building setback distances should be noted on the individual lots.**

3. In my comments provided for the Design Review application, it was noted that the easterly intersection of the proposed road with Wilton Road is offset approximately 70' from the existing intersection of Wilton Road/North River Road. Although the Town's road design specifications do not specify minimum distance requirements between intersections, the American Society of Civil Engineers recommends at least 125' for local roads. A site visit conducted by Town Planner Sarah Marchant and myself at 11:30 AM, Wednesday, May 11, 2011 observed little traffic on Wilton Road and very little from North River Road.

   Sheet P1 indicates that the pavement of the proposed road at this intersection is designed as a 'T' intersection with Wilton Road. This is good, and **care should be taken during construction and paving to insure that this paved area is constructed according to plan as it provides as much separation between intersections as possible. A note on this plan sheet (P1) insuring this paving design should be shown.**

4. In staff level discussions with the applicant and the engineer the need for sidewalks in this area has been mentioned. Sidewalks, or what appear to be sidewalks, begin just east of the Wilton town line. As part of the Traffic and Transportation chapter update the Planning Board has identified a town-wide sidewalk improvement/construction plan as a high priority so that sidewalk construction and improvements are included in the Town's infrastructure improvement plans. I would anticipate that the provision of a pedestrian-safe route along Wilton Road will be identified from Pine Valley to existing sidewalks leading to downtown Wilton. As the Pine Valley location continues to develop the need for sidewalks will increase. However, staff acknowledges that additional infrastructure cost also threatens the intended affordability of the proposed housing.

   The current plan begins the process to accommodate pedestrian access with the proposed easement intended to provide safe walking at the bridge. The Town should plan for extending sidewalks/pedestrian lanes from this development to the existing sidewalks leading to downtown Wilton.

   Community Development Office staff discussion has led to a recommendation that as the Pine Valley subdivision builds out and incorporates land south of the railroad right-of-way, a sidewalk will be needed to link residents to a future sidewalk or pedestrian lane on Wilton Road.

   Staff recommendation would be to make sure the current subdivision plan roadway engineering allows for a sidewalk to be built within the right-of-way of the new subdivision road or within pedestrian easements, as well as Lot 6-14-11, with the intent of

directly connecting to a future sidewalk/pedestrian lane on Wilton Road, and that construction of this sidewalk within the current 10-lot development and future phases south of the railroad right-of-way be made a condition of future residential phases south of the railroad right-of-way. A note to this effect should be placed on the current plans.

5. **Plan set numbering needs small revision – the sheet entitled "Proposed Easement Plan, Land of 282 Route 101,…" should be renumbered to read Sheet No. 3 of 15.**

6. **Plan set should incorporate a name for the new subdivision road.**

Staff Recommendation:

The applicant has worked diligently since the May meeting to address the Board's concerns relative to details on the proposed driveway crossings and satisfying the Fire Department and Wilton Water Commissioners on the water supply to the district.

The Planning Board also asked the applicant to review existing deeds for clarification of fencing in the no-build areas and come back with options to serve the public's interest for the open space requirements. The Board should discuss with the applicant the results of their deed review research relative to fencing. Staff has suggested a solution to the sidewalk needs to aid in "serving the public interest" per the Open Space Conservation ordinance to allow for sufficient space within the ROW and6/14-11 to accommodate a sidewalk to be built with the future development of lot 6/15. The Board should discuss this option with the Board and if it is a reasonable solution to the Open Space ordinance.

The Historic Commissions comment regarding contaminates are unjustified based on the history of this particular piece of 6/14. The ZBA granted a variance to applicant to allow 10 residential dwelling lots on this land, justifying the use of this land for residential purposes. The fencing they have recommended was agreed to be provided at the May meeting, however it is not detailed on the plan. Fencing for both the south and north sides of the property should be shown on the plan with details on height and type of fencing.

The Police Chief's concerns about the site distance at this location were discussed at the May meeting. The hump in the roadway is due to the penstock and not moveable. There is sufficient sight distance from the roadway to meet the Town's standards.

The Conservation Commissions site maintenance plan concerns can be addressed through the Site Maintenance Plan Easement example as submitted by the applicant. At this time Staff does not have a final version of this document however Staff will work with the applicant, Code Enforcement and Stormwater to finalize this document for recording the final subdivision plans.

Staff would like to note the Conservation Commission's request for a future trail easement along the river on lot 6/15 as part of the potential future development of that lot.

If the Board chooses to grant conditional approval for the 10 lot subdivision plans the following items will need to be updated on the plan prior to final approval:

1. Add a note stating the Pine Valley Subdivision is an Open Space Conservation Subdivision.
2. Add building setback distances.
3. Add a note to sheet P1 ensuring the intersection of the new road and Wilton Rd are constructed and paved in accordance with the specifications of the plan.
4. Add a note per the Zoning Administrator's suggestions regarding future sidewalks.
5. Modify the engineering within the ROW and 6/14-11 to allow for future sidewalk construction
6. Renumber sheet entitled "Proposed Easement Plan, Land of…" to Sheet 3 of 15.
7. Incorporate a name for the new roadway
8. Submit final signed Drainage, Site Maintenance Plan, Sewer, Water, Pedestrian Access, Penstock and Bus Stop Easements for recording on at the Registry of Deeds.
9. Add fencing lines and height/type details for the fencing on the North and South sides of the property.
10. Add a note indicating "Sewer, road and drainage work shall be constructed in accordance with the Town of Milford's Water Utilities Department and Public Works Department standards."
11. Add a note stating a sign is required at the entrances to the new road reading as follows: "This road has not been accepted by the Town of Milford. Until the street has been accepted, the Town assumes no responsibility for maintenance including snow removal, nor any liability for damages resulting from use of the street. RSA 674:41."
12. Add a note with the State Alteration of Terrain approval numbers

Image taken April, 2010

LaBOMBARD
ENGINEERING, LLC

June 14, 2011

Kevin Slattery
Etchstone Properties, Inc.
179 Amherst Street
Nashua, NH 03064

Re: **Pine Valley subdivision – Milford, NH**

Dear Kevin,

This letter is to confirm our conversation(s) with regard to preparing a design for a concrete structure that would span over the existing 8 foot diameter penstock within the above referenced project. The intent would be to design an independent structure that would cross over the existing corrugated metal pipe without imposing any added load on the penstock.

I anticipate placing a footing beside and just below the centerline of the penstock so as to have the soil bearing "zone of influence" not impact the piping. I would then add a concrete wall to get back up to grade and a slab to span over the pipe. The concrete would be designed for an AASHTO H 20-44 loading which is the current required design standard for all State highway bridges. This design will safely carry a 16 ton axle load (20 ton vehicle).

I will require that during construction of these structures that I provide periodic construction inspection services to ensure compliance with the design. I will require visual inspections of the footings, walls and slabs just prior to placing concrete to enable verification of proper installation of the reinforcing steel. I will also recommend that you obtain concrete cylinders for testing to ensure the proper strength of concrete. For your review, attached please find a conceptual depiction of the fundamental elements of my anticipated plan.

Sincerely,
LaBombard Engineering, LLC

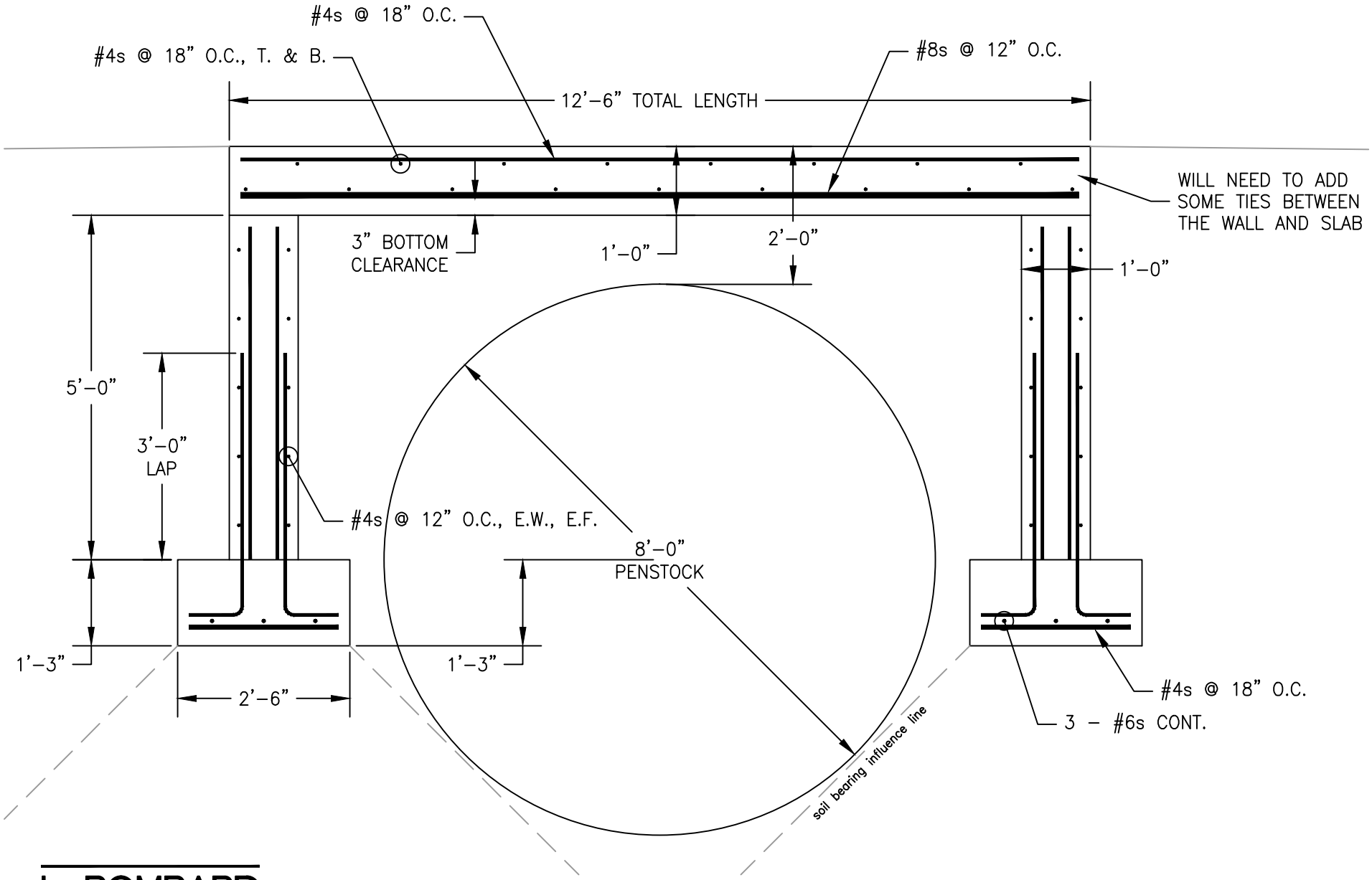
Dennis LaBombard, P.E.

STATE OF NEW HAMPSHIRE
DENNIS R. LaBOMBARD No. 6654
LICENSED PROFESSIONAL ENGINEER

Attachment

11-010.docx

12 Rideout Lane - Brookline, NH 03033-2462 - (603) 673 - 9733 - E-mail: Drlengr@aol.com



LaBOMBARD
ENGINEERING, LLC
12 RIDEOUT LANE
BROOKLINE, N.H. 03033
(603) 673-9733

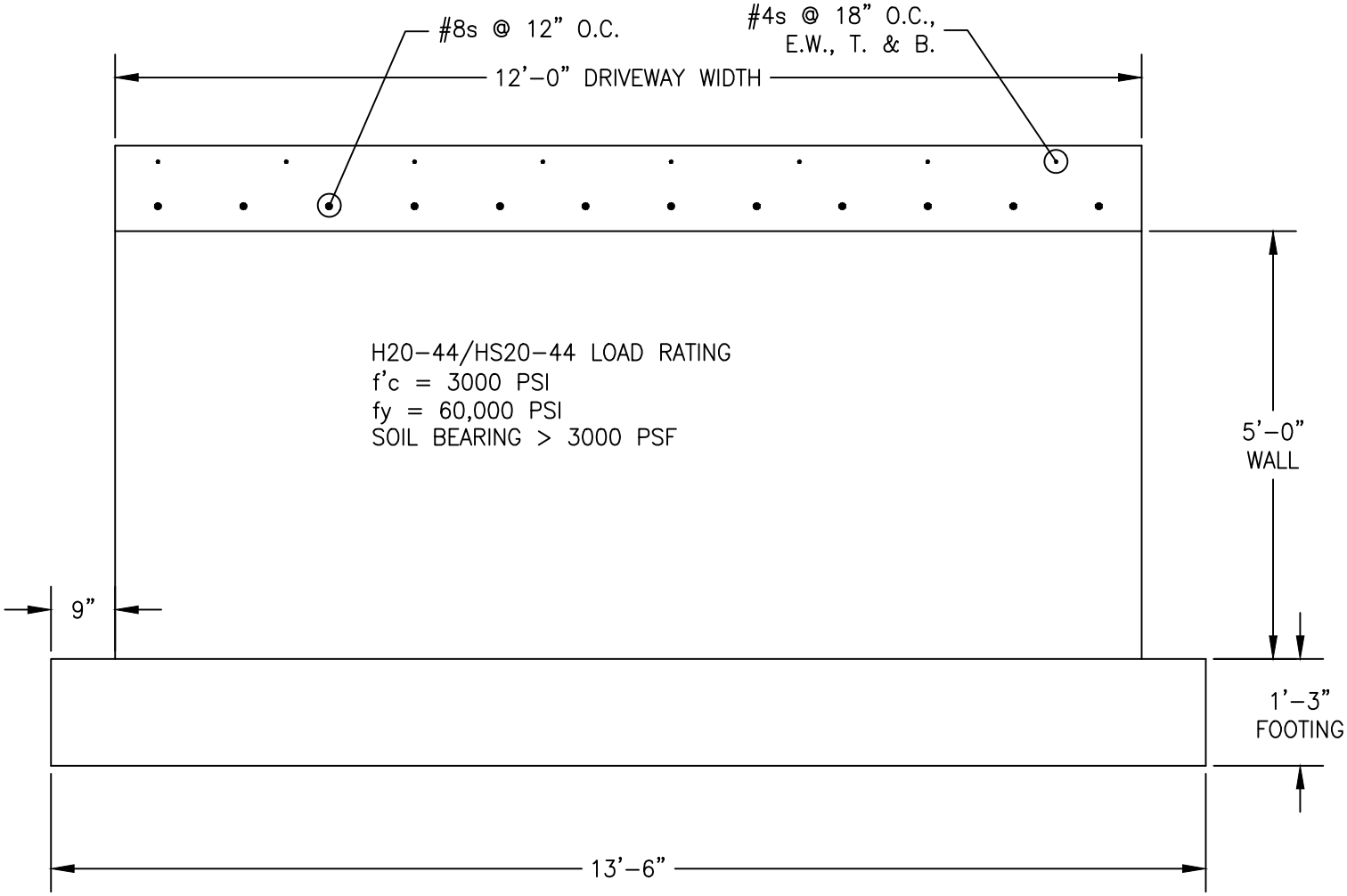
JOB NO. 11-010

TYPICAL PENSTOCK CROSSING SECTION

SCALE: ½" = 1'-0"

PRELIMINARY DESIGN
PENSTOCK CROSSING
PINE VALLEY SUBDIVISION
MILFORD, NH
JUNE 14, 2011

SHEET 1 OF 2



ABUTMENT ELEVATION

SCALE: ½" = 1'-0"

LaBOMBARD
ENGINEERING, LLC
12 RIDEOUT LANE
BROOKLINE, N.H. 03033
(603) 673-9733
JOB NO. 11-010

PRELIMINARY DESIGN
PENSTOCK CROSSING
PINE VALLEY SUBDIVISION
MILFORD, NH
JUNE 14, 2011

PINE VALLEY BUSINESS CENTER
PINE VALLEY SUBDIVISION
31 WILTON ROAD
TAX MAP 6-14
MILFORD, NEW HAMPSHIRE

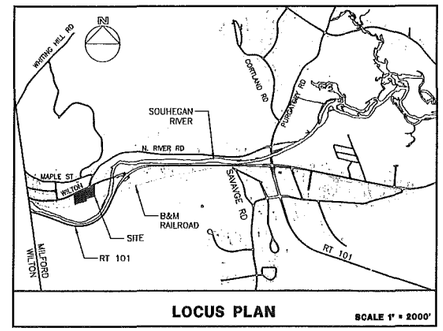
APRIL 18, 2011
LAST REVISED: MAY 27, 2011

GENERAL NOTES:

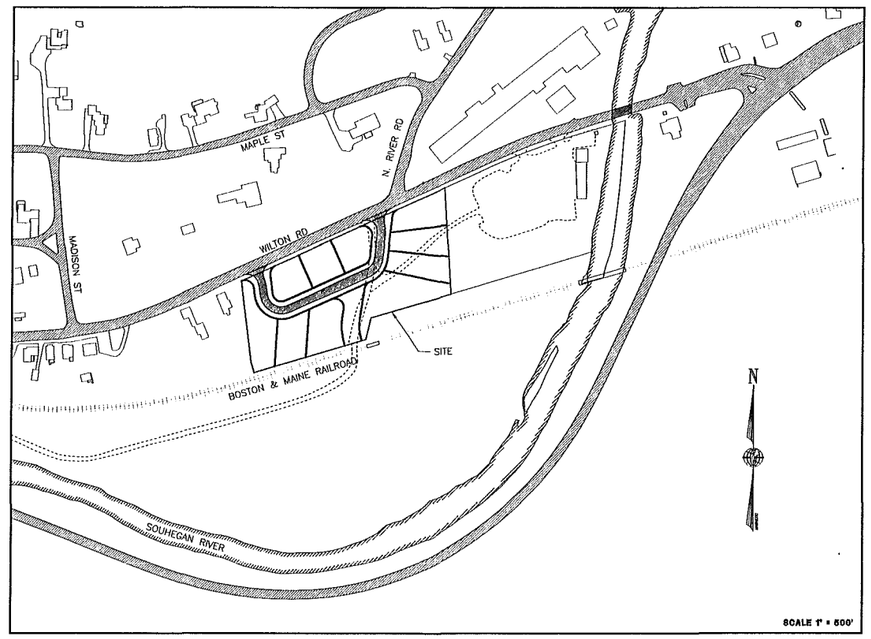
1. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE A PORTION OF MILFORD TAX MAP PARCEL 6-14 INTO TEN SINGLE FAMILY LOTS ON THE WESTERLY 3.4 ACRES. THE REMAINING LAND TO BE OVERFLOW PARKING FOR LOT 6-13 AND/OR FUTURE DEVELOPMENT. LOT 6-14-11 IS NOT A BUILDING LOT, RESERVED FOR ACCESS TO LOT 6-15.
2. OWNER OF RECORD FOR LOT 6-14 IS 37 WILTON ROAD MILFORD, LLC, 100 ELM STREET NASHUA, NH 03060. REFERENCE H.C.R.D. BOOK 8076 PAGE 2233 (4/15/09).
3. THE TOTAL AREA OF EXISTING LOT 6-14 IS 329,823 S.F. (7.6 ACRES) MORE OR LESS.
4. THE PARCEL IS ZONED "ICI": INTEGRATED COMMERCIAL-INDUSTRIAL.
5. A VARIANCE GRANTED BY THE MILFORD ZBA, CASE #30-10, DATED OCTOBER 10, 2010, PROVIDES FOR TEN SINGLE FAMILY HOMES ON LOT 6-14.
6. REFERENCING THE TOWN OF MILFORD GROUNDWATER PROTECTION AREA MAP, PREPARED 10/24/02, LOCUS LIES WHOLLY WITHIN THE LEVEL II PROTECTION DISTRICT AREA.
7. REFERENCING FEMA DFIRM PANEL 33011C0453D, DATED 9/25/2009, THE EASTERLY MOST PORTION OF LOCUS LIES IN FLOOD ZONE AE (100 YEAR) WITH THE REMAINING LANDS SITUATED IN ZONE X AS SHOWN HEREON.
8. SITE SPECIFIC SOILS WERE MAPPED BY THOMAS E. CARR, C.S.S. OF THIS OFFICE IN APRIL 2011 IN ACCORDANCE WITH THE "SITE SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT" VERSION 3.0 AUGUST 25, 2006.
9. THE PARCEL IS SERVED BY WILTON WATER DISTRICT MUNICIPAL WATER AND MILFORD SEWER.
10. BEARINGS DEPICTED ARE ON A +0°02'31" ROTATION FROM PLAN REF. #1.
11. THE PROPOSED SUBDIVISION IS SUBJECT TO POLICE AND LIBRARY IMPACT FEES.
12. "THE ISSUANCE OF BUILDING PERMITS FOR LOTS 6-14-1 THROUGH 6-14-10 ARE SUBJECT TO ARTICLE XII OF THE ZONING ORDINANCE, GROWTH MANAGEMENT & INNOVATIVE LAND USE CONTROL."
13. "ALL WATER, SEWER, ROAD (INCLUDING PARKING LOT) AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF MILFORD'S WATER UTILITIES DEPARTMENT AND PUBLIC WORKS DEPARTMENT STANDARDS."
14. A SIGN IS REQUIRED AT EACH END OF THE PROPOSED ROAD THAT STATES: "THIS ROAD HAS NOT BEEN ACCEPTED BY THE TOWN OF MILFORD. UNTIL THE ROAD HAS BEEN ACCEPTED THE TOWN ASSUMES NO RESPONSIBILITY FOR MAINTENANCE INCLUDING SNOW REMOVAL, NOR ANY LIABILITY FOR DAMAGES RESULTING FROM USE OF THE ROAD. RSA 674:41."

