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GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
MAINE LAND USE PLANNING COMMISSION
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WEST FARMINGTON, MAINE
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WALTER E. WHITCOMB
COMMISSIONER

PERMIT

AMENDMENT A TO DEVELOPMENT PERMIT DP 4888

The staff of the Maine Land Use Planning Commission, after reviewing the application and supporting documents submitted by Gary C. Agren for Amendment A to Development Permit DP 4888, finds the following facts:

1. Applicant: Gary C. Agren
PO Box 547
New Portland, ME 04954
2. Date of Completed Application: April 1, 2015
3. Location of Proposal: Freeman Twp., Franklin County
Lot #33.2 on Plan 02, Map FR025
4. Zoning: (D-CI) Commercial Industrial Development Subdistrict
(P-FW) Fish & Wildlife Protection Subdistrict
(P-WL1) Wetland Protection Subdistrict
(P-WL2) Wetland Protection Subdistrict
(M-GN) General Management Subdistrict

Zoning at the Project Site: (D-CI) Commercial Industrial Development Subdistrict
5. Lot Size: 79.5 acres (owned)
6. Development: Existing Active Gravel Pit Area, Extraction Ongoing (6.8 Acres)
Existing Active Gravel Pit Area, Reclamation Started (0.5 Acres)
Existing Non-Active Gravel Pit Area Undergoing Reclamation (5.3 Acres)
Proposed Pit Expansion Area (12.7 Acres)

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Background Information & Current Conditions

7. The applicant's lot was originally developed with an 11.4 acre gravel pit, located approximately 1,550 feet south of Colegrove Road. Gravel extraction activities commenced at the subject lot in the 1960's. The area within the pit where gravel extraction is currently ongoing is 6.8 acres. There are four other areas (Areas A – D) within the pit, totaling 5.3 acres, where gravel extraction has been completed and reclamation has begun. The Commission zoned most of the applicant's lot, including the gravel pit, to a (P-FW) Fish and Wildlife Protection Subdistrict in the 1970's to protect a deer wintering area.
8. The Commission approved Zoning Petition ZP 732 in May of 2011 to rezone a 20 acre portion of the applicant's lot from (P-FW) Fish and Wildlife Protection Subdistrict to (D-CI) Commercial Industrial Development Subdistrict to allow for expansion of the gravel pit. The (D-CI) Commercial Industrial Development Subdistrict encompasses the 6.1 acre active pit area at the time plus an additional 13.9 acres to the north of the active pit area for future expansion of the pit. The 5.3 acre area undergoing reclamation at that time remained zoned (P-FW) Fish & Wildlife Protection Subdistrict.
9. Development Permit DP 4888, issued to the applicant in March of 2012, granted approval to continue mineral extraction activities within the existing active pit and also for expansion of the extraction activities over the additional 13.9 acres of his land within the (D-CI) Commercial Industrial Development Subdistrict. Condition #10 of Development Permit DP 4888 required that the pit be operated and reclaimed in accordance with an approved plan titled "Gravel Pit Management & Reclamation Plan" by Licensed Professional Forester Adam E. Cates, last revised March 27, 2012, hereinafter referred to as "the Plan." Among other items, the Plan specifies methods for reclaiming extracted areas, and acceptable stocking, survival and growth rates for trees planted in the reclaimed areas. The following specific requirements, among others, were established for the operation and reclamation of the gravel pit, directly by permit condition and/or by provisions of the Plan:
 - A. *Size of Active Pit Area (Condition #5 and the Plan):* No more than 7 acres of active pit area is allowed to remain open at any given time. "Active Pit Area" includes extracted areas that are undergoing reclamation but have not yet attained the target tree survival rate (excluding extracted areas A, B and C) stipulated under the Plan.
 - B. *Annual Reporting & Site Visit (Condition #19 and the Plan):* An annual report of the pit operations and reclamation activities is to be submitted to the Commission and MDIFW by October 1 of each calendar year. Details of the annual reporting requirements are specified in the Plan. This condition and the Plan also required that the applicant contact Commission and MDIFW staff by October 1 of each calendar to arrange an annual site visit with Commission and MDIFW staff.
 - C. *Reclamation methods (the Plan):* The Plan specifies two methods for reclaiming extracted areas: transplanting natural clumps of native conifer vegetation for relatively flat areas; and planting containerized nursery stock in sloped areas. The first method involves transplanting the clumps of native vegetation with their root systems in intact organic duff and topsoil layers and placing the clumps directly on the pit surface. The

