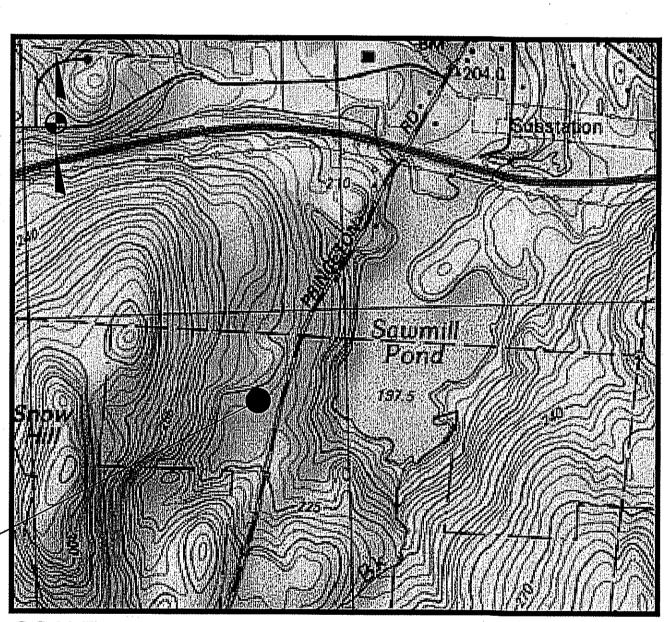
Site Plan Approval Documents

January 4, 2024

Proposed Pod Storage Facility

Map 115 Parcel 4 84 Fitchburg Road Westminster, Massachusetts 01473



SCALE: 1"=1000'±

Applicant: West Mini Storage 170 State Road East (978) 490-1075 Westminster, MA 01473

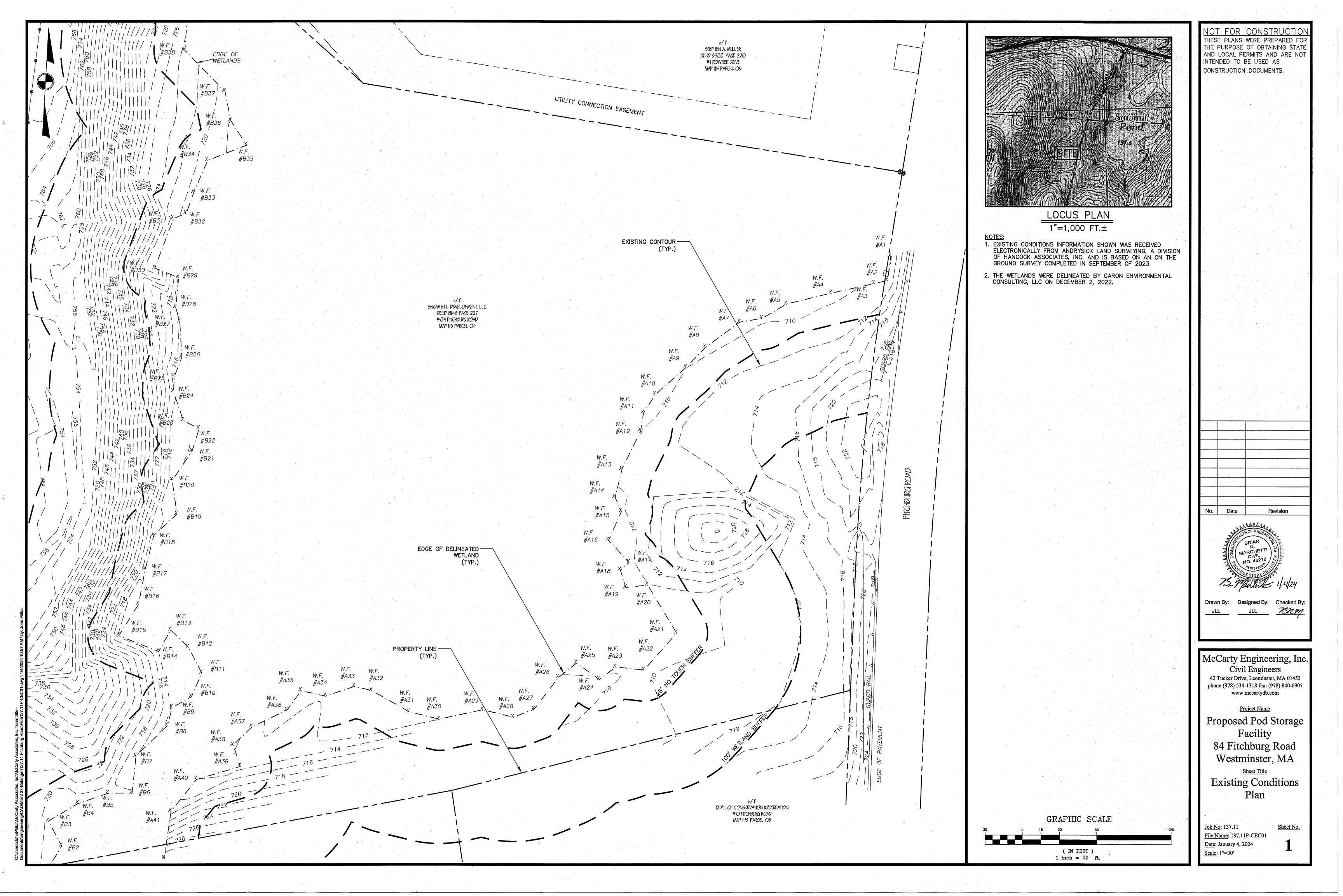
Record Owner: Snow Hill Development LLC 198 Narrows Road (978) 490-1075 Westminster, MA 01473