REFERENCE PLANS:

1. "PLAN OF TAX PARCELS 7-27, 7-33 & 7-34, HILLSBOROUGH MILLS, MILFORD N.H." DATED JULY 17, 1979, REVISED JANUARY 29, 1980, SCALE 1"=80' PREPARED BY THOMAS F. MORAN, INC. THE PLAN IS UNRECORDED.
2. "PLAN OF TAX PARCELS 7-27, 7-33 & 7-34, HILLSBOROUGH MILLS, MILFORD N.H." DATED JULY 17, 1979, SCALE 1"=80' PREPARED BY THOMAS F. MORAN, INC. AND RECORDED WITH H.C.R.D. AS PLAN #12421.
3. "LAND IN MILFORD, N.H., WILTON RAILROAD COMPANY-TO-HILLSBOROUGH MILLS.," NUMBERED R17-15-1, DATED JAN 1936, SCALE 1"=50', PREPARED BY W.F. CUMMINGS AND RECORDED WITH H.C.R.D. AS PLAN #634.
4. "EXHIBIT F-5, PENSTOCK PLAN AND PROFILE STA. 17+00 TO 30+00, POWER PLANT, PINE VALLEY MILL, WILTON AND MILFORD, NEW HAMPSHIRE" DATED JULY 12, 1983, REVISED APRIL 23, 1985, SCALE 1"=40', PREPARED BY THOMAS F. MORAN, INC. THE PLAN IS UNRECORDED.



LOCUS PLAN SCALE 1" = 2000'



SCALE 1" = 500'

PLAN INDEX

SHEET 1		COVER SHEET
SHEET 2		SUBDIVISION PLAN
SHEET 3		EASEMENT PLAN
SHEET 4		EXISTING CONDITIONS
SHEET 5	P-1	PLAN AND PROFILE
SHEET 6	P-2	SIGHT DISTANCE
SHEET 7	SP-1	SITE PLAN
SHEET 8	SP-2	GRADING PLAN LOTS 1,2,8-10
SHEET 9	SP-3	GRADING PLAN LOTS 3-7
SHEET 10	SW-1	STORMWATER MANAGEMENT& EROSION CONTROL PLAN
SHEET 11	D-1	DETAIL SHEET - GENERAL CONSTRUCTION
SHEET 12	D-2	DETAIL SHEET - STORM WATER
SHEET 13	D-3	DETAIL SHEET - SEWER LINE
SHEET 14	D-4	DETAIL SHEET - WATER LINE
SHEET 15	D-5	DETAIL SHEET - EROSION CONTROL

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UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

GRAPHIC SCALE
200 100 0 200 400 600

REV.	DATE	DESCRIPTION	C/O	DR	CK
D	---	---	---	---	---
C	---	---	---	---	---
B	5/27/11	SUBMISSION TO TOWN	---	KEA	JAH
A	4/18/11	SUBMISSION TO PLANNING BOARD	---	KMA	JAH

CERTIFICATION:

"I HEREBY CERTIFY THAT THE EXISTING IMPROVEMENTS SHOWN ARE THE RESULT OF A FIELD SURVEY PERFORMED BY THIS OFFICE ON FEBRUARY 15, 2011 THROUGH APRIL 05, 2011.

P.E. CERTIFICATION

"I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THESE PLANS ADHERE TO ALL APPLICABLE REGULATIONS OF THE MILFORD SITE PLAN REGULATIONS, AND TO ALL APPLICABLE REGULATIONS EXISTING IN THE TOWN OF MILFORD AND THE STATE OF NEW HAMPSHIRE."

MERIDIAN DESIGN PROFESSIONALS:

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 871 KENNETH C. CLINTON SIGNATURE 5/27/11

STATE OF NEW HAMPSHIRE THOMAS E. CARR No. 042 CERTIFIED SOIL SCIENTIST 5/26/11

STATE OF NEW HAMPSHIRE THOMAS E. CARR No. 018 CERTIFIED SOIL SCIENTIST 5/26/11

STATE OF NEW HAMPSHIRE JOHN A. HEAVISIDES No. 7995 LICENSED PROFESSIONAL ENGINEER 5/27/11

TOWN OF MILFORD
RECEIVED
MAY 27 2011
PB____ ZBA____
Office

APPROVED
MILFORD, NH PLANNING BOARD
SUB DIVISION #:_____
DATE APPROVED:_____
SIGNED:_____

MERIDIAN Land Services, Inc.
ENGINEERS
LAND SURVEYORS
Office
LAND PLANNERS
OFFICE: 31 OLD NASHUA ROAD AMHERST, NEW HAMPSHIRE 03110
MAILING ADDRESS: P.O. BOX 118 MILFORD, NEW HAMPSHIRE 03055
TEL. 603-673-1441
FAX 603-673-1584
MERIDIAN@MERIDIANLANDSERVICES.COM

FILE:280CVR05A.dwg | PROJECT NO. 280.05 | SHEET NO. 1 OF 15

Plotted: 5/27/2011 1:29 PM By: JAH
H:\pwa\00280\280.05\DRAWINGS\280CVR05A.dwg

REFERENCE PLANS:

1. "PLAN OF TAX PARCELS 7-27, 7-33 & 7-34, HILLSBOROUGH MILLS, MILFORD N.H." DATED JULY 17, 1979, REVISED JANUARY 29, 1980, SCALE 1"=80' PREPARED BY THOMAS F. MORAN, INC. THE PLAN IS UNRECORDED.
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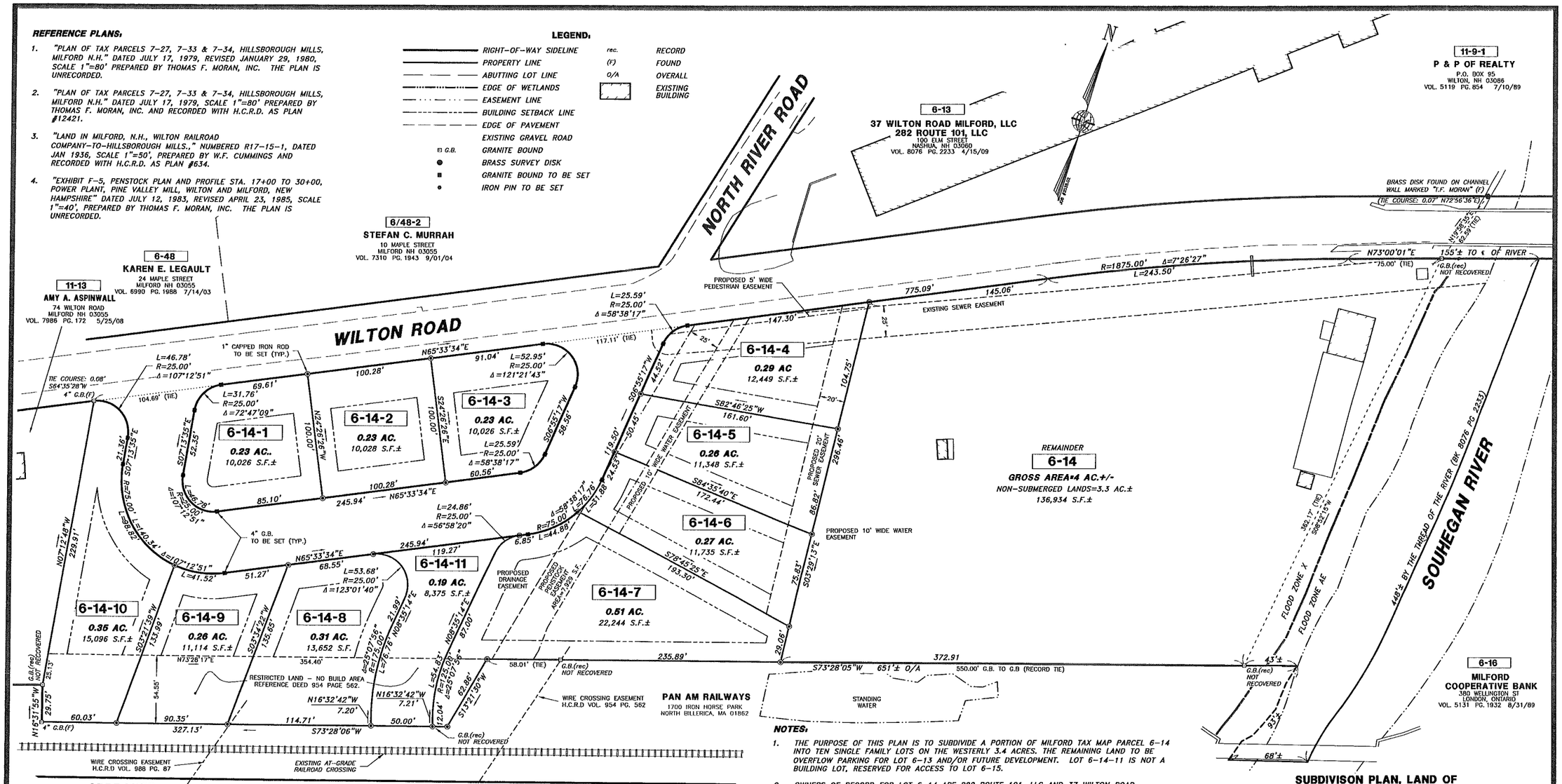
LEGEND:

	RIGHT-OF-WAY SIDELINE	rec.	RECORD
	PROPERTY LINE	(F)	FOUND
	ABUTTING LOT LINE	O/A	OVERALL
	EDGE OF WETLANDS		EXISTING BUILDING
	EASEMENT LINE		
	BUILDING SETBACK LINE		
	EDGE OF PAVEMENT		
	EXISTING GRAVEL ROAD		
G.B.	GRANITE BOUND		
	BRASS SURVEY DISK		
	GRANITE BOUND TO BE SET		
	IRON PIN TO BE SET		



APPROVED
MILFORD, NH PLANNING BOARD
SUB DIVISION #:_____
DATE APPROVED:_____
SIGNED:_____

CERTIFICATION:

"I HEREBY CERTIFY THAT THE BOUNDARY INFORMATION SHOWN WAS DEVELOPED FROM THE REFERENCE PLAN CITED HEREON AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY"

5/27/11

STATE OF NEW HAMPSHIRE NO. 871 KENNETH C. CLINTON LICENSED LAND SURVEYOR

Issued for State and/or Municipal review only

OWNER'S SIGNATURE:

282 ROUTE 101, LLC _____ DATE _____

37 WILTON ROAD MILFORD, LLC _____ DATE _____

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE A PORTION OF MILFORD TAX MAP PARCEL 6-14 INTO TEN SINGLE FAMILY LOTS ON THE WESTERLY 3.4 ACRES. THE REMAINING LAND TO BE OVERFLOW PARKING FOR LOT 6-13 AND/OR FUTURE DEVELOPMENT. LOT 6-14-11 IS NOT A BUILDING LOT, RESERVED FOR ACCESS TO LOT 6-15.
2. OWNERS OF RECORD FOR LOT 6-14 ARE 282 ROUTE 101, LLC AND 37 WILTON ROAD MILFORD, LLC; WITH BOTH ENTITIES HAVING THE BUSINESS ADDRESS OF 100 ELM STREET NASHUA, NH 03060. REFERENCE H.C.R.D. BOOK 8076 PAGE 2233 (4/15/09).
3. THE TOTAL AREA OF EXISTING LOT 6-14 IS 329,823 S.F. (7.6 ACRES) MORE OR LESS.
4. THE PARCEL IS ZONED "ICI": INTEGRATED COMMERCIAL-INDUSTRIAL.
5. A VARIANCE GRANTED BY THE MILFORD ZBA, CASE #30-10, DATED OCTOBER 10, 2010, PROVIDES FOR TEN SINGLE FAMILY HOMES ON LOT 6-14.
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8. THE PARCEL IS SERVED BY WILTON WATER DISTRICT MUNICIPAL WATER AND MILFORD SEWER.
9. BEARINGS DEPICTED ARE ON A +0°02'31" ROTATION FROM PLAN REF. #1.
10. THE PROPOSED SUBDIVISION IS SUBJECT TO POLICE AND LIBRARY IMPACT FEES.
11. SEE SUBDIVISION PLAN SET FOR ADDITIONAL NOTES AND INFORMATION.

GRAPHIC SCALE
40 20 0 40 80 120

REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/27/11	EASEMENTS	--	MJH	KCC

SUBDIVISON PLAN, LAND OF

282 ROUTE 101, LLC & 37 WILTON ROAD MILFORD, LLC

TAX MAP-LOT 6-14 30 WILTON ROAD
MILFORD, NEW HAMPSHIRE

SCALE: 1" = 40' APRIL 18, 2011

MERIDIAN Land Services, Inc.
OFFICE: 31 OLD NASHUA ROAD, AMHERST, NEW HAMPSHIRE 03031
MAILING ADDRESS: PO BOX 118, MILFORD, NEW HAMPSHIRE 03055-0118
TEL 603-673-1441 FAX 603-673-1584 MERIDIAN@MERIDIANLANDSERVICES.COM
ENGINEERS - LAND SURVEYORS - SCIENTISTS - LAND PLANNERS

FILE: 280D05A.dwg | PROJECT NO. 280.05 | SHEET NO. 2 OF 13

May 27, 2011 - 3:02pm JAH Land Desktop 2005 - LD75
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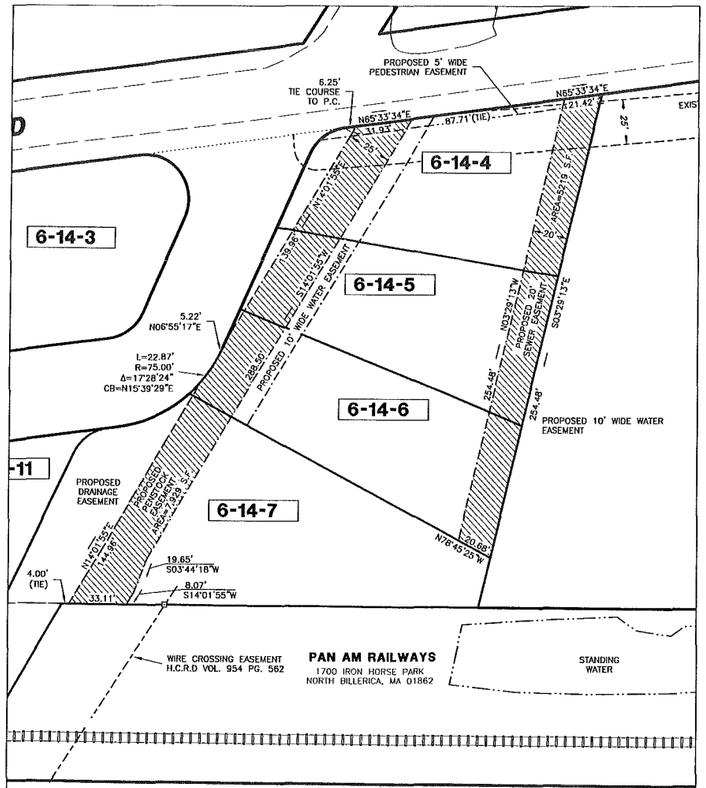
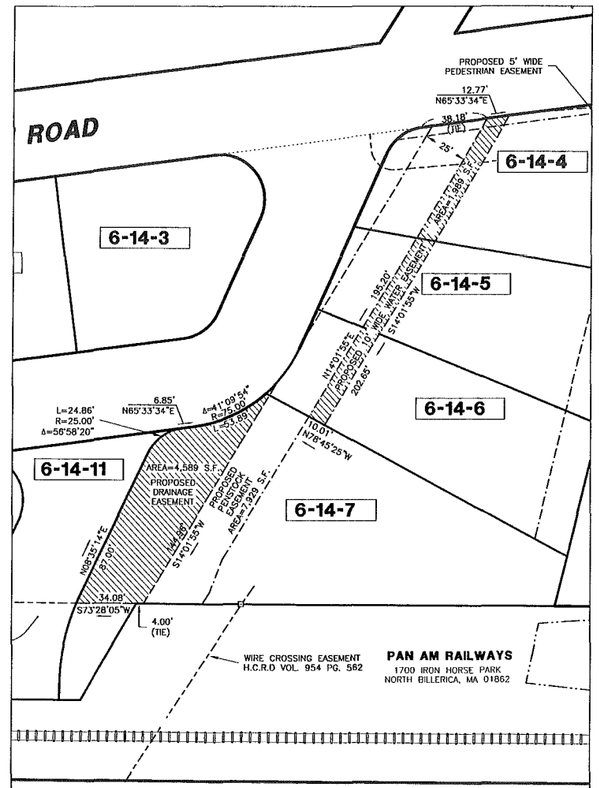
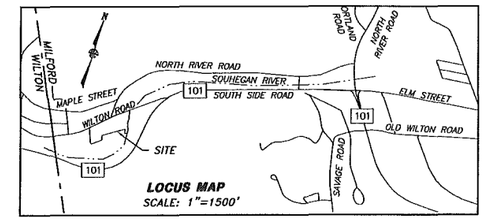


