

APPENDIX C: NATURAL RESOURCES

This section describes the characteristics of Saco's physical landscape. A thorough understanding of Saco's environment, the relationships between its contributing elements, and the constraints and opportunities for development each presents is essential for making wise and informed land use decisions. In some cases, constraints can be overcome by careful design or the use of technology. For example, development in areas where soils are not suitable for septic systems may be instead served by public sewers. Informed by knowledge of Saco's natural resources and the issues associated with them, the community can make wise decisions about when technology should be employed, when natural limitations should be respected, and when the preservation of natural systems best serves the needs of the community.

A. GEOLOGY

The effects of glaciation are apparent in Saco. Fourteen thousand years ago, a continental ice sheet covered the region. The immense weight of the ice sheet depressed the land into the earth's mantle. As the ice sheet melted, the sea level rose. Depressed lowland coastal regions were covered with water. Glaciomarine sediments were deposited over the submerged landscape. As the glacier retreated, vast amounts of sand and gravel were left behind and redeposited across the plain by glacial meltwater. In the upland areas of Saco, pockets of glacial till and end moraine ridges remain where the glacier deposited heterogeneous sand, silt, clay, and stones.

B. LANDFORMS AND WATERSHEDS

Changes in topography are measured in elevation. Saco's landscape rises gently from sea level at Camp Ellis and along the coast to a height of approximately 60 feet in downtown Saco. West of the turnpike, the land rises from the river elevation of 50 feet to 100 feet. North toward the Saco/Scarborough municipal border, the land surface undulates between the elevations of 100 and 200 feet, with Berry Hill as the highest spot at 220 feet. Saco has no strongly pronounced ridge lines but rather hummocks and hills. The steepest slopes occur in drainages descending through the landscape rather than in hillsides rising prominently above it.

Slope affects land's suitability for development. As slope¹ increases, so does the cost of development, and the severity of potential environmental impacts. The Maine State Plumbing Code does not allow the installation of septic systems on slopes greater than 20%. Slopes in the 3% to 8% range are generally considered to have the fewest restrictions for development. Development on slopes of less than 3% may experience drainage problems, especially in areas with high water tables or clay soils.

In most areas of Saco, slope is not a limiting factor for development. Much of Saco has slopes in the 0% to 8% range. There are a few areas in Saco where slopes exceed 8%. In most of these areas, steep slopes are associated with stream and river drainages that present other constraints to development as well.

The topography of the land defines Saco's watersheds (see Figure C.1). A watershed is an area of land within which precipitation drains to a single water body. High points of land define watershed boundaries. Saco has ten watersheds.

In this chapter, major watersheds are used to delineate the location of natural resources.

¹Slope is expressed as a percentage of rise over run. A 10% slope means that there is a 10-foot elevation difference over a horizontal distance of 100 feet.

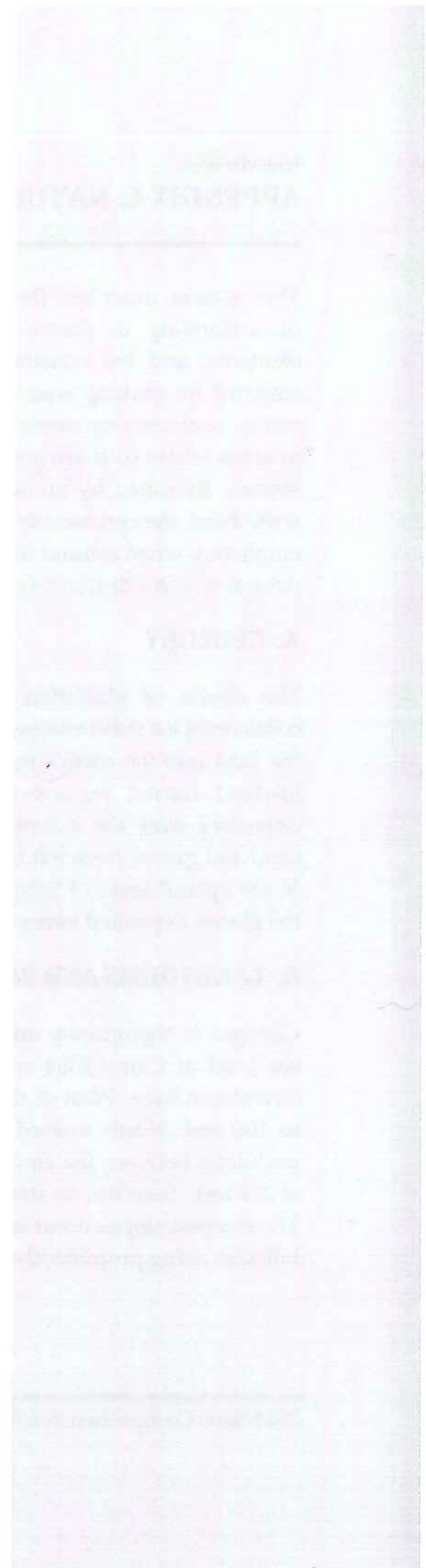
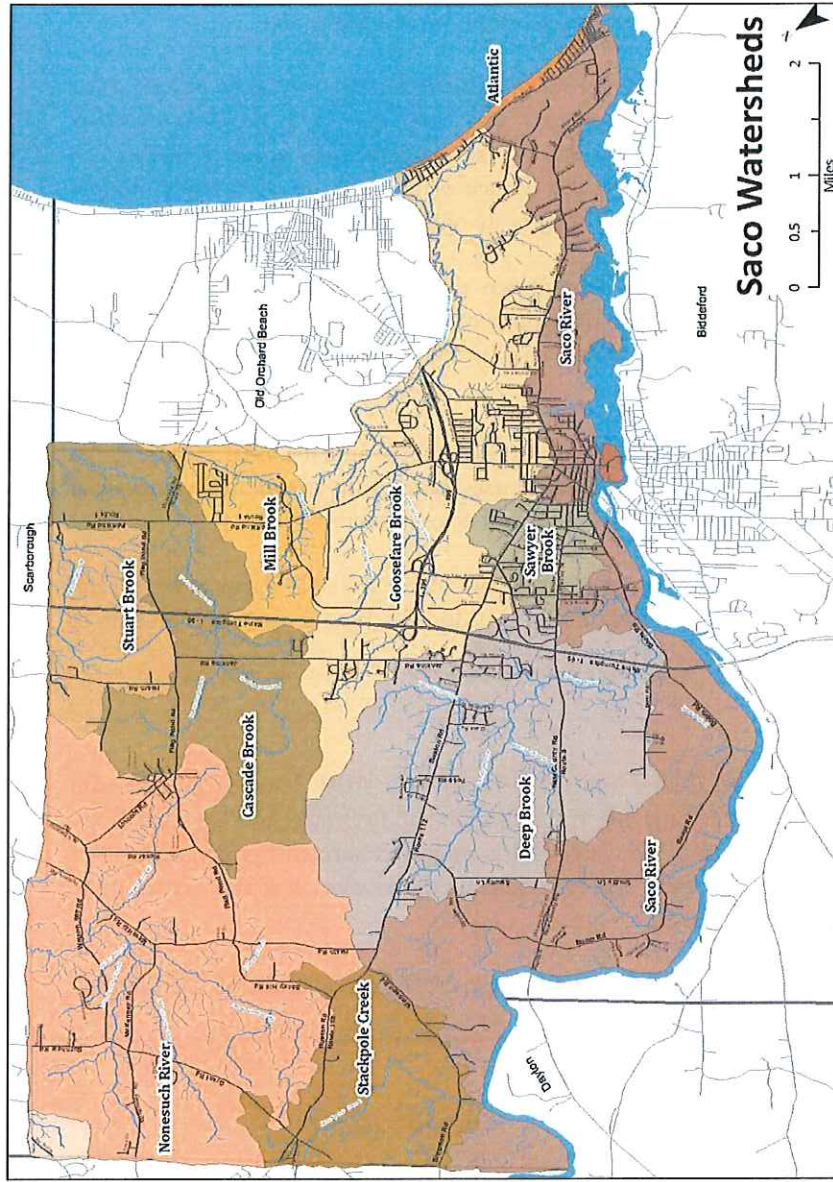


Figure C.1: MAP OF SACO WATERSHEDS



1. Watersheds

Saco River Watershed

The Saco River flows out of the White Mountains of New Hampshire, draining a watershed of approximately 1,700 square miles on its journey to the Atlantic Ocean. The watershed is 75 miles long and extends 44 miles at its widest point.

Cole Brook, Stackpole Creek, and several short, unnamed tributaries drain into the Saco River between the Saco/Buxton municipal line and the Cole Brook/Saco River confluence. Most of the land within the Saco River Watershed lies south of the Buxton Road and west of Smutty Lane. Along this stretch of the river, most of the drainages are short, serving the hummocky topography north of the river.

Land upstream of Cataract Dam in Downtown was historically used primarily for agriculture and forestry. Residential development has increasingly occurred in the upper reaches of the watershed in recent years, primarily off Boom Road and Smutty Lane.

Below Cataract Dam, the Saco River becomes an estuary, and the tidal effects of the Atlantic extend to the base of the dam. Land use varies, with substantial commercial and residential development along the river in both Saco and Biddeford.

All land within 500 feet of the riverbank on either side of the Saco River is within the Saco River Corridor. Development within the corridor is subject to the requirements of the Saco River Corridor Commission.

Deep Brook Watershed

The Deep Brook Watershed drains into the Saco River a short distance downstream from the Maine Turnpike crossing. Big Ledge Brook, Sandy Brook, and Dennett Brook are all tributary to Deep Brook. The watershed is roughly bounded by Buxton Road to the north, the Turnpike to the east, and Smutty Lane to the west. The southern edge of the Heath flows into the watershed.

Much of the land within this watershed is forested or used for agriculture. Residential

use has been increasing along road frontages (see the Land Use Chapter of this inventory). Several sand and gravel quarries operate in this watershed along Route 5 and Berry Road.

Sawyer Brook Watershed

Sawyer Brook begins in the Tall Oaks/Shadagee Woods area and flows to the Saco River upstream of Saco Island. Land use in the Sawyer Brook Watershed is urban in character, comprised primarily of residential uses with a few commercial uses. In 2001, the City completed a \$2.6 million dollar flood mitigation project on Sawyer Brook in cooperation with FEMA. The combined sewer systems in this area were separated as part of the City's Combined Sewer Overflow (CSO) Abatement plan.

Goosefare Brook Watershed

The Goosefare Brook watershed is located in both the City of Saco and the Town of Old Orchard Beach. The lower reach of the Goosefare forms the boundary between the two communities. The majority of the watershed, approximately 4,000 acres, is in Saco; approximately 1,000 acres are in Old Orchard Beach. The headwaters, approximately 2,100 acres, are entirely in Saco. The brook drains directly into Saco Bay roughly midway between Old Orchard Beach and Ferry Beach State Park, two major beaches on the longest stretch of recreational sand beach in the State of Maine. Tributary to Goosefare Brook are Innis, Bear, and Branch Brooks, and several small, unnamed streams flowing northeast from Saco's urban core.

The Goosefare Brook watershed is a valuable ecological and environmentally sensitive resource threatened by increasing industrial, commercial and residential development and declining water quality. The watershed has a very diverse land use pattern, ranging from heavy industry to undeveloped land. Goosefare Brook flows under a turnpike interchange and two turnpike connector interchanges, and through the highly developed commercial and industrial Route 1 corridor.

Goosefare Brook discharges through a salt marsh estuary into Saco Bay in one of the state's prime seaside recreational areas. The Maine Department of Inland Fisheries and Wildlife has rated the Goosefare Estuary as a Coastal Wildlife Concentration Area of state significance (see Aquatic Habitat).

The Maine Department of Environmental Protection has included Goosefare Brook on its statewide list of Urban Impaired Streams. Goosefare Brook does not meet its statutory Class B classification for aquatic life use, based on non-attainment for macroinvertebrates, and toxic metals (cadmium, chromium, copper, iron, nickel, lead and zinc).

A Goosefare Brook Watershed-Based Management Plan was completed in May 2016, prepared for the City of Saco and the Town of Old Orchard Beach by FB Environmental Associates. The Plan includes a 15 year restoration plan, which will be overseen by a Goosefare Brook Restoration Committee comprised of members of both communities.

Formatted: Font: Palatino Linotype, 12 pt

Formatted: Left

In Saco, the Goosefare Brook watershed represents approximately 16% of the City's total land area. It is located in the rapidly developing corridor between Portland and Saco. A majority of the City's planned industrial, commercial and residential development is in this area.

Mill Brook Watershed

Mill Brook is the smallest watershed in Saco. Its headwaters lie just west of Spring Hill Road, between the Turnpike and Route One. The ~~two~~ dominant land uses in the watershed are commercial development along Route One, Mill Brook Road and Spring Hill Road, and a mobile home park located a short distance south of Cascade Road.

Formatted: Strikethrough

Cascade Brook Watershed

The Cascade Brook watershed is roughly bounded by Boothby Park and Lincoln Road to the west, and the Blue Haven Mobile Home Park just south of Cascade Road to the south. Harmon Brook flows from Boothby Park and converges with Foxwell Brook flowing from the Saco Heath just west of Jenkins Road to form Cascade Brook. Stuart Brook, which drains much of the land along the Saco/Scarborough line, flows into Cascade Brook a short distance upstream of Cascade Brook's confluence with the Scarborough Marsh.

Land use in the Cascade Brook watershed varies. Forestry and agriculture dominate west of Jenkins Road, while residential development (most not served by public sewer) predominates along Jenkins, Flag Pond, and Hearn Roads. The Turnpike crosses the watershed, as does Route One. A considerable amount of commercial development is located along Route One (see the Land Use Chapter). In 2007, the Park North and Cascades subdivisions were approved by the City. This major development project included the extension of public sewer nearly to the Scarborough town line.

Nonesuch River Watershed

The Nonesuch River watershed encompasses the northwest portion of Saco. Grant, Boynton, Ricker, Skilly, and Nonesuch Brooks are tributary to the Nonesuch River. The headwaters of the Nonesuch River start a short distance northwest of the junction ~~off~~

Formatted: Indent: Left: 0.19"

Buxton and Rocky Hill Roads.

Formatted: Font: 12 pt

Formatted: Indent: Left: 0.19"

Historically, land in the Nonesuch River watershed has been used for forestry and agriculture. Over the last two decades, residential development has increased, and several large subdivisions were built in the area. There are one active gravel quarry and two former quarry sites in the watershed, one of which was reclaimed and converted into the nine lot Morrill Estates subdivision in 2015.

Other Watersheds

The Stroudwater River watershed clips the north-northwest corner of Saco around Tapley Road and extends south from the center of that road's length into the City for nearly one half mile. There is no development in this watershed.

The Stackpole Creek watershed is tributary to the Saco River. It occupies the westernmost corner of the City in the space between the Nonesuch River watershed and the Saco River watershed. It is loosely bounded by Buxton Road to the northeast, though it deviates northerly for 0.6 miles along Grant Road and 0.45 miles along Rocky Hill Road. To the south, the watershed is bounded by Simpson Road in the vicinity of Fire Lane 4. ~~As a result of the 2009 update to Saco's zoning ordinance (Section 7.1 Natural Resources Districts/Shoreland Performance Standards), a Shoreland Overlay Zone and an expanded Resource Protection Zone provide greater safeguards to portions of Stackpole Creek.~~

Formatted: Strikethrough

The Stuart Brook Watershed is roughly bounded to the southeast by Route 1, to the southwest by Flag Pond Road, and to the west/northwest by Hearn and Fenderson Roads. It extends into Scarborough and is nearly bisected by I-95. Stuart Brook was rezoned as a resource protection zone in 2001. ~~The possible expansion of the Country Village Mobile Home Park could mean significant changes to this small watershed. Public sewer will need to be extended to the project if it occurs.~~

Formatted: Strikethrough

C. SOIL ASSOCIATIONS

Saco's landscape is comprised of various soil associations, each with a distinct pattern of soil types, topography, and drainage. These major soil associations are a direct result of the area's geologic history.

Soils influence development potential. Each soil association has ~~of~~ a series of characteristics that are ~~more~~ or less suitable for different land uses. These characteristics include texture; mix of clay, silt and sand; depth to bedrock; height of the water table; percolation rate of water through the soil (drainage); and load bearing capacity. In general, moderately-well drained soils are well suited to development, while poorly drained soils are highly susceptible to erosion and flooding.

Formatted: Strikethrough

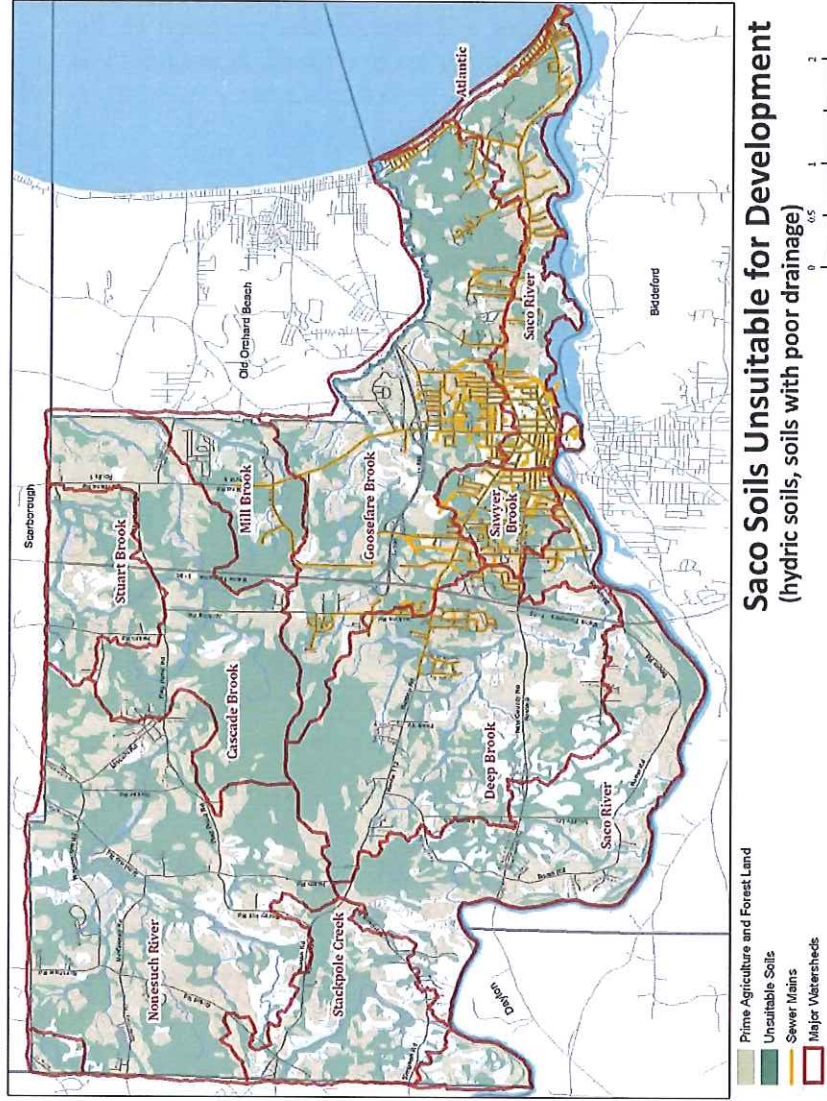
The following section considers the limitations and opportunities presented by the different soil types in Saco in relation to subsurface waste disposal, agriculture, and forestry.

1. Subsurface Waste Disposal Suitability

In areas of Saco not served by public sewer, subsurface sewage disposal or septic systems are the most common means of waste disposal. Septic systems consist of a septic tank and leach field. The leach field distributes effluent from the septic tank into the soil, where it is filtered as it percolates through the soil. The Maine State Plumbing Code does not allow new septic systems on slopes greater than 20%. The code requires a minimum of 12 inches (or more with some soil types) between the bottom of the leach field bed and the seasonal high water table, bedrock, or other restrictive layer.

The Soil Conservation Service (SCS), a branch of the United States Department of Agriculture, rates soils in York County for various land uses in two reports, "Soil Survey Data for Growth Management" and "Soil Potential Ratings for Low Density Development." Soils rated as unsuitable for subsurface waste disposal include Biddeford, Brayton, Chocorua, Ondawa, Podunk, Raynham, Rumney, Saco, Scantic, Sebago, Sulfihemists, Vassalboro, Waskish, Westbury, and Winooski. The limiting factors for all of these soils are that they are too wet, subject to flooding, organic (and poorly draining), or some combination thereof.

Figure C.2: MAP OF SACO SOILS



Five soil types may be unsuitable for septic systems or may require lot sizes ranging from 40,000 to 80,000 square feet (depending upon the specific conditions at the site) to keep from polluting groundwater. They are Adams, Allagash, Colton, Croghan, and Naumburg. The primary limiting factor on these soils is excessive permeability.

Figure C.2 on the previous page shows the location of prime agricultural/forest soils as well as soils not suitable for septic systems. Approximately 38% of Saco's land is considered prime agricultural soil. These soils could be highly productive for agricultural activities; they are also considered well-suited for development. Areas with hydric and/or highly erodible soils are considered not suitable for most development. These soils make up 47% of Saco. They are found near major waterbodies and streams and include coastal areas and the Saco Heath. Figure C.2 also indicates the relationship between soil groups and existing public sewer infrastructure.

Saco River Watershed

Rumney, Podunk, and Ondawa soils dominate in the Saco River floodplain. These soils are mostly organic, usually black in color with highly fibrous, visible plant remains. They are typically found in swamps, marshes, and bogs. Flooding and wetness are the primary limiting factors on these soils. None of the land in the Saco River watershed upstream of the turnpike is served by public sewer.

Moving away from the river, from Boom Road toward Buxton Road, there are a variety of soils. Scantic and Raynham soils are interspersed throughout this area. These soils are silty and have a high seasonal groundwater table, limiting their suitability for septic systems.

In the Buxton Road area, Croghan and Naumburg soils are dominant. A two-acre minimum lot size is recommended to build a septic system in Croghan soils. Naumburgs are highly permeable and need to be judged on a site specific basis. Some Naumburg soils are saturated and unsuitable for development. However, they are often found in association with other soils more suitable for subsurface waste disposal.

Deep Brook Watershed

The eastern portion of the Deep Brook watershed is served by public sewer. In the

unsewered portion of the watershed, many areas with soils unsuitable for development are located along streambanks that present other development constraints as well. Along the Buxton Road west of Jenkins Road is a stretch of Scantic soils. Further west, Croghan and Naumburg soils dominate. South of the Buxton Road, Raynham soils mix with a range of other soils that present fewer constraints to development. North of the Buxton Road, moving toward the Heath, Croghan, Naumburg, and Adams soils dominate. The Heath is primarily made up of Waskish soils.

Sawyer Brook Watershed

All land within this watershed is served by public sewer.

Goosefare Brook Watershed

The upper reaches of the Goosefare Brook watershed lie in the Waskish soils of the Heath. The Jenkins Road area consists of Adams, Croghan, and Naumburg soils. Most of the developed areas in this watershed are served by public sewer. The broad expanse of largely undeveloped land that lies between the Turnpike and Route One is served by public sewer in the industrial park and along Route One. The soils in this area are predominantly Naumburg, Croghan, and Scantic soils and are unsuitable for dense development. Future development in this area should be tied into the public sewer system.

Mill Brook Watershed

The soils in the Mill Brook watershed restrict development reliant on subsurface waste disposal. Except for a few small pockets of Buxton, Elmwood, Lyman and Scio soils, the rest of the watershed is comprised of Naumburg, Croghan, and Adams soils. Development within the watershed consists of a few homes and businesses along Route One, [the Mill Brook business park](#), and a mobile home park. Any future development should be at low densities or served by public sewer.

Cascade Brook Watershed

Much of the Cascade Brook watershed is served by public sewer with the 2008-2009 extension of service along Route One to the Park North and Cascade subdivisions. The

area south of Flag Pond Road between the turnpike and the Saco/Old Orchard Beach municipal border is dominated by Croghan, Adams, and Naumburg soils. Harmon Brook flows over Scantic soils and Cascade Brook over Saco and Podunk soils. There are reasonably large areas within this watershed with soils suitable for development (see Figure C.2).

Nonesuch River Watershed

The northwest corner of Saco, north of McKenney Road, has a heavy concentration of Raynham, Scantic and Saco soils, which present significant constraints to development. South of McKenney Road, Croghan, Allagash, Naumburg, Adams, and Colton soils dominate. This area has some residential development. Areas along major roads may have soils suitable for development.

2. Prime Farmland Soils

The U.S. Department of Agriculture defines prime farmland as the land that is best suited to producing food, feed, forage, fiber, and oilseed crops. Prime farmland has the soil quality, growing season, and moisture supply to produce a sustained high yield of crops while using acceptable farming methods. Prime farmland produces high yields with the least amount of external input. It is a valuable, limited commodity. In many areas experiencing growth and development, prime farmland is under siege. The same characteristics that make soil prime farmland make it desirable for development. Protection of prime farmland soils is worthy of consideration when making land use decisions. Saco does not have areas with large expanses of uninterrupted prime farmland soils. Rather, they are found in intermittent pockets surrounded by other soil types.

3. Prime Forestry Soils

The Soil Conservation Service defines prime forest land as land that has soils which are capable of growing wood at the economic productive growth rate for a given tree species. Soils with a productivity rating of medium, high or very high are considered prime forestry soils. Management issues, such as erosion hazard, equipment limitations, or seedling mortality, are not factored in when calculating the forest productivity of a soil. Rather, productivity is based on the total yield of wood per hectare of mature trees. The indicator species used for York County is eastern white pine. Large expanses of Saco have soils well suited to forestry.

All of the soils identified as prime farmland soils are also rated as prime forestry soils. Four additional soil types, Brayton, Westbury, Scantic, and Scio, are also identified as prime forestry soils. Scio has the highest tree growth productivity rating of all York County soils. Only two soil types, Naumburg and Saco, have low forestland productivity ratings. Naumburg soils are prevalent between Ferry Road and Goosefare Brook, and between Jenkins Road and the Saco/Old Orchard Beach municipal border. Naumburg soils are also a substantial part of the mix of soils present in the Nonesuch River watershed.

Forestry no longer plays the central role it once did in Saco's economy. Most of the land around Saco has been cut many times since the area was first settled. Natural constraints to timber harvesting in Saco include the steepness of the slope and the wetness of the soil. Other constraints include conflicts with residential neighbors and development pressure.

D. SURFACE WATERS

Water is the primary reason Saco came into existence. Cataract Falls in the center of town powered industry in the City. The Saco River transported raw materials from inland and provided access to world markets downriver of the falls. The Atlantic Ocean and the clam flats in the Saco River Estuary provided food and a livelihood for harvesters.

Water still plays a critical role in Saco. The community draws its drinking water from the Saco River. Cataract Falls generates power. Treated effluent from the wastewater treatment plant is discharged into the river. Abundant wetlands and estuarine areas provide habitat for wildlife. While the river and ocean no longer are a primary means of travel, they are still heavily used for recreational boating. Saco has a small commercial fishing fleet. The streams and rivers found throughout Saco are scenic and recreational resources.

The health of these resources should be protected. Public water supplies that depend on surface water sources are especially vulnerable to pollution. This section looks at the water quality of Saco's surface water resources.

The State of Maine has established a water quality classification system in accordance

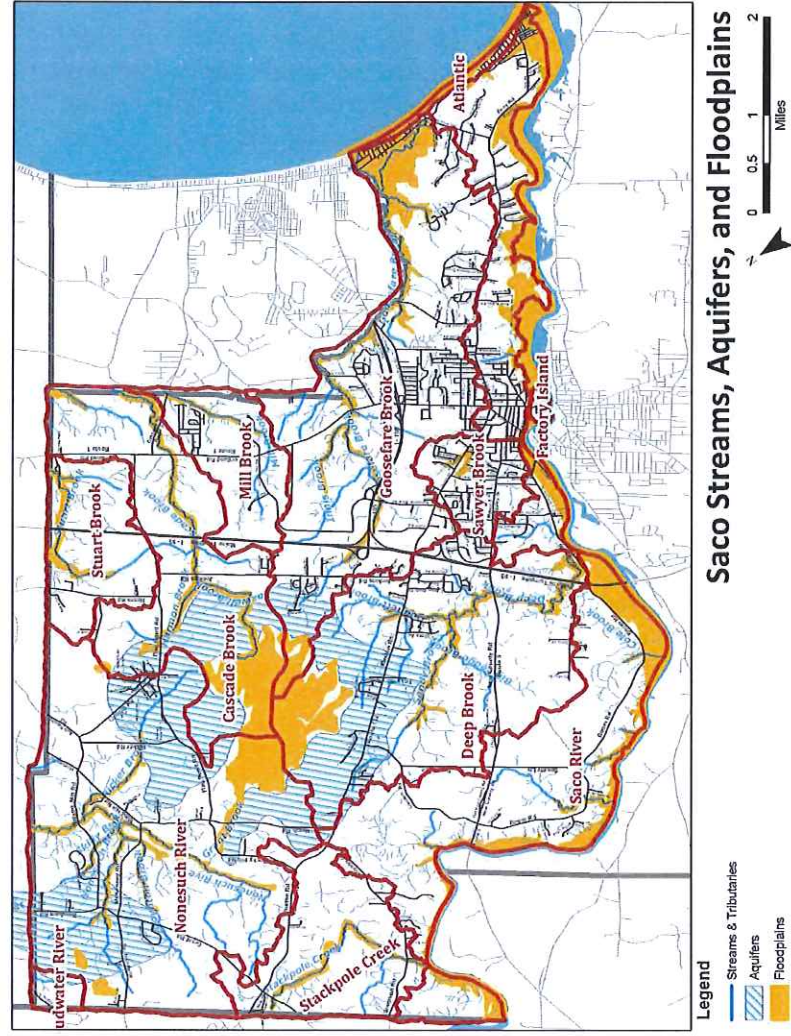
with Sections 305(b) and 106(a) of the Clean Water Act. The classification system is based on varying minimal attainment standards for designated uses such as drinking water supply, fishery habitat, and recreational uses. There are four classifications for river waters, ranging from the lowest quality, Class C, to the highest quality, Class AA. There is only one classification for lake waters, Class GPA. Estuaries and marine waters have three classifications, Class SC, Class SB, and Class SA. Classification is a legislative function and is not a report of water quality. Water quality is reported as "attaining" or "not attaining" the minimum standards stipulated by the classification.

Class AA waters are considered outstanding natural resources because of their ecological, social, scenic or recreational importance. Class AA waters are free flowing and natural, and are suitable for use as drinking water after disinfection. The aquatic life, dissolved oxygen, and bacteria content are as naturally occurs. No direct discharges of pollutants are allowed into Class AA waters.

Class A waters are also suitable for drinking after disinfection. The dissolved oxygen content should not be less than 7 parts per million or 75% of saturation, whichever is higher. The aquatic life and bacteria content will be as naturally occurs. Direct discharges are allowed only if the effluent is of equal or better quality than the existing water quality of the receiving waters and no other reasonable alternatives exist.

Class B waters are suitable for drinking after treatment. The dissolved oxygen standard is the same as for Class A waters, except for a period between October 1 and May 14 when the standard is raised to ensure levels suitable for spawning and egg incubation of indigenous fish species. The E. coli bacteria standard for Class B waters is lower than for higher classified waters. Discharges to Class B waters will be allowed so long as the receiving waters are of sufficient quality to support all indigenous aquatic species, and the discharge does not cause detrimental changes to the resident biological community.

Figure C.3: MAP OF SACO STREAMS, AQUIFERS, AND FLOODPLAINS



Class C waters are suitable for drinking after treatment. The dissolved oxygen content should not be less than 5 parts per million or 60% of saturation, whichever is higher. In identified salmonid spawning areas, water quality must be sufficient to ensure spawning, egg incubation, and survival of early salmonid life stages. The E. coli bacteria standard is the most permissive of the classifications. Discharges to Class C waters may cause some changes to aquatic life, if the receiving waters are of sufficient quality to support all indigenous fish species and can maintain the structure and function of the resident biological community.

Marine and estuarine water classifications follow a similar pattern of diminishing dissolved oxygen and bacteria standards from Class SA to Class SC. Designated uses for all three classifications include recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, navigation, and habitat for fish and other estuarine and marine life. Classes SB and SC also include industrial process and cooling water supply, and hydroelectric power generation as appropriate uses. No direct discharges of pollutants are allowed into Class SA waters. Discharges into Class SB waters cannot cause closure of open shellfish harvesting areas. Shellfish harvesting is restricted in Class SC waters. Discharges into Class SC waters may cause some changes to estuarine and marine life if the receiving waters are of sufficient quality to support all indigenous fish species and can maintain the structure and function of the resident biological community.

Saco River Watershed including tributaries west of the Turnpike

The Saco River, flowing out of New Hampshire's White Mountains, is the principal surface water in the Saco River watershed. Between the mountains and the ocean, the river passes through several dams and small impoundments. The Saco River has largely been spared the heavy industrial use and pollution that other Maine rivers have suffered. It has been designated by the Maine Department of Environmental Protection (MDEP) as a river of national significance and as the premier canoeing river in Maine. The Saco River attained this designation because of its clean water, easy accessibility, and scenic resources. Of the Saco's 81 miles in Maine, 99% have been ranked as fishable and swimmable.

The Saco River between the Saco/Buxton municipal line and the Cataract Dam impoundment is rated by MDEP as a Class B water body. Below Cataract Dam, water

quality diminishes. In 1996, the Saco River Estuary from head tide to Camp Ellis did not attain the Class SC bacteria standard for water contact recreation. Water quality sampling also indicates that this entire water body does not attain the Class SC bacteria standard for shellfish harvesting, nor does it attain the dissolved oxygen or aquatic life support standards of its classification. MDEP attributes the nonattainment of Class SC standards to the discharges of treated and untreated municipal and industrial wastewater from the wastewater treatment plants of Saco and Biddeford, and to hydrologic modification caused by the dams.

The communities of Saco, Biddeford, Old Orchard Beach, and a portion of Scarborough draw their public water supplies from the Saco River. The Saco River is also used to supplement local supplies in the Kennebunk-Kennebunkport-Wells Water District. Upriver of the public water intake, point sources of pollution are minimal. There are two Overboard Discharge Permits (ODPs) along the Saco River upstream of the City. The largest is held by Bonny Eagle High School that allows for up to 51,250 gallons of discharge per day. The other, the Yarumian ODP, covers five properties in Buxton and allows for 1,950 gallons of discharge per day. Overboard discharges are individual sewage treatment systems that discharge directly into the river. Although the design of overboard discharge systems varies, generally effluent will pass through a septic tank, a filtration bed, and a disinfection process before being released into the river. The Yarumian system is a septic tank and sand-field filtration system and MDEP describes it as "very good passive filtration." Bonny Eagle High School recently retrofitted their system, replacing a poorly functioning UV system with a more effective chlorine injection process.

The State of Maine is working to reduce the number of overboard discharge permits. Two key conditions for being able to continue using a permit are 1) that no other feasible waste disposal alternative exists, and 2) that the water quality classification of the water body to which the effluent is being discharged is not adversely affected. The Saco River meets the standards for a Class A waterbody below the discharge point of the Bonny Eagle High School System.

MDEP reports that the only other sizable discharge permits upriver of the Saco water supply intake are hydroelectric dam water cooling discharges. These discharges change water temperature and dissolved oxygen levels but typically do not contain pollutants.

Several points along the Saco fail to attain their various ratings, usually due to E. coli bacteria levels or due to atmospheric mercury. Regional efforts to confront mercury levels in all surface waters are being implemented.

Below Cataract Dam, water quality decreases. In 1996, the Saco River Estuary from head tide to Camp Ellis did not attain the Class SC bacteria standard for water contact recreation. In 1998, MDEP found that the estuary failed to attain Class SC standards for Marine Life Use Support, due to "Toxicity, Copper, [and] Elevated Fecals." This was attributed to municipal point-source polluters and Combined Sewer Overflow (CSO) activity. The Saco River Estuary failed to attain standards again in 2008 due to bacterial contamination attributed to "6 STP outfalls; stormwater; elevated fecals; [and] nonpoint source[s]." This recent sampling re-observes the toxicity and copper concerns discovered in 1998. Saco Bay has been removed from this area, but retains impairments for the same reasons⁵.

Area citizens recognize the Saco River's natural beauty and respect its vulnerability. However, because the river is clean and flows close to metropolitan areas, it has seen a dramatic increase in recreational use, especially by campers and canoeists. It has also attracted the speculative eye of developers. The Saco River Corridor Commission (SRCC) was created to protect and preserve the natural attractions of the river and the valley and to prevent the encroachment of unplanned development.

The Saco River Corridor Commission tests annually for the following eight parameters of river health: pH, dissolved oxygen, turbidity, temperature, total Kjeldahl nitrogen, *Escherichia coli*, alkalinity, total phosphorus, and orthophosphate. Each year 15 weeks of testing on a bi-weekly schedule is completed. The monitoring seasons begins during the middle of April and conclude at the end of October. Testing occurs on Tuesday, Wednesday, Thursday, and Friday mornings before 9:00 a.m. Data from 2001 – 2007 can be viewed on the SRCC website, <http://www.srcc-maine.org/>.

Formatted: Strikethrough

Formatted: Highlight

The SRCC hopes that the collection of this data for use by towns in the corridor and the State of Maine will help to refine and/or reform regulations to meet the current needs of the river and the citizens in the corridor. The data creates a picture of the river systems. Over time, this picture will reveal trends in water quality, allowing for the

²Maine DEP 305(b) report. (<http://maine.gov/dep/blwq/docmonitoring/305b/2008/appendices.pdf>)

identification of problem areas along the river and a more informed decision making process.

Deep Brook Watershed

Deep Brook is the principal surface water in the Deep Brook watershed. Several smaller streams are tributary to Deep Brook. In 1996, Deep Brook did not attain the dissolved oxygen standard for Class C river waters. MDEP attributes most of the dissolved oxygen deficit to agricultural activities and residential development in the watershed. As of 2008, the brook is classified as a Class B waterway, although some diminished aquatic life due to dissolved oxygen deficits remains.³ The City requires a 75 foot buffer around the stream to protect water quality from encroaching land use hazards.

Sawyer Brook Watershed

Sawyer Brook is the principal surface water in the Sawyer Brook watershed. In 2001, the City completed the Sawyer Brook Mitigation project, which included the relocation of a sewer line from the Sawyer Brook area; drainage improvements to Spring Street, Park Street, Riverside Avenue, Ferry Lane, Roebuck Avenue, Boothby Park, Therrien Avenue, and Nye Street; and maintenance activities at Sawyer Brook. The \$2.6 million project was funded through the Federal Emergency Management Agency's Project Impact program and Section 404 grants (75%), and local funding (25%). In 2008, Sawyer Brook failed to attain its Class B standards due to *E Coli* bacteria levels.⁴

Goosefare Brook Watershed

Goosefare Brook is the primary surface water in the Goosefare Brook watershed. Goosefare Brook does not meet state Class B water quality standards for aquatic life due to toxins, including heavy metals from industrial stormwater discharge and polluted runoff. A Goosefare Brook Watershed Survey conducted in 2002 —identified impairments and suggested improvements at each of 78 sites surveyed. In 2006,

³Maine DEP

⁴Maine DEP 305b Appendix. P 60. <http://www.maine.gov/dep/blwq/docmonitoring/305b/2008/appendices.pdf>

approximately 3.2 miles of the brook were listed as an urban impaired stream⁵ from downstream of the Maine Turnpike to below the Route 1 crossing. In 2008, Goosefare Brook failed to attain standards on seven heavy metal measures, including lead and cadmium. Industrial activity within the watershed was indicated as a contributor in the 2002 study, as were nonpoint pollution sources and runoff from the I-95 interchange.

The October 1995, the "Saco Combined Sewer Overflow Abatement Master Plan" (prepared by Deluca-Hoffman) identified Bear Brook (the primary tributary to Goosefare Brook) as the site of infrequent Combined Sewer Overflows (CSOs). Although infrequent, abatement of the CSOs at this location was deemed a high priority because of Goosefare Brook's low flows and minimal assimilative capacity. In 2008, Bear Brook failed to attain Class B standards due to E. coli bacteria levels.

In May, 2016, the City of Saco and Town of Old Orchard Beach received a completed Watershed-Based Management Plan for the Goosefare Brook watershed, prepared by a local consultant with funding provided by the Maine DEP. The plan identifies actions and strategies to be implemented in two phases from 2016-2031. An implementation committee begins meeting in early 2017.

Mill Brook, Cascade, Nonesuch, and other Watersheds

The waterways associated with Saco's other watersheds include Mill Brook, Cascade Brook, Ricker Brook, and the Nonesuch River, as well as their tributaries and adjoining wetlands and ponds.

Mill Brook is rated as Category 2, Class B water. It has been monitored and reached attainment of its class for some uses, but has not been monitored for all uses.

All brooks in the Cascade Brook watershed are rated as Category 2, Class B waters. They have been monitored and reached attainment of their class for some uses, but have not been monitored for all uses.

All brooks in the Nonesuch River watershed are rated as Category 2, Class B waters except for Phillips Brook. Phillips Brook failed to attain its Class B standard for aquatic life use.

In 2008, the Stroudwater River in the Stroudwater River watershed failed to attain Class

B standards due to dissolved oxygen levels. Nutrient loading from non-point source

Formatted: Body Text, Justified, Indent: Left: 0.17", Right: 0.16", Space Before: 0 pt

⁵DEP definition of an urban impaired stream: "A stream is considered impaired if it fails to meet water quality standards because of effects of stormwater runoff from developed land. Additional stormwater treatment controls are necessary in urban watersheds of impaired streams because proposed stormwater sources in urban and urbanizing areas contribute to the further degradation of stream water quality."

pollution is often a contributor to this kind of issue, however, the portion of the watershed within the City of Saco has very little development or activity upon it. It is therefore unlikely that Saco's portion of the watershed contributes to this issue.

The Stackpole Creek and Stuart Brook watersheds are entirely identified as Category 2, Class B waters. They have been monitored and attained their standards for some uses, but have not been monitored for all uses. MDEP only performs more intensive monitoring if there is reason to suspect a threat to attainment.

E. GROUNDWATER

Groundwater includes all precipitation that percolates into the ground. Depending on local geology, 10% to 50% of annual precipitation becomes groundwater. Groundwater is contained by two types of aquifers: bedrock, and sand and gravel. A large portion of Saco is underlain by a sand and gravel aquifer (see Figure B.3).

Groundwater serves as a source of replenishment for surface streams and water bodies. Tapped through wells, groundwater in bedrock also meets the water needs of people not served by the public water system. In Saco, this includes most of the area west of the turnpike.

Groundwater, especially in sand and gravel aquifers, is susceptible to various sources of pollution. Possible contamination sources include leaking underground fuel oil and gasoline tanks, sand-salt piles, road salting, old landfills and dumps, septic systems, agricultural chemicals (both for commercial and domestic use), manure piles, and point and non-point discharges of hazardous substances. Once ground water is polluted, it is very difficult to clean up.

F. THREATS TO WATER QUALITY

Development and land use can affect water quality in several ways. Improperly functioning septic systems may cause bacteria to contaminate surface or groundwater. Poor agricultural practices can result in nutrient loading to ponds and rivers and chemical pollutants in groundwater. Construction and development create impervious ground surface that can result in faster runoff and erosion, increased transportation of point and non-point pollution to surface waters, and the lowering of the groundwater table. Toxic or hazardous substances can make their way into Saco's water if

improperly disposed of or spilled. An understanding of these potential threats informs wise decisions about land use.

Saco River Watershed including tributaries west of the Turnpike

Water quality in the Saco River watershed is critical to the well being of many citizens of Saco, Biddeford, Old Orchard Beach, and Scarborough. The water intake for the Biddeford-Saco Water Company is approximately 1 mile west (upstream) of the Turnpike. Fortunately, this watershed has had minimal development and is used primarily for agricultural purposes. Extra care should be taken to insure that environmentally responsible agriculture is practiced and that future development is designed to have minimal water quality impact. Homes in the region are dependent upon on-site water supply and septic systems. To protect the groundwater, the assimilative capacity of the soils in the region should be taken into account when considering what density of development to allow. Area businesses that use or store hazardous materials should ensure adequate containment to contain spills.

Deep Brook Watershed

The primary water quality threats in the Deep Brook watershed include gravel quarrying operations in the Berry Road area, agricultural practices, and the closed Saco Municipal Landfill located off Foss Road.

Gravel quarries increase erosion, and can contribute toxic chemicals to the water supply if care is not taken when refueling and maintaining equipment.

Agricultural practices can contribute to water quality deterioration. If soil is worked on too steep a slope, the result can be top soil loss and sedimentation in water bodies. Runoff from agricultural chemicals can cause algal blooms, and can bioaccumulate in fish and shellfish tissues.

The Saco Municipal Landfill opened in the early 1960's. Many local and out-of-state industries sent waste to the landfill in the late 1970's and early 1980's. In 1987, the landfill was closed. In 1989, the Maine Department of Environmental Protection (MDEP) and the Federal Environmental Protection Agency (EPA) investigated the landfill as a source of pollution. It was subsequently declared a Superfund site. In 1998,

the landfill was capped to reduce the potential for increased ground water contamination. Institutional controls to restrict the use of the site were finalized in 2000, and a five year review of the cleanup was performed in 2005.⁶ Approximately 700 people obtain drinking water from wells located within 3 miles of the site. Water and sediment in Sandy Brook, which flows through the site, and groundwater beneath the site, have shown elevated levels of various heavy metals and volatile organic compounds. The landfill is located on the edge of Saco's primary sand and gravel aquifer. Groundwater monitoring continues.

Sawyer Brook Watershed

Sawyer Brook is Saco's most urban watershed. Non-point pollution from Saco's streets and parking lots, and chemicals from lawns and gardens makes its way to the Saco River via Sawyer Brook.

Goosefare Brook Watershed

Goosefare Brook and its tributaries face several water quality challenges. While most homes and businesses within the Goosefare Brook watershed are served by the municipal wastewater system, much of the surface runoff can make its way into the streams and groundwater. All of Saco's industrial parks are in this watershed. Fertilizer and nitrates from Saco's recreational playing fields and the Biddeford-Saco Country Club Golf Course drain to Goosefare Brook, as does runoff from the I-95 interchange.

Mill Brook Watershed

Water quality threats to Mill Brook include inadequate septic systems in the mobile home park. Other residential development is limited. Auto dealerships, entertainment parks, and lodging facilities are the primary Route One commercial uses. Ensuring adequate treatment of water from the impervious surface associated with this development is a challenge.

⁶ US EPA website "Waste Site Cleanup & Reuse in New England" (www.epa.gov)

Cascade Brook Watershed

The Cascade Brook headwaters rise in the protected bog wetlands and forest of the Heath. From there, they flow through land used for agricultural, residential, and commercial purposes. Agricultural runoff and non-point pollution are the primary threats to water quality in the Cascade Brook watershed. In the past, septic systems from the dense residential development at the Country Village Mobile Home Park may have posed a threat to groundwater.

The 212-acre Saco Tannery Waste Pits EPA Superfund site is in the Cascade Brook watershed. Stuart Brook runs through the site. Between 1951 and 1981, more than 23 million gallons of process wastes, such as chromium sludge, acid waste, methylene chloride, and caustic substances, were disposed of in two lagoons and 53 disposal pits. Groundwater is the drinking water source for the 2,600 Saco residents who live within a 3-mile radius of the site. The groundwater was found to be contaminated with arsenic and chlorobenzene; however, the levels of contamination were within safety standards. By 1993, all construction and remediation projects were completed. Groundwater monitoring suggests that contamination is not migrating off site via the groundwater. Because the construction of the soil covers over the lagoons and pits resulted in the loss of 10 acres of wetlands, the EPA and the Maine Department of Environmental Protection purchased 247 acres of a unique ecological property 2 miles from the site. According to the EPA, this approach to wetlands compensation was one of the first in the nation for Superfund projects.⁶ In 1999, the Saco Tannery Waste Pits site was removed from the Superfund National Priorities List. The Finance Authority of Maine now owns all 225 acres. The site is not open to the public at this time.

Nonesuch River Watershed

Land use in the Nonesuch River watershed is primarily agricultural. However, residential use, and the associated demand on groundwater resources, has been increasing. The primary threats to water quality are improper agricultural practices and inadequate soils or septic systems for the density of development that is occurring. Boothby Park, with its relatively high density and poor soils, lies in this watershed, near

⁶ US EPA website Waste Site Cleanup & Reuse in New England (www.epa.gov)

the headwaters of Ricker Brook. Three sand and gravel quarries operating in the area may also have impacts on water quality.

G. FLOODPLAINS

Floodplains are the low, mostly flat areas adjacent to rivers, streams, ponds, and the ocean that are periodically covered by rising water or waves during times of rain or snowmelt. Coastal flooding is generally attributed to high wind and wave action caused by storm activity. The Federal Emergency Management Agency (FEMA) has mapped the 100 year flood plain (see Figure C.3). This area has a 1% chance of being flooded during any given year.

Improper use, filling, and development within a floodplain create the potential for increased flooding, property damage, and downstream contamination. Floodplains should be considered a severe constraint on development.

1. Coastal Flooding

Defining 100 year floodplains in coastal areas is an inexact science. Evidence of coastal flooding is temporal, and changes to the landscape are dynamic. Coastal flooding is caused by wind, wave, and tidal action driven by global forces. Nevertheless, FEMA has mapped a 100 year floodplain for Saco's coastline, subject to update in ~~mid-2018~~ ~~early 2010~~. Much of the developed area in coastal areas is in the floodplain, as are Ram and Eagle Islands. Projected sea level rise could potentially increase the size of the area subject to flooding.

Formatted: Strikethrough

H. BEACHES/EROSION/SAND DUNES

The jetty at Camp Ellis has caused erosion since shortly after its installation over 100 years ago. The jetty is 4,800 feet long to the south, and 6,600 feet long to the north. It was designed to protect the Saco River Federal Navigation Project which consists of an 8-foot deep channel that varies from 100 to 200 feet wide. Camp Ellis Beach is adjacent to the jetty.

Coastal storms, exacerbated by the jetty, have caused severe shoreline erosion along Camp Ellis Beach and the loss of over 30 homes. At the request of the City of Saco, the New England District of the Army Corps of Engineers, is conducting a study to find a remedy to this ongoing erosion. Alternative solutions are being analyzed using a

Formatted: Highlight

computer program model developed by Woods Hole Group under contract to the Corps. The model is examining the effects of structures, including jetty spurs, breakwaters and T-groins, on wave climate, currents and erosion. Subsurface borings have also been taken in the Saco Bay area to assess foundation conditions. Soft clay was found under a large portion of the study area and resulted in a reanalysis of alternative solutions.

Subsurface borings were completed in mid-November 2005, and modeling efforts were complete, including internal reviews, by early January 2006. The results of these efforts were provided to the City and State in January 2006, and at a public information meeting held in Saco on February 22, 2006. These studies have caused the Army Corps to favor a plan consisting of a 750-foot long spur jetty and periodic beachfill. The City and most coastal residents prefer a plan with a 500-foot spur jetty, two nearshore breakwaters and less frequent beachfill. Additional detailed modeling of these final alternative plans is nearly complete and design of project features is underway. As the total cost of either project will exceed the \$5 million federal cap under Section 111 authority, Congress provided specific authority in the Water Resources Development Act of 2007 to exceed this limitation. The Act authorized a maximum Federal expenditure of \$26,900,000 for work under Section 111 at Camp Ellis. The Army Corps plans to complete design efforts soon, and to prepare a draft decision document and environmental assessment recommending implementation of the final selected plan.

Remaining steps include: public, state and federal review of environmental assessment; detailed, final design; bidding and construction; and bidding and placement of beachfill. The final design and the project partnership agreement defining financial responsibility for future beachfill and other matters remain to be resolved.

I. WETLANDS

The ecological value of wetlands is now widely appreciated. Historically, wetlands were considered wasteland to be drained or filled. With increased understanding of their important ecological role, that perception has changed. Wetlands control erosion, store floodwaters, recycle nutrients, filter pollutants, and recharge ground waters. They provide open space and wildlife habitat. They are some of Maine's most productive areas, producing up to ten tons of nutrients per year.

Wetlands are defined by the Environmental Protection Agency (EPA), Army Corps of Engineers (COE), and the State of Maine as, “areas that are inundated or saturated by surface groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands usually include swamps, marshes, bogs, and similar areas.”⁷

Most wetlands can be identified by three characteristics: the presence of 1) water loving plants, 2) hydric soils, and 3) a very high water table for at least part of the year. Water loving plants are the dominant vegetation type, and can include plants typically associated with wetlands, such as cattails, as well as plants that grow equally well in wet or dry soils, such as red maple. Hydric soils are undrained and have colors and textures that indicate prolonged saturation during the growing season. Wetlands have water present at or near the surface for one week or more during the growing season.

Wetlands are found throughout Saco (see Figure C.4). Many are located along streams and intertidal areas, or function as the headwaters for streams. Other wetlands are small, noncontiguous, and isolated from surface water sources. The dominant wetland types in Saco are forested wetlands, shrub/scrub swamps, bogs, and coastal marshes and meadows.

Forested wetlands

Forested wetlands range from red maple swamps with pools of standing water early in the growing season, to dense stands of white pine and red spruce which grow in sandy soils with a fluctuating water table. Forested wetlands occur along sluggish streams, on flat uplands, and in shallow lake basins or potholes. The soils are normally waterlogged, but may be seasonally waterlogged with up to a foot or more of water. In Saco, the most common forested wetland is the coniferous variety.

Shrub/scrub swamps

Shrub/scrub swamps occur primarily along sluggish streams. Pockets of this wetland type can also be found within forested wetlands. Soil is generally waterlogged, but may

⁷ EPA, 40 CFR 230.3 and COE, 33 DFR 328.3; U.S. ACE, Northeast Regional Supplement, 2010

be covered with a foot or more of water. Vegetation typically consists of dense growths of alders, winterberry, high bush blueberry, or several species of viburnum. Shrub/scrub swamps frequently serve as a transition between marshes and forested wetlands.

Bogs

Bogs are nutrient-poor wetlands characterized by sphagnum moss and many species of the heath family, such as leatherleaf, labrador tea, bog laurel, cranberry, and rhodora. Insectivorous plants such as pitcher plants and sundews are also commonly found in bogs.

The Heath is the southernmost example of a raised coalesced bog in North America. The Nature Conservancy owns 1,223 acres of the bog. It is the largest wetland in Saco, and contributes water to three different watersheds: Cascade Brook, Deep Brook, and the Nonesuch River. Much of the Heath is forested, including stands of Atlantic White Cedar (at the northern edge of its range and locally endangered) and Pitch Pine.

Coastal marshes and meadows

Coastal marshes and meadows occur along tidal rivers and streams. Vegetation types are salt-tolerant. The marshes are inundated daily, to varying degrees, with saltwater. The meadows border the landward side of salt marshes or open water. Meadow soils are always saturated during the growing season, but are rarely inundated with saltwater. Coastal wetlands are important ecosystems that provide food and habitat for a broad spectrum of fowl, fish, mollusks and others.

Not all wetlands are created equal. Some have more value than others for cleansing water, providing flood control, maintaining stream flows, or as wildlife habitat. The Maine Natural Areas Program (MNAP) defines wetlands by their environmental benefit and the functions they serve. Functional value is based on six criteria: 1) sediment retention, 2) floodflow alteration, 3) finfish habitat, 4) plant and animal habitat, 5) shellfish habitat, and 6) educational and cultural value. For each function a wetland provides, it receives one point. The more benefit a wetland provides to the community, the more points it receives.

In addition to MNAP ratings, non-forested wetlands of greater than 10 acres in size are protected under state and local wetlands ordinances. Specific conditions apply to alteration, mitigation, and development within these areas.

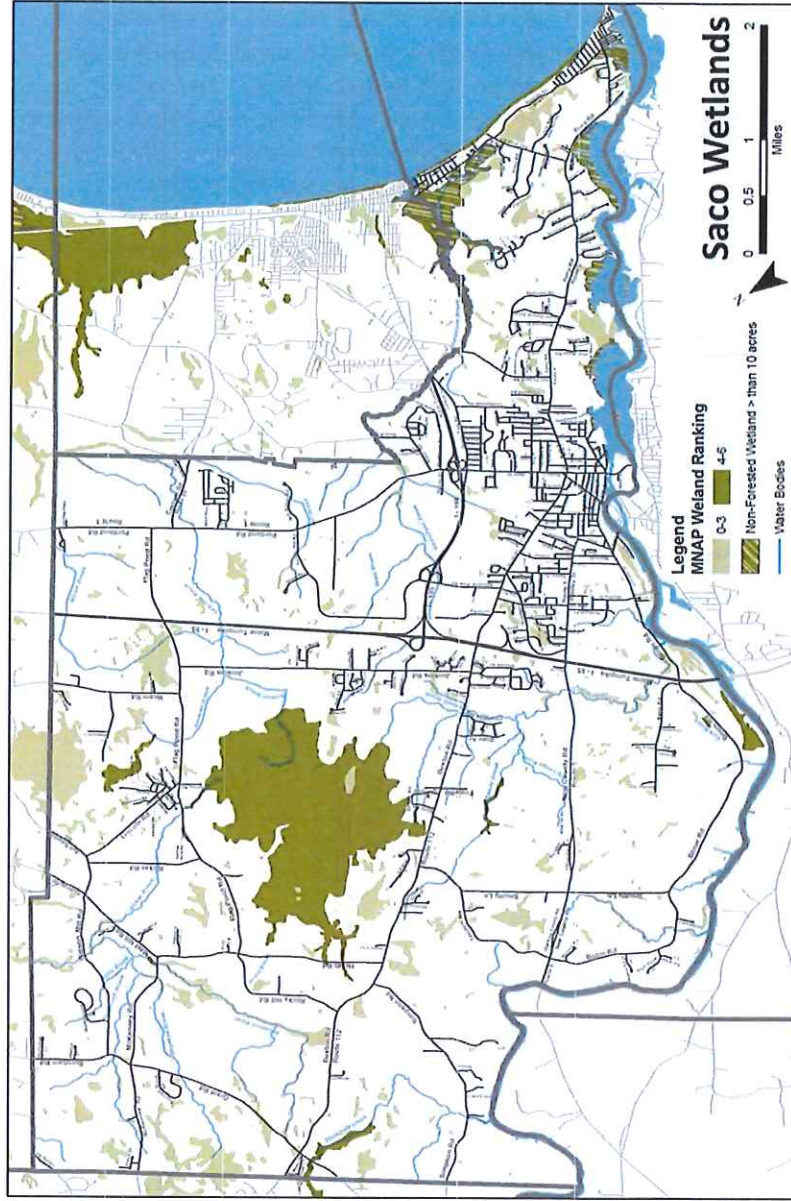
J. Vernal Pools

Vernal pools act much like wetlands, but are typically smaller, do not have permanent inlets, and do not fall under the general protection of the Maine Natural Areas Program (MNAP). Vernal pools are created as winter runoff and spring rains collect in depressions in the landscape. Often the water dries up by summer or fall. Vernal pools are seasonal habitats for many amphibians, such as frogs and salamanders. They lack consistent water levels and do not provide for viable populations of predatory fish.