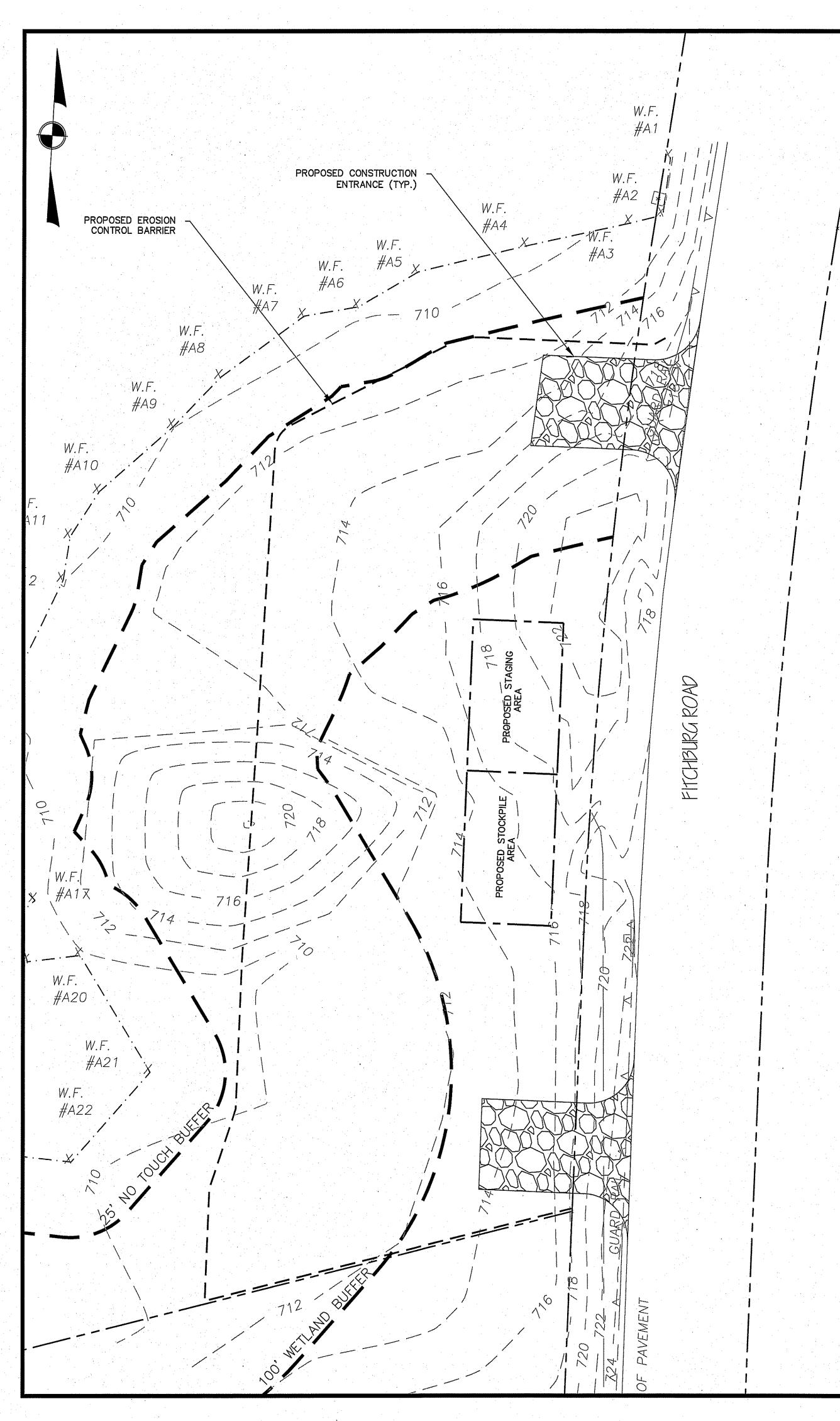
Civil Engineer: McCarty Engineering, Inc. 42 Tucker Drive Leominster, MA 01453 (978) 534-1318 Surveyor(s): Andrysick Land Surveying 206 Worcester Road Princeton, MA 01541 (978) 464-5890

Wetland Consultant: Caron Environmental Consulting LLC 247 Bragg Hill Road Westminster, MA 01473 (978) 874-5469

PROJECT SITE

Sheet	Sheet Title				
· · · · · · · · · · · · · · · · · · ·	Cover Sheet	5	Lighting Plan		THOF MAD A
1	Existing Conditions Plan	6	Construction Details		BRIAN R. MARCHETTI
2	Erosion Control Plan	7	Construction Details		CIVIL NO. 46279
3	Layout & Materials Plan				3 7 WWW 1 1 4/24
4	Grading & Drainage Plan				The second of th





NOTE: DURING AND AFTER THE CONSTRUCTION PERIOD, THE RESPONSIBLE PARTY FOR THE OPERATION AND MAINTENANCE OF THE SITE WILL BE THE PROPERTY OWNER / APPLICANT.

A sign for all job notices must be posted conspicuously near the main construction

Before construction begins, siltation control barriers consisting of silt fencing attached to wood posts and backed by staked straw wattles will be placed between the work areas and resource areas or as shown on plan. Additional siltation control barriers will be installed around the proposed drainage and at other critical locations.

The Contractor will record:

1) Dates when major grading activities occur; 2) Dates when construction activities temporarily or permanently cease on a portion

of the site; and 3) Dates when stabilization measures are initiated.

The time of construction requiring the most attention and care occurs between the stripping of natural overburden and the stabilization of construction areas. Cut and fill areas create additional risk by increasing the possibility of stormwater runoff causing

The Contractor will, as much as possible, leave natural cover untouched. The Contractor will limit to the shortest time possible the time that slopes are exposed. The slope stabilization will be completed as early as construction activities will allow. During the times between clearing and landscaping, slopes will be stabilized with a combination of rip-rap, straw mulch, temporary grass seeding and other measures as necessary to prevent any significant erosion of soils.

When necessary, the Contractor shall implement structural practices to divert flows from exposed soils, retain/detain flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Placement of structural practices in flood plains must be avoided to the degree practicable. Structural measures should be placed on upland soils to the degree practicable. Such measures must be designed and installed in compliance with applicable federal, state or local requirements. All solid materials such as washings from concrete trucks, building materials, or surplus concrete, shall not be directed to any drainage system or wetland resource area. In conjunction with the site grading process, a number of sedimentation control procedures will be followed. The object of the procedures is to prevent the erosion of soils and the transport of sediments to the resource areas and off the site.

The Proponent shall meet the US EPA Construction General Permit requirements.

remporary and permanent stabilization of disturbed surfaces is the most reliable method of preventing the erosion and transport of site soils. Toward that end, the areas that are disturbed will be provided temporary stabilization within two weeks after the last disturbance when:

1) Work is not complete in that area;

2) Work will remain incomplete for a period of two weeks or more, and 3) The planting season has not been reached in areas which will be re-vegetated.

Permanent stabilization will take place when:

4) Work is complete in that area and 5) The planting season has been reached and areas can be revegetated.

Best Management Practices Employed

To guard against the transport of soils to resource areas, several Best Management Practices (BMPs), will be employed. Siltation control barriers, sediment sumps, straw check dikes, swales, temporary settling basins, vegetative filter strips, site entrance mat, rip-rap outlet protection, flocculants with jute mesh or other biomedia, will or may be used on this site as appropriate to the needs of erosion control. Some of these items, such as sediment sumps, are temporary. Other features, such as catch basins and area drains

Sediment from sediment traps or sedimentation ponds must be removed when design capacity has been reduced by 50 percent.

cording to the Natural Resources Conservation Service Soil Survey, the soils onsite are categorized as Catden & Natchaug Mucks and Woodbridge-Paxton Association.

INSPECTION AND MAINTENANCE OF EROSION CONTROLS

1) At all times, siltation fabric fencing, stakes and straw wattles sufficient to construct an erosion control barrier a minimum 300 feet long will be stockpiled on the Site in order to repair established barriers that may have been damaged or breached.

2) The Applicant will designate as Inspector, a person or entity other than the Site Contractor. The Inspector must be accessible seven days a week and be responsible for inspecting and coordinating the maintenance and repair of all erosion control systems on

3) An inspection of all erosion control measures shall be conducted by the Inspector at least once each week until the completion of construction of the project. The Contractor shall inspect all erosion control systems daily and shall notify the Inspector of any breaches or failures. In case of any noted breach or failure, the Contractor shall immediately make appropriate repairs.

4) The Inspector shall inspect all erosion control systems on the Site before, during and after any storm event reaching one of the following thresholds:

a) Any storm event in which rain is predicted to last for 12 consecutive hours or b) Any storm event for which a flash flood watch or warning is issued;

c) Any single storm event predicted to have a cumulative rainfall greater than 1/2

d) Any storm event not meeting the previous three thresholds but which would mark the third consecutive day of measurable rainfall.

5) The Inspector shall inspect erosion control measures at times of significant increase in surface water runoff due to rapid thawing when the risk of failure of those measures is significant.