PENSTOCK AND SEWER EASEMENT DETAIL
SCALE: 1"=40'



DRAINAGE AND WATER EASEMENT DETAIL
SCALE: 1"=40'



LOCUS MAP
SCALE: 1"=1500'

NOTES:

1. SEE COVER SHEET AND SHEET 2 FOR PLAN NOTES.

CERTIFICATION:

"I HEREBY CERTIFY THAT THE BOUNDARY INFORMATION SHOWN WAS DEVELOPED FROM THE REFERENCE PLAN CITED HEREON AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY"

STATE OF NEW HAMPSHIRE — No. 871 — KENNETH C. COVITON — LICENSED LAND SURVEYOR

SIGNATURE 5/27/11

Issued for State and/or Municipal review only

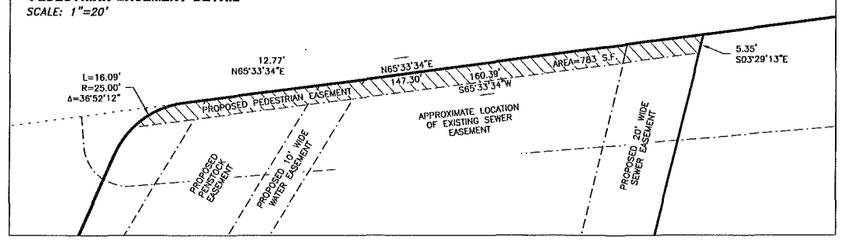
OWNER'S SIGNATURE:

282 ROUTE 101, LLC — DATE

37 WILTON ROAD MILFORD, LLC — DATE

APPROVED
MILFORD, NH PLANNING BOARD
SUB DIVISION #: _____
DATE APPROVED: _____
SIGNED: _____

PEDESTRIAN EASEMENT DETAIL
SCALE: 1"=20'



REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/27/11	EASEMENTS	--	MJH	KCC

PROPOSED EASEMENT PLAN, LAND OF

282 ROUTE 101, LLC & 37 WILTON ROAD MILFORD, LLC

TAX MAP-LOT 6-14 30 WILTON ROAD
MILFORD, NEW HAMPSHIRE

SCALE: AS NOTED MAY 27, 2011

MERIDIAN Land Services, Inc.
OFFICE: 31 OLD NASHUA ROAD, AMHERST, NEW HAMPSHIRE 03031
MAILING ADDRESS: PO BOX 118, MILFORD, NEW HAMPSHIRE 03055-0118
TEL 603-673-1441 FAX 603-673-1584 MERIDIAN@MERIDIANLANDSERVICES.COM
ENGINEERS - LAND SURVEYORS - SCIENTISTS - LAND PLANNERS

FILE: 280D05A.dwg | PROJECT NO. 280.05 | SHEET NO. 2 OF 13

May 27, 2011 - 3:02pm JAH Land Desktop 2005 - LD75
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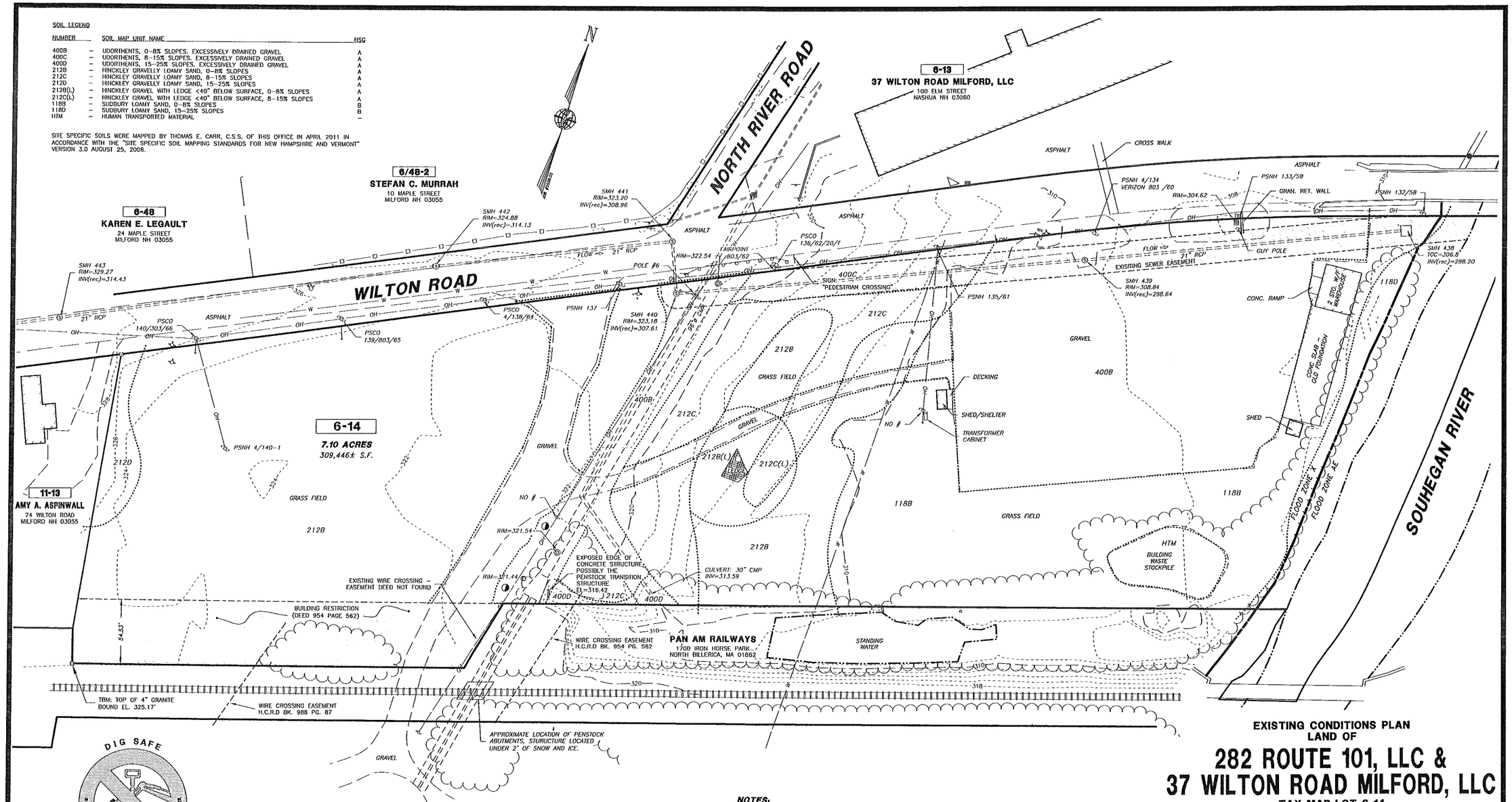
SOIL LEGEND

NUMBER		SOIL MAP UNIT NAME	HSG
400B	–	UDORTHENTS, 0–8% SLOPES. EXCESSIVELY DRAINED GRAVEL	A
400C	–	UDORTHENTS, 8–15% SLOPES. EXCESSIVELY DRAINED GRAVEL	A
400D	–	UDORTHENTS, 15–25% SLOPES. EXCESSIVELY DRAINED GRAVEL	A
212B	–	HINCKLEY GRAVELLY LOAMY SAND, 0–8% SLOPES	A
212C	–	HINCKLEY GRAVELLY LOAMY SAND, 8–15% SLOPES	A
212D	–	HINCKLEY GRAVELLY LOAMY SAND, 15–25% SLOPES	A
212B(L)	–	HINCKLEY GRAVEL WITH LEDGE <40" BELOW SURFACE, 0–8% SLOPES	A
212C(L)	–	HINCKLEY GRAVEL WITH LEDGE <40" BELOW SURFACE, 8–15% SLOPES	A
118B	–	SUDBURY LOAMY SAND, 0–8% SLOPES	B
118D	–	SUDBURY LOAMY SAND, 15–25% SLOPES	B
HTM	–	HUMAN TRANSPORTED MATERIAL	–

SITE SPECIFIC SOILS WERE MAPPED BY THOMAS E. CARR, C.S.S. OF THIS OFFICE IN APRIL 2011 IN ACCORDANCE WITH THE "SITE SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT" VERSION 3.0 AUGUST 25, 2006.



REV.	DATE	DESCRIPTION	C/O	DR	CK
B	5/27/11	UPDATE SOILS	--	JAH	JAH
A	4/18/11	INITIAL SUBMISSION TO PB	--	KMA	JAH

STATE OF NEW HAMPSHIRE
THOMAS E. CARR
No. 018
CERTIFIED SOIL SCIENTIST
5/26/11

NOTES:

1. PROJECT DATUM: NGVD 1929.
2. SEWER INVERTS ARE DEPICTED PER THE TOWN OF MILFORD RECORD SEWER DOCUMENTS.
3. DRAIN INVERTS ARE THE RESULT OF A FIELD SURVEY MADE BY THIS OFFICE.
4. SUBSURFACE UTILITIES DEPICTED HEREON ARE THE RESULT OF RECORD PLANS COMPILED WITH FIELD SURVEY DATA AND THE LOCATIONS ARE APPROXIMATE. PRIOR TO THE COMMENCEMENT OF ANY EXCAVATIONS, DIGGGING, DRILLING, TRENCING OR ANY OTHE SITE WORK CALL DIGSAFE: 1-888-344-7233.
5. SEE SUBDIVSION PLAN SET FOR ADDITIONAL NOTES AND INFORMATION.

EXISTING CONDITIONS PLAN
LAND OF

282 ROUTE 101, LLC & 37 WILTON ROAD MILFORD, LLC

TAX MAP-LOT 6-14
30 WILTON ROAD
MILFORD, NEW HAMPSHIRE

SCALE: 1" = 40' FEBRUARY 6, 2011

MERIDIAN Land Services, Inc.
OFFICE: 31 OLD NASHUA ROAD, AMHERST, NEW HAMPSHIRE 03031
MAILING ADDRESS: PO BOX 118, MILFORD, NEW HAMPSHIRE 03055-0118
TEL 603-673-1441 FAX 603-673-1584 MERIDIAN@MERIDIANLANDSERVICES.COM
ENGINEERS - LAND SURVEYORS - SCIENTISTS - LAND PLANNERS

FILE: 280T05.DWG | PROJECT NO. 280.05 | SHEET NO. 4 OF 15

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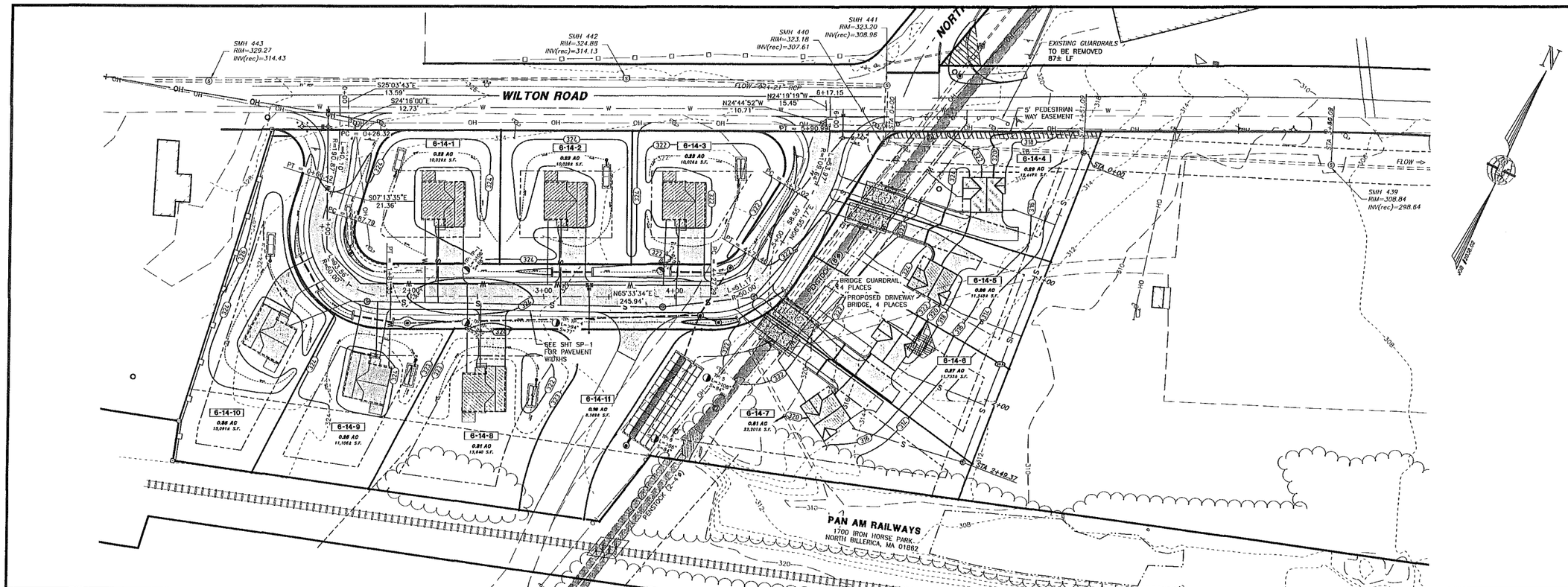

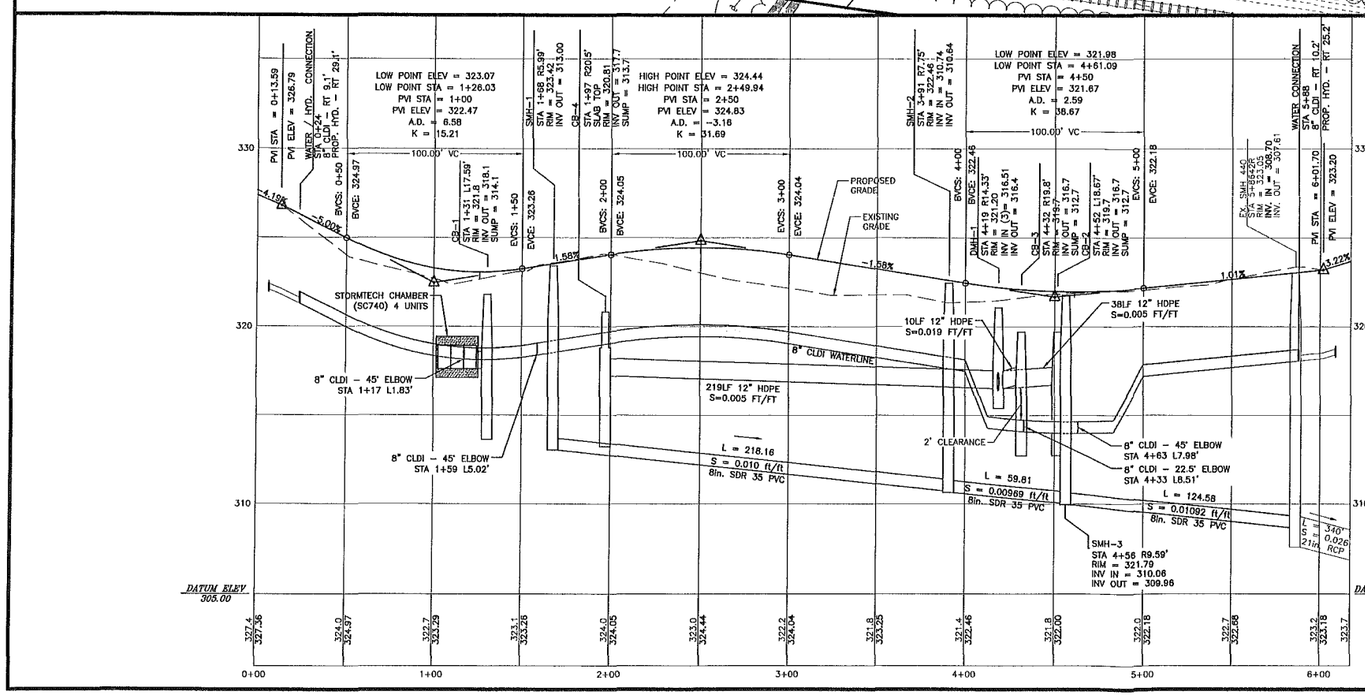

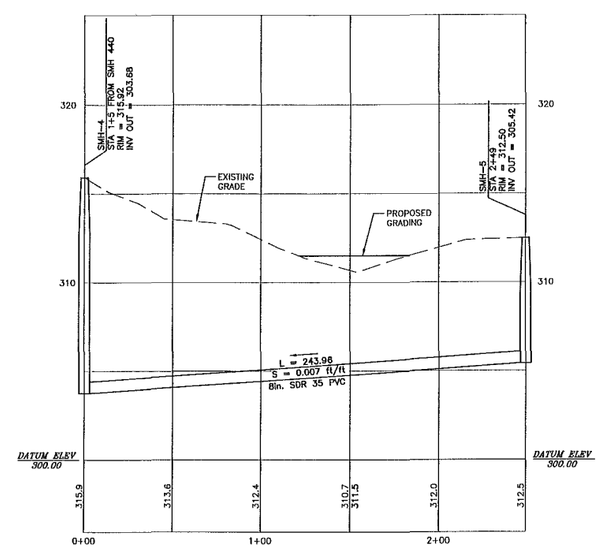

SEWER PROFILE FOR LOTS 6-14-4 THRU 6-14-7

GRAPHIC SCALE

IMPERIAL: 1:40 (IN:FT)

MERIDIAN
Land Services, Inc.
ENGINEERS
LAND SURVEYORS
SCIENTISTS
LAND PLANNERS
OFFICE: 31 OLD NASHUA ROAD AMHERST, NEW HAMPSHIRE 03110 TEL 603-673-1441
MAILING: P.O. BOX 118 FAX 603-673-1584
ADDRESS: MILFORD, NEW HAMPSHIRE 03055 MERIDIAN@MERIDIANLANDSERVICES.COM

STATE OF NEW HAMPSHIRE · JOHN A. HEAVISIDES No. 7995 LICENSED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	DR	CK
I	---	---	---	---
H	---	---	---	---
G	---	---	---	---
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D	---	---	---	---
C	5/27/11	SUBMISSION TO TOWN	KEA	JAH
B	4/18/11	SUBMISSION TO PLANNING BOARD	KMA	JAH
A	3/21/11	DRAFT PLAN FOR REVIEW WITH DPW	KMA	JAH

PINE VALLEY - SUBDIVISION
MILFORD, NEW HAMPSHIRE

PROPOSED ROAD
STA 0+00 - 6+17.16

37 WILTON ROAD MILFORD, LLC

MARCH 07, 2011

SCALE: 1" = 40'

