

CONSERVATION COMMISSION AGENDA

March 2, 2021 @6:00 pm
Virtual Meeting

NOTE: Items may be taken out of order at the Chair's discretion.

DECISIONS

I. Public Hearings

1. 231 Podunk Road –Local NOI – Proposed Septic system for a new SFH

- Owner/Applicant: AH & DB Custom Homes Representative: M. Dipinto, Three Oaks Environmental
- Request: Issue an OOC.
- Documents Presented: Colored site plan
- Jurisdiction: Buffer Zone
- Project Summary: The project includes the construction of a single family home and associated appurtenances.
- Staff Notes:
 - Receipt of legal ad posting and abutter notifications received.
 - Site visit performed previously (August 2020) to review wetland delineation on the property for projects previously permitted on the subdivided property.
 - All work is proposed within an existing agricultural field.
 - No work is proposed within the 100-foot state WPA buffer zone. Construction of the septic system is the only work proposed within the 200-foot local buffer zone.
- Staff Recommendations:
 - Sedimentation controls are included at the limit of grading shown on the plan. The limit of grading shall serve as the limit of work.
 - Approval of the project and issuance of SWB OOCs with the SCC standard special conditions and the above noted recommendation.

2. 233 Podunk Road –Local NOI – Proposed Septic system and Construction of a new SFH

- Owner/Applicant: AH & DB Custom Homes Representative: M. Dipinto, Three Oaks Environmental
- Request: Issue an OOC.
- Documents Presented: Colored Site Plan
- Jurisdiction Noted on ANRAD: Buffer Zone
- Project Summary: The project includes the construction of a single family home and associated appurtenances.
- Staff Notes:
 - Receipt of legal ad posting and abutter notifications received.
 - Site visit performed previously (August 2020) to review wetland delineation on the property for projects previously permitted on the subdivided property.
 - All work is proposed within an existing agricultural field.
 - No work is proposed within the 100-foot state WPA buffer zone. Construction of the septic system is the only work proposed within the 200-foot local buffer zone.
- Staff Recommendations:
 - Sedimentation controls are included at the limit of grading as shown on the plan. The limit of grading shall serve as the limit of work.
 - Approval of the project and issuance of SWB OOCs with the SCC standard special conditions and the above noted recommendation.

3. 423 Main Street – Continued NOI – Parking Lot Improvements – DEP File #300-1091

- Owner: STL 423 Applicant: NBM Realty Representative: D. Sheehan, Graves Engineering
- Request: Issue Order of Conditions.
- Documents Presented: Colored site plan
- Jurisdiction: Riverfront Area & Buffer Zone



Conservation Agent

Rebecca Gendreau

Administrative Assistant

Erin Carson

Conservation Commission Members

Ed Goodwin

Chairperson

Steven Chidester

Vice Chair

David Barnicle

Member

Steve Halterman

Member

Erik Gaspar

Member

308 Main Street.

Sturbridge, MA

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- Project Summary: The project includes the redevelopment of a previously developed RA. The project will include a reduction in developed areas, restoration, paving of an existing gravel parking lot and a storm-water management system to include a rain garden.
- Staff Notes:
 - The project was continued from the Feb 2, 2020 meeting, as no DEP File # or comments had been received. The SCC had requested that globe thistle be removed from the planting list and that a split rail fence be incorporated into the project to prevent snow plowing into the restored RA.
 - DEP File # and comments have now been received. MassDEP recommends that proposed erosion control barriers be extended up along the western parcel boundary along the top of the wooden retaining wall to better protect adjacent resource areas and the neighboring parcel. Alternatively, if the applicant believes that the existing retaining wall will be sufficient to act as a barrier to potential sedimentation the applicant should provide sufficient information for Commission review. The 100 Buffer Zone does not appear to be rendered correctly on project plans.
 - Project has been revised to incorporate SCC and DEP comments. Revised plans have been received.
- Staff Recommendations:
 - Staff recommends that the project be approved, as shown, with the following conditions: the SCC's standard special conditions, a condition stating that: a Certificate of Compliance shall not be issued until after 2 growing seasons to ensure that the rain garden plantings have survived. The SCC reserves the right to require additional plantings to ensure achievement of 75% cover of plant species within two growing seasons; and the following perpetual conditions to include:
 - The property owner of record or designee, is responsible for the implementation of the Operation and Maintenance Plan. This shall be noted in the Certificate of Compliance and shall be an ongoing condition.
 - The applicants, owners, and their successors and assignees shall maintain all components of the stormwater management system including, but not limited to, all collection basins, grass swales, the rain garden, outlet structures, and other elements of drainage systems, in order to avoid blockages and siltation which might cause failure of the system and/or detrimental impacts to on-site or off-site resource areas, and shall maintain the integrity of vegetative cover on the site.
 - The Storm-water operations and maintenance plan and site records shall be stored on site to ensure employees are familiar with the demands of the plan.
 - Evidence of maintenance of the Storm-water Management system shall be provided to the Commission on an annual basis. An annual maintenance report shall be available to the Conservation Commission by June 1st of each year reporting on the maintenance and operation procedures which have been met for that year. This reporting requirement will follow the issuance of a Certificate of Compliance.
 - The Conservation Commission shall be notified in writing when any maintenance functions are required to be performed which may impact the wetlands, such as, but not limited to, placing backfill and repairing drains and terraces, removing accumulated sediments at the outfall pipe, prior to the work being conducted.
 - Stabilized slopes shall be maintained as designed and constructed by the property owner of record, whether "bioengineered" or mechanically-stabilized slopes. This shall be noted in the Certificate of Compliance and shall be an ongoing condition.
 - Rain garden maintenance: The property owner shall be responsible for the upkeep of the rain garden including the replacement of deceased plantings and as noted on the Storm-water O & M Plan. This condition shall survive the expiration of this Order, and shall be included as a continuing condition in perpetuity on the Certificate of Compliance. Plantings shall be reviewed annually by the owner/applicant and any plant materials requiring replacement shall occur.
 - Snow storage. Snow shall not be pushed into, or piled, in the rain garden or outside of the developed areas. This shall be noted in the Certificate of Compliance and shall be an ongoing condition.
 - The split rain fence, as shown on the plan, shall not be removed and shall be inspected and maintained in perpetuity. The split rail fence serves as a barrier to prevent snow plowing in the rain garden and within the adjacent vegetated areas. An alternate type of fencing can be proposed and is subject to prior SCC or it's agent's review and approval.
 - Staff recommends issuance of an OOC with the above noted conditions.

4. 122 Main Street – NOI – Parking Lot Improvements– DEP File #300-xxxx

- Owner/Applicant: Swaminarayan Realty Representative: S. Gioiosa, SITEC
- Request: Issue an OOC.
- Documents Presented: Colored Plans
- Jurisdiction: Buffer Zone
- Project Summary: Project includes the redevelopment of an existing gas station with convenience store to include installation of fuel tanks, new canopies and additions to the commercial building.
- Staff Notes:

- DEP has not provided a file # and comments.
- Receipt of legal ad posting and waiting on abutter notifications.
- Site had an Immediate Response Action issued by DEP. RTN # 002-21413. Tanks and contaminated soil have already been removed in Dec. 2020. Conservation Dept. became aware of work occurring without permitting and requested ECs and stop work as no permitting issued for work. Conservation Agent did check site before snow cover and ECs had not been installed, however, no material had eroded down the slope or entered the wetland. Work was overseen by a LSP. Contamination likely from historic spill from 2011 (RTN #2-001835). Additional RTN # 2-0018985 for property for a release/spill in 2013. Reporting documentation has been received. No reporting of contamination in groundwater just in soils. RTN closed by DEP. New tanks have been installed in Dec. 2020. Area is currently open. Work is on hold for permitting. Erosion controls shall be installed when weather conditions allow but ASAP. No additional work shall occur until permitting is received unless explicitly requested and approved by the SCC to close open area.
- All work is within the existing footprint of the developed site. Some work is within 50 ft. of wetlands. New structures are not proposed within 50 ft.
- Project is subject to the redevelopment standards of the MA Storm-water Management Standards.
- Site is a Land Use with a High Pollutant Load. No current storm-water management on site. There are no storm-water management improvements proposed as part of the project.
- Town Planner comments: "The applicant has applied for a Special Permit with the Zoning Board of Appeals to expand, change or alter a pre-existing non-conforming structure. The non-conformity is actually proposed to increase significantly with the edge of the canopy being proposed at only 5' from the front property line. I have raised concerns about the location and the functionality and safety of this proposed layout. I am at this time awaiting updated plans and it may be necessary to have a Peer Review conducted on the layout if it is unclear to myself and public safety officials that this layout can function in a safe manner."
- Staff Recommendations:
 - Project will result in a decrease of impervious surface and includes landscape plantings and restoration plantings; however, as the site is a LUHPL additional efforts to improve storm-water exiting the site should be made.
 - Staff recommends that as this is a LUHPL that BMPs are incorporated in the project to treat storm-water. Staff also recommends reviewing the current drainage patterns (where is storm-water flowing at this time) and options to mitigate and recharge storm-water on site. Grass swales, rain gardens or other BMPs could be incorporated along the parking lot without impacting the slope and/or concentrating flow on the slope. The application states that due to the site's soils and presence of ledge, that it is not possible to incorporate storm-water management. Have test pits been done to determine that ledge is on site which may prohibit underground storm-water management? Staff recommends that this is explored. There would appear to be areas which may be suitable such as the pea stone area and areas outside of the existing parking lot near the dumpster area. These areas should be explored for storm-water management.
 - Staff recommends that the project team should fully demonstrate that they have explored all options for storm-water management and demonstrated that no BMPs can be incorporated into the project for the board's consideration.
 - Staff also recommends that the board perform a site visit to review when weather allows. Next site visit day is 3-9-21. Flow paths of storm-water should be illustrated on the plan by engineer for the board before the site visit.
 - Staff recommend continuing the public hearing to allow for such additional information on addressing storm-water and DEP comments. Staff recommend continuing to the next meeting, March 16, 2020.

5. 650 & 680 Route 15 – NOI –Proposed development of a Nursery and Tree Farm to include a perennial stream crossing – DEP File #300-xxxx

- Owner/Applicant: Mark Kubricky, Landing Rock LLC Representative: P. Engle, McClure Engineering
- Request: Issue an OOC.
- Documents Presented: Colored Plans
- Resource Areas on Site: Riverfront Area, Bank, Land Under Water, BLSF, BVW, Buffer Zone
- Project Summary: The work includes a proposed driveway to include two stream crossings for a proposed organic nursery and tree farm.
- Staff Notes:
 - No DEP file # or comments to date.
 - Receipt of legal ad posting and abutter notifications received.
 - Conceptual plan previously presented to board which included just a roadway ending near the Holland line. Property owner owns adjacent property in Holland (gravel pit). Board indicated that just the road would not be considered as segmented project. Board recommended filing an ANRAD. ORAD issued in 2019. ORAD was for 650 Rt. 15 and a portion of 680 Rt. 15.
 - Staff have been informed that the property owner (also listed as the applicant) has a potential buyer with the proposed use.