second method involves placing a layer of topsoil over the gravel pit surface, incorporating the topsoil layer into the gravel, placing a layer of stump grindings mixed with organic duff over the topsoil/gravel layer for erosion control, then planting with acceptable nursery stock.

D. *Acceptable growing stock (the Plan)*: The Plan specifies that containerized nursery stock (preferably red spruce) is to be used for areas to be reclaimed with transplanted seedlings.

10. Gravel extraction in a 0.5 acre area of the pit (Area D) was completed in 2013 and this area was revegetated in June of 2014. The perimeter of Area D was revegetated with natural clumps in accordance with the method described in the Plan. The interior of Area D was revegetated using transplanted native red spruce seedlings, a method not in accordance with the Plan. Since Area D was not entirely re-planted in accordance with the Plan and has not yet attained the target survival rate, it still counts towards the "Active Pit Area." The applicant expanded the active pit area by 1.2 acres in 2014 so that the current area where gravel extraction is ongoing is 6.8 acres, but the total Active Pit Area as defined by permit condition and the Plan is 7.3 acres.

Annual Site Visits

11. Commission staff have visited the project site with the applicant, Mr. Cates and MDIFW staff on annual basis in the fall as specified in the Plan. The last annual site visit was held on October 22, 2014. During that site visit, the size of the active pit area, methods of reclamation, and the timing of the required annual reports and site visits were discussed, as described in more detail under Finding of Fact #12 below.

Proposal

12. The applicant seeks approval to revise the previously approved gravel pit management and reclamation plan, and has submitted a proposed amended plan by Mr. Cates, as revised April 1, 2015. The proposed changes are as follows:
 - A. *Increase the maximum allowed size of the active pit area to 9 acres.* The applicant states that the 7-acre size limit has proven too restrictive to allow for safe piling of materials and safe separation distances between workers, trucks and equipment during processing and loading of materials.
 - B. *Change the dates of the required annual report & site visit:* Under the proposed revised plan the annual report of the pit operations and reclamation activities would be submitted to the Commission and MDIFW by September 1 of each calendar year, and the applicant would contact Commission and MDIFW staff by that date to arrange the annual site visit. The proposed change in the reporting and site visit dates is intended to better accommodate the work schedules of MDIFW staff who typically have very high work loads in October and November.
 - C. *Add a third allowable reclamation method:* The applicant proposes another reclamation method for relatively flat areas of the pit. Under the proposed method the site to be

reclaimed would be prepared by spreading a 6 to 12 inch layer of topsoil over the gravel surface, then incorporating the topsoil layer into the gravel to a depth of 18 inches. Containerized nursery stock, meeting the definition of "Acceptable Growing Stock" in the Plan, would then be planted into the prepared surface.

- D. *Acceptable growing stock:* The applicant proposes to allow natural regeneration of red spruce, balsam fir or white pine seedlings within a reclaimed area to be counted toward acceptable stocking limits specified in the Plan.

Review Comments

13. The MDIFW has reviewed the proposed revised plan and finds that the proposed changes to the gravel pit management and reclamation plan to be acceptable.
14. The facts are otherwise as represented in Development Permit DP Application 4888, Amendment Request A, and supporting documents.

Based upon the above Findings, the staff concludes that if carried out in compliance with the Conditions below, the proposal will meet the Criteria for Approval, section 685-B(4) of the Commission's Statutes, 12 M.R.S.A.