P1
SHEET

FILE: 280P05C.dwg
PROJECT 280.05
SHEET NO. 5 OF 15

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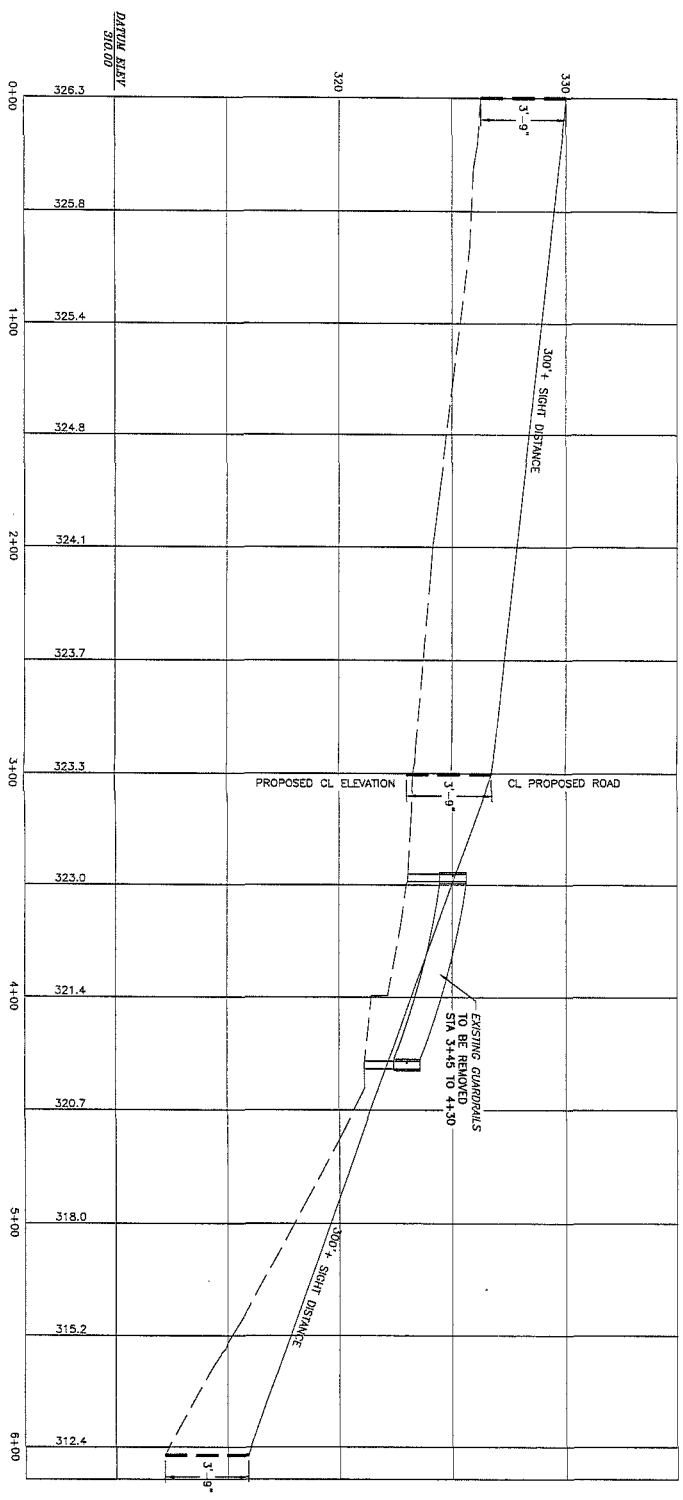

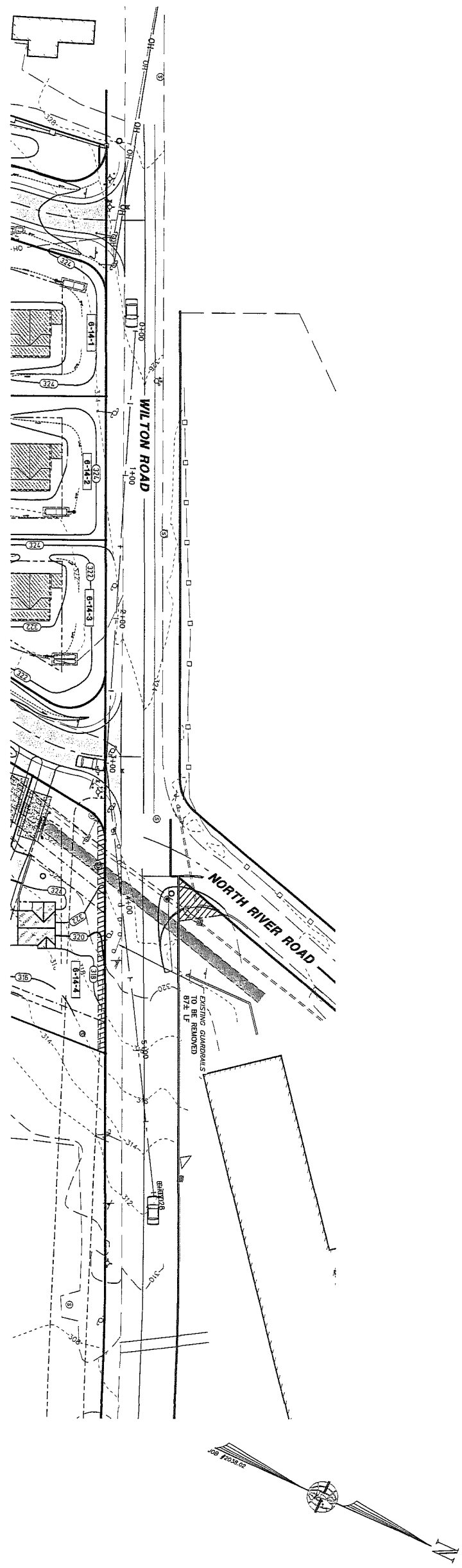

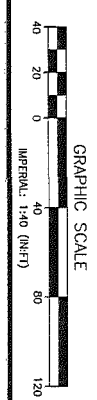

PINE VALLEY - SUBDIVSION
MILFORD, NEW HAMPSHIRE

PROPOSED ROAD
SIGHT DISTANCE

37 WILTON ROAD MILFORD, LLC

SCALE: 1" = 40'

MARCH 07, 2011

REV.	DATE	DESCRIPTION	DR	CK
I	--	--	--	--
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D	--	--	--	--
C	--	--	--	--
B	--	--	--	--
A	5/27/11	SUBMISSION TO TOWN	KEA	JAH

STATE OF NEW HAMPSHIRE
JOHN A. HEAVISIDES
No. 7995
LICENSED
PROFESSIONAL ENGINEER
5/27/11

ENGINEERS
LAND SURVEYORS
SCIENTISTS
LAND PLANNERS

MERIDIAN
Land Services, Inc.

OFFICE: 31 OLD NASHUA ROAD
AMHERST, NEW HAMPSHIRE 03110
TEL 603-673-1441
FAX 603-673-1584

MAILING ADDRESS: P.O. BOX 118
MILFORD, NEW HAMPSHIRE 03055
MERIDIAN@MERIDIANLANDSERVICES.COM

SHEET P-2

FILE: 280P05C.dwg
PROJECT 280.05
SHEET NO. 6 OF 15

LEGEND:

EXISTING CONDITIONS

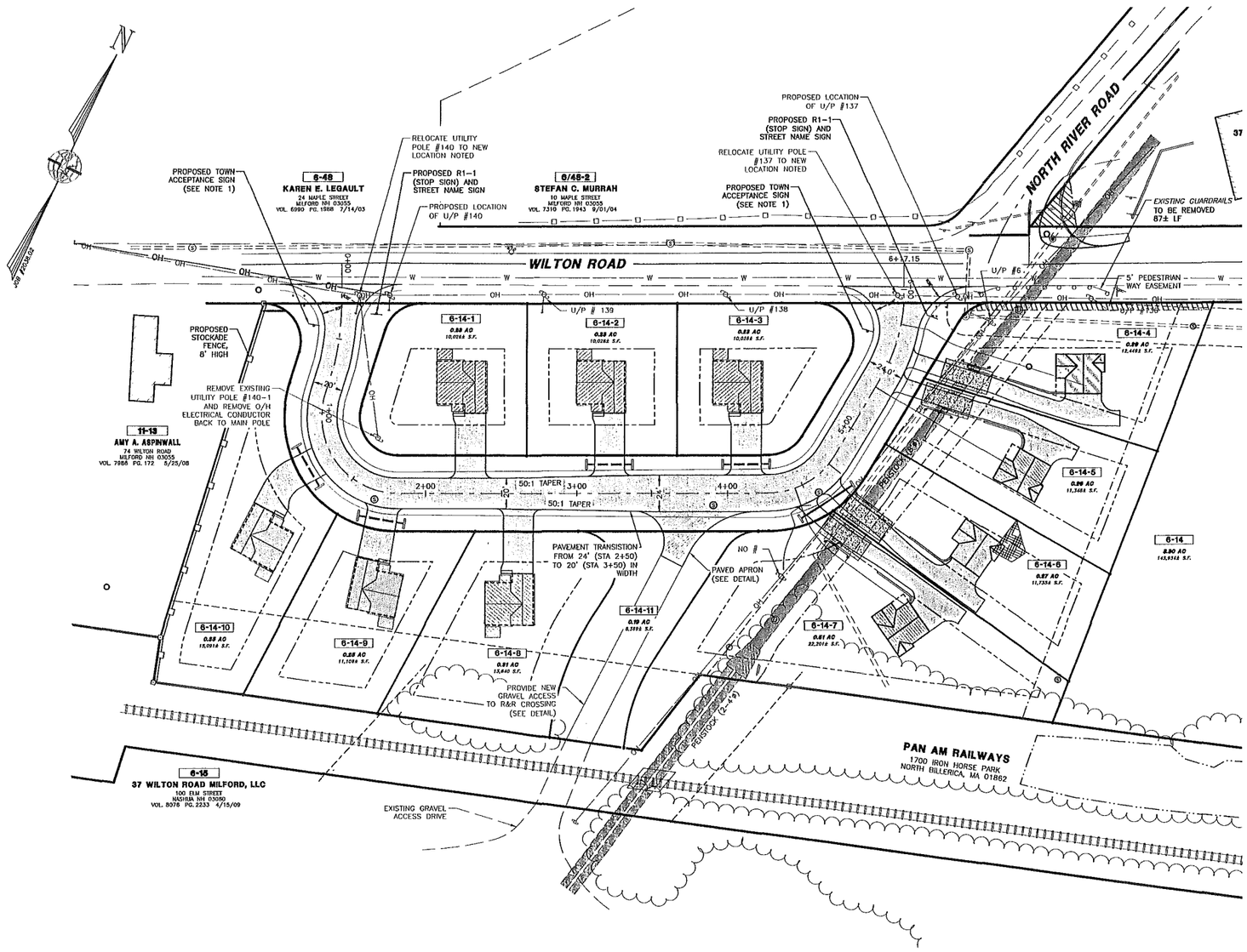
- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ABUTTING LOT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVED ROAD
- EDGE OF GRAVEL ROAD
- 10' CONTOUR INTERVAL
- 2' CONTOUR INTERVAL
- CULVERT
- OH — OVERHEAD UTILITIES
- U/G — TELEPHONE LINE
- W — WATER LINE
- S — SEWER LINE
- STRUCTURE
- EDGE OF FOLIAGE
- RAILROAD TRACKS
- BUILDING
- 26-161 — TAX MAP AND LOT NUMBER
- WATER HYDRANT
- WATER VALVE
- SHUT-OFF
- SEWER MANHOLE
- DRAIN MANHOLE
- TELEPHONE MANHOLE
- ELECTRICAL MANHOLE
- MANHOLE
- CATCH BASIN
- SIGN
- I.PIPE(F) — IRON PIPE FOUND
- I.PIN(F) — IRON PIN FOUND
- D.H.(F) — DRILL HOLE FOUND
- G.B.(F) — GRANITE BOUND FOUND
- D.H.(S) — DRILL HOLE SET
- UTILITY POLE AND GUY WIRE

PROPOSED CONDITIONS

- 320 — 10 FT. CONTOUR
- 318 — 2 FT. CONTOUR
- 1210 — SPOT ELEVATION
- INTERMITTENT CONTOUR
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- BUILDING SETBACK
- WATER LINE
- SEWER LINE
- SWALE
- OH — OVERHEAD ELECTRICAL
- STOCKADE FENCE
- DRAINAGE PIPE
- CULVERT AND HEADWALLS
- INFILTRATION CHAMBER
- CATCH BASIN
- LAWN BASIN
- DRAINAGE FLOW DIRECTION
- TREE
- UTILITY POLE AND GUY WIRE
- SEWER MANHOLE
- FIRE HYDRANT
- BOLLARD
- SIGN
- PIN AND CAP (SET)

SITE PLAN NOTES

1. IN ACCORDANCE WITH THE TOWN OF MILFORDS DEVELOPMENT REGULATIONS A SIGN AT BOTH ENTRANCES SHALL BE INSTALLED THAT READS, "THIS ROAD HAS NOT BEEN ACCEPTED BY THE TOWN OF MILFORD. UNTIL THE STREET HAS BEEN ACCEPTED, THE TOWN ASSUMES NO RESPONSIBILITY FOR MAINTENANCE INCLUDING SNOW REMOVAL, NOR ANY LIABILITY FOR DAMAGES RESULTING FROM USE OF STREET. RSA 674:41."



GRAPHIC SCALE

40 20 0 40 80 120

IMPERIAL: 1:40 (IN:FT)

MERIDIAN
ENGINEERS
LAND SURVEYORS
SCIENTISTS
LAND PLANNERS
Licensed Professionals
OFFICE: 31 OLD NASHUA ROAD AMHERST, NEW HAMPSHIRE 03110 TEL. 603-673-1441 FAX. 603-673-1454
MAILING ADDRESS: P.O. BOX 1191 MILFORD, NEW HAMPSHIRE 03055 MERIDIAN@MERIDIANLANDSERVICES.COM

STATE OF NEW HAMPSHIRE JOHN A. HEAVISIDES No. 7985 LICENSED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY	CK
H	---	---	---	---
G	---	---	---	---
F	---	---	---	---
E	---	---	---	---
D	5/27/11	SUBMISSION TO TOWN	KGL	JAH
C	4/18/11	SUBMISSION TO PLANNING BOARD	KGA	JAH
B	3/21/11	DRAFT PLAN FOR REVIEW WITH DPW	KGA	JAH
A	3/21/11	DRAFT	DR	CK

SITE PLAN

PINE VALLEY - SUBDIVISION
MILFORD, NEW HAMPSHIRE

37 WILTON ROAD MILFORD, LLC

MARCH 07, 2011

SCALE: 1" = 40'

SP-1
SHEET

FILE: 280P05C.dwg
PROJECT 280.05
SHEET NO. 7 OF 15

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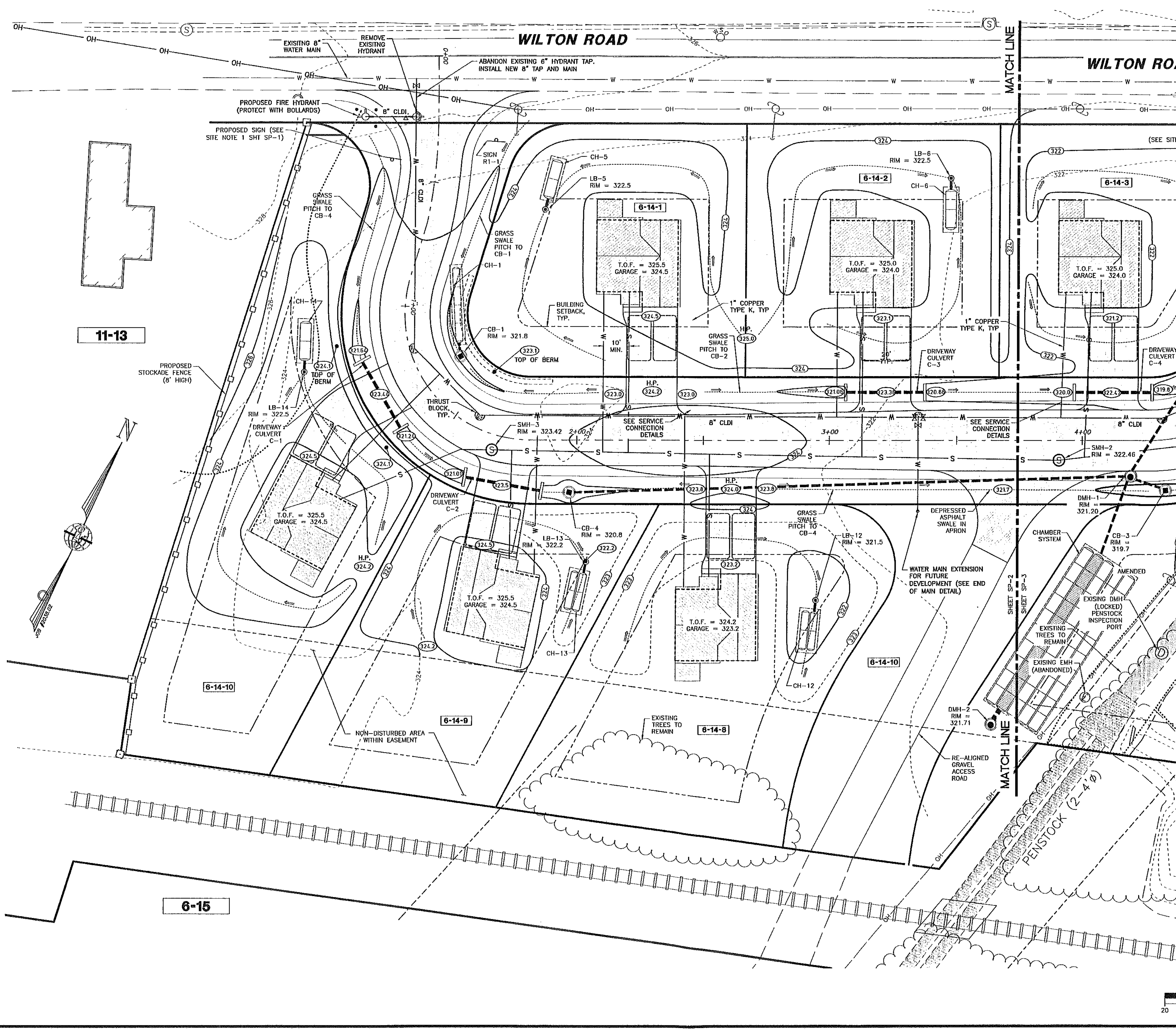

MERIDIAN Land Services, Inc.