- ORAD included the following language: “Should work be proposed on the subject parcel which would require a Scope of Alternatives or should work be proposed within an area which could contain a jurisdictional buffer zone from an area not shown within the “Limit of Resource Area Delineation” or is proposed within any areas of the subject property outside of the “Limit of Resource Area Delineation” as shown on the approved plan, the extent of resource areas shall be delineated. This delineation shall require separate review and approval from the SCC per the Wetlands Protection Act (WPA) and the Sturbridge Wetland Bylaw (SWB).”
- The NOI includes a storm-water checklist and drainage analysis, wildlife habitat evaluation and an alternative analysis.
- The plans and application do not detail what the tree farm involves. The applicant should disclose the proposed tree farm as there is no definition or clear limit of work associated with this proposed use.
- Leadmine Brook is not shown as a Coldwater Fisheries Resource, however, it is unknown if this stream has been reviewed by MA DFW.
- Jean Bubon, Town Planner, provided he following comments: “The Zoning Bylaw, Section 25.02 states the following “All uses, other than single family and two family dwellings, horticultural nursery, farm, tree farm, professional office when the office and residence of the professional are both located in the same residential building when the property is located in a residential zone, and accessory uses customarily incidental to these uses, shall be subject to Site Plan Review described herein.” -Without a description to the contrary, it would appear that Planning Board approval is not required, however appropriate permits through the Building Department and DPW will be needed.”
- Ken Lacey, BOH comments: “No official percolation testing on record for this.” Plan shows subsurface soil absorption system (designed by others). Does not appear that perc testing has been completed. Perc tests are necessary to locate a system. Crossing wetlands to access land for a perc test is not exempt and would likely require a NOI.
- It would appear that additional alternative options could be explored. The project could be cited entirely on the 680 Rt. 15 parcel. 680 Rt. 15 is 6.41 acres in size with what appears to be approx. 3.5 acres of degraded areas (remnant pavement, etc.) on this parcel and the area for the nursery is shown as less than 1 acre. This parcel would appear to provide sufficient space for the nursely and provide additional land for other uses such as the tree farm. This would appear to eliminate the need for the infrastructure required for the roadway including the wetland crossings and storm-water basins. It could also eliminate all resource area impacts except for RA impact of previously disturbed areas. This would also appear to be a more feasible option that would greatly reduce project cost, timeframe and provide visibility from Rt. 15 which may be favorable for a nursery business. In addition, the applicant has not fully demonstrated that the second wetland crossing is required. The applicant has not explored utilizing upland areas on the northern section of 650 Rt. 15. The applicant excluded these areas from the ORAD. This portion of the property would appear to have more upland area and using this area would eliminate the need for the second crossing w/ direct BVW impact. Also, the applicant has not demonstrated additional project alternatives which would reduce impacts such as width of driveway, etc. All alternatives should be explored to avoid and/or minimize impacts. Additional wetland delineation may be required to review all alternatives.
- Staff Recommendations:
 - At this time, staff recommend that the board require additional information in the form of:
 - A peer review by a P.E. for compliance with the MA Storm-water Standards and the Town of Sturbridge Storm-water Standards.
 - A peer review by a qualified wetland/wildlife consultant of the NOI application and associated documents for compliance with the WPA and SWB. This shall include a peer review of the wildlife habitat evaluation including an assessment of resource areas to serve as coldwater fisheries habitat.
 - Alternative options are explored to avoid and/or minimize impacts on-site as noted above.
 - Additional details on the proposed nursery/tree farm use.
 - Staff would recommend that the project is revised to be located at 680 Rt. 15. If the project was revised to be located here then it would appear that the need for peer reviews, or the scope of those reviews, would be eliminated or minimized.
 - Staff recommend continuing the public hearing to 4-6-21 to allow for RFPs to be distributed, received and reviewed by the board.

6. 96 Shattuck Road –RDA –Confirmation that the proposed repair of a wetland crossing falls under the Agricultural exemption

- Owner: William Sujdak Applicant: James Pioppi Representatives: S. Morrison, EcoTec
- Request: Seeking Negative Determination for proposed work
- Documents Presented: Site Photo
- Jurisdiction: Bank, Land Under Water, BVW, Buffer Zone
- Project Summary: Project includes the replacement of a failed culvert crossing on a woods road.
- Staff Notes:
 - Receipt of legal ad posting and waiting on abutter notifications.
 - Applicant is not the property owner but an adjacent property owner who has indicate that he has a right of way to

access his land to the south of this site. Applicant seeks to replace the failed stream crossing to provide access to his property.

- This property has an active FCP and has proposed a temporary bridge to span this stream as the culvert is failed. A FCP has recently been approved by DCR for the Pioppi parcel (128 Rt. 84). This FCP also plans to install a temporary bridge to span the failed culvert.
- Property is within the Chapter 61 Program for forestry.
- A narrative has been provided for the proposed work which includes replacing the failed culvert with a new pipe and adding fill to match the existing grade.
- Staff have spoken to MA DEP and MA DCR about this work. MA DEP comments below. DCR has indicated that the activity would appear to require some level of filing for the WPA.
- DEP originally provided the following comments prior to the RDA submittal based on an EcoTec letter which was previously submitted stating that 310 CMR 10.04 Agriculture(b)(4) applied to the proposed work.
- MA DEP comments: "310 CMR 10.04(Agriculture)(b)3. is not the correct section of the exemptions for ag to look at given there are more specific applications to Forest Cutting Plans and crossings found at 14. through 16. Please see as follows. 310 CMR 10.04(Agriculture)(b)16. the construction of new temporary access or the maintenance of existing legally constructed access for forestry activities described in 310 CMR 10.04: Agriculture(b)14. or 15. provided that:
 - a. every practicable effort shall be made to avoid access, including stream crossings, and the construction of landings through and in resource areas;
 - b. where access, including stream crossings, through resource areas cannot be avoided, every practicable effort shall be made to minimize impacts resulting from construction of new access including, but not limited to, maintaining and improving (but not enlarging) existing access. Activities shall be conducted when the soil is frozen, dry, or otherwise stable to support the equipment used;
 - c. where DEM has determined through its review and approval of the Forest Cutting Plan that access is impracticable without constructing new access or stream crossings:
 - i. access shall be designed, constructed, and maintained in accordance with the Massachusetts Forestry Best Management Practices Manual;
 - ii. stream crossings shall be stabilized to prevent erosion using methods described in the Massachusetts Forestry Best Management Practices Manual. When crossings involve fill, culverts or other structures that will obstruct flow, they shall be designed, constructed, and maintained in accordance with the Massachusetts Forestry Best Management Practices Manual to allow the unobstructed passage of existing flows for at least the 25 year storm;
 - iii. access or stream crossings shall be removed within one year of completion of the work described in the approved Forest Cutting Plan;
 - iv. following removal of access, the topography and site conditions shall be substantially restored to allow pre-existing vegetation to be reestablished; and
 - v. activities shall be conducted when the soil is frozen, dry, or otherwise stable to support the equipment used.

If a., b., and c. are met then the crossing can be designed to meet i.-v. It is my understand that there is access currently which has been approved by DCR (formerly DEM) as sufficient? That crossing could also be considered under 310 CMR 10.04(Agriculture)(b)16.(c)i.-v., particularly thinking about stabilization of the bank and eroded material."

- RDA submission also provided to DEP and DEP verbally commented that they have not demonstrated to meet the criteria for 310 CMR 10.04(Agriculture)(b)16. In addition, the work to meet the definition would have to be part of the FCP and it is not. Both FCPs call for a temporary bridge. Also, the crossing/access isn't existing anymore. Lastly, the area of the temporary crossing, approved under the FCP, shall be restored as outlined in the regs.
- Staff have been made aware that DEP provided comments to the applicant's representative after reviewing the RDA submittal.
- Staff also spoke to the applicant's representative and informed that the scope for the work would appear to require a NOI and recommended filing a NOI for the work. Staff also stated that an RDA could be submitted to the SCC for a formal decision if the representative did not agree. The SCC is the regulatory authority.
- Staff Recommendations: Recommend issuance of a:
 - Positive #3 the work described on the referenced plan(s) and document(s) is within an area subject to protection under the Act and will remove, fill, dredge, or alter that area. Therefore, said work requires the filing of a Notice of Intent.

- Positive #5 The area and/or work described on the referenced plan(s) and document(s) is subject to review and approval by the Sturbridge Conservation Commission pursuant to the Sturbridge Wetland Bylaw.

7. 30 Main Street/20 Fiske Hill Road –*continued NOI* –Development of residential and commercial cul-de-sac subdivision- DEP File #300-1086

- Owner/Applicant: Mathew Sosik Representative: Peter Engle, McClure Engineering
- Request: Issue Order of Conditions
- Documents Presented: LEC Vernal Pool Assessment Protocol
- Jurisdiction: Buffer Zone to a BVW and IVW
- Project Status Summary: The project was last discussed at the 2-2-2021. Project was continued to provide applicant opportunity to revise the project plans, review EcoTec's report and develop a vernal pool survey protocol for SCC review.
- Staff Notes:
 - Vernal pool survey protocol received for review by LEC. EcoTec has reviewed and provided the following initial comments: "The Vernal Pool assessment protocol looks good to me and, barring a spring drought, should be adequate to confirm the presence or absence of vernal pool indicators. My only comment is that you require written permission for evaluation of the off-site ponding area but you don't state how that permission will be obtained."
 - Staff have contacted abutter's in which access is required for off-site vernal pool survey. Waiting for response.
 - Staff provided protocol to NHESP for comment.
 - ENF submitted to MEPA. Copy of the ENF has been received.
 - Site visit cancelled due to snow cover.
- Staff Recommendations:
 - Staff recommends approval of the protocol with the following recommendations (first 4 bullets are from NHESP):
 - At least 2 of the prospective 4 visits should consist of egg-mass surveys conducted during the period beginning one week after commencement of inbound amphibian (e.g. Wood Frog, Spotted Salamander) migrations and ending 4 weeks after said commencement of migrations. Only 1 such visit is needed if its results provide sufficient evidence of vernal pool habitat, per the *NHESP Guidelines for the Certification of Vernal Pool Habitat*.
 - Surveyors should carry dipnets during any visual surveys for fairy shrimp, egg masses, or other wetland biota in the water column, and they should make every reasonable effort to capture and identify amphibian larvae observed.
 - Date, personnel, method(s), and percent surface area searched should be recorded for each wetland survey and compiled a summary table for final reporting.
 - Documentation of wetland biota to be used as evidence of vernal pool habitat (e.g., fairy shrimp, amphibian egg masses, amphibian larvae) should include clear photos of the subject(s) at close range such that identification can be made to species with certainty; **photos of amphibian larvae should include dorsal, lateral, and ventral views of each subject**.
 - the Conservation Department is notified of LEC site visits 48 hours in advance and that staff are able to attend the visits, or portion thereof, if available.
 - Search time at each PVP and weather conditions at time of site visit shall be documented.
 - Polarized sunglasses shall be worn for optimal viewing within wetlands.
 - Potential ILSF located on site by EcoTec shall be included in this survey if deemed appropriate. This potential wetland needs additional review after snow cover and frozen conditions for regulatory status as a jurisdictional wetland. If hydrology is deemed appropriate it shall be included in the survey. The SCC and/or staff will be making a site visit with the peer reviewer (when the weather allows) and can review this wetland then. This will be done before survey start.
 - I wouldn't anticipate that it may be required but since the weather/season has not allowed for a SCC site visit, I would recommend that the SCC reserves the right to potentially add other on-site wetlands to the vernal pool assessment if other wetlands appear suitable during the site visit.
 - If access is not granted for the offsite PVP, then I would recommend that audio surveys, for wood frog chorus, is conducted from the closest point on the applicant's property.
 - Staff also recommends that the board perform a site visit to review when weather allows. Tentatively schedule for 3-9-21.
 - Staff recommends that board designate one member to review ENF with staff and provide comment.
 - Staff recommends continuing this public hearing until at least 5-4-21 to allow for vernal pool survey to be initiated and plan revisions.