As of September 1, 2007, significant vernal pool habitats as defined by the Maine Department of Environmental Protection (MDEP) are protected under the Natural Resources Protection Act (NRPA). Any activity within 250 feet of the high water mark must obtain approval from MDEP through a permit by rule or individual NRPA approval.

Though vernal pools undoubtedly exist throughout Saco, to date they have not been cataloged or mapped. The City hopes to catalog and map whatever wetlands, including vernal pools, which are identified as part of subdivision and site plan applications, within its municipal Geographic Information System (GIS).

Figure C.4: MAP OF SACO WETLANDS



K. RARE AND UNIQUE WILDLIFE AND PLANT HABITATS

Wildlife habitat is a both tenuous and resilient resource. Often, as a community grows, wildlife habitat diminishes or is fragmented. Yet even as habitat grows smaller and is of lesser quality, it persists and adapts. The availability of high quality habitat for fish, wildlife, and plants is essential to maintaining an abundant and diverse population for both ecological and sport purposes. Saco has a number of areas that offer quality habitat for a variety of species.

The Maine Department of Inland Fisheries and Wildlife (IF&W) has assessed the value of habitats in Saco (see Figure C.5). IF&W has identified areas of special concern because of their importance as wildlife and fish habitat and as recreational resources to the community and state. Aquatic habitats and the areas immediately adjacent are among the most sensitive to change and are vulnerable to degradation. Wetlands, in addition to moderating flood waters and improving water quality, are also an essential and productive ecosystem for a broad variety of species.

The riparian zone is the upland area adjacent to wetlands, streams, and other water bodies. Riparian zones protect and improve water quality by filtering excess nutrients and sediment, maintaining water temperature, and contributing vegetation and invertebrates to the aquatic ecosystem food chain. Riparian habitats also serve as an important travel corridor for many species. Land clearing or other forms of development within the riparian zone can degrade water quality and diminish aquatic habitat value.

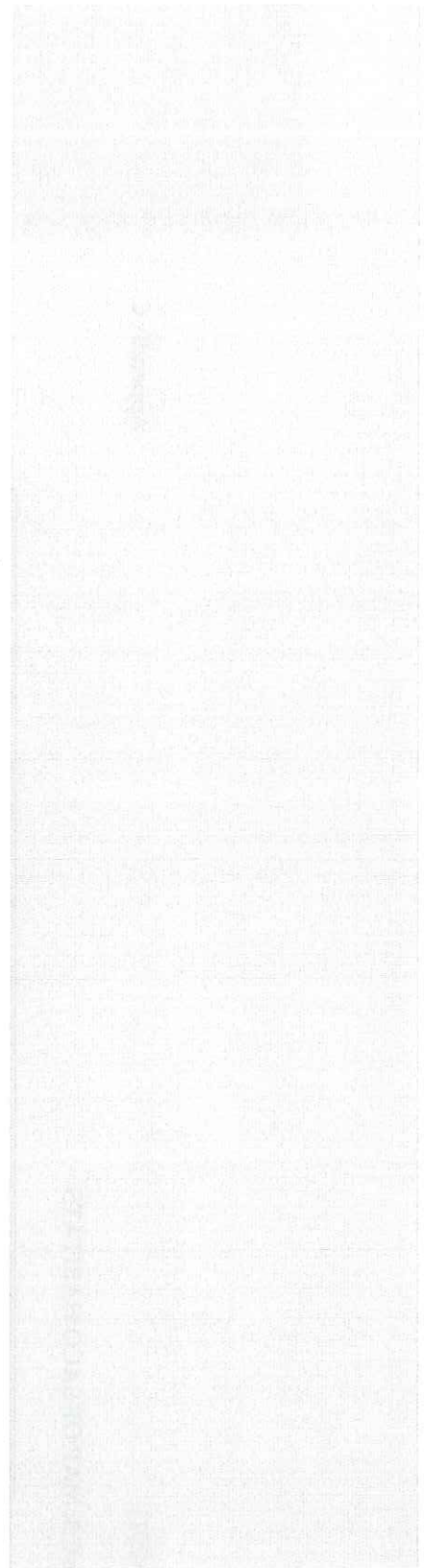
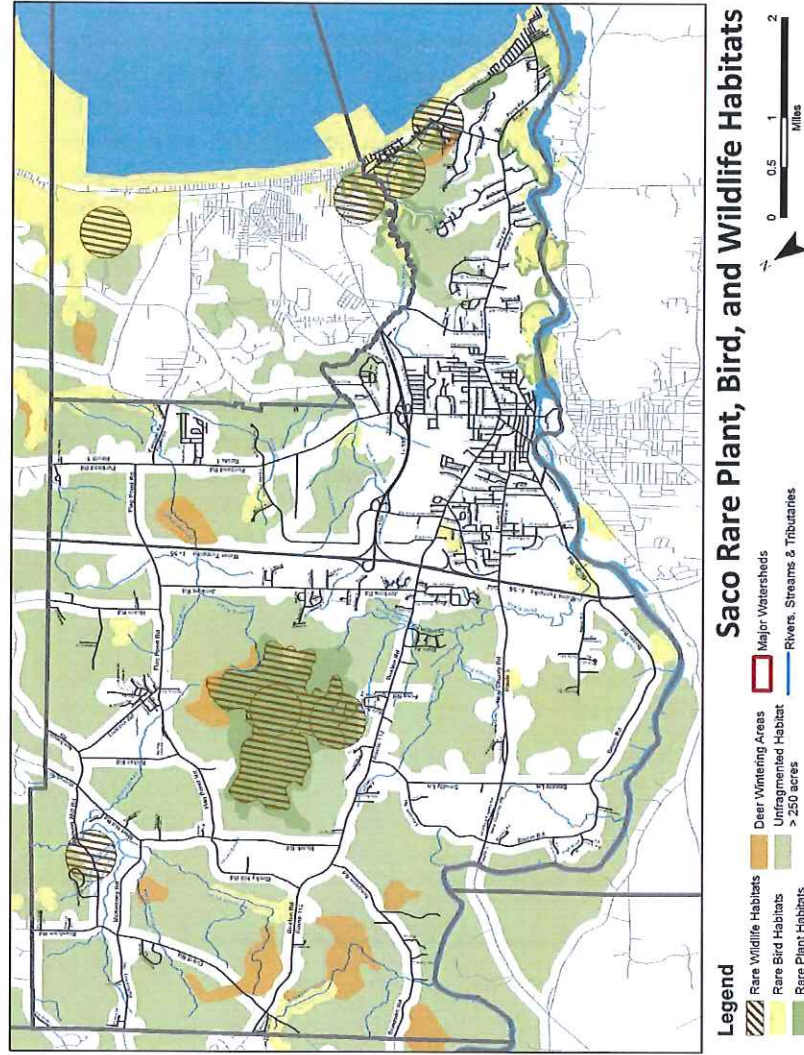


Figure C.5: MAP OF SACO HABITATS



Several areas in Saco have been identified by IF&W as Essential Habitats. Essential Habitats are areas that currently provide or have historically provided physical or biological features essential to the conservation of an endangered or threatened species in Maine and which may require special management considerations. Examples of areas that could qualify for this designation are nest sites or important feeding areas. For some species, habitat protection is vital to preventing further decline or achieving recovery goals. This habitat protection tool is used only when habitat loss has been identified as a major factor limiting a species' recovery. Before an area can be designated as Essential Habitat, it must be identified and mapped by IF&W, and adopted through public rule making procedures.

The following outlines the important wildlife, plant, and aquarian habitats in Saco.

1. Unfragmented Habitats

Unfragmented habitat blocks⁷ are important wildlife habitats. They are also popular areas for outdoor recreational activities, and reflect the community's rural character. The value of an unfragmented habitat block increases with size. Larger blocks can support a greater diversity of animal and plant populations. A block of 250 acres or more has the potential to be used by most species in Saco.

The Maine Natural Areas Program (MNAP) has identified the large unfragmented habitat blocks in Saco. Their locations can be used to help define the significant tracks and wildlife corridors that traverse the City (see Figure C.5).

In isolation, the value of unfragmented habitat blocks is limited. To function properly, habitat blocks must connect. Wildlife travel corridors⁸ link individual habitat blocks and serve as an avenue of connectivity for animal movement.

Ensuring a well-connected wildlife habitat network helps to maintain biodiversity. Development in rural areas fragments habitat blocks, reducing their value. Limiting development to the edges of these areas helps ensure that animals in the interior are protected from development activities and maintains the environmental integrity of the

⁷ Unfragmented blocks are large, contiguous areas of natural woodland with little or no human disturbance essential for maintaining a diverse and healthy population of wildlife.

⁸ A wildlife corridor is a linear area that connects two or more blocks of wildlife habitat.

habitats.

2. Deer Wintering Areas

Deep snow and frigid temperatures can put stress on the deer population. Deer wintering areas provide critical protection for deer herds during Maine's winters. They are usually located in evergreen forests, whose canopies reduce wind velocity, maintain warmer than average temperatures, and reduce snow depth by retaining snowfall above the forest floor.

Most deer wintering areas in Saco are found in the unfragmented habitat blocks primarily west of the turnpike (see Figure C.5). Two are located outside this area: one along the coast at the edge of the Rachel Carson Conservation Area, and another along Cascade Brook just east of the turnpike.⁹

Deer wintering areas identified within the City's Comprehensive Plan must be shown on subdivision plans, and the applicant must demonstrate that there will be no significant impact on the habitat.

3. Waterfowl and wading bird habitats

Waterfowl and wading bird habitats provide breeding, migration, and wintering grounds for a number of bird species. As of 2006, State of Maine regulations require that municipalities designate all Maine Department of Inland Fish and Wildlife (MDIF&W) designated inland waterfowl and wading bird habitats as resource protection areas.

MDIF&W designated inland waterfowl and wading bird habitats can be found around twelve Saco wetlands. Most are located in the rural portion of the community and in areas near the Saco River. Three are found in the highly developed urban core along North Street and Route One. As resource protection areas, these sites require 250 foot buffers, restricting development to protect critical habitat.

⁹ Figure X.X shows the deer wintering sites as recorded by the State Beginning with Habitat data. There may be additional local deer wintering sites not identified on this map.

4. Rare and endangered species habitats

Rare and endangered species in Saco include four turtle species (blanding’s turtle, eastern box turtle, spotted turtle, and wood turtle), four bird species (arctic tern, harlequin duck, least bittern, and saltmarsh sharp-tailed sparrow), two species of butterfly (hessel’s hairstreak and bog elfin), an aquatic snail (malleated vertigo), and the New England cottontail, a wild rabbit. These species have been identified as endangered, threatened, or of special concern based on their prevalence in Maine. Their habitats are listed as unique and critical natural resources by the State of Maine and are protected by various resource protection measures.

Rare Species	State Status
Blanding’s Turtle	Endangered
Eastern Box Turtle	Endangered
Hessel’s Hairstreak	Endangered
Arctic Tern	Threatened
Harlequin Duck	Threatened
Spotted Turtle	Threatened
Wood Turtle	Special Concern
New England Cottontail	Special Concern
Least Bittern	Special Concern

Source: Beginning with Habitat

5. Plant Habitats

The Maine Natural Areas Program (MNAP), a program of the Maine Department of Conservation, maintains information on the status and location of rare plants and exemplary natural communities in Maine. Recent advances in GPS and GIS mapping technologies have allowed for a greater accuracy in mapping the location of these resources (see Tables C.2 and C.3). Because of the rarity and sensitive nature of many of the plants and communities the Natural Areas Program keep records on, public information on the location of the resources is general.

MNAP has identified 10 natural community types and 16 rare plant species in Saco. Each community/species has been assigned a rarity rank of 1 (rare) through 5 (common), both within Maine (s - state rank) and globally (g - global rank). MNAP is particularly interested in example of communities/species ranked S1, S2, or S3, and outstanding examples (e.g., large, old growth stands) of S4 and S5 types.

¹⁰ State legal status for habitat

Rare Plants	Global Rarity	State Rarity	State Status
Beach Plum	G4	S1	Endangered
Clothed Sedge	G5	S1	Endangered
Long's Bulrush	G2/G3	S2	Threatened
Stiff Arrow-head	G5	S2	Threatened
Atlantic White-cedar	G4	S2	Special Concern
Hollow Joe-pye Weed	G5	S2	Special Concern
Horned Pondweed	G5	S2	Special Concern
Mudwort	G4/G5	S3	Special Concern
Parker's Pipewort	G3	S3	Special Concern
Saltmarsh False-foxglove	G5	S3	Special Concern
Sassafras	G5	S2	Special Concern
Small Reed-grass	G5	S3	Special Concern
Smooth Winterberry Holly	G5	S3	Special Concern
Spongy Arrow-head	G5/T4	S3	Special Concern
Swamp Saxifrage	G5	S3	Special Concern
Water Pimpernel	G5/T5	S3	Special Concern

Rare Communities	Global Rarity	State Rarity	Location
Pocket Swamp	G5	S2	Long and Short Ponds
Salt-hay Saltmarsh	G5	S3	Goosefare Brook
Brackish Tidal Marsh	GNR	S3	Saco River, Tidal Marsh
Brackish Tidal Marsh	GNR	S3	Chase Point Marsh
Atlantic White Cedar Bog	G3/G4	S1	Saco Heath
Pitch Pine Bog	G3/G5	S2	Saco Heath
Raised Level Bog Ecosystem	GNR	S4	Saco Heath
Coastal Dune-marsh Ecosystem	GNR	S3	Camp Ellis Back Marsh
Tidal Marsh Estuary Ecosystem	GNR	S3	Goosefare Brook
Salt-hay Saltmarsh	G5	S3	Camp Ellis Back Marsh

¹¹ A definition of Global and State Rarity as well as State Legal Status can be found at the end of the Natural Resource Chapter.

¹² A definition of Global and State Rarity can be found at the end of the Natural Resource Chapter.

6. Aquatic Habitat

Aquatic habitats in Saco include rivers and streams that provide habitat for fish, plants, and other species that live primarily in water.

There are numerous Coastal Wildlife Concentration Areas (CWCA) in Saco. They support an abundance of wildlife, including waterfowl, wading birds, shorebirds, and seabirds, which depend on the CWCAs for resting, wintering, breeding, and migration. CWCAs are rated Class A, Class B, and Class C. Class A delineates resources of national significance, Class B delineates resources of statewide significance, and Class C delineates resources of local significance. Two CWCAs are located on the Saco River below Cataract Dam, where the river becomes an estuary as fresh and salt water mix and water levels are influenced by the tide. The CWCA between the dam and Thunder Island is rated as a Class C Coastal Wildlife Concentration Area. Down the river from Thunder Island is a Class B CWCA.

Offshore, Eagle Island is a Class A Coastal Wildlife Concentration Area and has been identified as a seabird nesting island. Ram Island is a Class B Coastal Wildlife Concentration Area and has also been identified as a seabird nesting island. Goosefare Brook Estuary is rated as a Class B Coastal Wildlife Concentration Area, as is the coastline from the outlet from Goosefare Brook to Camp Ellis. Much of the Goosefare Brook Estuary is owned and protected by the Rachel Carson National Wildlife Refuge. Stratton Island provides Essential Habitat for roseate tern nest sites, and Goosefare Brook has been identified as providing Essential Habitat for piping plovers. It is imperative that water quality be restored, improved, and maintained to protect critical wildlife habitats.

Coastal Wildlife Concentration Areas are not considered by the IF&W to be "Significant Wildlife Habitats" per se. They may contain designated or candidate Essential Habitats and/or Significant Wildlife Habitats and most are protected under local shoreland and resource protection districts.

L. SCENIC RESOURCES

A community's scenic resources give it identity and make it an appealing place to live. Scenic resources help define a community. They are not limited to natural areas. For some Saco residents, the buildings and places in Saco on the National Register of

Historic Places or in the Downtown Historic District (see Historic Chapter) may define their sense of place. For others, it may be the coast at Ferry Beach, open farmland in North Saco, or the serenity of Laurel Hill Cemetery.

M. CONSERVATIONS GROUPS AND RESOURCES

1. Local Conservation Organizations

Saco Conservation Commission

The Conservation Commission is an advisory board to the City Council, the Planning Board, and the Zoning Board of Appeals on issues dealing with the environment. The commission catalogs valuable natural features of the City, and works toward their protection. It provides environmental and technical assistance to the Planning Board during review of development proposals and the development of new land use ordinances. The Conservation Commission participates in coastal clean-up and conducts a beach profile study, a water quality testing program, and the Purple Loosestrife - Galerucella Beetle Project.

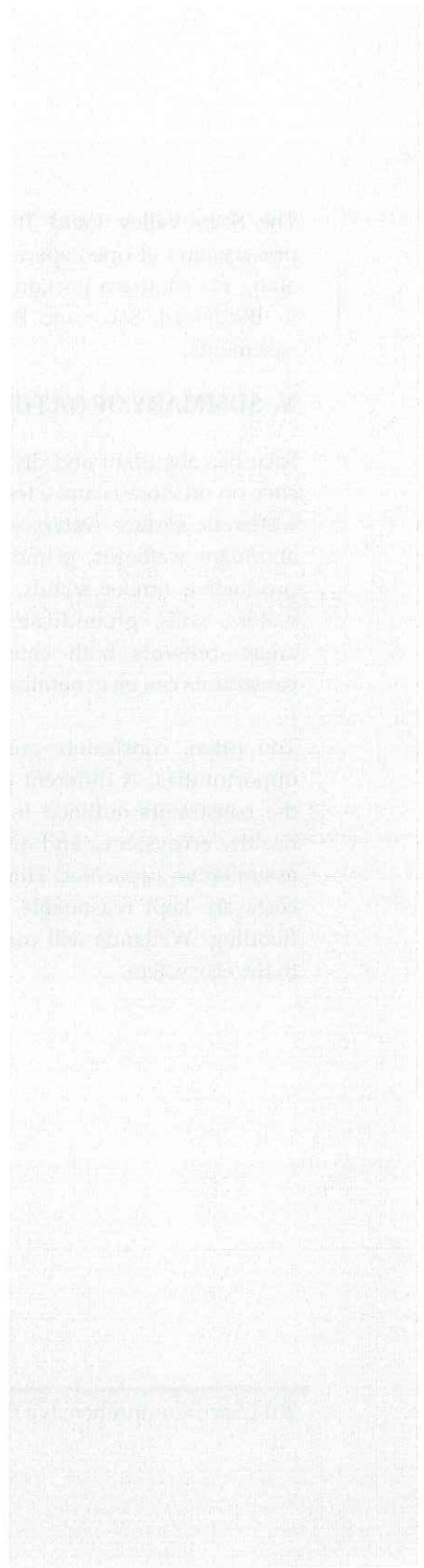
2. Regional Conservation Organizations

Saco River Corridor Commission

Established in 1973, the Saco River Corridor Commission (SRCC) is committed “to protect public health, safety, and the quality of life for the State of Maine through the regulation of land and water uses, protection and conservation of the region's unique and exceptional natural resources and through the prevention of impacts caused by incompatible development.”

The SRCC is made up of twenty municipalities within the Saco River watershed. Each has a position for a regular and an alternate member. The -commission provides support services to permit applicants, and to municipal officials and private citizens concerned with the Saco River Corridor Act or other environmental matters.

Saco Valley Land Trust



The Saco Valley Land Trust (SVLT) is a non-profit organization dedicated to the preservation of open space, wildlife habitat, and water quality in Saco, Biddeford, and along the southern portion of the Saco River. The trust owns ~~over 500~~ **nearly 700** acres in Biddeford, Saco, and Buxton, ~~as well as 200~~ **and holds 560** acres of conservation easements.

Formatted: Strikethrough

Formatted: Strikethrough

N. SUMMARY OF NATURAL OPPORTUNITIES AND CONSTRAINTS

Saco has abundant and diverse natural resources. They range from roseate tern nesting sites on offshore islands, to the sandy shores and dune ecosystem along the coast, to the wetlands, surface waters and groundwaters of watersheds. Saco has fertile estuaries, abundant wetlands, prime fisheries, significant wildlife areas, active agriculture, and productive timber stands. The natural shape of the land— its topography, surface waters, soils, groundwater, wetlands, wildlife habitats, and other special natural areas—presents both constraints to, and opportunities for development. The constraints can be generalized as shown on Table C.4.

Too often, constraints are viewed as having negative effects or resulting in lost opportunities. A different perspective is that Saco will reap the benefits of abiding by the constraints outlined in this chapter. The City will continue to have clean water, healthy ecosystems, and diverse wildlife. Land will be used wisely, with respect for its assimilative capacities. Homes and businesses will be sited in areas where building costs are kept reasonable, and where there is little threat of erosion, mudslides, or flooding. Wetlands will continue to cleanse water and add vast quantities of nutrients to the ecosystem.

Table C.4: SUMMARY OF NATURAL OPPORTUNITIES AND CONSTRAINTS				
	Severe	Significant	Moderate	Least
Slope				
• 25% or greater	X			
• 15% to 25%		X		
• Under 15%				X
Soils				
• prime farmland			X	
• hydric Soils		X		
Septic Suitability				
• non-discharge	X			
• 80,000 square feet		X		
• 40,000 s.f. and below			X	
Floodways	X			
Floodplains		X		
Sand Dunes	X			
Groundwater				
• sand and gravel aquifers		X		
Special Areas				
• high value fisheries and wildlife areas		X		
• critical areas	X			
• high value stream corridors		X		
• wetlands	X			

O. ISSUES AND IMPLICATIONS

1. Surface Waters

- Saco has relatively clean water. Only a few sections of the many miles of streams and rivers in Saco do not attain their designated water quality classification standards. In many of the areas not meeting the standards, sources of pollution have been identified. The City should continue to work to improve the quality of the water in these segments.
- The Saco Combined Sewer Overflow Abatement Master Plan has been largely implemented. The City should put the finishing touches on this exemplary 10 year effort.

- A sizeable portion of the area west of the turnpike is tributary to the Saco River

Formatted: Indent: Left: 0", First line: 0.42"

upstream of the public water supply intake. MDEP's Best Management Practices (BMPs) should be used to guide the City's efforts to protect surface water quality and minimize impacts on the public water supply. Likewise, sound practices should be encouraged to minimize impacts from residential yard runoff.

- As development occurs, runoff from impervious surfaces increases. Since passage of the Clean Water Act, control of point sources of pollution has increased dramatically. The City will continue to work with the MDEP on the NPDES permit. Saco should continue to enforce performance standards that control stormwater runoff, reduce erosion, and minimizes the migration of non-point pollution and rely on NPDES permit and Chapter 500 for areas one acre or larger.
- The cleaning and repainting of boats presents the potential for contaminated runoff. The City should monitor the compliance of boatyards and marinas with state requirements to control this runoff
- The Saco River Estuary does not meet Class SC water quality standards. The reasons for the estuary not meeting water quality standards are numerous and include several point sources of pollution, significant drainage areas of non-point pollution, and combined sewer overflows that make their way into the estuary. The estuary is an important and fertile ecosystem that plays a significant role in the health and diversity of the ecosystem within and beyond Saco's borders. But it can do more. Any reasonable actions that will reduce pollution entering the estuary should be supported. The City has already shown its commitment to this objective with its near-completion of the Combined Sewer Overflow Abatement Master Plan.
- The Goosefare Brook is categorized as an impaired waterbody and requires a higher level of attention with regard to development and other non-point source pollution. Current regulations impose higher standards in this watershed and the City should continue to work to reduce contaminated runoff and other measures recommended by the 2016 Goosefare Brook Watershed-Based Management Plan.

2. Groundwater

- Many Saco residents rely on groundwater and private wells for their drinking water. Groundwater recharges surface streams and wetlands. For the health of Saco residents and to maintain healthy ecosystems, it is important that groundwater quality be preserved.

Formatted: Expanded by 1.95 pt

Formatted: Indent: First line: 0.42"

Formatted: Expanded by 1.85 pt

Formatted: Condensed by 0.05 pt

Formatted: Condensed by 0.05 pt

Formatted: Expanded by 1.95 pt

Formatted: Expanded by 2 pt

Formatted: Condensed by 0.05 pt

Formatted: Expanded by 2 pt

Formatted: Expanded by 1.9 pt

Formatted: Expanded by 1.95 pt

Formatted: Condensed by 0.05 pt

Formatted: Expanded by 1.95 pt

Formatted: Expanded by 2 pt

Formatted: Condensed by 0.05 pt

Formatted: Expanded by 1.95 pt

Formatted: Condensed by 0.05 pt

Formatted: Expanded by 1.95 pt

Formatted: Condensed by 0.05 pt

Formatted: Expanded by 1.95 pt

Formatted: Expanded by 1.9 pt

Formatted: Condensed by 0.05 pt

Formatted: Expanded by 2 pt

Formatted: Expanded by 1.9 pt

- In areas reliant upon subsurface waste disposal systems, residential densities should be kept at levels and in configurations that ensure groundwater is protected.
- When reviewing subdivision plans that will utilize subsurface waste disposal systems, especially when the homes will be sited in close proximity to one another (i.e. cluster subdivisions among others), the cumulative impact of multiple septic systems should be accounted for in the subdivision design.
- Uncovered sand and salt piles can be significant contributors to groundwater pollution. As precipitation percolates through the pile, salt leaches into groundwater. Saco's sand and salt stockpile, located behind the public –works garage, is uncovered and lies above a sand and gravel aquifer. To protect Saco's groundwater, the City should get the municipal sand and salt piles under cover.
- Saco's mobile home parks rely upon subsurface waste disposal. Blue Haven Mobile Home Park, the more densely developed of the two parks, has a mixture of private and community septic systems. The park is adjacent to Mill Brook. Because of the parks' density of development, its close proximity to a stream and its location above a groundwater resource, its subsurface waste disposal presents a serious threat to water quality in this area. The 2009 sewer extension has brought capacity very near each park. Plans should be developed to sewer both mobile home parks.
- Saco's industrial parks, and the region of the city zoned for further industrial development lie above a sand and gravel aquifer. The City should continue to give consideration to protecting the groundwater within this aquifer when determining what industries to allow in industrially zoned areas.
- Most soils around Saco do not have the assimilative capacity to effectively handle the waste generated by large scale, or dense residential development. The availability of public sewerage is one factor that should play a role in determining which areas of Saco are designated as growth areas. The City should consider ways to ensure that residential development in designated growth areas is connected to the sewerage system.

Formatted: Highlight

3. Wetlands

- Wetlands play a critical role in the area's ecology.

- Wetlands filter sediment and pollutants from surface water runoff, playing a key role in keeping water clean. Critical wetlands should be given prime consideration and protection when reviewing development proposals. Data on the location and characteristics of wetlands submitted in conjunction with development reviews should be added to the City's GIS database.
- Wetlands with significant wildlife value are vulnerable to development in the upland fringe. The City should consider requiring -that buffers are maintained around wetlands that are valuable wildlife habitat. The Beginning with Habitat Program is a starting point for identifying and protecting these important areas. Cluster zoning techniques might be appropriate to address the issue.
- While significant vernal pools have not been identified throughout the City, the presence of these resources should be considered in the development review process and appropriate protection provided consistent with state standards.

4. Soils

- Large areas of Saco have soil conditions that limit the installation of septic systems. The City should consider restricting new, unsewered development in these areas.

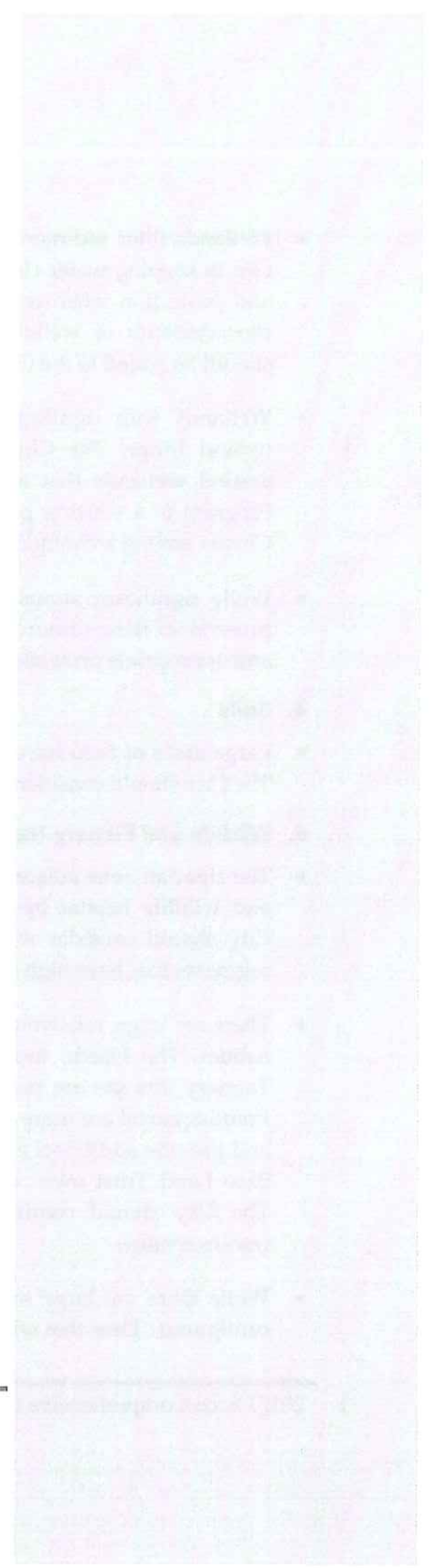
5. Wildlife and Fishery Habitat

- The riparian zone adjacent to rivers and streams plays an important role as fishery and wildlife habitat by providing food and maintaining water temperature. The City should consider working to retain naturally vegetated buffers along stream segments that have high or medium values as fishery or wildlife habitat.
- There are large, relatively undeveloped areas in Saco that serve as important wildlife habitat. The Heath, the Rachel Carson National Wildlife Refuge, and the Saco Tannery Pits site are permanently protected habitat areas. Horton Woods and the Prentiss parcel are more recent acquisitions that have added to these valuable places and provide additional examples of a pro-active approach to habitat protection. The Saco Land Trust owns or holds conservation easements on several other parcels. The City should continue to encourage preservation in areas of high natural resource value.
- While there are large sections of the City with high habitat value, they are non-contiguous. Deer that winter in the deer yard west of Bay View Road are unlikely to

interact with the deer in the Heath or in the deer yard east of the turnpike and south of Flag Pond Road. The City should strive to not fragment wildlife habitat, and to maintain wildlife travel corridors. Doing so will help minimize conflict between people and wildlife.

6. Coastal Areas

- Erosion of the beach at Camp Ellis has been an issue for a century. Over 30 homes have been lost and the erosion problem has been aggravated in the past three decades. The City and the Army Corps have made great progress in identifying causes and solutions for the problem, and developing funding to implement the solutions. Final agreement on design and future project management is a priority for the City.



Memorandum

To: Planning Board Members
From: Bob Hamblen
Re: Libby's Landing Final Subdivision Review
Tax Map 124, Lot 6
Meeting of February 7, 2017

A. Overview

The Board voted to approve the preliminary plan for this 18 lot subdivision on Dec. 6, 2016. Since then, the City's wetlands consultant has signed off on the delineation submitted. The city engineer has asked Gorrill-Palmer to take a look at sight distance from the proposed street location. Based on those findings, the curb cut has been shifted about 135 feet to the west. All else remains the same, and staff is of the opinion that consideration can be given to approving the final plan.

As previously reported:

Applicant Nancy Moulton received approval on 11/12/13 for a seven lot subdivision called Boynton Brook. A single lot had been carved out of a roughly 75 acre parcel, then five lots were proposed, plus a multi-acre remainder parcel, resulting in the subdivision proposal.

A new applicant, Mezoian Development LLC, returns with a proposal for the Libby's Landing subdivision. After some discussion, lawyers and the DEP have agreed that Landing is actually an amendment to the existing subdivision. Combined, the two are large enough to trigger the need for a Site Location of Development permit, being greater than 30 acres and more than 15 lots. Being in the C-1 zone, all lots must be 80,000 s.f. or larger, and each must have 200 feet of frontage or more – these requirements appear to be met.

The street has been revised in the wake of the Aug. 2 sketch plan review. It is now proposed as roughly a 1,000 foot dead-end ending in a cul de sac. A 50 foot ROW has been provided as a connector to the abutting Grant parcel. Aside from electricity, cable and phone, public utilities are not available or nearby, so lots would be serviced with private wells and septic systems.

A hydrogeologic assessment has been performed by Sweet Associates. The Morrill Estates subdivision was subject to a \$585 per lot fee for traffic impacts. Staff would recommend the same apply to the current proposal. No open space nor recreational facilities are proposed, so payment of an impact fee would be addressed in the Conditions of Approval, if the Board is agreeable. The land to be dedicated to the City is for the purpose of the detention pond and access to it.

Project engineer Steve Blake, BH2M, is representing Mr. Mezoian.

B. Determination of Completeness

- The Board voted to waive a submission item and a performance standard on 12/6/16: 5.2.2(16) sidewalks, curbs and 11.11 roadway crown, then to find the application for preliminary subdivision review to be complete.
- Final plan – find a checklist attached; staff recommends the application as being complete. A suggested motion: **“I move that the Board find the application for final subdivision plan to be complete.”**

C. Summary of Findings

Zoning: C-1
Proposed use: residential subdivision

	<u>Required</u>	<u>Existing/Proposed</u>
Min. lot size	80,000 s.f.	80,000+ s.f.
Min. st. frontage	200 feet	>200 feet
Setbacks		
Front	30 feet	30 feet or >
Side	25	25 feet or >
Rear	25	25 feet or >
Max. lot coverage	20%	<20% buildings only
Max. bldg. height	35 ft.	35 feet or less

D. Conclusion/suggested motion to approve

As this is written, Joe Laverriere has provided comments; the applicant proposes to respond via the final plan. We have not heard concerns expressed by neighbors. We believe that the plan and application are at the point that final approval could be considered by the Board.

Suggested motion:

“Move that the Board grant approval under the provisions of the Saco Subdivision Regulations for the final plan submitted for the proposed Libby’s Landing subdivision based on the attached Findings of Fact and Conditions of Approval dated February 7, 2017.”

Saco Planning Board

Libby's Landing Subdivision
Final Plan Findings of Fact

February 7, 2017

The Saco Planning Board hereby finds:

1. The Libby's Landing subdivision is an amendment to the existing 7 lot Boynton Brook subdivision, and includes eleven proposed lots, as well as a remainder parcel that would be retained by the applicant. Access would occur via a proposed street designed to City specifications, and may in the future be offered to the City as a public way.
2. The record owner of the property to be divided is Nancy Moulton, 108 Geraldine Street, Key West, FL 33040.
3. The applicant is Mezoian Development LLC, 4 Driftwood Lane, Saco.
4. The subdivision involves an existing parcel identified as Map 124, Lot 6, in the C-1 zone. Said parcel is referenced as Book 6384, Page 69 in the York County Registry of Deeds.
5. The applicant has established Right, Title and Interest in the form of a Real Estate Land Sale Contract between Nancy A. Moulton, Seller and Michael Mezoian, Mezoian Development, Buyer, signed and dated July 15, 2016. Also, a warranty deed for the parcel dated Dec. 24, 1992, and recorded Dec. 28, 1992 at the York County Registry of Deeds.
6. The project requires review and approval according to City of Saco Subdivision Regulations and Maine state law, which will include both preliminary plan (approved on Dec. 6, 2016) and final plan review. In that more than 30 acres and more than 15 lots are involved, the project is also subject to Site Location of Development review, which the City will conduct under review authority delegated by the Maine DEP.
7. Reserved: A waiver of submission items 5.2.2(16) sidewalks, curbs, and 11.11 roadway crown, was granted by the Board on Dec. 6, 2016. The Board then voted to find the application for preliminary subdivision to be complete.
8. The applicant has submitted an eight sheet plan set dated July, 2016, latest revision date 1/19/17, entitled "Libby's Landing Subdivision for Mezoian Development, LLC, 4 Driftwood Lane, Saco, Maine." The sheets are listed as follows:

1	<i>Preliminary Plan</i>
2	<i>Existing Conditions and Standard Boundary Survey</i>
3	<i>Roadway Profile Frances Libby Way</i>
4	<i>Roadway Profile Frances Libby Way</i>
5	<i>Grading and Drainage Plan</i>
6	<i>Pond Details</i>
7	<i>Erosion Control Details</i>
8	<i>Roadway Details</i>

9. Traffic generated by the proposed eleven new lots is estimated at approximately 105 trips per day, which does not trigger the need for a traffic impact analysis. A traffic impact fee is addressed in the Conditions of Approval.
10. Pedestrian traffic: no sidewalks exist on Grant Road, nor are any proposed. A waiver is requested for the construction of sidewalk within the proposed Frances Libby Way right of way, and granted on Dec. 6, 2016.
11. Sanitary service is proposed via installation and connection to subsurface septic systems for each lot.
12. Water service is proposed via connection to private wells that would be drilled on each lot.
13. Stormwater management: a stormwater management plan has been submitted for the total developed area of 10-4 acres, and total proposed impervious area of 2.67 acres, which includes the development of five lots along Grant Road that are part of the Boynton Brook subdivision. Buffers and a wet pond are proposed to provide water quality treatment and the attenuation of peak flows. These measures are designed to meet the Basic and General standards required by Chapter 500 of the DEP stormwater rules, and City of Saco stormwater standards.
14. Wetlands: Note 5 on the preliminary subdivision plan identifies Mark Hampton Associates as being responsible for wetlands identification. Note 23 on the plan reports that 91,844 s.f. of wetlands have been identified. No wetlands are reported as being proposed for alteration. The delineation was reviewed by Normandeau Associates, on behalf of the City, see Dec. 8, 2016 memo.
15. Erosion and sedimentation control will be accomplished via temporary and permanent measures employed during construction of foundations and buildings, in accordance with erosion prevention provisions outlined in the Maine Erosion Control and Sedimentation Handbook for Construction: Best Management Practices, 2003, and is addressed on Sheet 7 of the plan set.
16. Based on the proposed 80,000 s.f. or greater average per dwelling unit, no less than 2.5% of the overall parcel, or 40,636 s.f. must be reserved as open space. No open space or recreational facilities are proposed, and the number of proposed units is fewer than twenty. Therefore, the proposed lots are subject to the City of Saco Open Space and Recreational Facilities Impact Fee.

The submissions detailed above are sufficient to make a determination on compliance with City of Saco subdivision review requirements. The Planning Board has considered the following criteria from the Subdivision Regulations, and before granting approval for the final plan has determined that:

1.1.1 Pollution. The proposed subdivision will not result in undue water or air pollution. In making this determination, it has at least considered:

- A. The elevation of the land above sea level and its relation to the flood plains;
- B. The nature of soils and subsoils and their ability to adequately support waste disposal;
- C. The slope of the land and its effect on effluents;
- D. The availability of streams for disposal of effluents; and
- E. The applicable state and local health and water resource rules and regulations;

1.1.2 Sufficient water. The proposed subdivision has sufficient water available for the reasonably foreseeable needs of the subdivision, given the Board's awareness of existing private wells in the area;

1.1.3 Municipal water supply. The proposed subdivision will not cause an unreasonable burden on an existing water supply, as it will not be used;

1.1.4 Erosion. The proposed subdivision will not cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results, based on control measures proposed during construction;

1.1.5 Traffic. Though the proposed subdivision will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed, the applicant has agreed with the Board that a percentage of vehicular trips generated by this subdivision will utilize the Rte. 112/Exit 36 corridors via the Buxton Road/Industrial Park Road intersection. Based on the projected impacts of this project on the Rte. 112 corridor, a traffic impact fee of \$585 per lot is required.

1.1.6 Sewage disposal. The proposed subdivision will provide for adequate sewage waste disposal and will not cause an unreasonable burden on municipal services if they are utilized – private, individual septic systems will service each lot;

1.1.7 Municipal solid waste disposal. The proposed subdivision will not cause an unreasonable burden on the municipality's ability to dispose of solid waste, if municipal services are to be utilized – if the street is accepted by the City, assumedly curbside pick-up will be made available to homeowners, for which capacity exists;

1.1.8 Aesthetic, cultural and natural values. The proposed subdivision will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline, based on the Aug. 19, 2016 letter from the state IF&W;

1.1.9 Conformity with local ordinances and plans. The proposed subdivision conforms with a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan

or land use plan, if any. In making this determination, the municipal reviewing authority may interpret these ordinances and plans;

1.1.10 Financial and technical capacity. The subdivider has adequate financial and technical capacity to meet the standards of this section based on submittals found in Sections 3 and 4 of the bound application;

1.1.11 Surface waters; outstanding river segments. Whenever situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond or river as defined in Title 38, chapter 3, subchapter I, article 2-B, the proposed subdivision will not adversely affect the quality of that body of water or unreasonably affect the shoreline of that body of water.

A. When lots in a subdivision have frontage on an outstanding river segment – lots do not have frontage on an outstanding river segment.

1.1.12 Ground water. The proposed subdivision will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water, based on the Groundwater Impact Study conducted by Sweet Associates, and submitted in the bound application;

1.1.13 Flood areas. Based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, and information presented by the applicant whether the subdivision is in a flood-prone area. If the subdivision, or any part of it, is in such an area, the subdivider shall determine the 100-year flood elevation and flood hazard boundaries within the subdivision. The proposed subdivision plan must include a condition of plan approval requiring that principal structures in the subdivision will be constructed with their lowest floor, including the basement, at least one foot above the 100-year flood elevation;

1.1.14 Freshwater wetlands. All freshwater wetlands within the proposed subdivision have been identified on the plan submitted as part of the application, regardless of the size of these wetlands, based on the delineation by Mark Hampton, and review by Normandeau Associates;

1.1.15 River, stream or brook. Any river, stream or brook within or abutting the proposed subdivision has been identified on any maps submitted as part of the application. For purposes of this section, "river, stream or brook" has the same meaning as in Title 38, section 480-B, subsection 9;

1.1.16 Storm water. The proposed subdivision will provide for adequate storm water management, as verified by the stormwater management report submitted with the application, and subject to review by the City Engineer;

1.1.17 Spaghetti-lots prohibited. If any lots in the proposed subdivision have shore frontage on a river, stream, brook, great pond or coastal wetland as these features are defined in Title 38, section 480-B, none of the lots created within the subdivision have a lot depth to shore frontage ratio greater than 5 to 1 – none are proposed;

1.1.18 Lake phosphorus concentration. The long-term cumulative effects of the proposed subdivision will not unreasonably increase a great pond's phosphorus concentration during the construction phase and life of the proposed subdivision – no great pond is affected; and

1.1.19 Impact on adjoining municipality. For any proposed subdivision that crosses municipal boundaries, the proposed subdivision will not cause unreasonable traffic congestion or unsafe conditions with respect to the use of existing public ways in an adjoining municipality in which part of the subdivision is located – the proposed subdivision does not cross a municipal boundary.

Based on the application submitted and representations made by the applicant to the Board, the project meets the standards of approval for a preliminary subdivision plan as outlined in the City of Saco Subdivision Regulations.

Voted by the Planning Board on February 7, 2017.

On Behalf of the Planning Board, Signed:

Bob Hamblen
City Planner

Date

Saco Planning Board

Libby's Landing Subdivision, Final Plan

Conditions of Approval

February 7, 2017

1. All details will conform to City of Saco standards, including but not limited to the City of Saco Zoning Ordinance and Subdivision Regulations.
2. Final approval is also conditioned upon compliance by the applicant with any and all oral commitments regarding the project which were specifically made by the applicant to the Board in the course of its deliberations.
3. This approval is governed by the action taken by the Saco Planning Board for final subdivision review.
4. All work shall be in conformance with the approved plans, an eight sheet plan set dated July, 2016, latest revision date 1/19/17, entitled "Libby's Landing Subdivision for Mezoian Development, LLC, 4 Driftwood Lane, Saco, Maine."
5. No deviations from the approved plans are permitted without prior approval from the Planning Board for major changes, and from the City Planner for minor changes. The determination of major or minor shall be made by the City Planner.
6. The applicant shall, upon beginning construction of the proposed Frances Libby Way, post a sign, of a size no smaller than two feet by three feet and with two-inch letters in black on a white background, which states the following: THIS IS NOT A PUBLIC WAY OWNED BY THE CITY OF SACO. The sign shall further identify the owner of the way and its address.
7. The applicant shall confer with the Parks and Recreation Department as to species selection and placement prior to planting of street trees.
8. The completed subdivision is projected to generate 105 Average Daily Trips, a percentage of which are anticipated to impact the Rte. 112 corridor. A recent update of the Rte. 112 Corridor Study recommends a mix of mitigation measures designed to address existing and potential operational and safety deficiencies within the corridor, including signalization of the Rte. 112 and Jenkins Road intersection upon achieving MDOT warrants, and restriping Rte. 112 from Saco Middle School to the Jenkins Road intersection in order to create a center turn lane. Based on the projected impacts of this project on the Rte. 112 corridor, a traffic impact fee of \$585 per lot is required.

9. The applicant shall confer with the Department of Public Works prior to the installation of a streetlight at the end of the proposed Frances Libby Way.

10. The applicant shall be responsible for providing the following basic services until street acceptance:

- Snow plowing of all ways;
- Trash pick-up from all inhabited units;
- Maintenance of all roadway surfaces, drains, sewers and other utilities;
- Installation of street signs and lights; Lights are to be energized;

The costs of performing the provisions of this section shall be added into the bond or surety provided for in Article 8. The applicant shall, prior to the sale or transfer of a lot, notify the grantee that the applicant is responsible for providing the basic services as outlined above until the street is accepted to city standards and accepted by the city. Nothing herein shall be interpreted as requiring the applicant to provide these services to streets or utilities duly accepted by the City of Saco.

11. A performance guarantee acceptable to the City of Saco shall be established for 150% of the construction cost of all required improvements, including but not limited to the following: utility installation, landscaping, paving, work within ROW, road construction, drainage, loam & seed, and sediment & erosion control. To establish the amount of the financial guarantee, the applicant shall provide the City with itemized, per unit cost estimates, and a construction schedule, at least one week before any anticipated site work. This financial guarantee shall be maintained for a period not less than three months beyond the anticipated completion of the project.

The performance guarantee shall contain:

- a construction schedule,
- itemized cost estimates for each element of construction taking into account inflation,
- a provision permitting the City to review the status and amount of Letter of Credit or deposit and to require an increase if warranted by changing economic conditions or other circumstances, said determination to be made in the sole judgment and discretion of the City,
- provisions for inspections of each phase of construction,
- provisions for the release of part or all of the performance guarantee to the developer. While partial draws are permitted, the amount of each shall be no less than twenty percent (20%) of the original amount. While partial draws may be requested upon completion of construction items, the City will determine in its sole judgment whether the requested release of funds shall be approved,
- and, a date after which the developer will be in default and the City shall have access to the funds to finish construction. Said date shall be thirty-six (36) months after the posting of the financial guarantee. All street and infrastructure construction shall be completed within thirty-six (36) months after the posting of the financial guarantee. All streets and infrastructure intended for City acceptance shall be offered to the City as outlined in Section 11.25 of the Subdivision Regulations and in Section 186-37 of City Code within ninety (90) days of said date.

12. Prior to work commencing, the applicant shall establish a construction inspection account equal to 3% of the base cost of the Letter of Credit.
13. No work shall commence until one mylar set and three paper sets of the final plans have been received by the Planning Office, signed by the Planning Board and recorded at the York County Registry of Deeds.
14. Prior to any construction activities, the applicant and contractor shall meet with the City Planner and City Engineer to review plans, inspection schedules and erosion control practices.
15. The final plan shall be submitted in digital format as a single composite electronic file. The plan may be submitted on a floppy disc, CD-ROM, via e-mail, or other format acceptable to the City Planner, and shall be compatible with commonly used CAD and/or GIS software. See Section 6.2.6 of the Subdivision Regulations for further detail.
16. As-built plans shall be submitted before the final release of the Letter of Credit, and shall be submitted in digital format as a single composite electronic file. The plan may be submitted on a floppy disc, CD-ROM, via e-mail, or other format acceptable to the City Planner, and shall be compatible with commonly used CAD and/or GIS software. Three paper copies and one mylar copy of the as-built plans shall be submitted.
17. Stumps generated on-site shall be ground and used on-site for erosion control, or shall be hauled off-site. Stumps shall not be buried within the proposed public right of way.
18. No wetland impacts have been permitted. Any wetland impacts associated with lot development may be subject to permitting by lot owners, and/or developers of individual lots.
19. Proposed driveway locations to individual lots are subject to review and approval by the Department of Public Works prior to the issuance of a building permit.
20. In lieu of the provision of open space or recreational facilities, an Open Space and Recreational Facilities Impact Fee shall be paid to the Code Enforcement Office prior to the issuance of building permits for all lots.
21. The design engineer shall inspect the construction and stabilization of the stormwater management pond to be built on the site. Inspections shall consist of weekly visits to the site to inspect the construction (from initial ground disturbance to final stabilization of the pond) of the pond's embankment, stormwater inlet, underdrained gravel outlet, gravel outlet filter material makeup and placement, outlet control structure, clay liner and cover material, and emergency spillway. If necessary, the inspecting engineer shall interpret the pond's construction plan for the contractor. Once the pond is constructed and stabilized, the inspecting engineer will notify the City within 14 days to state the pond has been completed. Accompanying the engineer's notification shall be a log of the engineer's inspections giving the date of each inspection, the time of each inspection, and the items inspected on each visit, and include any testing data or sieve analysis data of the gravel filter media. An inspection of the underdrained gravel outlet shall also be performed by a professional

engineer one year after the final stabilization of the pond. The engineer shall notify the City as to the outlet's effectiveness and determine any maintenance items that are needed.

22. Until such time that the stormwater facilities are offered and accepted by the City, the applicant shall be required to perform routine inspection and maintenance of the stormwater facilities as outlined in the operations and maintenance manual development specifically for the site. A copy of the annual inspection and maintenance report including inspection log(s) shall be submitted annually (by July 15th of each year) to the City Public Works Department.
23. As part of the project's as-built certification for roadway and utility infrastructure, the applicant shall provide a Stormwater Basin As-Built Certification. Prior to the issuance of a Certificate of Occupancy for any lot, the Applicant shall submit evidence in the form of a letter with as-built survey plan prepared and stamped by a Professional Engineer who either prepared the Post-Construction Stormwater Management Plan and its associated Facilities or supervised the Plan and Facilities construction and implementation. The letter or plan shall certify that the Stormwater Management Facilities have been installed in accordance with the approved Post-Construction Stormwater Management Plan and that they will function as intended by said Plan. The as-built survey plan shall be performed for all post-construction stormwater facilities to document general conformance with the approved plans.
24. The field location and delineation of the stream buffers shall be performed prior to the start of any clearing activities on the site. Prior to the start of construction, copies of the recorded buffer deed restrictions shall be provided to the Planning Department.
25. After all improvements have been satisfactorily constructed, installed and inspected by the City or its agents, the developer may submit a request that the City accept the proposed street. Before the City accepts the street, the Developer is required to submit a metes and bounds description specific to the street requested to be accepted. The description shall be prepared and certified by a Registered Land Surveyor and shall reference monuments or other physical property points shown or referenced on the approved subdivision plan and record drawings as required by Article 11.23 of the Subdivision Regulations. The description shall be suitable for filing with the York County Registry of Deeds. The Planning Board shall not recommend that the City accept a street until the metes and bounds description has been furnished.

With these Conditions and the accompanying Findings of Fact, the Saco Planning Board hereby finds that the applicant has satisfied the requirements set forth in the City of Saco Subdivision Regulations for the final plan for the Libby's Landing subdivision. Approval is hereby granted for the final subdivision plan, contingent on these Conditions of Approval. Voted by the Saco Planning Board on January 7, 2017.

On behalf of the Planning Board,

City Planner

Date



Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors

28 State Street Tel. (207) 839-2771
Gorham, Maine 04038 Fax (207) 839-8250

LESTER S. BERRY
WILLIAM A. THOMPSON
ROBERT C. LIBBY Jr
WALTER E. PELKEY
ANDREW S. MORRELL
STEVEN J. BLAKE

January 19, 2017

Bob Hamblen
Saco City Planner
300 Main Street
Saco, Me. 04072

Re: Libby's Landing – Comment Responses

Dear Bob;

We have reviewed the comments from DPW and offer the following responses. We have included the original comment (*italics*) and our responses (**bold**). The following is a list of attachments:

- Attachment 1: Revised Homeowners Association Covenants
- Attachment 2: Parcel Deed
- Attachment 3: Draft Buffer Deed Restrictions

Please Note: The current parcel deed has been included. Since the last submission, Mezoian Development has acquired the parcel from Nancy Moulton. The Plan Notes on the Subdivision Plan have been updated accordingly.

Comments from DPW (Received December 29, 2016)

1. *Provide conversion for vertical datum sited on plans to 1988 NAVD datum required by City ordinance.*

The conversion to NAVD 88 has been included on Sheet 1.

2. *Draft language for the buffer deed restrictions shall be submitted to the City for review and approval. As a condition of approval, a copy of the recorded deed restrictions shall be provided to the City prior to the start of construction. The extent of the stream buffer shall be delineated in the field with visible markers. The location of the stream buffers and setting of markings shall be performed prior to any clearing on the property.*

Refer to Attachment 3 for Draft Buffer Deed Restriction language.

3. *After review of the Grant Road ditch grading, we would request the grading and drainage easement be provided with a standard width of 15' along the Grant Road frontage of Lots 1 and 2. Similarly, after review of roadside ditch grading along the interior subdivision road, we would request a similar standard width of 20' for the grading and drainage easement along the frontage of all other lots on the interior road.*

The easements have been adjusted as requested.

4. *While the new access road into the site may meet the minimum sight line distance requirements of 400', the vertical geometry of Grant Road gives the impression of much shorter sight lines and is very deceiving. Shifting of the proposed roadway in a westerly direction will greatly improve this condition. We would recommend the City's traffic peer review consultant review this proposed intersection and provide recommendations to the City.*

We have reviewed the location of the access road entrance with the City's Traffic Review Consultant and have relocated the entrance based on our discussion.

5. *Provide a culvert for the new driveway accessing the fire cistern tank location.*

A culvert has been added to the plans.

6. *Provide typical detail for the Grant Road embankment and ditch regarding work. As shown on the plan view (Sheet 3), the typical section for the roadside swale should provide for a minimum 3' wide shoulder along the edge of pavement. From that point, the roadside embankment should be graded at a 3H:1V to the invert of the ditch. The backslope of the ditch shall be graded at either 3H:1V or maximum 2H:1V.*

A typical detail has been added, see Sheet 8.

7. *Based upon the 15" driveway culvert size recommendations, the minimum depth of the roadside ditches shall be identified on the typical section as being 3.8' below centerline grade. This should be identified on the typical road section.*

The typical section has been revised as requested.

8. *With the revised location and grading for the stormwater pond access road, how will runoff from lot 10 get to the pond? It appears that a drainage swale at the back of lot 10 may be required with a culvert beneath the pond access road to the inlet forebay.*

A drainage swale and culvert has been added, see Sheets 5 and 6.

9. *The turnaround on the maintenance access road should provide for 35' long T-extensions (from centerline intersection) with 20' radii.*

The maintenance access road turnaround has been revised as requested.

10. *An anti-seep collar should be provided on the 6" drain line. In addition, the anti-seep collar for the primary outlet should be moved to the 18" pipe on the downstream side of the outlet control structure.*

An anti-seep collar has been added to the 6" drain line. The anti-seep collar for the primary outlet has been relocated as requested.

11. *The applicant shall confer with the DPW prior to the installation of a streetlight at the end of the proposed subdivision road. DPW may choose to require a hardwired streetlight or a solar-powered streetlight.*

A note has been added to the plans requiring direction from DPW prior to installation of streetlights.

12. *In order to maintain clear sight lines at intersections, DPW is requesting a corner sight line easement be conveyed to the City that encompasses a triangular area at the corner of Lots 1 and 2. This easement shall restrict all vegetation and structures in excess of 3' in height above adjacent curb line elevation. A copy of the standard easement layout is attached to this review memo.*

Corner Sight Line Easements have been added to the Subdivision Plan.

Enclosed are revised plans for review. If you have any questions, please feel free to call.

Sincerely,



Steven J. Blake, P.E.
Project Engineer

Cc: M. Mezoian

**LIBBY’S LANDING DECLARATION OF PROTECTIVE COVENANTS,
CONDITIONS, RESTRICTIONS AND COMMON EASEMENTS**

This Declaration of Protective Covenants, Conditions, Restrictions and Common Easements, made this _____ day of _____, 201____, by **MEZOIAN DEVELOPMENT, LLC**, a Maine Limited Liability Company with an established place of business in the City of Saco, York County, Maine (hereinafter called “Declarant”); and

WHEREAS, Declarant owns, by deed from Nancy A. Moulton, dated December 28, 2016, and recorded in the York County Registry of Deeds in Book 17395, Page 393, certain real estate situated in the City of Saco, York County, Maine, and depicted upon Subdivision Plan dated July, 2016, as revised through _____, 201____, approved by the City of Saco on _____, 2017, prepared by BH2M, and recorded in said Registry of Deeds in Plan Book _____, Page _____ (hereinafter called the “Plan”), as Lots No. 1 through 11; and

WHEREAS, Declarant desires to develop an eleven (11) lot residential subdivision on property to be known as Libby’s Landing (Lots No. 1 through 11, collectively, called the “Property”, the “lots” or in the singular the “lot”) with one interior roadway known as Frances Libby Way; and

WHEREAS, Declarant desires to assure quality standards for the wholesome development of the Property and to promote the interests and welfare of each owner of a part of the Property and therefore, desires to subject the Property to protective covenants and common easements, all as set forth hereinafter.

NOW, THEREFORE, Declarant hereby declares that the Property is and shall be held, occupied, improved, transferred, leased and otherwise used and disposed of subject to the protective covenants and common easements set forth herein, all of which are declared to be in furtherance of a uniform scheme of mutual equitable servitudes upon each and every portion thereof, in favor of each and every other portion thereof, and to create reciprocal rights and privity of contract and estate between all persons acquiring or owning an interest in any portion thereof, which protective covenants and common easements shall be determined to run with the land and be a burden and benefit upon and to, and be enforceable by, all persons having any interest in any portion of the Property.

**ARTICLE I
DEFINITIONS**

Section 1: “Libby’s Landing” shall mean and refer to the lots and the property which are made subject to the terms of this Declaration, as the same may be amended from time to time.

Section 2: “Declarant” shall mean and refer to Mezoian Development, LLC, its successors and assigns, if such successors or assigns should acquire more than one undeveloped

lot from the Declarant for the purpose of development of the Libby's Landing subdivision and if, in the conveyance to such successor or assign, the Declarant expressly transfers to such party Declarant's rights hereunder.