Therefore, the staff approves the application of Gary C. Agren with the following conditions:

1. No more than nine (9) acres shall remain open as the active pit area at any given time. In addition to the area of active operations, "Active Pit Area" includes extracted areas that are undergoing reclamation but have not yet attained the target tree survival rate described under the Plan referenced under Condition #2, except that "Active Pit Area" does not include existing extracted areas A, B and C. Reclamation of mined areas must be undertaken at a sufficient rate to ensure that this maximum area for the active pit area is not exceeded.
2. The permittee shall conduct the permitted extraction activities and reclaim all extracted areas according to his "Gravel Pit Management & Reclamation Plan" by Adam E. Cates, last revised April 1, 2015, hereinafter referred to as "the Plan," and attached as Appendix A. Notwithstanding the foregoing, if provisions of the Plan conflict with the conditions of this permit, the permit conditions shall apply.

Determination of survival and growth rates shall be done by a Licensed Professional Forester using forestry methodology acceptable to both the Commission and MDIFW.

3. The permittee shall contact Commission and MDIFW staff to arrange a site visit, and shall submit an annual report, by September 1 of each calendar year as described in the Plan
4. The permittee shall provide any potential buyers with a copy of this permit including its conditions and Appendix A (the Plan). Any future owners of the pit and expansion area must notify the Commission and MDIFW of their acquisition of the subject property within 30 days of the transfer, and must abide by the conditions of this permit and the provisions of the Plan.

5. All conditions of Development Permit DP 4888 shall remain in effect except for Conditions #5, #10, #19 and #21 of Development Permit DP 4888 which are superseded by Conditions #1, #2, #3 and #4 of this amendment, respectively.

This permit is approved upon the proposal as set forth in the application and supporting documents, except as modified in the above stated conditions, and remains valid only if the permittee complies with all of these conditions. Any variation from the application or the conditions of approval is subject to prior Commission review and approval. Any variation undertaken without Commission approval constitutes a violation of Land Use Planning Commission law. In addition, any person aggrieved by this decision of the staff may, within 30 days, request that the Commission review the decision.

DONE AND DATED AT WEST FARMINGTON, MAINE, THIS 9th DAY OF JUNE, 2015.

By: *Nina Z. Buisola*
for Nicholas D. Livesay, Executive Director

Appendix A

**Gravel Pit Management
&
Reclamation Plan**

Property of:

Gary C. & Beth R. Agren

P.O. Box 547

New Portland, Me. 04954

Parcel Location

Township: Freeman Twp., Maine County: Franklin

Tax Map FR025 Plan 02

Lot 33.2

Plan Prepared By:

Adam E. Cates -State of Maine LPF # 3239

P.O. Box 164 Solon, Maine 04979

(207) 635-3547

Plan Revision Date : April 1, 2015

Introduction

Mr. Agren owns an active gravel pit in Freeman Township. This pit has been in operation for several decades and falls within a zoned deer wintering area as identified by the Maine Land Use Regulation Commission (LURC) and the Maine Inland Fisheries and Wildlife (IF&W). The purpose of this document is to establish and document a gravel pit reclamation and management plan for past, ongoing and future gravel extraction activities. This plan is required by IF&W because this extraction site falls within the boundaries of a zoned deer wintering area.

History & Background Information

This property has been in the Agren family for approximately 60 years. Mr. Agren's father, Conrad Agren purchased the property in the 1950's. He harvested forest products from the property for several years and opened the gravel pit extraction site in 1962. Once the pit was established, it provided winter sand for the Town of New Vineyard as well as gravel for the reconstruction of Rt. 27. Mr. Agren continued to supply gravel to many private and municipal agencies from this site until his death in 1981.

After his father's death, Gary purchased the pit and associated woodland from his mother. He continued to operate and expand the pit since that time supplying numerous private, municipal and construction contractors with gravel and sand. This pit continues to serve a number of different contractors and municipalities today. Some of the entities that continue to use material from the pit include the Maine DOT, Towns of New Vineyard and New Portland, Franklin County, Taylor Made Homes, Haley Construction and numerous local contractors. It should be evident that the materials extracted from this site directly provide many area earthwork businesses with needed raw materials. These raw materials are used on projects that directly provide dozens of jobs in the surrounding area.