6) In such instances as remedial action is necessary, the Inspector shall cause to be repaired within three days, any and all significant deficiencies in erosion control

EROSION CONTROL DEVICES

1) Site Entrance Mat

A Site Entrance Mat will be installed at the construction entrance to the site. It will consist of a 50-foot long, 6-inch thick layer of 1-1/2" to 3" crushed stone overlying a 6-inch thick layer of 3" to 6" crushed stone. The site entrance mat will be installed over a compacted base. The crushed stone will be refreshed as necessary If earthern products are transported onto Fitchburg Road during any of the construction

phases, than the site contractor is responsible for removing these earthern products. 2) Erosion Control Barriers

The Erosion Control Barriers will consist of an approved siltation fabric fencing installed on posts according to the manufacturer's instructions and backed by staked straw wattles where appropriate. The filter fabric and straw wattles will be placed in a manner that prevents the passage of soil materials under, around or over the fencing. Any Sediment that has been captured against the barrier will be removed promptly and the area that has areas of erosion will be stabilized promptly.

EROSION CONTROL DEVICES (CONTINUED)

determined in the field at the Inspector's discretion.

3) Straw wattle Diversion Dikes Straw wattles will be placed in other locations on the site in order to further prevent the flow of sediment from the site or reduce the velocity of runoff crossing open land or running off of stockpile or fill areas. Straw wattle diversion dikes will also be placed within developing rills to reduce surface runoff velocities and to shift the path of the water flow. The locations where straw wattle diversion dikes are installed will be

4) Slope Stabilization Slopes or surfaces that are created due to excavation or filling of the site will be stabilized with one or more of the following:

Straw mulch,

• Softwood and hardwood chips, or

• In areas that will be steeper than 2.5:1 after construction, the slope will be stabilized by the placement of erosion control blanket or heavy rip-rap. The rip-rap slope to be placed will be formed by placing heavy stone on a one foot

thick layer of gravel. Permanent stabilization of slopes and surfaces will employ one or more of the

following: Loam and grass,

• Rip-Rap, or

 A combination of grasses, rip-rap and/or plants and shrubbery. 5) Runoff Diversion Swales

Runoff Diversion Swales will be provided in order to intercept sheet and concentrated flows above areas of cut, above abutting properties and above resource areas. The swales will direct runoff to sediment sumps or temporary settling basins or to detention 6) Sediment Sumps

Sediment Sumps are excavated depressions 10-foot in diameter and 2-feet deep. The sumps will collect runoff from the unfinished drive and slopes and will allow sediment to settle out before flow continues to a detention area or siltation control barrier. Sediment sumps will be cleaned whenever the accumulated sediment has reached one-half of the original depth of the sump. 7) Stone-Lined Sediment Sumps

A 10-foot diameter, 2-foot deep, Stone-Lined Sediment Sump will be installed at all points where storm water is discharged from the piped collection system. These sumps will serve to collect sediment which may erode from the Site during the construction period. Sediment will be removed from a Stone-Lined Sediment Sump when it has reached one-half of the original capacity. Stone-Lined Sediment Sumps will be cleaned and remain in place after permanent stabilization of the Site has been achieved.

8) Temporary Settling Basins A Temporary Settling Basin is a large, excavated sediment sump that has a stone face overflow leading to a swale or to a drainage inlet structure. The size varies with the area draining to it. Temporary settling basins will be cleaned whenever the accumulated sediment has reached one half of their original depth. 9) Rip-Rip Outlet Protection

Rip-rap outlet protection is a stone apron beginning at a drainage system discharge point and extending down the slope. The rip-rap will serve to reduce the velocity of the discharge, thereby preventing erosion.

CONSTRUCTION/WASTE MATERIAL Construction/Waste material to be stored on site shall include the following:

 Fill Material Drainage Structures/Piping

See below for Waste Disposal procedure.

Sewer Structures/Piping

 Utility Conduit/Piping Building Material

All waste materials will be collected and stored securely in metal dumpsters. The dumpster will meet local and state solid waste management regulations. All trash and construction debris will be deposited in the dumpster and emptied as necessary. A licensed company in accordance with applicable Federal, State, and local regulations will transport the trash. No trash or construction debris will be buried on site. The disposal of liquid waste is not allowed. Individuals working on the site will be informed of the appropriate procedure for the disposal of construction debris. The site contractor shall be responsible for ensuring that the project site is free of litter

HAZARDOUS WASTE

All hazardous waste materials will be disposed of in accordance with applicable Federal, State and local regulations and in accordance with the manufacturer's recommendations. Individuals working on the site will be informed of the appropriate procedures for waste disposal. The construction supervisor will be responsible for overseeing that the proper procedures are followed.

SANITARY WASTE

All sanitary waste will be collected in a timely manner by a licensed contractor and disposed of in accordance with Federal, State, and local regulations.

EQUIPMENT & VEHICLE FUELING AND MAINTENANCE PRACTICES Large equipment will be fueled by an over the road fuel truck and small equipment will be fueled by pickup truck fuel tanks. All equipment will be fueled at a minimum 100 feet from any wetland and/or water body. Fueling areas will be inspected for signs of leaks or spills.

EQUIPMENT & VEHICLE WASHING

No heavy equipment and vehicle washing will be allowed on the site. All construction equipment will be parked in the designated staging area at least 100-feet from any wetland or water body.

SPILL PREVENTION AND CONTROL

All construction personnel will be instructed regarding the following measures. The site construction supervisor will be responsible for overseeing that all spill prevention procedures will be adhered to. No storage, stockpiling, or staging of equipment or construction material will occur within 100-feet of any wetland or

All materials stored onsite will be maintained in an orderly manner and in their appropriate containers. Materials will be kept in there original containers with their original labels. Substances will not be mixed with one another unless recommended by the manufacturer. The manufacturers guidelines for the proper use and disposal will be

The construction supervisor will inspect the premises regularly to ensure proper use and disposal of materials.

PETROLEUM PRODUCTS

All onsite construction machinery and vehicles will be monitored for leaks and will receive regular preventive maintenance to reduce the likelihood of leakage. No vehicle maintenance or handling of petroleum of products will occur within 100-feet of any wetland or waterbody. No petroleum products will stored onsite

Fertilizers will be applied at the minimum amount recommended by the manufacturer.

The storage of fertilizer products will not be allowed onsite. **SOLVENTS & PAINTS**

All containers will be sealed and stored when not used. Excess material will not be

discharged to the storm and or sewer systems and will be properly disposed of according to the manufacturers specifications including all Federal, State, and local regulations. No storage will occur within 100' of a wetland or waterbody.

CONCRETE TRUCK WASHOUT

Concrete trucks will discharge into temporary basins, where the concrete will be allowed to cure. Once the concrete is cured, the concrete will be broken up and used as common fill or hauled off site.

SPILL CONTROL PRACTICES

All of the manufacturers recommended methods for spill cleanup will be clearly posted and site personnel will be informed of the necessary procedures and the location of the cleanup supplies Materials and the equipment necessary for cleanup of a spill will be kept on site in a designated area. Examples of cleaning equipment are: shovels, rakes, wheel barrows, brooms, dust pans, mops ,rags, safety gloves and eye wear, absorbent foams, sand, sawdust, and plastic or metal bins designated specifically for spill cleanup. After discovery, all spills will be removed as soon as possible.

Reportable Spills, toxic or hazardous (10 gallons or more for petroleum), material will be reported to the Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup Central Regional Office, 627 Main Street, Worcester, MA 01608-ph-508-792-7653 The construction superintendent will be responsible for spill prevention and cleanup coordinator and supervisor. The construction supervisor is responsible for educating the construction personnel of the protocol in the event of a spill.

NON STORAGE DISCHARGES

The following non-stormwater discharges are expected as part of the proposed project during the Water from utility flushing and dust control, pavement wash water, where no spills or leaks of toxic or hazardous materials have occurred, uncontaminated groundwater during the dewatering

Non-stormwater discharges will be directed to vegetated surfaces and or temporary settling basins prior to discharge to wetlands and/or waterways.