Section 3: "Declaration" shall mean and refer to this Declaration of Protective Covenants, Conditions, Restrictions and Common Easements applicable to the property and as recorded in the York County Registry of Deeds, as the same shall be amended from time to time.

Section 4: "Lot" shall mean and refer to those numbered parcels shown upon the Plan. Lot shall also mean any residential lot or parcel of land which Declarant elects to make subject to the terms of this Declaration and which is shown upon a survey plan or plans recorded in the York County Registry of Deeds.

Section 5: "Owner" shall mean and refer to the record owner, whether one or more persons or entities, of a fee simple title to any lot which is a part of the property, including contract companies, but excluding those having such interest merely as security for the performance of an obligation.

Section 6: "Property" shall mean and refer to that certain real property hereinbefore described and shown on the plan. In addition, the property shall include any lot or lots which may be created from any other property of Mezoian Development, LLC, whether now owned or acquired in the future, which is contiguous to the original property or contiguous to any property which has been so added (herein the "Additional Property"); provided, however, that any such additional property will only become subject to the terms and provisions of this Declaration upon an amendment executed by the Declarant, expressly making such additional property subject to the terms hereof.

Section 7: "Road Maintenance" shall refer to and include, but not be limited to, snow plowing, sanding, repair, replacement and upkeep of any drainage and erosion control and stormwater management system.

ARTICLE II PROTECTIVE COVENANTS AND RESTRICTIONS

Each conveyance by Declarant, its successors and assigns, of any lot within the Property shall be subject to the following protective covenants and restrictions:

Section 1: Each lot shall be used for residential purposes only and shall be occupied by not more than one residential structure, said residential structure to include no buildings or structures other than the following, viz: one detached dwelling structure designated as a residence for one or two families, a garage or garages for private use, constructed either as an integral part of the dwelling or as a detached building and adapted for the storage of not more than six (6) automobiles in total for all garages, an in-ground swimming pool, suitable garden structures including a greenhouse and such additional structures as shall from time to time be

used in connection with residential uses situated in similar neighborhoods. Except as permitted under Sections 11, 12 and 13 of this Article, no such lot shall be used for access to any other land or for the use, introduction, maintenance or repair of utility services benefitting any other land not part of the Libby's Landing subdivision. As used herein, the term "one detached dwelling structure designated as a residence for one or two families" shall mean a structure in which the second residential unit is of the nature of an "in-law" apartment, that is, its size and configuration is subordinate to the main living area and the exterior appearance is in the nature of a single family residence rather than a duplex structure.

Section 2: The keeping of poultry, swine, or any livestock, other than household pets normally housed in a dwelling house, shall not be permitted, nor shall kennels be permitted, and no automobile trailer, house trailer, recreational vehicle, boat, boat trailer or similar vehicle, shall be brought upon, or be maintained or permitted to remain on the above described premises, unless stored in such a manner that the same is not observable from any street or, if observable, the same is of such condition and stored in such a manner that it does not adversely impact property values in the neighborhood.

Section 3: Notwithstanding the provisions of Sections 1 and 2 of this Article, a barn and fenced paddock enclosure(s) may be constructed on Lot 11 for the purpose of keeping up to four (4) horses and up to ten (10) chickens.

Section 4: All proposed structures allowed under Sections 1 and 3 of this Article shall be reviewed by the Declarant before any construction commences and shall be placed on permanent masonry foundations and only the use of architectural roofing shingles shall be allowed. The use of simulated or artificial brick or stone composition sidings shall be prohibited unless the appearance, finish and durability of the same shall be comparable to natural materials. Accessory structures on any Lot must be constructed of the same or compatible materials as specified for the dwelling constructed thereon. All propane or other utility tanks must be enclosed and finished to match the exterior of the residence on the Lot.

Section 5. Until the expiration of ten (10) years from the date of the sale of Mezoian Development, LLC's entire interest in the Libby's Landing subdivision, all plans, specifications and designs including, plans showing the location on the Lot, design, exterior appearance, materials, and colors of all buildings and structures, the mailbox, mailbox post, driveway, landscaping and walks, fences, decks or patios, and top of the foundation wall elevations must receive the written approval of the Declarant, its successors and specific assigns. The location of any barn and paddock fencing on Lot 11, together with a plan for methods of confining animals on Lot 11, and for the maintenance of all areas containing such horses in a safe and sanitary condition, shall likewise require written approval of the Declarant, its successors and specific assigns. Such approval shall not be unreasonably withheld but such plans, specifications and designs must, in the opinion of the Declarant, be harmonious with other structures in the subdivision. No fences or free-standing walls exceeding six (6) feet in height shall be erected on a Lot, and any fence shall be subject to the design review approval requirement.

Section 6: All exterior finishing on any building and all landscaping to the grounds must be completed within one (1) year of the commencement of construction. Completed, as used

herein, includes, but is not limited to, porches, steps, decks, platforms, carports or other outside living terraces, and grading and seeding of lawns.

Section 7: No junk, abandoned or unregistered vehicle shall be allowed on the premises, except as may be permitted under Section 2 of this Article, and no accumulations of trash or debris shall be allowed on the premises.

Section 8: No Owner may alter the area encompassed within the bounds of the proposed drainage easement areas as indicated on the aforesaid Plan in any manner which would impede or adversely affect the drainage of Libby's Landing subdivision. All homes must connect to public storm drainage systems.

Section 9: No clotheslines shall be permitted and no satellite television antennas or similar receiving devices shall be permitted unless eighteen (18) inches in diameter or less and shall be located at the rear of the building in a location specifically approved by Declarant.

Section 10: The above Sections shall not apply to nor be binding upon any remaining land owned by Mezoian Development, LLC, or which may hereinafter be acquired by it or any entity under common control with it, and which may lie near or adjacent to the Libby's Landing subdivision.

Section 11: Mezoian Development, LLC, for itself, its successors and specific assigns, reserves the right to use all of the streets and ways shown on the Plan of Libby's Landing subdivision for access to and egress from any other land adjacent or near to said Libby's Landing subdivision that it may own or hereafter acquire, and for the use, introduction and maintenance of all utility services to Libby's Landing subdivision, or to any other adjacent or nearby land owned by it or its specific assigns, or hereafter acquired by it or them. It is further agreed and understood that no purchaser of such adjacent or near land from Mezoian Development, LLC, shall have the right to use such streets and ways unless such rights have been specifically granted by Mezoian Development, LLC.

Section 12: Mezoian Development, LLC, reserves for itself, its successors and specific assigns, the right and privilege to alter, amend, reconfigure, combine or re-subdivide any unsold lots on the Libby's Landing subdivision Plan, or any adjacent real estate in its ownership, or to use any such lots for access to and egress from, and for the use, introduction, installation and maintenance of utility services to any adjacent land owned by Mezoian Development, LLC, or hereafter acquired by it or its specific assigns, subject to approval of the City of Saco Planning Board. It is further agreed and understood that no purchaser of such adjacent or near land from Mezoian Development, LLC, shall have the right to use any such lots unless such rights have been specifically granted by Mezoian Development, LLC.

Section 13: Mezoian Development, LLC, reserves the right to use those areas marked as "drainage easements" or "utility easements" on the above referenced plan for the purpose of providing drainage for its adjacent or nearby land, either now owned or hereafter acquired, or for adjacent or nearby land of its specific assigns.

Section 14: No signs advertising the sale of a Lot or structure thereon shall be permitted to be erected anywhere in the Libby's Landing subdivision, other than that one sign, having dimensions of not more than twenty-four (24) inches by twenty-four (24) inches, may be placed upon any Lot, except that, during the period of construction of the improvements allowed to be constructed upon any Lot, the building may maintain one construction information sign of a size and design approved by Mezoian Development, LLC.

Section 15: Mezoian Development, LLC, or an entity under common control with it, may acquire adjacent land to Libby's Landing subdivision and such land may be developed by it for any uses permitted under the terms of applicable state, federal and local land use statutes, ordinances and regulations.

Section 16: All deeds for the conveyance of Lots shall make reference to Note 26 on the Plan and shall include a restriction that Limited Disturbance Buffers shall be left undisturbed except for the removal of dead or diseased trees.

Section 17: Those areas designed on the Plan as "100' Stream Setback" (hereinafter called the "Stream Buffer") shall be subject to the following restrictions which shall be included in all deeds for the conveyance of Lots 2, 4, 6 and 8:

- (a) Unless the owner of a Lot that is subject to a Stream Buffer obtains prior written approval of the Maine Department of Environmental Protection, the Stream Buffer area must remain undeveloped in perpetuity.
- (b) No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk, waste, pollutants or other fill material shall be placed, stored or dumped within Stream Buffer areas, nor shall the topography of the area be altered or manipulated in any way.
- (c) No trees may be cut or sprayed with biocides except for the normal maintenance of dead, windblown or damaged trees and for pruning of branches below a height of twelve (12) feet, provided two-thirds (1/3) of the tree's canopy is maintained.
- (d) No undergrowth, ground cover vegetation, leaf litter, organic duff layer or mineral soil may be disturbed except that one winding path no wider than six (6) feet and that does not provide a downhill channel for runoff, is allowed through the Stream Buffer area on each Lot.
- (e) No building or other temporary or permanent structure may be constructed, placed or permitted to remain within the Stream Buffer area, except for a sign, utility pole or fence.
- (f) No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted within the Stream Buffer.

(g) Any level lip spreader directing flow to the Stream Buffer must be regularly inspected and adequately maintained to preserve the function of the level spreader.

ARTICLE III EASEMENTS

Section 1: Creation of Easements. The following easements are hereby created:

(a) The Declarant reserves the right to maintain on the Property such advertising signs as may comply with the applicable governmental regulations, which signs may be placed in any location on the property and may be relocated or removed, all at the sole discretion of the Declarant. This easement shall continue until the Declarant has conveyed all lots to owners other than the Declarant.

(b) The Property shall be, and hereby is, made subject to easements in favor of the Declarant, appropriate utility and service companies, cable television companies and governmental agencies or authorities for such utility and service lines and equipment as may be necessary or desirable to serve any portion of the Property. The easements created by this Article shall include, without limitation, rights of the Declarant, or the providing utility or service company, or governmental agency or authority, to install, lay, maintain, repair, remove and replace gas lines, pipes and conduits, water mains and pipes, sewer and drain lines, drainage ditches, pump stations and leach fields, telephone wires and equipment, television equipment and facilities (cable or otherwise), electrical wires, conduits and equipment and ducts and vents over, under, through, along and on the Property. Notwithstanding the foregoing provisions of this Article, any such easement through a lot shall be located either in substantially the same location as such facilities or similar facilities that existed at the time of first conveyance of the lot by Declarant or occupancy of the lot by its occupants.

(c) The lots shall be and are hereby made subject to an easement in favor of the Declarant, and the agents, employees and independent contractors thereof, for the purpose of the inspection, upkeep, maintenance, repair and replacement, if applicable, of the lots and any improvements and fixtures located thereon, pursuant to its rights to enforce the provisions of this Declaration.

(d) All easements, rights and restrictions described and mentioned in this Article are easements appurtenant, running with the land and the property, and (except as may be otherwise expressly provided herein or in the instrument creating the same) shall continue in full force and effect until the termination of this Declaration.

Section 2: Reservation of Easement. So long as the Declarant has title to any lot or any other portion of the Property, the Declarant reserves the right to grant to any third party any license or easement in, on, over or through the Property, in addition to and not in limitation of those set forth above, which license or easement is determined by the Declarant, in its reasonable

judgment, to be necessary or desirable for the development or improvement of the Property. Any such license or easement granted hereunder shall be located so as not to materially interfere with the use or occupancy of the lots by their occupants, and may be recorded by the Declarant at its sole cost and expense. Declarant will obtain Planning Board approval prior to the granting of said easement rights.

**ARTICLE IV
ROAD MAINTENANCE BY DEVELOPER**

Frances Libby Way shall be constructed to City of Saco standards and shall be private until the City of Saco accepts said roadway. Until such time as the City of Saco accepts said roadway, all lots will be subject to the following:

Section 1: All lots shall be benefitted by an appurtenant easement over Frances Libby Way for purposes of ingress and egress and location of utilities and all customary uses. It is the intention of the Declarant to petition the City of Saco to accept the roadway as a public road to be maintained by the City of Saco.

Section 2: Upon the issuance of the first occupancy permit, the road shall not be gated or otherwise restricted without the prior approval of the City of Saco Planning Board.

Section 3: Said road will require plowing and sanding in the winter and other repair, maintenance and replacement, as well as the upkeep of the drainage and erosion control systems as originally approved by the City of Saco, as hereinafter set forth. In order to clearly identify the matters associated therewith, a Road Maintenance Agreement, dated _____, 201__, has been recorded in the York County Registry of Deeds in Book _____, Page _____, reference to which is hereby made for its terms and conditions.

Section 4: The Declarant shall be responsible, initially, for maintaining and plowing the road and for the upkeep of the drainage and erosion control systems. No later than the conveyance of the sale of the last Lot, the Declarant shall convey the roadway to the City or Association, and the City or Association shall accept the conveyance of the roadway by deed. Upon such conveyance all obligations and responsibilities of the Declarant with respect to the road shall terminate and cease.

**ARTICLE V
AMENDMENT OF DECLARATION**

Section 1: The Declarant may amend this Declaration at any time, as long as the Declarant still owns a Lot in Libby's Landing subdivision.

Section 2: This Declaration may be amended at any time and from time to time by written instrument duly executed by the Owners of record of two (2) or more of the Lots, and by the respective mortgagees of record of those Owners, and recorded in the York County Registry of Deeds.

Section 3: Notwithstanding the foregoing, no amendment to Article IV, Section 2 shall be effective unless approved by the City of Saco Planning Board.

Section 4: All Owners of Lots are subject to the terms and provisions contained or referred to in this Declaration. The acceptance of a deed of conveyance of a Lot other than as security, or the entering into of occupancy of any Lot, shall signify that the provisions contained or referred to in this Declaration are accepted and ratified by such Owner or occupant and shall further signify that the Owners acknowledge the authority of the Lot Owners to enforce the covenants and restrictions with run with the land, by suit or otherwise. All the provisions contained or referred to herein shall be deemed and taken to be covenants running with the land and shall bind any person having at any time any interest or estate in a Lot (except as mortgage security) as though such provision were recited and stipulated at length in each and every deed or conveyance of a Lot.

If any one or more of these covenants, or any part thereof, shall be invalid or unenforceable, such invalidity or unenforceability shall not affect the remaining portions hereof, which shall remain in full force and effect.

IN WITNESS WHEREOF, Mezoian Development, LLC, being the owner of all of the Lots at the Property, has caused this Declaration of Protective Covenants and Common Easements to be executed in its name and behalf by Michael H. Mezoian, its Manager, thereunto duly authorized, on this _____ day of _____, 2016.

WITNESS:

MEZOIAN DEVELOPMENT, LLC

By:

Michael H. Mezoian
Its Manager

STATE OF MAINE
YORK COUNTY, ss.

_____, 2016

Then personally appeared the above named Michael H. Mezoian, in his capacity as Manager of Mezoian Development, LLC, and acknowledged the foregoing instrument to be his free act and deed in said capacity, and the free act and deed of said Mezoian Development, LLC.

Before me,

Barbara J. Dresser
Attorney at Law

Attachment 2
Parcel Deed



BK 17395 PGS 393 - 394 12/30/2016 01:28:04 PM
 INSTR # 2016056216 DEBRA ANDERSON
 RECEIVED YORK SS REGISTER OF DEEDS

WARRANTY DEED
 Maine Statutory Short Form

KNOW ALL MEN BY THESE PRESENTS,

THAT **NANCY A. MOULTON**, of Key West, County of Monroe, State of Florida,
 for consideration paid,

Grant to **MEZOIAN DEVELOPMENT, LLC**, a Maine limited liability company of Saco, County of York, State of Maine, whose mailing address is 4 Driftwood Lane, Saco, ME 04072, with **warranty covenants** the land in Saco, County of York, State of Maine, described as follows:

A certain lot or parcel of land located on the southerly sideline of Grant Road, so-called, in the City of Saco, County of York and State of Maine; said parcel being more particularly described as follows:

Beginning at a capped iron rod found (PLS #2190) on the southerly sideline of said Grant Road at the northeasterly corner of land now or formerly of Aubrey Gray;

thence N 72°-37'-46" E along the southerly sideline of said Grant Road a distance of 217.61 feet to a capped iron rod to be set (PLS #2190);

thence N 67°-43'-43" E along the southerly sideline of said Grant Road a distance of 635.52 feet to a capped iron rod to be set (PLS #2190) and remaining land of Nancy Moulton;

thence S 16°-35'-47" E along the remaining land of the remaining land of Nancy Moulton a distance of 706.69 feet to a capped iron rod to be set (PLS #2190);

thence N 82°-26'-21" E along the remaining land of Nancy Moulton a distance of 370.67 feet to a capped iron rod to be set (PLS #2190);

thence S 38°-01'-50" E along the remaining land of Nancy Moulton a distance of 151.46 feet to a capped iron rod to be set (PLS #2190) and land now or formerly of Claire Grant;

thence S 51°-57'-55" W along the land of Claire Grant and along land now or formerly of Richard Grant a distance of 1702.88 feet to a capped iron rod to be set (PLS #2190) and remaining land of Nancy Moulton;

Maine R.E. Transfer Tax Paid

thence N 38°-29'-42" W along the remaining land of Nancy Moulton a distance of 1,093.52 feet to a capped iron rod to be set (PLS #2190) and land now or formerly of David & Cathryn Bissonnette;

thence N 73°-24'-22" E along the land of said Bissonnett, along land now or formerly of Mezoian Development, LLC and along the land of said Gray a distance of 721.49 feet to a capped iron rod found (PLS #2190);

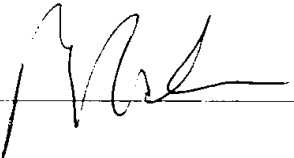
thence N 16°-35'-47" W along the land of said Gray a distance of 447.92 feet to the point of beginning.

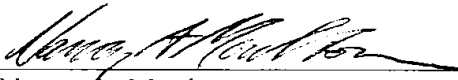
The above described parcel contains 1,625,484 sf (37.32 acres). All bearings refer to magnetic north as observed in 1993.

Being a portion of the premises conveyed to Nancy A. Moulton by deed of Lesley P. Moulton and Frances A. Moulton dated December 24, 1992 and recorded in the York County Registry of Deeds in Book 6384, Page 69.

IN WITNESS WHEREOF, I, the said **NANCY A. MOULTON**, have hereunto set my hand and seal, this 28th day of December, 2016.

**SIGNED, SEALED AND DELIVERED
IN PRESENCE OF**

_____ 

_____ 
Nancy A. Moulton

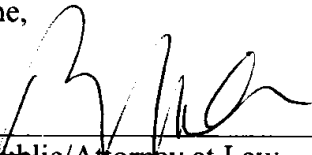
**STATE OF MAINE
YORK, ss.**

_____ 12-28, 2016

Then personally appeared the above named **NANCY A. MOULTON** and acknowledged the foregoing instrument to be her free act and deed.

2015
↓

Before me,

_____ 
Notary Public/Attorney at Law
BARBARA J. DRESSSEL

JONES & WARREN, P.A.
MAIN STREET TITLE CO.
146 MAIN STREET, SUITE 204
SACO, ME 04072

1. **Restrictions on Restricted Buffer Area.** Unless the owner of the Restricted Buffer Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must remain undeveloped in perpetuity. To maintain the ability of the Restricted Buffer Area to filter and absorb stormwater, and to maintain compliance with the Stormwater Management Law and the permit issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.
 - a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material will be placed, stored or dumped on the Restricted Buffer Area, nor shall the topography of the area be altered or manipulated in any way;
 - b. No trees may be cut or sprayed with biocides except for the normal maintenance of dead, wind-blown or damaged trees and for pruning of tree branches below a height of 12 feet provided two thirds of the tree's canopy is maintained;
 - c. No undergrowth, ground cover vegetation, leaf litter, organic duff layer or mineral soil may be disturbed except that one winding path, that is no wider than six feet and that does not provide a downhill channel for runoff, is allowed through the area;
 - d. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for a sign, utility pole or fence;
 - e. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area;
 - f. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

2. **Enforcement.** The MDEP may enforce any of the Restrictions set forth in Section 1 above.
3. **Binding Effect.** The restrictions set forth herein shall be binding on any present or future owner of the Restricted Buffer Area. If the Restricted Buffer Area is at any time owned by more than one owner, each owner shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner's property.
4. **Amendment.** Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the owner or owners of the Restricted Buffer Area and by the MDEP.
5. **Effective Provisions of Declaration.** Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be

deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area.

6. Severability. Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.
7. Governing Law. This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

(NAME)

STATE OF MAINE, _____ County, dated _____, 20__.
(County)

Personally appeared before me the above named _____, who swore to the truth of the foregoing to the best of (his/her) knowledge, information and belief and acknowledged the foregoing instrument to be (his/her) free act and deed.

Notary Public

1. **Restrictions on Restricted Buffer Area.** Unless the owner of the Restricted Buffer Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must remain undeveloped in perpetuity. To maintain the ability of the Restricted Buffer Area to filter and absorb stormwater, and to maintain compliance with the Stormwater Management Law and the permit issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.
 - a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material may be placed, stored or dumped on the Restricted Buffer Area, nor may the topography of the area be altered or manipulated in any way;
 - b. Any removal of trees or other vegetation within the Restricted Buffer Area must be limited to the following:
 - (i) No purposefully cleared openings may be created and an evenly distributed stand of trees and other vegetation must be maintained. An "evenly distributed stand of trees" is defined as maintaining a minimum rating score of 24 points in any 25 foot by 50 foot rectangle (1,250 square feet) area, as determined by the rating scheme in Table 11:

**Table 11.
Point System for Determining an Evenly
Distributed Stand of Trees**

Diameter of tree at 4½ feet above ground level	Points
2 - 4 inches	1
4 - 8 inches	2
8 - 12 inches	4
>12 inches	8

Where existing trees and other vegetation result in a rating score less than 24 points, no trees may be cut or sprayed with biocides except for the normal maintenance of dead, windblown or damaged trees and for pruning of tree branches below a height of 12 feet provided two thirds of the tree's canopy is maintained;

- (ii) No undergrowth, ground cover vegetation, leaf litter, organic duff layer or mineral soil may be disturbed except that one winding path, that is no wider than six feet and that does not provide a downhill channel for runoff, is allowed through the area;
- c. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for a sign, utility pole (whether constructed of wood, steel or other materials) and appurtenant equipment such as guys and guy anchors, or fence;
- d. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area;

- e. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

- 2. **Enforcement.** The MDEP may enforce any of the Restrictions set forth in Section 1 above.
- 3. **Binding Effect.** The restrictions set forth herein shall be binding on any present or future owner of the Restricted Buffer Area. If the Restricted Buffer Area is at any time owned by more than one owner, each owner shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner's property.
- 4. **Amendment.** Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the owner or owners of the Restricted Buffer Area and by the MDEP.
- 5. **Effective Provisions of Declaration.** Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area.
- 6. **Severability.** Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.
- 7. **Governing Law.** This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

(NAME)

STATE OF MAINE _____ County, _____, 20__.
(County) (date)

Personally appeared before me the above named _____, who swore to the truth of the foregoing to the best of (his/her) knowledge, information and belief and acknowledged the foregoing instrument to be (his/her) free act and deed.

Notary Public



CITY OF SACO, MAINE

Saco Public Works Department
300 Main Street
Saco, Maine 04072

Joseph A. Laverriere, P.E. – City Engineer
Telephone: (207) 284-6641
Email: jlaverriere@sacomaine.gov

MEMORANDUM

TO: Robert Hamblen, Planner
FROM: Joseph A. Laverriere, P.E. – City Engineer
DATE: January 23, 2017
RE: **Libby's Landing Subdivision**
Tax Map 124, Lot 6

Planning Account No.: 300174

The Department of Public Works (DPW) has reviewed the revised final subdivision plan application materials for the above referenced project prepared by BH2M, dated January 19, 2017. The following comments and recommendations have been prepared based upon our review:

1. Expand drainage easement along Grant Road on Lot 1 to 15' in width.
2. Specify the 20' easement along the interior subdivision road as a "grading and drainage" easement that is to be conveyed to the City of Saco.
3. Specify the easement running along the sideline of Lots 8 and 10 as "drainage and access" easement that is to be conveyed to the City of Saco.
4. Extend Grant Road ditch grading another 150' further northeast along Lot 2.

As requested previously, we recommend the following conditions of approval:

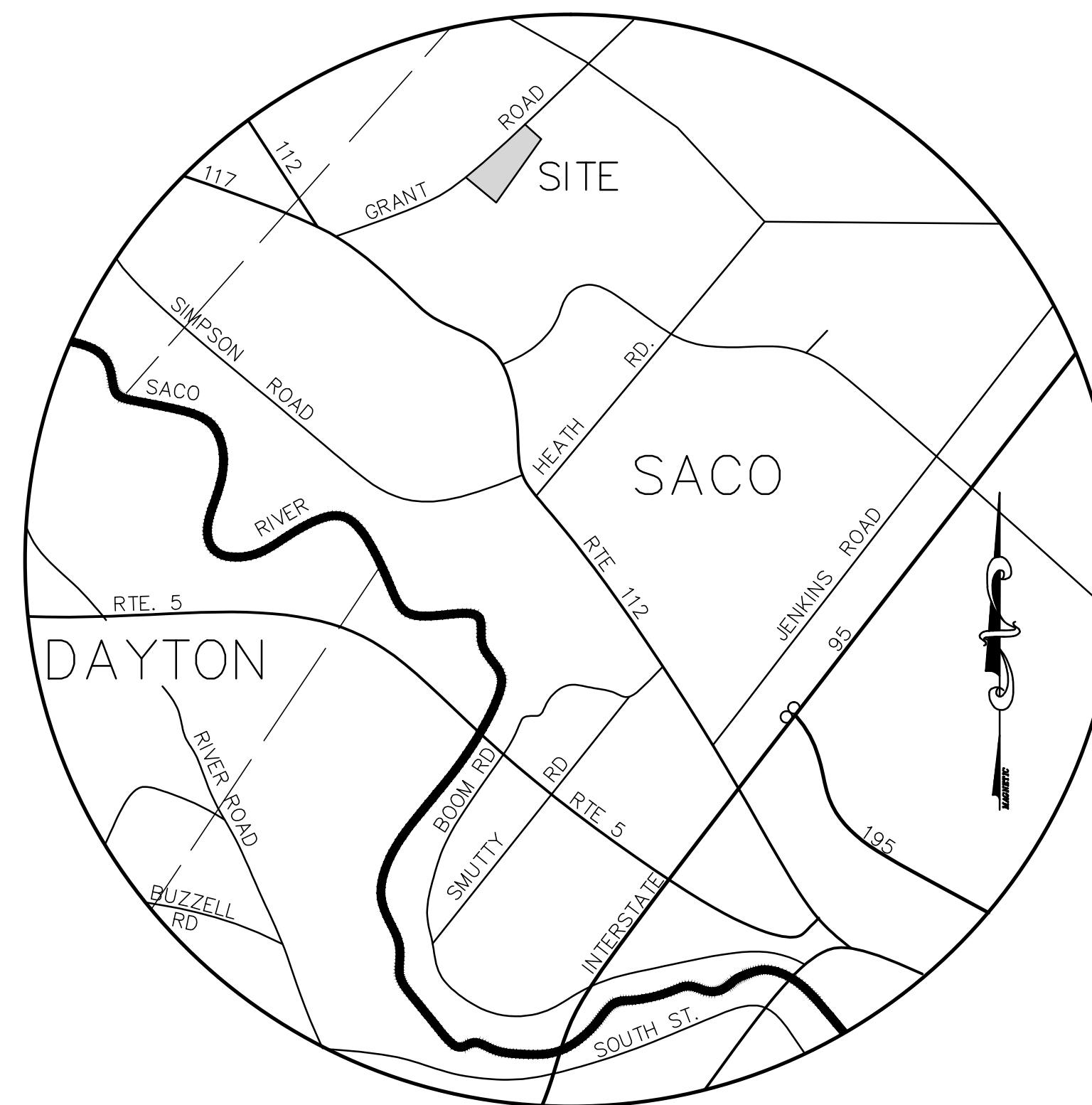
1. The design engineer should be required to inspect the construction and stabilization of the stormwater management pond to be built on the site. Inspections shall consist of weekly visits to the site to inspect the construction (from initial ground disturbance to final stabilization of the pond) of the pond's embankment, stormwater inlet, underdrained gravel outlet, gravel outlet filter material makeup and placement, outlet control structure, clay liner and cover material, and emergency spillway. If necessary, the inspecting engineer shall interpret the pond's construction plan for the contractor. Once the pond is constructed and stabilized, the inspecting engineer will notify the City within 14 days to state the pond has been completed. Accompanying the engineer's notification shall be a log of the engineer's inspections giving the date of each inspection, the time of each inspection, and the items inspected on each visit, and include any testing data or sieve analysis data of the gravel filter media. An inspection of the underdrained gravel outlet shall also be performed by a professional engineer one year after the final stabilization of the pond. The engineer shall notify the City as to the outlet's effectiveness and determine any maintenance items that are needed.
2. Until such time that the stormwater facilities are offered and accepted by the City, the applicant shall be required to perform routine inspection and maintenance of the stormwater facilities as outlined in the operations and maintenance manual development specifically for the site. A copy of the annual inspection and maintenance report including inspection log(s) shall be submitted annually (by July 15th of each year) to the City Public Works Department.
3. As part of the project's as-built certification for roadway and utility infrastructure, the applicant shall provide a Stormwater Basin As-Built Certification. Prior to the issuance of a Certificate of Occupancy for any lot, the Applicant shall submit evidence in the form of a letter with as-built survey plan prepared and stamped by a Professional Engineer who either prepared the Post-Construction Stormwater Management

Plan and its associated Facilities or supervised the Plan and Facilities construction and implementation. The letter or plan shall certify that the Stormwater Management Facilities have been installed in accordance with the approved Post-Construction Stormwater Management Plan and that they will function as intended by said Plan. The as-built survey plan shall be performed for all post-construction stormwater facilities to document general conformance with the approved plans.

4. The field location and delineation of the stream buffers shall be performed prior to the start of any clearing activities on the site.
5. Prior to the start of construction, copies of the recorded buffer deed restrictions shall be provided to the Planning Department.

We look forward to discussing this project further, and would be happy to clarify any of our comments made within this review memo.

LIBBY'S LANDING SUBDIVISION



LOCATION MAP

SCALE: 1" = 1 MILES

For
Mezoian Development, LLC
4 Driftwood Lane
Saco, Maine

PLAN INDEX

- 1 FINAL PLAN
- 2 EXISTING CONDITIONS & STANDARD BOUNDARY SURVEY
- 3 ROADWAY PROFILE FRANCES LIBBY WAY (STA. 0+00 TO 6+00)
- 4 ROADWAY PROFILE FRANCES LIBBY WAY (STA. 6+00 TO 13+36.34)
- 5 GRADING AND DRAINAGE PLAN
- 6 POND DETAILS
- 7 EROSION CONTROL DETAILS
- 8 ROADWAY DETAILS



Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors

28 State Street Tel. (207) 839-2771
Gorham, Maine 04038 Fax (207) 839-8250

Libby's Landing Subdivision
Final Plan Application, Determination of Completeness
Meeting of February 7, 2017

6.2 The Final Plan shall include all of the information presented with the Preliminary Plan and any amendments thereto suggested or required by the Board, and:

Y 6.2.1 The metes and bounds of all lot lines.

Y 6.2.2 Lots and blocks within the subdivision numbered in accordance with local practices.

Y 6.2.3 The location of permanent reference monuments. They shall be constructed in accordance with specifications herein and their location noted and referenced upon the Final Plan.

Fee 6.2.4 Written offers of cession to the City of all public open space shown on the Plan, and copies of agreements or other documents showing the manner in which spaces, title to which is reserved by the subdivider, are to be maintained, and written evidence that the City Attorney is satisfied with the legal sufficiency of the documents. Such written evidence shall not constitute an acceptance by the City of any public open space.

6.2.5 With submittal of the Final Plan application, proof of the following approvals shall be submitted in writing, where applicable:

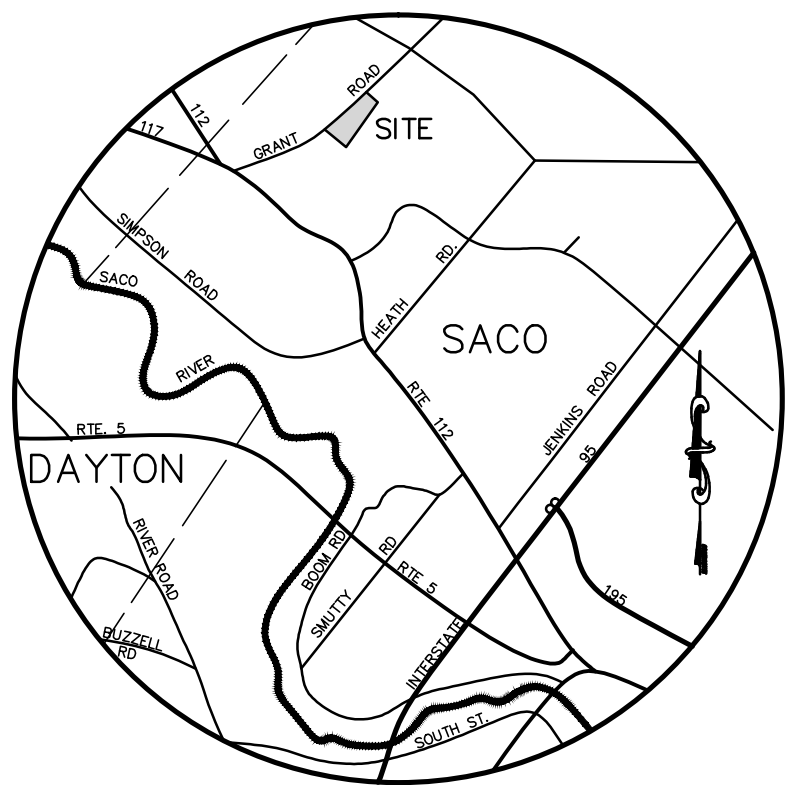
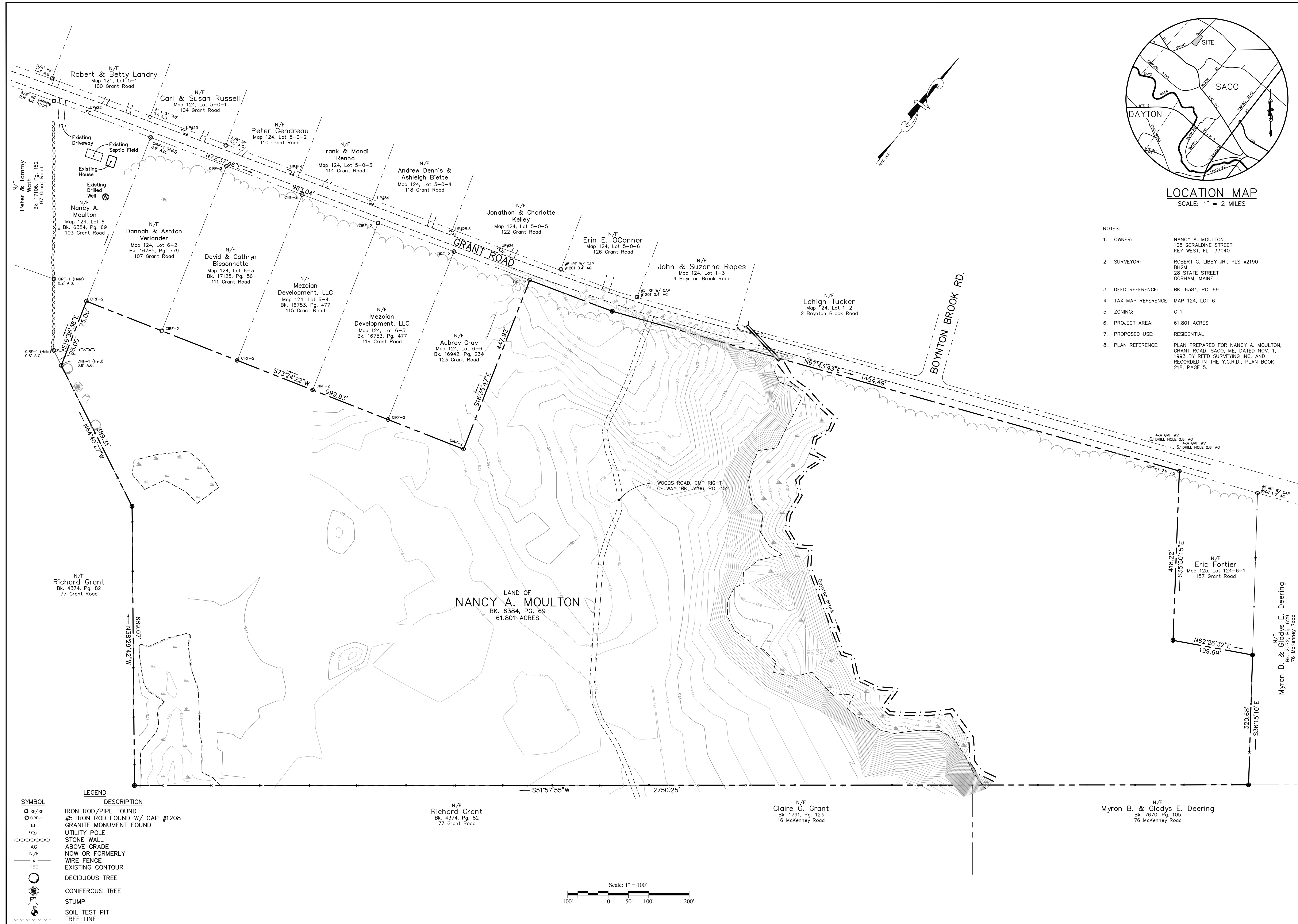
Y Maine Department of Environmental Protection, under the NRPA, Site Location Development Act, Alteration of Coastal Wetlands Act, Great Ponds Act, Fresh Water Wetlands Act, Alteration of Streams and Rivers Act, or a Wastewater Discharge License, if needed.

Maine Department of Human Services, if the subdivider proposes to provide a central water supply system.

Maine Department of Human Services, if a centralized or shared subsurface sewage disposal system(s) is to be utilized.

The Army Corps of Engineers, under the Harbor Act or Sec. 404 of the Clean Water Act.

If individual wells serving each building site are to be used, the Board may also require the subdivider to submit the results of water quality tests.



LOCATION MAP
SCALE: 1" = 2 MILES

- NOTES:
- OWNER: NANCY A. MOULTON
108 GERALDINE STREET
KEY WEST, FL 33040
 - SURVEYOR: ROBERT C. LIBBY JR., PLS #2190
BH2M
28 STATE STREET
GORHAM, MAINE
 - DEED REFERENCE: BK. 6384, PG. 69
 - TAX MAP REFERENCE: MAP 124, LOT 6
 - ZONING: C-1
 - PROJECT AREA: 61.801 ACRES
 - PROPOSED USE: RESIDENTIAL
 - PLAN REFERENCE: PLAN PREPARED FOR NANCY A. MOULTON,
GRANT ROAD, SACO, ME, DATED NOV. 1,
1993 BY REED SURVEYING INC. AND
RECORDED IN THE Y.C.R.D., PLAN BOOK
218, PAGE 5.

NO.	DATE	REVISION	DESCRIPTION
1	11/15/16		Submitted Preliminary Plan to City
2	12/27/16		Submitted Final Plan to City
3	1/19/17		Submitted Revised Final Plan to City

Engineers, Surveyors
Berry, Huff, McDonald, Milligan Inc.

BH2M
Engineers, Surveyors
Berry, Huff, McDonald, Milligan Inc.
28 State Street
Gorham, Maine 04038
Tel: (603) 839-9771
Fax: (603) 839-8250

FOR
Mezoian Development LLC
4 Debra Lane
Saco, Maine

EXISTING CONDITIONS
& STANDARD BOUNDARY
SURVEY
LAND OF
NANCY A. MOULTON
GRANT ROAD
SACO, MAINE

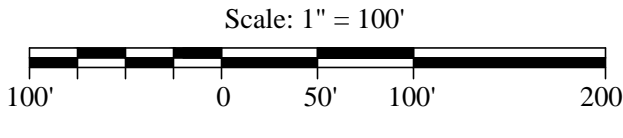
DESIGNED Survey	DATE July 2016
DRAWN Dept.	SCALE 1" = 100'
CHECKED R. Libby Jr.	JOB. NO. 16109

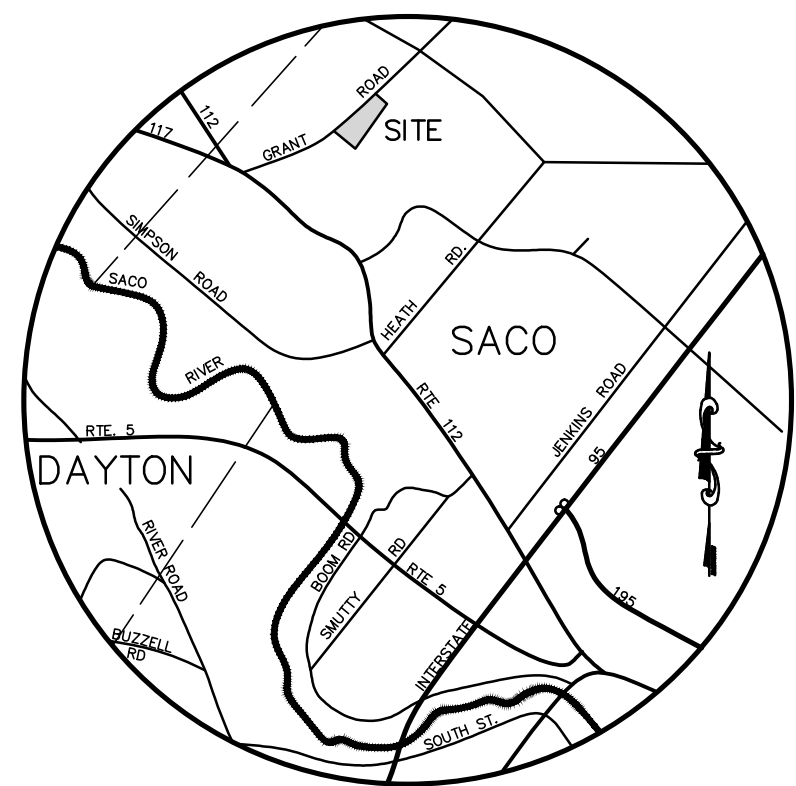
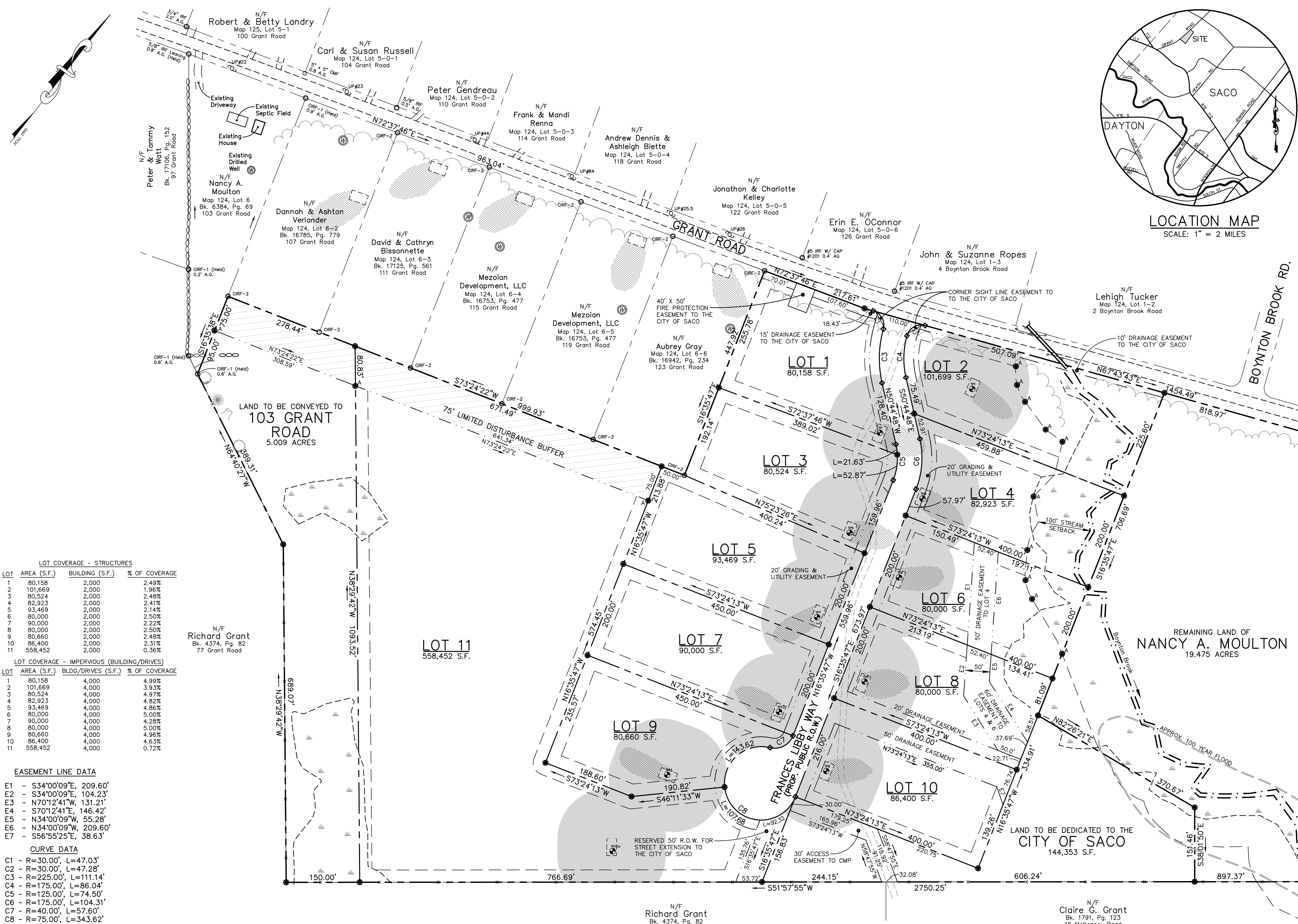
SHEET
2

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED.

LEGEND

SYMBOL	DESCRIPTION
○ IRF / IRF	IRON ROD/PIPE FOUND
○ CIRF-1	#5 IRON ROD FOUND W/ CAP #1208
□	GRANITE MONUMENT FOUND
○	UTILITY POLE
—	STONE WALL
AG	ABOVE GRADE
N/F	NOW OR FORMERLY
—	WIRE FENCE
-160	EXISTING CONTOUR
○	DECIDUOUS TREE
☼	CONIFEROUS TREE
☼	STUMP
○	SOIL TEST PIT
—	TREE LINE





LOCATION MAP
SCALE: 1" = 2 MILES

- NOTES:
- OWNER: MEZOIAN DEVELOPMENT, LLC
4 DRIFTWOOD LANE
SACO, MAINE
 - APPLICANT: MEZOIAN DEVELOPMENT, LLC
4 DRIFTWOOD LANE
SACO, MAINE
 - ENGINEER: STEVEN J. BLAKE, PE #11695
BH2M
28 STATE STREET
GORHAM, MAINE 04038
 - SURVEYOR: ROBERT C. LIBBY JR., PLS #2190
BH2M
 - WETLANDS/SOILS: MARK HAMPTON
MARK HAMPTON ASSOCIATES
PO BOX 1931
PORTLAND, MAINE
 - GROUNDWATER IMPACT STUDY: RICHARD SWEET CERTIFIED GEOLOGIST #100
155 GRAY ROAD
FALMOUTH, MAINE
 - DEED REFERENCE: BK. 17395, PG. 393
 - TAX MAP REFERENCE: MAP 124, LOT 6
 - ZONING: C-1
 - PROJECT AREA: 37.315 ACRES
 - PROPOSED USE: RESIDENTIAL
 - MINIMUM STANDARDS: LOT SIZE - 80,000 S.F. (UNSEWERED)
FRONTAGE - 200' (UNSEWERED)
SETBACKS - 30' FRONT, 25' SIDE & REAR (UNSEWERED)
 - SEWER SERVICE: ON SITE INDIVIDUAL SEPTIC SYSTEMS
 - WATER SERVICE: DRILLED WELLS
 - ELECTRIC/TELEPHONE: OVERHEAD ALONG GRANT ROAD
 - ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENTATION CONTROL BMP'S, LATEST REVISION
 - BENCHMARK: 8" SPIKE IN GROUND ELEV. = 181.15' (USGS APPROXIMATE DATUM ELEV.) (ADJUSTMENT TO NAVD 88 = -0.60)
 - PLAN REFERENCE: PLAN PREPARED FOR NANCY A. MOULTON, GRANT ROAD, SACO, ME, DATED NOV. 1, 1993 BY REED SURVEYING INC. AND RECORDED IN THE Y.C.R.D., PLAN BOOK 218, PAGE 5.
 - ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE IN ACCORDANCE WITH THE EROSION PREVENTION PROVISIONS OUTLINED IN THE MAINE EROSION AND SEDIMENTATION CONTROL BMP'S, LATEST REVISION.
 - FAILURE TO COMMENCE SUBSTANTIAL CONSTRUCTION OF THIS SUBDIVISION WITHIN TWO YEARS OF THE DATE OF APPROVAL AND SIGNING OF THE PLAN SHALL RENDER THE PLAN NULL AND VOID. ALL ROAD AND INFRASTRUCTURE CONSTRUCTION SHALL BE COMPLETED PER THE APPROVED PLAN NO LATER THAN 36 MONTHS AFTER THE POSTING OF THE FINANCIAL GUARANTEE. ALL ROADS AND INFRASTRUCTURE INTENDED FOR CITY ACCEPTANCE SHALL BE OFFERED TO THE CITY WITHIN 90 DAYS AFTER THE END OF THE 36 MONTH PERIOD.
 - THE NEED AND PLACEMENT OF STREET TREES SHALL BE DETERMINED BY THE PARKS AND REC DIRECTOR DURING ROADWAY CONSTRUCTION.
 - TRAFFIC ESTIMATE: 9.57 TRIPS/LOT/DAY
11 LOTS x 9.57 = 105.3 TRIPS/DAY
 - DENSITY:
SUBDIVISION NET DENSITY
PROJECT AREA - 1,625,484 S.F.
WETLANDS - 107,575 S.F.
R.O.W. - 66,846 S.F.
SLOPES >20% - 96,964 S.F.
100 YEAR FLOOD - 12,849 S.F.
1,341,250 = 16.76 LOTS
80,000
 - DRIVEWAY LOCATIONS SHALL BE REVIEWED AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AS PART OF THE BUILDING PERMIT PROCESS. ALL DRIVEWAY CULVERTS SHALL BE 15" DIAMETER AND HAVE AT LEAST 2 FEET OF COVER.
 - UNTIL SUCH TIME THAT THE STORMWATER FACILITIES ARE OFFERED AND ACCEPTED BY THE CITY, THE APPLICANT SHALL BE REQUIRED TO PERFORM ROUTINE INSPECTION AND MAINTENANCE OF THE STORMWATER FACILITIES AS OUTLINED IN THE OPERATIONS AND MAINTENANCE MANUAL DEVELOPED SPECIFICALLY FOR THE SITE. A COPY OF THE ANNUAL INSPECTION AND MAINTENANCE REPORT INCLUDING INSPECTION LOG(S) SHALL BE SUBMITTED ANNUALLY (BY JULY 15 OF EACH YEAR) TO THE CITY PUBLIC WORKS DEPARTMENT.
 - LIMITED DISTURBANCE BUFFERS SHALL BE LEFT UNDISTURBED EXCEPT FOR REMOVING DEAD OR DISEASED TREES.
 - THE APPLICANT SHALL, UPON BEGINNING CONSTRUCTION OF A STREET WHICH INTERSECTS WITH A PUBLIC WAY, POST A SIGN OF A SIZE NO SMALLER THAN TWO FEET BY THREE FEET AND WITH TWO INCH LETTER IN BLACK ON A WHITE BACKGROUND, WHICH STATES THE FOLLOWING THIS IS NOT A PUBLIC WAY OWNED BY THE CITY OF SACO THE SIGN SHALL FURTHER IDENTIFY THE OWNER OF THE WAY AND ITS ADDRESS.
 - PRINCIPAL STRUCTURES IN THE SUBDIVISION WILL BE CONSTRUCTED WITH THEIR LOWEST FLOOR, INCLUDING THE BASEMENT, AT LEAST ONE FOOT ABOVE THE 100-YEAR FLOOD ELEVATION.
 - PLAN VAULTS: SECTION 5.2.2(16) SIDEWALKS, CURBS APPROVED DECEMBER 6, 2016
SECTION 11.11 ROADWAY CROWN (APPROVED DECEMBER 6, 2016)

LOT COVERAGE - STRUCTURES

LOT	AREA (S.F.)	BUILDING (S.F.)	% OF COVERAGE
1	80,158	2,000	2.49%
2	101,669	2,000	1.96%
3	80,524	2,000	2.48%
4	82,923	2,000	2.41%
5	93,469	2,000	2.14%
6	80,000	2,000	2.50%
7	90,000	2,000	2.22%
8	80,000	2,000	2.50%
9	80,660	2,000	2.48%
10	86,400	2,000	2.31%
11	558,452	2,000	0.36%

LOT COVERAGE - IMPERVIOUS (BUILDING/DRIVES)

LOT	AREA (S.F.)	BLDG/DRIVES (S.F.)	% OF COVERAGE
1	80,158	4,000	4.99%
2	101,669	4,000	3.93%
3	80,524	4,000	4.97%
4	82,923	4,000	4.82%
5	93,469	4,000	4.28%
6	80,000	4,000	5.00%
7	90,000	4,000	4.44%
8	80,000	4,000	5.00%
9	80,660	4,000	4.96%
10	86,400	4,000	4.63%
11	558,452	4,000	0.72%

EASEMENT LINE DATA

E1	- S34°00'09"E, 209.60'
E2	- S34°00'09"E, 104.23'
E3	- N70°12'41"W, 131.21'
E4	- S70°12'41"E, 146.42'
E5	- N34°00'09"W, 55.28'
E6	- N34°00'09"W, 209.60'
E7	- S56°55'25"E, 38.63'

CURVE DATA

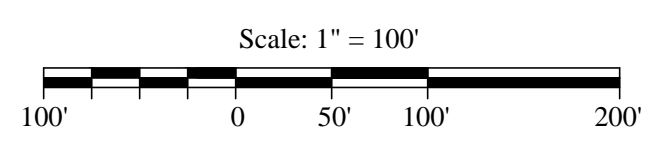
C1	- R=30.00', L=47.03'
C2	- R=30.00', L=47.28'
C3	- R=225.00', L=111.14'
C4	- R=175.00', L=86.04'
C5	- R=125.00', L=74.50'
C6	- R=175.00', L=104.31'
C7	- R=40.00', L=57.60'
C8	- R=75.00', L=34.62'

LEGEND

SYMBOL	DESCRIPTION
●	3/8" CAPPED IRON ROD "NO DISTURBANCE BUFFER"
○	IRON ROD/PIPE FOUND
○	CRF-1 #5 IRON ROD FOUND W/ CAP #1208
○	CRF-2 #5 IRON ROD FOUND W/ CAP #2190
□	GRANITE MONUMENT FOUND
○	UTILITY POLE
AG	ABOVE GRADE
N/F	NOW OR FORMERLY
x	BARBED WIRE FENCE
○	SOIL TEST PIT
—	TREE LINE
—	EDGE OF WETLANDS
—	STREAM
—	EASEMENT
—	NITRATE PLUME
—	WELL EXCLUSION ZONE

YORK ss REGISTRY OF DEEDS
RECEIVED _____ 20____
AT _____ H _____ M _____, AND
RECORDED IN BOOK _____ PAGE _____
ATTEST: _____
REGISTER

THIS PLAN SUPERSEDES THE PREVIOUSLY RECORDED PLAN TITLED "AMENDED FINAL PLAN BOYNTON BROOK SUBDIVISION, GRANT ROAD, SACO, MAINE" APPROVED DECEMBER 15, 2015 AND RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS IN PLAN BOOK 380, PAGE 9. THE PURPOSE OF THIS PLAN IS TO ADD 11 LOTS TO THE SUBDIVISION.



I CERTIFY THAT THIS SURVEY CONFORMS TO THE MAINE BOARD OF LICENSED SURVEYORS FOR PROFESSIONAL LAND SURVEYORS TECHNICAL STANDARDS OF PRACTICE FOR A STANDARD BOUNDARY SURVEY WITH THE FOLLOWING EXCEPTIONS:

1. NO SURVEYORS REPORT

ROBERT C. LIBBY JR. PLS #2190

THIS PLAN REVIEWED AND APPROVED BY THE CITY OF SACO PLANNING BOARD.

CHAIR _____ DATE _____
_____ DATE _____

REVISION

NO.	DATE	DESCRIPTION
1	11/15/16	Submitted Preliminary Plan to City
2	12/27/16	Submitted Final Plan to City
3	1/19/17	Submitted Revised Final Plan to City

DESIGNED
W. Pelkey
DATE July 2016

DRAWN
Dept. I"=100'

CHECKED
R. Libby Jr.
JOB NO. 16109

SHEET
1

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED.

FINAL PLAN
LIBBY'S LANDING
GRANT ROAD
SACO, MAINE

DESIGNED
W. Pelkey
DATE July 2016

DRAWN
Dept. I"=100'

CHECKED
R. Libby Jr.
JOB NO. 16109

SHEET
1

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED.