The associated deer wintering area was established in the early 1970's, shortly after the development of the Land Use Regulation Commission. This DWA can be identified on LURC zoning maps as P-FW #060540. Mr. Agren, his father and brother were at the pit site, clearing future extraction areas, when several members from LURC visited the site to establish the deer wintering area. The Agren's spoke with the LURC staff at that time about the pit and plans to continue its development.

At the Land Use Regulation Commission held on May 4th, 2011, the commission approved a petition to temporarily rezone 20 acres of the P-FW to D-CI (Commercial Industrial Development Subdistrict) for the purposes of gravel extraction. The conditions of the rezoning approval stipulate that the gravel extraction areas will be reclaimed in accordance with the permit conditions and revert back to P-FW. The purpose of this document is to describe the pit management and reclamation procedure and to guide the mineral extraction and reclamation within the temporarily rezoned area.

Current Condition

This gravel extraction site is located in Freeman Twp. adjacent to the New Portland town line. See attached Exhibit A for an overview as the site exists in September of 2011. The entire footprint of the gravel pit including all past activity, reclaimed areas and active area totals 11.8 acres in Freeman and an additional 0.4 acre area in New Portland. All maps and acreage have been developed using GPS and GIS ArcMap technology as well as current ortho-rectified satellite imagery.

There are two areas referenced in the 2008 temporary agreement between IF&W, LURC and Mr. Agren. These areas were cleared of vegetation in 2008 and gravel extraction was completed in 2010. In August of 2010 these areas plus another 0.8 acres were sloped 2:1, covered with topsoil to a depth of 6" and stabilized with mulch and a wildlife seed developed by IF&W. This area includes all extraction areas south and southeast of the main pit road to the wooded edge and encompasses 2.9 acres, collectively referred to as Area A. In May of 2011 the entire area was planted with two year old containerized red spruce seedlings on a 6'x 6' spacing, or 1,210 trees per acre.

Areas B and C are no longer being mined for gravel and are in various stages of reclamation.

Mr. Agren reclaimed Area B (1.4 acres) in 2009. This area has been sloped to 2:1 or less, covered with topsoil and planted with native species such as fir, spruce and other herbaceous cover. During this closeout, clumps of sod and intact vegetation were placed randomly through the area to reduce soil erosion and jump-start the vegetation growth. These clumps were obtained from scalping nearby new pit areas as they were opened for extraction. This technique adds vegetation species diversity and is widely used by construction contractors and encouraged by the Maine DOT, DEP, and state soil scientist David Rocque as a soil stabilization technique. Areas that were not covered with natural vegetative clumps, were interplanted on an 8'x8' spacing. Seedlings for this interplanting were native fir/spruce gathered on site and uprooted by hand.

Area B was evaluated during the 2010 growing season to determine the effectiveness of the rehabilitation effort. The natural clumps were doing very well. Seedlings within these clumps appeared healthy and vigorous. Many of the transplanted native seedlings were not doing well with an estimated 50% survival rate. Because of this evaluation, this area was interplanted in the spring of 2011 with red spruce container stock. The planting was done around natural seedlings to fill the areas with poor stocking. Approximately 550 seedlings were planted in this 1.4 acre area to fill void areas.

Area C (1.0 acre) has not been used for many years. The area has naturally regenerated with a herbaceous cover of alders, grey birch and scattered softwood species, primarily fir in the understory. An effort has been made to cut the hardwood overstory and release the fir.

Area D (0.5 acre): Gravel extraction in this area is completed, and it was planted to trees in June, 2014. The perimeter of this area was planted with native clumps as described below, and the interior was replanted with native red spruce seedlings rather than nursery stock.

Long-Term Plans

There are plans to continue gravel extraction to the north in the future. Because gravel sales are very dependent on many economic factors, it is very difficult to predict extraction activities and volume much beyond the upcoming year. As demand warrants, gravel will continue to be removed to the north closing out acres to the south as work progresses, following the provisions for closeout outlined in this plan. Because of the depth of gravel and the very high pit face, acres impacted will be relatively small to extract similar volumes of gravel. Each year approximately ½ to 1 acre of new pit will be opened with restoration occurring on an equal number of acres. As new pit areas are opened, areas in the southern portion of the pit will be reclaimed following the recommendations outlined below.