SEQUENCE OF INSTALLATION AND CONSTRUCTION Prior to the start of earth-moving activities, the sediment control barriers shall be installed along

stabilized with gravel, wood chips, or temporary vegetation.

At each construction entrance, a stone entrance mat shall be installed to remove soil material from the equipment tires. Any other bare construction routes or equipment staging areas shall be

LAND CLEARING AND GRADING

the limit of work as shown on the site plans.

To the extent practicable, clearing, grubbing and stripping shall be limited. Whenever practical, existing strips of vegetative cover will be preserved between cleared areas and resource areas to provide runoff filtration. All slopes shall be brought to finish grade and stabilized as soon as possible. Slopes between 1:1 and 2:1 steepness shall be stabilized with erosion control fabric, and/or rip-rap armoring. Slopes between 2:1 and 3:1 shall be stabilized with a bonded fiber matrix, hydroseeding or seed and erosion control blanketing. Slopes which are 3:1 and flatter shall be stabilized with hydroseeding and/or hand seeding. Additional run-off control

measures shall be installed as grading progresses, to include temporary basins, dikes, and swales.

TEMPORARY SEDIMENT BASINS AND SUMPS

As needed within construction phases temporary sediment basins and sumps will be excavated prior to further soil disturbance on the site. The basins shall include stone and filter fabric. The basin slopes and bottom shall be stabilized with loam, seed, and/or an erosion control product, and a stabilized exit spillway shall be constructed with a filter fabric and stone apron. Temporary riser pipes may be utilized to allow retention and treatment with controlled release of stormwater runoff during construction. The basins may be over excavated as needed to provide storage for, at a minimum, 1,800cf per disturbed acre of run-off. Additional temporary sediment basins or sediment sumps, may be constructed as necessary to store and infiltrate run off. Sediment sumps are excavated depressions of a minimum 10-foot diameter and a 2-foot depth and strategically installed to reduce velocities and to provide sediment trapping. Basins and sumps will be inspected weekly, before and after significant storm events.

RUN OFF CONTROL AND CONVEYANCE SYSTEMS

As needed, diversion swales and /or dikes leading into the basins shall be constructed and stabilized utilizing earth, crushed stone, or haywattles. Additional swales or dikes shall be constructed as necessary to divert runoff into temporary sediment basins. Stone check dams shall be installed at appropriate intervals.

STOCKPILING

Soil stockpiling shall take place in designated areas, outside of the Wetland Buffer Zones. Any stockpiling that will remain inactive for more than 2 weeks shall be hydroseeded or covered with plastic covers.

SURFACE STABILIZATION

Apply temporary or permanent stabilization measures immediately on all disturbed areas where work is completed or delayed greater than 2 weeks. STORM WATER INFILTRATION SYSTEM

The infiltration area shall be brought to finish grade, stabilized, and the outlet structures shall be installed before the proposed building addition is erected.

INLET PROTECTION Following the installation of the closed drainage system, driveway paving, catch basin inlets will be protected with catch basin filters.

BUILDING SITE PREPARATION

The proposed building construction area will be cleared and grubbed and stabilization shall be provided between construction increments.

LANDSCAPING AND FINAL STABILIZATION After construction is complete in a given area any exposed soils will be stabilized by hydroseeding and or landscaping.

CONSTRUCTION SCHEDULE

The following is a general construction sequence for the construction of the Site. The actual schedule may vary somewhat from that stated if site or weather conditions require a different schedule and if such change does not negatively affect the prevention of pollution. An example of a logical change to the schedule would be deviating from the sequence below to allow the laying of driveway berm prior to a winter freeze in order to better control the site drainage.

• The Applicant will hold a pre-construction meeting with representatives of the Town, the Engineer, Contractor's employees and the Inspector in order to review permits, procedures and construction methods.

• Establish the Site Entrance Mat at the construction entrance to the site. • Establish a construction staging and equipment storage area protected against

erosion by lines of staked straw wattles and siltation fencing. • Install the siltation control barriers between the work areas and in other locations

as shown within the plan set. Tree and Brush clearing

• Place the straw wattles or fencing at least five feet from the base of the loam pile.

• Excavate for Stone foundation pads and backfill with stone • Place storage pods on foundation pads

• Establish and build the drainage discharge points, and various additional erosion control measures.

Strip and Stockpile Topsoil

• Install perimeter retaining walls.

• Install drainage system, including pipes, drain manholes and catch basins. • Apply temporary or permanent stabilization measures immediately on all

disturbed areas where work is completed or delayed greater than 2 weeks • Complete site grading to match the site design

• Lay the binder course of pavement. • Complete the permanent stabilization of slopes, repair areas that have been

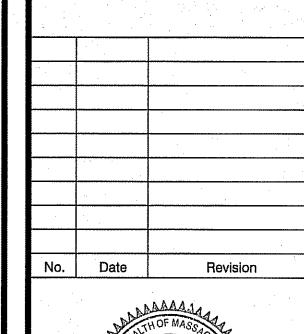
damaged, and install additional erosion control devices as required. Lay driveway berm.

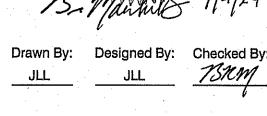
• Install landscape material and site improvements

• Lay finish course of pavement, signage, fencing • Remove accumulated sediment and temporary erosion control measures after all

slopes have been permanently stabilized and the risk of erosion has passed. • Equipment moving, project punchlist and closeout

NOT FOR CONSTRUCTION THESE PLANS WERE PREPARED FOR THE PURPOSE OF OBTAINING STATE AND LOCAL PERMITS AND ARE NOT INTENDED TO BE USED AS CONSTRUCTION DOCUMENTS.





BRIAN

R. MARCHETTI I

CIVIL NO. 46279

McCarty Engineering, Inc. Civil Engineers 42 Tucker Drive, Leominster, MA 01453

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Proposed Pod Storage Facility 84 Fitchburg Road