8. 231, 233, & 235 Cedar Street –*continued ANRAD* – DEP File #300-1090

- Owner/Applicant: Michael & Gail Young Representatives: L. Jalbert, Jalbert Engineering
- Request: Issue ORAD
- Jurisdiction: BVW and IVW

○ Documents reviewed: DEP Letter (dated 4-1-1988) and SOOC's DEP File #300-1029

- Project Status Summary: ANRAD was discussed at the last meeting. The SCC had requested additional documentation be provided supporting approvals for past work on property to assist with ANRAD review and to support that work may have been completed in compliance with any historic DEP approvals for the property.

○ Staff Notes:

- DEP Comments at time of file # issuance: "Although a file # is being issued, please note the following: An error was made in the fee calculation, and an additional fee of \$25.00 is owed to MassDEP. Please submit this fee immediately, and provide a copy of the check to MassDEP Central Region via email. Isolated Vegetated Wetland and Isolated Land Subject to Flooding are not listed in Section B of the ANRAD. The presence or absence of these resource areas, and the confirmation of their borders should not occur unless Section B is revised. Calculations should be provided if the presence/absence of ILSF is requested under this ANRAD. The applicant should provide documentation to support the statement that the cart path fill is "presumed to pre-date applicable wetland regulations."
- Waiting on revised ANRAD documents and confirmation of filing fee to DEP should the applicant proceed with ANRAD as ANRAD plan is shown. Documents would appear to have to be revised regardless but is dependent on the request. ANRAD Form 4A requests review of 2,959 ft. of BVW. Plan and supporting documentation illustrates Isolated Vegetated Wetland. Clarification on request and revised documents would appear required.
- Staff have assisted with research for the project representative and have discussed with the project representative. Copy of SOOC for DEP File #300-1029, for lots 5 & 6, provided to applicant's representative. See attached SOOC and DEP Letter. Records for DEP File #300-1030, lots 7 & 8, were not located.
- Based on a review of the SOOC, it would appear that any property owners executed the SOOC conditions. Therefore, any historic approvals for any work would not appear to have been conducted in compliance with the WPA. Therefore, it would appear that the past permitting would not grandfather the activities.
- Based on information available and previous DEP determination, the wetlands shown as A, C and D Series were a Bordering Vegetated Wetland which have been altered in violation of the WPA and therefore should not be considered three separate ILSF.

○ Staff Recommendations:

- Staff recommend that the applicant consult with the representative and the wetland scientist to review the wetland impacts on site and develop a plan to bring the site into compliance addressing wetland violations and current regulations. Staff recommend that the board require such plan and work with the current property owner to address as it appears that some of the work may have occurred prior to his ownership. However, the extent of that work and who may have conducted such work is not fully known. Current property owner has had ownership since 1989.
- Staff recommend that the ANRAD is continued to address this. If the applicant is requesting issuance of the ORAD, at this time, then staff would recommend that the board issue a denial based on the delineation for the A, C and D series wetlands as IVW on the plan. These wetlands were a BVW which has been altered without proper permitting. If the applicant elects for issuance of ORAD and indicates that they will not develop such plan, staff would recommend that the board discuss options to address the wetland fill on site. Staff recommend that the board and the applicant work to resolve the wetland issues.
- Staff recommend continuing the public hearing to allow for additional information. Staff recommend continuing to the meeting, April 6, 2021 to allow for the submission of the plan and additional site review and documentation of wetland impacts. Staff recommends that the board request an initial plan with timelines to bring the site into compliance by March 23, 2021 due to current snow cover and potential need for project team site visits.

9. 150 Charlton Road –continued ANRAD – DEP File #300-1088

- Owner: Cobra Realty Trust Applicant: Jeremy Procon, Interstate Towing
- Representatives: G. Krevosky, EBT Environmental Consultants
- Request: Issue ORAD
- Documents Presented: colored plan (Revised plan (last revised 2-22-21))

○ Project Status Summary:

- ANRAD was discussed at the meetings. Project plans required revisions based on presence of additional resource areas on site.

○ Staff Notes:

- Revised plan received.
- Revised ANRAD documents and filing fee received. Revised plans, fees and documents need to be sent to DEP if not already done and applicable.

○ Staff Recommendations:

- Staff recommend that the board require a peer review of the wetland delineation and ANRAD.
- Staff recommend board site visit after a peer review is completed.
- Staff recommend continuing to the next meeting, April 6, 2021 to allow for peer review proposal submission and review.

10. 118 Leadmine Lane –continued NOI –Construction of a SFH, well and septic system- DEP File #300-1073

- Owner: G. Kellaher Applicant: A. Kellaher Representative: G. Krevosky, EBT Environmental Consultants, Inc.
- Request: Issue Order of Conditions
- Documents Presented: n/a
- Project Status Summary: The project was last discussed at the 2-2-21 meeting and continued. In addition, the EO was discussed as it relates to DEP File #300-684 in which the property owner is also in violation for. The project was continued to provide applicant opportunity to revise the project based on SCC comments.
- Staff Notes:
 - Staff was contacted by Glenn Krevosky of EBT, Inc. He has been retained to assist the property owner with addressing the violations.
 - Staff have discussed the site w/ Mr. Krevosky and have provided supporting documents and correspondence to assist him.
- Staff Recommendations:
 - Staff recommends that no approvals be given for the work outlined in the NOI until the EO and expired OOC have been addressed.
 - Staff recommends continuing this public hearing until 4-6-21 to allow time for the new representative to develop and submit such plan to the SCC. Staff notes that snow cover may prohibit the representative's site review, therefore the one-month continuation.
 - Per the SCC's Revised Documents Deadline Policy, documents shall be submitted 7 calendar days in advance of a meeting. Such information is due by 3-30-21.

II. Wetlands Decisions

11. 150 Charlton Road-Request for Certificate of Compliance-DEP File #300-665

- Original Applicant: William Babineau Requester: Cobra Realty Trust
- Request: Issue a Certificate of Compliance, OOC page 8
- Documents Presented: Request for certificate of Compliance & Gary Magnuson, CMG Environmental, Inc. Letter (dated 1-21-21); OOC DEP File#300-665 Page 8
- Project Summary: OOCs were issued for the installation of injection wells as part of a Remedy Implementation Plan submitted to DEP for a release of petroleum at 149 Charlton Rd. which resulted in groundwater contamination that migrated to 150 Charlton Rd.
- Staff Notes:
 - 10 injection wells were proposed to be installed within wetland resource areas for the implementation of remedial activities for contaminated groundwater. Limited brush and tree removal was required. Stumps were to remain in place.
 - Project resulted in temporary direct impacts to BVW and Riverfront Area
 - Restoration was required. Once the remedial activities were complete the area was to be restored to pre-construction conditions. Pre-construction conditions were to be documented prior to the start of work as a baseline for restoration activities. It does not appear that this had been completed. See OOC Page 8 attached.
 - Permit issued in 10/2005. Reporting for activities in 2006 received in file. Last correspondence was August 2006: notification of first peroxide injection to be completed soon.
 - Based on CMG letter, DEP requirements appear to be met for meeting RTN requirements. However, appears OOC conditions 32-35 have not been met.
- Staff Recommendations: Staff recommend that the board does not issue a CoC at this time and that the board requires additional information documenting how these conditions have been met or will be met prior to issuance of a CoC. It does not appear that a restoration plan was developed, reviewed by the board or implemented after the work was completed nor had the stream samples been submitted.

12. 180 New Boston Road-Request for Certificate of Compliance-DEP File #300-460

- Original Applicant: Robert Moss Requester: Karen Davis
- Request: Issue a Certificate of Compliance
- Staff Notes:
 - Lot is part of a subdivision. Staff reviewed the subdivision plans and performed a site visit. Upon review of the plans and

permit, it appears that as part of the approval of this project for impacts to Riverfront Areas, areas of the property were designated as wildlife habitat which included restoration plantings. In addition, these areas were to remain in an undisturbed vegetated state in perpetuity. Upon review of the site it appears that this property included restoration areas on both sides of the driveway. An area was designated to the right side of the driveway when facing the house (west of the septic system) and an area to the left side of the driveway when facing the house.

- Upon review of the property, it appears that the right side of the driveway when facing the house (west of the septic system) is heavily vegetated and appears to be left in an undisturbed vegetated state. However, the area to the left of the driveway appears to have been altered beyond the limit of approved work and does not contain the plantings as shown on the plan. Therefore, it would appear that this project is not in compliance with DEP File #300-460. The remainder of the work which is within the jurisdiction of the Conservation Commission appears to be in compliance with the permit.
- Lack of CoC was discovered as part of a sale of the property. Staff have spoken to the sellers and new owners in regards to this. A restoration plan was developed w/ staff guidance which will be implemented this Spring by the new property owner for issuance of a CoC.
- Staff Recommendations:
 - Staff recommend not issuing a CoC at this time and continuing this to the 5-4-21 meeting to allow for restoration plan to be completed.

13. 116 Brookfield Road-Request for Certificate of Compliance SCC File #07-16

- Original Applicant/Permit Holder: EJF Realty Corporation Requester: Peter Iott
- Request: Issue Certificate of Compliance
- Staff Notes:
 - SCC recently received a CoC Request related to this property and issued a CoC in Jan. 21. Attorney's realized that a 2nd OOC was issued on this site. This is a local OOC for work within the 200 foot BZ which included installation of a storm-water system for a commercial development. Majority of work outside of the 200 ft. BZ.
 - Staff site visit conducted. Snow cover limited review of system. Engineer letter of substantial compliance has been received. Site recently had a fire and structures have been removed. Driveway and drainage structure are still in place.
 - Perpetual conditions include GC#22 (no fertilizer, pesticide or herbicide) and SC#32 (O&M for storm-water).
- Staff Recommendations: Staff would recommend issuance of a complete CoC with the above noted perpetual conditions.

14. 245 Walker Road-Request for Certificate of Compliance – DEP File #300-655

- Original Applicant/Permit Holder: Michael & Celeste Lemay Requester: Andrew & Caroline Beaumont
- Request: Issue Certificate of Compliance
- Staff Notes:
 - Project was the development of a SFH lot. The LOW was 85 feet from the edge of a BVW.
 - Staff reviewed the file and performed a site visit. Project is in compliance with final approved plans. No perpetual conditions noted in the OOC.
- Staff Recommendations: Staff recommend issuance of a complete CoC for release of 245 Walker Rd.