Operation Size

It is understood that a commercial gravel operation such as this requires a substantial amount of space to safely and efficiently process and stockpile a variety of gravel products. The gravel screening/crushing plant consumes nearly an acre of ground and often, up to five different products are stored in piles each with a volume of several thousand yards. Safe areas to load trucks must also be included in the pit footprint. By mutual agreement between Mr. Agren, IF&W and LURC, the working footprint of the pit will be limited to nine (9) acres in size. As new areas are opened, excavated areas will be closed and reclaimed to the standards below to ensure that the active pit does not exceed the nine (9) acre limitation. At the time of this writing, the active pit size is 6.8 acres. (See attached map).

Reclamation Plan

As part of the temporary rezoning approval from LURC and gravel extraction permit conditions, the rehabilitation and closeout work must continue in extracted areas. Much of the information for these recommendations was gathered from site visits and input from Dave Rocque, State Soil Scientist, LURC staff as well as IF&W staff.

Areas Currently Under Reclamation

There are four areas currently in various stages of reclamation. Areas A, B, C and D (see attached map). The following actions shall be taken in these areas. The access road bisecting the gravel pit will remain open to facilitate access for forest management activities to the south.

Area A (2.9 acres) - Planted May 2011 - 1,210 red spruce trees per acre (6' x 6' spacing).

Under the original pit management plan, Area A was required only to meet the 75% survival target rate, and no further monitoring or replanting would be required if that survival rate was achieved. The 75% survival rate was exceeded in this area when monitored in 2012 and 2014. Since the target survival rate has been achieved no more planting or monitoring is required in this area.

Area B (1.4 acres) - "Natural clumps" placed 2009, fill planted May 2011.

The target survival rate of 75% was achieved in Area B as measured in September of 2012. This area will be due for a growth rate assessment in 2016 in accordance with the "Measuring and Assessing Growth Rates for Reclaimed Areas" section of this plan.

Area C (1.0 acres) - Stocked with hardwood, birch and alder stems and fir understory.

This area will be assessed annually to monitor hardwood competition. If hardwood competition becomes an issue the competing hardwood stems will be severed manually and/or controlled with a ground herbicide application.

Area D (0.5 acres) - Planted with native red spruce seedlings in June 2014

This area will be replanted with containerized red spruce nursery stock in the spring of 2015 in accordance with the acceptable growing stock and stocking, survival and growth rates specifications described below.

Reclamation of Areas Opened Up in the Future

There are three methods that shall be used to prepare exposed areas for planting. The intent of these site preparation methods is to establish a suitable substrate, simulating the natural duff and soil layers found in undisturbed forest areas. It is in these layers that seedlings will establish healthy root systems and develop into viable forest cover. The first method utilizes transplanted clumps of natural vegetation and is suitable for flatter pit areas with little concern for erosion. The second method, also for flatter areas, includes site preparation with topsoil and planting containerized nursery stock. The third, more expensive method includes site preparation with topsoil and grindings, and planting containerized nursery stock and is better suited for the sloped pit areas.

These two methods are described in detail below. These descriptions were taken from a letter prepared by David Rocque, Maine State Soil Scientist, dated April 28th, 2011. Mr. Rocque visited the Agren Pit and was asked for his input in developing a suitable method for reclamation and seedling establishment. The following are his recommendations to be implemented for reclaiming future areas to be opened up:

Reclamation of Relatively Flat Areas - "Natural Clumps"

The best option is to remove clumps of native conifer vegetation, including the root systems in the intact organic duff and topsoil layers (O, A, E and B horizons) and then place the clumps on the exposed gravel pit surface. This truly is the natural substrate and most likely contains viable seed from spruce and fir. This technique is suitable for the more level surfaces where erosion or sliding down the banking is least likely. It should be done such that the duff and topsoil "mats" are butted up against each other to form a continuous layer similar to a forest setting. It will also probably require cutting or killing more aggressive hardwood species.