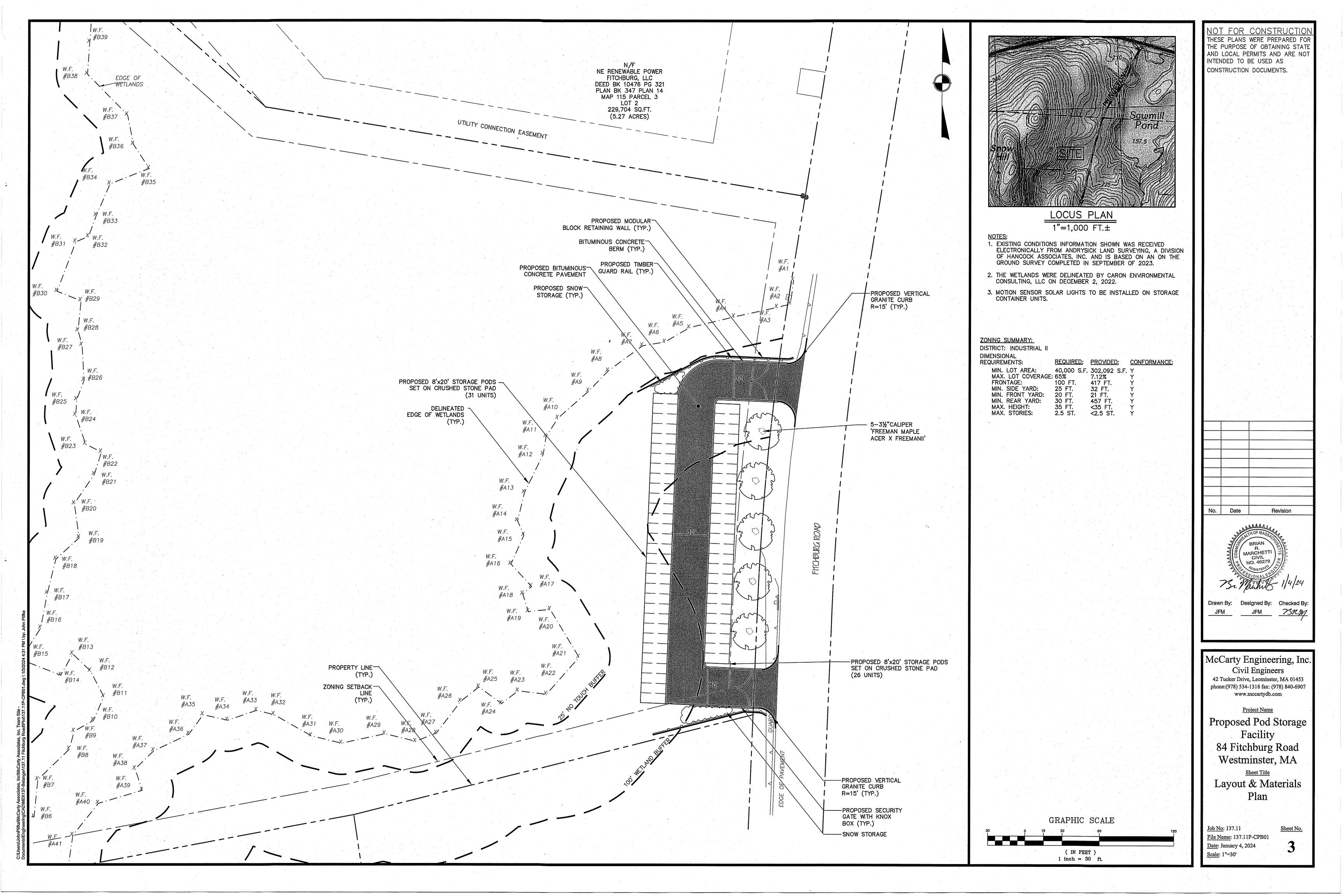
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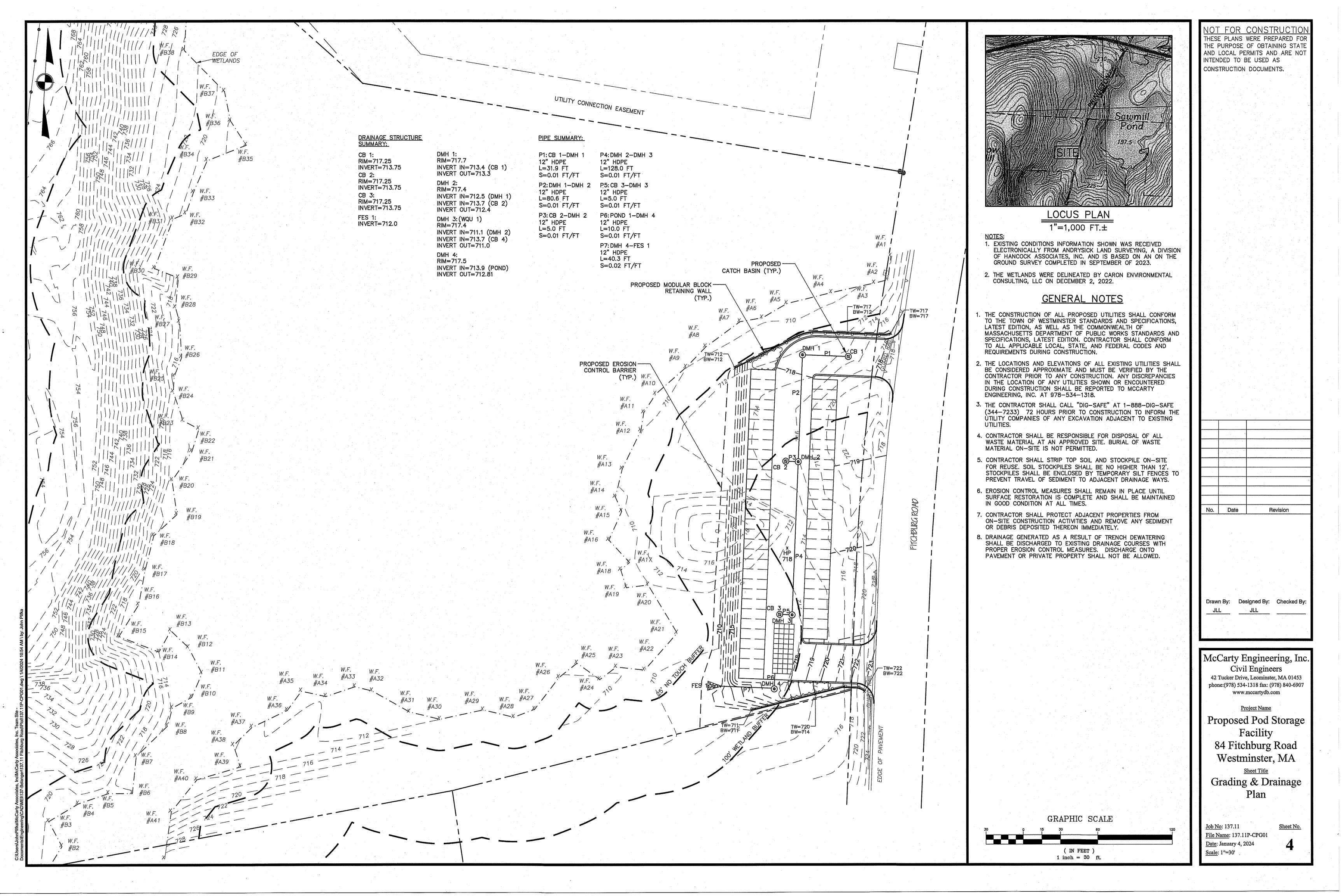
Westminster, MA Sheet Title **Erosion Control** Plan