15. 49 Bushnell Road-Chapter 61 Right of First Refusal Request

- Owner: Ethan Hillman Requester: Amber Herting
- Request: Removal of properties from Chapter 61 Program and BOS release of Right of First Refusal
- Staff Notes:
 - Site is an L shaped 5 acre developed lot with a SFH and associated appurtenances. The land does abut other SFH lots which are within the Chapterland Program and Opacum Land Trust does have a parcel of land to the south of the road (50 Bushnell Rd.). However, there does not appear to be much conservation value with the lot especially as most of it is developed for a SFH.
- Staff Recommendations:
 - Staff recommend that the SCC not recommendation exercising right of first refusal to the BOS for the town or offer right of first refusal to the state or a land trust.

16. 133, 137, 139 Fiske Hill Rd & 48 Old Farm Road- Chapter 61A Right of First Refusal Request

- Owner: Spencer Solar Requester: Blaise Berthiaume
- Request: Removal of properties from Chapter 61 Program and BOS release of Right of First Refusal
- Staff Notes:
 - Site is comprised of four parcels totaling approx. 52.24 acres of land. The property was recently harvested under a FCP. There were wetland concerns on site which resulted in a stop work order from DCR. Those concerns have been addressed and the FCP has been closed. The parcel is primarily forested and is mostly surrounded by residential and commercial development. The site does contain wetlands including an intermittent stream, BVW and isolated wetlands. The parcel does not abut any other protected open space of Chapter 61 parcels, however, it does abut additional forested parcels and can/does provide wildlife habitat and connectivity to adjacent wildlife habitat. The submitted materials include a purchase and sale agreement with the potential buyer and a statement that the future use includes development of a few SFH lots and a Christmas tree farm. Staff have spoken to this potential buyer noted and that was the same

information that was conveyed. The buyer was made aware of permitting requirements which would apply for any proposed activities including agriculture uses and need for formal wetland delineation on site. The farm would/may be approx. 6 acres in size and the remaining portions of the property were disclosed to remain as forest. Due to the limited steep slopes on site and wetlands, it would appear that development on this parcel would be limited.

- Staff Recommendations:
 - The property does have characteristics which would make for a suitable conservation property, however, it is not designated as part of the town's masterplan or contiguous to other conservation lands. Staff recommend that the SCC not recommend exercising right of first refusal to the BOS for the town or offer right of first refusal to the state or a land trust at this time.

III. ADMINISTRATIVE DECISIONS

17. Minutes of 2/2/21 to be approved

- Staff Recommendations: Vote to approve minutes as written.

UPDATES

IV. OLD BUSINESS

18. MA DOT Enforcement Order MA Turnpike Cedar Lake

- Documents Presented: Revised Plan
- Project Status Summary: MA DOT has revised the approved plan to further address plan concerns based on occurrences which have happened on site in November 2020, in which a neighboring property was flooded, and based on comments from the Cedar Lake Association (CLA), staff and the SCC.
- Staff Notes:
 - The plan includes: full repair of the eastern swale, Area 5 on the plan, as requested; additional notes for work within Area 4 as requested; additional BMP improvements within Areas 2, new Area 6 and stations as shown on the plan. These BMP improvements (drop inlets, stilling wells, etc.) would appear to assist with treatment and velocity of storm-water.
 - Staff spoke to CLA representatives and are pleased with modifications.
 - Staff Recommendations: Staff recommends that MA DOT provide a timeframe for implementation of the project changes. Will this affect the timeline provided? Approve plan as shown w/ the following notes. Staff recommends that all disturbed areas are seeded (w/ native seed mixes) and remain protect with erosion controls until the areas are stabilized. SCC shall be notified when work within each area is completed. Completed work should be reviewed by designing engineer and letter of substantial compliance (detailing any project variations) submitted at end of the project. Residents near Area 5 should be notified of work by DOT. Trees should be added to screen the residence near Area 5. Follow up monitoring of the implemented work should be conducted to ensure the improvements are functioning as designed. EO shall not be released until monitoring and documentation of completed and functioning project.

19. 508 International, LLC, Jennings, R., and Sellev, A.; 27 Ladd Road, Enforcement Order (EO)

- Documents Presented: Restoration Plan (dated 2-2-21)
- Project Status Summary: An EO was issued in 2019 for unpermitted activities on this property. A NOI was being reviewed by the SCC which was recently withdrawn. A restoration plan was submitted to address Order #5 of the EO. The matter had also been referred to the town's legal counsel and has been heard in Superior Court and the case is still open.
- Staff Notes:
 - The submission of a restoration plan was the final remaining Order to be addressed. The plan includes removal of the structure and seeding underneath the bridge location with a native wetland seed mix.
- Staff Recommendations: Approve restoration plan with the following conditions:
 - Work must follow the submitted plan.
 - Equipment is not permitted in the flagged wetland or any wetland.
 - Work must be overseen by a competent wetland scientist.
 - Areas within the 25 foot No Disturb Zone shall be stabilized. These areas shall be seeded with an appropriate native seed mix. Due to compaction from use, the areas may need to be scarified etc. prior to seed application.
 - A report shall be submitted within one week of restoration activities to include photographic documentation and certification that work was done in compliance with the plan and conditions.
 - The area shall be monitoring to ensure stabilization has been achieved. Staff recommend that the wetland scientist review the site within one month of restoration activities and submit said report within one week of site visit. If the site is fully stabilized to the SCC's approval, then the monitoring can cease. If it is not fully stabilized, then the wetland scientist shall include recommendations for achieving stabilization in the report. Additional monitoring may be required.
 - EO shall not be released and court case should not be recommended to be released until these conditions are

met and areas are fully stabilized.

20. 508 International, Jennings, R., B. and I.; 205B and 205C Podunk Pike, Enforcement Order

- Documents Presented: n/a
- Project Status Summary: An EO was issued on 10-30-21 for unpermitted activities. A series of trails/roadways had been installed on the property and used for commercial recreational activities including but not limited to the use of motorized vehicle events and pedestrian endurance events. This unpermitted work occurred within jurisdictional wetland resource areas and the buffer zone. The SCC had originally requested that an application be submitted for activities discovered on 205B and 205C Podunk Pike in an effort to permit such work. An application had been received. However, the application was insufficient and after multiple continuances the application was denied and an EO was issued as there are outstanding violations which were required to be addressed.
- Staff Notes:
 - The SCC's EO ordered: a cease and desist, disclosure of all activities within SCC jurisdiction and a restoration plan.
 - No materials have been received to date to address the EO.
 - The SCC has not been made aware that the EO was appealed and the 60-day appeal period has passed.
 - Staff followed up on this and requested discussion at this meeting.
 - Staff Recommendations: Staff recommend that the SCC provide a letter to the violators providing 21 days from issuance of the letter to comply with the Enforcement Order. If they do not comply with the EO by that date then the SCC should refer this matter to the Town of Sturbridge's legal counsel, to file a lawsuit seeking compliance with the Enforcement Order in Superior Court.

21. DEP File #300-1021; RV Management Service-SB, LLC, 30 River Road, Enforcement Order

- Documents Presented: Plan: Pine Lake RV Outlet 6 Revision 022321, Site Photos
- Project Status Summary: This discussion was continued from 12-1-21. The SCC requested additional information pertaining to the project and compliance with the EO. Staff provided guidance and a document was created based on the meeting discussion on 12-4-20. The matter has postponed as the project team requested additional time to respond.
- Staff Notes & Recommendations:
 - The EcoTec letter did not include all of the language provided by staff.
 - #1. A table is included in the letter outlining that some of the restoration plantings have occurred. Appears less trees and shrubs have been planted than shown on the approved OOC documents. No plan has been provided to indicate when the remaining plantings will be installed as requested. The restoration areas were created to address the first EO on site which resulted in the Amended OOC. Compliance is necessary. **Staff recommend setting a timeframe to complete the plantings as most of the project is now completed. Staff recommend that the permit holder commit to completion of the planting plan by the end of the growing season of 2021. Staff recommend that the board request this in writing by March 23, 2021.**
 - #2 The board requested documentation supporting that the infiltrators had been installed as shown on the approved plans. Photographs showing install within the "quad" area have been provided. No other documentation has been provided to support installation of the infiltrators as shown on the plan. If the infiltrators have not been installed as approved, revised plans reflecting the current conditions would be required for the board's review and approval. Proposed project changes to approved plans typically require an amendment to the permit. Staff would remind the permit holder that all revised plans need to be submitted to all other regulatory authorities including NHESP for review and approval. Additional stormwater improvements have been made on site to address increased runoff and other project changes which do appear to be assisting with decreasing runoff velocity and providing recharge before entering resource areas. **However, staff would not recommend that the board sign off on any project, which include a stormwater system, in which proper documentation has not been provided by a P.E. showing that the system was constructed. Staff recommend that a P.E. sign off that this has been done or plans are submitted reflecting the installed infiltrators, or lack thereof, for review and approval. Staff recommend that the board require this by March 23, 2021.**
 - #3 Any new structure proposed within a resource area will require the submission of a NOI. Installing a dam within a perennial stream likely requires additional state and federal permitting requirements. It is unclear if such a structure would meet permitting standards. When the dam was removed, DEP informed staff that the new wetland resource area would be required to be shown on as-built plans. The cause of the dam breach remains unknown. The failure resulted in the migration of sediment from the former Duck Pond which resulted in sedimentation into the downstream resource areas. In addition, on site erosion and discharging stormwater also resulted in silt and sediment entering wetland resource areas. The board and staff worked with the project team to stabilize the pond substrate and a stream channel had been mostly established prior to the installation of the temporary dam. Staff did not support the installation of the temporary dam as it would/could disrupt the stabilization which was achieved to date as a stream channel had mostly been defined. There was some sediment migration associated with the channel definition however this would have continued to decrease over time. The removal of dams in a controlled manner can and does result in the migration of sediment and can and has been permitted throughout MA. The documented sediments observed within the downstream resource areas

here did result in an impact. Due to the lapse in time since the dam failure, it appears that some of the accumulated sediment has washed further downstream. **Staff recommend that the board does request such a plan to remove accumulated sediment from on and off site resource areas impacted by the project site.** Staff had anticipated the submission of this plan for the board's review and approval at this time. Hand removal of sediment would appear sufficient. **Staff recommend that a plan is developed and submitted, for review and approval by March 23, 2021, to address this prior to the removal of the temporary dam. This summer will make two years since the breach and documented impacts. This needs to be addressed as soon as possible. Staff also recommend that accumulated sand/sediment is removed in the stream section above the duck pond. Staff would recommend that a new dam is not installed. Staff would recommend that a plan is developed to remove the temporary dam which shall include BMPs to assist with minimizing downstream impacts.** Downstream resource areas should be evaluated after such removal and remediated if necessary.