ENGINEERS
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LAND PLANNERS

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STATE OF NEW HAMPSHIRE · PROFESSIONAL ENGINEER · JOHN A. HEAVISIDES No. 7995 LICENSED

REV.	DATE	DESCRIPTION	DR	CK
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PINE VALLEY - SUBDIVISION
MILFORD, NEW HAMPSHIRE

GRADING PLAN

37 WILTON ROAD MILFORD, LLC

SCALE: 1" = 20'

MARCH 07, 2011

SP-2
SHEET

FILE: 280P05C.dwg
PROJECT 280.05
SHEET NO. 8 OF 15

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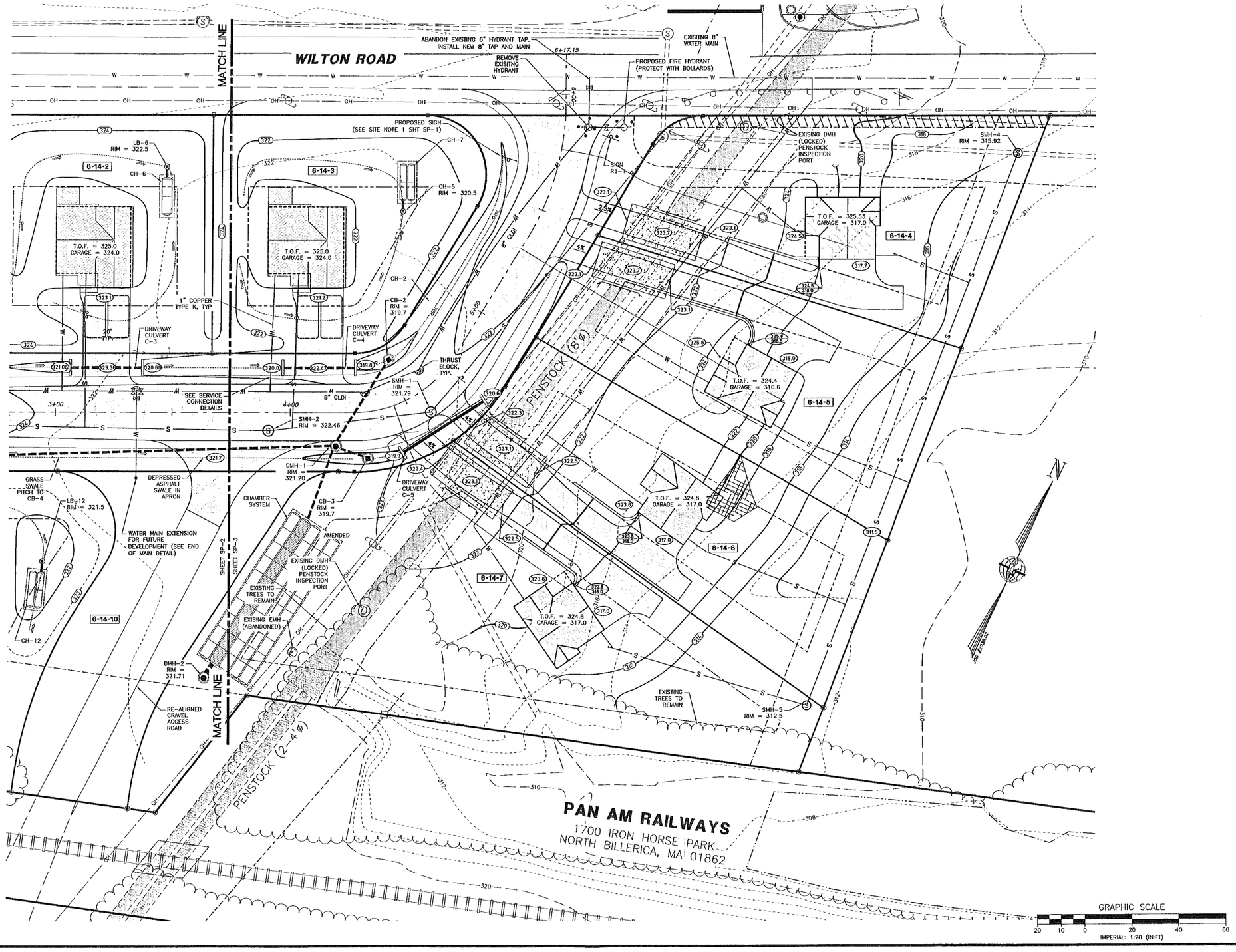

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LAND PLANNERS

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STATE OF NEW HAMPSHIRE · PROFESSIONAL ENGINEER · JOHN A. HEAVISIDES No. 7995 · LICENSED

REV.	DATE	DESCRIPTION	DR	CK
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PINE VALLEY - SUBDIVISION
MILFORD, NEW HAMPSHIRE

GRADING PLAN

37 WILTON ROAD MILFORD, LLC

SCALE: 1" = 20'

MARCH 07, 2011

SP-3
SHEET

FILE: 280P05C.dwg
PROJECT 280.05
SHEET NO. 9 OF 15

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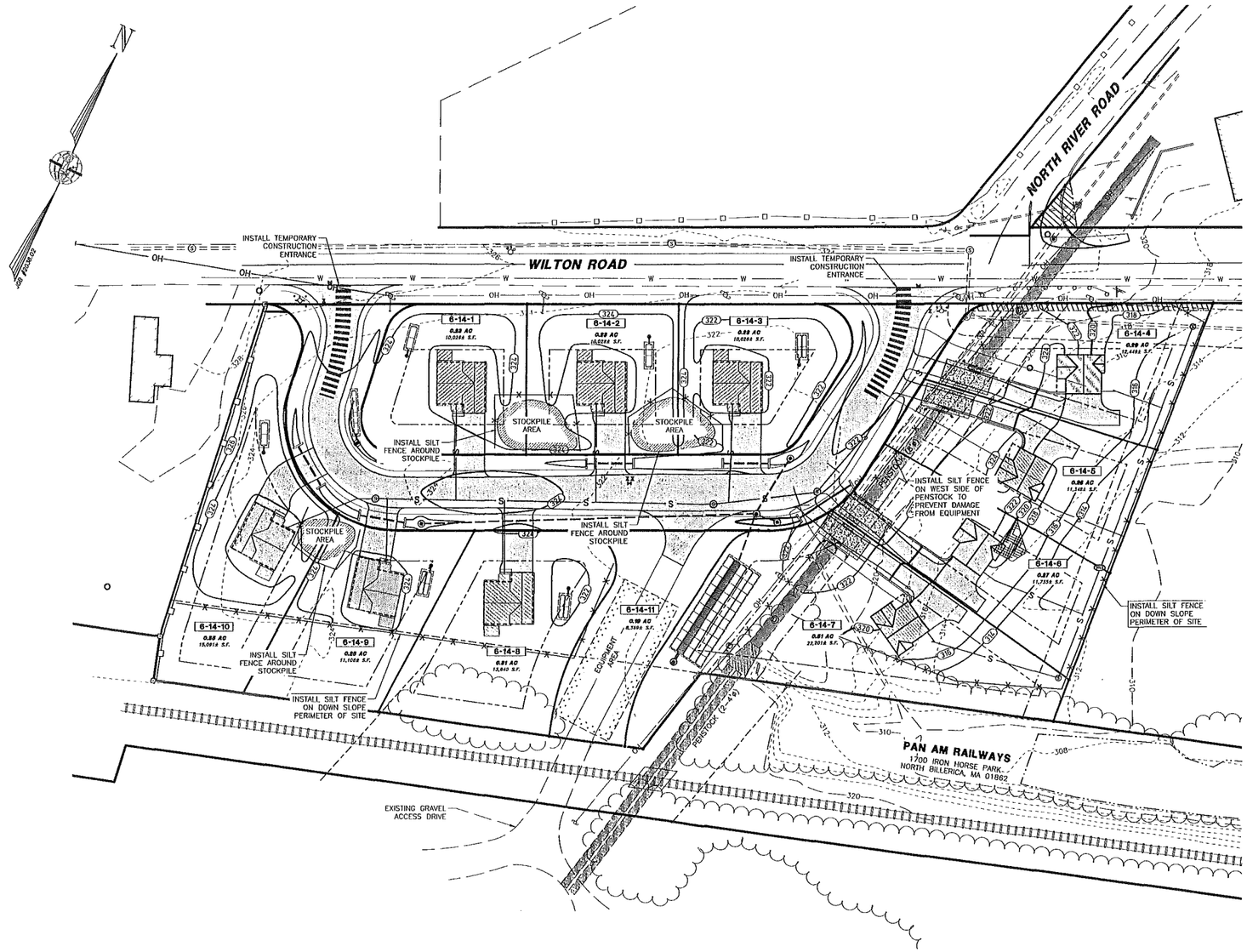

STORM WATER PLAN NOTE

THIS SITE CONTAINS NO WETLANDS OR CRITICAL AREAS AS DEFINED WITHIN THE MILFORD DEVELEOPMENT REGULATIONS.

GRAPHIC SCALE

40 20 0 40 80 120

IMPERIAL: 1:40 (IN:FT)

MERIDIAN
Land Services, Inc.
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OFFICE: 31 OLD NASHUA ROAD
AMHERST, NEW HAMPSHIRE 03110 TEL. 603-673-1441
FAX. 603-673-1446
MAILING: P.O. BOX 118
ADDRESS: MILFORD, NEW HAMPSHIRE 03055 MERIDIAN@MERIDIANLANDSERVICES.COM

JOHN A. HEAVISIDES No. 7985 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

REV.	DATE	DESCRIPTION	DR.	CK.
I	---	---	---	---
H	---	---	---	---
G	---	---	---	---
F	---	---	---	---
E	---	---	---	---
D	---	---	---	---
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A	3/31/11	DRAFT PLAN SUBMITTED WITH DPW	JAH	JAH

PINE VALLEY - SUBDIVISION STORM WATER MANAGEMENT
MILFORD, NEW HAMPSHIRE AND EROSION CONTROL PLAN

37 WILTON ROAD MILFORD, LLC

MARCH 07, 2011

SCALE: 1" = 40'

SW-1
SHEET

FILE: 280P05C.dwg
PROJECT 280.05
SHEET NO. 10 OF 15

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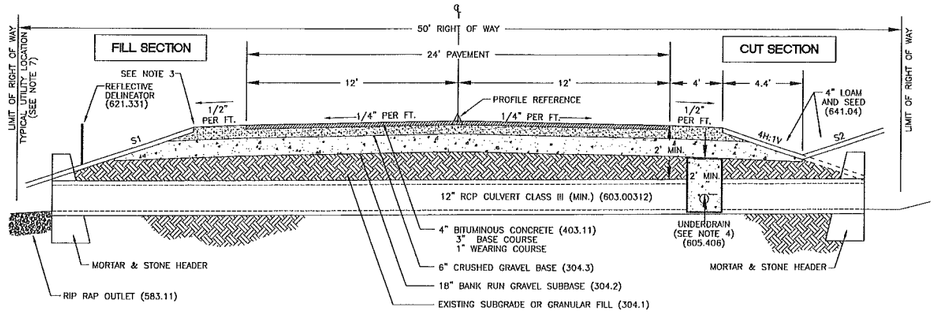


ROAD DESIGN REQUIREMENTS

ROAD GRADE (MIN.)	1%
ROAD GRADE (MAX.)	6%
ANGLE AT INTERSECTION	90°
CENTERLINE RADIUS – CURVES (MIN.)	200'
TANGENT LENGTHS (MIN.)	100'
EDGE OF PAVEMENT RADII (MIN.)	20'
DESIGN SPEED (LOCAL ROAD)	35 MPH
"K" VALUE (MIN.)	40 CREST/45 SAG
BINDER COURSE	2" (MIN.)
WEARING COURSE	1" (MIN.)

MAXIMUM SIDE SLOPES:

DISTANCE TO ORIGINAL GROUND	S1 (FILL)	S2 (CUT)
LESS THAN 10'	4:1	3:1
10' TO 20'	3:1	2:1
GREATER THAN 20'	2:1	2:1
LEDGE	--	1:2

NOTES:

1. THE ROAD DESIGNS ARE IN ACCORD WITH THE FOLLOWING DESIGN STANDARDS:
   NHDOT – "HIGHWAY DESIGN MANUAL" 2007
   AASHTO – "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS", 2004
2. DESIGN SPEED MAY BE MODIFIED UPON APPROVAL OF THE MILFORD CHIEF OF POLICE AND IN ACCORDANCE WITH STATE LAW.

GENERAL ROAD CONSTRUCTION NOTES

1. REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER ROAD FOUNDATION MATERIAL WITHIN 3' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO THE DIRECTOR OF PUBLIC WORKS. COMPACTION TO BE AT LEAST 95% OF THE DRY WEIGHT AS DETERMINED BY MODIFIED PROCTOR TESTING (ASTM 1557).
2. ALL MATERIALS AND CONSTRUCTION SHALL MEET AND BE COMPLETED IN STRICT ACCORDANCE WITH THE TOWN OF MILFORD'S INFRASTRUCTURE DESIGN, CONSTRUCTION & ADMINISTRATION STANDARDS DATED APRIL 5, 2010.
3. A 2.5' SHOULDER EXTENSION IS REQUIRED WHEREVER GUARDRAILS ARE TO BE LOCATED (SEE BELOW) TO PROVIDE FOR GUARDRAIL CONSTRUCTION AND SUPPORT.
4. SHOULD UNDERDRAIN PIPE BE REQUIRED IN CUT SECTIONS, THE PIPE SHALL DISCHARGE THROUGH A MORTARED RUBBLE AND MASONRY ENDWALL OR INTO A CATCH BASIN.
5. AN EASEMENT SHALL BE PROVIDED BEYOND THE LIMITS OF THE RIGHT OF WAY TO THE BOUNDARY OF THE EXISTING WETLAND TO PROVIDE FOR MAINTAINANCE OF THE DRAINAGE STRUCTURES.
6. WHERE ROAD GRADE IS 3% OR GREATER, ROAD SWALE SHALL BE LINED WITH RIPRAP (2 LAYERS, 6" TO 8" STONE, 8' WIDE WITH 6" GRAVEL BASE OR EROSION CONTROL FABRIC). WHERE ROAD GRADE IS LESS THAN 3%, EROSION CONTROL FABRIC SHALL BE INSTALLED EXTENDING 3' EACH SIDE FROM SWALE CENTERLINE.
7. ALL UTILITY POLES AND TRANSFORMER SLABS SHALL BE LOCATED AT THE RIGHT OF WAY LINE.

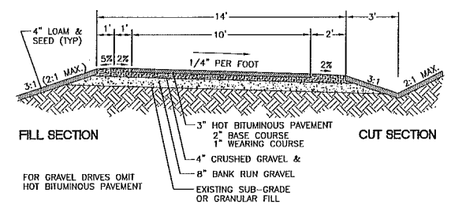
GUARDRAIL LOCATIONS

IF THE FILL SLOPE IS STEEPER THAN 4:1 WITH MORE THAN 10' OF FILL, A GUARDRAIL SHALL BE PROVIDED.

TYPICAL RURAL ROAD CROSS-SECTION

(NHDOT ITEM NO.)

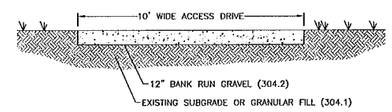
MAY 27, 2011 SCALE: NONE — 1 / D-1



RESIDENTIAL DRIVEWAY

(NHDOT ITEM NO.)

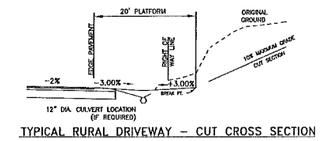
JUNE 28, 2001 SCALE: NONE — 3 / D-1



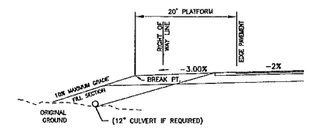
ACCESS ROAD (MINIMAL TRAFFIC)

(NHDOT ITEM NO.)

FEB. 03, 2011 SCALE: NONE — 4 / D-1



TYPICAL RURAL DRIVEWAY – CUT CROSS SECTION
NOT TO SCALE



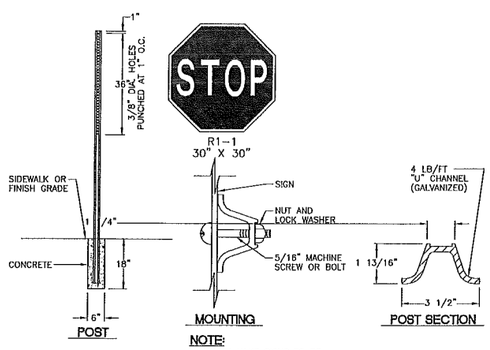
TYPICAL RURAL DRIVEWAY – FILL CROSS SECTION
NOT TO SCALE

DESIGN STANDARDS

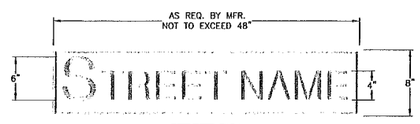
1. THE MAXIMUM DRIVEWAY GRADE BEYOND THE PLATFORM AREA SHALL NOT EXCEED A 10% SLOPE.
2. THE ALGEBRAIC DIFFERENCE BETWEEN TWO ADJACENT GRADES SHALL NOT EXCEED 12%. EXAMPLE: THE ALGEBRAIC DIFFERENCE FOR A –3.0% GRADE INTERSECTING WITH A –10.0% GRADE IS 7. [–3.0 –(–10) = 7]
3. DITCHES ARE REQUIRED FOR DRIVEWAYS IN CUT SLOPES.
4. DRIVEWAY CULVERTS SHALL BE REQUIRED TO CONVEY THE FULL FLOW OF WATER OF EXISTING DRAINAGE SWALES AND ANY ADDITIONAL WATER TRANSMITTED BY THE DRIVEWAY.
5. DRIVEWAY CULVERTS, WHERE REQUIRED, SHALL BE A MINIMUM OF 12" IN DIAMETER AND SHALL HAVE A MINIMUM OF 1'–0" COVER OVER THE CROWN OF THE PIPE.
6. DRIVEWAY ENTRANCES SHALL BE CONSTRUCTED DURING THE APPLICATION OF ROADWAY BASE COURSE OF PAVEMENT TO A DISTANCE OF 25' FROM ROADWAY CENTERLINE.
7. ALL DRIVES SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH MANNER THAT WATER RUNOFF WILL BE DIRECTED TO THE DITCHLINE AND NOT INTO THE TOWN'S ROADWAY.
8. DRIVEWAY PAVEMENT WITHIN 25' OF ROADWAY CENTERLINE SHALL BE PAVED 2 INCHES THICK.
9. THE SECTION OF DRIVEWAY WITHIN THE R.O.W. WILL BE CONSTRUCTED WITH 6" OF CRUSHED GRAVEL AND 12" OF BANKRUN GRAVEL.

TYPICAL RURAL DRIVEWAY DETAILS

MAY 20, 2000 SCALE: NONE — 6 / D-1



NOTE:
1. STREET NAME SIGNS TO BE INSTALLED PER TOWN STANDARDS.

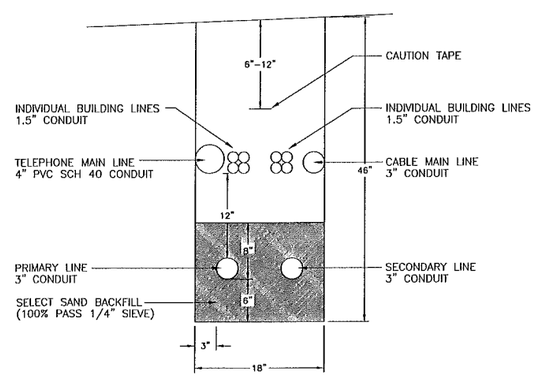


STREET SIGN

STREET SIGN NOTES:
1. STREET SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD SIGN TYPE D3-1, GREEN IN COLOR UNLESS OTHERWISE SPECIFIED BY THE TOWN.
2. STREET SIGN SHALL COMFORM TO THE LATEST EDITION OF THE MUTCD IN SIGN LOCATION, MOUNTING HEIGHT, SIGN HEIGHT AND WIDTH AND TEXT HEIGHT AND STYLE.
3. LETTERING ON POST-MOUNTED STREET NAMES SIGNS SHOULD BE COMPOSED OF INITIAL UPPER-CSE LETTERS AT LEAST 6 INCHES IN HEIGHT AND LOWER CASE LETTERS AT LEAST 4.5 INCHES IN HEIGHT.
4. STREET NAME SIGN SHALL BE RETROREFLECTIVE TO SHOW THE SAME SHAPE AND COLOR BOTH DAY AND NIGHT. NAME AND BORDER SHALL CONTRAST WITH THE BACKGROUND COLOR.
5. SIGN HEIGHT SHALL BE 8" IN HEIGHT WITH A WIDTH NOT TO EXCEED 48"
6. CAPITAL LETTERS SHALL BE 6" IN HEIGHT. LOWER CASE LETTERS SHALL BE 4.5" IN HEIGHT.