LEGEND

- STORM DRAIN
- SILT FENCE / EC MIX BERM
- EXISTING CONTOUR
- PROPOSED CONTOUR
- TRANSFORMER PAD
- UTILITY POLE

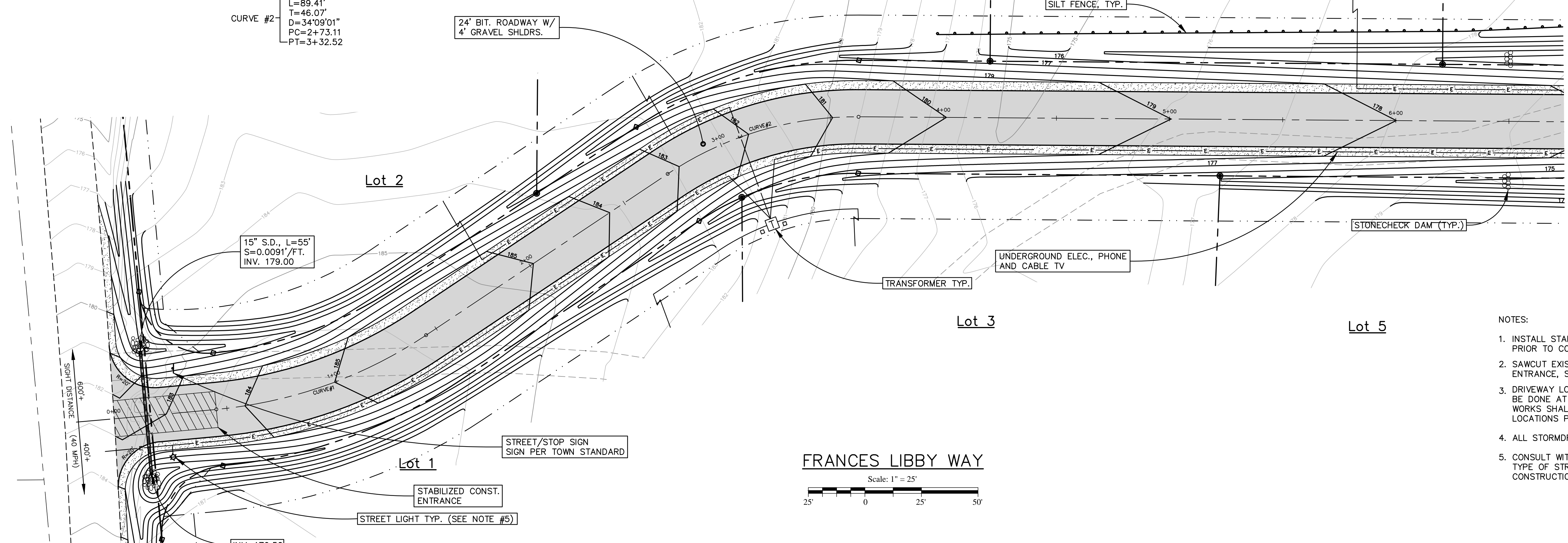
Q CURVE DATA

CURVE #1

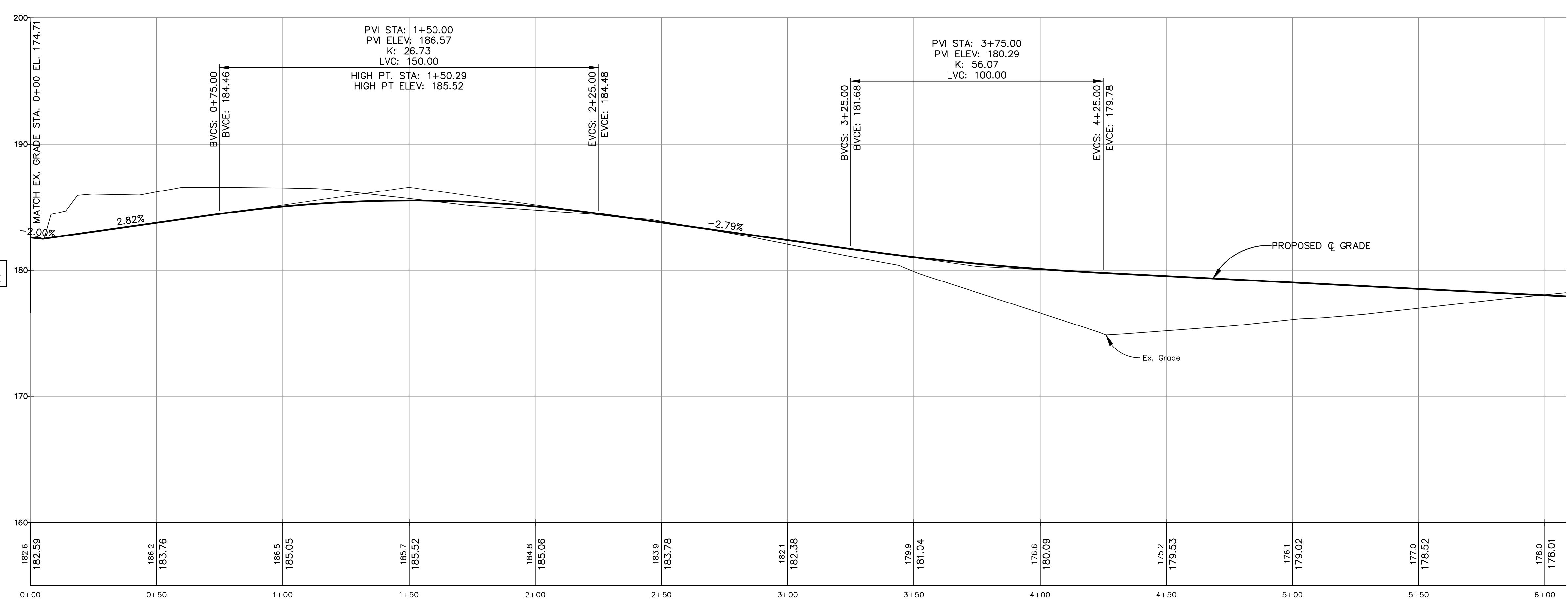
- R=200.00'
- L=99.40'
- T=50.75'
- D=28°28'31"
- PC=0+45.32
- PT=1+44.72

CURVE #2

- R=150.00'
- L=89.41'
- T=46.07'
- D=34°09'01"
- PC=2+73.11
- PT=3+32.52

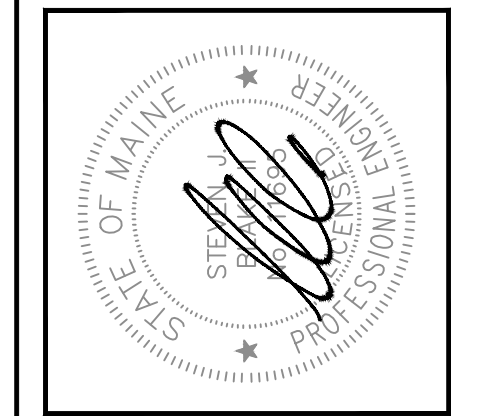


- NOTES:**
- INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION, SEE DETAIL.
 - SAWCUT EXISTING PAVEMENT AT PROJECT ENTRANCE, SEE DETAIL.
 - DRIVEWAY LOCATIONS AND PAVED APRONS SHALL BE DONE AT TIME OF LOT DEVELOPMENT. PUBLIC WORKS SHALL REVIEW AND APPROVE DRIVEWAY LOCATIONS PRIOR TO CONSTRUCTION.
 - ALL STORMDRAIN PIPE SHALL BE ADS N12 OR EQUAL
 - CONSULT WITH THE DEPARTMENT OF WORKS REGARDING TYPE OF STREET LIGHT TO BE PLACE PRIOR TO CONSTRUCTION.



REVISION

NO.	DATE	DESCRIPTION
1	11/15/16	Submitted Preliminary Plan to City
2	12/27/16	Submitted Final Plan to City
3	1/19/17	Submitted Revised Final Plan to City



BH2M

Berry, Huff, McDonnell, Milfigan Inc.
Engineers, Surveyors

28 State Street
Conform, Maine 04038

Tel: (207) 839-2771
Fax: (207) 839-8250

FOR
Mezorian Development LLC
4 Driftwood Lane
Saco, Maine

ROADWAY PROFILE
FRANCES LIBBY WAY
(STA. 0+00 TO STA. 6+00)

LIBBY'S LANDING

GRANT ROAD
SACO, MAINE

DESIGNED W. Pelkey	DATE July 2016
DRAWN Dept.	SCALE As Noted
CHECKED S. Blake	JOB. NO. 16109

SHEET
3

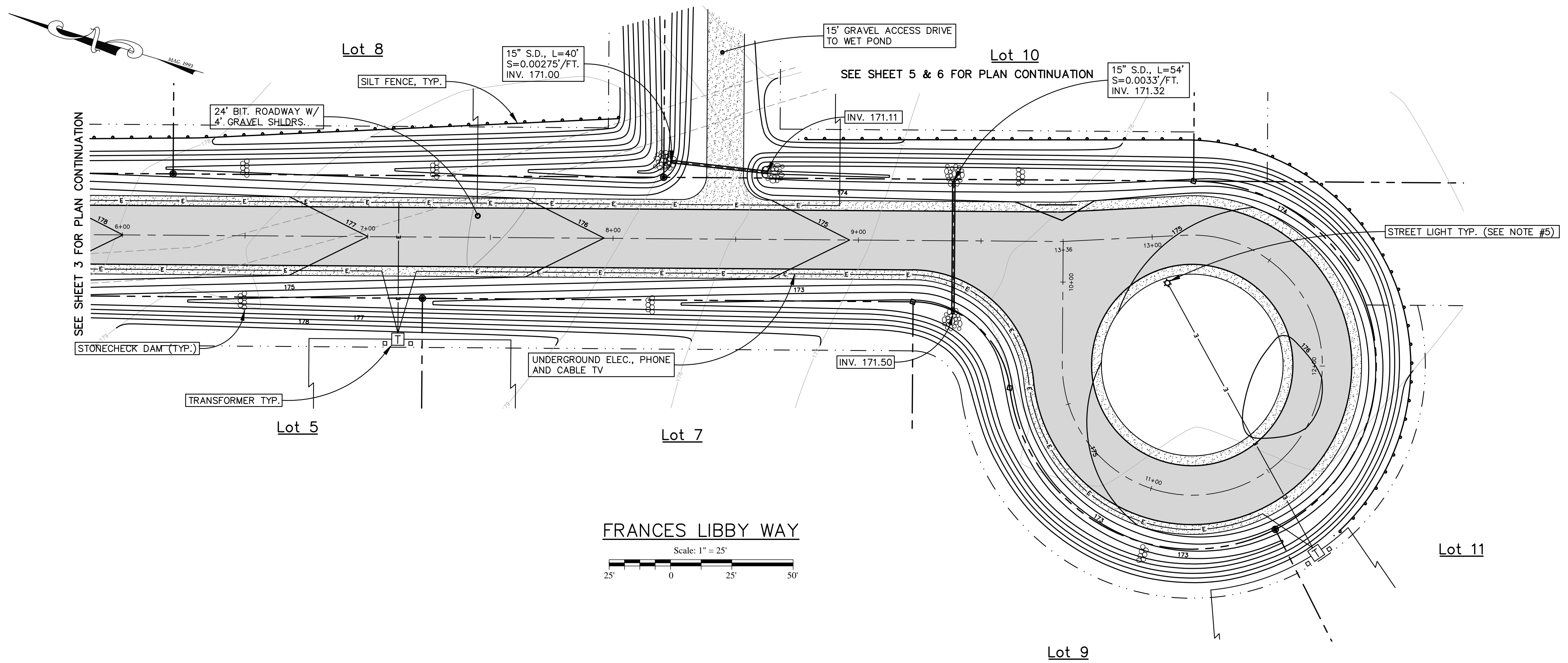
REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED

NOTES:

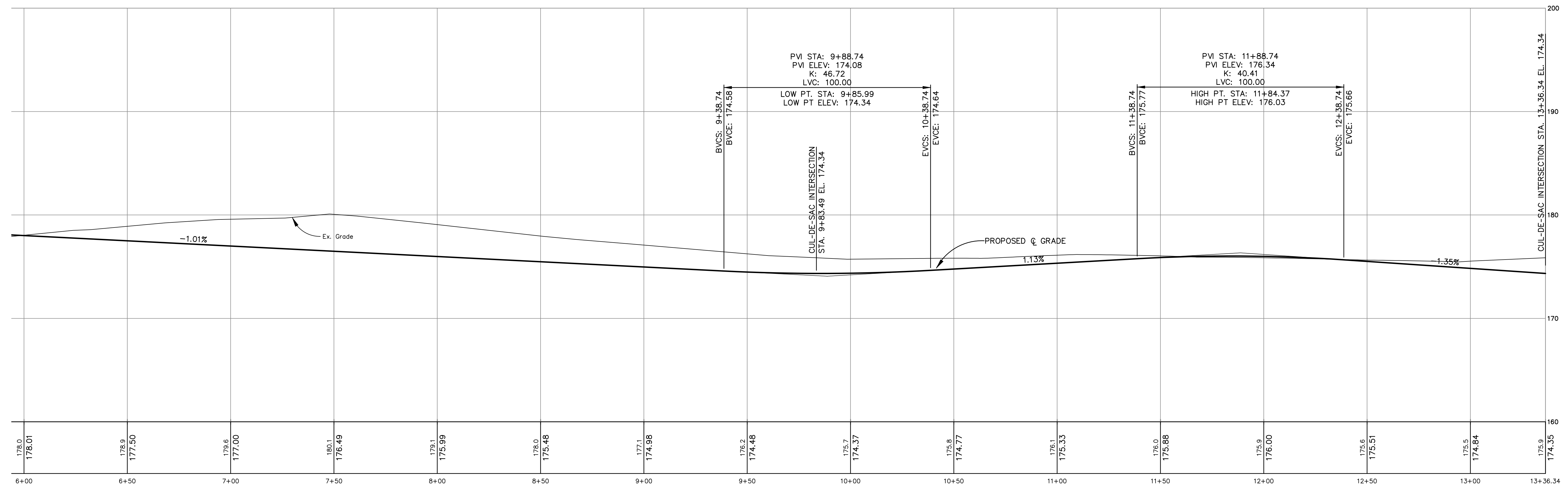
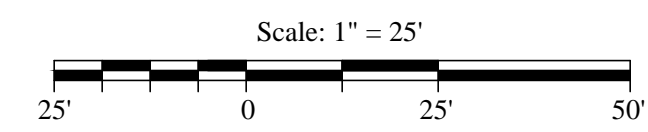
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION, SEE DETAIL.
2. SAWCUT EXISTING PAVEMENT AT PROJECT ENTRANCE, SEE DETAIL.
3. DRIVEWAY LOCATIONS AND PAVED APRONS SHALL BE DONE AT TIME OF LOT DEVELOPMENT. PUBLIC WORKS SHALL REVIEW AND APPROVE DRIVEWAY LOCATIONS PRIOR TO CONSTRUCTION.
4. ALL STORMDRAIN PIPE SHALL BE ADS N12 OR EQUAL.
5. CONSULT WITH THE DEPARTMENT OF WORKS REGARDING TYPE OF STREET LIGHT TO BE PLACE PRIOR TO CONSTRUCTION.

LEGEND

	STORM DRAIN
	SILT FENCE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	TRANSFORMER PAD
	UTILITY POLE



FRANCES LIBBY WAY



PROFILE
SCALE
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 25'

NO.	DATE	REVISION	DESCRIPTION
1	11/15/16		Submitted Preliminary Plan to City
2	12/27/16		Submitted Final Plan to City
3	1/19/17		Submitted Revised Final Plan to City



BH2M
Berry, Huff, MacDonald, Milligan Inc.
Engineers, Surveyors
28 State Street
Gorham, Maine 04038
Tel: (603) 839-9771
Fax: (603) 839-8250

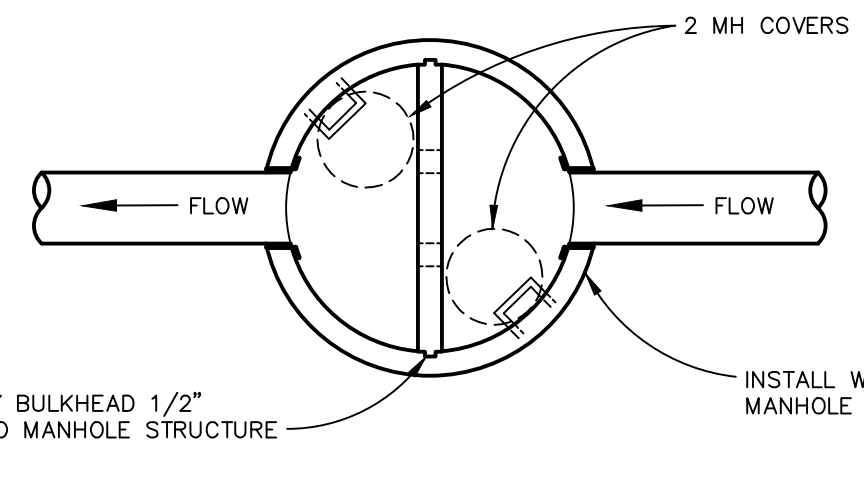
FOR
Meridian Development LLC
4 Derby Road
Saco, Maine

ROADWAY PROFILE
FRANCES LIBBY WAY
(STA. 6+00 TO STA. 13+36.34)
LIBBY'S LANDING
GRANT ROAD
SACO, MAINE

DESIGNED W. Pelkey	DATE July 2016
DRAWN Dept.	SCALE As Noted
CHECKED S. Blake	JOB NO. 16109

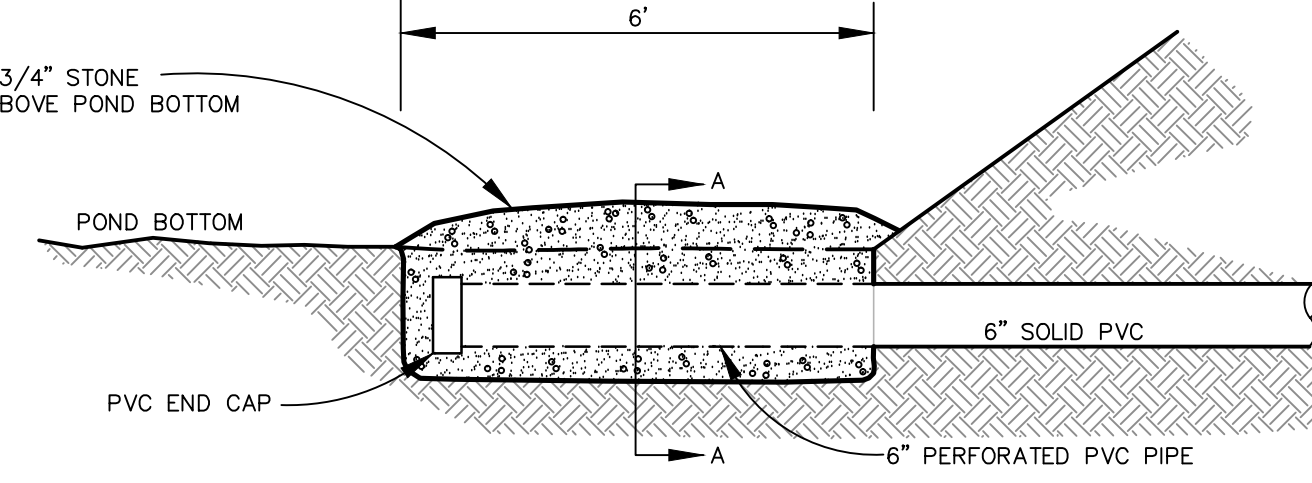
SHEET
4

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED.

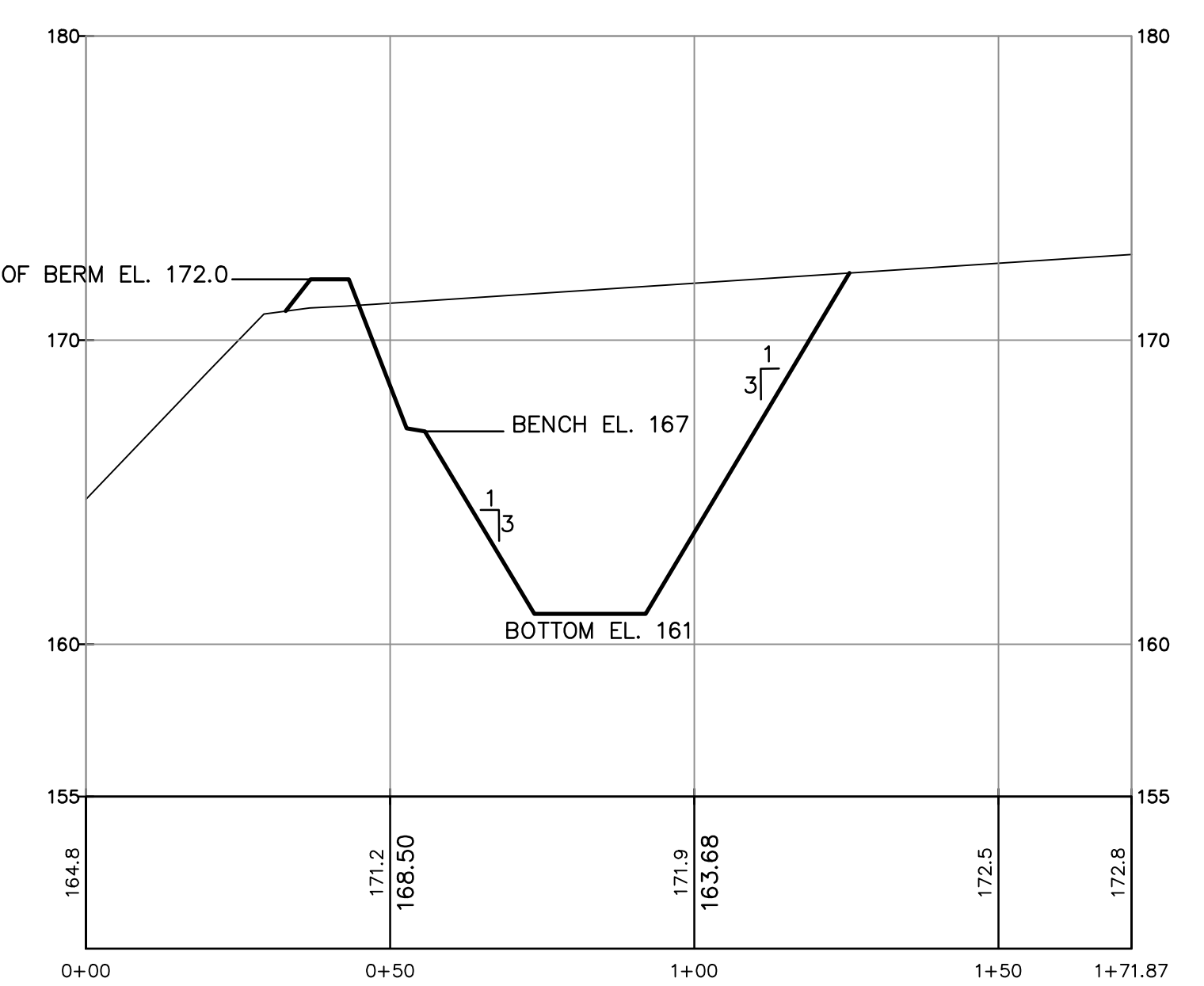


NOTES:
CONSTRUCTION OVERSIGHT
 THE APPLICANT WILL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO INSPECT THE CONSTRUCTION AND STABILIZATION OF ALL STORMWATER MANAGEMENT STRUCTURES. IF NECESSARY, THE INSPECTING ENGINEER WILL INTERPRET THE POND'S CONSTRUCTION PLAN FOR THE CONTRACTOR. ONCE ALL STORMWATER MANAGEMENT STRUCTURES ARE CONSTRUCTED AND STABILIZED, THE INSPECTING ENGINEER WILL NOTIFY THE DEPARTMENT IN WRITING WITHIN 30 DAYS TO STATE THAT THE POND HAS BEEN COMPLETED. ACCOMPANYING THE ENGINEER'S NOTIFICATION MUST BE A LOG OF THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT, AND INCLUDE ANY TESTING DATA OR SIEVE ANALYSIS DATA OF EVERY MINERAL SOIL AND SOIL MEDIA SPECIFIED IN THE PLANS AND USED ON SITE.

WETPONDS
 INSPECTION BY A PROFESSIONAL ENGINEER WILL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT THE INSTALLATION OF EACH POND'S EMBANKMENT CONSTRUCTION, STORMWATER INLET, UNDERDRAINED GRAVEL OUTLET, GRAVEL OUTLET FILTER MATERIAL MAKEUP AND PLACEMENT, OUTLET CONTROL STRUCTURE, CLAY LINER, AND EMERGENCY SPILLWAY CONSTRUCTION FROM INITIAL GROUND DISTURBANCE TO FINAL STABILIZATION OF THE POND. AN INSPECTION OF THE UNDER DRAINED GRAVEL OUTLET SHALL ALSO BE PERFORMED ONE YEAR AFTER THE FINAL STABILIZATION OF THE POND.



**SECTION A-A
 POND DRAIN
 NTS**

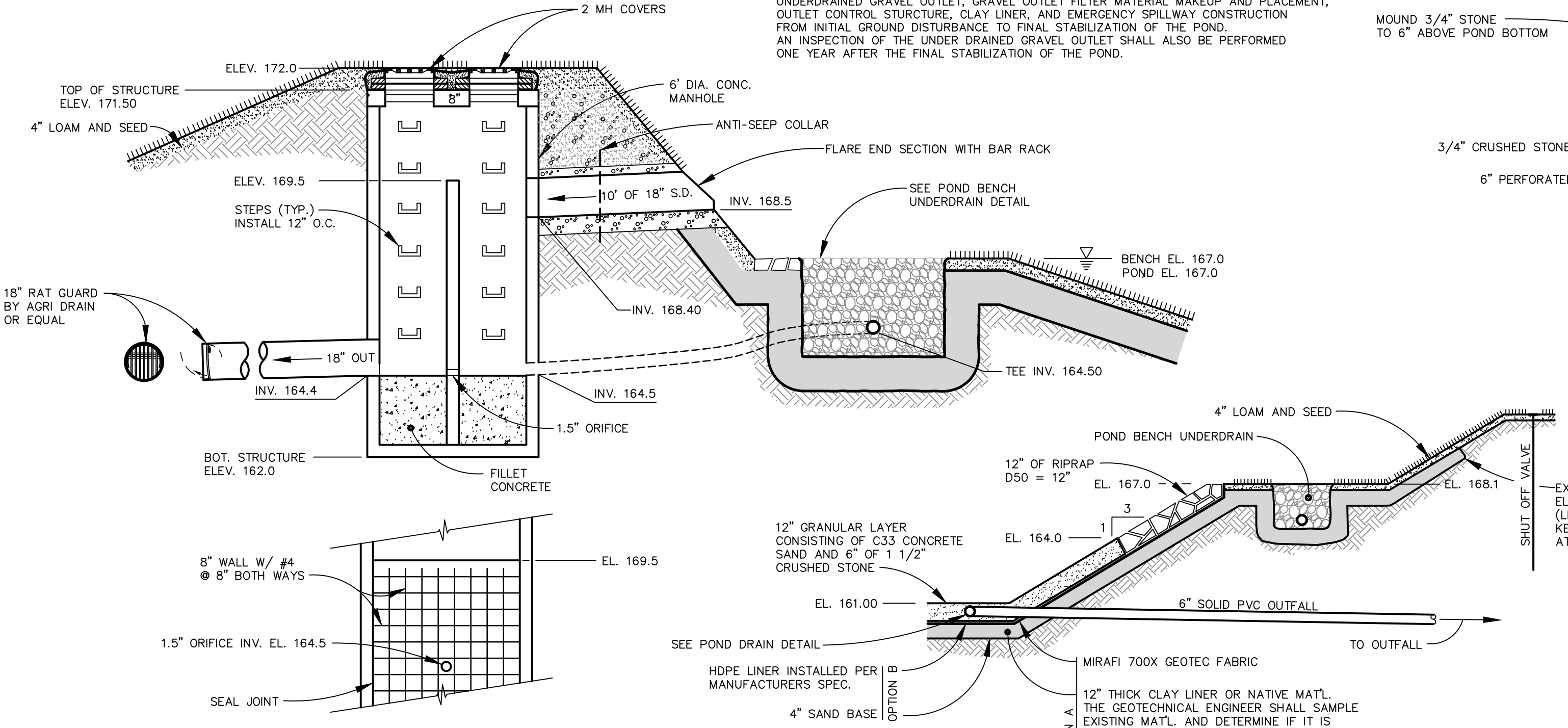


POND SECTION

SCALE
 VERTICAL: 1" = 5'
 HORIZONTAL: 1" = 25'

STORMWATER ELEVATIONS

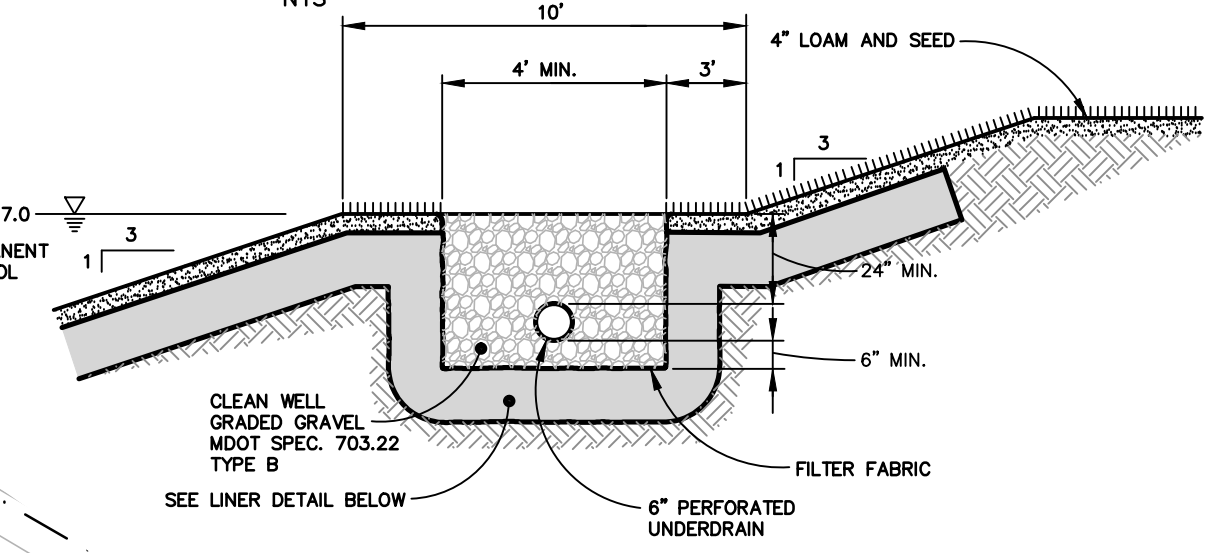
- 2 YEAR STORM PEAK ELEVATION = 167.28
- 10 YEAR STORM PEAK ELEVATION = 169.19
- 25 YEAR STORM PEAK ELEVATION = 169.68
- 50 YEAR STORM PEAK ELEVATION = 169.90
- CHANNEL PROTECTION VOLUME ELEVATION = 168.50
- WATER QUALITY VOLUME ELEVATION = 167.00



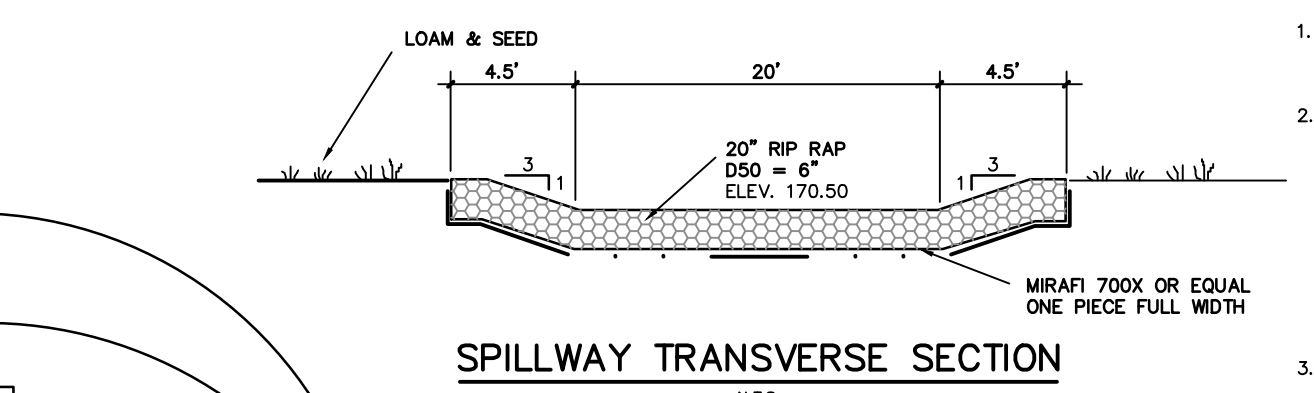
**OUTLET CONTROL STRUCTURE
 NTS**

NOTE: SHOP DRAWING SUBMITTALS FOR THE OUTLET CONTROL STRUCTURE SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE ORDERING OF THE STRUCTURE.

**POND CONSTRUCTION
 NTS**



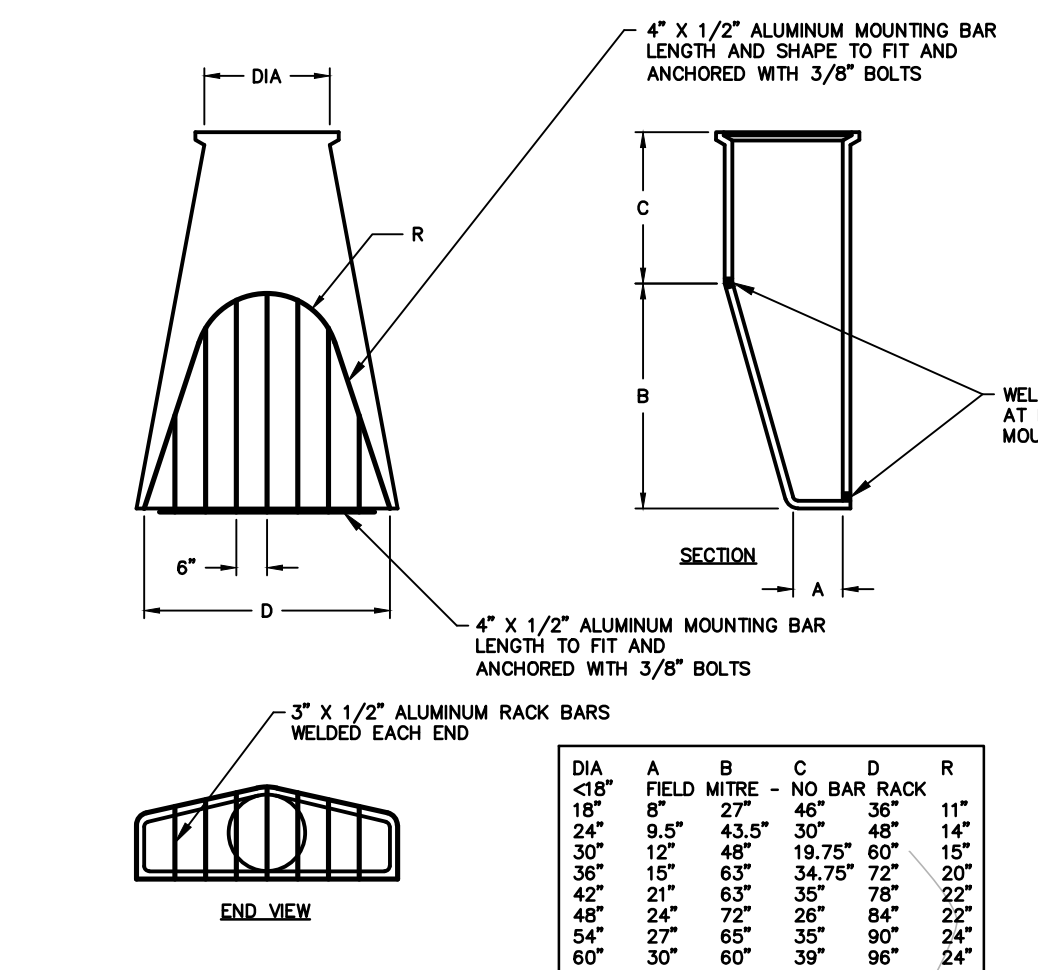
**SPILLWAY LONGITUDINAL SECTION
 N.T.S.**



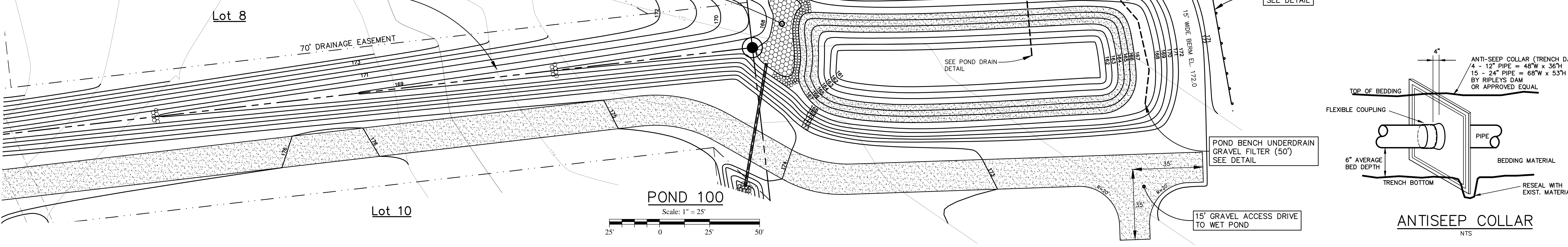
**SPILLWAY TRANSVERSE SECTION
 N.T.S.**



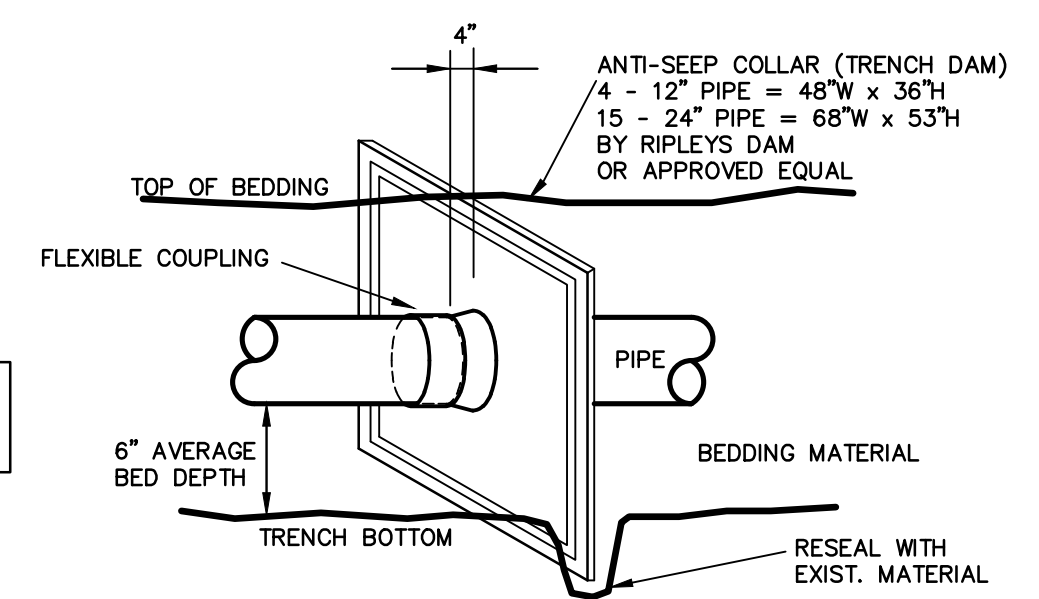
- DETENTION / RETENTION POND EMBANKMENT & CONSTRUCTION NOTES:**
- THE FOUNDATION AREA SHALL BE CLEARED OF TREES, LOGS, ROOTS, BRUSH, BOULDERS, SOIL, RUBBISH & TOPSOIL. THE ENGINEER SHALL OBSERVE & APPROVE THE EMBANKMENT SUBGRADE PRIOR TO PLACING ANY FILL TO DETERMINE SUITABILITY & POSSIBLE NEED FOR A GUTOFF TRENCH.
 - FILL MATERIAL FOR THE EMBANKMENT SHALL CONSIST OF SILT AND/OR CLAY MATERIAL APPROVED BY THE ENGINEER. THE CONTRACTOR SHOULD NOTE THAT ACCEPTABLE MATERIAL MAY NOT BE FOUND ON-SITE. ALL FILL MATERIAL SHALL BE FREE OF SOIL, ROOTS, FROZEN SOIL, STONES, RUBBISH, POCKETS, STREAMS, OR LAYERS OF SUBSTANTIALLY DIFFERENT MATERIALS. FILL SHALL BE REMOVED PRIOR TO ADDING ADDITIONAL FILL. FILLING SHALL COMMENCE IN THE LOWEST POINT OF THE GUTOFF TRENCH AND/OR DAM & CONTINUE IN HORIZONTAL LIFTS NO GREATER THAN 12". 92% MODIFIED PROCTOR DENSITIES SHALL BE OBTAINED IN EACH LIFT PRIOR TO ADDITIONAL LIFTS. THE DISTRIBUTION & GRADATION OF THE FILL SHALL BE SUCH THAT NO LENSES, POCKETS, STREAMS, OR LAYERS OF SUBSTANTIALLY DIFFERENT MATERIALS ARE PLACED IN THE LAYERS IN THE EMBANKMENT. FILL WITHIN 5' OF THE DISCHARGE PIPE & STRUCTURE SHALL BE COMPACTED TO 92% MODIFIED PROCTOR.
 - IF BEDROCK IS ENCOUNTERED DURING CONSTRUCTION IT SHALL BE REMOVED TO AT LEAST 1 FOOT BELOW THE POND BOTTOM.



**RCP FLARED END WITH BAR RACK DETAIL
 N.T.S.**

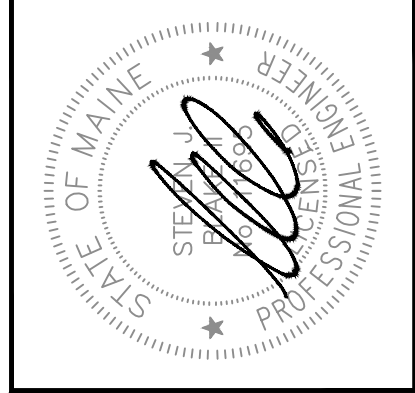


**POND 100
 Scale: 1" = 25'**



**ANTISEEP COLLAR
 NTS**

NO.	DATE	REVISION DESCRIPTION
1	11/15/16	Submitted Preliminary Plan to City
2	12/27/16	Submitted Final Plan to City
3	1/19/17	Submitted Revised Final Plan to City



BH2M
 Engineers, Surveyors
 Berry Huff, M.D., Inc.
 28 State Street
 Gorham, Maine 04038
 Tel: (207) 839-2771
 Fax: (207) 839-8250

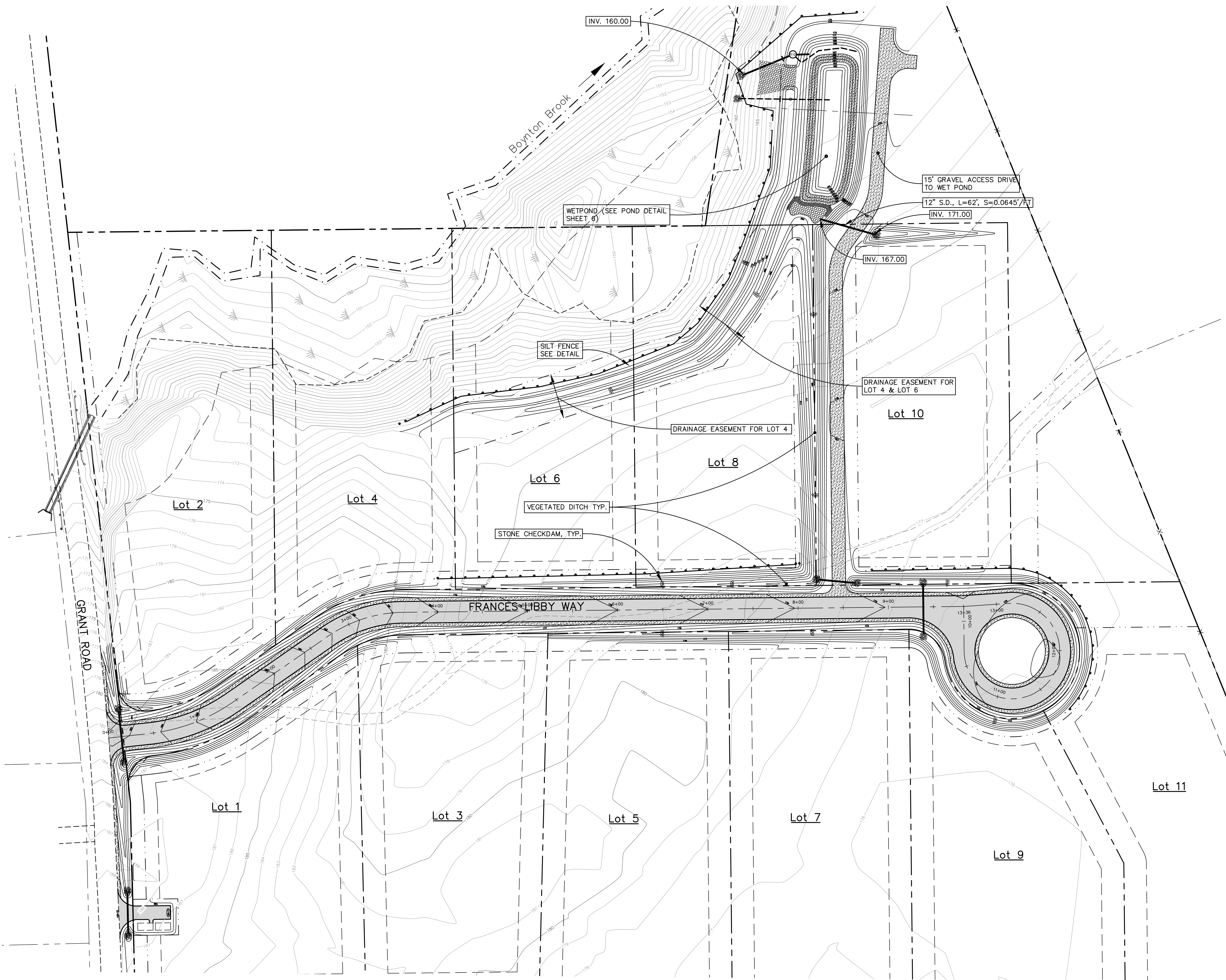
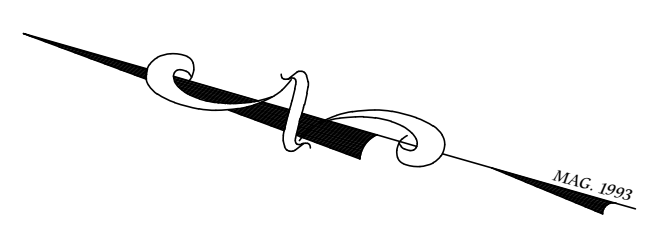
FOR
 Mezoian Development LLC
 4 Driftwood Lane
 Saco, Maine

POND DETAILS
LIBBY'S LANDING
 GRANT ROAD
 SACO, MAINE

DESIGNED W. Pelkey	DATE July 2016
DRAWN Dept.	SCALE 1" = 100'
CHECKED R. Libby Jr.	JOB. NO. 16109

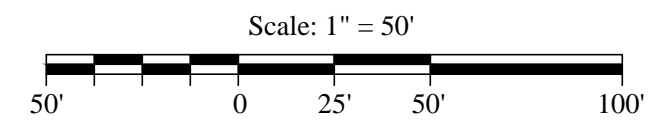
SHEET
6

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED

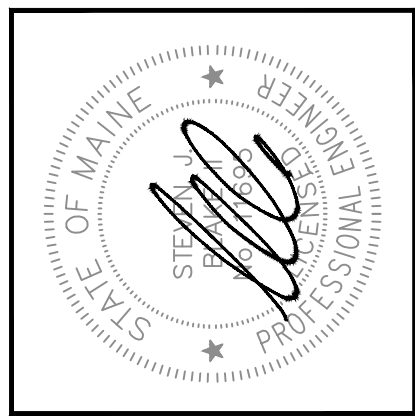


LEGEND

	STORM DRAIN
	SILT FENCE/ EC MIX BERM
	EXISTING CONTOUR
	PROPOSED CONTOUR
	TRANSFORMER PAD
	UTILITY POLE



NO.	DATE	REVISION DESCRIPTION
1	11/15/16	Submitted Preliminary Plan to City
2	12/27/16	Submitted Final Plan to City
3	1/19/17	Submitted Revised Final Plan to City



BH2M
 Berry J. Huff, McDonald, Milfigan Inc.
 Engineers, Surveyors
 28 State Street
 Gorham, Maine 04038
 Tel: (207) 839-2771
 Fax: (207) 839-8250

FOR
 Mezoian Development LLC
 4 Driftwood Lane
 Saco, Maine

GRADING & DRAINAGE PLAN
 LIBBY'S LANDING
 GRANT ROAD
 SACO, MAINE

DESIGNED W. Pelkey	DATE July 2016
DRAWN Dept.	SCALE 1" = 50'
CHECKED R. Libby Jr.	JOB. NO. 16109

SHEET
5

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED.

EROSION AND SEDIMENT CONTROL PLAN

THIS PLAN WAS DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION IN DEVELOPING AREAS AS CONTAINED IN THE "MAINE EROSION AND SEDIMENT CONTROL BMP'S", DEPARTMENT OF ENVIRONMENTAL PROTECTION DATED MARCH 2003. FOR ADDITIONAL DETAILS AND SPECIFICATIONS SEE BMP'S MANUAL.

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL STRUCTURES ARE SHOWN ON THE SITE PLAN.

- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMP'S", DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED MARCH 2003.
- THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME PERIOD. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 2 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
- SEDIMENT BARRIERS (EROSION CONTROL MIX, STONE CHECK DAMS, STABILIZED CONSTRUCTION ENTRANCE, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL SLOPE IN PLACE PER ITEM #5
- INSTALL EROSION CONTROL MIX AT TOE OF SLOPES TO FILTER SILT FROM RUNOFF. SEE E.C. MIX DETAIL FOR PROPER INSTALLATION. EROSION CONTROL MIX WILL REMAIN IN PLACE PER ITEM #5
- ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY BEFORE AND FOLLOWING ANY SIGNIFICANT RAINFALL (0.5 INCHES) OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF. EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION. PERMANENT STABILIZATION IS 90% GRASS CATCH IN VEGETATED AREAS.
- NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2 TO 1).
- IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCHING (DOMINANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED BY AUG. 15 OR 45 DAYS PRIOR TO THE FIRST KILLING FROST (OCT. 1) TO PROTECT FROM SPRING RUNOFF PROBLEMS.
- DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS. POST SEEDING SEEDMENT IF ANY WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER.
- REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:
 - FOUR INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
 - APPLY LIME/STONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TESTING IS CRITICAL, FERTILIZER WILL BE APPLIED AT THE RATE OF 800 POUNDS PER ACRE OR 18.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P2005-K20) OR EQUIVALENT. APPLY GROUND LIME/STONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER 1,000 SQ. FT.).
 - FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUEGRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS. SEEDING RATE IS 1.03 LBS PER 1000 SQ. FT. LAWN QUALITY SOO MAY BE SUBSTITUTED FOR SEED. SEED MIX SHALL CONTAIN 10% ANNUAL RYE GRASS.
 - HAY MULCH AT THE RATE OF 70-90 LBS PER 1000 SQUARE FEET OR A HYDRO-APPLICATION OF ASPHALT, WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS WILL BE USED ON HAY MULCH FOR WIND CONTROL.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS ONCE THE SITE IS STABILIZED WITH 90% GRASS CATCH IN VEGETATED AREAS. TEMPORARY EROSION AND SEDIMENT CONTROL BLANKET SHALL BE USED IN ALL DITCHES AND SWALES AS SHOWN IN DETAILS.
- WETLANDS WILL BE PROTECTED WITH EROSION CONTROL MIX OR SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.

MULCH AND MULCH ANCHORING

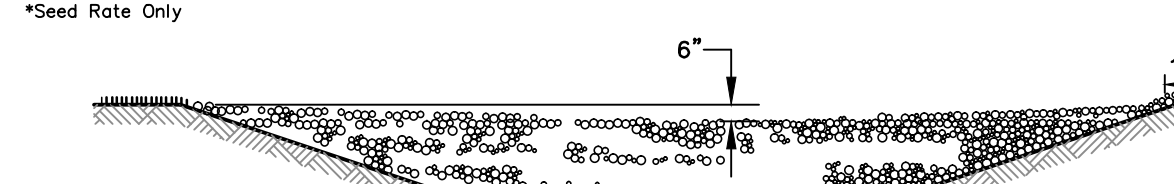
LOCATION	MULCH	RATE (1000 SF.)
PROTECTED AREA	STRAW OR HAY *	100 POUNDS
WINDY AREAS	SHREDDED OR CHOPPED CORNSTALKS	185-275 POUNDS
	STRAW OR HAY (ANCHORED) *	100 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES (GREATER THAN OR EQUAL TO 3:1)	JUTE MESH OR WOOD/PAPEL MAT	AS REQUIRED AS REQUIRED
(GREATER THAN OR EQUAL TO 3:1)		
	* A HYDRO-APPLICATION OF ASPHALT, WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON HAY MULCH FOR WIND CONTROL.	

MULCH ANCHORING
ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD./BLOCK); MULCH NETTING (AS PER MANUFACTURER); ASPHALT EMULSION (0.4 GALLONS PER SQ. YD.); LIQUID ASPHALT (0.10 GALLONS PER SQ. YD.); WOOD CELLULOSE FIBER (750 LBS./ACRE); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SERRATED STRAIGHT DISK. NETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

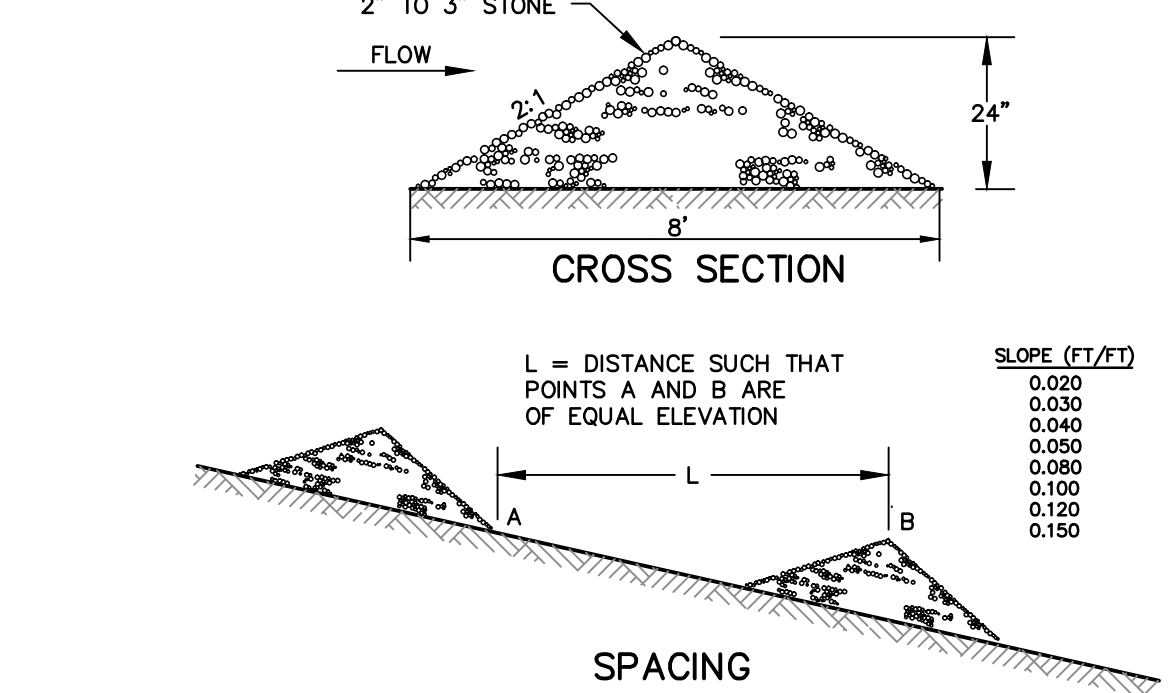
Additional temporary seed mixture (for periods less than 12 months).

Season	Seed	Rate
Summer (5/15 - 8/15)	Sudangrass Oats	40 lbs/acre 80 lbs/acre
Late Summer/Early Fall (8/15 - 9/15)	Prennial Ryegrass	40 lbs/acre
Fall (9/15 - 11/1)	Winter Rye	112 lbs/acre
Winter (11/1 - 4/3)	Mulch w/ Dormant Seed	80 lbs/acre*
Spring (4/1 - 7/1)	Oats Annual Ryegrass	80 lbs/acre 40 lbs/acre

*Seed Rate Only



NOTE: KEY STONE INTO CHANNEL BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 18" (0.5m) TO PREVENT FLOW AROUND DAM.