Clumps of conifer vegetation are to be taken only from areas within the permitted footprint of the gravel pit operation that are being opened up for gravel extraction, or obtained from other locations outside of any (P-FW) Fish and Wildlife Protection Subdistrict and in accordance with all applicable local, state and Federal requirements.

Reclamation of Flat Areas - Site Preparation for Planting of Containerized Nursery Stock when Natural Clumps are not available

When an area is ready to be revegetated I would recommend placing a 6" – 12" thick layer of the topsoil onto the gravel surface and then the topsoil should be incorporated into the gravel to a depth of 18" +/- . incorporating the topsoil into the gravel surface results in providing for a much greater rooting depth than just placing the standard 4" of topsoil on top of the gravel. Roots will only grow down to the gravel layer and then stop because the gravel has no water or food.

Reclamation of Sloped Areas - Site Preparation for Planting of Containerized Nursery Stock

"As an alternative to the above approach, I would suggest removing the organic duff layer from areas where the gravel pit is to be expanded and stockpiling it in one Location. Then the topsoil layer (A, E and B horizons) where some amount of silt and clay are present should be removed and placed in another pile. Finally, the wood removed from the site, including the stems, limbs and roots, should be ground up by a stump grinder and stored in another pile. Chipping the wood is not an equivalent method to grinding. Chips can float and would not create as suitable a substrate as the stringy ground wood. When an area is ready to be vegetated I would recommend placing a 6" – 12" thick layer of the topsoil onto the gravel surface and then the topsoil should be incorporated into the gravel to a depth of 18" +/- . incorporating the topsoil into the gravel surface results in providing for a much greater rooting depth than just placing the standard 4" of topsoil on top of the gravel. Roots will only grow down to the gravel layer and then stop because the gravel has no water or food it also prevents the topsoil layer from becoming heavy from rains and vegetation and then slipping down the face of the gravel pit. I would then take the ground wood and mix it with the organic duff to create at least a 4" thick layer on top of the gravel/topsoil mixed layer. This will provide erosion control that is immediately effective, a suitable substrate for spruce/fir seedling to germinate in as well as a source of seeds and will keep the underlying soil moist for planted seedlings. This method should be used on sloping faces in the gravel pit, particularly if the slope is a long (or tall) one."

Minimum Stocking Rates and Survival Rates for Future Reclaimed Areas

In all areas planting, or fill planting around existing natural seedlings, shall be done to a desirable stocking level of 1210 trees per acre (6' x 6' spacing) with a target survivability rate of at least 75%. Planting shall be done by June 15th each year and survival will be evaluated one year later after one growing season. If the area falls below 75% of the targeted stocking, fill planting will be done immediately to the stocking level of 1210 trees per acre (6' x 6' spacing) and survival assessed again after the second growing season from the initial planting; or the landowner may consider the planting a failure and start the reclamation process over. If the area still falls below 75% stocking after the second growing season from the initial planting the area will be considered a failure and the reclamation process will restart with additional site preparation. Survival rates will be assessed by a Licensed Professional Forester using accepted forestry methodology. Areas shall be considered not part of the active pit footprint, once they have survived at least one full growing season with a stocking of acceptable growing stock in excess of 908 stems per acre.

Measuring & Assessing Growth Rates for Future Reclaimed Areas and Area B

Successful reclamation needs to be measured by not only acceptable stocking levels but adequate growth. This growth measurement will ensure that planted and/or natural stock does not stagnate. Seedlings, both natural and planted, take several years from planting to fully establish and begin normal growth for existing site conditions. Usually this process of establishment takes at least three to five years. For the purposes of this plan all areas will be evaluated after five growing seasons to determine adequate growth. Growth rates will be assessed by a Licensed Professional Forester using accepted forestry methodology. This evaluation will be done between August 15th and September 15th after the fifth growing season.

Adequate growth is defined as:

Growth rates at least 66% of the average height growth of the same seedling class and species in the adjacent, undisturbed surrounding forest. Seedling height growth will be used as the measure to determine average growth.