SIGNS & POST

JUNE 14, 1995 SCALE: NONE — 2 / D-1



TYPICAL UTILITY TRENCH

JULY 20, 1998 SCALE: NONE — 5 / D-1

MERIDIAN
ENGINEERS
LAND SURVEYORS
SCIENTISTS
LAND PLANNERS
Licensed Professional Services
OFFICE: 31 OLD NASHUA ROAD AMHERST, NEW HAMPSHIRE 03310 TEL. 603-673-1441 FAX 603-673-1584
MAILING ADDRESS: P.O. BOX 118 MILFORD, NEW HAMPSHIRE 03055 MERIDIAN@MERIDIANLANDSERVICES.COM

STATE OF NEW HAMPSHIRE JOHN A. REAVIS/DES NO. 7918 LICENSED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY	CK
A	3/21/11	DRAFT PLAN FOR REVIEW WITH DPW	KMA	JAH
B	4/18/11	SUBMISSION TO PLANNING BOARD	KMA	JAH
C	5/27/11	SUBMISSION TO TOWN	KEA	JAH
D	---	---	---	---
E	---	---	---	---
F	---	---	---	---
G	---	---	---	---
H	---	---	---	---

GENERAL CONSTRUCTION DETAILS

PINE VALLEY - SUBDIVISION
MILFORD, NEW HAMPSHIRE

37 WILTON ROAD MILFORD, LLC

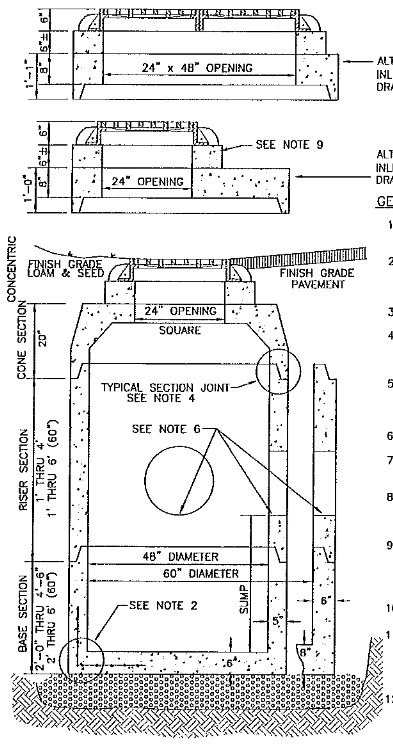
MARCH 07, 2011

SCALE: AS NOTED

D-1
SHEET

FILE: 280V05C.dwg
PROJECT 280.05
SHEET NO. 11 OF 15

H:\mla\00280\280.05\DRAWINGS\280V05C.dwg



ALTERNATIVE TOP SLAB WITH DOUBLE INLET GRATE FOR 5' DIAMETER STORM DRAIN MANHOLE

ALTERNATIVE TOP SLAB WITH SINGLE INLET GRATE FOR 4' DIAMETER STORM DRAIN MANHOLE

GENERAL NOTES

1. STORM DRAIN MANHOLE SHALL BE SUPPLIED BY CONCRETE SYSTEMS, INC., HUDSON, NH OR EQUAL.
2. REINFORCING STEEL SHALL CONFORM TO THE LATEST ASTM SPECIFICATION: 0.12 SQ.IN./LINEAR FT. AND 0.12 SQ.IN. (BOTH WAYS) BASE BOTTOM.
3. CONCRETE COMPRESSIVE STRENGTH – 4000 PSI MINIMUM.
4. TYPICAL SECTION JOINT SHALL BE SEALED WITH BUTYL RUBBER AND SHALL CONFORM TO ASTM C443 SPEC. AND FED SPEC. SS-S-210A.
5. MANHOLE DESIGN SPECIFICATIONS SHALL CONFORM TO THE LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
6. ALL PIPING SHALL BE SEALED WITH NON SHRINK GROUT.
7. ALTERNATIVE TOP SLAB IS TO BE STEEL REINFORCED TO MEET OR EXCEED H-20 LOADING.
8. INLET GRATE AND FRAME IS TO BE NEENAH MODEL R-3531-D FOR SINGLE GRATE AND MODEL R-3531-A FOR A DOUBLE GRATE STRUCTURE, OR EQUAL.
9. INLET FRAME IS TO BE ADJUSTED TO GRADE WITH A MINIMUM OF TWO (2) COURSES OF BRICK OR ONE SOLID CONCRETE RING AND GROUT. SEALED IN PLACE WITH NON SHRINK GROUT.
10. STORM DRAIN MANHOLE IS TO BE SET ON 6" OF 3/4" STONE BEDDING.
11. THE 48" DIAMETER STORM DRAIN MANHOLE SHALL BE RESTRICTED TO PIPES OF 24" IN DIAMETER OR LESS. THE 60" DIAMETER STORM DRAIN SHALL BE RESTRICTED TO PIPES OF 36" IN DIAMETER OR LESS.
12. ALL DRAINAGE STRUCTURES SHALL CONFORM TO NHDOT STANDARDS.

THE SUMP FOR ALL CB SHALL BE 48"

TYPICAL CATCH BASIN (1 / D-2)

FEB. 14, 2011
SCALE: NONE

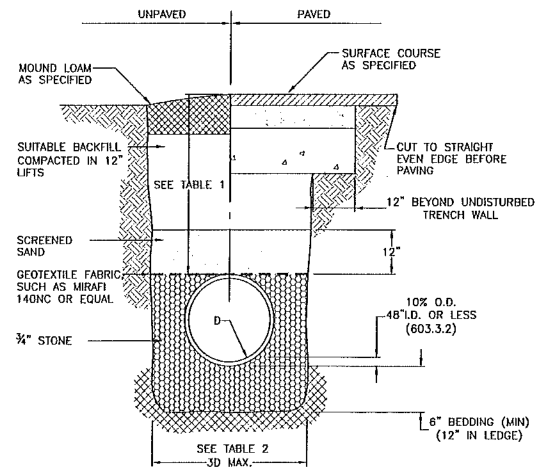


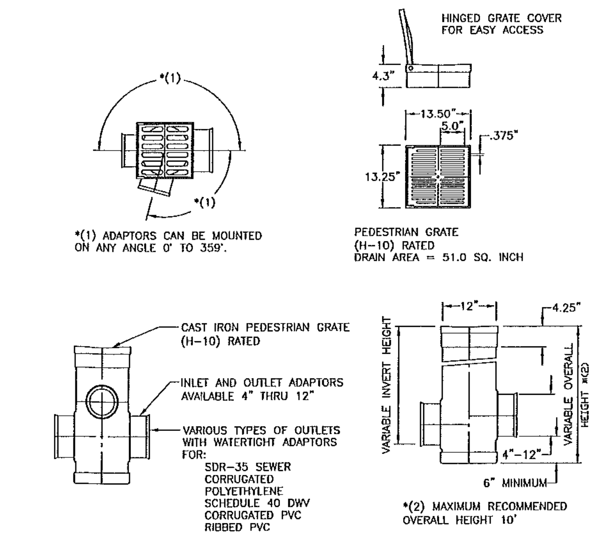
TABLE 1		
LOCATION	PIPE MATERIAL	MINIMUM COVER
PAVED ROADS UNPAVED ROADS DRIVEWAYS UNPAVED AREAS	ALL ALL ALL ALL	3 FT. 3 FT. 1 FT. 2 FT.

TABLE 2 (206.4.1.2)	
INSIDE DIAMETER	TOTAL WIDTH
12" TO 24" OVER 24"	I.D. + 24" 2 x I.D.

SMOOTH INTERIOR CORRUGATED POLYETHELENE PIPE TYPICAL DRAINAGE TRENCH (3 / D-2)

(NHDOT ITEM NO.)

SEPT 30, 2002
SCALE: NONE

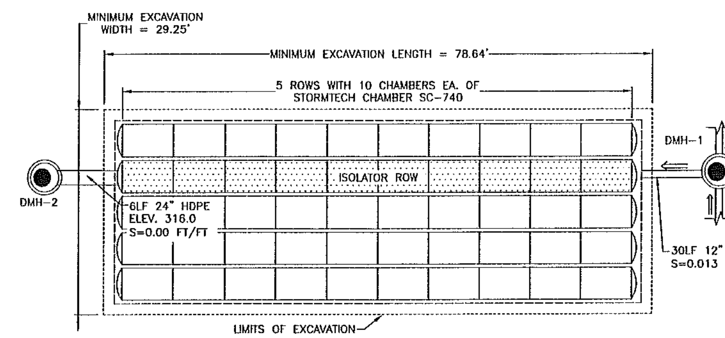


LAWN AREA CATCH BASIN -12" (5 / D-2)

NYLOPLAST DRAIN BASIN OR EQUAL

MAY 1, 2001
SCALE: NONE

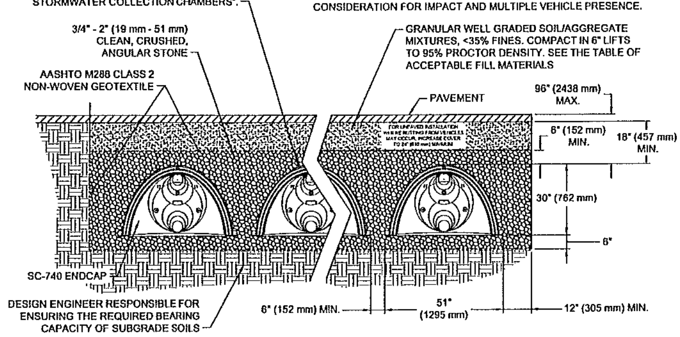
SUBSURFACE INFILTRATION BASINS: STRUCTURE & ELEVATIONS (FT)						
STRUCTURE	# OF CHAMBERS	# OF ROWS	CHAMBERS PER ROW	STONE INVERT A	CHAMBER INV./INV. IN B	FINISHED GRADE C
LAWN BASIN 1	2	1	2	317.8	318.3	322.5
LAWN BASIN 2	2	1	2	317.4	317.9	322.5
LAWN BASIN 3	4	2	2	315.5	316.0	320.5
LAWN BASIN 4	4	2	2	317.5	318.0	321.5
LAWN BASIN 5	4	2	2	318.6	319.1	322.2
LAWN BASIN 6	2	1	2	317.9	318.4	322.5
CATCH BASIN 1	4	1	4	317.6	318.1	321.8
CHAMBER SYSTEM	50	5	10	315.5	316.0	321.7



PLAN VIEW

SC-740 CHAMBER
CHAMBERS SHALL MEET ASTM F 2418-05 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS, WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE.

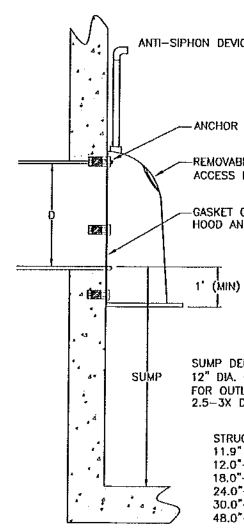


FRONT VIEW

CHAMBER SYSTEM (8 / D-2)

STORMTECH CHAMBER SC-740 OR EQUAL

MAY 26, 2011
SCALE: NONE



INSTALLATION NOTE:
POSITION HOOD SUCH THAT BOTTOM FLANGE IS A DISTANCE OF 1/2 OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT. MINUMUM DISTANCE FOR PIPES <12" I.D. IS 6".

SUMP DEPTH OF 36" MIN. FOR <OR= 12" DIA. OUTLET.
FOR OUTLETS >OR= 15", DEPTH = 2.5-3X DIA.

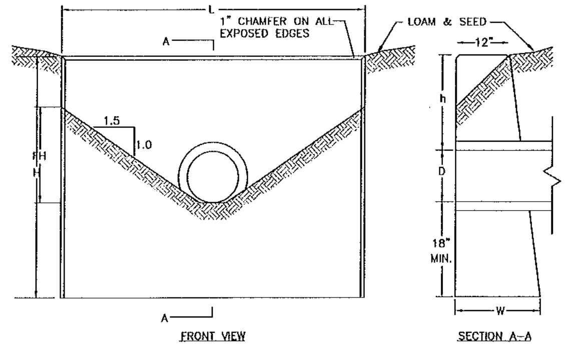
STRUCTURE OUTLET HOLE SIZE	HOOD SIZE
11.9" O.D. OR LESS	12 F or R
12.0"-17.9" O.D.	18 F or R
18.0"-23.9" O.D.	24 F or R
24.0"-29.9" O.D.	30 F or R
30.0"-47.9" O.D.	48 F
48.0"-95.9" O.D.	96 F

F: FLAT WALL STRUCTURE
R: ROUND WALL STRUCTURE

ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY BEST MANAGEMENT PRODUCTS, INC., LYME, CT OR EQUAL

TYPICAL OIL-DEBRIS HOOD (2 / D-2)

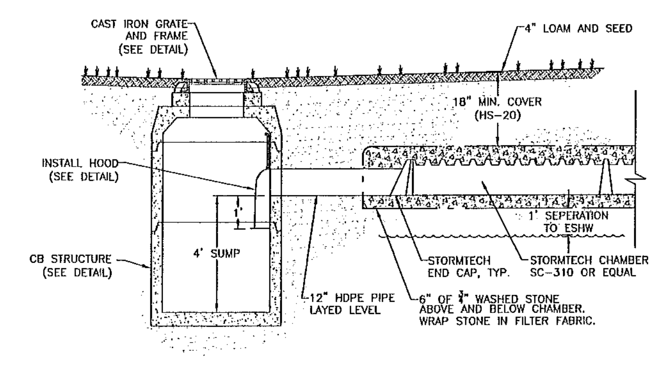
AUG. 8, 2003
SCALE: NONE



CULVERT DIAM.	HEADWALL LENGTH	HEADWALL HEIGHT	FILL HEIGHT	PIPE COVER	HEADWALL BOTTOM
D	L	H	FH	h	WIDTH W
INCHES	FEET & INCHES				
12	4'-2"	3'-9"	1'-3"	1'-3"	1'-11"
15	5'-11"	4'-2"	1'-7"	1'-5"	2'-0"
18	6'-11"	4'-5"	1'-10"	1'-5"	2'-1"
24	8'-10"	4'-11"	2'-5"	1'-5"	2'-3"

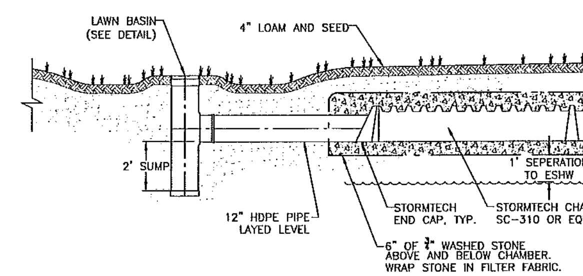
HEADWALL - PRECAST CONCRETE (4 / D-2)

OCT. 12, 2009
SCALE: NONE



CB TO CHAMBER INFILTRATION SYSTEM (6 / D-2)

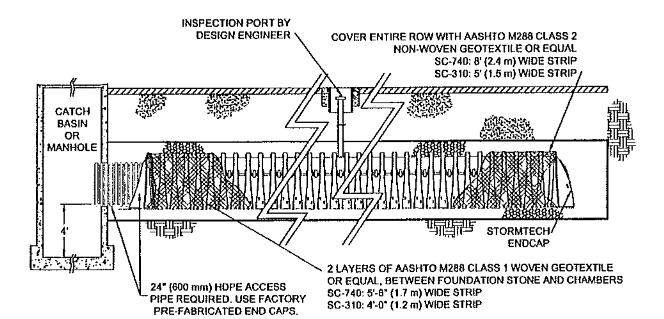
MAR. 21, 2011
SCALE: NONE



LAWN BASIN -12" (7 / D-2)

NYLOPLAST DRAIN BASIN OR EQUAL

MAY 1, 2001
SCALE: NONE



CHAMBER SYSTEM - ISOLATOR ROW (9 / D-2)

STORMTECH CHAMBER SC-740 OR EQUAL

MAY 26, 2011
SCALE: NONE

MERIDIAN Land Services, Inc.
ENGINEERS
LAND SURVEYORS
SCIENTISTS
LAND PLANNERS
OFFICE: 31 OLD NASHUA ROAD AMHERST, NEW HAMPSHIRE 03110 TEL. 603-673-1441 FAX 603-673-1584
MAILING ADDRESS: P.O. BOX 118 MILFORD, NEW HAMPSHIRE 03055 MERIDIAN@MERIDIANLANDSERVICES.COM
JOHN A. HEAVISIDES No. 7985 LICENSED PROFESSIONAL ENGINEER
5/27/11

REV.	DATE	DESCRIPTION	DR	CK
I	--	--	--	--
H	--	--	--	--
G	--	--	--	--
F	--	--	--	--
E	--	--	--	--
D	--	--	--	--
C	5/27/11	SUBMISSION TO TOWN	KEA	JAH
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PINE VALLEY - SUBDIVISION
MILFORD, NEW HAMPSHIRE

STORMWATER DRAINAGE DETAILS

37 WILTON ROAD MILFORD, LLC

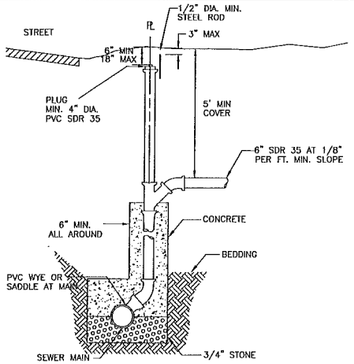
MARCH 07, 2011

SCALE: AS NOTED

D-2
SHEET

FILE: 280V05C.dwg
PROJECT 280.05
SHEET NO. 12 OF 15

H: \mls\00280\280.05\DRAWINGS\280V05C.dwg



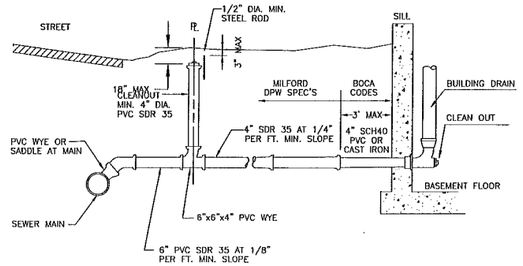
CHIMNEY DETAIL

NOTE:

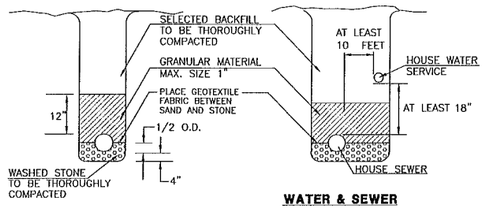
1.) IF THE VERTICAL DROP INTO THE SEWER MAIN IS GREATER THAN 4', A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. FORMWORK SHALL BE LEFT IN PLACE. NO BACKFILL BEFORE CONCRETE HAS TAKEN INITIAL SET (7 HR). BACKFILL TO BE BROUGHT UP EVENLY ON ALL SIDES