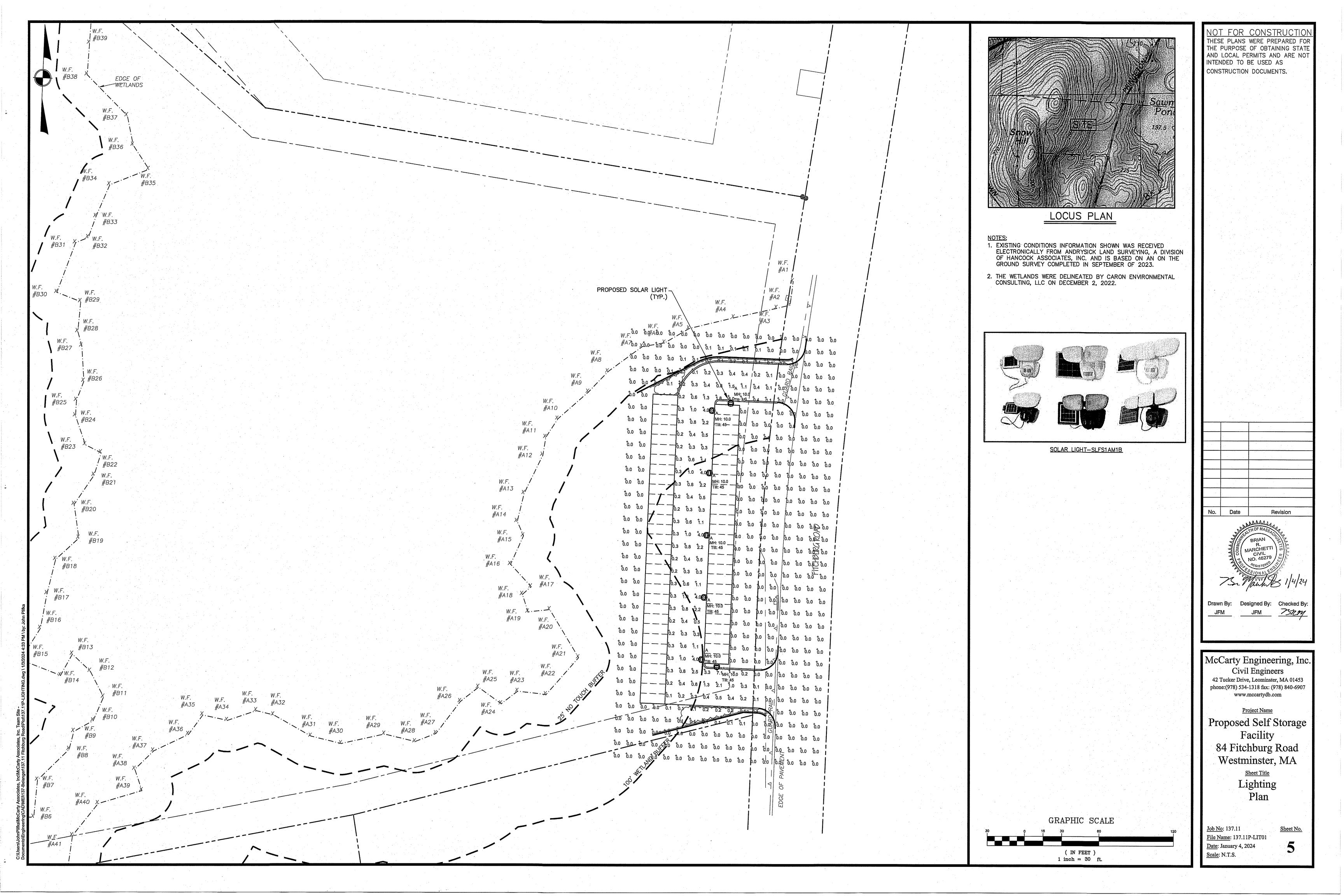
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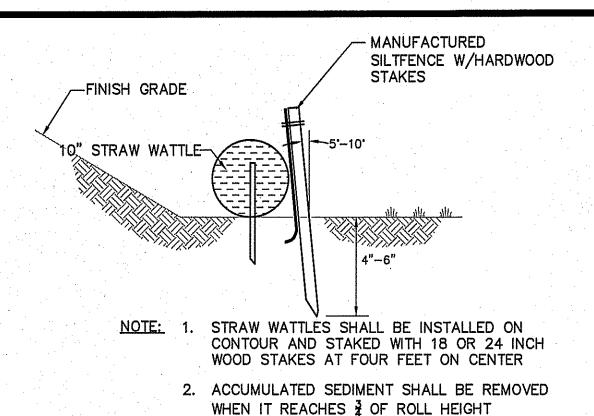
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File Name: 137.11P-CER01 Date: January 4, 2024

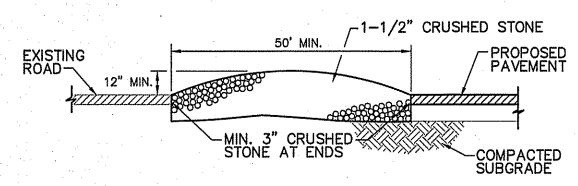








STRAW WATTLE / SILT FENCE DETAIL N.T.S.

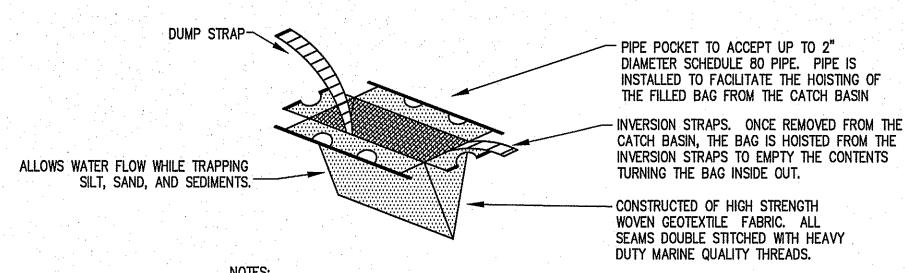


THE PURPOSE OF THIS TEMPORARY BERM IS TO REMOVE MUD FROM THE TIRES OF VEHICLES LEAVING THE SITE DURING CONSTRUCTION.

PROVIDE LEVEL AREA OF CRUSHED STONE 50 FEET IN FROM EDGE OF EXISTING ROAD.

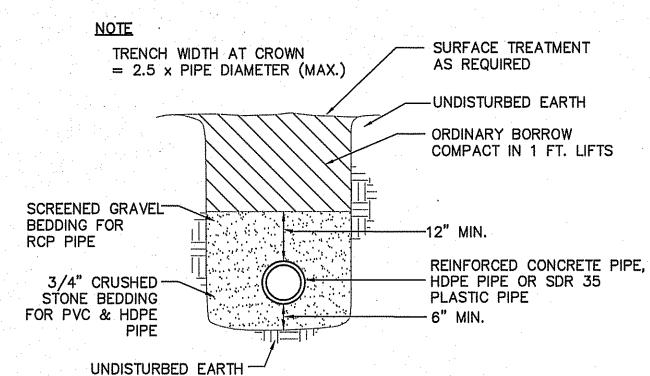
TEMPORARY ENTRANCE BERM

N.T.S..



1. PRODUCT TO BE "SILT SACK" MANUFACTURED BY REED AND GRAHM, INC. SACRAMENTO, CA. OR APPROVED EQUAL.

CATCH BASIN INLET PROTECTOR N.T.S.



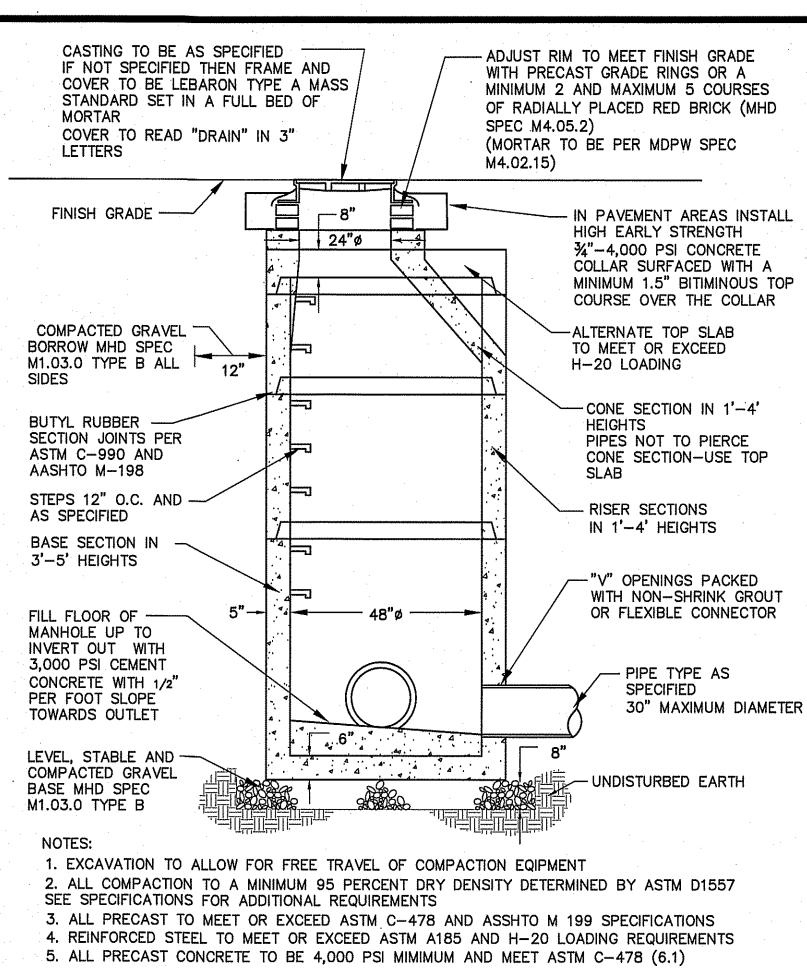
1. TRENCH EXCAVATION WIDTH TO ALLOW FOR FREE TRAVEL OF COMPACTION EQUIPMENT 2. ALL COMPACTION TO A MINIMUM 95 PERCENT DRY DENSITY DETERMINED BY ASTM D1557.

3. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS

4. AVOID HEAVY EQUIPMENT LOADS OVER PIPE DURING CONSTRUCTION

DRAIN PIPE TRENCH DETAIL

N.T.S.



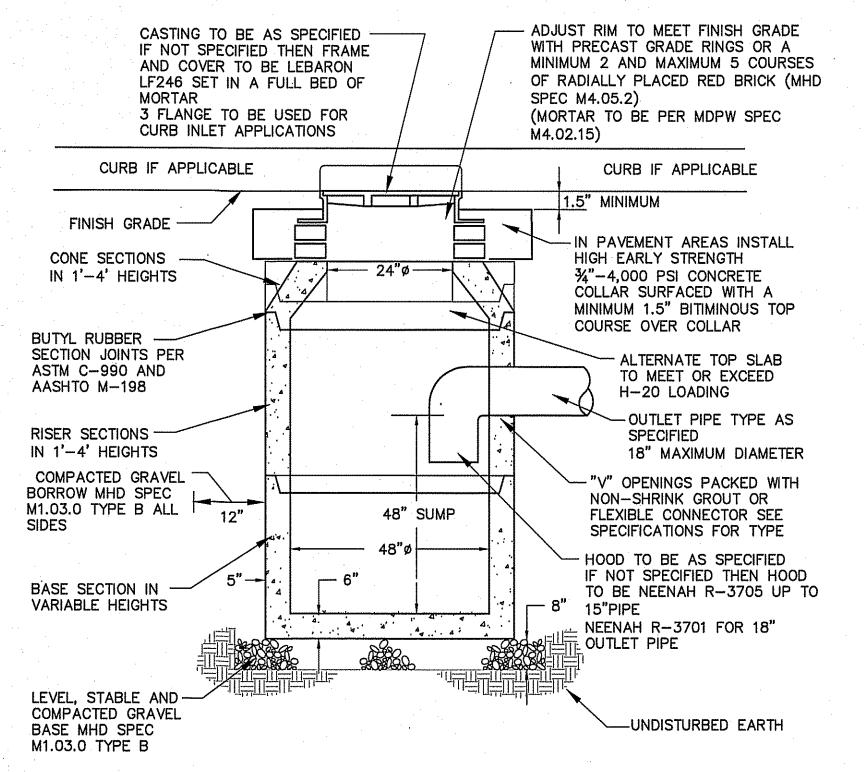
6. IF NO STEPS ARE SPECIFIED THAN AS THE LOCAL MUNICIPALITY REQUIRES OR IF NO MUNICIPLAITY REQUIREMENTS THEN COPOLYMER POLYPROPYLENE COATED REINFORCED PER ASTM C-478 AND OSHA (STD 1-1.9)

7. CONTRACTOR TO CONFIRM WITH CITY OR TOWN DPW THAT BRICK INVERTS ARE NOT A REQUIREMENT

8. FILL ALL INTERNAL AND EXTERNAL HOLES WITH NON-SHRINK GROUT

PRECAST CONCRETE DRAIN MANHOLE DETAIL

N.T.S.

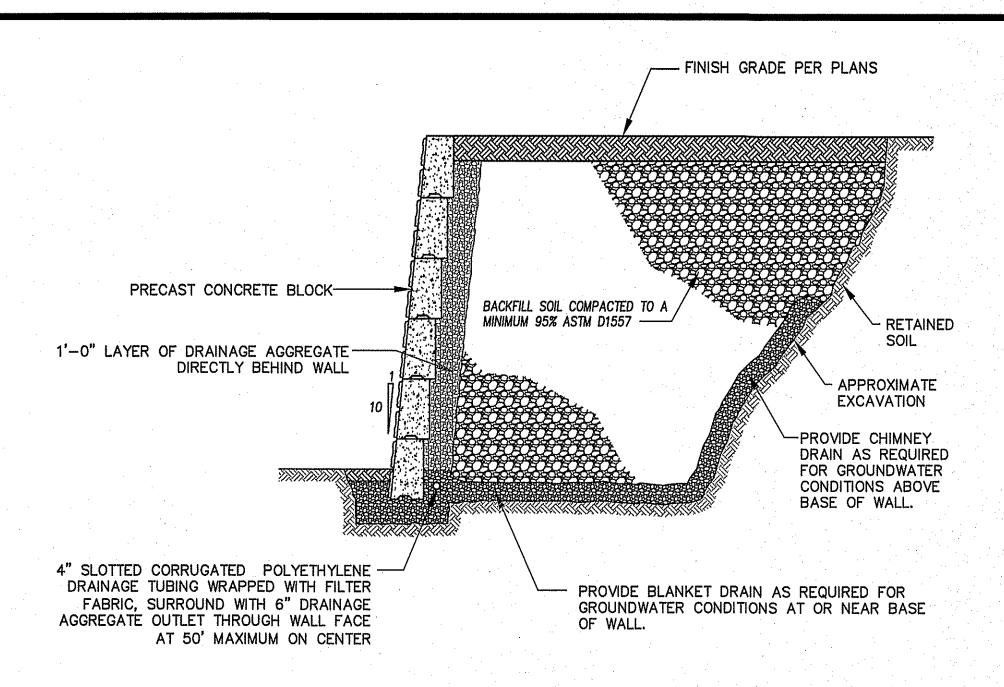


- 1. EXCAVATION TO ALLOW FOR FREE TRAVEL OF COMPACTION EQUIPMENT 2. ALL COMPACTION TO A MINIMUM 95 PERCENT DRY DENSITY DETERMINED BY ASTM D1557
- SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS 3. ALL PRECAST TO MEET OR EXCEED ASTM C-478 AND AASHTO M 199 SPECIFICATIONS 4. REINFORCED STEEL TO MEET OR EXCEED ASTM A185 AND H-20 LOADING REQUIREMENTS

5. ALL PRECAST CONCRETE TO BE 4,000 PSI MIMIMUM AND MEET ASTM C-478 (6.1) 6. ALL INTERIOR HOLES TO BE SEALED WITH NON-SHRINK GROUT

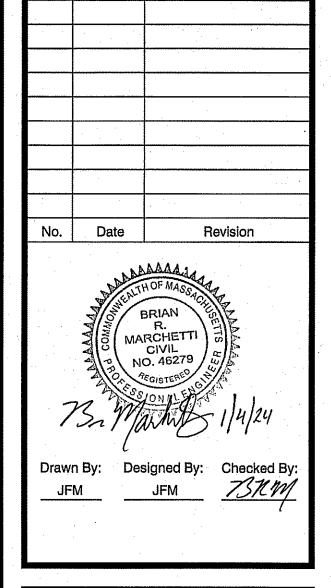
PRECAST CONCRETE CATCH BASIN DETAIL

N.T.S.