- #4. A conceptual plan was provided on 2-24-21 to address this. Staff have reviewed the concept plan and submitted photos. This would appear to be an improvement over the current situation and would appear to decrease the stormwater velocity and allow for some recharge before entering a resource area. It will require the removal of two 4-6 inch conifers, however, this would appear to be a significant long term benefit which outweighs the two smaller trees. **Staff would recommend approval of this revisions with the following conditions: swale shall be seeded and protected with an erosion control blanket. The board should discuss when this will be installed and issue a date to have this completed. Staff would recommend to have this completed prior to campground opening for the season or May 1 whichever is first. Staff recommend written commitment is provided to meet this deadline by March 23, 2021.**
- #5. **Staff recommend that the area is replaced with at least grass and shown on a final plan as such as this area is outside of the approved LOW.**
- #6. No reporting on monitoring has been received to date. Staff are not aware that there have been any on site issues.
- #7. Erosion controls have not been permitted to be removed and appear to be in place still.
- **Overall recommendation:** Staff would strongly recommend that the board set firm deadlines for submission of the items, noted above, in an effort to reach an agreement to address the outstanding EO and finalize this project. Please note that once everything has been approved, final plans reflecting all project and site changes, stamped and signed by a P.E. will be required. In addition, the O & M Plan will need to be updated to reflect additional components of the stormwater system. As the EO was not appealed, the violator is required to comply with the EO. The board has been working with the violator to address the EO and concessions have been made. However, all items need to be addressed. Staff would recommend that if the materials requested to address the EO are not received by the deadlines noted above, the board should request that the Town's legal counsel and/or DEP assist with reaching final resolution to the wetland resource area impacts and other violations to the issued permit (OOC).

22. DEP File #300-684; 118 Leadmine Lane, Kellaheer, G. Enforcement Order

- Documents Presented: n/a
- Project Status Summary: The EO was last discussed at the 2-2-21 meeting and continued. The SCC provided the property owner with additional guidance on addressing the on-site violations. The discussion was continued to provide the property owner the opportunity to continue to work on a plan to address the EO based on SCC comments.
- Staff Notes:
 - Staff was contacted by Glenn Krevosky of EBT, Inc. He has been retained to assist the property owner with addressing the violations.
 - Staff have discussed the site w/ Mr. Krevosky and have provided supporting documents and correspondence to assist him.
- Staff Recommendations:
 - Staff recommends continuing discussion until 4-6-21 to allow time for the new representative to develop and submit such plan to the SCC. Staff notes that snow cover may prohibit the representative's site review, therefore the one-month continuation. Reminder that there is a cease and desist on site and no work shall occur on site.
 - Per the SCC's Revised Documents Deadline Policy, documents shall be submitted 7 calendar days in advance of a meeting. Such information is due by 3-30-21.

IV. ADMINISTRATIVE UPDATES

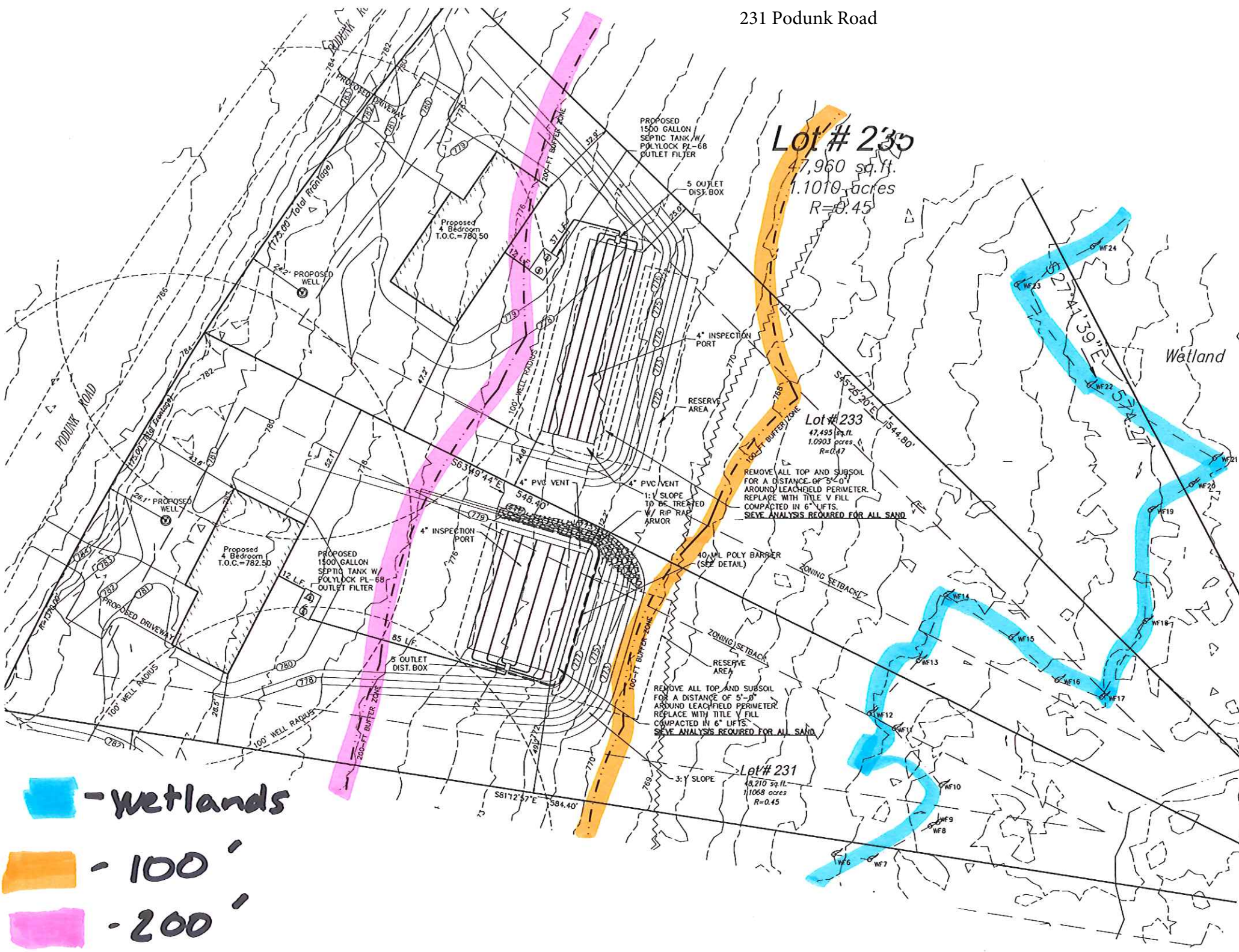
23. Committee Updates: CPA, Trail Committee, Open Space Committee, and Lakes Advisory Committee

V. NEW BUSINESS

24. Agent's Report

25. MACC Annual Conference Virtual April 6-17, 2021

26. Next Meeting-March 2, 2021 and Site Visit Schedule-February 23, 9-12 pm



Lot # 235
 47,960 sq. ft.
 1.1010 acres
 R=0.45

Lot # 233
 47,495 sq. ft.
 1.0903 acres
 R=0.47

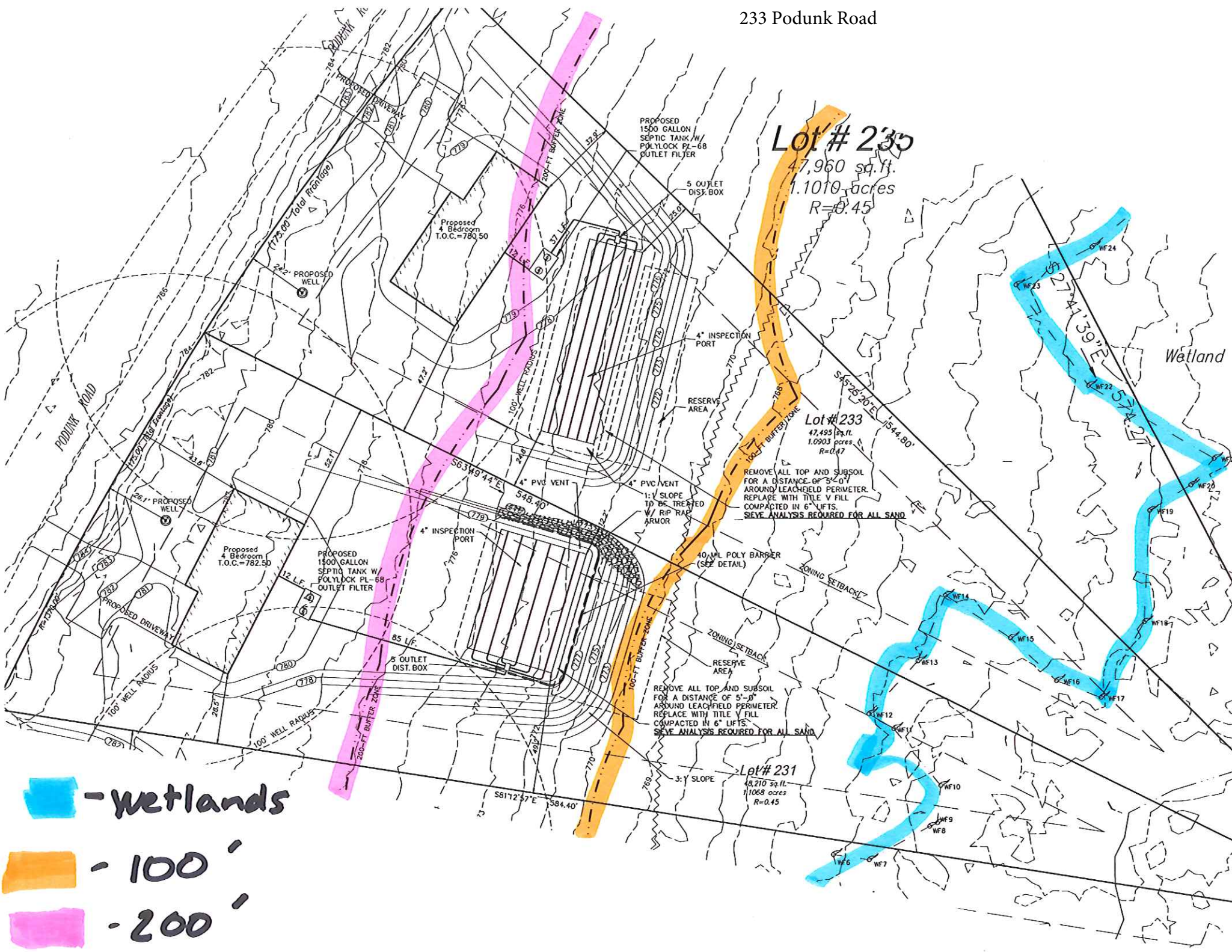
Lot # 231
 48,210 sq. ft.
 1.1068 acres
 R=0.45

- wetlands
- 100'
- 200'

Wetland

REMOVE ALL TOP AND SUBSOIL FOR A DISTANCE OF 5'-0" AROUND LEACHFIELD PERIMETER. REPLACE WITH TITLE V FILL COMPACTED IN 6" LIFTS. **SEIVE ANALYSIS REQUIRED FOR ALL SAND**

REMOVE ALL TOP AND SUBSOIL FOR A DISTANCE OF 5'-0" AROUND LEACHFIELD PERIMETER. REPLACE WITH TITLE V FILL COMPACTED IN 6" LIFTS. **SEIVE ANALYSIS REQUIRED FOR ALL SAND**