If objectives for planting survival and stocking levels are achieved, but growth rates are not, then this should trigger a change in methodology for future site preparation work, or vegetation management to address competition.

Once an area has successfully met the stocking, survival and five year growth requirements outlined above, it then reverts back to P-FW. At this point the landowner has done everything possible and within their control to ensure a fully stocked growing coniferous stand. Future monitoring and assessment of this area becomes the responsibility of IF&W much like the thousands of acres of P-FW existing throughout the state.

Acceptable Growing Stock (AGS)

Acceptable Growing Stock for reclaiming Area A: Acceptable Growing Stock for Area A shall be as specified under the reclamation method for Area A above.

Acceptable Growing Stock when reclaiming future areas with planted stock (initial plantings or fill planting): Seedlings shall be two-year old containerized seedling stock from a reputable nursery. Containerized two-year old red spruce is preferred if available. Two year-old containerized balsam fir is acceptable. If neither red spruce nor balsam fir are available, or if survival and stocking requirements cannot be met, then containerized two-year old white spruce may be used.

Containerized stock generally has a well-developed root system and stands a much better chance of survival than bare root. It is also imperative that during the planting process, all seedlings independent of their source, must be planted in an adequate hole to accommodate the root systems and firmly compacted.

Acceptable Growing Stock when reclaiming future areas with transplanted "Natural Clumps": Transplanted natural clumps shall have an adequate stocking of natural conifer regeneration (except larch or red pine). White pine is acceptable as long as it is a minor component.

In determining adequate stocking levels of reclaimed areas, red spruce, balsam fir or white pine seedlings that develop through normal seed dispersal or germinates naturally from dormant seed in the topsoil, shall be counted toward acceptable stocking limits.

Other Provisions

Annual Reporting and Site Visit

By September 1st each fall, the Landowner will contact LURC, IF&W and a licensed forester to visit the site and review the reclamation efforts. Prior to this annual meeting, LURC and IF&W will be provided a summary of the acres and pit closeout activities. This information will be provided in spreadsheet format and serve as a method to track and record, by year and area, the inspection schedule, areas cleared, site preparation, planting information, inspection for stocking and survival, inspection for five year adequate growth, areas successfully reclaimed and areas reverted back to P-FW. Information regarding extraction plans for the upcoming year and an updated pit overview map shall also be provided. Extraction and reclamation activities that occur after September will be reported on the following year's annual report.

Ground Water Monitoring

There are currently two test wells located in the pit area. These wells will be tested once every month from April to November. Depth to the water from ground level will be recorded and made

available upon request. The pit floor will remain at least 5' above the seasonal high water level during spring and fall as recorded in the test well. As the pit face and operation progresses, new wells will be installed. Results from well testing will be included in the annual report to LURC and IF&W.

Equipment Fueling and Spill Preparedness

A small berm and fueling area shall be constructed with impermeable material, such as clay, found on site. Equipment will be fueled in this bermed area as a precaution in case of fuel spill. Also as an added precaution a fluid spill kit shall be kept on site including the DEP spill response phone number (1-800-482-0777). In the event of a fuel spill, DEP shall be immediately notified.

Wetland Protection

There is a small mapped P-WL1 wetland in the northwest corner of the proposed pit expansion area. This area will be protected by an undisturbed naturally vegetated buffer of at least 100'. In all cases the pit extraction areas will slope away from the wetland area to prevent direct water discharge from the pit into the wetland area.