2.) CONCRETE SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A 1500 PSI OF N.H. DEPT. OF PUBLIC WORKS AND OF N.H. DEPT. OF PUBLIC WORKS AND HIGHWAY STANDARD SPECS AS FOLLOWS:

A.) CEMENT 6.0 BAGS/CY
B.) WATER 3.75 GALS/BAG CEMENT
C.) MAX AGGREGATE 1-1/2"



SEWER AND HOUSE SEWER

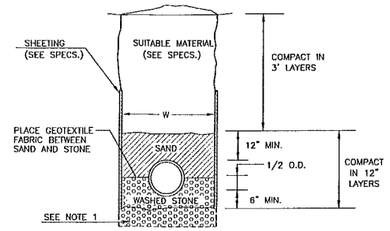


TRENCH CROSS SECTION

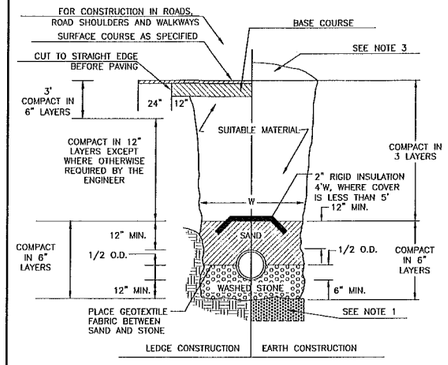
WATER & SEWER IN SAME TRENCH

HOUSE SEWER DETAILS

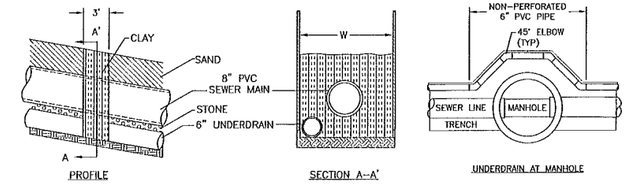
1 / D-3



EARTH CONSTRUCTION WITH SHEETING



LEDGE/EARTH CONSTRUCTION DETAIL



TRENCH DAM NOTES:

1. INSTALL 3' WIDE CLAY TRENCH DAMS FOR THE FULL WIDTH OF THE TRENCH WHERE THE PIPE SLOPE IS 5% OR GREATER.
2. EXTEND CLAY TO 18" ABOVE THE PIPE (MIN).
3. INSTALL DAMS AT 100 FT. INTERVALS, OR AT THE MID-POINT OF THE TRENCH BETWEEN MANHOLES IF DISTANCE IS LESS THAN 100 FEET.
4. USE SOLID (NON-PERFORATED) PIPE THROUGH THE DAM.
5. INSTALL PERFORATED UNDERDRAIN PIPE A MINIMUM OF 10 FT. UP SLOPE FROM THE MOST UPSLOPE DAM AND BETWEEN SUBSEQUENT DOWNSLOPE DAMS.
6. OUTLET UNDERDRAIN TO NEAREST STORM WATER STRUCTURE OR DITCH. IF UNDERDRAIN IS ROUTED PAST SEWER MANHOLE, USE SOLID NON-PERFORATED PIPE NEAR MANHOLE. MAINTAIN A MINIMUM HORIZONTAL CLEARANCE OF 18" BETWEEN PIPE AND MANHOLE STRUCTURE.

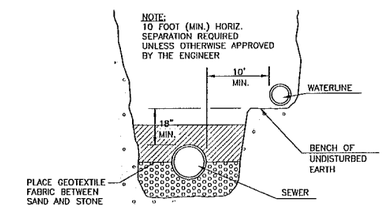
TRENCH DAM FOR STEEP SLOPES

GENERAL TRENCH NOTES:

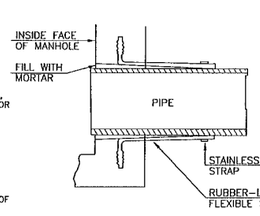
1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. SEE ALSO NOTE 2.
2. W=MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
3. FOR CROSS COUNTRY CONSTRUCTION, MOUND TO A HEIGHT OF 6" (MINIMUM) ABOVE ORIGINAL GROUND SURFACE.

STANDARD TRENCH SECTION

2 / D-3

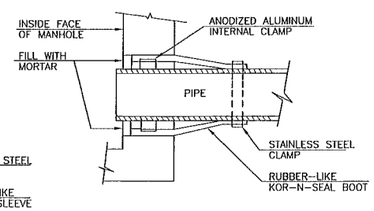


WATER & SEWER IN SAME TRENCH



LOCK-JOINT FLEXIBLE MANHOLE SLEEVE

(OR EQUAL)

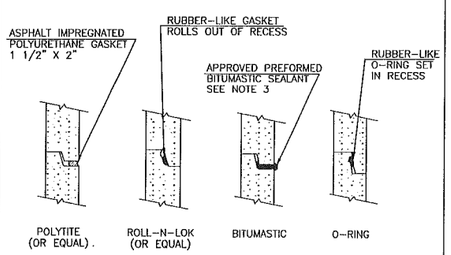


KOR-N-SEAL JOINT SLEEVE

(OR EQUAL)

NOTES:

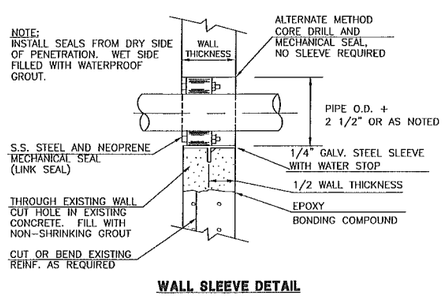
1. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON ANELASTOMERIC OR MASTIC-LIKE GASKET.
2. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATERTIGHTNESS UPON THE ELASTOMERIC SEALANT.
3. FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.



NOTE: ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS

DETAIL-A

NOTE:
INSTALL SEALS FROM DRY SIDE OF PENETRATION. WET SIDE FILLED WITH WATERPROOF GROUT.



WALL SLEEVE DETAIL

MANHOLE JOINTS AND PIPE CONNECTIONS

3 / D-3

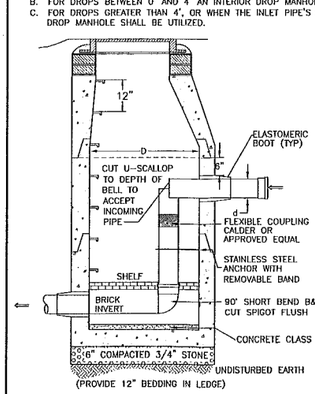
NOTES:

1. THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH OR WITHOUT REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
2. INVERTS AND SHELVES MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
3. SHALLOW MANHOLE IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER SHALL BE USED, WHERE INDICATED, HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS. SEE MISCELLANEOUS DETAILS-SEWERS.
4. FRAMES AND COVERS FRAMES MUST BE A 8" DEPTH, HEAVY PATTERN AND COVERS MUST BE CAST WITH THE WORD "SEWER"

DROP MANHOLE:

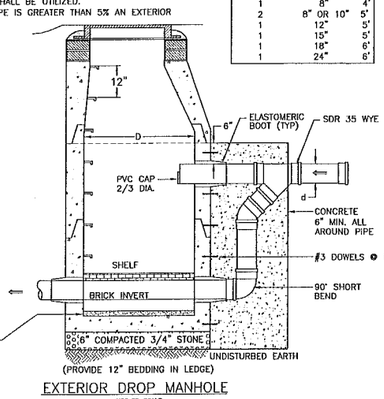
A. DIMENSIONS AND CONSTRUCTION OF DROP MANHOLE TO BE SIMILAR TO TYPICAL MANHOLE EXCEPT AS SHOWN.
B. FOR DROPS BETWEEN 0' AND 4' AN INTERIOR DROP MANHOLE SHALL BE UTILIZED.
C. FOR DROPS GREATER THAN 4', OR WHEN THE INLET PIPE'S SLOPE IS GREATER THAN 5% AN EXTERIOR DROP MANHOLE SHALL BE UTILIZED.

# OF DROPS	d	D
1	8"	4'
2	8" OR 10"	5'
1	12"	5'
1	15"	5'
1	18"	6'
1	24"	6'



INTERIOR DROP MANHOLE

NOT TO SCALE



EXTERIOR DROP MANHOLE

NOT TO SCALE

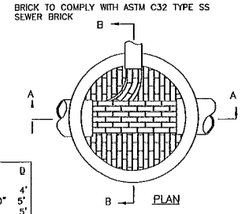
STANDARD MANHOLE

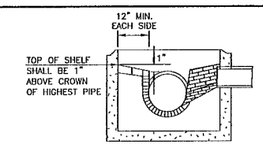
4 / D-3

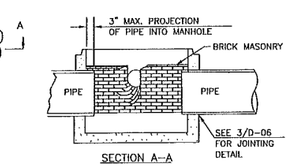
NOTE:
INVERT AND SHELF TO BE PLACED AFTER LEAKAGE TEST.

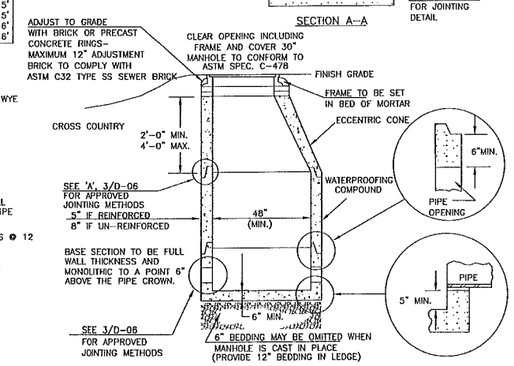
CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. INVERT BRICKS SHALL BE LAID ON EDGE.

BRICK TO COMPLY WITH ASTM C32 TYPE SS SEWER BRICK









TYPICAL MANHOLE

MERIDIAN
ENGINEERS LAND SURVEYORS SCIENTISTS LAND PLANNERS
Licensed Site Developers
OFFICE: 31 OLD NASHUA ROAD AMHERST, NEW HAMPSHIRE 03110 TEL: 603-673-1441 FAX 603-673-1584
MAILING: P.O. BOX 118 ADDRESS: MILFORD, NEW HAMPSHIRE 03055 MERIDIANENGINEERINGANDLANDSERVICES.COM

STATE OF NEW HAMPSHIRE JOHN A. HENDRICKS No. 7958 LICENSED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION	BY	CK.
A	3/21/11	DRAFT PLAN FOR REVIEW WITH DPW	KMA	JAH
B	4/18/11	SUBMISSION TO PLANNING BOARD	KMA	JAH
C	5/27/11	SUBMISSION TO TOWN	KEA	JAH
D	---	---	---	---
E	---	---	---	---
F	---	---	---	---
G	---	---	---	---
H	---	---	---	---
I	---	---	---	---

SEWER LINE DETAILS

PINE VALLEY - SUBDIVISION
MILFORD, NEW HAMPSHIRE

37 WILTON ROAD MILFORD, LLC

MARCH 07, 2011

SCALE: AS NOTED

D-3
SHEET

FILE: 280V05C.dwg
PROJECT 280.05
SHEET NO. 13 OF 15

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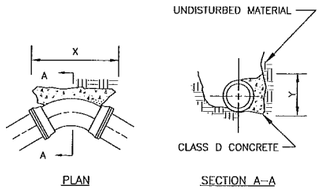


TABLE OF DIMENSIONS										
PIPE SIZE	90° BEND		45° BEND		22½° BEND		11¼° BEND		TEE&PLUG	
	X	Y	X	Y	X	Y	X	Y	X	Y
6"	33"	21"	18"	21"	12"	18"	9"	12"	21"	24"
8"	45"	27"	24"	27"	18"	21"	12"	15"	27"	33"
10"	60"	36"	36"	36"	24"	30"	18"	21"	36"	42"
12"	66"	39"	36"	42"	24"	30"	18"	21"	39"	45"
14"	72"	45"	42"	48"	27"	36"	18"	27"	45"	54"

HORIZONTAL BEND

THRUST BLOCKS - WATER MAINS

1 D-4

OCT. 17, 1995
SCALE: NONE

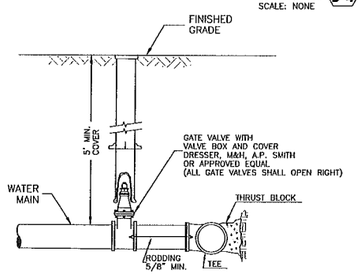
BEARING AREA REQUIRED, SQUARE FEET

TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS, pfs	4" AND LESS DEGREE BEND				6" AND 8" DEGREE BEND				10" AND 12" DEGREE BEND			
	11¼	22½	45	90	11¼	22½	45	90	11¼	22½	45	90
LOOSE SAND OR MEDIUM CLAY – 2,000	1.0	2.0	2.7	4.0	1.5	3.0	6.0	10.0	3.0	6.2	12.0	22.0
PACKED GRAVEL AND SAND – 4,000	1.0	1.0	1.5	2.0	1.0	1.5	3.0	5.0	1.5	3.1	6.0	11.0
ROCK – 10,000	1.0	1.0	1.0	1.0	1.0	1.0	1.2	2.0	1.0	1.3	2.4	4.4

BEARING AREA REQUIRED, SQUARE FEET

TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS, pfs	14" AND 16" DEGREE BEND OR DEFLECTION				18" AND 20" DEGREE BEND OR DEFLECTION			
	11¼	22½	45	90	11¼	22½	45	90
LOOSE SAND OR MEDIUM CLAY – 2,000	6.0	12.0	22.5	40.0	9.5	19.0	37.0	67.0
PACKED GRAVEL AND SAND – 4,000	3.0	6.0	11.3	20.0	4.8	9.5	18.5	33.5
ROCK – 10,000	1.2	2.4	4.5	8.0	2.0	3.8	7.4	13.5

NOTE: THRUST BLOCKING FOR TEES SHALL HAVE THE SAME BEARING AREA AS 90° BEND OF THE PIPE SIZE OF THE OUTLET. DEAD ENDS SHALL HAVE THE SAME BEARING AREA AS 90° BENDS.

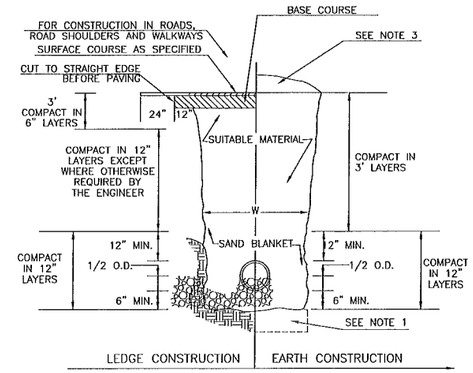


BURIED GATE VALVE DETAIL

2 D-4

OCT. 25, 1994
SCALE: NONE

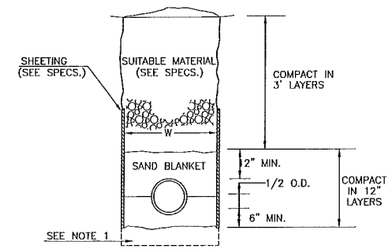
VALVE AND BLOCKING DETAILS



LEDGE / EARTH CONSTRUCTION

5 D-4

OCT. 17, 1995
SCALE: NONE

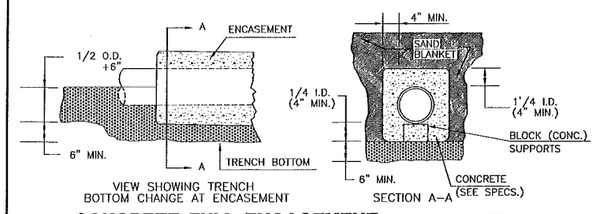


EARTH CONSTRUCTION WITH SHEETING

6 D-4

OCT. 17, 1995
SCALE: NONE

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. SEE ALSO NOTE 2.
2. W=MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
3. FOR CROSS COUNTRY CONSTRUCTION, SEE MOUNDING DETAIL, MISCELLANEOUS DETAILS – WATER (WHERE INDICATED) OR MOUND TO A HEIGHT OF 6" (MINIMUM) ABOVE ORIGINAL GROUND SURFACE.



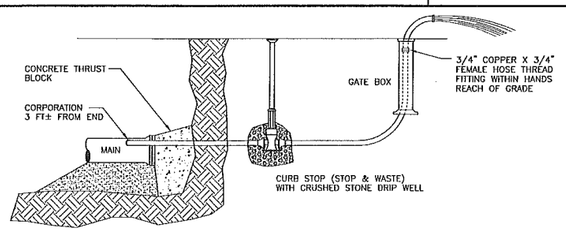
CONCRETE FULL ENCASEMENT

(WHERE INDICATED ON PLANS)
(NOT FOR PVC PIPE)

6 D-4

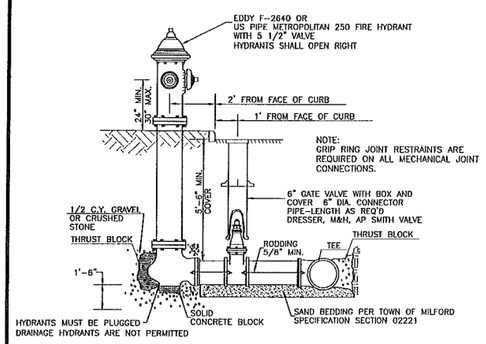
OCT. 17, 1995
SCALE: NONE

STANDARD TRENCH SECTION



PERMANENT BLEEDER

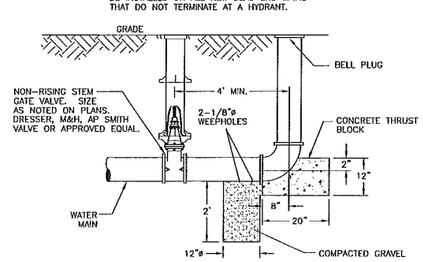
NOTE: A 3/4" BLEEDER OR BLOW-OFF SHALL BE INSTALLED ON ALL NEW DEAD END MAINS THAT DO NOT TERMINATE AT A HYDRANT.