Lot # 235
 47,960 sq. ft.
 1.1010 acres
 R=0.45

Lot # 233
 47,495 sq. ft.
 1.0903 acres
 R=0.47

Lot # 231
 48,210 sq. ft.
 1.1068 acres
 R=0.45

- wetlands
- 100'
- 200'

Wetland

PROPOSED
 1500 GALLON
 SEPTIC TANK W/
 POLYLOCK PL-68
 OUTLET FILTER

5 OUTLET
 DIST. BOX

4" INSPECTION
 PORT

RESERVE
 AREA

40 ML POLY BARRIER
 (SEE DETAIL)

ZONING SETBACK

RESERVE
 AREA

ZONING SETBACK

3:1 SLOPE

100-FT BUFFER ZONE

200-FT BUFFER ZONE

100-FT BUFFER ZONE

100-FT BUFFER ZONE

100-FT BUFFER ZONE

100-FT BUFFER ZONE

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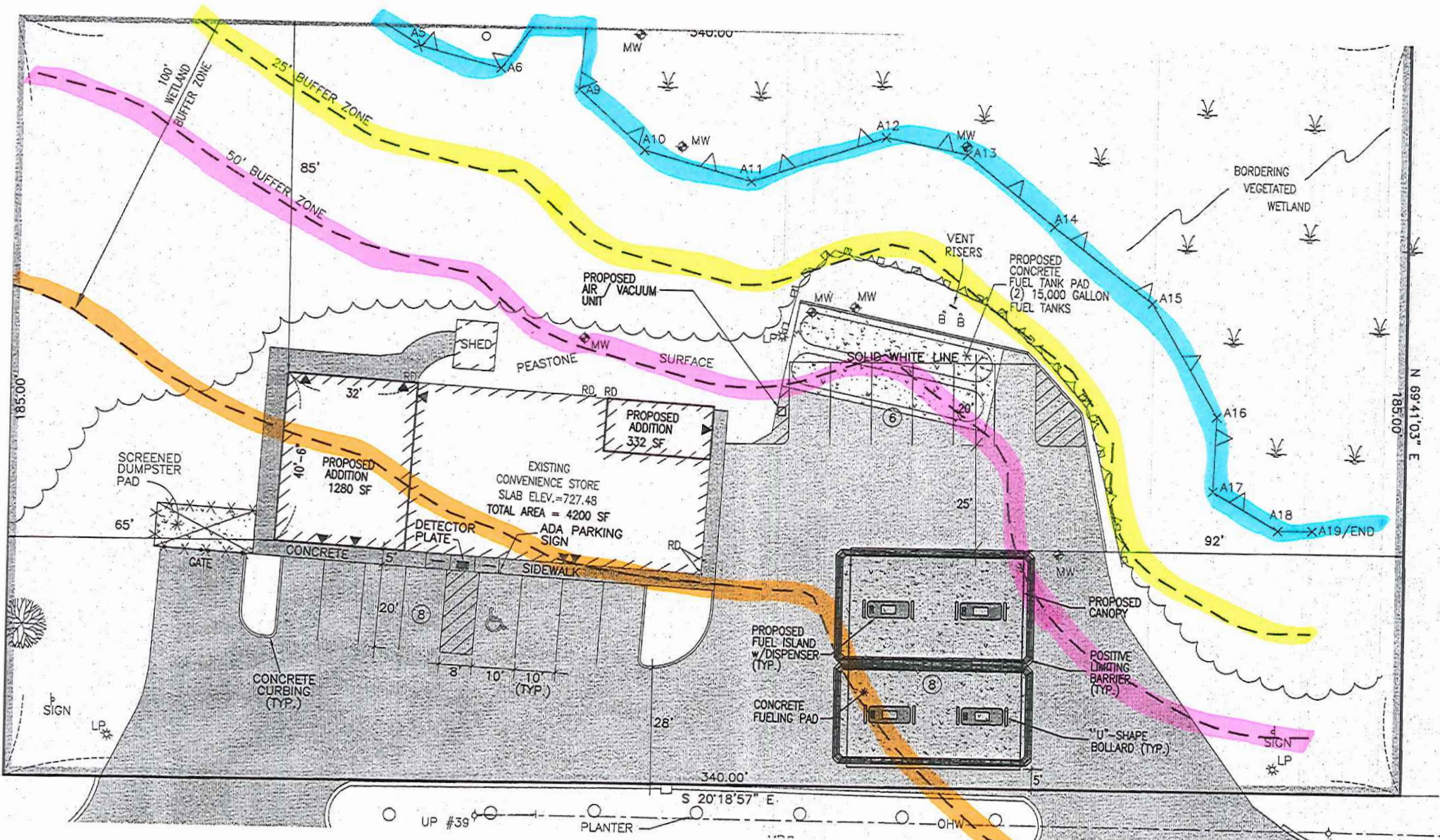
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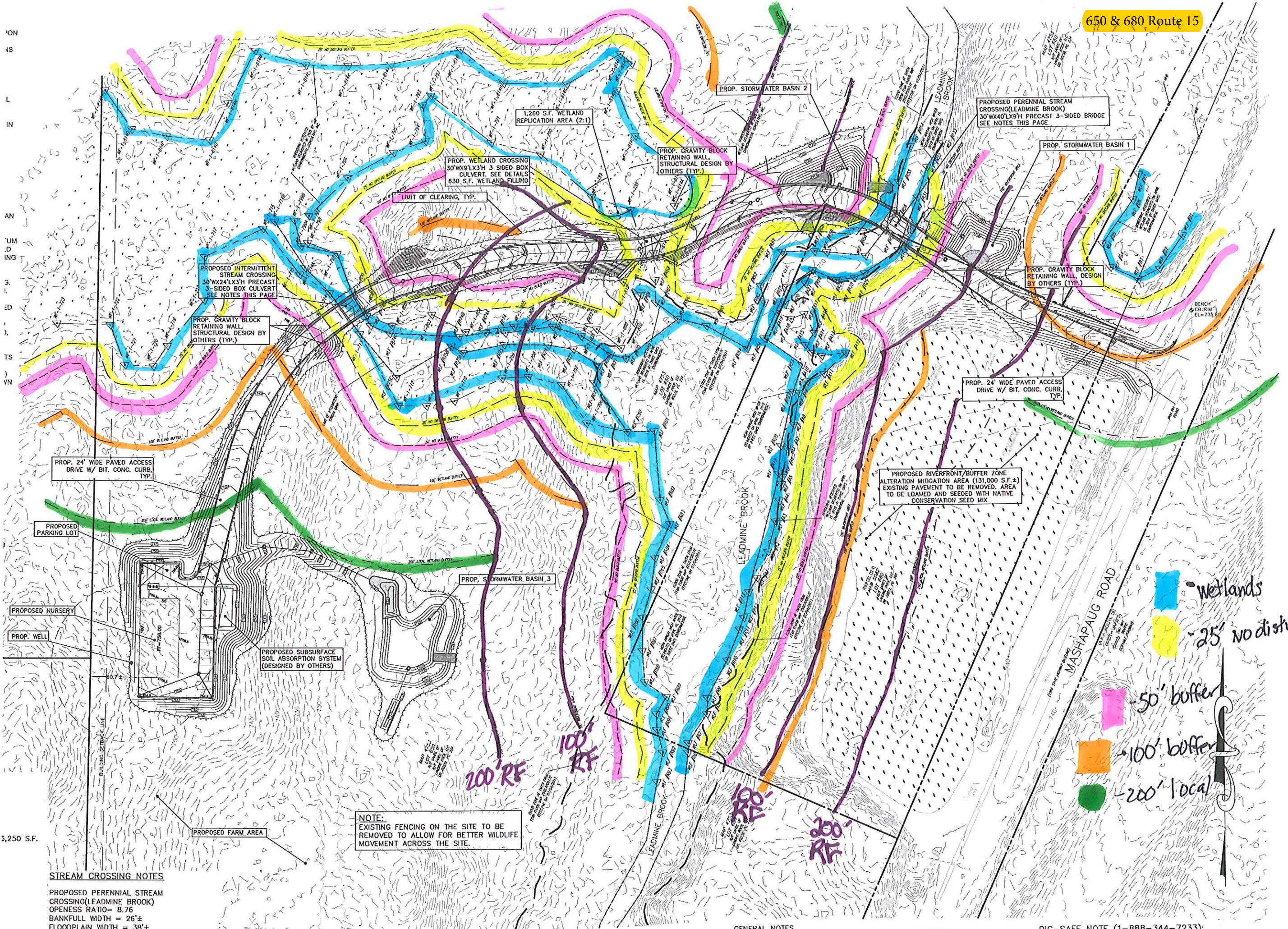
100-FT BUFFER ZONE

122 Main Street



= 25'
 = 100'
 = 50'
 wetland line

10N
9S
8L
7IN
6AN
5UM
4D
3ING
23.
1ED
0,
TS
VN



3,250 S.F.

STREAM CROSSING NOTES

PROPOSED PERENNIAL STREAM CROSSING (LEADMINE BROOK)
OPENNESS RATIO = 8.76
BANKFULL WIDTH = 26' ±
FLOODPLAIN WIDTH = 38' ±
BANKFULL WIDTH V. 1.2 - 31.2' (MIN. COAM)

NOTE:
EXISTING FENCING ON THE SITE TO BE REMOVED TO ALLOW FOR BETTER WILDLIFE MOVEMENT ACROSS THE SITE.

GENERAL NOTES

DIG-SAFF NOTE (1-RRR-344-7233)

- Wetlands
- 25' no disturb
- 50' buffer
- 100' buffer
- 200' local

Cart Path Crossing Repair Sketch Plan

Prepared by EcoTec, Inc.

February 8, 2021



Culvert Repair Protocol

1. Work will be conducted during a no flow or minimal flow period;
2. Install erosion control barrier consisting of straw wattles on the downgradient side of the work area;
3. Replace the existing damaged culvert with a new 18" concrete culvert. The existing length of the culvert is 22-feet. The new culvert will be the same length. The increased size will increase the capacity make the culvert less susceptible to clogging;
4. Clean gravel/crushed stone will be installed to match the grades on either side of the washout.
5. Once fully stabilized and the erosion control barrier will be removed.



February 18, 2021

Email (rgendreau@town.sturbridge.ma.us)

Rebecca Gendreau, Agent
Sturbridge Conservation Commission
308 Main Street
Sturbridge, MA 01566

Re: Vernal Pool Assessment Protocol
DEP File No. 300-1086
30 Main Street and 20 Fiske Hill Road
Parcel IDs: 415-03914-030 and 280-03534-020
Sturbridge, Massachusetts

[LEC File #: MCEI20-002.04]

Dear Ms. Gendreau:

On behalf of the Applicant, Fiske Hill East Realty Trust, LEC Environmental Consultants, Inc., (LEC) is submitting this Vernal Pool Assessment Protocol for the above-referenced properties in Sturbridge, Massachusetts. During their review of the Notice of Intent (NOI) Application, the peer reviewer, EcoTec, Inc., noted seasonal ponding within the interior of the A-series Bordering Vegetated Wetland (BVW) from flags A-20 to A-28 that could provide vernal pool habitat. Furthermore, EcoTec, Inc., observed an off-site, seasonal ponding area within 200 feet of the site north of the D-series wetland that could also provide vernal pool habitat. The off-site seasonal ponding area is identified as Potential Vernal Pool (PVP #24005) per MassGIS NHESP data layers on 8 Fiske Hill Road. The interior of the A-series BVW is not identified as a PVP. No Certified Vernal Pools (CVPs) are located on-site. As discussed during the February 2, 2021 Conservation Commission Public Hearing, LEC has prepared this Protocol to evaluate the two potential vernal pool habitat areas this spring.