PRECAST CONCRETE RETAINING WALL DETAIL N.T.S.

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McCarty Engineering, Inc. Civil Engineers 42 Tucker Drive, Leominster, MA 01453 phone:(978) 534-1318 fax: (978) 840-6907

Project Name

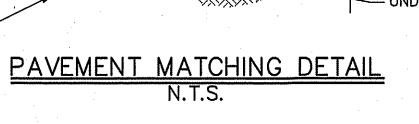
Proposed Pod Storage Facility 84 Fitchburg Road Westminster, MA

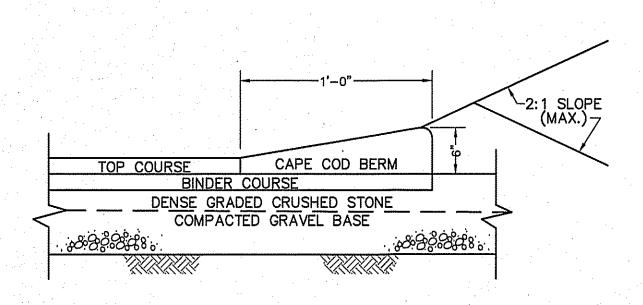
www.mccartydb.com

Sheet Title Construction Details

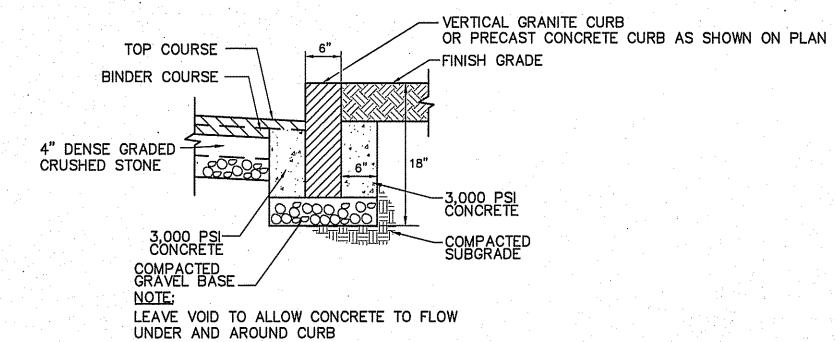
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Sheet No.



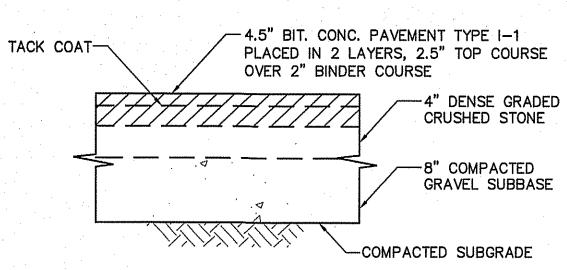


BITUMINOUS CONCRETE BERM DETAIL N.T.S.

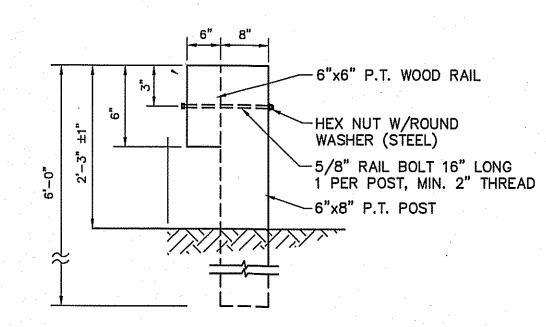


VERTICAL GRANITE/PRECAST CONCRETE CURB DETAIL

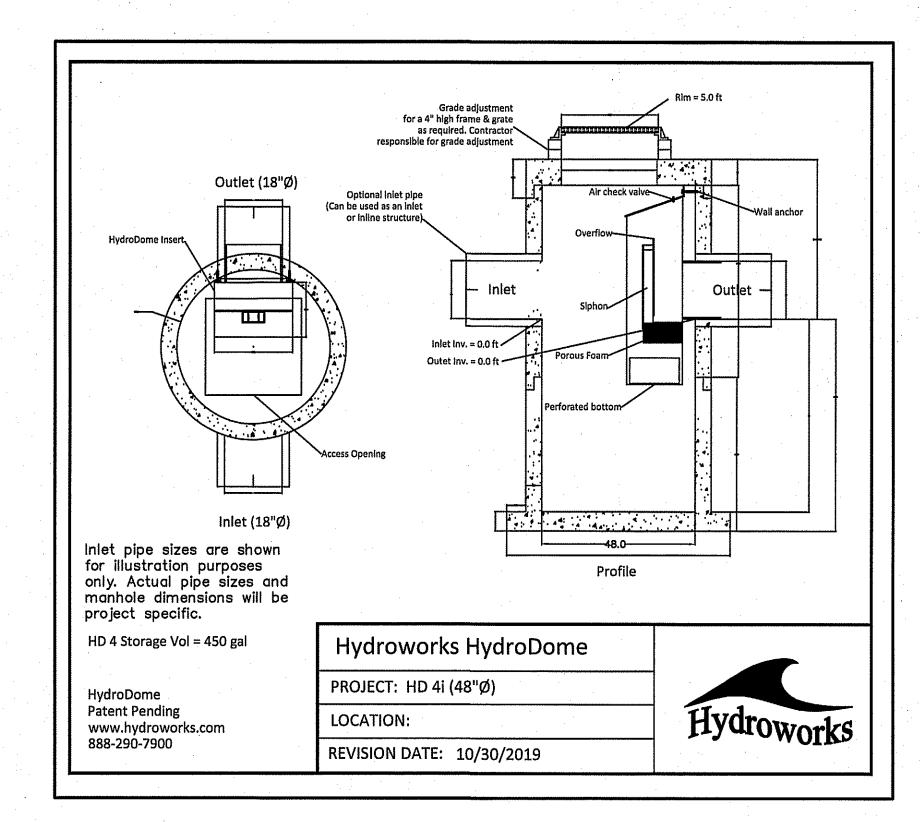
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BITUMINOUS CONCRETE PAVEMENT DETAIL N.T.S.

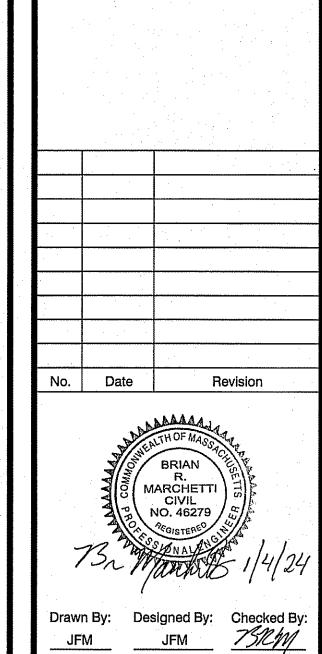


TIMBER GUARD RAIL DETAIL N.T.S.



HYDROWORKS HYDRODOME HD4i DETAIL

N.T.S.



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phone:(978) 534-1318 fax: (978) 840-6907 www.mccartydb.com

Project Name

Proposed Pod Storage Facility 84 Fitchburg Road Westminster, MA

> Construction Details

File Name: 137.11P-DET02 Date: January 4, 2024 Scale: N.T.S.