HYDRANT DETAIL

3 D-4

OCT. 17, 1995
SCALE: NONE



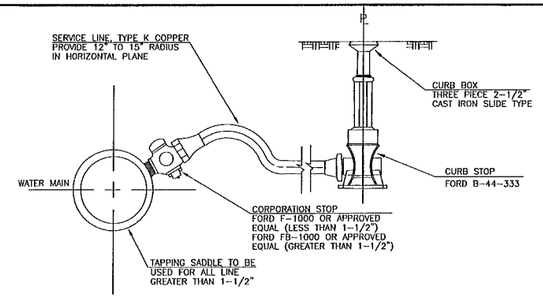
PERMANENT BLOW-OFF

END OF MAIN DETAILS

4 D-4

DEC. 21, 1998
SCALE: NONE

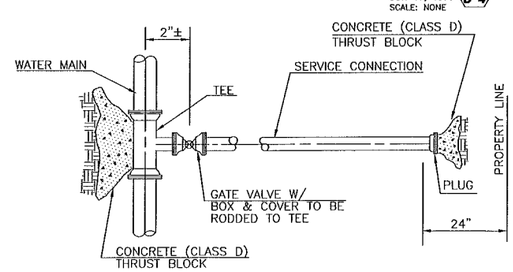
HYDRANT DETAILS



SERVICE CONNECTION 3/4' THRU 2'

7 D-4

OCT. 17, 1995
SCALE: NONE



SERVICE CONNECTION 4' AND OVER

8 D-4

OCT. 25, 1994
SCALE: NONE

NOTES:

1. ALL MATERIALS USED AND INSTALLATION PROCEDURES SHALL MEET THE MILFORD WATER WORKS SPECIFICATIONS.
2. ALL WATER MAINS SHALL BE AWWA C151, MINIMUM THICKNESS CLASS 52, CEMENT LINED, DUCTILE IRON PIPE. ALL WATER MAIN CONSTRUCTION SHALL BE:
   1) PRESSURE TREATED FOR ONE HOUR AT 150 PSI
   2) PASS A LEAKAGE TEST IN ACCORDANCE WITH THE SPECIFICATIONS FOR THE INSTALLATION OF CAST IRON WATER MAINS AWWA C600
   3) DISINFECTED AND FLUSHED IN ACCORDANCE WITH AWWA SPECIFICATIONS FOR DISINFECTING WATER MAINS – C601 AND
   4) SHALL BE INSTALLED WITH A MINIMUM DEPTH OF 5 FEET OF COVER OVER THE PIPE.
3. ALL FITTINGS SHALL BE DUCTILE IRON, 350 PSI RATED AND SHALL CONFORM TO AWWA C110 FOR MECHANICAL JOINTS AND AWWA C111 FOR JOINTS AND GASKET INSTALLATIONS. JOINTS SHALL BE FITTED WITH MEGALUG RETAINER GLANDS.
4. THRUST BLOCK AND RETAINER GLANDS SHALL BE USED AT ALL HYDRANT INSTALLATIONS AND AT ALL DIRECTION CHANGES IN LINES.
5. ALL VALVES FROM 4 TO 12 INCHES SHALL BE METROPOLITAN PATTERN, OPEN RIGHT, MECHANICAL JOINT, AWWA APPROVED GATE VALVES, AS MANUFACTURED BY DRESSER, M&H, OR A.P. SMITH OR APPROVED EQUAL.
6. FOR NEW ROAD INSTALLATIONS, THE ROAD RIGHT OF WAY SHALL BE FILLED TO THE SUBGRADE ELEVATION PRIOR TO THE INSTALLATION OF THE WATER MAIN.

WATER SERVICE DETAILS

MERIDIAN
ENGINEERS
LAND SURVEYORS
SCIENTISTS
LAND PLANNERS
Land Surveyors, LLC
OFFICE: 31 OLD NASHUA ROAD AMHERST, NEW HAMPSHIRE 03110 TEL: 603-673-1441 FAX: 603-673-1584
MAILING: P.O. BOX 118 ADDRESS: MILFORD, NEW HAMPSHIRE 03055 MERIDIANENGINEERS@MERIDIANLANDSERVICES.COM
JOHN A. HARRINGTON No. 7305 STATE OF NEW HAMPSHIRE PROFESSIONAL LAND SURVEYOR

REV.	DATE	DESCRIPTION	DR	CK
I	---	---	---	---
H	---	---	---	---
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A	3/31/11	DRAFT PLAN FOR REVIEW WITH DPW	KMA	JAH

WATER LINE DETAILS

PINE VALLEY - SUBDIVISION
MILFORD, NEW HAMPSHIRE

37 WILTON ROAD MILFORD, LLC

MARCH 07, 2011

SCALE: AS NOTED

D-4
SHEET

FILE: 280V05C.dwg
PROJECT 280.05
SHEET NO. 14 OF 15

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1. ALL POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE RIPRAP OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITION.

3. AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

WINTER CONSTRUCTION

OCT. 12, 2009 SCALE: NONE — 1 / D-5

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED:

1. INSTALLATION OF SILT SOCKS AND SILTATION FENCE WHERE INDICATED SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA.

2. SILT SOCKS AND SILTATION FENCES SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL DISTURBED AREAS HAVE A HEALTHY STAND OF VEGETATIVE COVER. EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EVERY 0.5" OR GREATER RAINFALL.

3. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.

4. PER THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. THE TOTAL AREA OF ACTIVE DISTURBANCE, INCLUDING LOT DISTURBANCES, SHALL NOT EXCEED 5 ACRES.

5. THE DURATION OF TIME THAT AN AREA IS DISTURBED SHALL BE MINIMIZED. ALL NON-ACTIVE DISTURBED AREAS (ie: CLEARED FOR CONSTRUCTION BUT NOT PRESENTLY UNDERGOING CONSTRUCTION) SHALL BE STABILIZED WITHIN 28 DAYS OF DISTURBANCE. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.

6. ALL DITCHES, SWALES AND DETENTION BASINS SHALL BE CONSTRUCTED DURING THE INTIAL PHASE OF CONSTRUCTION AND SHALL BE STABILIZED PRIOR TO DIRECTING STORM WATER FLOW TO THEM.

7. AN AREA MAY BE CONSIDERED STABILIZED WHEN ONE OF THE FOLLOWING HAS OCCURED:
   A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

8. ALL DISTURBED AREAS SHALL BE COVERED WITH A MINIMUM OF 4" OF LOAM. LOAM SHALL BE COVERED WITH THE APPROPRIATE SEED MIXTURE AS INDICATED BELOW.

   THE SEED MIXTURE SHALL BE APPLIED AT A RATE OF 2.5 POUNDS PER 1,000 SQ. FT. AND SHALL BE MIXED AS FOLLOWS:

TYPICAL LAWN SEED		SLOPE SEED	
CREEPING RED FESCUE	0.87 LBS.	CREEPING RED FESCUE	1.01 LBS.
KENTUCKY BLUEGRASS	0.71 LBS.	RYE GRASS	0.75 LBS.
RYE GRASS	0.58 LBS.	RED TOP	0.18 LBS.
RED TOP	0.14 LBS.	ALSIKE CLOVER	0.18 LBS.
		BIRDSFOOT TREFOIL	0.18 LBS.

9. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER (N-P2O5-K2O) OR EQUIVALENT (LOW PHOSPHORUS FERTILIZER IS DEFINED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT AS LESS THAN 2% PHOSPHORUS). APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET).

   FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY AS SPECIFIED BY THE COMPREHENSIVE SHORELAND PROTECTION ACT (SLOW RELEASE FERTILIZERS MUST BE AT LEAST 50% SLOW RELEASE NITROGEN COMPONENT). NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER. THESE LIMITATIONS ARE REQUIREMENTS.

10. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING THE WINTER MONTHS.

11. THE SITE CONTRACTOR SHALL MAINTAIN A VIGOROUS DUST CONTROL PROGRAM THROUGHOUT THE CONSTRUCTION PROCESS. EXPOSED EARTH SHALL BE KEPT MOIST OR MULCHED AT ALL TIMES TO PREVENT DUST FORMATION. SPECIAL ATTENTION SHALL BE PAID TO HIGH TRAFFIC AREAS.

EROSION CONTROL

OCT. 12, 2009 SCALE: NONE — 2 / D-5

1. CUT AND CLEAR TREES; DISPOSE OF DEBRIS.

2. INSTALL SILT SOCKS AND SILTATION CONTROL FENCE IN LOCATIONS SHOWN ON PLANS. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION.

3. PULL STUMPS AND REMOVE FROM SITE OR MULCH TO USE ON-SITE FOR EROSION CONTROL. REMOVE TOPSOIL AND STOCKPILE AWAY FROM ANY WETLAND. STABILIZE STOCKPILE IMMEDIATELY BY SEEDING. PLACE SILT FENCE AROUND THE DOWN SLOPE SIDE OF EARTH STOCKPILES.

4. CONSTRUCT SWALES DURING INITIAL PORTION OF CONSTRUCTION, PRIOR TO ROUGH GRADING THE SITE. STABILIZE IMMEDIATELY WITH LOAM AND SEED PER THE EROSION CONTROL NOTES. DO NOT DIRECT STORM WATER RUNOFF TO SWALES UNTIL A HEALTHY VEGETATIVE COVER IS ESTABLISHED.

5. ROUGH GRADE THE ROAD. ALL CUT AND FILL SLOPES SHALL BE STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE THE EROSION CONTROL NOTES.

6. INSTALL DRAINAGE PIPES AND STRUCTURES; PLACE SEDIMENT FILTERS IN CATCH BASINS UNTIL ALL NON-PAVED DISTURBED AREAS HAVE A HEALTHY VEGETATIVE COVER.

7. INSTALL UNDERGROUND UTILITIES: WATER, SEWER, TELEPHONE, ELECTRICAL.

8. INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS AND AFTER ANY RAINFALL OF HALF AN INCH OR MORE.

9. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERTS, DITCHES, SILTATION FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.

10. FINISH GRADING THE ROAD. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED WITHING 72 HOURS OF ACHIEVING FINISHED GRADE. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

11. PAVE THE ROAD.

12. PERMANENT SEED ALL DISTURBED AREAS ADJACENT TO THE ROAD NOT ASSOCIATED WITH LOT CONSTRUCTION.

13. FINISH GRADE LOT(S) AND APPLY TOP SOIL TO LOT(S).

14. APPLY LOAM. COMPLETE PERMANENT SEEDING AND LANDSCAPING TO ALL DISTURBED AREAS IN LOT(S).

15. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED.

CONSTRUCTION SEQUENCE

OCT. 12, 2009 SCALE: NONE — 3 / D-5

1. TEMPORARY PROTECTION OF DISTURBED AREAS SHALL BE IMPLEMENTED WHERE A TEMPORARY STAND OF GRASS OR SMALL GRAINS WILL NORMALLY PRODUCE SUFFICIENT COVER TO RETARD EROSION AND REDUCE SEDIMENT.

2. USE OF TEMPORARY SEEDING SHALL BE IMPLEMENTED WHEN A DISTURBED AREA OR MATERIAL STOCKPILE WILL BE INACTIVE FOR A PROLONGED PERIOD OF TIME.

3. ALL ESSENTIAL GRADING SUCH AS DIVERSIONS, DAMS, DITCHES, AND DRAINS NEEDED TO PREVENT GULLYING AND REDUCE SILTATION SHALL BE COMPLETED PRIOR TO SEEDING.

4. PREPARE SEEDBED BY REMOVEING ALL STONES, TRASH AND STUMPING DEBRIS THAT WILL INTERFERE WITH SEEDING AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT 3 INCHES TO PREPARE SEEDBED AND MIX FERTILIZER INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATIONS SHOULD BE PERFORMED ACROSS THE SLOPE.

5. A MINIMUM OF 300 POUNDS PER ACRE (7 LBS. PER 1,000 SQ.FT.) OF 10-10-10 FERTILIZER, OR ITS EQUIVALENT, SHALL BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING INCORPORATED INTO THE SOIL.

6. THE SEED SHALL BE SPREAD UNIFORMLY OVER THE AREA. AFTER SEEDING, THE SOIL SHOULD BE FIRMED BY ROLLING OR PACKING. WHERE ROLLING OR PACKING IS NOT FEASIBLE, THE SEED SHALL BE COVERED LIGHTLY BY RAKING, DISKING, OR DRAGGING.

7. HAY OR STRAW MULCH MAY BE NECCESSARY TO PROMOTE SEED GERMINATION IN DRY AND/OR INFERTILE CONDITIONS.

8. PLANT SELECTION AND APPLICATION RATES:

SPECIES	RATE 1 (LBS/AC.)	RATE 2 (LBS/1,000 S.F.)	REMARKS
WINTER RYE	112	2.5	FALL, 8/15 TO 9/15 PLANT 1.0 INCH DEEP
OATS	80	2.0	SPRING PRIOR TO 5/15 PLANT 1.0 INCH DEEP
ANNUAL RYEGRASS	40	1.0	QUICK, SHORT DURATION GOOD APPEARANCE EARLY SPRING & FALL PLANT 0.25 INCH DEEP
PERENNIAL RYEGRASS	30	0.7	LASTS LONGER THAN ANNUAL LATE SPRING & FALL MULCHING WILL ALLOW USE ALL SEASON PLANT 0.5 INCH DEEP

SEEDING FOR TEMPORARY PROTECTION OF DISTURBED AREAS

AUGUST 30, 2006 SCALE: NONE — 4 / D-5

1. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF MILFORD, AS SET FORTH IN THE CURRENT EDITION OF THE "TOWN OF MILFORD DEVELOPMENT REGULATIONS". OTHERWISE, ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION – STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS AND SHALL VERIFY THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT, COMPLETE, ACCURATE, AND CAN BE CONSTRUCTED PRIOR TO AND/OR DURING CONSTRUCTION. MERIDIAN LAND SERVICES, INC., AS DESIGN ENGINEER, SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES, ERRORS, OMISSIONS, OR EXISTING UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION SO THAT REMEDIAL ACTION MAY BE TAKEN BEFORE PROCEEDING WITH THE WORK.

3. THE OWNER AND/OR CONTRACTOR SHALL VERIFY ALL ZONING REQUIREMENTS FOR CONFORMANCE PRIOR TO CONSTRUCTION.

4. THE CONTRACTOR SHALL CONTACT "DIGSAFE" 72 HOURS PRIOR TO THE START OF CONSTRUCTION (1-800-255-4977 IN NH, 1-888-344-7233 IN MA).

5. COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND SPECIAL CONDITIONS OF TOWN/CITY AGENCIES, SUCH AS THE PLANNING BOARD, CONSERVATION COMMISSION, AND OTHERS, IS MANDATORY AND IS THE RESPONSIBILITY OF THE OWNER.

6. ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS TOWN BOARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND MERIDIAN LAND SERVICES, INC. PRIOR TO CONSTRUCTION.

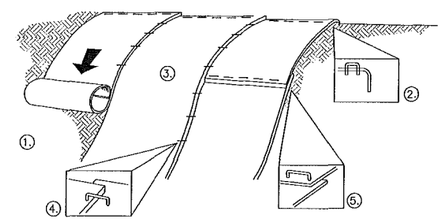
7. ALL DRAINAGE STRUCTURES SHALL CONFORM TO NHDOT STANDARDS.

8. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE TOWN DEPARTMENT PRIOR TO CONSTRUCTION TO ARRANGE FOR INSPECTIONS OF THE CONSTRUCTION.

9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCURATE AS-BUILT INFORMATION OF ALL WORK, ESPECIALLY UNDERGROUND CONSTRUCTION OF UTILITY LINES, SERVICES, CONNECTIONS, ETC. AND APPROPRIATE TIES TO ABOVE GROUND PERMANENT STRUCTURES, FIELD SURVEY COORDINATES, OR SOME OTHER METHOD OF ESTABLISHING THE AS-BUILT CONDITION OF ALL CONSTRUCTION.

CONSTRUCTION NOTES

NOV. 13, 2009 SCALE: NONE — 5 / D-5



STRAW/COCONUT FIBER EROSION CONTROL TURF REINFORCEMENT MAT SUCH AS NORTH AMERICAN GREEN SC150 OR EQUAL.

THE EROSION CONTROL MATERIAL(S) SHALL BE ANCHORED WITH "U" SHAPED 11 GAUGE WIRE STAPLES OR WOODEN STAKES WITH A MINIMUM TOP WIDTH OF 1 IN AND LENGTH OF 6 IN.

CONSTRUCTION REQUIREMENTS, SLOPE APPLICATIONS:

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES OR STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.

3. ROLL THE BLANKETS DOWN THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES OR STAKES IN APPROPRIATE LOCATIONS. REFER TO MANUFACTURERS STAPLE GUIDE FOR CORRECT STAPLE PATTERN.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE.

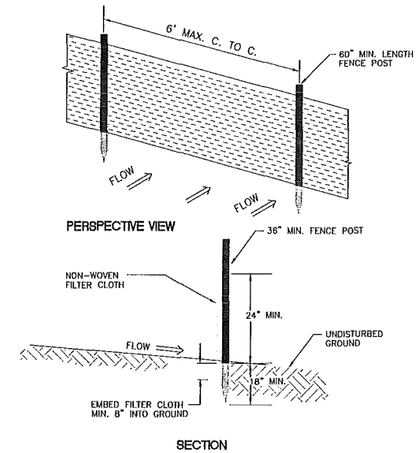
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

THE CONTRACTOR SHALL MAINTAIN THE BLANKET UNTIL ALL WORK ON THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE SHALL CONSIST OF THE REPAIR OF AREAS WHERE DAMAGED BY ANY CAUSE. ALL DAMAGED AREAS SHALL BE REPAIRED TO REESTABLISH THE CONDITIONS AND GRADE OF THE SOIL PRIOR TO APPLICATION OF THE COVERING AND SHALL BE REFERTILIZED, RESEEDED, AND REMULCHED AS DIRECTED.

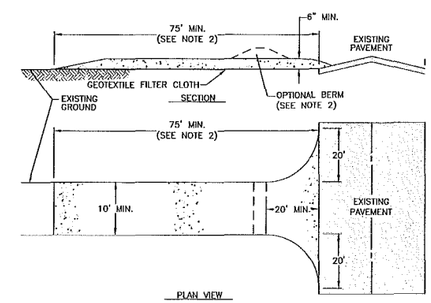
SLOPE STABILIZATION TURF REINFORCEMENT MAT

AUG. 2, 2002 SCALE: NONE — 6 / D-5



SILT FENCE BARRIER

DEC. 27, 1995 SCALE: NONE — 7 / D-5



1. STONE FOR STABILIZED CONSTRUCTION EXIT SHALL BE 3 INCH CRUSHED STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.

2. THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH HIGH BERM IS INSTALLED AT THE EXIT OF THE PROJECT SITE.

3. THE THICKNESS OF THE STONE SHALL NOT BE LESS THAN 6 INCHES.

4. THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE EXISTING POINT OF INGRESS/EGRESS OR 10 FEET, WHICH EVER IS GREATER.

5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.

6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.

7. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO EXIT ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

STABILIZED CONSTRUCTION EXIT

OCT. 12, 2009 SCALE: NONE — 8 / D-5

MERIDIAN
Licensed Professional Services
ENGINEERS
LAND SURVEYORS
SCIENTISTS
LAND PLANNERS
OFFICE: 31 OLD NASHUA ROAD AMHERST, NEW HAMPSHIRE 03110 TEL 603-673-1441 FAX 603-673-1584
MAILING ADDRESS: P.O. BOX 118 MILFORD, NEW HAMPSHIRE 03055 MERIDIAN@MERIDIANLANDSERVICES.COM

REV.	DATE	DESCRIPTION	DR	CK
A	3/21/11	DRAFT PLAN FOR REVIEW WITH DPW	KMA	JAH
B	4/18/11	SUBMISSION TO PLANNING BOARD	KMA	JAH
C	5/27/11	SUBMISSION TO TOWN	KSA	JAH
D	---	---	---	---
E	---	---	---	---
F	---	---	---	---
G	---	---	---	---
H	---	---	---	---
I	---	---	---	---

GENERAL NOTES
DETAILS

MARCH 07, 2011

PINE VALLEY - SUBDIVISION
MILFORD, NEW HAMPSHIRE

37 WILTON ROAD MILFORD, LLC

SCALE: AS NOTED

D-5
SHEET

FILE: 280V05C.dwg
PROJECT 280.05
SHEET NO. 15 OF 15

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