Methodology

The Vernal Pool Assessment will be conducted implementing scientifically accepted professional practices and standards in accordance with the Massachusetts Division of Fisheries and Wildlife Guidelines for Certification of Vernal Pool Habitat (March 2009, "NHESP Certification Guidelines").

LEC will conduct up to four (4) site visits between March-May 2021 to evaluate the southerly portion of the A-series BVW and off-site PVP that may function as vernal pool habitat. The Assessment will commence concurrently with regional amphibian breeding activity, more specifically amphibian migration to vernal pools following snow/ice melt and favorable weather conditions (precipitation/temperature). In addition to LEC's own field work and routine NHESP coordination, we regularly monitor the Vernal Pool Association message board that documents regional amphibian activity.

Table with 5 columns: LEC Environmental Consultants, Inc., www.lectenvironmental.com, 12 Resnik Road Suite 1 Plymouth, MA 02360 508.746.9491, 380 Lowell Street Suite 101 Wakefield, MA 01880 781.245.2500, 100 Grove Street Suite 302 Worcester, MA 01605 508.753.3077, P.O. Box 590 Rindge, NH 03461 603.899.6726, 680 Warren Avenue Suite 3 East Providence, RI 02914 401.685.3109, PLYMOUTH, MA, WAKEFIELD, MA, WORCESTER, MA, RINDGE, NH, EAST PROVIDENCE, RI



During the Assessments, LEC will identify the presence or absence of Fairy Shrimp (Obligate Vernal Pool Species) via visual observation and dip-netting and/or evidence of Obligate or Facultative Vernal Pool amphibian breeding activity (e.g., spermatophores, chorusing, mated pairs, egg masses, transforming tadpoles/larvae/juveniles, etc.).

As defined under the “NHESP Certification Guidelines”,

***Obligate species** serve as direct indicators of vernal pool habitat because they require at least two months of flooded conditions and the absence of established, reproducing fish populations. When breeding evidence of obligate species is documented, it is not necessary to prove there is no established fish population.*

***Facultative amphibian species** serve as indirect indicators of vernal pool habitat. Documentation of the appropriate facultative amphibian species does not ensure certification; evidence documenting there is no established, reproducing fish population must also be submitted. Additionally, the physical documentation (e.g., pool photos, descriptive notes) submitted must demonstrate the pool possesses the physical characteristics necessary to sustain a vernal pool environment (e.g., depth, size, vegetation).*

LEC will also observe the physical characteristics of each area, including water depths, and provide photographic documentation.

The site evaluations will be staggered to target optimal vernal pool breeding activity based on regional amphibian activity and weather conditions. Should adequate biological criteria be documented within either area, further continuance of the Vernal Pool Assessment may only be necessary to confirm whether either area holds standing water for the continuous two (2) months.

Should either area meet the criteria for certification, LEC will delineate the Mean High Water (MHW) boundary for each certifiable vernal pool in accordance with the “NHESP Certification Guidelines.” The MHW or Vernal Pool boundary is coincident with any distinct and clear topographic break at the edge of a pool or the maximum observed or recorded extent of flooding that represents the ecological boundary of the vernal pool, evident by leaf staining and other indicators of hydrology.

Please note that the Vernal Pool Assessment will require evaluating on an off-site subject parcel: 8 Fiske Hill Road (Parcel ID: 280-03553-008) owned by Antonia Squier. LEC will require written right-of-entry permission from the Property Owner for LEC, its agents, and staff to perform the Vernal Pool Assessment. LEC will not enter the off-site property until written right-of-entry permission is obtained.

Reporting

LEC will prepare a summary report with photographs documenting the results of the Vernal Pool Assessment for submission to the Commission. The report will review the presence or absence of documented vernal pool species and/or breeding activity and whether either area provides viable vernal pool habitat. LEC will participate in a subsequent Public Hearing to review our findings.



Should either area meet the criteria for certification, LEC will submit the necessary Vernal Pool Field Observation Form and requisite materials to the Commission and to NHESP via MassWildlife's Heritage Hub (electronic database).

Please do not hesitate to contact me at bmadden@lecenvironmental.com should you have any questions or comments.

Sincerely,

LEC Environmental Consultants, Inc.

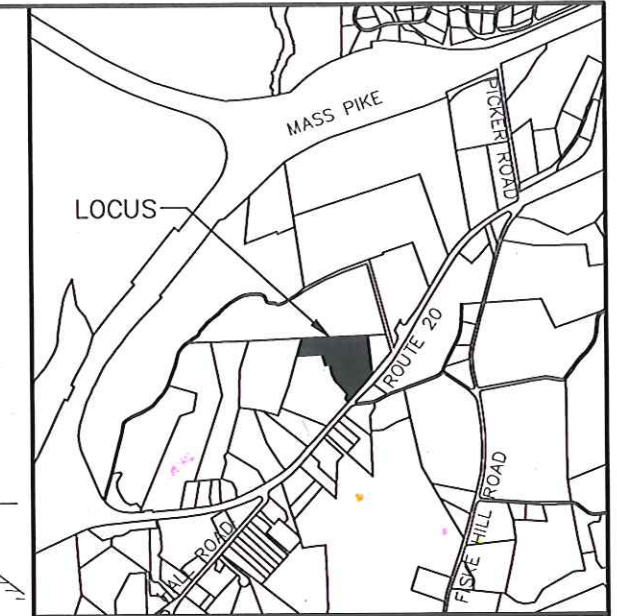
A handwritten signature in black ink that reads "Brian T. Madden". The signature is written in a cursive style with a prominent flourish at the end.

Brian T. Madden
Wildlife Scientist

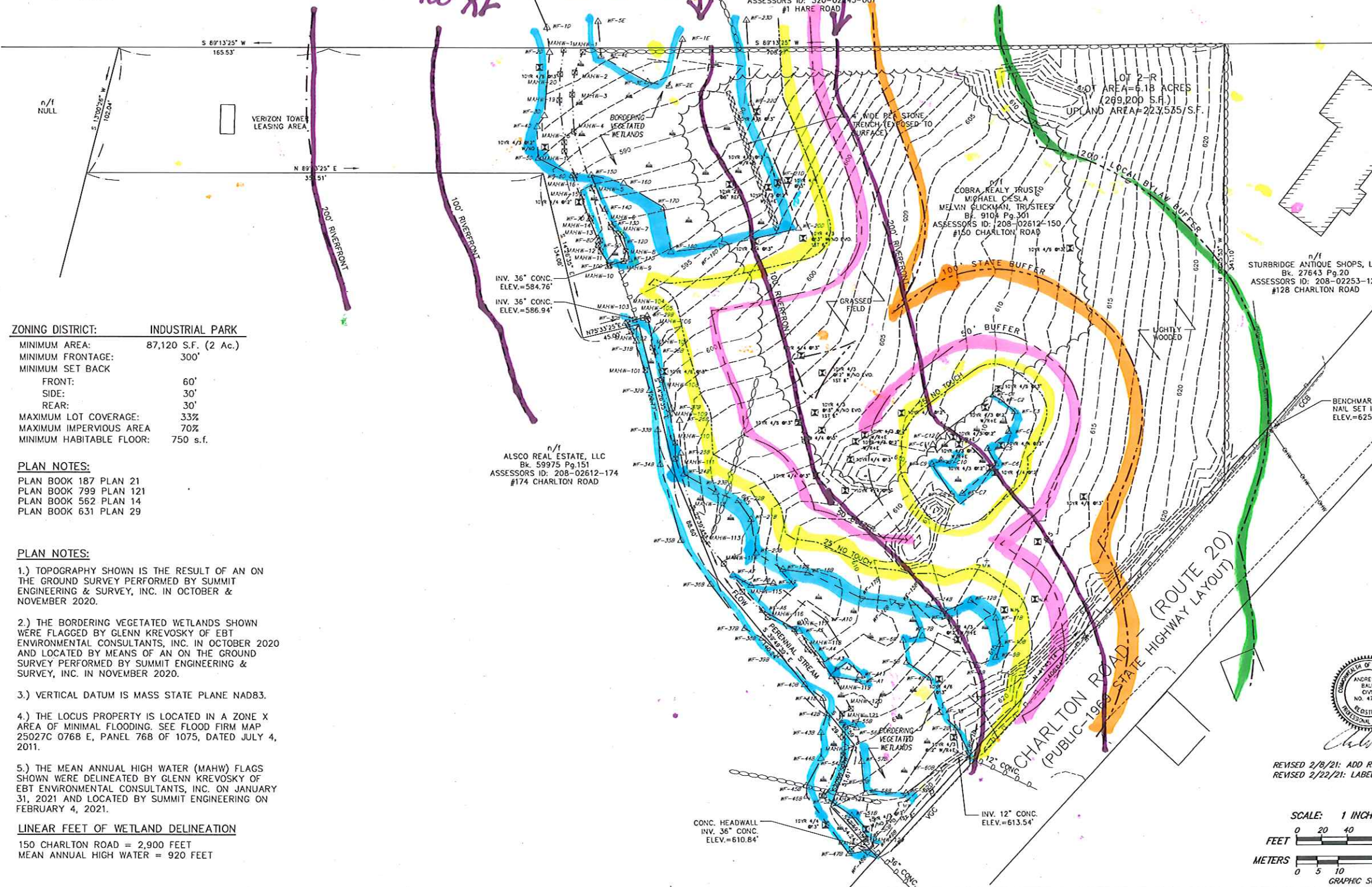
150 Charlton Road updated plans for 3/2 Meeting



LOCUS MAP
1"=2000'



LOCUS MAP
SCALE: 1"=1000'



- - wetlands
- - 25' No disturb
- - 50' buffer
- - 100' buffer
- - 200' local

ZONING DISTRICT: INDUSTRIAL PARK

MINIMUM AREA:	87,120 S.F. (2 Ac.)
MINIMUM FRONTAGE:	300'
MINIMUM SET BACK:	
FRONT:	60'
SIDE:	30'
REAR:	30'
MAXIMUM LOT COVERAGE:	33%
MAXIMUM IMPERVIOUS AREA:	70%
MINIMUM HABITABLE FLOOR:	750 s.f.