STONE CHECK DAM DETAIL
NTS

EROSION CONTROL DURING CONSTRUCTION

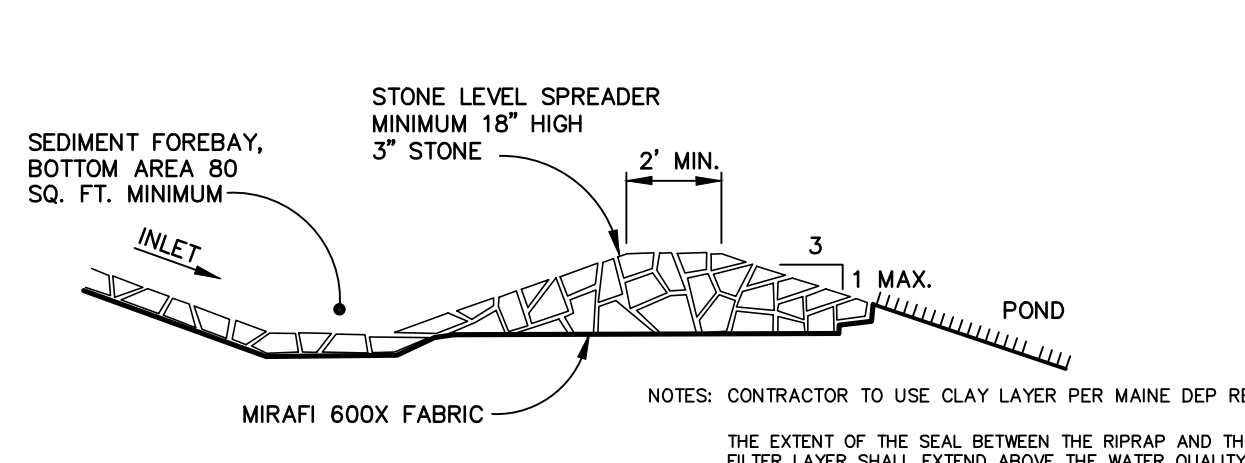
- WINTER CONSTRUCTION**
- WINTER CONSTRUCTION PERIOD: OCTOBER 1 THROUGH APRIL 15
 - WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRES OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
 - EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
 - CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO MORE THAN ONE ACRE OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION.
 - OVERWINTER STABILIZATION OF DITCHES AND CHANNELS: ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL IS NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.
 - INSTALL A SOO LINO LINING IN THE DITCH: A DITCH MUST BE LINED WITH PROPERLY INSTALLED SOO BY OCTOBER 1. PROPER INSTALLATION INCLUDES: PINNING THE SOO ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOO TO GUARANTEE CONTACT BETWEEN THE SOO AND UNDERLYING SOIL, WATERING THE SOO TO PROMOTE ROOT GROWTH INTO THE (DISTURBED) SOIL, AND ANCHORING SOO AT THE BASE OF THE DITCH WITH AJTE OR PLASTIC MESH TO PREVENT THE SOO FROM SLIDING DURING FLOW CONDITIONS. SEE THE PERMANENT VEGETATION BMP SECTION.
 - INSTALL A STONE LINING IN THE DITCH: A DITCH MUST BE LINED WITH STONE RIPRAP BY NOVEMBER 15. A REGISTERED PROFESSIONAL ENGINEER MUST BE HIRED TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

- OVERWINTER STABILIZATION OF DISTURBED SLOPES: ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. THE DEPARTMENT WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS. BY OCTOBER 1 THE DISTURBED SLOPE MUST BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP AS DESCRIBED IN THE FOLLOWING STANDARDS.
 - STABILIZE THE SOIL WITH SOO: THE DISTURBED SOIL MUST BE STABILIZED WITH PROPERLY INSTALLED SOO BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOO ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOO TO GUARANTEE CONTACT BETWEEN THE SOO AND UNDERLYING SOIL, AND WATERING THE SOO TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE SEASON SOO INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V) OR HAVING GROUNDMATER SEEPS ON THE SLOPE FACE.
 - STABILIZE THE SOIL WITH EROSION CONTROL MIX: EROSION CONTROL MIX MUST BE PROPERLY INSTALLED BY NOVEMBER 15. THE CONTRACTOR WILL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GREATER THAN SOO (2H:1V) OR HAVING GROUNDMATER SEEPS ON THE SLOPE FACE. SEE THE TEMPORARY MULCHING BMP SECTION.
 - STABILIZE THE SOIL WITH STONE RIPRAP: PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE DEVELOPER'S OWNER WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP. SEE THE RIPRAP SOPE STABILIZATION BMP SECTION.
- OVERWINTER STABILIZATION OF DISTURBED SOILS: BY SEPTEMBER 15, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% MUST BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.
 - STABILIZE THE SOIL WITH TEMPORARY VEGETATION: BY OCTOBER 1, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, AND COVER WITH MULCH OF THE SEEDING SOIL WITH HAY OR STRAW AT 70 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED BELOW.
 - STABILIZE THE SOIL WITH SOO: STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOO BY OCTOBER 1. PROPER INSTALLATION INCLUDES PINNING THE SOO ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOO TO GUARANTEE CONTACT BETWEEN THE SOO AND UNDERLYING SOIL, AND WATERING THE SOO TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
 - STABILIZE THE SOIL WITH MULCH: BY NOVEMBER 15, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

- MAINTENANCE: MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85 TO 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

- STABILIZATION SCHEDULE BEFORE WINTER:**
- SEPTEMBER 15: ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED. ALL SLOPES MUST BE STABILIZED, SEEDING AND MULCHED. ALL GRASS LINED DITCHES AND CHANNELS MUST BE STABILIZED WITH MULCH OR AN EROSION CONTROL BLANKET.
 - OCTOBER 1: IF THE SLOPE IS STABILIZED WITH AN EROSION CONTROL BLANKET AND SEEDING, ALL DISTURBED AREAS TO BE PROTECTED WITH AN ANNUAL GRASS MUST BE SEED AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND MULCHED.
 - NOVEMBER 15: ALL STONE LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED. SLOPES THAT ARE COVERED WITH RIPRAP MUST BE CONSTRUCTED BY THIS DATE.
 - DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.
 - AREAS WITHIN 100 FEET OF STREAMS THAT ARE NOT STABILIZED WITH VEGETATION BY DEC. 1 SHALL BE MULCHED AND ANCHORED WITH NETTING. IF WORK CONTINUES IN THIS AREA DURING THE WINTER, A DOUBLE LINE OF SEDIMENT BARRIERS MUST BE USED.

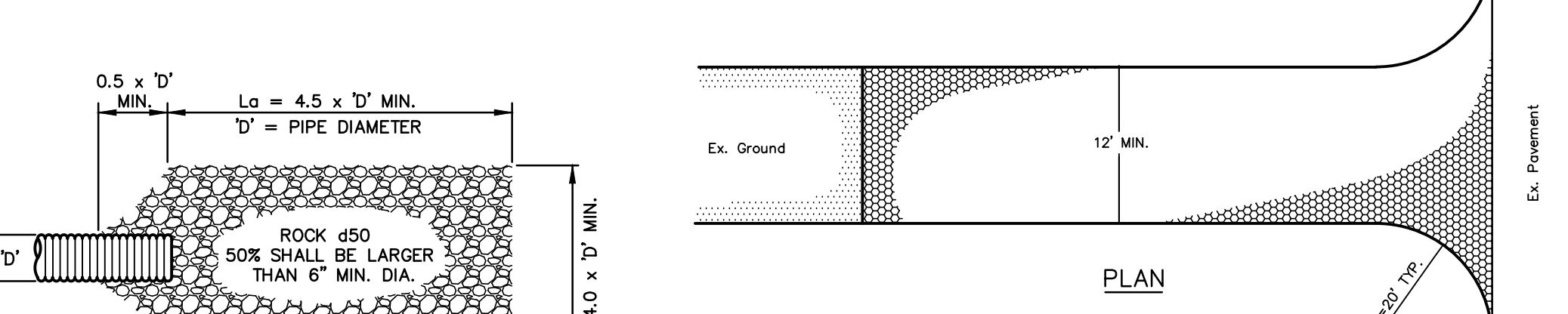
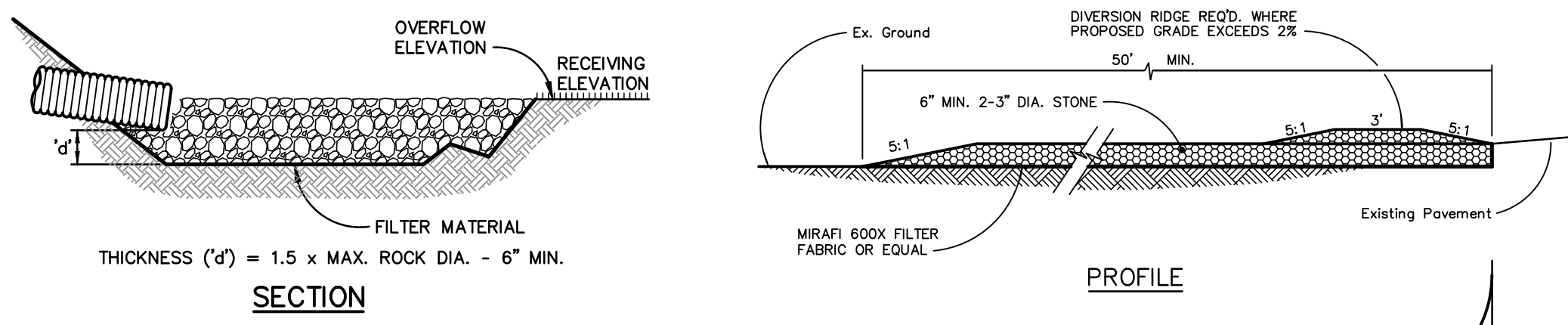
- HOUSEKEEPING:**
- SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
 - GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY, AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL, DIKES, BERMS, SHELTERS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
 - EFFLUENT SEDIMENT AND DUST: ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES MUST NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.
 - DEBRIS AND OTHER MATERIALS: LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
 - TRENCH OR FOUNDATION DE-WATERING: TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE. LIKE A COFFERDAM SEDIMENTATION BASIN AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.
 - NON-STORMWATER DISCHARGES: IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.
 - ADDITIONAL REQUIREMENTS: ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.



SEDIMENT FOREBAY
NTS

- INSTALLATION REQUIREMENTS:**
- FOR TRENCH EXCAVATION, LIMIT THE TRENCH LENGTH TO 500 FEET AND PLACE THE EXCAVATED MATERIAL ON THE UP GRADIENT SIDE OF THE TRENCH.
 - INSTALL DIVERSION DITCHES OR BERMS TO MINIMIZE THE AMOUNT OF CLEAN STORMWATER RUNOFF ALLOWED INTO THE EXCAVATED AREA.
 - NEVER DISCHARGE TO AREAS THAT ARE BARE OR NEWLY VEGETATED.

MAINTENANCE:
DURING THE ACTIVE DEWATERING PROCESS, INSPECTION OF THE DEWATERING FACILITY SHOULD BE REVIEWED FREQUENTLY. SPECIAL ATTENTION SHOULD BE PAID TO THE BUFFER AREA FOR ANY SIGN OF EROSION AND CONCENTRATION OF FLOW THAT MAY COMPROMISE THE BUFFER AREA. OBSERVE WHERE POSSIBLE THE VISUAL QUALITY OF THE EFFLUENT AND DETERMINE IF ADDITIONAL TREATMENT CAN BE PROVIDED.



- NOTES:**
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINAGE INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

STABILIZED CONSTRUCTION ENTRANCE
NTS

ENERGY DISSIPATOR
NTS



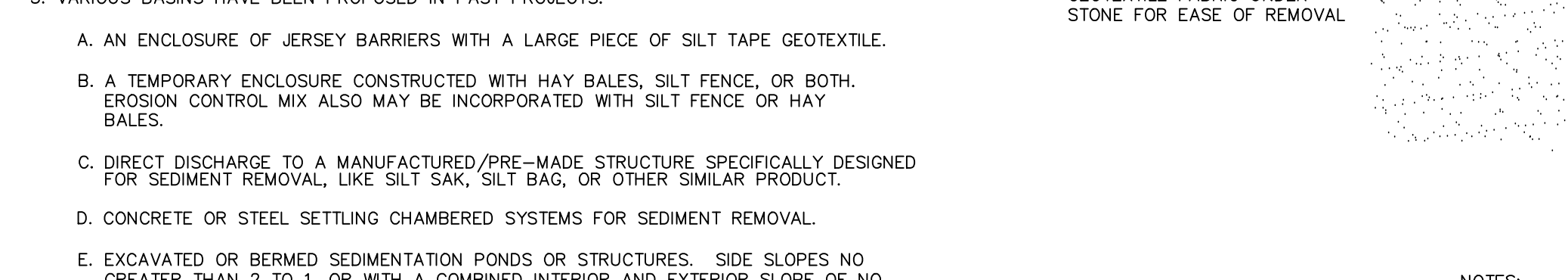
DEWATERING PROCEDURE:

- SITE DEWATERING SHOULD BE COMPLETED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL - BMP SECTION G-3 (CONSTRUCTION DEWATERING) DATED MARCH 2003 AS SUMMARIZED BELOW:
- CONSIDERATIONS:**
- THE DISCHARGE AREAS SHOULD BE CHOSEN WITH CAREFUL CONSIDERATION TO DOWN GRADIENT WATER RESOURCES AND THE LANDSCAPE ABILITY TO TREAT WATER FLOWS FROM THE DEWATERING PROCESS. A WOODED BUFFER IS BEST. ALL BUFFER REQUIREMENTS ARE FOUND IN THE VEGETATED BUFFER BMP SECTION. THE DISCHARGE SHOULD BE STOPPED IMMEDIATELY IF THE RECEIVING AREA IS SHOWING ANY SIGNS OF UNSTABILITY OR EROSION.
 - IF THE COLLECTED RUNOFF IS CONTAMINATED WITH OIL, GREASE OR OTHER PETROLEUM PRODUCTS, OIL/WATER SEPARATOR OR A FILTRATION MECHANISM MAY BE NECESSARY PRIOR TO THE DISCHARGE. ANOTHER METHOD OF DISPOSAL SUCH AS CONTAINMENT AND TRUCKING AWAY BY A MAINE DEP LICENSED TRANSPORTER WILL NEED TO BE IMPLEMENTED IF THE WATER HAS BEEN CONTAMINATED BY TOXIC AND HAZARDOUS MATERIALS.
 - ALL REQUIREMENTS OF STATE LAW AND PERMIT REQUIREMENTS OF LOCAL, STATE AND FEDERAL AGENCIES MUST BE MET.

SPECIFICATIONS:
DEWATERING EXCAVATED AREAS MUST BE IN TWO DISTINCT PHASES. THE REMOVAL OF THE COLLECTED WATER WITHIN THE EXCAVATION AND THE TREATMENT OF THE COLLECTED WATER.

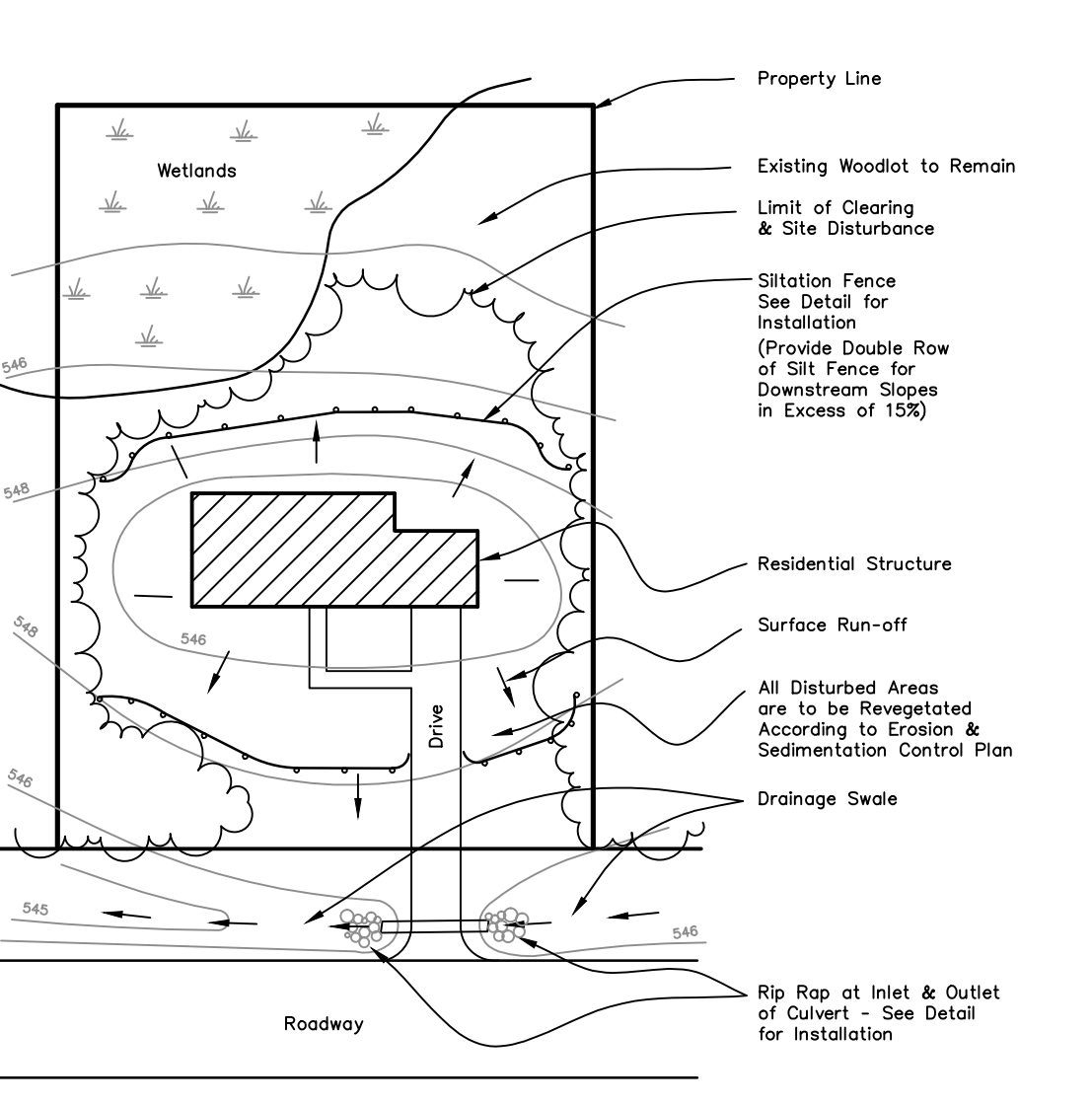
- PHYSICAL DEWATERING**
THE REMOVAL OF WATER FROM THE EXCAVATED AREA CAN BE ACCOMPLISHED BY NUMEROUS METHODS. THE MOST COMMON OF THESE ARE: GRAVITY DRAIN THROUGH DAYLIGHT CHANNELS, MECHANICAL PUMPING, SIPHONING, AND USING THE BUCKET OF CONSTRUCTION EQUIPMENT TO SCOOP AND DUMP WATER FROM THE EXCAVATION.
- CHANNELS DUG DISCHARGING WATER FROM THE EXCAVATED AREA NEED TO BE STABLE. IF FLOW VELOCITIES CAUSE EROSION WITHIN THE CHANNEL THEN DITCH LINING SHOULD BE USED.
 - BUCKETED WATER SHOULD BE DISCHARGED IN A STABLE MANNER TO THE SEDIMENT REMOVAL AREA. A SPLASH PAD OF RIPRAP UNDERLAIN WITH GEOTEXTILE MAY BE NECESSARY TO PREVENT SCOURING OF THE SOIL IN THE BASIN.
 - DEWATERING IN PERIODS OF INTENSE, HEAVY RAIN, WHEN THE INFILTRATION CAPACITY OF THE SOIL IS EXCEEDED, SHOULD BE AVOIDED.

- SEDIMENT REMOVAL:**
MANY METHODS OF SETTLING OR FILTERING SEDIMENT ARE AVAILABLE FOR THE CONTRACTOR TO CONSIDER:
- FLOW TO THE SEDIMENT REMOVAL STRUCTURE MAY NOT EXCEED THE SEDIMENT REMOVAL STRUCTURE'S CAPACITY TO SETTLE AND FILTER FLOW OR THE STRUCTURE'S VOLUME CAPACITY.
 - SEDIMENT REMOVAL BASINS SHOULD DISCHARGE WHEREVER POSSIBLE TO A WELL-VEGETATED BUFFER THROUGH SHEET FLOW AND SHOULD MAXIMIZE THE DISTANCE TO THE NEAREST WATER RESOURCE AND MINIMIZING THE SLOPE OF THE BUFFER AREA.
 - VARIOUS BASINS HAVE BEEN PROPOSED IN PAST PROJECTS:
 - AN ENCLOSURE OF JERSEY BARRIERS WITH A LARGE PIECE OF SILT TAPE GEOTEXTILE.
 - A TEMPORARY ENCLOSURE CONSTRUCTED WITH HAY BALES, SILT FENCE, OR BOTH. EROSION CONTROL MIX ALSO MAY BE INCORPORATED WITH SILT FENCE OR HAY BALES.
 - DIRECT DISCHARGE TO A MANUFACTURED/PRE-MADE STRUCTURE SPECIFICALLY DESIGNED FOR SEDIMENT REMOVAL, LIKE SILT SAK, SILT BAG, OR OTHER SIMILAR PRODUCT.
 - CONCRETE OR STEEL SETTling CHAMBERED SYSTEMS FOR SEDIMENT REMOVAL.
 - EXCAVATED OR BERMED SEDIMENTATION PONDS OR STRUCTURES. SIDE SLOPES NO GREATER THAN 2 TO 1, OR WITH A COMBINED INTERIOR AND EXTERIOR SLOPE OF NO GREATER THAN 5 TO 1. SEE THE SEDIMENT TRAP BMP SECTION.
 - A STORMWATER DETENTION POND MAY BE USED AS A STILLING BASIN DURING CONSTRUCTION. HOWEVER, A SEDIMENT BARRIER NEEDS TO BE INSTALLED TO THE OUTLET STRUCTURE TO PREVENT THE DISCHARGE OF SEDIMENT. SEE THE SEDIMENT POND CONSTRUCTION BMP SECTION.

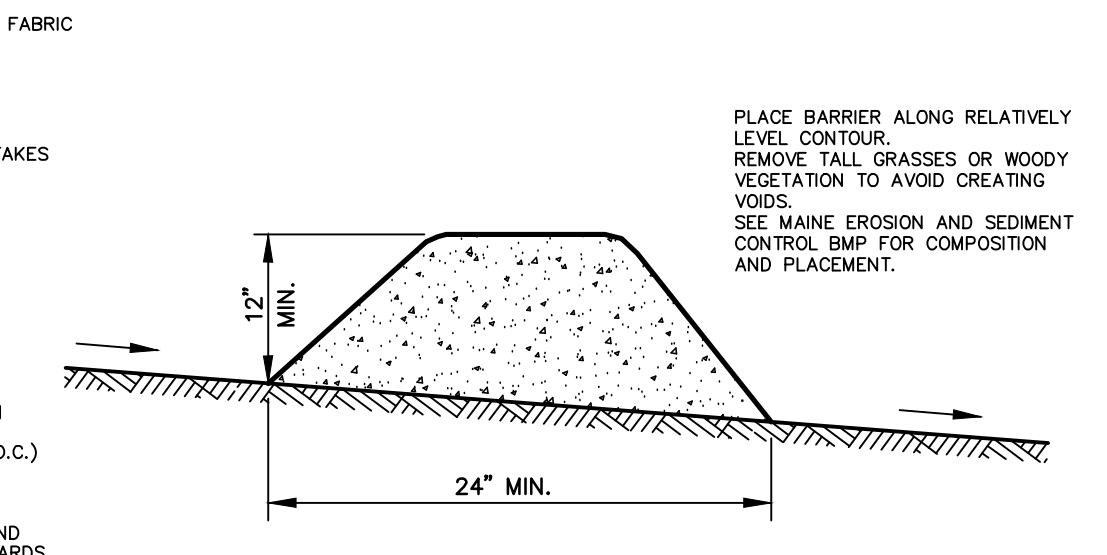


- NOTES:**
- DIRT BAG MATERIAL BASED ON PARTICLE SIZE IN DIRTY WATER, I.E. FOR COARSE PARTICLES A WOVEN MATERIAL; FOR SILTS/CLAYS A NON-WOVEN MATERIAL.
 - DO NOT OVER PRESSURIZE DIRT BAG OR USE BEYOND CAPACITY.
 - LOCATE DISCHARGE SITE ON FLAT UPLAND AREAS AS FAR AWAY AS POSSIBLE FROM STREAMS, WETLANDS, OTHER RESOURCES AND POINTS OF CONCENTRATED FLOW.
 - DOWN GRADIENT RECEIVING AREA MUST BE WELL VEGETATED OR OTHERWISE STABLE FROM EROSION, E.G. FOREST FLOOR OR COARSE GRAVEL/STONE.
 - DISCHARGE NOT PERMITTED WITHIN 25' OF A STREAM OR WETLAND. CONSULT DEP IF STRUCTURE MUST BE WITHIN 75' OF STREAM OR WATER BODY. SECONDARY CONTAINMENT MAY BE REQUIRED.

PUMPED DISCHARGE SEDIMENT CONTROL DEVICE ("DIRT BAG")
NTS

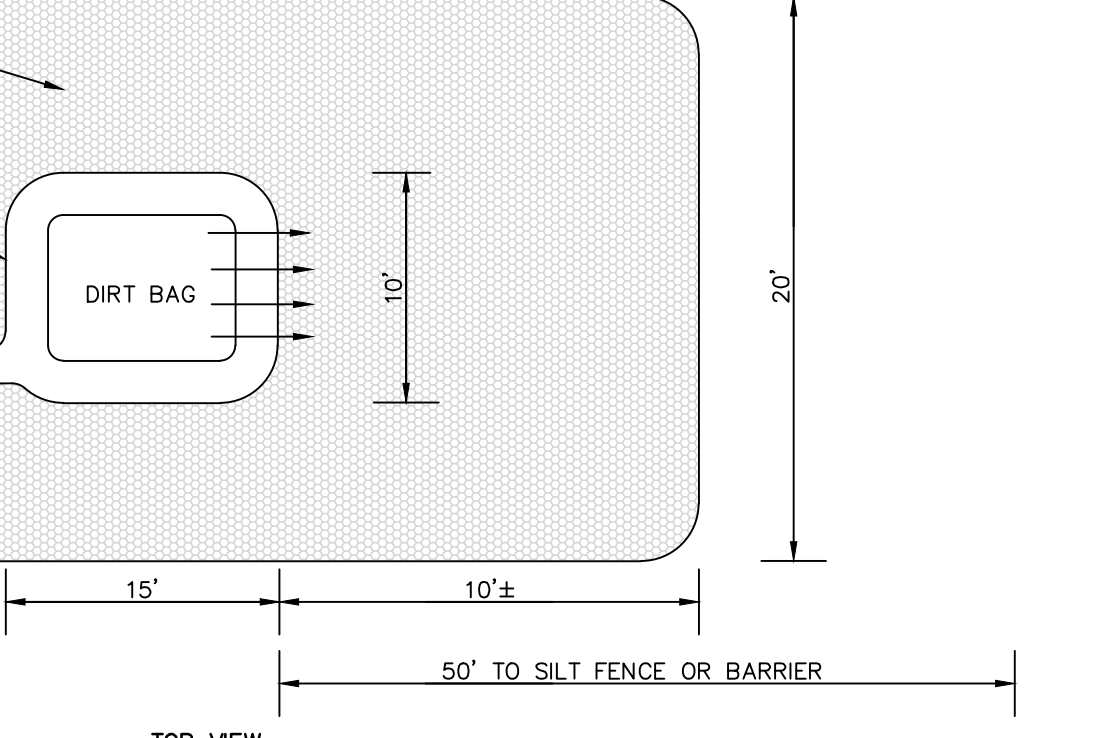


TYPICAL EROSION CONTROL MEASURES FOR RESIDENTIAL LOTS
NTS

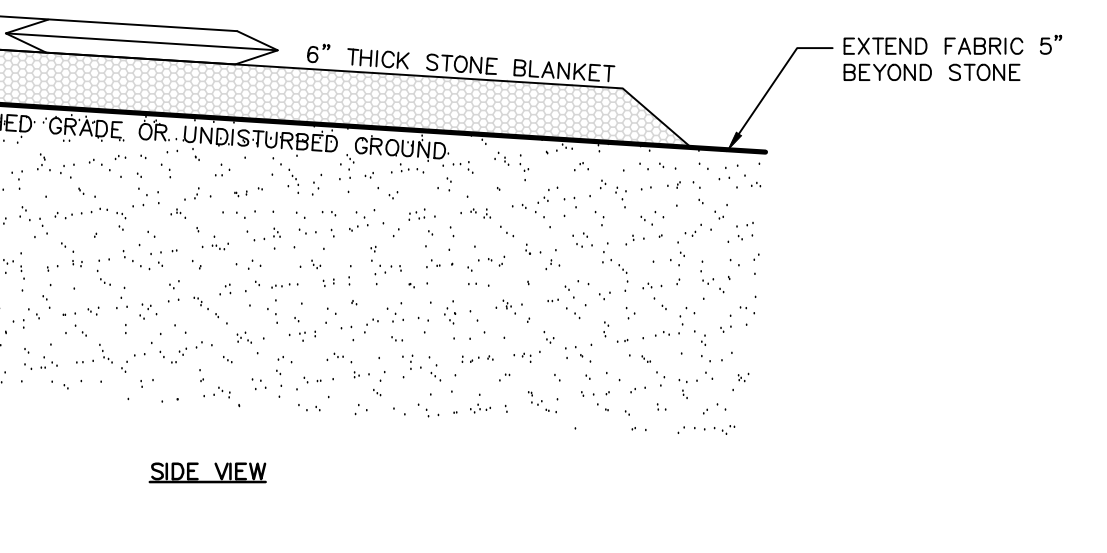


- KEY FABRIC IN A 4x4 TRENCH W/ BACKFILL:**
- KEY FABRIC IN A 4x4 TRENCH W/ BACKFILL.
 - SILT FENCE SHALL BE A 3' FENCE OF 120LB/M (W/ REIN. BACK OF 17' WIRE MESH, POSTS 10' O.C.) OR 200LB/M (W/ NO REIN. POSTS 6' O.C.)
 - INSTALL PER CUMBERLAND COUNTY S.W.C.C. STANDARDS

EROSION CONTROL MIX BERM
NTS



TOP VIEW

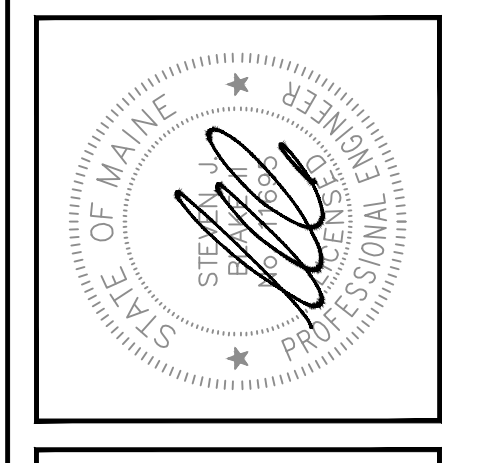


SIDE VIEW

- NOTES:**
- DIRT BAG MATERIAL BASED ON PARTICLE SIZE IN DIRTY WATER, I.E. FOR COARSE PARTICLES A WOVEN MATERIAL; FOR SILTS/CLAYS A NON-WOVEN MATERIAL.
 - DO NOT OVER PRESSURIZE DIRT BAG OR USE BEYOND CAPACITY.
 - LOCATE DISCHARGE SITE ON FLAT UPLAND AREAS AS FAR AWAY AS POSSIBLE FROM STREAMS, WETLANDS, OTHER RESOURCES AND POINTS OF CONCENTRATED FLOW.
 - DOWN GRADIENT RECEIVING AREA MUST BE WELL VEGETATED OR OTHERWISE STABLE FROM EROSION, E.G. FOREST FLOOR OR COARSE GRAVEL/STONE.
 - DISCHARGE NOT PERMITTED WITHIN 25' OF A STREAM OR WETLAND. CONSULT DEP IF STRUCTURE MUST BE WITHIN 75' OF STREAM OR WATER BODY. SECONDARY CONTAINMENT MAY BE REQUIRED.

PUMPED DISCHARGE SEDIMENT CONTROL DEVICE ("DIRT BAG")
NTS

NO.	DATE	DESCRIPTION
1	11/15/16	Submitted Preliminary Plan to City
2	12/27/16	Submitted Final Plan to City
3	1/19/17	Submitted Revised Final Plan to City



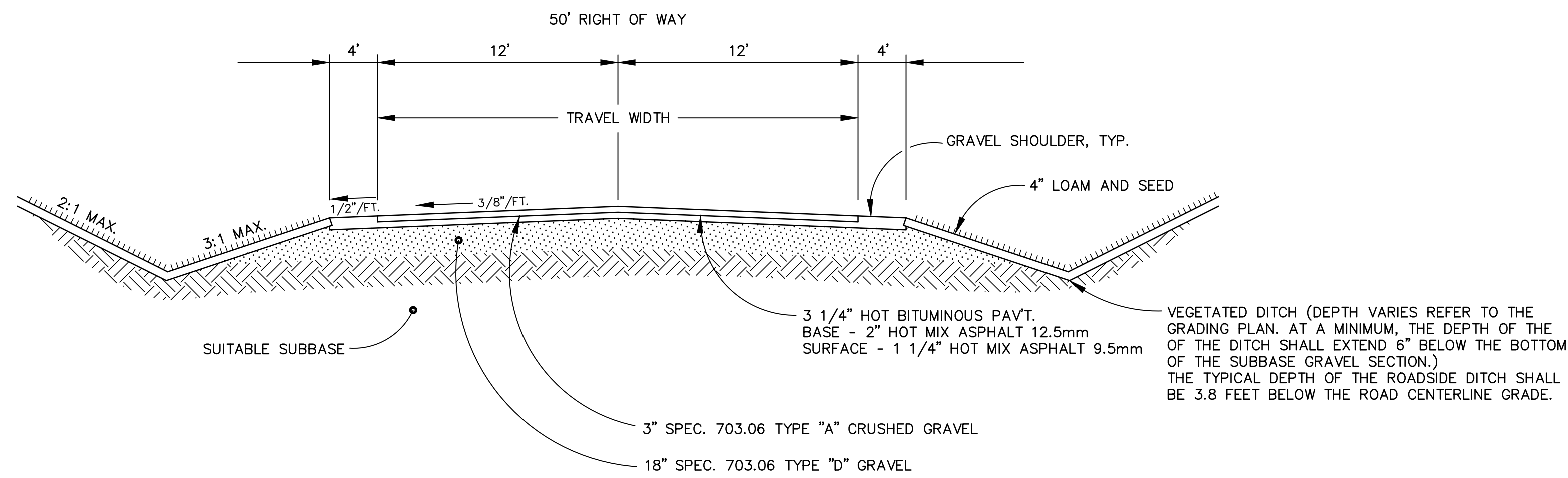
BH2M
Berry, Huff, MacDonald, Milligan Inc.
Engineers, Surveyors
28 State Street
Portland, Maine 04108
Tel: (207) 839-9771
Fax: (207) 839-9250

FOR USE BY
Meronion Development LLC
4 Ditchford Lane
Saco, Maine

EROSION CONTROL DETAILS
LIBBY'S LANDING
GRANT ROAD
SACO, MAINE

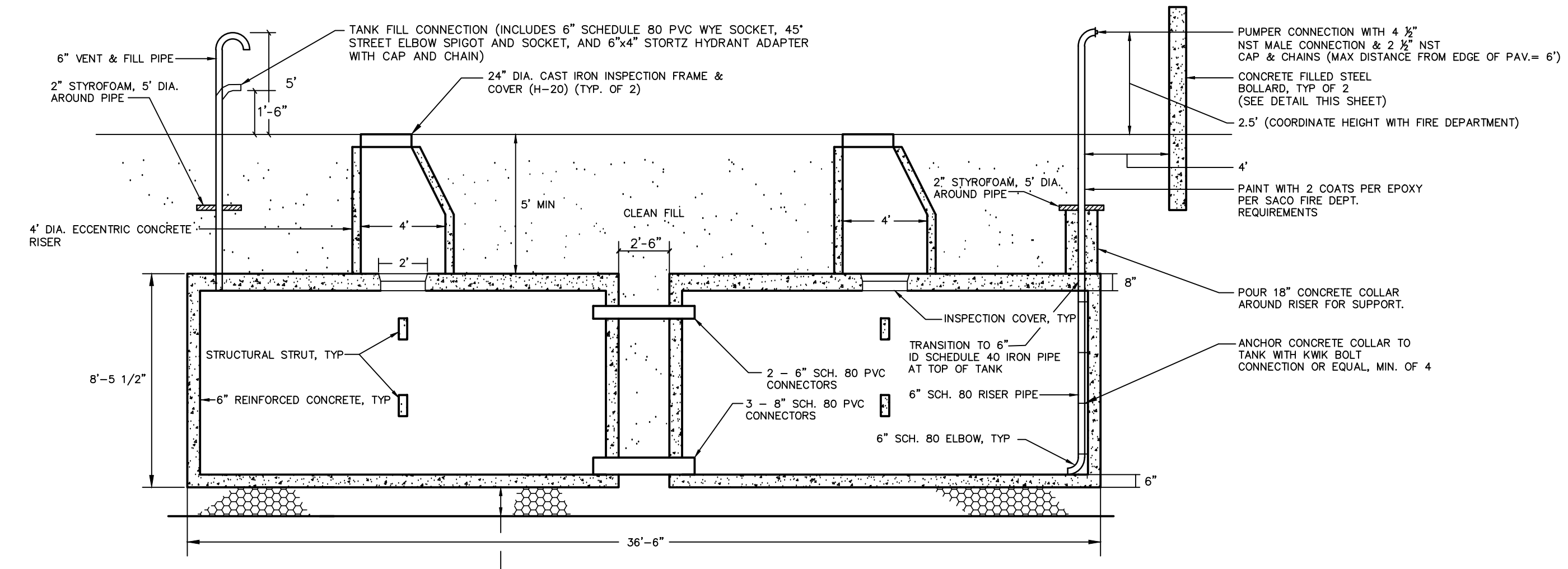
DESIGNED	DATE
W. Pelkey	July 2016
DRAWN	SCALE
Dept.	1" = 100'
CHECKED	JOB NO.
R. Libby Jr.	16109

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED.



ROADWAY SECTION
N.T.S.

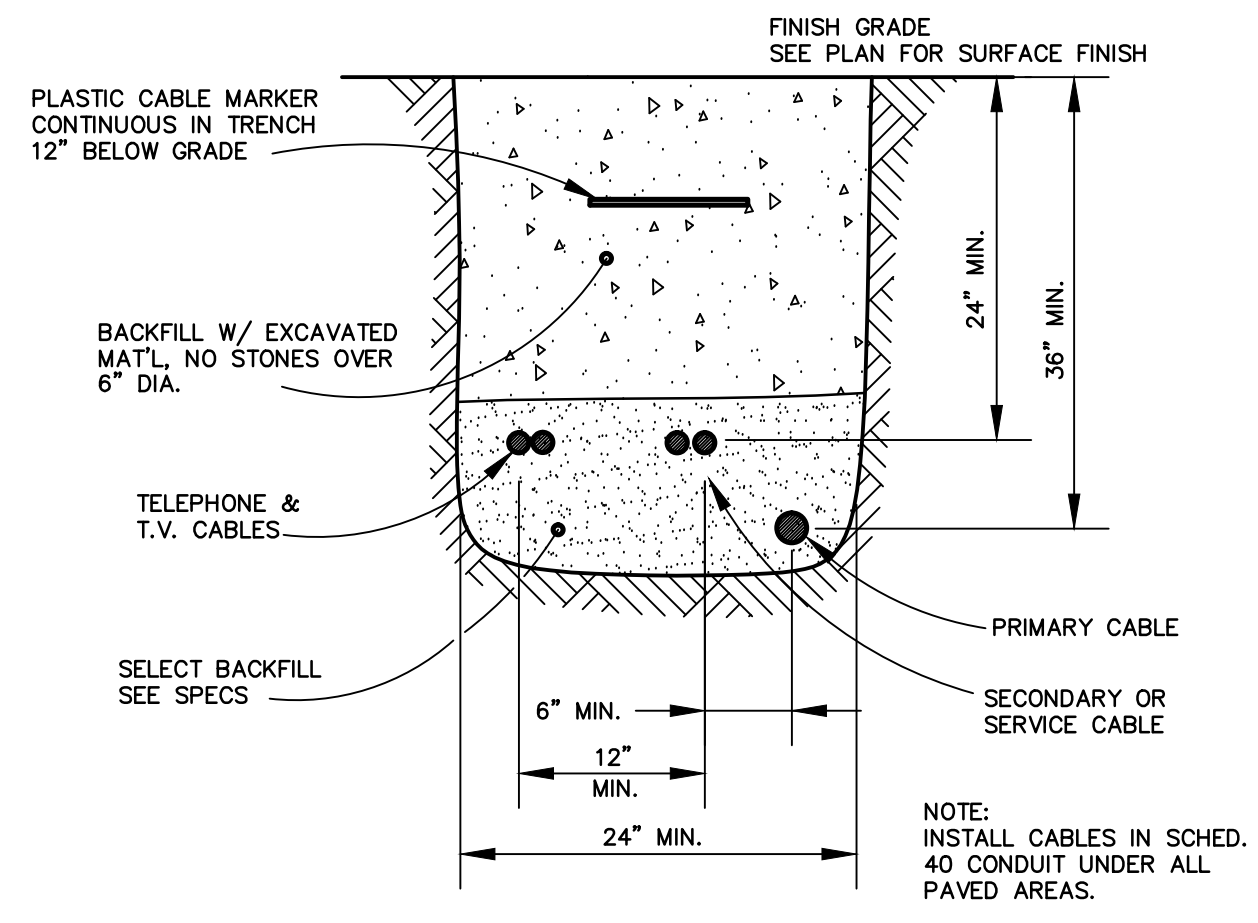
- NOTES:**
- TANKS TO BE H-20 LOADING
 - REFER TO CITY OF SACO FIRE DEPARTMENT "FIRE SUPPRESSION UNDERGROUND FIRE STORAGE TANK REQUIREMENTS"
 - SHOP DRAWINGS FOR THE FIRE CISTERN TANK AND APPURTENANCES SHALL BE SUBMITTED TO THE SACO FIRE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE ORDERING OF THE STRUCTURE.
 - THE CONTRACTOR SHALL NOTIFY THE FIRE DEPARTMENT A MINIMUM OF 72 HOURS PRIOR TO TANK INSTALLATION TO ARRANGE AN ON-SITE INSPECTION DURING TANK PLACEMENT. TANKS SHALL NOT BE BACK FILLED UNTIL THE FIRE DEPARTMENT HAS COMPLETED A SATISFACTORY INSPECTION (INCLUDING PHOTOS) OF THE TANKS AND THEIR INTERIORS
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TANK MAINTENANCE FOR A PERIOD OF ONE YEAR FROM THE DATE OF INSTALLATION. AFTER ONE YEAR ALL MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE SACO FIRE DEPT.



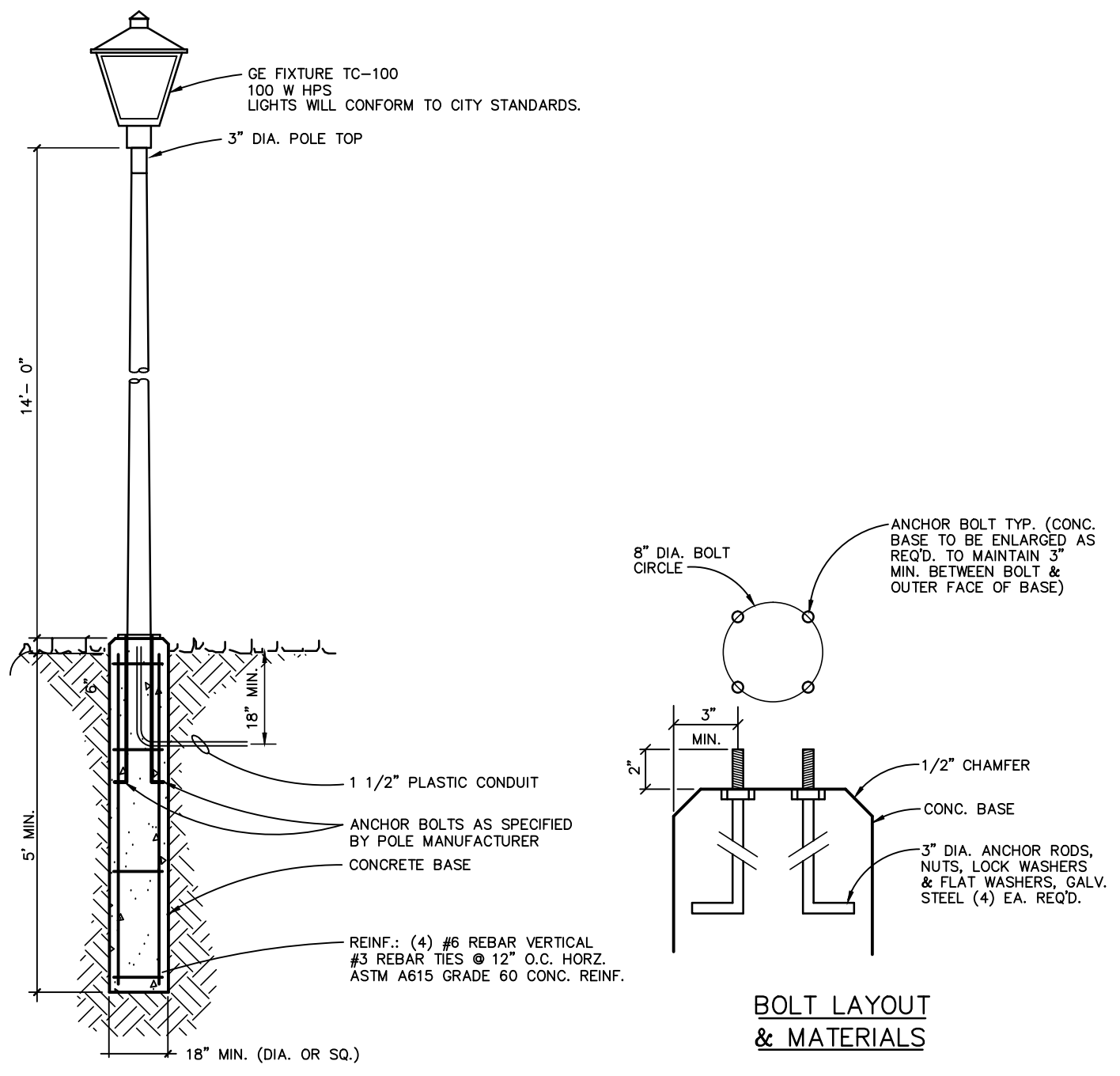
FIRE TANK DETAIL
N.T.S.

12" SAND BED FULL LENGTH COMPACT SAND TO 95% OF MAXIMUM DRY DENSITY. SAND SHALL MEET THE FOLLOWING SIEVE ANALYSIS BY WEIGHT:

SIEVE SIZE	MAX. % PASSING BY WEIGHT
NO. 4	95-100
NO. 10	80-85
NO. 100	2-10

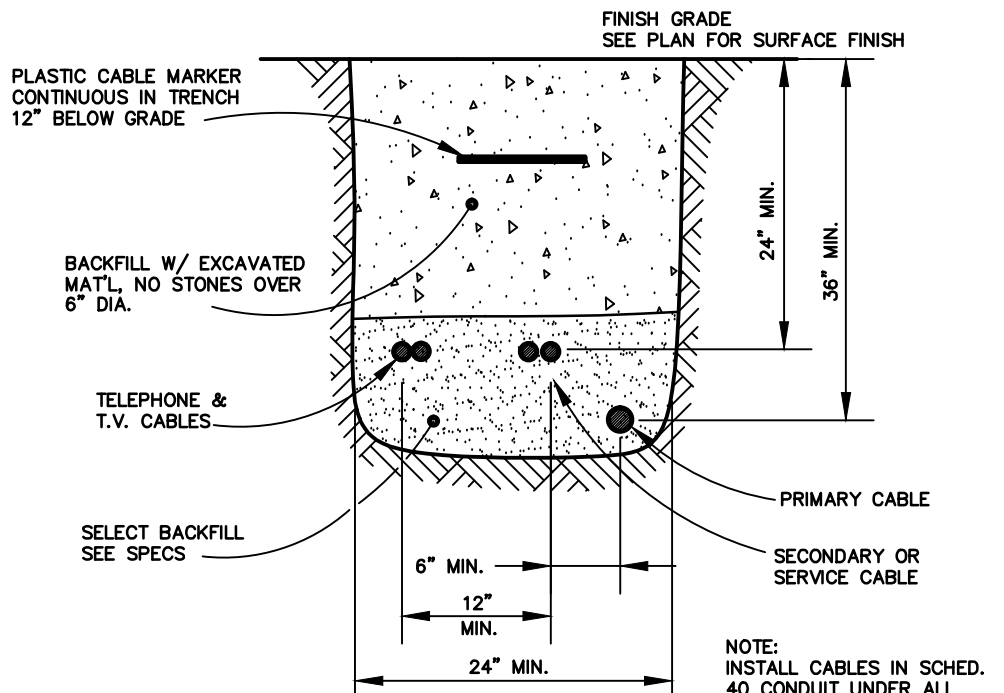


UNDERGROUND CABLE TRENCH
N.T.S.

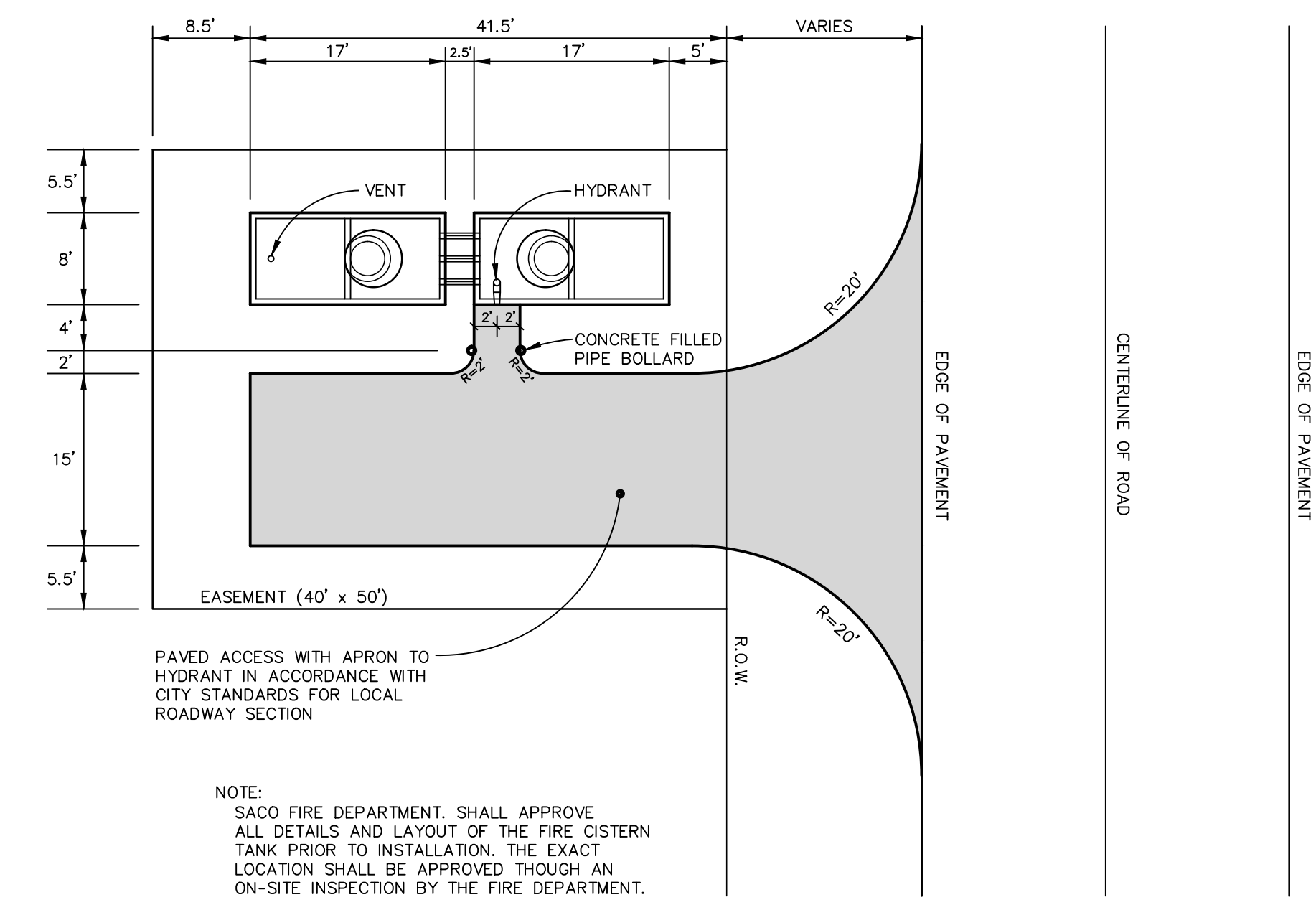


LIGHT POLE DETAIL
N.T.S.

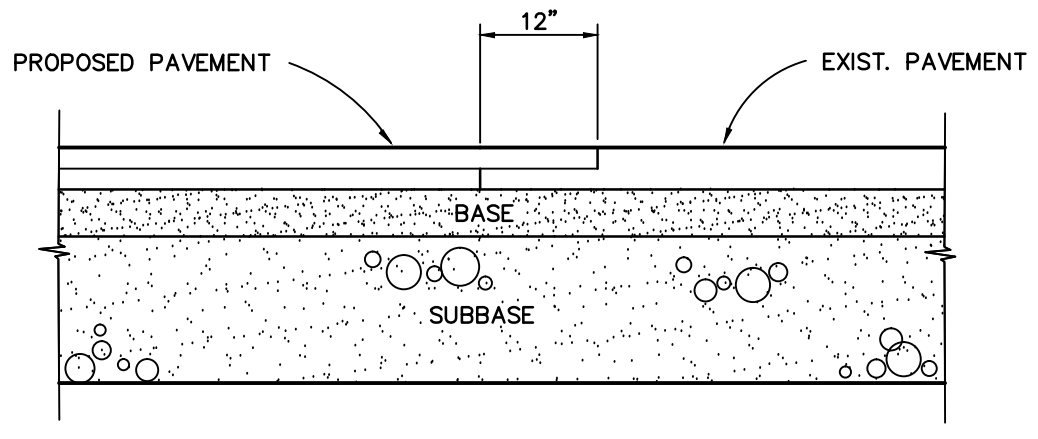
BOLT LAYOUT & MATERIALS



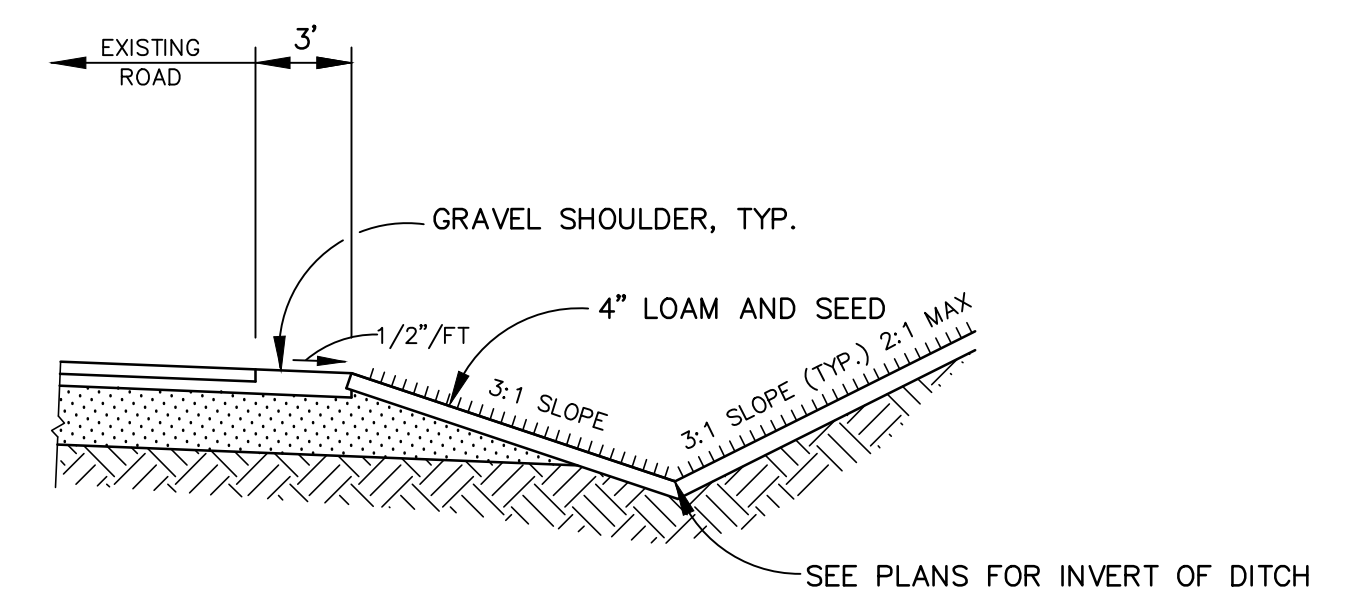
UNDERGROUND CABLE TRENCH
N.T.S.



FIRE CISTERN TANK LAYOUT
N.T.S.

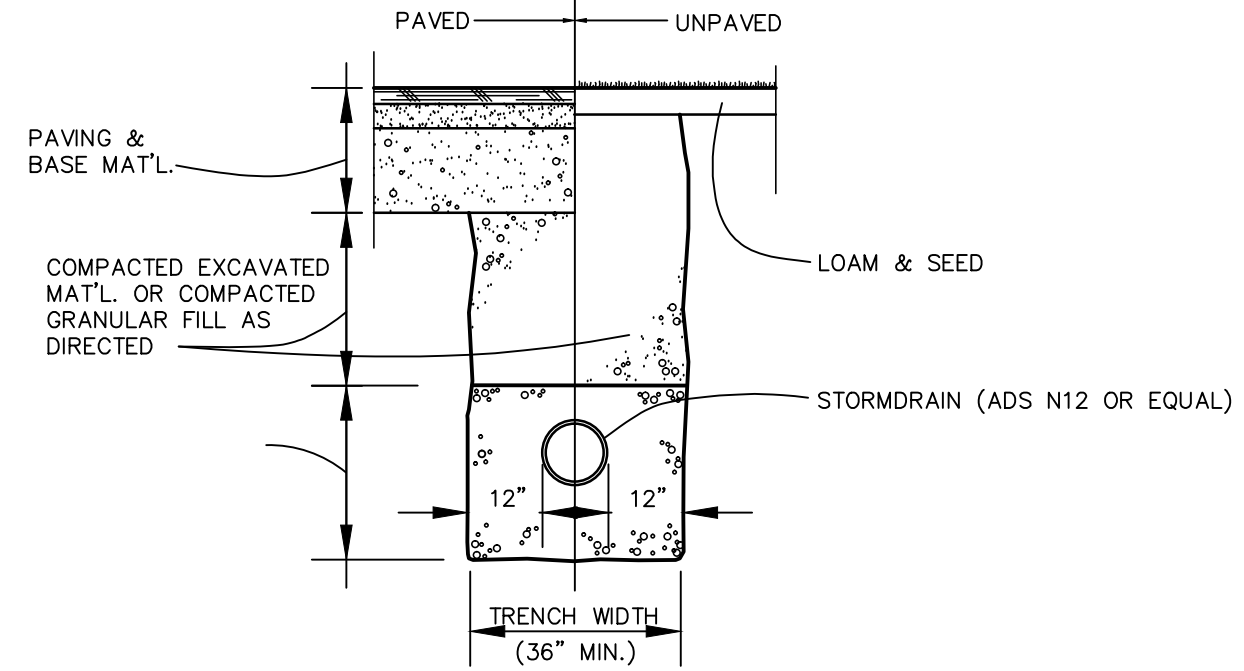


PAVEMENT JOINT DETAIL
N.T.S.