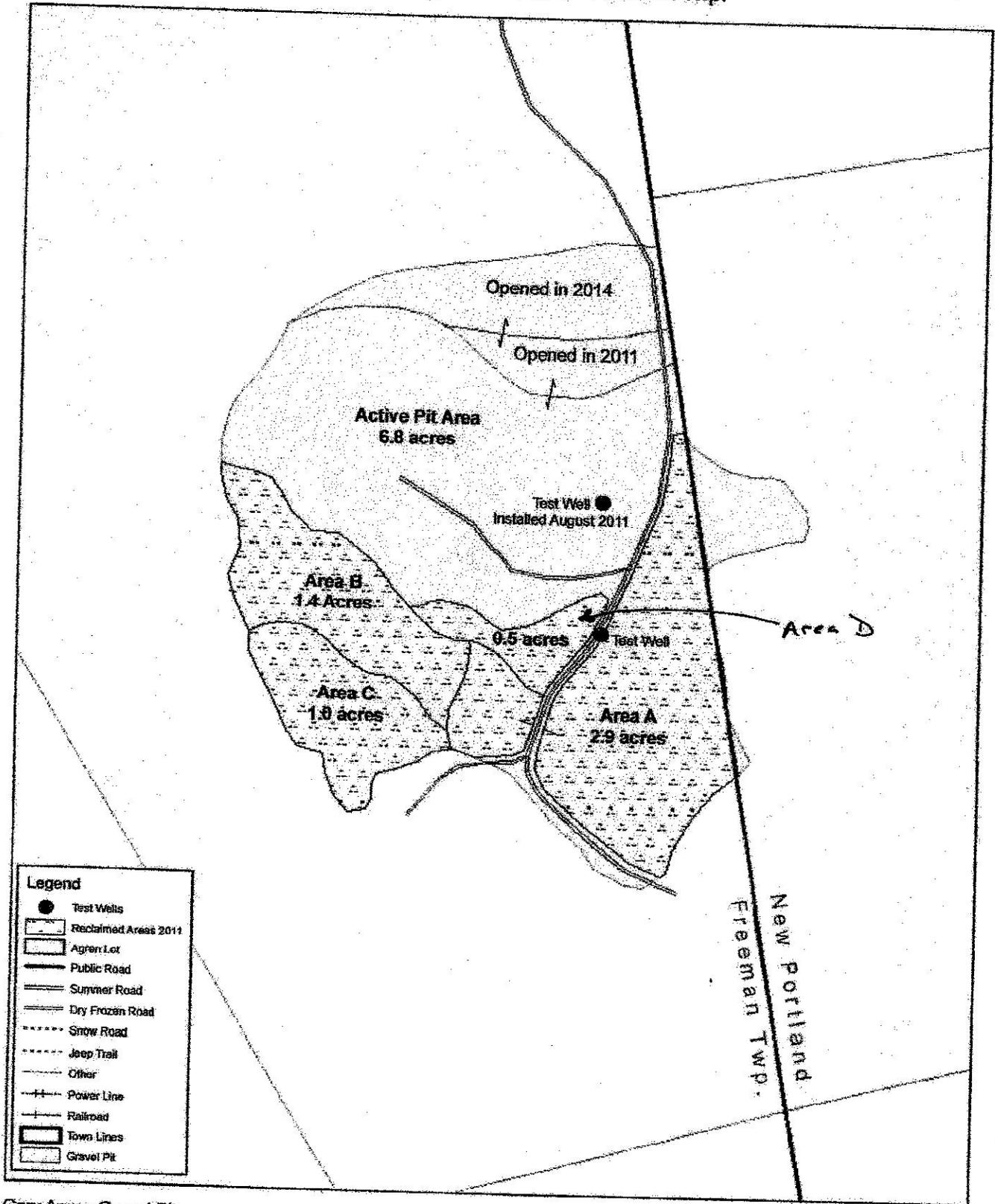
Property Lines and Adjacent Landowners

LURC regulations require adjacent landowner permission to extract gravel within 250' of a property line. The eastern portion of Mr. Agren's pit area borders property owned by Mary Utter, of Newton, New Jersey. Mrs. Utter was contacted and willingly signed a letter giving Mr. Agren, his assigns and heirs, permission to mine gravel to the property line.

Conclusion

This gravel pit has been an important component of income to the Agren family for many decades. It has also been a great gravel resource for area contractors, municipalities, and private individuals. Mr. Agren has every intention of continued utilization of his gravel resource for the remainder of his ownership. He also intends to comply with the rehabilitation requirements set forth by LURC, IF&W, as well as the standards outlined in this document.

2014 - Agren Gravel Pit - Freeman Twp.



Gary Agren Gravel Pit
Freeman Twp., Franklin County

Scale 1" = 200 feet