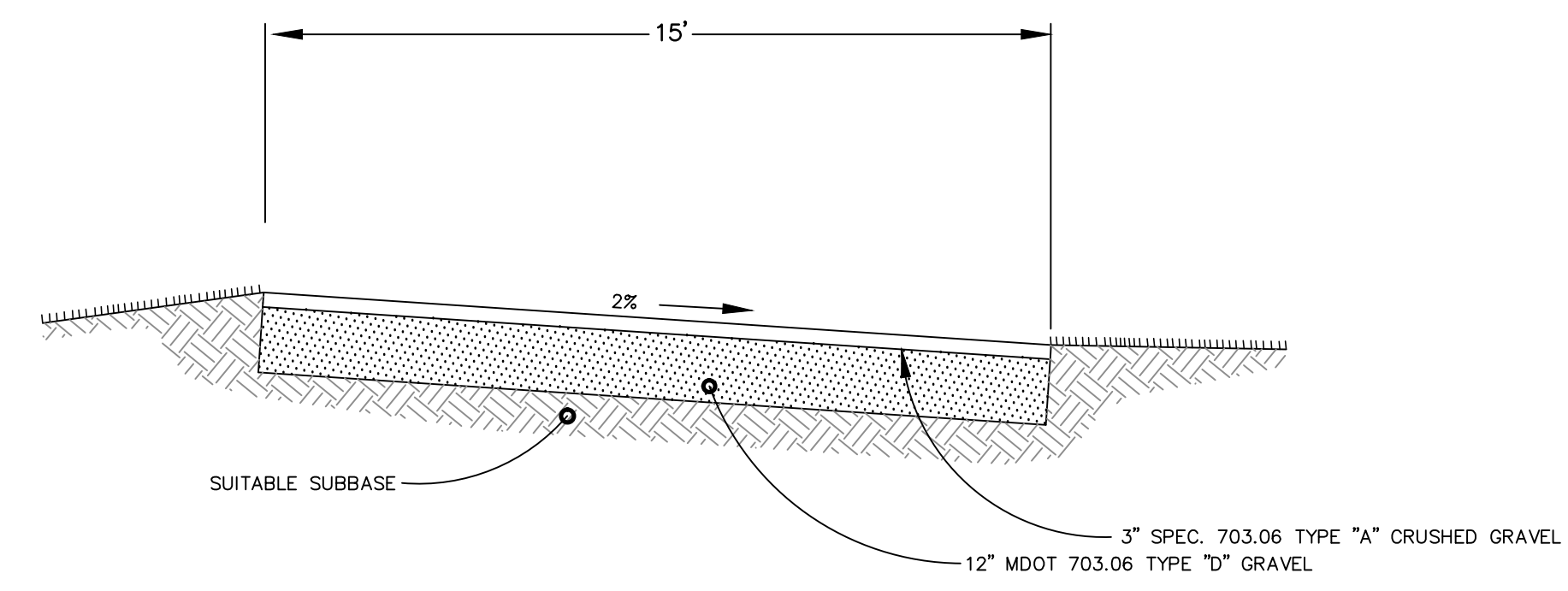


TYPICAL GRANT ROAD DITCH
N.T.S.

- NOTES:**
- Trench width shown is payment width for rockexcavation & replacement of unsuitable material.
 - Do not mechanically compact directly over flexible pipe (e.g. PVC, Polyethylene)
 - Concrete pipe shall have sand bedding.
 - Perforations along invert required on storm drain pipes per AASHTO standards.

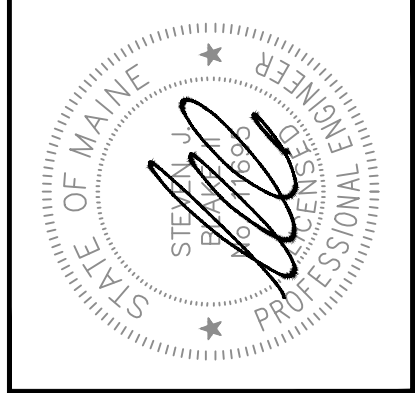


TRENCH DETAIL
N.T.S.



SUPERELEVATED WETPOND ACCESS ROAD SECTION
N.T.S.

NO.	DATE	DESCRIPTION
1	11/15/16	Submitted Preliminary Plan to City
2	12/27/16	Submitted Final Plan to City
3	1/29/17	Submitted Revised Final Plan to City



BH2M
Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors
28 State Street
Conform, Maine 04038
Tel: (207) 839-2771
Fax: (207) 839-8250

FOR
Metroian Development LLC
4 Derrwood Lane
Saco, Maine

STANDARD DETAILS
LIBBY'S LANDING
GRANT ROAD
SACO, MAINE

DESIGNED W. Pelkey	DATE July 2016
DRAWN Dept.	SCALE 1" = 100'
CHECKED R. Libby Jr.	JOB. NO. 16109

SHEET
8

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED

Standard Conditions of Approval
Site Location of Development Act

Saco Planning Board
Libby's Landing Subdivision
February 7, 2017

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

- A. Approval of Variations from Plans.** This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals, and supporting documents is subject to the review and approval of the Planning Board prior to implementation. Further division of proposed lots by the applicant or future owners is specifically prohibited, without prior approval of the Planning Board, and the applicant shall include deed restrictions to that effect.
- B. Compliance with All Applicable Laws.** The applicant shall secure and comply with all applicable Federal, State, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Compliance with All Terms and Conditions of Approval.** The applicant shall submit all reports and information requested by the Board or the Planning Department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- D. Advertising.** Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- E. Transfer of Development.** Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Planning Board, where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Planning Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.

- F. Initiation of Development.** If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Re-application for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted.
- G. Reexamination After Five Years.** If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.
- H. Approval included in Contract Bids.** A copy of this approval must be included in or attached to all contract bid specifications for the development.
- I. Approval Shown to Contractors.** Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.
- J. Recording.** The applicant shall have this approval, along with all findings, conclusions and conditions recorded in the York County Registry of Deeds. Verification of this action shall be submitted to the Saco Planning Office; a copy of the receipt issued by the Registry is adequate.

With the above Conditions and the accompanying Findings of Fact, the Saco Planning Board hereby finds that applicant Mezoian Development, LLC has satisfied the requirements of the Site Location of Development Law of the State of Maine. Under the Review Authority delegated to the City of Saco by the Maine Department of Environmental Protection, approval is hereby granted, contingent on these Conditions of Approval.

Voted by the Saco Planning Board on February 7, 2017.

On Behalf of the Planning Board,

Robert H. Hamblen
City Planner

Memorandum

To: Planning Board Members
From: Bob Hamblen
Re: Proposed Amendment, Cascades and Park North Subdivision
Tax Map 62, Lot 1-2
Date: Meeting of Feb. 7, 2017

A. Overview

A few Board members may recall approving this subdivision at the Jan. 8, 2008 meeting. At the Board's next meeting, developer Elliott Chamberlain proposed an amendment: he sought approval for the parcel at the corner of Cascade Road and Portland Road to be split off from the larger Cascades parcel, and the Board was amenable, on Jan. 22, 2008.

Town and Country Federal Credit Union bought the newly created, 4.18 acre parcel, but never followed through with development. Amari Holdings, LLC put a 2.37 acre portion of the parcel under option in 2016, and now asks to amend the plan by dividing the approved Lot C5, leaving a residual Lot C5-1, 1.81 acres in area.

Staff review of the proposed amendments yielded some comments, but no concerns.

B. Determination of Completeness

The application for the Cascades and Park North subdivision was found to be complete prior to the Jan. 8, 2008 final approval. Applications for subsequent amendments have similarly been found to be complete. Given this proposed amendment, the fact that the lots resulting from the amendment would be 2.37 and 1.81 acres in area, that there are no existing homeowners to get excited about the prospect of new lots, staff has no concerns about the completeness of the application. Suggested motion:

“I move to find the application for final subdivision review complete.”

C. Conclusions

Staff recognizes the proposed amendment as minor in nature, the resulting lots would be conforming in respect to minimum lot size and frontage, and sees no issues for concern. A suggested motion once the applicant's presentation is complete and public hearing has been held:

“I move to approve the proposed amendment to the final subdivision plan of the Park North/Cascades subdivision submitted by Amari Holdings, LLC based on the Findings of Fact dated January 22, 2008 and the Conditions of Approval dated January 8, 2008.”



Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors

28 State Street, Gorham, Maine 04038
207 839-2771

Bob Hamblen
Saco City Planner
300 Main Street
Saco, Maine 04072

Re: Amended Subdivision
Lot C-5 Park North & The Cascades

LESTER S. BERRY
WILLIAM A. THOMPSON
ROBERT C. LIBBY, Jr.
WALTER E. PELKEY
ANDREW S. MORRELL
STEVEN J. BLAKE

January 19, 2017



Dear Bob;

On behalf of the applicant, Amari Holdings LLC, we are submitting 12 copies of the plan and application for the above referenced project.

Lot C-5 from the approved subdivision is being divided into two lots with the applicant only purchasing what is shown as the lot abutting Route 1 and labelled as Lot C5. The balance of Lot C-5 will continue to be owned by Town and Country Credit Union and this is shown as Lot C5-1.

Both lots will meet the minimum lot area, frontage and setbacks for this contract zone.

Enclosed as part of the application is the subject parcel deed, existing easement deed, copy of corporation status from the Secretary of State, a right title & interest document and the application fee.

We would appreciate being placed on the next planning board agenda.

Sincerely,

A handwritten signature in black ink, appearing to read "William A. Thompson".

William A. Thompson
Project Manager

cc: N. Libby

APPLICATIONS

Account Number _____

Fee _____

Received by _____

Date _____

SACO PLANNING BOARD
300 Main Street
Saco, Maine 04072

- APPLICATION FORM FOR:
- Sketch Plan, Subdivision
 - Preliminary Plan Subdivision
 - Final Plan Subdivision
 - Amended Subdivision

This application shall conform in all respects to the City of Saco Subdivision Regulations. It shall be accompanied by fourteen (12) copies of the Plan and all submissions.

A. INFORMATION ON SUBDIVISION

1. Proposed name of subdivision Park North & The Cascades
2. Number of lots/units 1 Existing being split into 2
3. Does the applicant propose to dedicate to the public all streets and open space shown on the plan? No - existing roads are public
4. State number of acres which applicant proposes to dedicate to public usage for recreational or open space: 0
5. Does owner intend to request any waivers of the requirements of the Subdivision Regulations of this Board upon the submission of the Final Plan for approval? No
6. If any waivers of requirements are to be requested, list them and give reasons why such requirements should be waived: _____

B. APPLICANT INFORMATION

OWNER'S NAME Town and Country FCU

Address 557 Main Street South Portland, Maine 04106

Telephone and Fax Numbers _____

E-mail Address _____@_____

APPLICANT'S NAME Amari Holdings, LLC

Address 5 Stone Pony Circle Saco, Maine 04072

Telephone and Fax Numbers 207 286-6210

E-mail Address natelibbymasonry@yahoo.com

ARCHITECT/ENGINEER'S NAME BH2M Engineers

Address 28 State Street Gorham, Maine 04038

Telephone and Fax Numbers 207 839-2771

E-mail Address wthompson@bh2m.com

1. If Applicant is a Corporation, state whether the Corporation is licensed to do business in Maine X YES _____ NO and attach a copy of Secretary of State's Registration.
2. What interest does the Applicant have in the parcel to be subdivided (Option, land purchase contract, record ownership, etc.)? Purchase & Sale

C. INFORMATION ON PARCEL TO BE SUBDIVIDED

1. Location of property: Book 15384 ^{Page}~~Lot~~ 659
(from York County Register of Deeds)
2. Location of property: Map 62 Lot 1-2
(from Assessor's Office)
3. Street Address: 933 Portland Road Saco
4. Present use of land: Undeveloped
5. Current zoning of property: Cascade Contract Zone
6. Acreage of parcel to be subdivided: 4.18 acres

7. Indicate the nature of any restrictive covenants to be placed on the deeds: None
8. A complete statement of any easements relating to the property is attached. If none, please state. See attached Exhibit A Easement Area
9. Does applicant have an interest in abutting property? If none, please state.
No
10. Does the Preliminary Plan cover the entire contiguous holdings of the Applicant?
Yes

NOTE: All plans submitted for review should contain all required information outlined in the City of Saco Subdivision Regulations, or a waiver request for specific items and reasons why specific items should be waived.

NOTE: Complete this form and return it with the required documents and fourteen (12) drawings of the plan.

To the best of my knowledge, all information submitted on this application is true and correct.

Signed _____



APPLICANT

Date _____

1-19-17

The Planning Board normally meets the first and third Tuesdays of the month. Applicants must submit materials THREE WEEKS prior to the scheduled meeting for placement on the Board's agenda. If application and submission materials are not complete, placement on an agenda may be delayed.

Applications are placed on the Planning Board's agenda at the conclusion of staff review only.

FEE: A \$25.00 non-refundable fee must be deposited with all applications. The required deposit is \$1000 on an existing street, or \$1500 if on a proposed street, as determined by the City Planner. A copy of the Cost Recovery Ordinance is attached.

RIGHT TITLE & INTEREST



Individual Member
Individual Membership



Specialist,
Industrial and
Office Real Estate

CBRE | The Boulos Company

One Canal Plaza, Portland, ME 04101 * 207.772.1333

**CONTRACT
FOR THE SALE OF REAL ESTATE**

Date: August 29, 2016

RECEIVED OF: Nate Libby and/or Assigns whose mailing address is 5 Stone Pony Circle, Saco, Maine 04072, hereinafter called the Purchaser(s), the sum of Ten Thousand and 00/100 Dollars (\$10,000) as earnest money deposit and in part payment of the purchase price of the following described real estate, situated in the municipality of Saco, County of York, State of Maine and located at 933 Portland Road being the property owned by the Seller(s) at the above address, and described at said County's Registry of Deeds Book 15384, Page 659 and further described as: a portion of Map 62, Lot 1-2 as generally shown on the cross-hatched area of the attached site plan (Exhibit A) upon the terms and conditions indicated below:

1. PERSONAL PROPERTY: The following items of personal property are included in this sale (if applicable): N/A
2. PURCHASE PRICE: The TOTAL purchase price being Two Hundred Fifty Thousand and 00/100 Dollars (\$250,000) to be paid as follows: earnest money deposit to be paid into Escrow account upon full execution of the Contract and the balance to be paid in full by bank check or wire transfer at closing.
3. EARNEST MONEY/ACCEPTANCE: CBRE | The Boulos Company shall hold said earnest money in a non-interest bearing account and act as Escrow Agent until closing; this offer shall be valid until August 26, 2016 at 5:00 PM; and, in the event of the Seller's non-acceptance, this earnest money shall be returned promptly to the Purchaser(s).
4. TITLE: That a deed, conveying good and merchantable title in accordance with standards adopted by the Maine Bar Association shall be delivered to the Purchaser(s) and this transaction shall be closed and the Purchaser(s) shall pay the balance due and execute all necessary papers on or before closing to be within 60 days following satisfactory completion of financing and inspections and permitting contingencies, along with any contingencies or the occurrence of any condition or event set forth in Addendum A. If Seller(s) is unable to convey in accordance with the provisions of this paragraph, then the Seller(s) shall have a reasonable time period, not to exceed thirty (30) days, from the time the Seller(s) receives written notice of the defect, unless otherwise agreed to by both parties, to remedy the title, after which time, if such defect is not corrected so that there is merchantable title, the Purchaser(s) may, within fifteen (15) days thereafter, at Purchaser's option, declare the contract null and void and any earnest money shall be returned to the Purchaser(s) and neither party shall have any further obligation hereunder. If the Purchaser(s) does not declare the contract void within the period set forth above, the Purchaser(s) shall have waived the right to object to title. The Seller(s) hereby agrees to make a good-faith effort to cure any title defect during such period.
5. DEED: That the property shall be conveyed by a warranty deed, and shall be free and clear of all encumbrances except building and zoning restrictions of record, restrictive covenants and conditions of record and usual public utilities servicing the property and shall be subject to applicable land use and building laws and regulations.
6. POSSESSION /OCCUPANCY: Possession/occupancy of premises shall be given to Purchaser(s) immediately at closing, subject to any leases, unless otherwise agreed by both parties in writing.
7. LEASES/TENANT SECURITY DEPOSITS: Seller(s) agrees to transfer at closing to Purchaser(s) all Seller(s)' rights under the current leases to the property and all security deposits held by Seller(s) pursuant to said leases.
8. RISK OF LOSS: Until the transfer of title, the risk of loss or damage to said premises by fire or otherwise, is assumed by the Seller(s) unless otherwise agreed in writing. Said premises shall then be in substantially the same condition as at present, excepting reasonable use and wear.
9. PRORATIONS: The following items shall be prorated as of the date of closing:
 - a. Real Estate Taxes based on the municipality's tax year. Seller is responsible for any unpaid taxes for prior years.
 - b. ~~Fuel~~
 - c. N/A
 - d. Rents
 - e. Metered utilities, such as water and sewer, shall be paid by Seller(s) through the date of closing.
 - f. Purchaser(s) and Seller(s) shall each pay its transfer tax as required by the State of Maine.
10. INSPECTIONS: The Purchaser(s) is encouraged to seek information from professionals regarding any specific issue of concern. Purchaser(s) acknowledges receipt of disclosure form attached hereto. The Agent makes no warranties regarding the condition, permitted use or value of the Seller's real or personal property. This Contract is subject to the following inspections, with the results being satisfactory to the Purchaser(s):

Seller  Purchaser 

TYPE OF INSPECTION	YES	NO	RESULTS REPORTED	TYPE OF INSPECTION	YES	NO	RESULTS REPORTED
a. General Building	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Within _____ days	g. Lead Paint	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Within _____ days
b. Sewage Disposal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Within _____ days	h. Pests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Within _____ days
c. Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Within _____ days	i. ADA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Within _____ days
d. Radon Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Within _____ days	j. Wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Within 60 _____ days
e. Radon Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Within _____ days	k. Environmental Scan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Within 60 _____ days
f. Asbestos Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Within _____ days	l. Other: <u>Zoning</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Within 30 _____ days

The use of days is intended to mean from the effective date of this Contract. All inspections will be done by inspectors chosen and paid for by the Purchaser(s). If the result of any inspection or other condition specified herein is unsatisfactory to the Purchaser(s), in Purchaser(s) sole discretion, Purchaser(s) may declare the Contract null and void by notifying Seller(s) in writing within the specified number of days, and any earnest money shall be returned to the Purchaser(s). If the Purchaser(s) does not notify the Seller(s) that an inspection is unsatisfactory within the time period set forth above, this contingency is waived by the Purchaser(s). In the absence of inspection(s) mentioned above, the Purchaser(s) is relying completely upon Purchaser's own opinion as to the condition of the property.

11. FINANCING: This contract is subject to an approved market rate commercial loan for the purchase and construction costs to build a commercial building on the Property.
 - a. If Seller, or Sellers agent, is not notified to the contrary in writing within fifteen (15) days of notice by Purchaser of satisfactory completion of the last of any condition or contingencies set forth in Addendum A, then this financing condition shall be deemed to have been waived by Purchaser(s).
 - b. The Purchaser(s) is under a good-faith obligation to seek and accept financing on the above-described terms. The Purchaser(s) acknowledges that a breach of this good-faith obligation to seek and accept financing on the above-described terms will be a breach of this Contract.
 - c. If any of the above financing conditions are not met, Purchaser(s) may declare the Contract null and void by notifying Seller(s) in writing within the specified number of days, and any earnest money shall be returned to the Purchaser(s).
12. AGENCY DISCLOSURE: The Purchaser(s) and Seller(s) acknowledge that they have been informed that the Licensee is acting as a Seller's agent in this transaction and is representing the Seller.
13. DEFAULT: If Purchaser(s) fails to perform any of the terms of this Contract or is otherwise in default of any of its obligations, Seller shall have the option of either retaining the earnest money as full and complete liquidated damages or employing all available legal and equitable remedies. If Seller(s) fails to perform any of the terms of this Contract or is otherwise in default of any of its obligations, Purchaser(s) shall have the option of employing all available legal and equitable remedies. Notwithstanding any other provision of this agreement, Escrow Agent shall have the right to require written releases from both parties prior to releasing the earnest money to either party. If a dispute arises between Purchaser(s) and Seller as to the existence of a default hereunder and/or the release of the earnest money and said dispute is not resolved by the parties within (30) days, Escrow Agent may elect to file an action in interpleader and deposit the earnest money in the court to resolve said dispute, or otherwise disburse the earnest money pursuant to Maine Real Estate Commission regulations. Purchaser(s) and Seller, jointly and severally, shall indemnify Escrow Agent for all costs, losses, expenses, and damages, including reasonable attorneys' fees, incurred by Escrow Agent in connection with said action and/or in connection with any dispute relating to this Contract and/or the Deposit.
14. MEDIATION: Any dispute or claim arising out of or relating to this Contract or the premises addressed in this Contract shall be submitted to mediation in accordance with the Maine Residential Real Estate Mediation Rules of the American Arbitration Association. This clause shall survive the closing of this transaction.
15. PRIOR STATEMENTS: Any verbal representations, statements and agreements are not valid unless contained herein. This Contract completely expresses the obligations of the parties. This is a Maine contract and shall be construed according to the laws of Maine.
16. HEIRS/ASSIGNS: This Contract is assignable Yes No. This Contract shall extend to and be obligatory upon heirs, personal representatives, successors, and assigns (if assignment is allowed by the terms of this Contract), of the respective parties.
17. COUNTERPARTS: This Contract may be signed on any number of identical counterparts, including telefacsimilie copies, with the same binding effect as if the signatures were on one instrument. Original or telefacsimilie signatures are binding.
18. BINDING CONTRACT: This Contract is a binding contract when signed by both Seller(s) and Purchaser(s) and when that fact has been communicated to all parties or to their agents. The Effective Date of the Contract is noted below. Time is of the essence of this Contract.
19. REVIEW OF LEASES AND INCOME AND EXPENSE INFORMATION: Intentionally Deleted
20. Seller(s) and Purchaser(s) acknowledge receipt of the Maine Real Estate Commission Disclosure of Agency Relationship Form (Form #2), if the property is, or has a component of, one to four residential dwelling units.
21. ADDENDA: This Contract has addenda containing additional terms and conditions incorporated herein: YES NO

Seller  Purchaser 

A COPY OF THIS CONTRACT IS TO BE RECEIVED BY ALL PARTIES AND, BY SIGNATURE, RECEIPT OF A COPY IS HEREBY ACKNOWLEDGED. IF NOT FULLY UNDERSTOOD CONSULT AN ATTORNEY.

Seller(s) acknowledges that the laws of the State of Maine provide that every buyer of real property located in Maine must withhold a withholding tax equal to 2 1/2% of the consideration unless the Seller(s) furnishes to the Buyer(s) a certificate by the Seller(s) stating, under penalty of perjury, that Seller(s) is/are a resident of Maine or the transfer is otherwise exempt from withholding.

Walt Libby
Purchaser
Walt Libby (President)
Name/Title

8-29-16
Date
Soc. Sec. # or Tax I.D. #

Purchaser

Name/Title

Date

Soc. Sec. # or Tax I.D. #

The Seller(s) accepts the offer and agrees to deliver the above-mentioned property at the price and upon the terms and conditions set forth above and agrees to pay the Broker the commission for services herein according to the Listing Agreement or if there is no Listing Agreement the sum of: (7% per expired listing agreement). The obligation to pay said commission or sum shall survive the closing of this transaction. Seller agrees that Broker may apply any deposit(s) received in connection with the sale of the Property toward commissions due and payable under this Agreement. In the event the Seller(s) defaults on its obligations hereunder, CBRE | The Boulos Company shall be entitled to costs of collection, including reasonable attorneys' fees.

Signed this _____ day of _____, _____ Effective date of Contract: _____

The Listing Licensee is Drew Sigfridson, SIOR of CBRE | The Boulos Company (Company).
The Selling Licensee is Drew Sigfridson, SIOR of CBRE | The Boulos Company (Company).

David Libby
Seller
DAVID LIBBY PRESIDENT/CEO
Name/Title

8/31/16
Date
Soc. Sec. # or Tax I.D. #

Seller

Name/Title

Date

Soc. Sec. # or Tax I.D. #

Offer reviewed and refused on _____, _____ Seller

Seller DL Purchaser WL

Addendum A

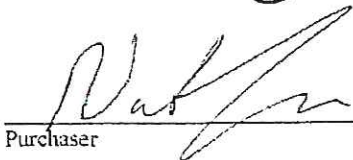
1. This Contract is subject to the Purchaser obtaining permits and approvals to construct a commercial building for a fitness facility on the site and obtaining approval for a conforming lot and marketable title to the portion of the property generally outlined on Exhibit A and the remaining parcel. The Purchaser shall be required to submit an application for its permits and approvals within forty five (45) days of the effective date of the Contract, or shall be deemed to have waived this condition of the Contract. This condition of the Contract shall expire One Hundred Eighty (180) days following the effective date of the Contract. In the event the Purchaser is diligently pursuing its permits and approvals, but requires additional time; the Purchaser may extend this condition of the Contract for up to two (2) additional thirty (30) day periods.
2. Seller and Buyer agree that Buyer's parcel shall run to the southwesterly edge of a proposed right of way shown in Exhibit A. In the event that Buyer elects at its sole option to reserve access over and by way of said right of way, then within 30 days after the satisfaction of the last of any condition contained in Section 1 of this Addendum A, Seller shall produce a commercially reasonable road maintenance agreement which shall split all maintenance costs on a 50-50 basis between Buyer and Seller, and each of their successors and assigns.
3. All other terms shall remain in full force and effect.

SEEN AND AGREED TO:



Seller

8/31/16
Date



Purchaser

8-29-16
Date

 _____
Seller Purchaser _____

SUBJECT DEED

QUITCLAIM DEED
With Covenant

MAINE R.E. TRANSFER TAX PAID

KNOW ALL MEN BY THESE PRESENTS, that **PARK NORTH DEVELOPMENT, LLC**, a Maine limited liability company with a mailing address of 1022 Portland Road, Saco, Maine 04072 ("Grantor") in consideration of one dollar (\$1.00) and other valuable consideration paid by **TOWN & COUNTRY FEDERAL CREDIT UNION**, a federally chartered credit union with a mailing address of 557 Main Street, P.O. Box 9420, South Portland, Maine 04106-9420 ("Grantee") the receipt whereof is hereby acknowledged, does hereby grant unto the said Grantee, their heirs, successors and assigns forever, with **QUITCLAIM COVENANTS**, a certain parcel of land located in Saco, Maine (the "Property") more particularly described on Exhibit A attached hereto and made a part hereof.

Grantee's acceptance of this Deed shall constitute Grantee's agreement to membership in the Cascade Falls - South Owner's Association and Grantee's agreement to be bound by the terms and conditions of the By Laws and Rules and Regulations of the said Association.

This conveyance is made subject, to and with the benefit of all terms, easements, restrictions and conditions shown on a plan prepared by Sebago Technics, Inc. entitled First Amended Overall Subdivision of Park North & The Cascades dated November 7, 2005, revised to January 14, 2008 and recorded in the York County Registry of Deeds, Plan Book 328, Page 1 (the "Plan").

This Conveyance is further subject to the Terms and Conditions of the Maine Department of Environmental Protection Findings of Fact and Order dated January 25, 2008 recorded in the York County Registry of Deeds in Book 15349, Page 538 and the Terms and Conditions of the Maine Department of Environmental Protection Minor Revision Findings of Fact and Order dated January 28, 2008 recorded in the York County Registry of Deeds in Book 15352, Page 686.

The Property shall, for a period of three (3) years from the date of this Deed, not be used for any of the following uses: (i) any adult entertainment facility (including, but not limited to, an adult book store, video store, nude or semi-nude entertainment facility) or (ii) any off-track betting, gaming or bingo establishment.

IN WITNESS WHEREOF, Park North Development, LLC, has caused this instrument to be signed and sealed this 24 day of March, 2008.

Park North Development, LLC

Timothy H. Norton
Witness

By: R. Elliott Chamberlain
R. Elliott Chamberlain
Its Authorized Member

STATE OF MAINE
Cumberland, ss.

March 24, 2008

Then personally appeared the above named R. Elliott Chamberlain, Authorized Member of Park North Development, LLC and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said Company.

Before me,

Timothy H. Norton
Notary Public/Attorney at Law

Timothy H. Norton
Print Name

Exhibit A
Lot C5

A certain lot or parcel of land situated at the northeasterly corner of U.S. Route 1 and Cascade Road in the City of Saco, County of York, State of Maine; said parcel being a portion of Lot 1 shown on the First Amended Subdivision Plan Set of Park North and The Cascades for Park North Development, LLC, dated November 7, 2005, and last revised on January 14, 2008 by Sebago Technics, Inc., Westbrook, Maine, STI Job Number 05082, recorded at the York County Registry of Deeds in Plan Book 328, Pages 1-6, hereinafter referred to as the plan; said lot or parcel of land being more particularly bounded and described as follows:

Beginning at the northeasterly corner of the sideline of the U.S. Route 1 and Cascade Road intersection;

Thence S 59°-58'-55" E, by and along the northeasterly sideline of Cascade Road, a distance of 170.89 feet to a found monument;

Thence continuing southeasterly along said sideline, along a curve to the right, with a radius of 1687.28 feet, an arc length of 403.48 feet, and a chord of S 53°-10'-52" E, 402.52 feet to a monument to be set at a point of reverse curvature;

Thence northeasterly along a proposed sideline of the access road as shown on said plan, along a curve to the left with a radius of 25.00 feet, an arc length of 39.14 feet and a chord of N 88°-49'-11" E, 35.26 feet to a monument to be set at a point of tangency;

Thence N 43°-58'-12" E, along said sideline of proposed access road, a distance of 104.11 feet to a monument to be set;

Thence S 46°-01'-48" E, along said sideline, a distance of 10.00 feet to a monument to be set;

Thence northeasterly along said sideline, along a curve to the right, with a radius of 435.00 feet, an arc length of 170.58 feet, and a chord of N 55°-12'-31.42" E, 169.49 feet to the southerly corner of Lot C1 as shown on said plan;

Thence N 25°-12'-32" W, along Lot C1 as shown on said plan, a distance of 28.95 feet to a point of curvature;

Thence continuing along Lot C1 northwesterly along a tangential curve to the left, with a radius of 312.50 feet, an arc length of 155.98 feet, and a chord of N 39°-30'-28" W, 154.36 feet to a point of tangency;

Thence N 53°-48'-23" W, continuing along Lot C1, a distance of 30.91 feet to a point of curvature;

Thence continuing along Lot C1, northwesterly along a tangential curve to the left, with a radius of 312.50 feet, an arc length of 129.13 feet, and a chord of N 65°-38'-40" W, 128.22 feet to a point of tangency;

Thence N 77°-28'-57" W, continuing along Lot C1, a distance of 77.88 feet to a point of curvature;

Thence continuing along Lot C1, northwesterly along a tangential curve to the right, with a radius of 287.50 feet, an arc length of 108.41 feet, and a chord of N 66°-40'-46" W, 107.77 feet to a point of tangency;

Thence N 55°-52'-35" W, continuing along Lot C1, a distance of 180.63 feet to the easterly sideline of U.S. Route 1;

Thence S 34°-52'-10" W, along the sideline of U.S. Route 1, a distance of 255.06 feet;

Thence S 12°-30'-15" W, along said sideline, a distance of 6.90 feet to the POINT OF BEGINNING.

Meaning and intending to describe a parcel of land containing approximately 182,281 square feet, or 4.18 acres.

The parcel described herein being subject to, benefited by, but not limited to all restrictions, covenants, easements and right-of-ways of record and those as noted on the plan.

Bearings herein are referenced to Grid North as noted on the plan.

MWE:mwe/kn
January 3, 2008

Revised
CEG/MWE:ceg/jc
March 17, 2008

END OF DOCUMENT

4-17-08
NORMAN HANSON V DETROIT
P.O. BOX 5600
PTAD ME 04112-5600

EXISTING EASEMENT DEED

Exhibit A Easement Area Description

A certain right-of-way and utility easement, situated over Lots C5 and C1 situated northeasterly of Cascade Road, northwesterly of Main Road, and southeasterly of U.S. Route One in the City of Saco, County of York, State of Maine as shown on a Sketch Plan of Lot C5 The Cascades for Park North Development, LLC dated March 14, 2008 with further reference to the First Amended Subdivision plan set of Park North and The Cascades recorded on February 12, 2008 at the York County Registry of Deeds in Plan Book 328, Pages 1 through 6, with further reference to project numbers 05082 and 06134, being further bounded and described as follows:

Beginning at the southeasterly side of U.S. Route One at the northerly corner of Lot C5 as shown on said plan;

Thence N 34°-52'-10" E, by and along U.S. Route One, a distance of 40.00 feet;

Thence S 21°-30'-57" E, over and through Lot C1, a distance of 39.86 feet;

Thence S 55°-52'-35" E, continuing over and through Lot C1, a distance of 147.20 feet to a point of curvature;

Thence by and along a curve to the left with a radius of 270.00 feet, a length of 101.82 feet, having a chord of S 66°-40'-46" E, 101.21 feet to a point of tangency;

Thence S 77°-28'-57" E, continuing over and through Lot C1, a distance of 77.88 feet to a point of curvature;

Thence by and along a curve to the right with a radius of 330.00 feet, a length of 136.36 feet, having a chord of S 65°-38'-40" E, 135.40 feet to a point of tangency;

Thence S 53°-48'-23" E, continuing over and through Lot C1, a distance of 30.91 feet to a point of curvature;

Thence by and along a curve to the right with a radius of 330.00 feet, a length of 164.71 feet, having a chord of S 39°-30'-28" E, 163.01 feet to a point of tangency;

Thence S 47°-10'-24" E, continuing over and through Lot C1, a distance of 33.26 feet to the northwesterly side of Main Road and a non-tangent curve;

Thence by and along a non-tangential curve to the left with a radius of 435.00 feet, a length of 30.01 feet, having a chord of S 68°-24'-50" W, 30.00 feet to the most easterly corner of Lot C5 on the northwesterly side of Main Road;

Thence continuing along a curve to the left with a radius of 435.00 feet, a length of 30.01 feet, having a chord of S 64°-27'-42" W, 30.00 feet;

Thence N 01°-58'-47" W, over and through Lot C5, a distance of 31.69 feet to a non-tangential curve;

Thence continuing over and through Lot C5, by and along a curve to the left with a radius of 295.00 feet, a length of 147.24 feet, having a chord of N 39°-30'-28" W, 145.72 feet to a point of tangency;

Thence N 53°-48'-23" W, continuing over and through Lot C5, a distance of 30.91 feet to a point of curvature;

Thence continuing over and through Lot C5, by and along a curve to the right with a radius of 295.00 feet, a length of 92.34 feet, having a chord of N 62°-46'-26" W, 91.97 feet to a point of tangency;

Thence S 61°-20'-52" W, continuing over and through Lot C5, a distance of 13.98 feet;

Thence S 15°-25'-59" W, continuing over and through Lot C5, a distance of 45.09 feet to a point of curvature;

Thence continuing over and through Lot C5, by and along a curve to the right with a radius of 329.50 feet, a length of 115.97 feet, having a chord of S 25°-30'-57" W, 115.37 feet to a point of tangency;

Thence S 35°-35'-56" W, continuing over and through Lot C5, a distance of 122.23 feet to the northeasterly side of Cascade Road;

Thence continuing over and through Lot C5, by and along a non-tangent curve to the left with a radius 1687.28 feet, a length of 35.02 feet, having a chord of N 52°-16'-17" W, 35.02 feet;

Thence N 35°-35'-56" E, continuing over and through Lot C5, a distance of 120.93 feet to a point of curvature;

Thence continuing over and through Lot C5, by and along a curve to the left with a radius of 294.50 feet, a length of 103.65 feet, having a chord of N 25°-30'-57" E, 103.12 feet to a point of tangency;

Thence N 15°-25'-59" E, continuing over and through Lot C5, a distance of 44.01 feet;

Thence N 31°-01'-29" W, continuing over and through Lot C5, a distance of 13.77 feet;

Thence N 77°-28'-57" W, continuing over and through Lot C5, a distance of 52.37 feet to a point of curvature;

Thence continuing over and through Lot C5, by and along a curve to the left with a radius of 305.00 feet, a length of 115.01 feet, having a chord of N 66°-40'-46" W, 114.33 feet to a point of tangency;

Thence N 55°-52'-35" W, continuing over and through Lot C5, a distance of 147.31 feet;

Thence N 89°-29'-29" W, continuing over and through Lot C5, a distance of 40.64 feet to the southeasterly sideline of U.S. Route One;

Thence N 34°-52'-10" E, by and along U.S. Route One, a distance of 40.00 feet to the POINT OF BEGINNING.

Meaning and intending to describe all of the access and utility easement as shown on said Sketch Plan.

Bearings are based on Grid North.

CEG/MWE:ceg/jc

March 17, 2008

CORPORATE STANDING



MAINE

Department of the Secretary of State

Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

[Subscriber activity report](#)

This record contains information from the CEC database and is accurate as of: Thu Jan 19 2017 09:38:29. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
AMARI HOLDINGS, LLC	20172076DC	LIMITED LIABILITY COMPANY (DOMESTIC)	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
11/07/2016	N/A	MAINE

Other Names (A=Assumed ; F=Former)

NONE

Clerk/Registered Agent

JASON G. HOWE, ESQ.
BERGEN & PARKINSON, LLC
62 PORTLAND ROAD, SUITE 25
KENNEBUNK, ME 04043

[Back to previous screen](#)

[New Search](#)

Click on a link to obtain additional information.

List of Filings

[View list of filings](#)

Obtain additional information:

Certificate of Existence [\(more info\)](#)

Short Form without amendments	Long Form with amendments
(\$30.00)	(\$30.00)

You will need Adobe Acrobat version 3.0 or higher in order to view PDF files. If you encounter problems, visit the [troubleshooting page](#).



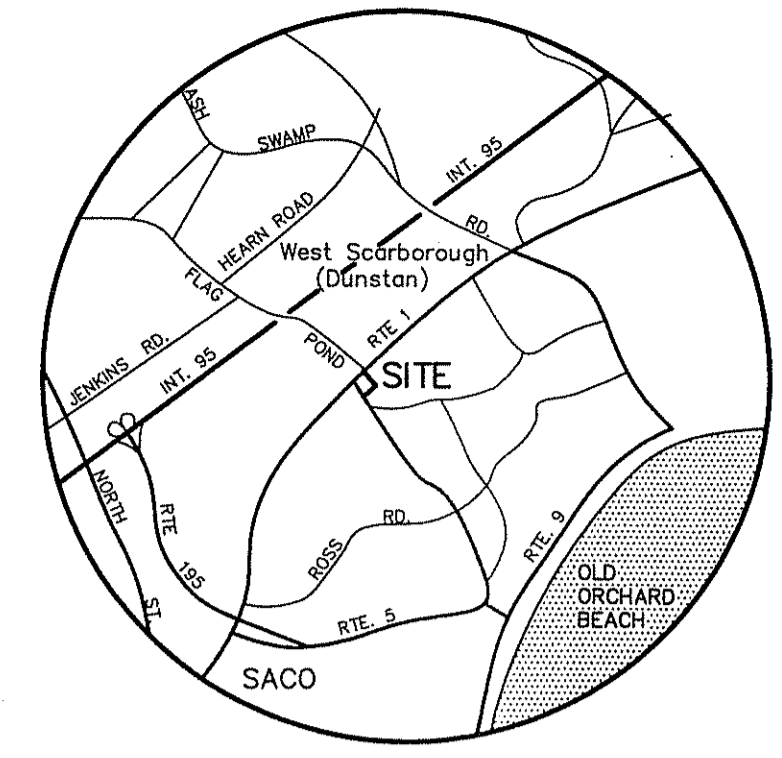
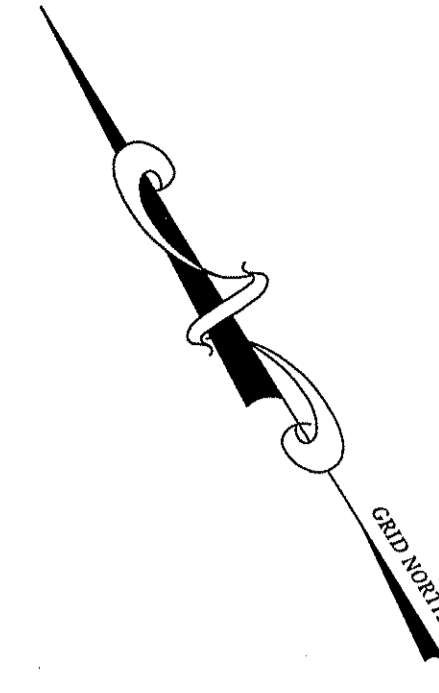
EXISTING SUBDIVISION PLAN

EASEMENT LINE/CURVE DATA

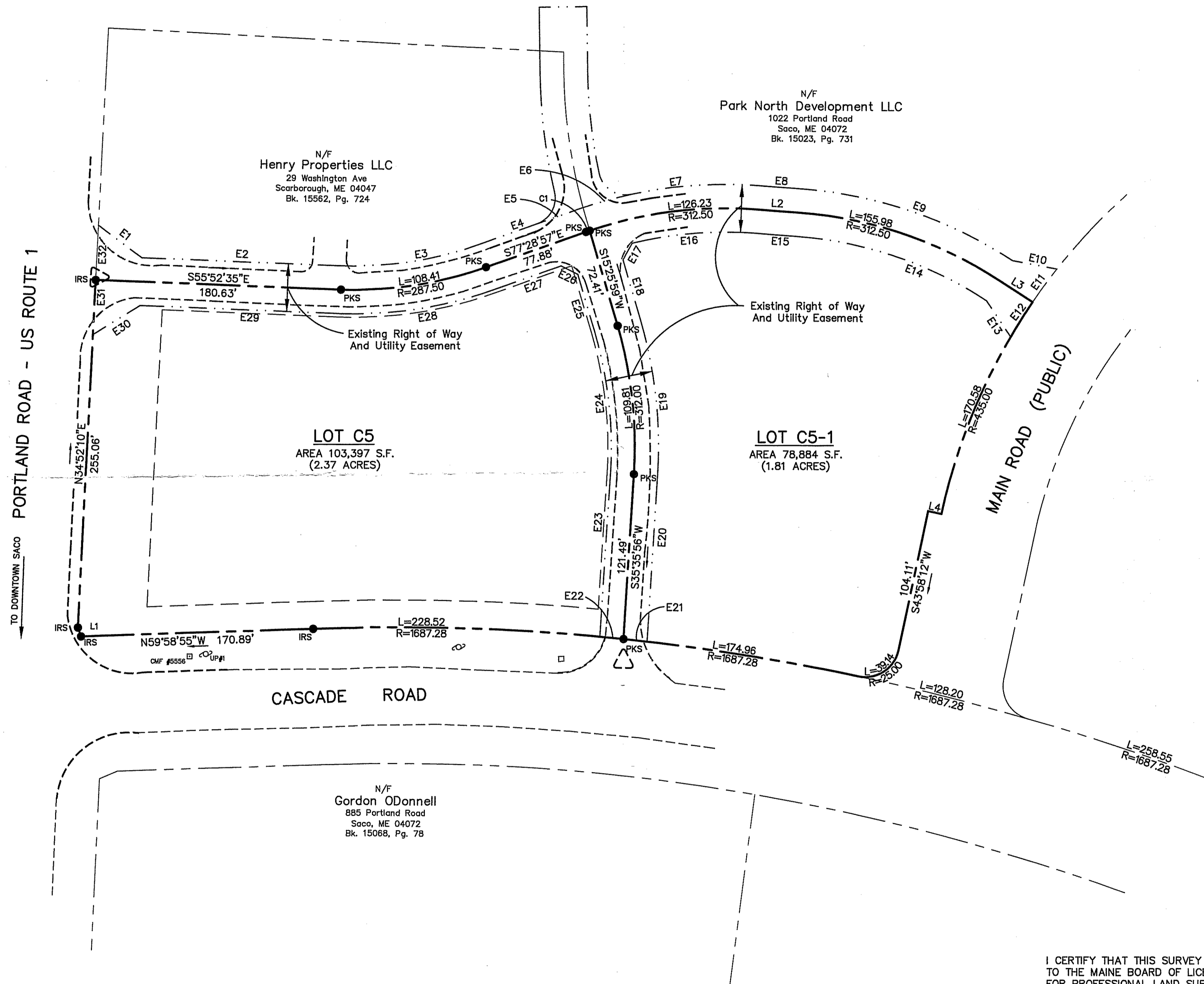
E1 - S21°30'57"E, 39.86'	E17 - N61°20'52"E, 13.98'
E2 - N55°52'35"W, 147.20'	E18 - S15°25'59"W, 45.09'
E3 - R=270.00', L=101.82'	E19 - R=329.50', L=115.97'
E4 - N77°28'57"W, 45.93'	E20 - S35°35'56"W, 122.23'
E5 - N77°28'57"W, 31.95'	E21 - R=1687.28', L=17.52'
E6 - R=330.00', L=40.90'	E22 - R=1687.28', L=17.51'
E7 - R=330.00', L=95.47'	E23 - S35°35'56"W, 120.93'
E8 - S53°48'23"E, 30.91'	E24 - R=294.50', L=103.65'
E9 - R=330.00', L=164.71'	E25 - S15°25'59"W, 44.01'
E10 - N47°10'24"W, 33.26'	E26 - S31°01'29"E, 13.77'
E11 - R=435.00', L=30.01'	E27 - N77°28'57"W, 52.37'
E12 - R=435.00', L=30.01'	E28 - R=305.00', L=115.01'
E13 - N01°58'47"W, 31.69'	E29 - N55°52'35"W, 147.31'
E14 - R=295.00', L=147.24'	E30 - N89°29'29"W, 40.64'
E15 - S53°48'23"E, 30.91'	E31 - N34°52'10"E, 40.00'
E16 - R=295.00', L=92.34'	E32 - N34°52'10"E, 40.00'

LINE/CURVE DATA

L1 - N12°30'14"E, 6.90'
L2 - S53°48'23"E, 30.91'
L3 - S25°12'32"E, 28.95'
L4 - N46°01'48"W, 10.00'
C1 - R=312.50', L=2.90'



LOCATION MAP
SCALE: 1" = 2 MILES



NOTES:

- OWNER: TOWN AND COUNTRY FCU
557 MAIN STREET
SOUTH PORTLAND, ME
- APPLICANT: AMARI HOLDINGS, LLC
5 STONE PONY CIRCLE
SACO, MAINE 04072
- SURVEYOR: ROBERT C. LIBBY JR., PLS #2190
BH2M
28 STATE STREET
GORHAM, MAINE
- DEED REFERENCE: BOOK 15384, PAGE 659
- TAX MAP REFERENCE: MAP 62, LOT 1-2
- ZONING: CASCADE CONTRACT ZONE
- PROJECT AREA: 182,281 S.F. (4.18 ACRES)
- PLAN REFERENCES:
 - A. "FOURTH AMENDED OVERALL SUBDIVISION OF PARK NORTH & THE CASCADES", BY SEBAGO TECHNICS, PROJECT #05082 DATED 7-13-09 AND RECORDED IN THE Y.C.R.D., PLAN BOOK 338, PAGE 19.
 - B. "FOURTH AMENDED PARCEL PLAN OF PARK NORTH & THE CASCADES", BY SEBAGO TECHNICS, PROJECT #05082 DATED 7-13-09 AND RECORDED IN THE Y.C.R.D., PLAN BOOK 338, PAGE 23.

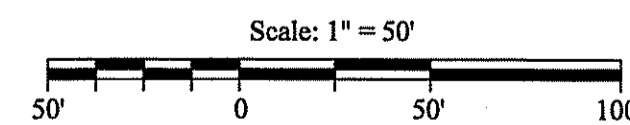
N/F
Heirs of James E Clair Sr.
PO Box 543
Winchester, MA 01890
Bk. 8175, Pg. 272

LOT C5
AREA 103,397 S.F.
(2.37 ACRES)

LOT C5-1
AREA 78,884 S.F.
(1.81 ACRES)

N/F
Gordon O'Donnell
885 Portland Road
Saco, ME 04072
Bk. 15668, Pg. 78

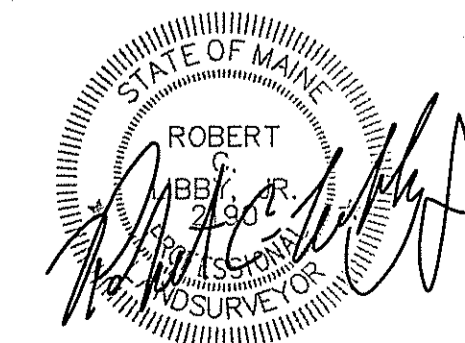
N/F
Park North Development LLC
1022 Portland Road
Saco, ME 04072
Bk. 15023, Pg. 731



THIS PLAN SUPERSEDES THE PREVIOUSLY RECORDED PLAN TITLED "FOURTH AMENDED PARCEL PLAN OF PARK NORTH & THE CASCADES, U.S. ROUTE ONE, SACO, MAINE" DATED 7-13-09, BY SEBAGO TECHNICS AND RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS IN PLAN BOOK 238, PAGE 23. THE PURPOSE OF THIS PLAN IS ONLY TO DIVIDE LOT C5 INTO TWO LOTS.

I CERTIFY THAT THIS SURVEY CONFORMS TO THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS TECHNICAL STANDARDS OF PRACTICE FOR A STANDARD BOUNDARY SURVEY WITH THE FOLLOWING EXCEPTIONS:

- NO SURVEYORS REPORT



ROBERT C. LIBBY JR. PLS #2190

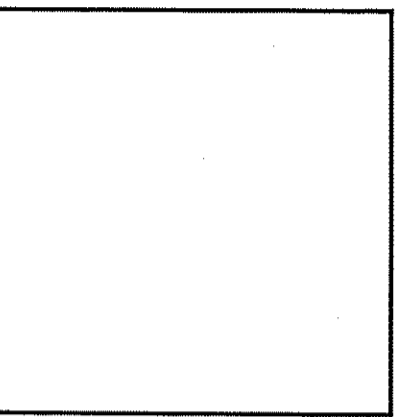
THIS PLAN REVIEWED AND APPROVED BY THE CITY OF SACO PLANNING BOARD.

DATE

CHAIR

SYMBOL	DESCRIPTION
□	CONCRETE MONUMENT FOUND
●	PK NAIL TO BE SET
○	5/8" IRON ROD W/ CAP TO BE SET
⊙	UTILITY POLE
---	EDGE OF PAVEMENT
---	PROPERTY LINE
---	EXISTING EASEMENT

NO.	DATE	REVISION DESCRIPTION



BH2M
Berry, Huff, McDonald, Milligan Inc.
Engineers, Surveyors
28 State Street
Gorham, Maine 04038
Tel. (207) 839-2771
Fax (207) 839-8250

FOR
Amari Holdings, LLC
5 Stone Pony Circle
Saco, Maine

FIFTH AMENDED PARCEL PLAN
PARK NORTH & THE CASCADES
TOWN & COUNTRY FCU
ROUTE ONE & CASCADE ROAD
SACO, MAINE

DESIGNED Survey	DATE Dec. 2016
DRAWN Dept.	SCALE 1" = 50'
CHECKED R. Libby Jr.	JOB. NO. 16087amend

SHEET
1

REPRODUCTION OR USE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED



CITY OF SACO, MAINE

Saco Public Works Department
300 Main Street
Saco, Maine 04072

Joseph A. Laverriere, P.E. – City Engineer
Telephone: (207) 284-6641
Email: jlaverriere@sacomaine.org

MEMORANDUM

TO: Robert Hamblen, Planner

Planning Account No.: 300185

DATE: February 3, 2017

RE: **Cascade Road Gym Facility**
Tax Map 62, Lot 1-2

The Department of Public Works (DPW) has reviewed the amended subdivision and revised site plan application materials for the above referenced project prepared by BH2M, dated January 19, 2017. The following comments have been prepared based upon our review:

Amended Subdivision

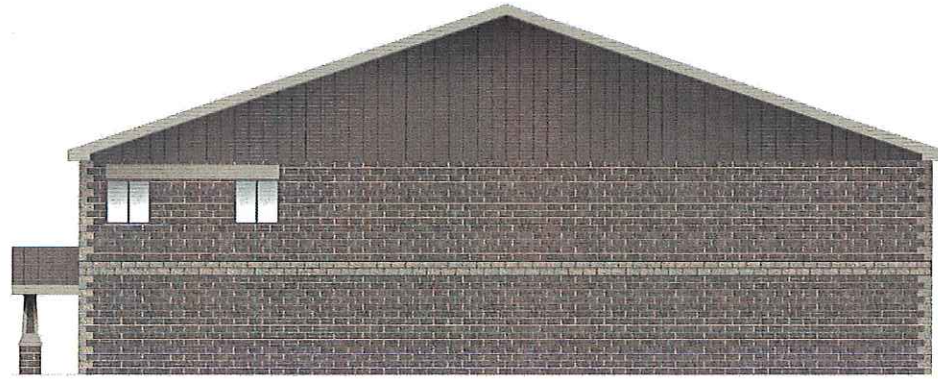
1. Provide copies of the latest, previously approved subdivision plan (4th amended) that are referenced in Note 8 – Plan References.
2. Clarify the recording book reference number in the explanative note in the bottom center of the plan. Is the correct reference 238 or 338?
3. Note 6 – Zoning. Provide information on lot bulk and space requirements.
4. Label the building setback lines within Lot C-5. Clarify the extent of the building setback at the internal access drive intersection (i.e. at easement chord E26).
5. As a point of clarification, the amended subdivision plan is likely needed to be a part of the amended Site Location of Development Act Permit that is being submitted separately to MaineDEP.
6. The proposed easement for the storm drain running between catch basins C & D (as shown on the site plans) should be added to the subdivision plan.

Revised Site Plan

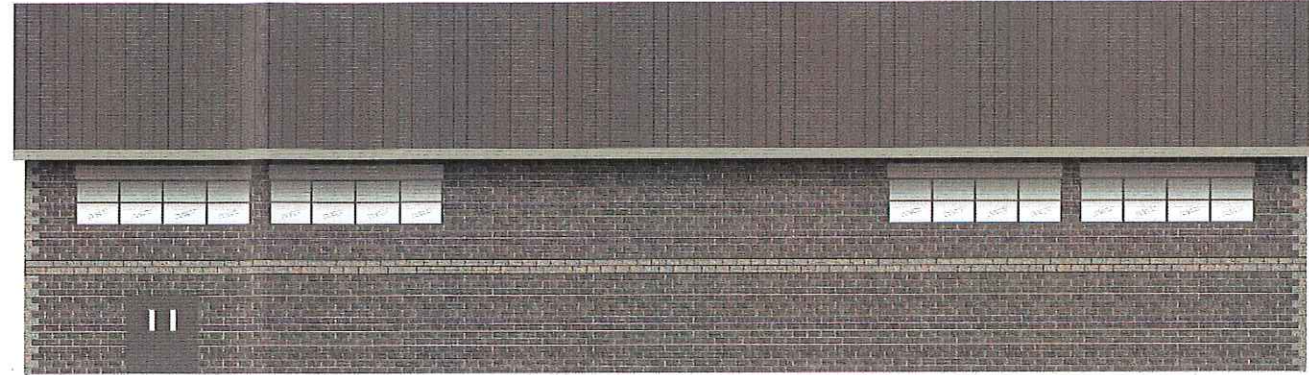
1. What is the status of the offsite roadway improvements identified as part of the MaineDOT Traffic Movement Permit (TMP) issued for this project?
2. Based upon the stormwater management plan previously prepared for this site, the proposed development is essentially utilizing the full extent of their impervious allocation for this lot. The remaining allocation should be designated for Lot C5-1. Any further development of this site will require additional stormwater management facilities. Some form of agreement of notation to that affect should be stated on the subdivision plan and site plan.
3. We would recommend at a minimum that curbing (similar to current curb type) be installed on the fillet radii at each driveway entrance into the site.
4. Will the extent of grading, in close proximity of the existing specimen trees along Cascade Road, be a detriment to these trees? Perhaps the applicant's landscape architect could provide input on this. If not, perhaps, Joe Hirsch from Parks and Recreation could provide some guidance.
5. The location of the sidewalk along Cascade Road needs to consider the offsite roadway improvements required as part of the TMP.

6. The sidewalk along Route 1 needs to re-align to connect with the existing sidewalk along the opposite side of the access road. A painted crosswalk needs to be provided across the access drive.
7. The sidewalk along Cascade Road as it approaches the right-in/right-out access drive needs to shift into the site approximately 20' to locate the ADA ramp and crosswalk on the back side of the delta island within the center of the access drive. A painted crosswalk needs to be provided across the access drive with an ADA landing on the opposite side.
8. Accommodations for pedestrians along the Route 1 and Cascade Road sidewalks to enter the site should be provided. This should be considered as an ADA accessible route.
9. An ADA ramp should not be provided at this time at the intersection of Cascade Road and Route 1.
10. What is the rim elevation for the existing drainage structure adjacent to Cascade Road?
11. Is there a reason for creating a low depressional area along the east and north sides of the building? From an aesthetics point of view, the grading in the area could extend to match the top of curb and eliminate the low depressional area. This would require the storm drain pipe to be extended and connect into the existing CB C.
12. Consideration for additional vegetative screening should be considered around the dumpster location.
13. Will the electrical feed be from a pole mounted transformer or pad mounted transformer?
14. A construction entrance should be provided at both driveway entrances into the site. The primary construction entrance should be designated as the easterly entrance into the site to minimize impacts on existing business.
15. What is the purpose for the concrete pad on the northeasterly corner of the building? Is this for surface mounted HVAC equipment? If so, is there any need for screening?
16. Saco Fire Department will need to provide input of fire lane access as well as requirements for fire protection. Based upon this input, the site plan will need to demonstrate adequate turning movements for the emergency vehicle access.

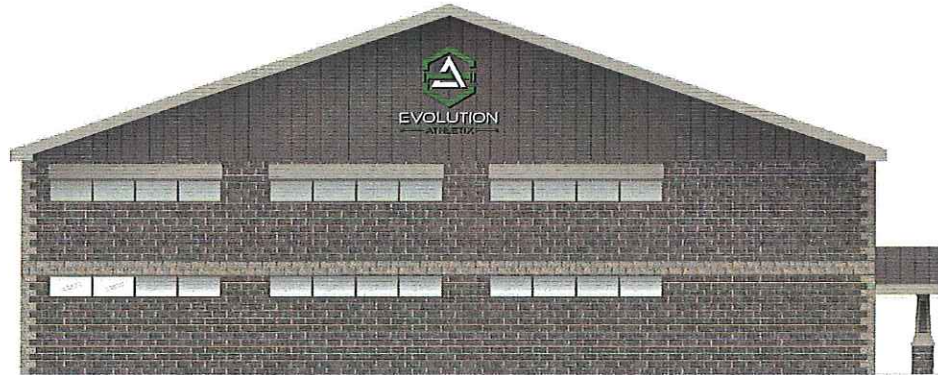
We look forward to discussing this project further, and would be happy to clarify any of our comments made within this review memo.



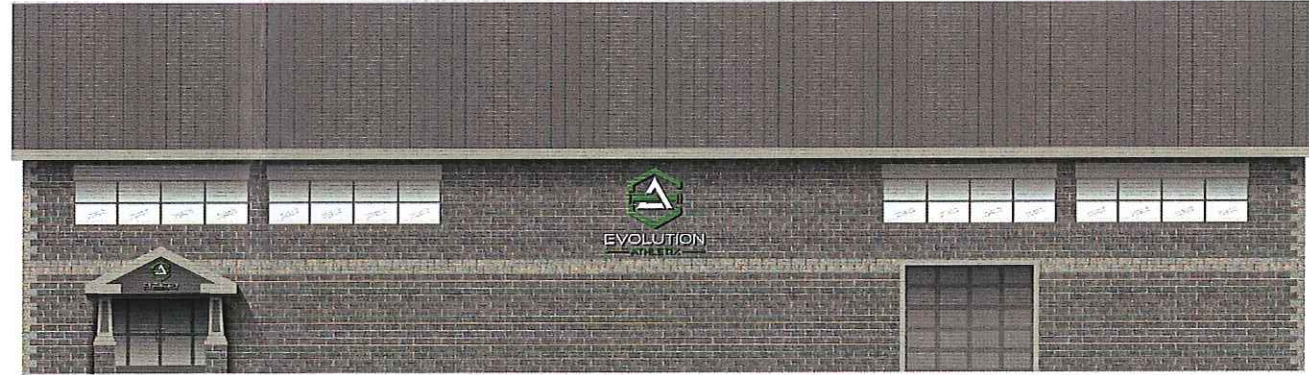
EAST ELEVATION



NORTH ELEVATION



WEST ELEVATION
(ROUTE 1)



SOUTH ELEVATION
(CASCADE ROAD)

EVOLUTION ATHLETIX
933 PORTLAND ROAD
SACO, MAINE 04072

SUBMISSION

DATE	ISSUE
1-20-2017	Elevation Renderings

PROPOSED
ELEVATIONS

SCALE: 1/8" = 1'

SK-1



BH2M

Berry, Huff, McDonald, Milligan Inc.

Engineers, Surveyors

28 State Street, Gorham, Maine 04038

207 839-2771

Bob Hamblen
Saco City Planner
300 Main Street
Saco, Maine 04072

Re: Amari Holdings LLC
Cascade Road Gym Facility

Dear Bob;

We have received comments from staff, and the planning board from the January meeting and have made some significant changes to the design.

The following are our responses and plan changes:

Memorandum from Joe Laverrier – December 29, 2016

1. A Maine General Construction Permit (MGCP) will be part of the Condition Compliance Permit application. This application is being submitted to the Maine DEP.
2. The NRPA wetland permit application has been withdrawn. The consensus of the wetland analyst for the applicant and the City is that there are no wetlands on this site.
3. We have prepared an amended subdivision plan and application for the subject lot C-5. All documents are included in this submission.
4. We have identified an easement for the existing stormwater between CD B and CB D at the northeasterly corner of lot C5.
5. Future plans for the remainder of this site are predicated on many things, compatible uses and all are market driven. Whatever the use we will meet all zoning and conditions of approval assigned to this lot.
6. The entrance use at the building is now noted on the site plan.
7. We have shown proposed sidewalks along both Route 1 and Cascade Road. It appears that there was no consideration for sidewalks on any of the internal roadways during their original approval.
8. Parking has been redesigned to eliminate any dead end parking.
9. The total number of parking spaces has been increased to 51 from the original 48 proposed.
10. Dumpster location has been moved and will result in easy access.
11. There is no curbing proposed as part of this development.
12. Our understanding is that the Saco Fire Department reviews all applications and will receive this from the Planning department.

LESTER S. BERRY
WILLIAM A. THOMPSON
ROBERT C. LIBBY, Jr.
WALTER E. PELKEY
ANDREW S. MORRELL
STEVEN J. BLAKE

JAN 23 2017

January 19, 2017

13. I have reached out to Maine Water Co. in December and have not yet received any review comments. We will attempt this a second time. With most projects an as-built would have been completed for the internal roads and lot development. We will ask the City if one is available.
14. We have redesigned the sanitary sewer service for this building and have left provisions for future sewer connection on this applicants remaining parcel.
15. Light poles have been repositioned away from the edge of pavement.

SUMMARY LETTER FROM BOB HAMBLÉN – JANUARY 5, 2017

- a) We have reviewed the design standards with the architect and applicant. A building redesign has been completed.
- b) All comments to the December 29, 2016 comments from City Engineer have been fully responded to.
- c) Lighting design has been modified with response to all comments from Stantec.
- d) Peer review on wetland has been resolved.
- e) Existing traffic movement permit and the impacts on this application is being reviewed by Traffic Engineer Bill Bray. We will have his comments soon.
- f) Additional landscaping has been added to better screen the parking lot from Route 1.
- g) The design and position of the building has been reworked. We understood the concerns of the planning board and believe we have an approved proposal.
- h) We have an application and proposed subdivision amendment for Lot C5. All documents are under separate cover to the City.

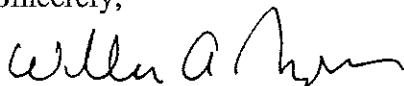
MAINE DEP SITE LOCATION PERMIT

We have received instructions from Bob Green of the Maine DEP as to how to proceed with the permitting required by Maine DEP.

This information is attached to this submission.

We are enclosing 12 copies of all documents and plans for planning board consideration of their next available agenda.

Sincerely,



William A. Thompson
Project Manager

encl.
cc: N. Libby

Saco Planning Board

Conditions of Approval
Amari Holdings, LLC, Site Plan Review
Cascade Subdivision

February 7, 2017

1. All work shall be in conformance with the approved plans, entitled “Site Plan, Gym Facility, Evaluation Athletix, Cascade Road, Saco, Maine,” prepared by BH2M, on behalf of applicant Amari Holdings LLC, revised through 1/19/17. These plans consist of six sheets, as follows:

- | | |
|------|--|
| 1 | <i>Site Plan</i> |
| 2 | <i>Existing Conditions and Boundary Survey</i> |
| 3 | <i>Lighting – Landscaping Plan</i> |
| 4, 5 | <i>Details A, B</i> |
| SK-1 | <i>Proposed Elevations</i> |

2. No deviations from the approved plans are permitted without prior approval from the Planning Board for major changes, and from the City Planner for minor changes. The determination of major or minor shall be made by the City Planner.

3. The project is subject to a Condition Compliance permit application, submitted to the Maine DEP. Approval of said permit shall be in hand, and a copy submitted to the Planning Department, prior to the start of site work.

4. All on- and off-site issues identified by City Engineer Joe Laverriere in comments dated Feb. 3, 2017 shall be fully addressed prior to the start of site work.

5. All landscaping shall adhere to standards found in Section 708-3(9) of the Ordinance, including the following:

Front Buffers

All parking areas, merchandise display areas, or outdoor storage areas shall be separated from any public road by a landscaped buffer strip at least 15 feet wide, planted with shade trees (minimum 2.5" to 3" caliper, planted at least every 35 feet along the road frontage), ornamental trees (one per 35 feet of road frontage), and dense medium height shrubs (three feet in height on maturity to screen parked vehicles). The Planning Board may permit the installation of earth berms, boulders, stone walls and other permanent landscape features to achieve the desired screening, and may permit that some of these elements substitute for low plantings, but not for shade trees.

Special Route 1 Standards

In lots fronting on Route 1, North of Interstate 195, a vegetated buffer of 40 feet is required. A driveway of reasonable width may cross the buffer strip. No parking or display of merchandise is permitted in the buffer strip.

6. A continuous internal walkway shall be provided from the public sidewalk to the principal customer entrance of the building. All internal pedestrian walkways shall be distinguished from driving surfaces through the use of durable surface materials such as pavers, bricks, or scored concrete or painted treatments to enhance pedestrian safety and comfort, as well as the attractiveness of the walkways. (Sec. 708-3(4))
7. The applicant shall clarify to the Planning Department that all issues applicable to this application that are identified in the 2008 Traffic Movement Permit issued by the Maine DOT are addressed prior to the start of site work.
8. The project is subject to a Condition Compliance from the Maine DEP. If/when granted, a copy of the permit shall be submitted to the Planning Department. Failure to secure a Condition Compliance approval from the DEP shall invalidate this approval.
9. A Letter of Credit acceptable to the City of Saco, as called for in Section 1110 of the Zoning Ordinance shall be submitted prior to the issuance of permits or site work being initiated. The Letter of Credit shall be established for 150% of the cost of the following improvements: clearing and grubbing, stormwater management installation, landscaping, paving, work within ROW, drainage, loam & seed, sediment & erosion control. The Letter of Credit shall be maintained for the duration of the project.
10. Prior to work commencing, the applicant shall establish a construction inspection account equal to 3% of the base cost of the financial guarantee.
11. To establish the Letter of Credit and construction inspection account amounts, the applicant shall provide the City with itemized, per unit cost estimates, and a construction schedule, at least one week prior to the start of site work.
12. No permits shall be granted nor shall work commence until one mylar set and three paper sets of the final plans have been received by the Planning Office and signed by the Planning Board.
13. Prior to any construction activities, the applicant and contractor shall meet with the Public Works Engineer, City Planner and inspecting engineer to review the approved final plan, inspection schedules and erosion control practices.
14. All plans and specifications shall be provided on disk in an AutoCAD format.
15. Failure to commence substantial construction on the approved site within twelve months of this approval shall result in the site plan approval becoming null and void.
16. As-built plans, both digital and paper, shall be submitted prior to the final release of the Letter of Credit.

17. At the completion of the project, a written request shall be submitted for final inspection and release of the financial guarantee and inspection account. Upon receipt of this written request, the City Planner shall circulate the request to all City departments that were involved in the initial review of the project. Final review of the project by the Public Works Department and the City's consulting engineering firm shall be completed.

With the above Conditions and the accompanying Findings of Fact, the City of Saco hereby finds that the applicant has satisfied the requirements set forth in Articles 4, 7 and 11 of the Zoning Ordinance. Approval is hereby granted, contingent on these Conditions of Approval.

Approved by the Saco Planning Board on February 7, 2017. On Behalf of the Planning Board,

Robert H. Hamblen
City Planner

STORMDRAIN/SEWER STRUCTURES

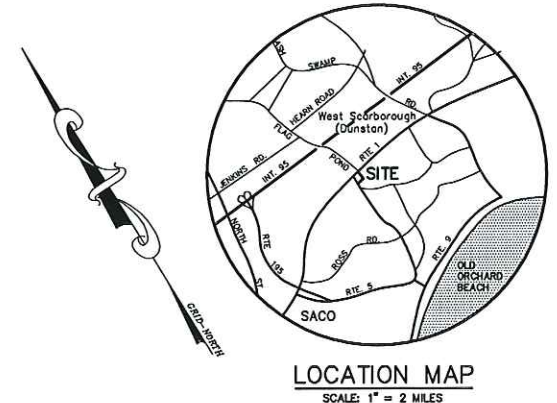
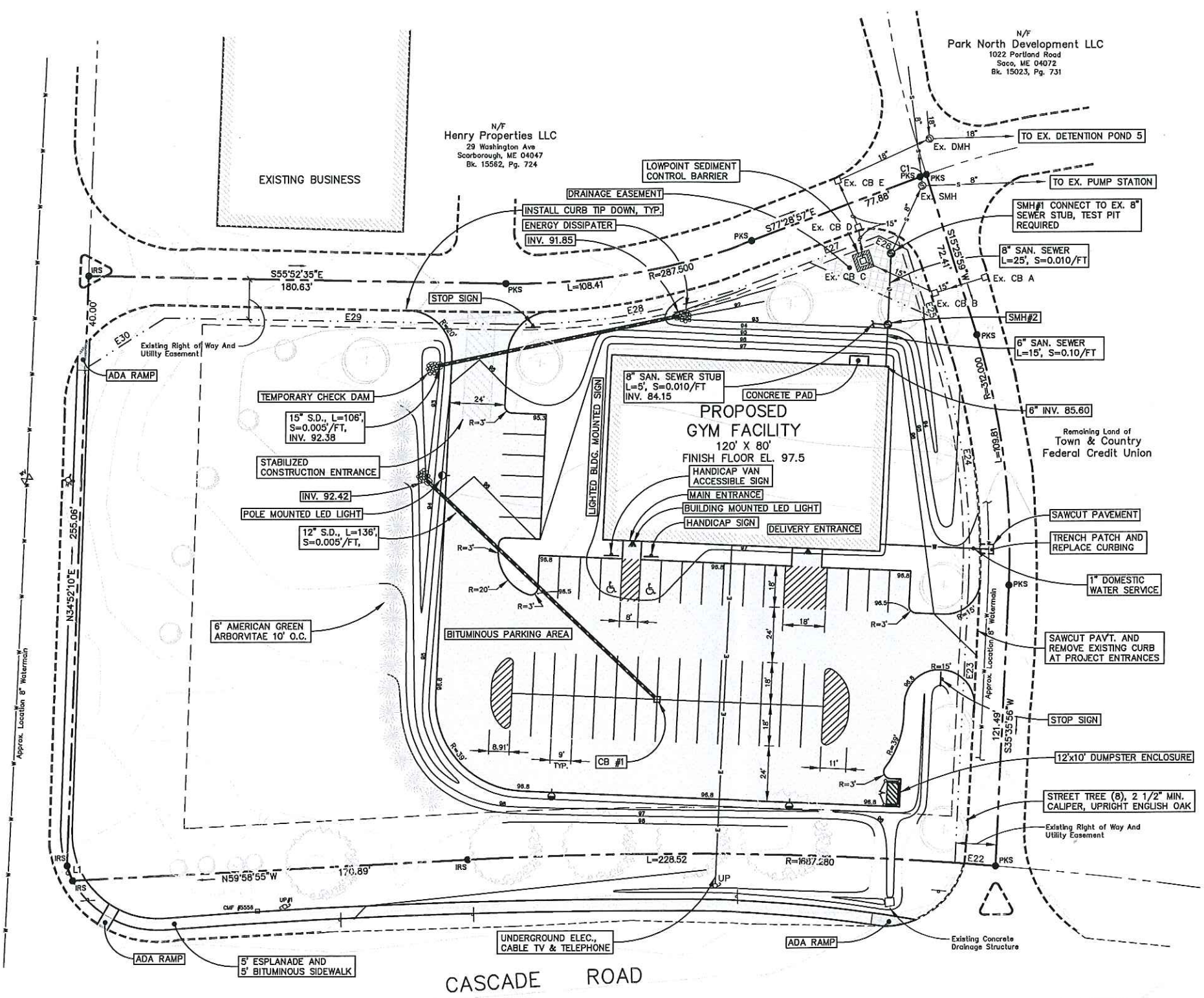
- CB A - RIM 92.37
15" INV. 88.32
- CB B - RIM 92.46
15" INV. IN 88.11
15" INV. OUT 87.96
- CB C - RIM 90.58
15" INV. IN 86.98
15" INV. OUT 86.95
- CB D - RIM 92.62
15" INV. IN 86.34
15" INV. OUT 86.24
- CB E - RIM 92.54
15" INV. IN 85.97
18" INV. OUT 85.67
- DMH - RIM 92.32
18" INV. IN 85.12
18" INV. OUT 85.07
- EX. SMH - RIM 92.28
8" INV. IN 83.37
8" INV. OUT 83.28
- SMH#1 - RIM 93.0
8" INV. IN 83.75
8" INV. OUT 83.65
(TEST PIT TO DETERMINE)
- SMH#2 - RIM 93.0
8" INV. IN 84.10
8" INV. IN (STUB) 84.10
8" INV. OUT 84.00
- CB#1 - RIM 96.1
12" INV. 93.1

EASEMENT LINE/CURVE DATA

- E23 - S35°35'56"W, 120.93'
- E24 - R=294.50', L=103.65'
- E25 - S15°25'59"W, 44.01'
- E26 - S31°01'29"E, 13.77'
- E27 - N77°28'57"W, 52.37'
- E28 - R=305.00', L=115.01'
- E29 - N55°52'35"W, 147.31'
- E30 - N89°29'29"W, 40.64'

PORTLAND ROAD - US ROUTE 1

TO DOWNTOWN SACO



NOTES:

1. OWNER: TOWN AND COUNTRY FCU
557 MAIN STREET
SOUTH PORTLAND, ME
2. APPLICANT: AMARI HOLDINGS, LLC
5 STONE PONY CIRCLE
SACO, MAINE 04072
3. ENGINEER: STEVE BLAKE, PE #11695
BH2M
28 STATE STREET
GORHAM, MAINE
4. SURVEYOR: ROBERT C. LIBBY JR., PLS #2190
BH2M
5. DEED REFERENCE: BK. 15384, PG. 659
6. TAX MAP REFERENCE: MAP 62, LOT 1-2
7. ZONING: CASCADE CONTRACT ZONE
8. PROJECT AREA: 103,412 S.F.
9. PROPOSED USE: GYM FACILITY
10. MINIMUM STANDARDS:
CONTRACT ZONE
LOT SIZE - 7,500 S.F.
FRONTAGE - 50'
SETBACKS - 50' FRONT FROM ROUTE 1
20' FRONT FROM ALL OTHER ROADS
10' SIDE AND REAR
MAX. BUILDING HEIGHT - 60'
MAX. BUILDING COVERAGE - 40%
11. SEWER SERVICE: PUBLIC
12. WATER SERVICE: PUBLIC
13. ELECTRIC/TELEPHONE: UNDERGROUND
14. PARKING: 1 SPACE PER 200 S.F.
TOTAL REQUIRED - 48
TOTAL PROPOSED - 51
15. PLAN REFERENCE: "FOURTH AMENDED OVERALL SUBDIVISION OF PARK NORTH & THE CASCADES", BY SEBAGO TECHNICS, PROJECT #05082 DATED 7-13-09 AND RECORDED IN THE Y.C.R.D., PL. BK. 338, PG. 19.
16. SIGNAGE: BUILDING MOUNTED SIGN MEETING CODE ENFORCEMENT STANDARDS.
17. STORMWATER MANAGEMENT PER SEBAGO TECHNICS APPROVED PLANS AND REPORT DATED JANUARY 2, 2014 COMPLETED FOR PARK NORTH DEVELOPMENT LLC.
18. IMPERVIOUS AREA ALLOCATED TO LOT C5 AS SHOWN ON THE APPROVED SUBDIVISION PLAN AND THE ASSOCIATED STORMWATER REPORT IS 1.7 ACRES. THIS DEVELOPMENT, WHICH INCLUDES THE PAVED ROADWAYS AND BUILDING, RESULTS IN 0.99 ACRES.
19. PHOTOMETRICS AND LIGHTING BY CHARRON INC.
20. REFERENCE IS MADE TO A GEOTECHNICAL INVESTIGATION FOR A PROPOSED TOWN AND COUNTRY FEDERAL CREDIT UNION BY R.W. GILLESPIE & ASSOCIATES INC. DATED FEBRUARY 18, 2008.

NO.	DATE	REVISION DESCRIPTION
1	11/29/16	Submitted for planning board review
2	12/28/16	Submitted for Final Approval
3	1/19/17	Rev'd Site Layout



BH2M
Engineers, Surveyors
Berry, Huff, McDonald, Milligan, Inc.
28 State Street
Gorham, Maine 04038
Tel: (207) 839-2774
Fax: (207) 839-8250

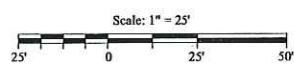
FOR
Amari Holdings, LLC
5 Stone Pony Circle
Saco, Maine

SITE PLAN
GYM FACILITY
EVALUATION ATHLETIX
CASCADE ROAD
SACO, MAINE

LEGEND

SYMBOL	DESCRIPTION
□	CONCRETE MONUMENT FOUND
●	PKS
○	IRS
○	95.55
○	PROPOSED SPOT GRADE
○	SIGN
○	DECIDUOUS TREE
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	LIMIT OF WETLANDS
---	UTILITY POLE
---	SANITARY SEWER
---	WATER LINE
---	WATER VALVE
---	DRAIN MANHOLE
---	SANITARY SEWER MANHOLE
---	HYDRANT
---	EXISTING CURB
---	SETBACK

N/F
Cordon O'Donnell
885 Portland Road
Saco, ME 04072
Bk. 15068, Pg. 78



I CERTIFY THAT THIS SURVEY CONFORMS TO THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS TECHNICAL STANDARDS OF PRACTICE FOR A STANDARD BOUNDARY SURVEY WITH THE FOLLOWING EXCEPTIONS:

1. NO SURVEYORS REPORT

THIS PLAN REVIEWED AND APPROVED BY THE CITY OF SACO PLANNING BOARD.

CHAIR	DATE



ROBERT C. LIBBY JR. PLS #2190

Gi: 2016\16087 Site.dwg, 1/23/2017 12:55:27 PM, Xerox CPD P5 V5.5.404.8.0

G:\2016\16087_Exist.dwg, 1/23/2017 12:37:06 PM, Xerox CPD P5 V5.5.404.8.0

STORMDRAIN/SEWER STRUCTURES

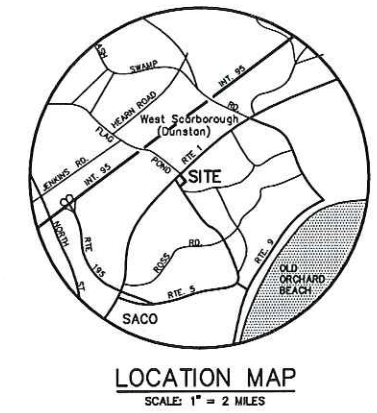
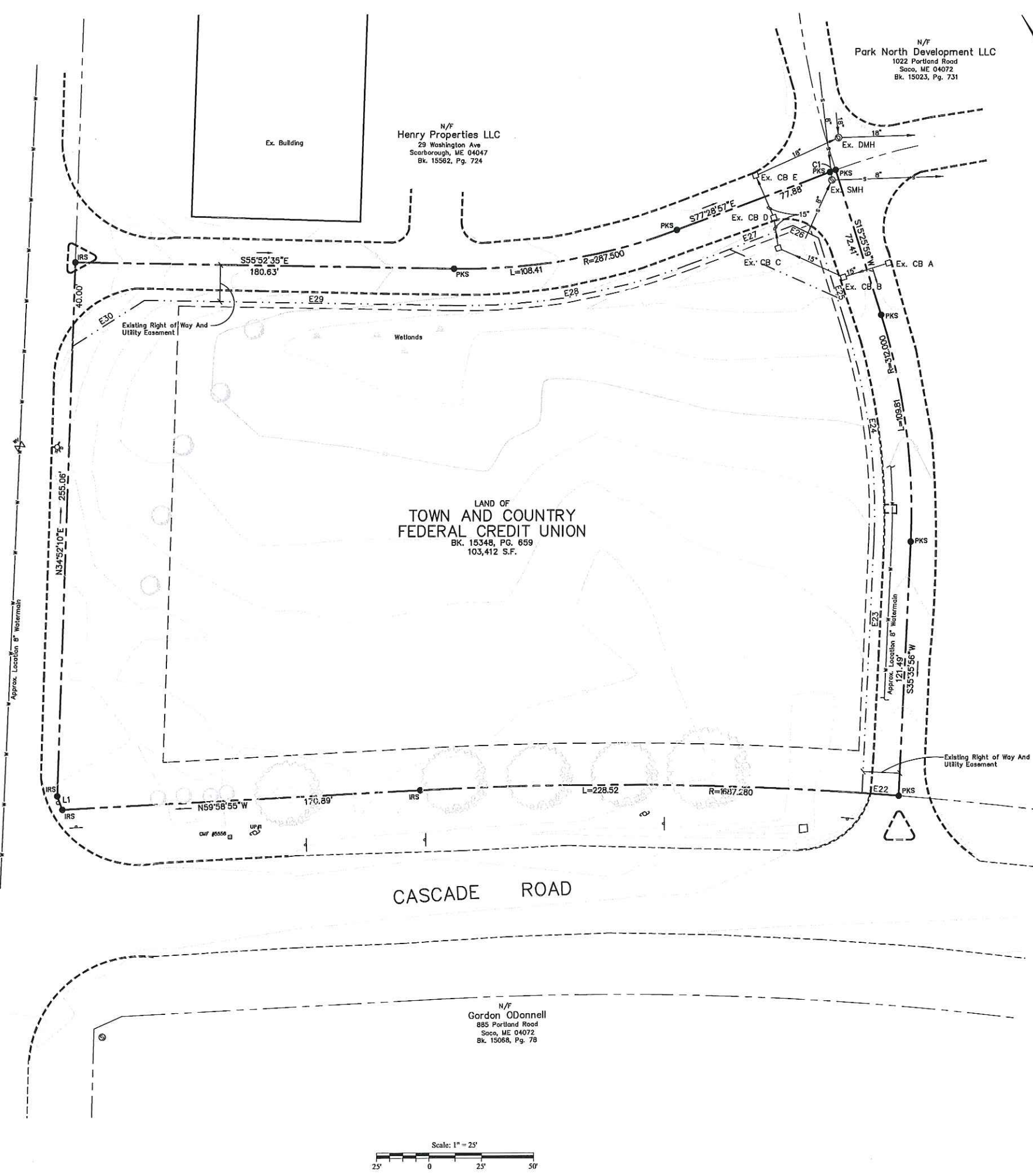
- CB A RIM 92.37
15" INV. 88.32
- CB B RIM 92.46
15" INV. IN 88.11
15" INV. OUT 87.96
- CB C RIM 90.58
15" INV. IN 86.98
15" INV. OUT 86.95
- CB D RIM 92.62
15" INV. IN 86.34
15" INV. OUT 86.24
- CB E RIM 92.54
INVS IN 85.97
18" INV. OUT 85.67
- DMH RIM 92.32
18" INVS. IN 85.12
18" INV. OUT 85.07
- SMH RIM 92.28
8" INVS. IN 83.37
8" INV. OUT 83.28

EASEMENT LINE/CURVE DATA

- E23 S35°35'56"W, 120.93'
- E24 R=294.50', L=103.65'
- E25 S15°25'59"W, 44.01'
- E26 S31°01'29"E, 13.77'
- E27 N77°28'57"W, 52.37'
- E28 R=305.00', L=115.01'
- E29 N55°52'35"W, 147.31'
- E30 N89°29'29"W, 40.64'

N/F
Heirs of James E Clair Sr.
PO Box 543
Winchester, MA 01890
Bk. 6175, Pg. 272

PORTLAND ROAD - US ROUTE 1



NO.	DATE	REVISION DESCRIPTION
1	11/29/16	Submitted Site Plan to City
2	12/28/16	Submitted for Final Approval
3	1/19/17	Rev'd Site Layout

NOTES:

1. OWNER: TOWN AND COUNTRY FCU
557 MAIN STREET
SOUTH PORTLAND, ME
2. APPLICANT: AMARI HOLDINGS, LLC
5 STONE PONY CIRCLE
SACO, MAINE 04072
3. SURVEYOR: ROBERT C. LIBBY JR., PLS #2190
BH2M
28 STATE STREET
GORHAM, MAINE
4. DEED REFERENCE: BK. 15384, PG. 659
5. TAX MAP REFERENCE: MAP 62, LOT 1-2
6. ZONING: CASCADE CONTRACT ZONE
7. PROJECT AREA: 103,412 S.F.
8. PLAN REFERENCE: FIRST AMENDED OVERALL SUBDIVISION OF PARK NORTH & THE CASCADES BY SEBACO TECHNIQS, PROJECT #05082 DATED 11-7-05 AND RECORDED IN THE Y.C.R.D., PL. BK. 328, PG. 1.

BH2M
Engineers, Surveyors
Berry, Huff, McDonald, Milligan, Inc.
28 State Street
Gorham, Maine 04038
Tel: (207) 839-2771
Fax: (207) 839-8250

FOR
Amari Holdings, LLC
5 Stone Pony Circle
Saco, Maine

EXISTING CONDITIONS & BOUNDARY SURVEY
GYM FACILITY
EVALUATION ATHELETIX
CASCADE ROAD
SACO, MAINE

I CERTIFY THAT THIS SURVEY CONFORMS TO THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS TECHNICAL STANDARDS OF PRACTICE FOR A STANDARD BOUNDARY SURVEY WITH THE FOLLOWING EXCEPTIONS:

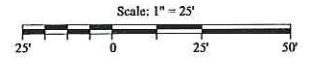
1. NO SURVEYORS REPORT

Robert C. Libby Jr.

ROBERT C. LIBBY JR. PLS #2190

LEGEND

SYMBOL	DESCRIPTION
●	CONCRETE MONUMENT FOUND
○	PK NAIL TO BE SET
○	5/8" IRON ROD W/ CAP TO BE SET
○	SIGN
○	DECIDUOUS TREE
---	EXISTING CONTOUR
---	LIMIT OF WETLANDS
○	UTILITY POLE
---	SANITARY SEWER
---	WATER LINE
---	WATER VALVE
○	DRAIN MANHOLE
○	SANITARY SEWER MANHOLE
○	HYDRANT



DESIGNED	DATE
Survey	Oct. 2016
DRAWN	SCALE
Dept.	As Noted
CHECKED	JOB. NO.
R. Libby Jr.	16087

SHEET
2

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED

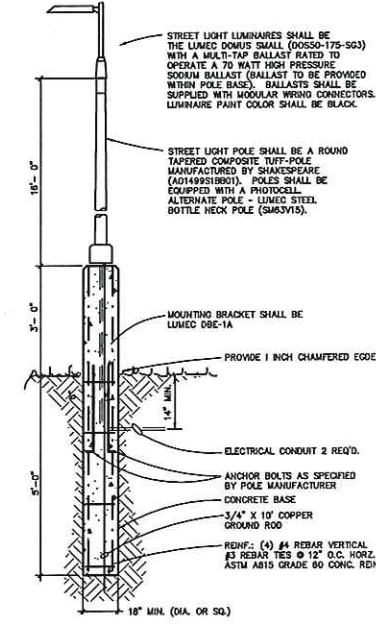
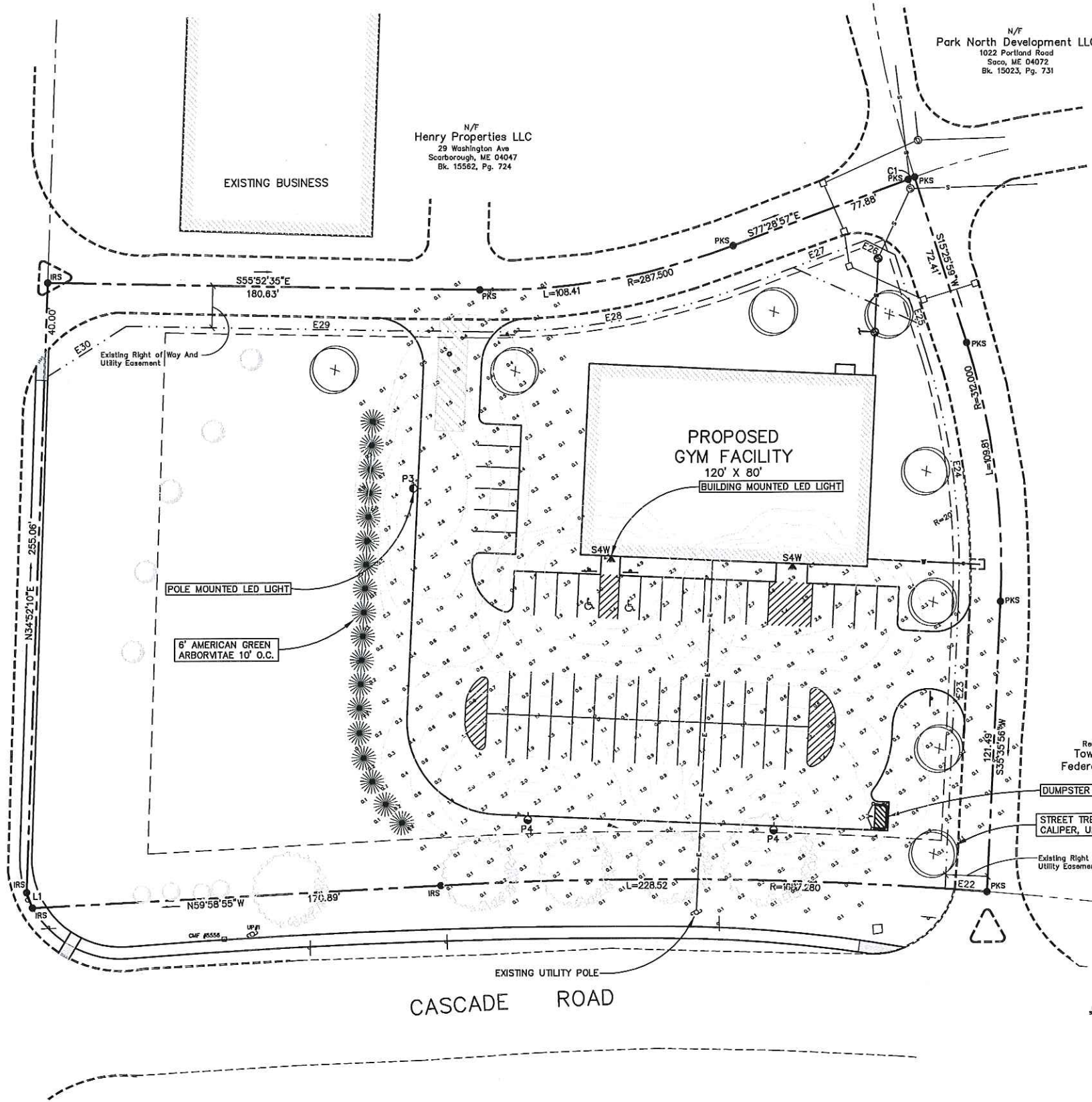
EASEMENT LINE/CURVE DATA

- E23 - S35°35'56"W, 120.93'
- E24 - R=294.50', L=103.65'
- E25 - S15°25'59"W, 44.01'
- E26 - S31°01'29"E, 13.77'
- E27 - N77°28'57"W, 52.37'
- E28 - R=305.00', L=115.01'
- E29 - N55°52'35"W, 147.31'
- E30 - N89°29'29"W, 40.64'

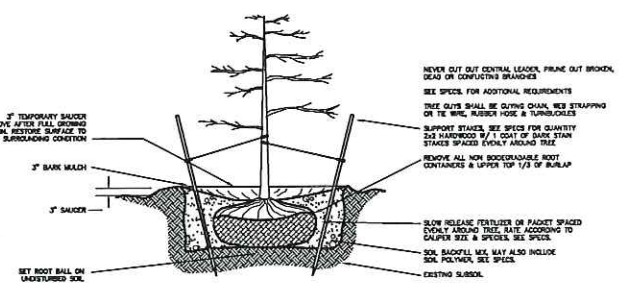
N/F
Heirs of James E Clair Sr.
PO Box 543
Winchester, MA 01890
Bk. 8175, Pg. 272

G:\2016\6087\Lighting.dwg, 1/25/2017 12:40:44 PM, Xerox GPD P5 V5.5, A04.8.0

PORTLAND ROAD - US ROUTE 1
TO DOWNTOWN SACO



LIGHT POLE DETAIL
N.T.S.



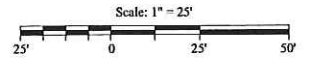
TREE PLANTING & STAKING DETAIL
N.T.S.

Symbol	Qty	Arrangement	Description
◀ S4W	2	SINGLE	PRV-A25-D-UNV-T4-BZ-WM/ WALL MTD 15' AFG
⊙ P4	2	SINGLE	PRV-A25-D-UNV-T5-BZ/ 20' AFG
⊙ P3	1	SINGLE	PRV-A25-D-UNV-T3-BZ/ 20' AFG

PARKING AREA ONLY

Illuminance (Fc)
Average = 1.33
Maximum = 4.3
Minimum = 0.4
Avg/Min Ratio = 3.33
Max/Min Ratio = 10.75

PHOTOMETRICS AND LIGHT BY CHARRON INC.



NO.	DATE	REVISION DESCRIPTION
1	11/29/16	Submitted for planning board review
2	12/28/16	Submitted for Final Approval
3	1/19/17	Rev'd Site Layout



BH2M
Barry Huff, McDonald, Milligan, Inc.
Engineers, Surveyors
28 State Street
Conform, Maine 04038
Tel: (207) 839-2773
Fax: (207) 839-8250

FOR
Amari Holdings, LLC
2 Stone Pony Circle
Saco, Maine

LIGHTING - LANDSCAPING
GYM FACILITY
EVALUATION ATHLETIX
CASCADE ROAD
SACO, MAINE

DESIGNED W. Thompson	DATE Oct. 2016
DRAWN Dept.	SCALE As Noted
CHECKED S. Blake	JOB. NO. 16087

SHEET
3

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED

EROSION AND SEDIMENT CONTROL PLAN
 THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION IN DEVELOPING AREAS AS CONTAINED IN THE "MAINE EROSION AND SEDIMENT CONTROL BMP'S", DEPARTMENT OF ENVIRONMENTAL PROTECTION DATED MARCH 2003. FOR ADDITIONAL DETAILS AND SPECIFICATIONS SEE BMP'S MANUAL.

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL STRUCTURES ARE SHOWN ON THE SITE PLAN.

1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMP'S", DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED MARCH 2003.
2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 2 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
3. SEDIMENT BARRIERS (EROSION CONTROL MIX, STONE CHECK DAMS, STABILIZED CONSTRUCTION ENTRANCE, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
4. INSTALL EROSION CONTROL MIX AT THE TOP OF SLOPES TO FILTER SILT FROM RUNOFF. SEE E.C. MIX DETAIL FOR PROPER INSTALLATION. EROSION CONTROL MIX WILL REMAIN IN PLACE PER NOTE #5.
5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY BEFORE AND FOLLOWING ANY SIGNIFICANT RAINFALL (0.5 INCHES) OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL MIX SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSTREAM ARE STABILIZED BY TURF, EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION. PERMANENT STABILIZATION IS 50% GRASS CATCH IN VEGETATED AREAS.
6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2 TO 1).
7. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCHING (DOMINANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
8. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED BY AUG. 15 OR 45 DAYS PRIOR TO THE FIRST KILLING FROST (OCT. 1) TO PROTECT FROM SPRING RUNOFF PROBLEMS.
9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY, WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER.
10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:
 - a. FOUR INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
 - b. APPLY LIME/STONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 POUNDS PER ACRE OR 18.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P-K) OR EQUIVALENT. APPLY GROUND LIME/STONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LBS PER 1,000 SQ. FT.).
 - c. FOLLOWING SOIL BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED TO A MIXTURE OF 47% CRESPING RED FESCUE, 5% KYRITID, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED TO A PREPARATION MIXTURE OF 48% CRESPING BLUEGRASS, 48% CRESPING RED FESCUE, AND 15% PERENNIAL RYEGRASS. SEEDING RATE IS 1.03 LBS PER 1,000 SQ. FT. LAWN QUALITY SOO MAY BE SUBSTITUTED FOR SEED. SEED MIX SHALL CONTAIN 10% ANNUAL RYE GRASS.
 - d. HAY MULCH AT THE RATE OF 70-80 LBS PER 1,000 SQUARE FEET OR A HYDRO-APPLICATION OF ASPHALT, WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RUB PLUS SHALL BE USED ON HAY MULCH FOR WIND CONTROL.
11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS ONCE THE SITE IS STABILIZED WITH 90% GRASS CATCH IN VEGETATED AREAS. TEMPORARY EROSION AND SEDIMENT CONTROL BLANKET SHALL BE USED IN ALL DITCHES AND SMOALS AS SHOWN IN DETAILS.
12. WETLANDS WILL BE PROTECTED WITH EROSION CONTROL MIX OR SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.

MULCH AND MULCH ANCHORING

LOCATION	MULCH	RATE (1000 S.F.)
PROTECTED AREA	STRAW OR HAY *	100 POUNDS
WINDY AREAS	SHREDDED OR CHOPPED CORNSTALKS STRAW OR HAY (ANCHORED) *	185-275 POUNDS 100 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES (GREATER THAN OR EQUAL TO 3:1)	JUTE MESH OR EXCELOR MAT	AS REQUIRED AS REQUIRED

* A HYDRO-APPLICATION OF ASPHALT, WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RUB PLUS SHALL BE USED ON HAY MULCH FOR WIND CONTROL.

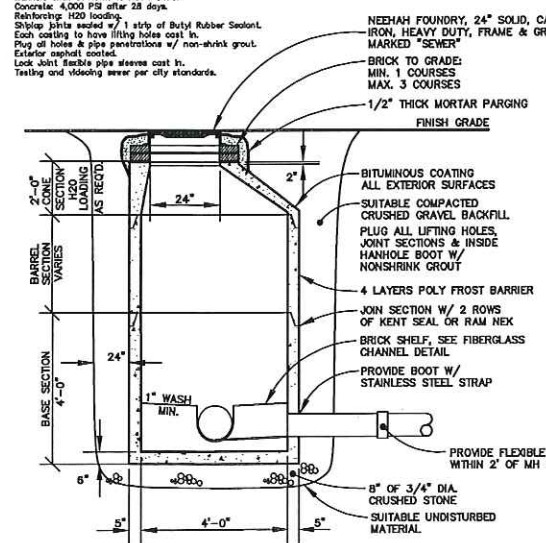
MULCH ANCHORING

ANCHOR MULCH WITH PEG AND TRINE (1 SQ. YD./BLOCK); MULCH NETTING (AS PER MANUFACTURER); ASPHALT EMULSION (0.04 GALLONS PER SQ. YD.); LIQUID ASPHALT (0.10 GALLONS PER SQ. YD.); WOOD CELLULOSE FIBER (750 LBS/ACRE); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SEPARATED STRAIGHT DISK WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

Additional temporary seed mixture (for periods less than 12 months).

Season	Seed	Rate
Summer (5/15 - 8/15)	Sudangrass Oats	40 lbs/acre 80 lbs/acre
Late Summer/Early Fall (8/15 - 9/15)	Perennial Ryegrass	40 lbs/acre
Fall (9/15 - 11/1)	Winter Rye	112 lbs/acre
Winter (11/1 - 4/1)	Mulch w/ Dominant Seed	80 lbs/acre
Spring (4/1 - 7/1)	Oats Annual Ryegrass	80 lbs/acre 40 lbs/acre

* Seed Rate Only

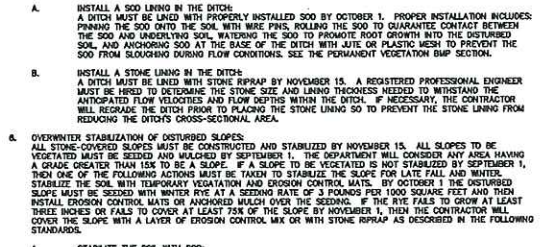


PRECAST CONCRETE SANITARY SEWER MANHOLE
 N.T.S.

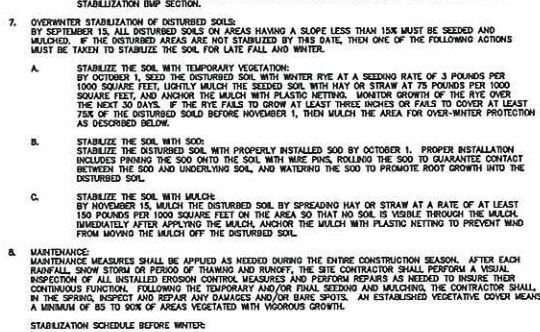
EROSION CONTROL DURING CONSTRUCTION

WINTER CONSTRUCTION

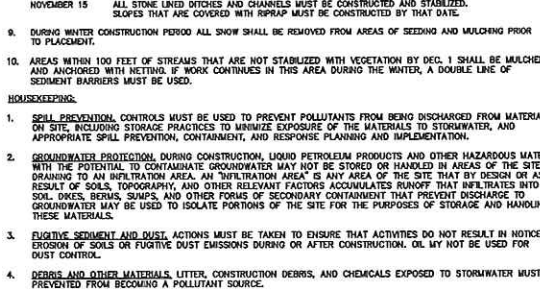
1. WINTER CONSTRUCTION PERIOD: OCTOBER 1 THROUGH APRIL 15
2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO MORE THAN ONE ACRE OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION.
5. OVERWINTER STABILIZATION OF DITCHES AND CHANNELS:
 ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL IS NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.
 - A. INSTALL A SOO LINO IN THE DITCH:
 A DITCH MUST BE LINED WITH PROPERLY INSTALLED SOO BY OCTOBER 1. PROPER INSTALLATION INCLUDES FINING THE SOO ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOO TO GUARANTEE CONTACT BETWEEN THE SOO AND UNDERLYING SOIL, WATERING THE SOO TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING SOO AT THE BASE OF THE DITCH WITH WIRE OR PLASTIC MESH TO PREVENT THE SOO FROM SLOUGHING DURING FLOW CONDITIONS. SEE THE PERMANENT VEGETATION BMP SECTION.
 - B. INSTALL A STONE LINO IN THE DITCH:
 A DITCH MUST BE LINED WITH STONE RIPRAP BY NOVEMBER 15. A REGISTERED PROFESSIONAL ENGINEER MUST BE Hired TO DETERMINE THE STONE SIZE AND LINO THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINO SO TO PREVENT THE STONE LINO FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.
 - C. OVERWINTER STABILIZATION OF DISTURBED SLOPES:
 ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. THE DEPARTMENT WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 1% TO BE A SLOPE. IF A SLOPE IS VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER. STABILIZE THE SOIL WITH TEMPORARY VEGETATION: BY OCTOBER 1, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP AS DESCRIBED IN THE FOLLOWING STANDARDS.
 - A. STABILIZE THE SOIL WITH SOO:
 THE DISTURBED SOIL MUST BE STABILIZED WITH PROPERLY INSTALLED SOO BY OCTOBER 1. PROPER INSTALLATION INCLUDES FINING THE SOO ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOO TO GUARANTEE CONTACT BETWEEN THE SOO AND UNDERLYING SOIL, AND WATERING THE SOO TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR SHALL NOT INSTALL THE SOO UNTIL THE DISTURBED SOIL HAS BEEN STABILIZED WITH SOO INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3:1) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
 - B. STABILIZE THE SOIL WITH EROSION CONTROL MIX:
 EROSION CONTROL MIX MUST BE PROPERLY INSTALLED BY NOVEMBER 15. THE CONTRACTOR WILL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GREATER THAN 33% (3:1) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE. SEE THE TEMPORARY VEGETATION BMP SECTION.
 - C. STABILIZE THE SOIL WITH STONE RIPRAP:
 PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE DEVELOPER'S OWNER WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP. SEE THE RIPRAP SLOPE STABILIZATION BMP SECTION.



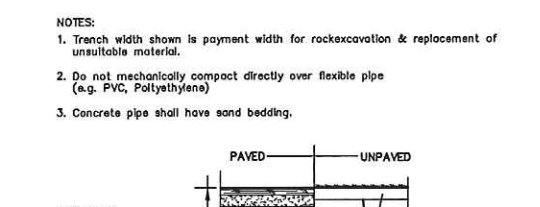
TYP. PAVEMENT DETAIL
 N.T.S.



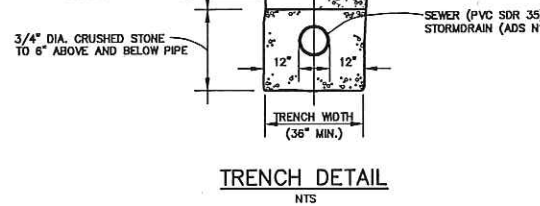
PAVEMENT JOINT DETAIL
 N.T.S.



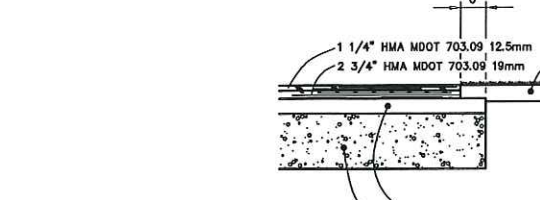
DUMPSTER FENCE ENCLOSURE
 N.T.S.



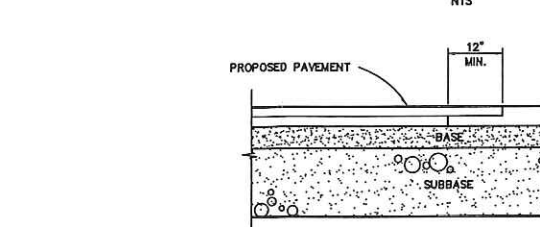
SILT FENCE DETAIL
 N.T.S.



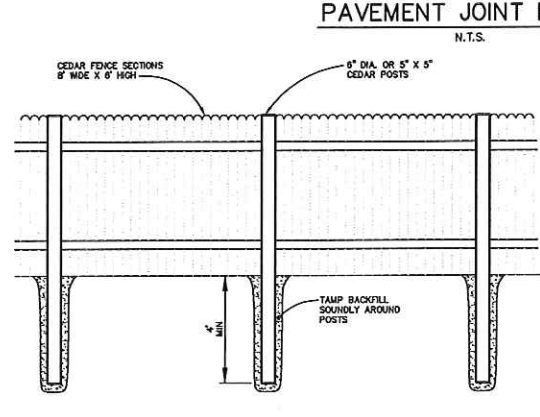
EROSION CONTROL MIX BERM
 N.T.S.



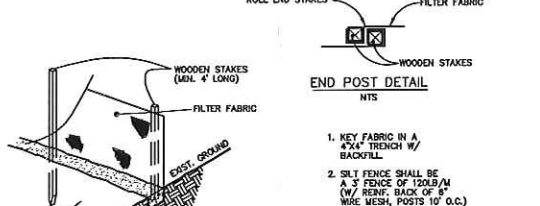
TYP. PAVEMENT DETAIL
 N.T.S.



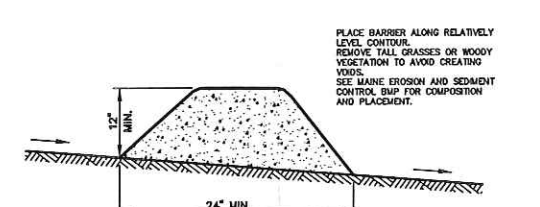
PAVEMENT JOINT DETAIL
 N.T.S.



DUMPSTER FENCE ENCLOSURE
 N.T.S.



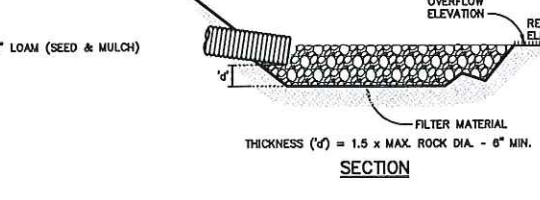
SILT FENCE DETAIL
 N.T.S.



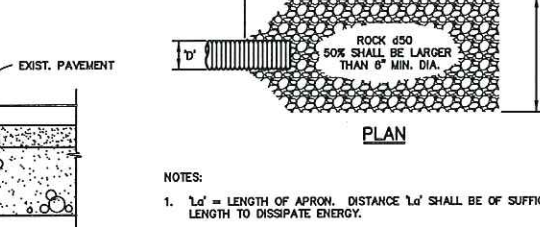
EROSION CONTROL MIX BERM
 N.T.S.



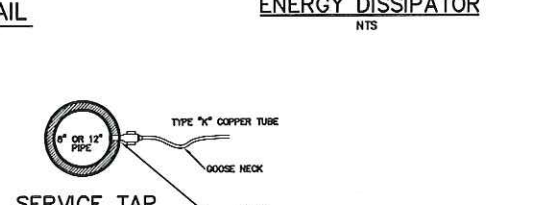
TRENCH DETAIL
 N.T.S.



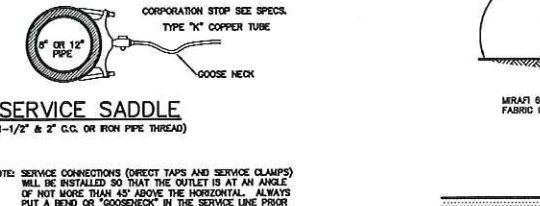
ENERGY DISSIPATOR
 N.T.S.



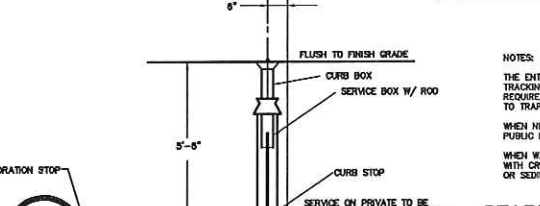
TEMPORARY CHECK DAM AT CULVERT INLET
 N.T.S.



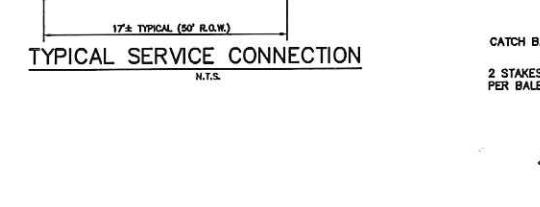
SERVICE TAP
 (3/4" AND 1" O.C. THREAD)



SERVICE SADDLE
 (1-1/2" & 2" O.C. OR IRON PIPE THREAD)



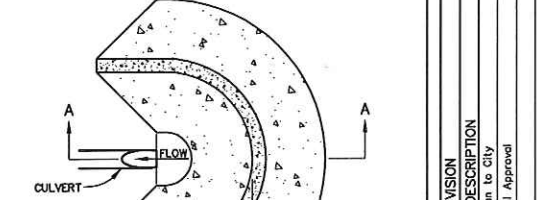
TYPICAL SERVICE CONNECTION
 N.T.S.



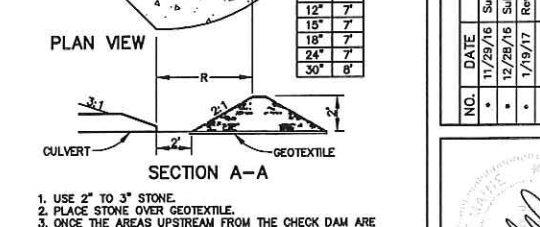
STABILIZED CONSTRUCTION ENTRANCE
 N.T.S.



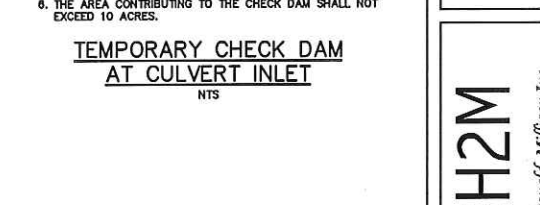
LOW POINT SEDIMENT CONTROL BARRIER
 N.T.S.



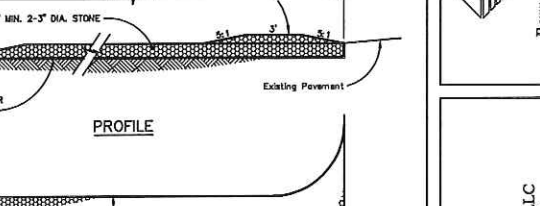
TYP. PAVEMENT DETAIL
 N.T.S.



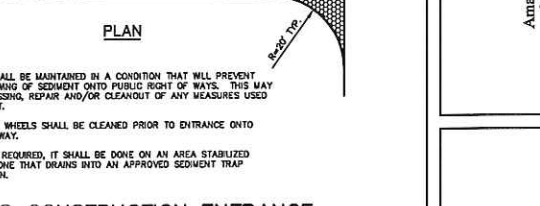
PAVEMENT JOINT DETAIL
 N.T.S.



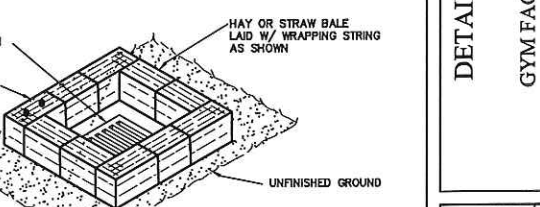
DUMPSTER FENCE ENCLOSURE
 N.T.S.



SILT FENCE DETAIL
 N.T.S.



EROSION CONTROL MIX BERM
 N.T.S.

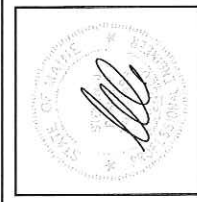


TRENCH DETAIL
 N.T.S.



TYPICAL SERVICE CONNECTION
 N.T.S.

NO.	DATE	REVISION	DESCRIPTION
1	11/29/16	Submitted Site Plan to City	
2	12/28/16	Submitted for Final Approval	
3	1/19/17	Rev'd Site Layout	



BH2M
 Barry Huff, McDonald, Milligan, Inc.
 Engineers, Surveyors
 28 State Street
 Gorham, Maine 04038
 Tel: (207) 839-2771
 Fax: (207) 839-6550

FOR
 Amari Holdings, LLC
 2 Stone Pony Circle
 Steco, Maine

DETAILS A
GYM FACILITY
 EVALUATION ATHLETIC CENTER
 CASCADE ROAD
 SACO, MAINE

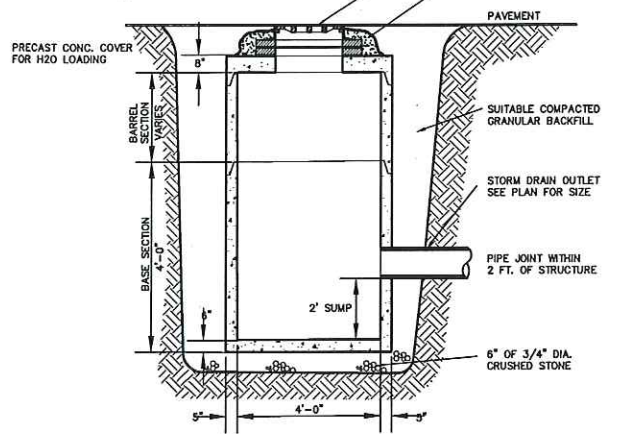
DESIGNED	DATE
Survey	Oct. 2016
DRAWN	SCALE
Dept.	As Noted
CHECKED	JOB. NO.
R. Libby Jr.	16087

SHEET
4

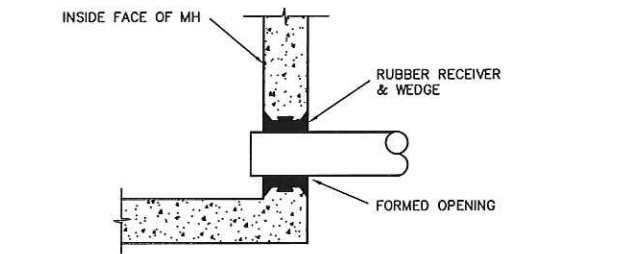
REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BHM INC. IS PROHIBITED

G:\2016\16087\Details Admin\1_23_17\2017 12:47:42 PM_Xerox.CPD.P5.V5.5.404.B.O

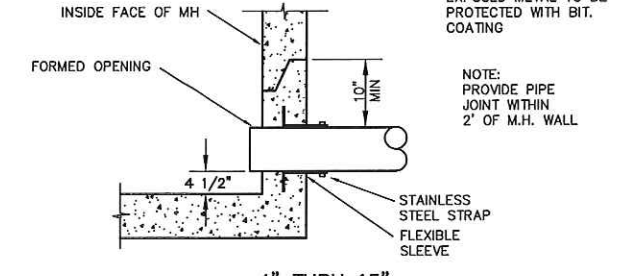
Manhole shall conform to ASTM C478.
 Concrete: 4,000 PSI after 28 days.
 Reinforcing: H20 loading.
 Shiplap joints sealed w/ 1 strip of Butyl Rubber Sealant.
 Each coating to have lifting holes cast in.
 Plug all holes & pipe penetrations w/ non-shrink grout.
 Exterior asphalt coated.
 Lock Joint flexible pipe sleeves cast in.



PRECAST CONCRETE CATCH BASIN DETAIL
 N.T.S.

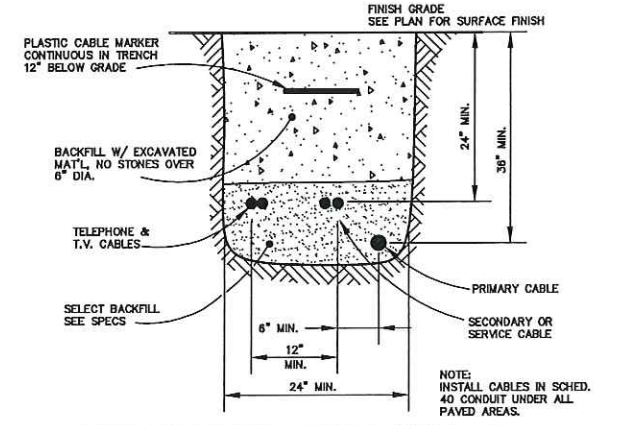


16" THRU 42"

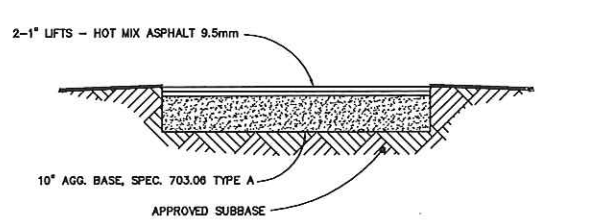


4" THRU 15"

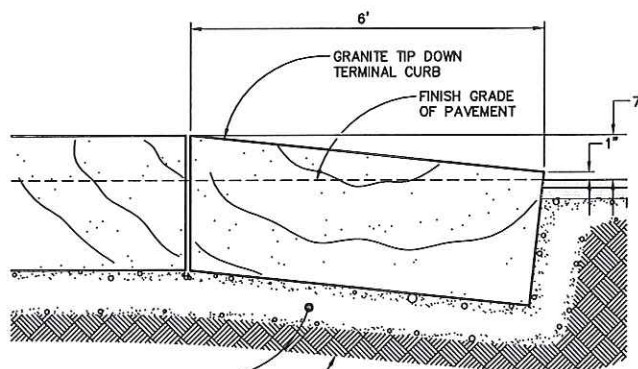
MANHOLE TO PIPE CONNECTION DETAIL
 N.T.S.



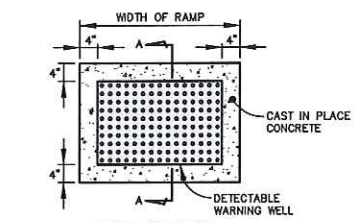
UNDERGROUND CABLE TRENCH
 N.T.S.



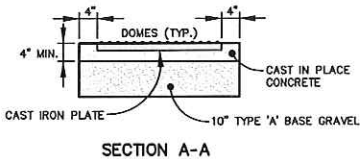
TYPICAL BIT. SIDEWALK SECTION
 N.T.S.



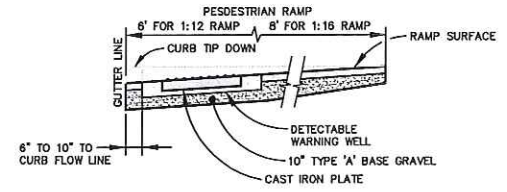
GRANITE TIP DOWN TERMINAL CURB
 N.T.S.



PLAN VIEW OF DETECTABLE WARNING WELL



SECTION A-A



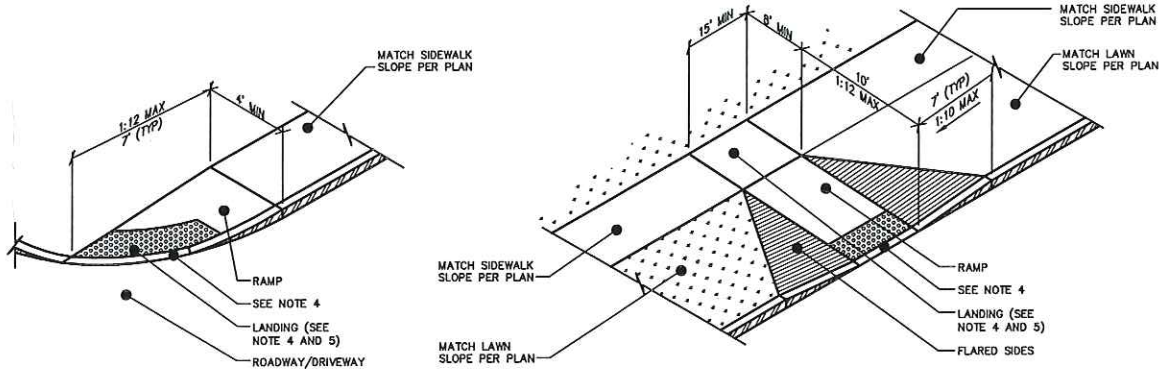
SIDE SECTION OF DETECTABLE WARNING, WELL, CURB AND GUTTER

NOTE: ALL DETECTABLE WARNING AREAS SHALL START 6-10" FROM THE FLOW LINE OF THE CURB, BE 24" IN DEPTH AND COVER THE COMPLETE WIDTH OF THE RAMP AREA ONLY.

DETECTABLE WARNING MAT EMBEDDING
 N.T.S.

NOTE:

1. CURB RAMP LENGTHS ARE BASED ON SIX (6) INCH CURB REVEAL HEIGHT AND NO RUNNING SLOPE. RAMP LENGTHS SHALL BE ADJUSTED AS NECESSARY TO ACCOMMODATE VARYING CURB REVEAL HEIGHTS AND TO MATCH RUNNING SLOPES OF ADJACENT ROADWAY AND SIDEWALK SLOPES TO MAINTAIN A RAMP THAT DOES NOT EXCEED THE MAXIMUM RAMP SLOPE OF 1:12.
2. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES AND SHALL HAVE A BASE DIAMETER OF 0.9 INCHES (23 mm) MINIMUM AND 1.4 INCHES (36 mm) MAXIMUM; A TOP DIAMETER OF 50 PERCENT OF THE BASE DIAMETER MINIMUM TO 65 PERCENT OF THE BASE DIAMETER MAXIMUM AND A HEIGHT OF 0.2 INCHES (5.1 mm), A CENTER-TO-CENTER SPACING OF 1.8 INCHES (41mm) MINIMUM AND 2.4 INCHES (61mm) MAXIMUM; AND A BASE-TO-BASE SPACING OF 0.85 INCHES (17mm) MINIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES ON A SQUARE GRID.
3. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON INTERIOR SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-GANE CONTACT.
4. ALL ACCESSIBLE ROUTE SIDEWALKS INTERSECTING ROADWAYS, DRIVEWAYS, OR OTHER VEHICULAR CROSSINGS REQUIRE DETECTABLE WARNINGS. DETECTABLE WARNING ZONES SHALL BE INSTALLED SIX (6) INCHES (OR THE HORIZONTAL THICKNESS OF THE ADJACENT CURB) FROM THE FLOW LINE OF THE CURB, EXTEND INTO THE SIDEWALK FOR A 24" DEPTH, AND COVER THE COMPLETE WIDTH OF THE SIDEWALK OR RAMP AREA. DETECTABLE WARNING ZONES SHALL CONFORM TO THE SLOPE REQUIREMENTS OF THE RAMP, LANDING, OR ACCESSIBLE ROUTE AS DEFINED IN THE SPECIFIED DETAIL. DETECTABLE WARNINGS SHALL NOT BE INSTALLED IN FLARED SIDES, IF THE RAMP INCLUDES FLARED SIDES.
5. ALL LANDING AREAS SHALL BE 4 FEET WIDE BY 4 FEET LONG (MINIMUM DIMENSIONS). THE SLOPE OF THE LANDING AREA SHALL NOT EXCEED A 1:48 IN ANY DIRECTION.
6. ALL ACCESSIBLE ROUTE SLOPES ADJOINING THE LANDING AREA, EXCLUDING THE CURB RAMP, SHALL NOT EXCEED A SLOPE OF 1:20 UNLESS OTHERWISE NOTED.



HANDICAP RAMP
 N.T.S.

NO.	DATE	REVISION DESCRIPTION
	11/29/16	Submitted Site Plan to City
	12/28/16	Submitted for Final Approval
	1/19/17	Rev'd Site Layout



BH2M
 Engineers, Surveyors
 Barry, Huff, McDonald, Milligan, Inc.
 28 State Street
 Gorham, Maine 04038
 Tel: (207) 839-2771
 Fax: (207) 839-8250

FOR
 Amari Holdings, LLC
 3 Stone Pony Circle
 Saco, Maine

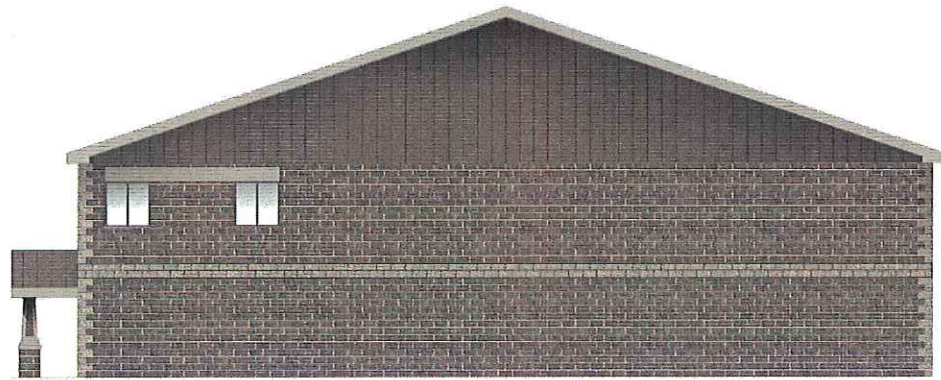
DETAILS B
GYM FACILITY
 EVALUATION ATHLETIC
 CASCADE ROAD
 SACO, MAINE

DESIGNED Survey	DATE Oct. 2016
DRAWN Dept.	SCALE As Noted
CHECKED R. Libby Jr.	JOB. NO. 16087

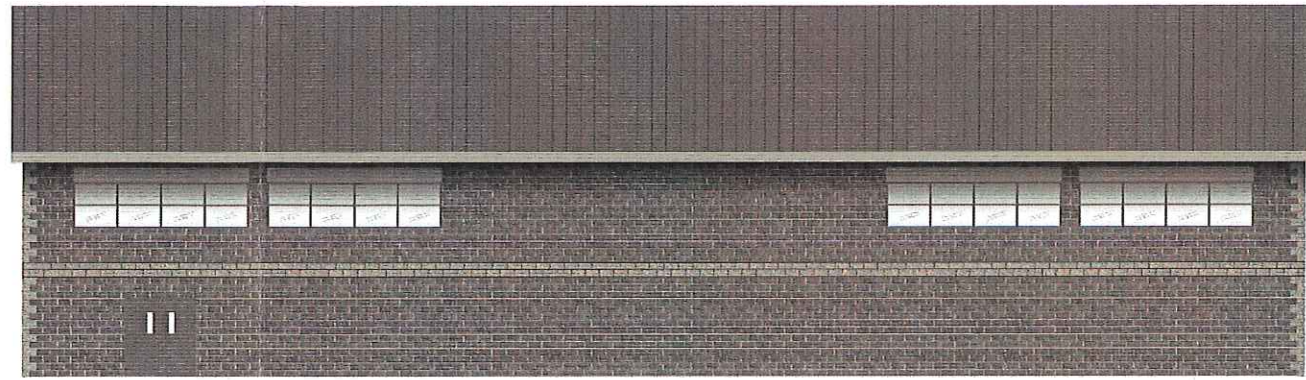
SHEET
5

REPRODUCTION OR REUSE OF THIS DOCUMENT WITHOUT THE EXPRESSED WRITTEN CONSENT OF BH2M INC. IS PROHIBITED

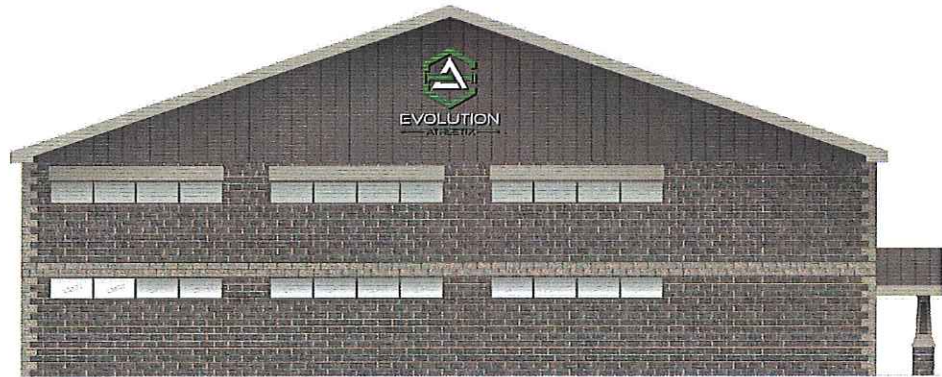
G:\2016\16087\Details B.dwg, 1/23/2017 12:49:30 PM, Xerox PDF PS V5.5, A04.8.0



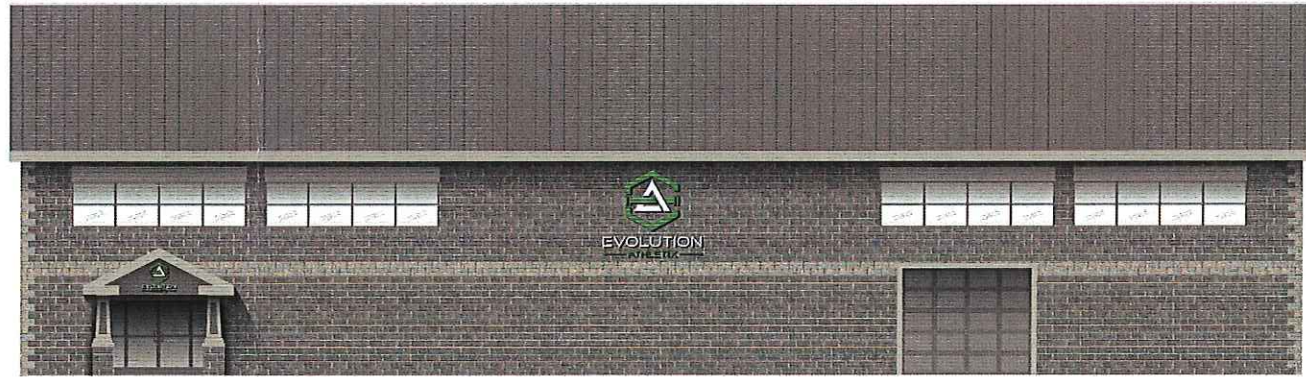
EAST ELEVATION



NORTH ELEVATION



WEST ELEVATION
(ROUTE 1)



SOUTH ELEVATION
(CASCADE ROAD)

EVOLUTION ATHLETIX
933 PORTLAND ROAD
SACO, MAINE 04072

SUBMISSION	
DATE	ISSUE
1-20-2017	Elevation Renderings

PROPOSED
ELEVATIONS

SCALE: 1/8" = 1'

SK-1

Saco Planning Board

Findings of Fact and Notice of Decision

February 7, 2017

Evaluation Athletix Site Plan Review

Lot C5, Cascades Subdivision

1. Applicant: Amari Holdings, Inc., 5 Stone Pony Circle, Saco ME 04072.
2. Property Owner: Town and Country Federal Credit Union, P.O. Box 9420, South Portland ME 04106-9420.
3. Project Engineer: Steve Blake, 28 State Street, Gorham, ME 04038.
4. Development Proposed: construction of a 9,600 s.f. commercial building proposed as a Health and Fitness Club plus associated parking, stormwater management, lighting, landscaping and signage.
5. Zoning: Cascade contract zone and MU-3.
6. Property is identified as Tax Map 62, Lot 1-2. Parcel is recorded in Book 15384, Page 659 at the York County Registry of Deeds.
7. A Health and Fitness Club is a permitted use on Parcel 1 as prescribed by the Cascade contract zone.
8. Minimum lot and yard requirements have been met as follows:

	<u>Required</u>	<u>Existing/Proposed</u>
Minimum lot size	7,500 s.f.	2.37 acres
Min. st. frontage	50 feet	228.52 feet
Setbacks		
Front	50 feet, Rte. 1	179' Rte. One
Side	20 ft., Cascade Rd. 10 feet	132.5' Cascade Rd., 40, 32.5 ft.
Max. lot coverage	50%	9.3 %
Max. bldg. Height	60 ft.	<60 ft.

9. Access to the site would be via a common access drive off Rte. One north of the Cascade Road intersection, and via the easterlymost full access site driveway off Cascade Road, as stated in the Traffic Movement Permit granted by the Maine DOT dated 4/2/08 and shown on the approved plan for the Cascade/Park North subdivision.

10. Parking requirements as specified in Article 7 of the Zoning Ordinance will be satisfied as follows: Personal Services Business – 1 space per 200 s.f. of total floor space. Floor space proposed: 9,600 s.f. Required spaces: 48. Proposed: 51, including 2 handicap spaces.

11. Utilities: Water is supplied via connection to existing 8” main in private drive from Cascade Road. Sanitary service is via connection to an 8” sewer main within the private access drive northeast of the proposed building. Existing overhead electric, cable and telephone service in the Cascade Road right of way would be run underground to the building.

12. Stormwater Drainage: surface flow will be directed to a system of stormwater structures and pipes on-site, thence to existing detention basin #5 in the northeast corner of Lot 1. Said detention basin was constructed by the Park North and Cascades developer in coordination with the neighboring Wagner Drywall commercial building located on Map 62, Lot 1-3. Rights to utilize the detention basin are addressed in the “Reciprocal Easement and Maintenance Agreement” found in the bound application for this project.

13. Erosion and Sedimentation Control: All work will be according to Best Management Practices endorsed by the Maine DEP, and to follow measures detailed on Sheet 3 of the plan set.

14. Landscaping: site plan calls for eight street trees along the two private access drives to the site. A row of eighteen, six foot arborvitae to be planted ten feet on center is shown on the plan immediately to the west of the proposed parking lot. The proposed plantings fall short of requirements found in Sec. 708-3(9)C.

15. Lighting: light pole fixtures are proposed and locations shown on the lighting and landscaping plan. The plan has been reviewed by Stantec, Inc., on behalf of the City. Upon correction of an apparent typo, the plan will be found to be in compliance with the Ordinance.

16. Traffic: no traffic volume estimate has been submitted. In order for City and subdivision developer to monitor level of traffic activity, an estimate of projected trips should be submitted.

17. Buffers: Landscaping as required by the Zoning Ordinance, Sec. 708-3(9)C and F, in order to screen parking areas from Rte. One and ensure maintenance of installed plants, is required.

18. Solid Waste Disposal: an on-site dumpster and pad are shown on the site plan.

19. Wetlands: the site has been reviewed by wetlands scientist Mark Hampton, and reviewed by Normandeau Associates on behalf of the City. The site plan showed a projected impact of 1,038 s.f., but agreement has been reached that no protected wetlands are proposed for alteration.

The Planning Board, following review of the site plan application by the Applicant, makes these findings based on the Site Plan review criteria found in Section 1105 of the Saco Zoning Ordinance:

1. General – the proposed use meets the requirements of the City of Saco Zoning Ordinance and is in compliance with applicable state laws and regulations.
2. Compatibility With Neighboring Buildings – the bulk, location and height of the proposed building and parking facilities are compatible with neighboring properties.
3. Natural Features – the building, parking areas and driveway are oriented with respect to the natural features of the site, preserve the natural landscape insofar as practical, and minimize grade changes.
4. Public Safety – the proposed use will provide adequate access to the site, and to the building for emergency vehicles at all times of the year, and will not result in fire safety or other safety hazards.
5. Lighting – the proposed exterior lighting does not create glare or hazards to motorists on adjacent streets, is adequate for the safety of occupants or users of the site, meets Ordinance requirements, and will not damage the value and diminish the usability of adjacent properties.
- 6. Landscaping – buffers and on-site landscaping will minimize the impact of detrimental features of the proposed use on neighboring properties, and will screen the appearance of parking areas from public rights of way and abutting properties.**
7. Off Site Impacts – the proposed use will not have a significant detrimental effect on the use of abutting properties as a result of noise, vibrations, fumes, odors, dust or other cause, and meets standards of the Zoning Ordinance and other City ordinances regulating these impacts.
- 8. Vehicle Circulation and Pedestrian Access – the provisions for vehicular loading and unloading, parking, circulation and pedestrian movement on the site and onto adjacent public streets will not result in hazardous or unsafe conditions, and are designed in accordance with the standards of Article 7 of the Zoning Ordinance.**
9. Flood Hazards – site design is in accordance with applicable flood hazard protection requirements. The project is not located with the 100-year flood plain.
10. Wastewater – the site will be connected to public sewer.
11. Solid Waste – adequate provision has been made for the disposal of solid waste as required by state law and local ordinance.
12. Erosion Control – will be done according to Best Management Practices set forth by the Maine DEP, and the standards of Section 806 of the Zoning Ordinance.
13. Drainage – the stormwater plan is to coordinate with the existing detention pond northeast of the subject property, which is adequate to manage stormwater runoff and other drainage conditions on the site, and is in conformance with Section 805 of the Zoning Ordinance.

14. Water Supply – via hookup to an existing 8” main in the access drive off Cascade Road.
15. Hazardous Materials – none proposed.
16. Wildlife and Scenery – the use will not have an adverse impact on significant scenic vistas or significant wildlife habitat.
17. Traffic Conditions – the use will not result in a decrease in level of service below LOS D at intersections, and will not cause unreasonable safety hazards on public roads.
18. Water Quality – a) surface water: the proposed use will not discharge any water pollutants, will utilize public sewer for the disposal of sanitary wastewater, and will have negligible if any impact on phosphorus concentration; b) ground water: the proposed use will not increase any contaminant concentration in ground water.
19. Utilities – the proposed use will not impose an unreasonable burden on water lines or other public utilities.
20. Special Features of Development – none.

The Planning Board, following review of the application for a building proposed for a Health and Fitness Club submitted by applicant Amari Holdings, Inc., makes these findings based on the design review criteria found in Section 729 of the Saco Zoning Ordinance, and on responses provided by the Applicant:

- a. **Scale. The scale of the building, based on overall size, its mass in relation to the space around it, and its entrances, windows, walls, and roofline is visually compatible with its site and with characteristics of neighboring buildings and sites.**
- b. Height. The height of the building is visually compatible with the heights of buildings on neighboring sites.
- c. **Footprint and Orientation. The proposed building is compatible with the neighborhood based on the pattern of buildings and spaces along the street wall, placement of the building on the lot, and the building footprint in relation to lot size and to nearby buildings.**
- d. **Materials. The relationship of materials and textures of the exterior of a building is compatible with that of buildings with which it is visually related, or that are traditionally used in Saco.**
- e. **Roof. The shape and proportion of the roof are articulated so as to lend visual interest, and the roof design will screen or camouflage rooftop protrusions so as to minimize the visual clutter of rooftop installations such as air conditioning units, exhaust vents, transformer boxes, air handler units, and dish antennas.**

- f. **Walls.** The proposed building walls do not extend a length greater than fifty (50) linear feet without an architectural feature such as a window, dormer, recessed corner, pilaster, cornice, porch or visually compatible door. The building is designed with a complex massing that includes varying roof lines, projections/recesses, or smaller additions to a main building.
- g. **Windows and Doors.** The proposed windows and doors are visually compatible with the architectural style of the building and with local architectural styles. The primary entrance shall face the street, unless the applicant can demonstrate that the circumstances of a given application merit an alternative orientation. **The entrance shall be identified through the use of architectural details that may include awnings or roofs for shelter, recessing, decorative lighting, trim or railings, in addition to pedestrian walkways connecting to parking areas and public sidewalks.**
- h. **Awnings and Canopies.** Awnings and canopies are encouraged but not required in order to visually integrate a series of buildings through compatible or coordinated placement and design. Awnings and canopies shall be integrated with the building façade, be human-scaled, and result in a consistent pattern through placement, size and shape – no awnings or canopies proposed.

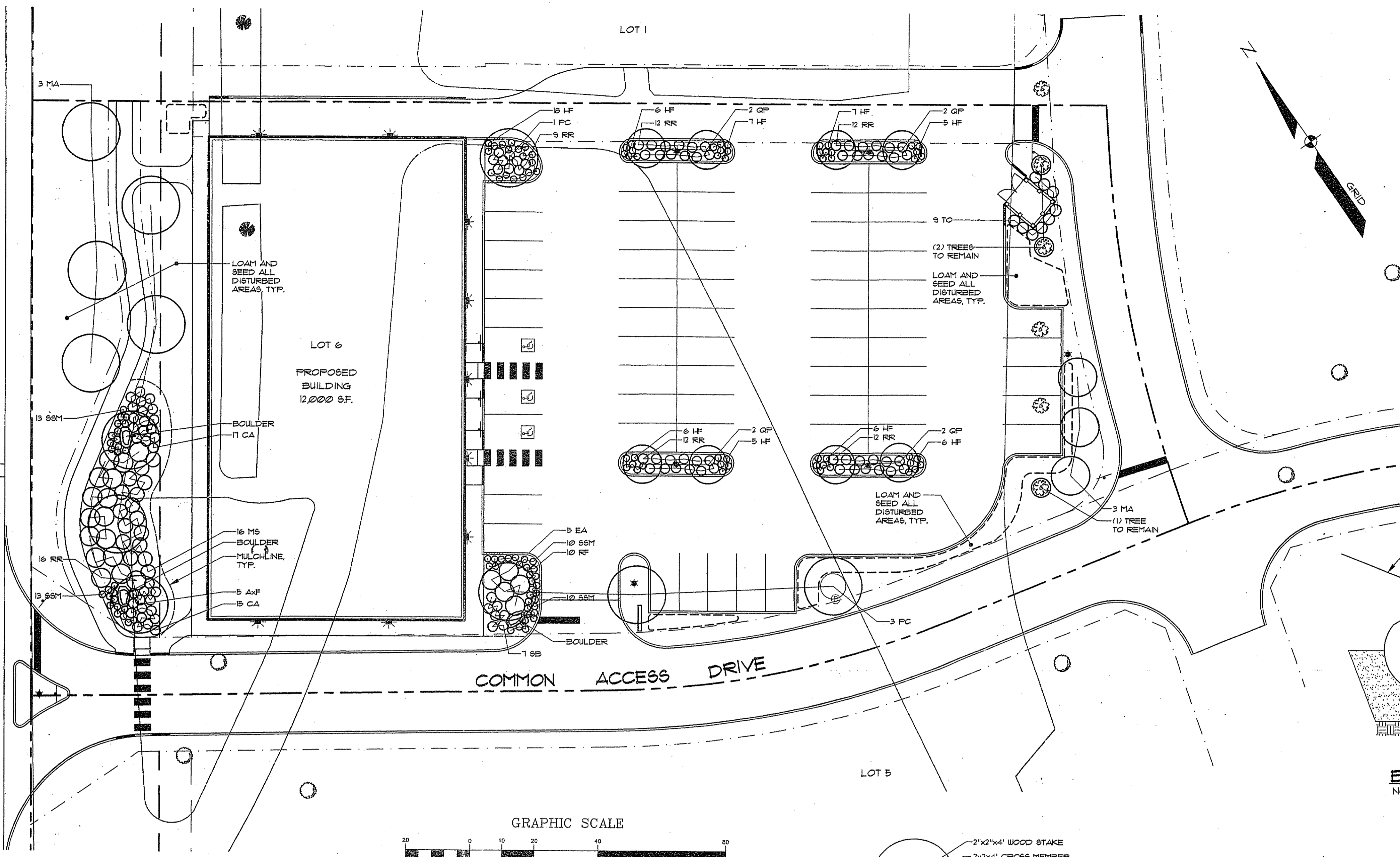
With these Findings and the accompanying Conditions of Approval, the City of Saco hereby finds that the applicant has satisfied the requirements set forth in Articles 4, 7 and 11 of the Zoning Ordinance.

Approval is hereby granted, contingent on compliance with these Findings of Fact and with the Conditions of Approval dated February 7, 2017.

On behalf of the Saco Planning Board,

Robert H. Hamblen
City Planner

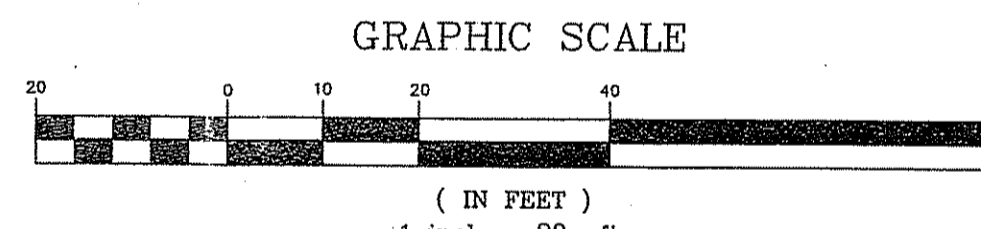
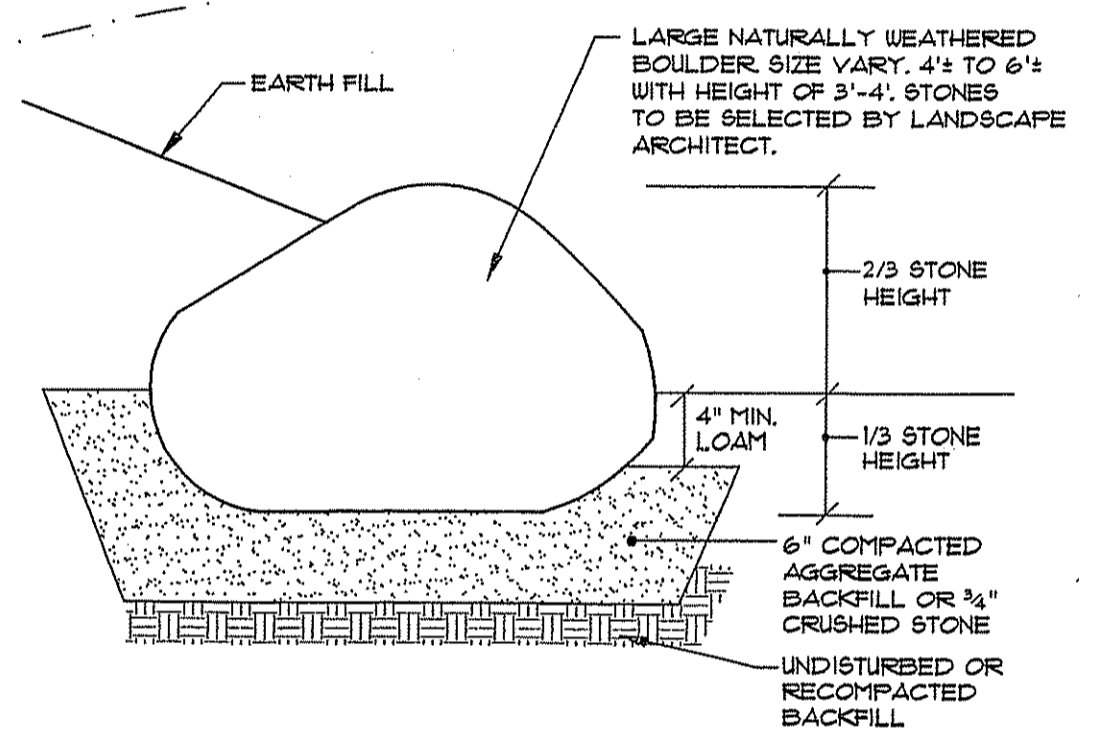
U.S. ROUTE ONE



LEGEND

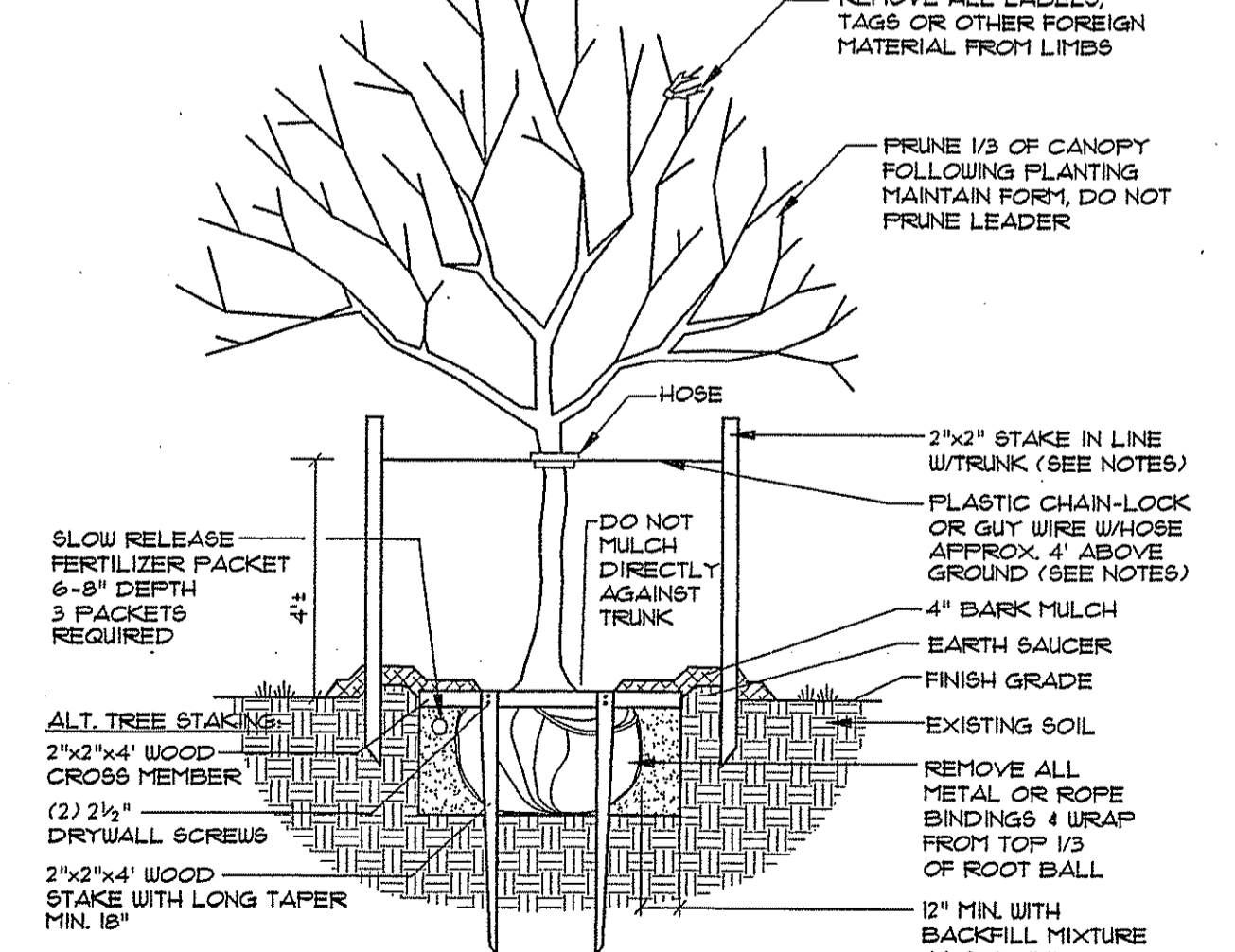
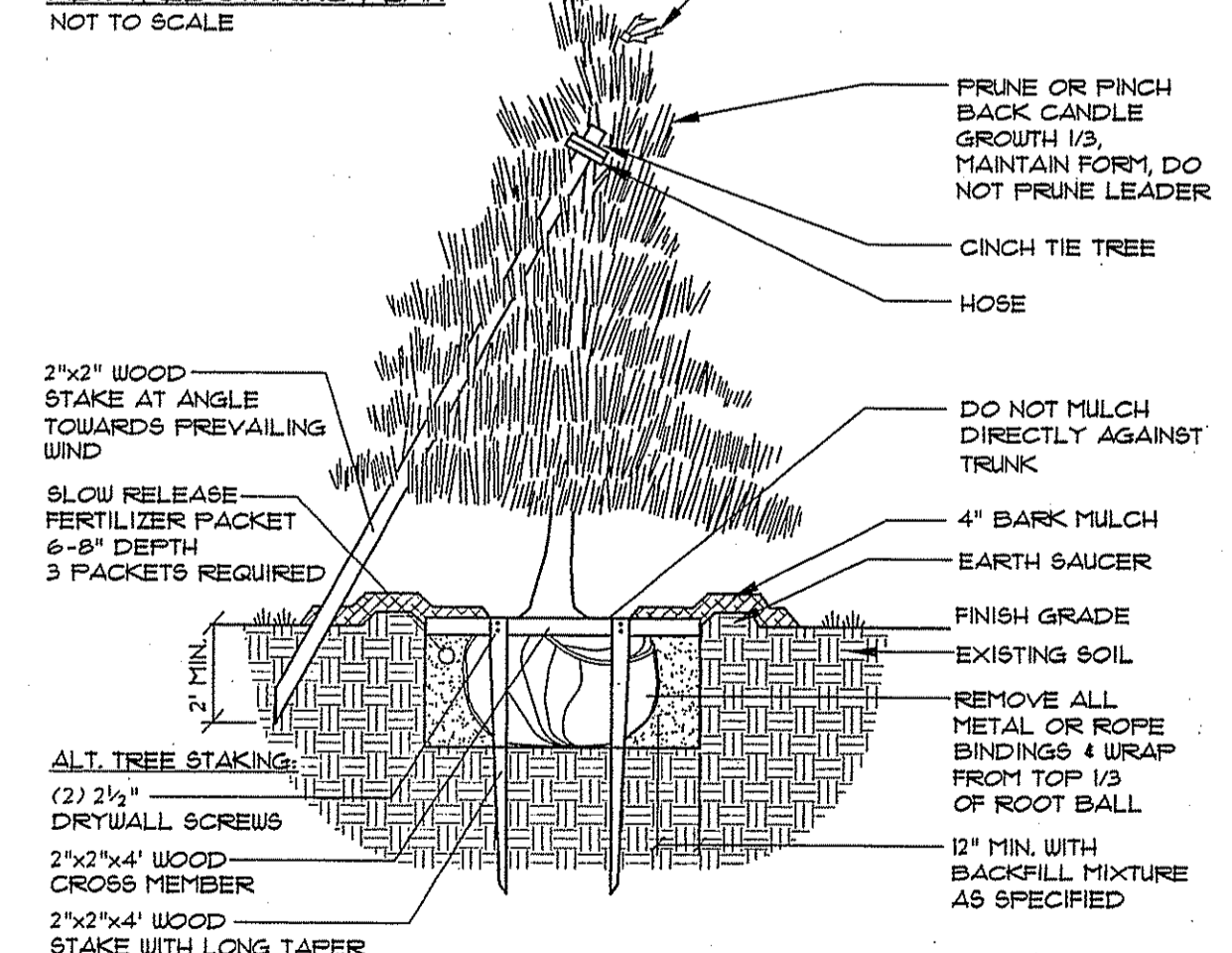
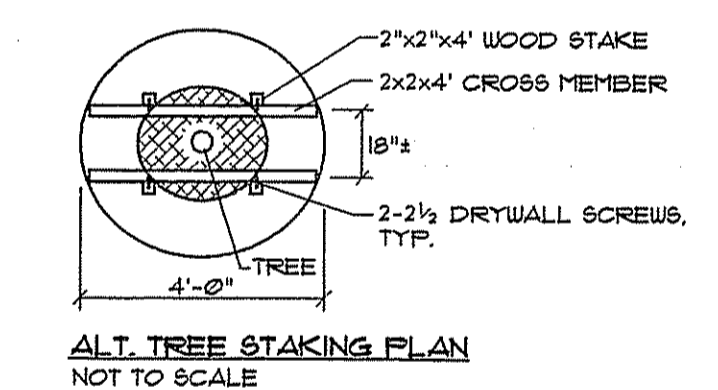
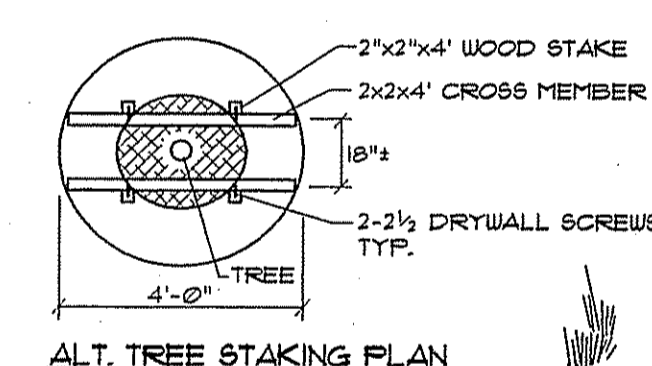
EXISTING	DESCRIPTION	PROPOSED
---	BOUNDARY LINE/ROW	---
---	ABUTTER LINE/ROW	---
---	SETBACK	---
---	EASEMENT	---
---	BUILDING	---
---	EDGE PAVEMENT	---
---	PAVEMENT PAINT	---
---	CURBLINE	---
○	LIGHT POLE/WALL	○
○	DECIDUOUS TREE	○
○	CONIFEROUS TREE	○

- NOTES:**
- ALL REQUIRED LANDSCAPING SHALL BE INSTALLED BEFORE OCCUPANCY, OR WITHIN 6 MONTHS, IF OCCUPANCY OCCURS DURING THE WINTER.
 - FINANCIAL SECURITY SUITABLE TO THE CITY, IN THE FORM OF AN ESCROW ACCOUNT, BOND, OR IRREVOCABLE LETTER OF CREDIT, EQUIVALENT TO 30% OF THE VALUE OF THE PLANTINGS, SHALL BE MAINTAINED FOR A PERIOD OF 18 MONTHS AFTER PLANTING.
 - ALL PLANTINGS SHALL BE WATERED REGULARLY DURING THEIR FIRST YEAR AND MAINTAINED PERMANENTLY IN GOOD GROWING CONDITION AS AN EFFECTIVE VISUAL SCREEN.
 - SHRUBS OR TREES WHICH DIE SHALL BE REPLACED WITHIN ONE GROWING SEASON WITH NEW SHRUBS OR TREES TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE LANDSCAPING REQUIREMENTS.



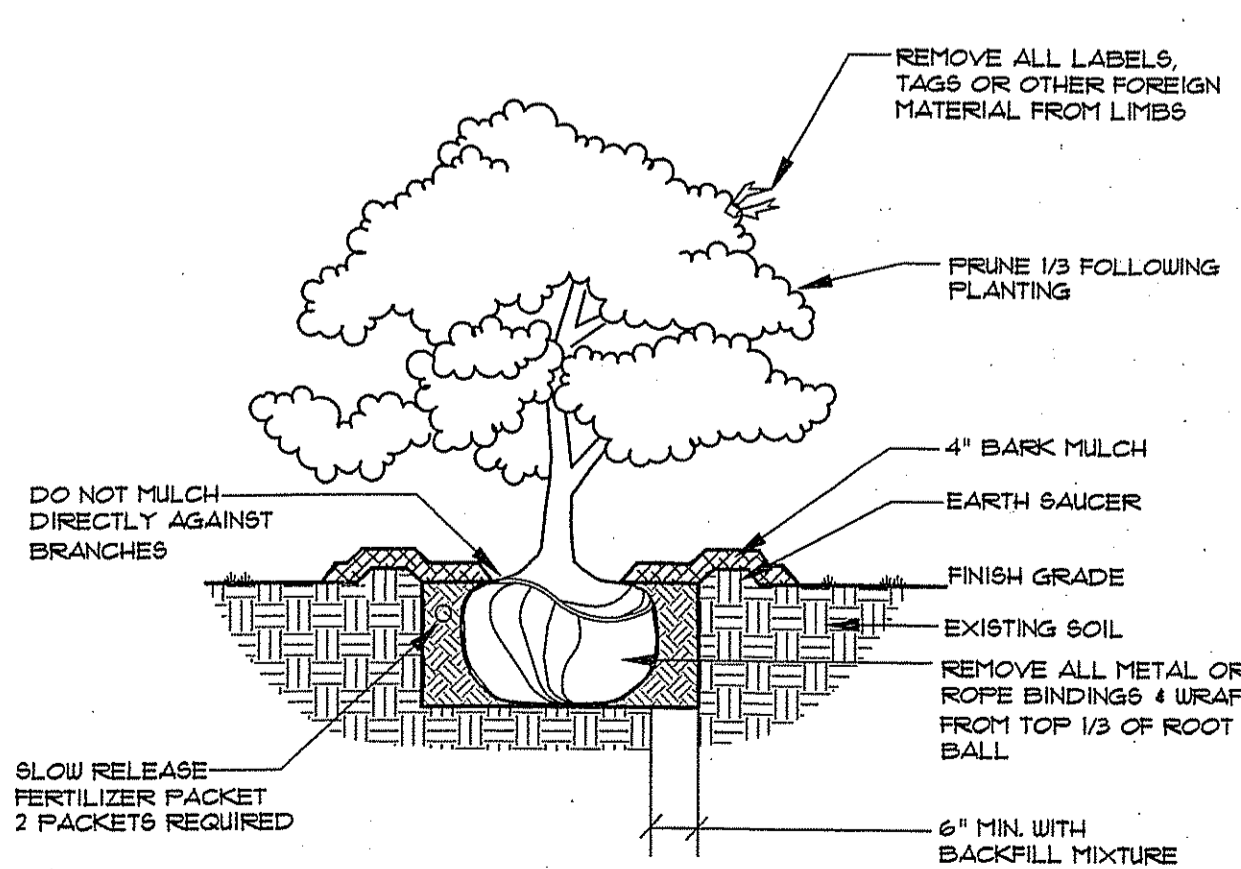
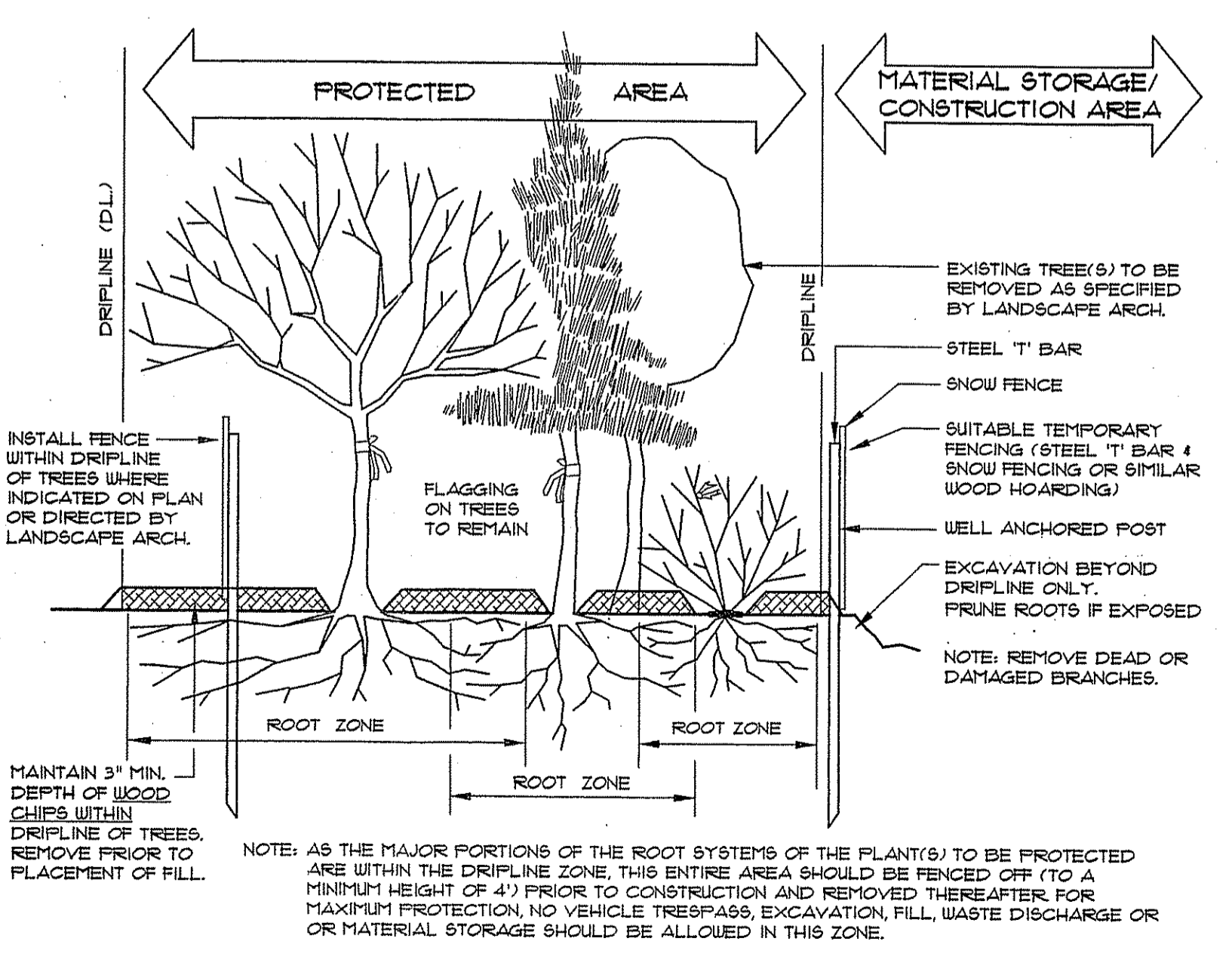
PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	SIZE
AxF	ACER X FREEMANII 'JEFFERSRED'	AUTUMN BLAZE MAPLE	3" CAL.
CA	CALAMAGROSTIS ACUTIFLORA 'KARL FORESTER'	FEATHER REED GRASS	NO. 1
EA	EUONYMUS ALATUS 'RUDY HAAG'	BURNING BUSH	3' HGT.
HF	HEMEROCALLIS FULVA 'STELLA DE ORO'	STELLA DE ORO DAYLILY	NO. 2
MA	MALUS 'DONALD WYMAN'	DONALD WYMAN CRAB APPLE	2 1/2" CAL.
MS	MISCANTHUS SINENSIS 'GRACILLIMUS'	MAIDEN GRASS	NO. 1
PC	PYRUS CALLERYANA 'CLEVELAND'	CLEVELAND PEAR	3" CAL.
RF	RUDBECKIA FULGIDA	GREEN HILLAR OAK	2.5" CAL.
RR	ROSA RUGOSA	BLACK EYED SUSAN	NO. 1
SSM	SALVIA SUPERBA 'MAY NIGHT'	SEA ROSE	2' HGT.
TO	THUJA OCCIDENTALIS 'SMARGARD'	MAYNIGHT SALVIA	NO. 1
		EMERALD GREEN ABORVITAE	6' HGT.



- NOTES:**
- INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY: 1. THE TREE IS OF SUBSTANTIAL SIZE.
 - THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
 - THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
 - IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.
- DECIDUOUS TREES** UNDER 2" CALIFER OR UNDER 8' IN HEIGHT
EVERGREEN TREES 1'-0" IN HEIGHT & UNDER

- NOTES:**
- INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY: 1. THE TREE IS OF SUBSTANTIAL SIZE.
 - THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
 - THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
 - IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.
- DECIDUOUS TREES** 2" TO 4" CALIFER



Sebago Technics
Engineering Expertise. You Can Build On.
260 Chestnut Street, Suite B
Westbrook, ME 04095-1599
Tel: (207) 856-0277
WWW.SEBAGOTECHNICS.COM

LANDSCAPE AND LIGHTING PLAN
OF:
LOT 6 - CASCADES SUBDIVISION
U.S. ROUTE ONE
SACCO, MAINE
FOR:

DATE: 1-20-09
SCALE: 1"

SHEET 5 C

Memorandum

To: Planning Board Members
From: Bob Hamblen
Re: Site Plan Review – Evaluation Athletix Health and Fitness Club
Tax Map 62, Lot 1-2
Date: Meeting of Feb. 7, 2017

A. Overview

The Board reviewed this application at its Jan. 3 meeting, and after a public hearing and discussion with the applicant, voted to table pending more information on several items:

- a. Respond fully to the Dec. 29, 2016 comments from City Engineer Joe Laverriere. ***BH2M has provided responses in its 1/19/17 letter.***
- b. Respond to the Jan. 3, 2017 lighting comments from Stantec. The cut sheets provided in the 11/29/16 submittal have been forwarded to Stantec. – ***The typo appears to be still in place on the lighting plan – LED fixture called out on plan, a Domus Small luminaire with High Pressure Sodium luminaire called out in the detail on the plan.***
- c. The issues identified by Normandeau re: hydric soils have been addressed in post-meeting e-mails.
- d. We have e-mailed to BH2M documents that have some bearing on this parcel: the Traffic Movement Permit for the Cascades-Park North subdivision, and Conditions of Approval dated 1/8/08 re: sidewalks (see pp. 2-4). ***A sidewalk has been added to the plan along the Cascade Road and Portland Road frontages.***
- e. An amended landscaping plan screening the parking lot from Rte. 1 and Cascade Road. – ***a row of arborvitae has been added to the plan in order to screen the parking lot from Rte. 1.***
- f. Changes to the design and location of the building. The building's front entrance should face either Rte. 1 or Cascade Road. A way to screen HVAC and other units on the roof. The Board views this corner as a gateway to the City, and to OOB, and would welcome a building better positioned, with more architectural interest. ***See design review comments below.***
- g. It wasn't clear from submissions to date that a subdivision amendment is being requested. That is the case, and accordingly, an application to amend the subdivision by splitting M62 L1-2 should be submitted for the next meeting. ***An application to amend the subdivision plan has been submitted.***

As reported previously:

Lot C-5 in the Cascade subdivision/contract zone is at the corner of Portland Road and Cascade Road, owned by Town and Country Federal Credit Union, envisioned at one time as being their flagship office

building. It never came to pass, and now a 2.37 acre portion of the property is proposed as the site of a 'Health and Fitness Club,' a permitted use per the contract zone agreement.

The building would have a 9,600 s.f. footprint, 48 parking spaces, with access from private drives off both an existing right in/right out curb cut on Rte. One, and a "Common Access Drive" from Cascade Road. The site, as is true of the commercial building on neighboring lot C-6, will be dependent on an off-site detention/treatment pond in the northeast corner of Lot C1.

See 'Discussion' section below for more. Bill Thompson, BH2M, is the project manager.

B. Completeness of Applications

- Site plan review -- the project is subject to a Site Location of Development amendment. The DEP has expressed its preference to handle this, inasmuch as the DEP reviewed and granted the original Site Law permit for the combined Cascades/Park North plan. So, Sec. 1104-1.4 is not yet met, as these state permits have not been submitted to the City. Not unusual, and a draft condition of approval addresses this.

The location is such that the plan is to drain stormwater to the existing detention pond built by Elliott Chamberlain in conjunction with the February 2009 Wagner Drywall approval, the commercial building at 937 Portland Road. So, no stormwater plan submitted nor needed, and the Reciprocal Easement and Maintenance Agreement appears to establish the right of this applicant to direct stormwater to the pond.

- Design review – found complete at the Jan. 3 meeting.

C. Discussion

A number of issues for discussion here:

- See Joe Laverriere's comments of 2/3.
- Cascades is subject to an existing TMP permit – *what impact does this project have on any existing conditions from that permit? We understand that Bill Bray is taking a look at this issue.*
- Section 729. Design Standards Applicability. These design standards shall apply to all building construction or remodeling projects requiring a conditional use permit or site plan review *See draft Findings of Fact, last 2 pages. Those standards for design review that staff feels are not met with the updated building elevations are in **bold**.*
--Scale – problem with length of wall and no architectural feature.

--Footprint – this building is the start of a street wall, and its placement on the lot should be just back from the 20 foot setback from Cascade Road, with a pedestrian walk from sidewalk to front entrance.

- a. *From Sec. 729: Footprint and Orientation.* Desirable examples of building orientation exist in the Main Street corridor from Saco Island to the King Street/Fairfield Street intersection, and the North Street corridor from Main Street to the former Eastern rail line. These areas include a human-scaled street wall, and site elements such as clearly defined front entrances, landscaping, lighting and off-street parking located to the side or rear of buildings. Compatibility shall be determined based on the pattern of buildings and spaces along the street wall, placement of the building on the lot, and the building footprint in relation to lot size and to nearby buildings. In the case of a corner lot, the Planning Board shall indicate to the applicant which street the front of the building and primary entrance shall face.

--Materials – the split block is most visually related to a number of buildings in the industrial park, and is an excellent material for industrial buildings.

--Roof – the shape and proportion of the proposed roof lends little visual interest, and will screen or camouflage little or none of the hardware that gets installed up top. Unless no air conditioning units, exhaust vents, transformer boxes, or air handler units would be installed on the roof?

--Walls – the east-facing wall has a 60 foot span with no window, door or other feature. The building has no varying roof lines, projections/recesses, or smaller additions. See Sec. 729 for photos of buildings that do display architectural interest.

--Windows and doors – primary entrance shall face the street, “... in addition to pedestrian walkways connecting to parking areas and public sidewalks.”

- The applicant will be responsible for design and construction of a sidewalk along a to-be-determined portion of Cascade Rd frontage, and from Cascade Road along the existing private access drive. *(This is based on the 1/8/08 Cascades and Park North subdivision approval. Staff has expressed a preference that sidewalk and landscaping on this site more closely approximate that has been done on other Cascades/Park North projects -- see site plans for Wagner Drywall, and for Ocean Communities credit union. See sketch plan presented for the microbrewery on Lot 18, Park North, which has yet to address a sidewalk, but is proposing landscaping that exceeds Sec. 708 standards.)*
- This building continues to have issues meeting design standards. The building's main entrance now faces Cascade Road, is set back from Cascade Road over 130 feet, and is separated from the road by a 45 space parking lot. Staff recommends bringing the front of the building to the 20 foot setback line and bringing a pedestrian walkway to the front entrance from the sidewalk.
- What is going to happen with the undeveloped portion of the parcel? Is it to remain undeveloped? If so, landscape it. If it is to be developed, then demonstrate that some thought has been given to how that will happen.

D. Conclusions

This applicant is well thought of by staff, and we don't want commentary herein to be taken personally: nothing against Amari Holdings LLC, but, this plan and building as designed fall far short of what staff would feel comfortable in recommending to the Board. Several outstanding technical and design issues exist. As a gateway to Saco and to Old Orchard Beach, this is one of the more prominent corners in the City. When buildings go up, the Board has to consider that this is a generational thing – barring catastrophe, the structure will be there for 20, 40, 60 years. Given the standards that must be met for both design and site plan review, this application continues to fall short. It's table or deny, in the opinion of staff.

Suggested motions:

“I move that the Board table (deny) this application pending responses to the issues discussed, (based on the plans and supporting materials submitted, and on the Findings of Fact and Conditions of Approval dated Feb. 7, 2017.)”