PLAN NOTES:

- PLAN BOOK 187 PLAN 21
- PLAN BOOK 799 PLAN 121
- PLAN BOOK 562 PLAN 14
- PLAN BOOK 631 PLAN 29

PLAN NOTES:

- 1.) TOPOGRAPHY SHOWN IS THE RESULT OF AN ON THE GROUND SURVEY PERFORMED BY SUMMIT ENGINEERING & SURVEY, INC. IN OCTOBER & NOVEMBER 2020.
- 2.) THE BORDERING VEGETATED WETLANDS SHOWN WERE FLAGGED BY GLENN KREVOSKY OF EBT ENVIRONMENTAL CONSULTANTS, INC. IN OCTOBER 2020 AND LOCATED BY MEANS OF AN ON THE GROUND SURVEY PERFORMED BY SUMMIT ENGINEERING & SURVEY, INC. IN NOVEMBER 2020.
- 3.) VERTICAL DATUM IS MASS STATE PLANE NAD83.
- 4.) THE LOCUS PROPERTY IS LOCATED IN A ZONE X AREA OF MINIMAL FLOODING. SEE FLOOD FIRM MAP 25027C 0768 E, PANEL 768 OF 1075, DATED JULY 4, 2011.
- 5.) THE MEAN ANNUAL HIGH WATER (MAHW) FLAGS SHOWN WERE DELINEATED BY GLENN KREVOSKY OF EBT ENVIRONMENTAL CONSULTANTS, INC. ON JANUARY 31, 2021 AND LOCATED BY SUMMIT ENGINEERING ON FEBRUARY 4, 2021.

LINEAR FEET OF WETLAND DELINEATION

150 CHARLTON ROAD = 2,900 FEET
MEAN ANNUAL HIGH WATER = 920 FEET

OWNERS:
OWNER #1
COBRA REALTY TRUST
MICHAEL CIESLA & MELVIN GLICKMAN
14 HARVARD STREET
WORCESTER, MA
DEED BOOK 9104 PG. 301
ASSESSORS PARCEL ID: 208-02612-150

ABBREVIATED NOTICE OF RESOURCE AREA DELINEATION (A.N.R.A.D.)

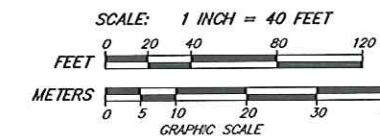
150 Charlton Road (Route 20)
Sturbridge, Massachusetts
PREPARED FOR
Cobra Realty Trust
14 Harvard Street
Worcester, MA

SCALE: 1" = 40' DATE: NOVEMBER 17, 2020
PREPARED BY
SUMMIT ENGINEERING & LAND SURVEY INC.
710 MAIN STREET, NORTH OXFORD, MA 01537
TEL. 508-987-8713

DWG: 19-288 Charlton St ANRAD.dwg
JOB NO. 19-288 SHEET 1 OF 1



REVISED 2/8/21: ADD RIVERFRONT DELINEATION
REVISED 2/22/21: LABEL RIVERFRONT





Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 8A – Request for Certificate of Compliance
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

300-0665
 Provided by DEP

A. Project Information

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

1. This request is being made by:

Cobra Realty Trust
 Name
PO Box 2917
 Mailing Address
Worcester MA 01613
 City/Town State Zip Code
(508) 347-3455
 Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

William Babineau - Villarge Automotive
 Applicant
10/3/2005 300-0665
 Dated DEP File Number

3. The project site is located at:

150 Charlton Road Sturbridge
 Street Address City/Town
Parcel ID: 208-02612-150
 Assessors Map/Plat Number Parcel/Lot Number

4. The final Order of Conditions was recorded at the Registry of Deeds for:

Cobra Realty Trust
 Property Owner (if different)
Worcester 37645 316
 County Book Page
 Certificate (if registered land)

5. This request is for certification that (check one):

- the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.
 the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).

- the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.



WPA Form 8A – Request for Certificate of Compliance

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

Yes

If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see <http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html>).

January 21, 2021

Sturbridge Conservation Commission
308 Main St
Sturbridge, MA 01566

**Re: Status of MCP Response Actions at
149 & 150 Charlton Road, Sturbridge MA
Release Tracking Number (RTN) 2-0434 et al.
MA DEP Wetlands File #300-0665
CMG ID 2003-036**

Dear Commissioners:

CMG Environmental, Inc. (CMG) herewith provides a summary of the current status of response actions at the above properties relative to MGL c.21E and the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000). We performed a review of documents submitted to the Department of Environmental Protection (DEP) for the above properties, and intend this summary to support a request for a Certificate of Compliance for DEP wetlands file #300-0665 at 150 Charlton Road.

BACKGROUND

The 149 Charlton Road parcel is currently an operating Stop & Shop-branded gasoline filling station that began operations circa 2012-2013. That location was the source area of a gasoline release to the subsurface from a former underground storage tank (UST) system in place when Village Automotive operated at the property. Village Automotive operated a gasoline filling station and mechanical repair business at the time of gasoline release discovery in 1988.

DEP assigned RTN 2-0434 under the pre-1993 MCP following discovery of a release of petroleum to groundwater identified during an environmental assessment in 1988. In July 1998 a geotechnical boring contractor identified evidence of petroleum in soil beneath Charlton Road (U.S. Route 20) north of 149 Charlton Road. DEP issued RTN 2-12301 to identify that release, which the Potentially Responsible Party (PRP) for RTN 2-0434 (Village Automotive) later linked to RTN 2-0434. CMG notes linking an RTN to a previously-issued one closes the newer RTN and requires all response actions for it be performed under the original RTN (2-0434 in this case).

In September 1998 contractors identified another release of petroleum constituents to soil along Route 20 during a water line replacement. DEP issued RTN 2-12420 for this release, which Village Automotive also linked to RTN 2-0434. In December 1998 Village Automotive replaced petroleum USTs at the property and identified a 72-hour reporting condition due to elevated total organic vapors in soil near a UST, and DEP issued RTN 2-12570 to identify that release. Village Automotive also linked this to RTN 2-0434.

In January 1999, Village Automotive's consultants identified elevated concentrations of petroleum, lead, and polychlorinated biphenyls (PCBs) during soil stockpiling activities. DEP issued RTN 2-12615 to that release, which Village Automotive closed in January 2000 via Class A-2 Response Action Outcome (RAO) submittal. A Class A-2 RAO was the term for a 'disposal site' achieving a permanent solution (i.e., no additional actions necessary) with contamination remaining but which poses a condition of 'no significant risk' to health, safety, public welfare, and the environment. In 2014 DEP revised the MCP, and the current term for such a case is 'Permanent Solution' (with no conditions).

During the course of assessment activities for RTN 2-0434 in the early 2000s, Village Automotive consultants identified the former gasoline additive methyl tertiary butyl ether (MTBE) and other gasoline constituents in soil and groundwater at 150 Charlton Road. This parcel is located north of 149 Charlton Road (across Route 20), and is hydraulically downgradient from that property (i.e., groundwater flows generally from the gas station northward beneath Route 20 onto 150 Charlton Road).

In 2005 DEP and Sturbridge Conservation Commission issued an Order of Conditions for file #300-0665 to allow installation of injection wells within wetland areas at 150 Charlton Road. The goal of this installation was to allow addition of remedial additives to degrade gasoline constituents present within soil and groundwater at that parcel.

Master RTN 2-0434 (and its linked RTNs 2-12301, 2-12420 & 2-12570) achieved a condition of 'no significant risk' in 2008 following earlier remedial soil excavation, in-situ chemical oxidation at both 149 & 150 Charlton Road, and years of natural attenuation processes. Environmental Compliance Services (ECS) of Agawam, Massachusetts prepared a Class A-2 RAO for RTN 2-0434, which Village Automotive submitted to DEP on June 24, 2008.

DEP subsequently issued three additional RTNs at 149 Charlton Road in 2012: 2-18586 (May), 2-18672 (August), and 2-18765 (December). RTN 2-18586 was a 30-gallon gasoline release from a tanker truck that achieved a Class A-2 RAO in July 2012. The PRP for 2-18586 (Bee-Zee Gas, who operated the gasoline station between Village Automotive's tenure and its current Stop & Shop operation) retracted that RTN in January 2013 after additional investigation resulted in a determination that it did not constitute a reportable release.

The issuance of RTN 2-18672 was for a failed tightness test on a gasoline supply line (i.e., a "threat of release"). Subsequent investigation confirmed a release of gasoline to the environment, for which Tetra Tech, Inc. supervised response actions that culminated in submittal of a Class A-2 RAO on June 7, 2013.

Vanasse Hangen Brustlin, Inc. submitted a Release Abatement Measure (RAM) Plan on behalf of Stop & Shop during fall 2012 following several years of environmental due diligence investigation related to Stop & Shop's purchase of 149 Charlton Road. They performed the RAM under RTN 2-0434 following discussions with DEP staff (since 2-0434 achieved a Class A-2 RAO in 2008). Their goal was to allow management of potentially contaminated soil and groundwater during redevelopment of the fueling station (e.g., installation of new USTs and dispensers). They closed this RAM in May 2013.

In July 2019 the Sturbridge Fire Department responded to a release of approximately 25 gallons of gasoline from a customer's car, which they reported to DEP as an overfill. DEP assigned RTN


2-20943 to identify that release. Subsequent investigation by NRC East Environmental determined this volume was likely due to damage to the vehicle's fuel tank after striking roadway debris rather than an actual overfill. Personnel at the filling station, the Sturbridge Fire Department, and NRC applied sorbents to contain the release. NRC personnel removed product from a nearby catch basin along with the damaged vehicle fuel tank. Weather conditions at the time were dry, and no discharge of water via the catch basin's outfall occurred (thus no gasoline migrated off-Site). Stop & Shop assumed responsibility for 2-20943 and subsequently submitted a Permanent Solution for it on August 19, 2019. CMG did not identify any other releases of oil and/or hazardous material at either 149 Charlton Road or 150 Charlton Road since issuance of RTN 2-20943 (nor any prior to that which are not already discussed herein).

SUMMARY

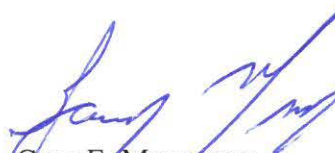
CMG concludes that all response actions for the former Village Automotive/former Bee-Zee Gas/current Stop & Shop gasoline filling station at 149 Charlton Road are complete. Absent any future releases that result in contaminant migration or discharge to 150 Charlton Road, the activities that required issuance of an Order of Conditions on that property occurred under original RTN 2-0434 and have been complete since 2008. CMG recommends closure of wetlands file #300-0665 for 150 Charlton Road.

Please call us at 774-241-0901 if you have questions or if CMG can be of any further assistance to you.

Sincerely,
CMG ENVIRONMENTAL, INC.



C. Ryan Goad
Hydrogeologist



Gary E. Magnuson
Principal

cc: Mr. Glenn Krevosky, EBT Environmental Consultants, Inc.
Mr. Daniel Prouty, Cobra Realty Trust

2003-036\MCP Status of 149 & 150 Charlton Road.doc

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And Town of Sturbridge Wetland Bylaw and Regulations

DEP File Number:

300-665

**C. General Conditions Under Massachusetts Wetlands Protection Act
Continued**

Special Conditions: All Special Conditions are based on the Notice of Intent application and the public hearing process. All work shall be done in accordance with this Order and with the final plans submitted and approved by the Commission, unless otherwise noted in this Order.

30. All Contracted Parties, property owners, applicants and whoever has an interest in this project **MUST** have a copy of this Order of Conditions and all approved documents and attachments listed herein. All Contracted parties must read and understand all documents included in this Order of Conditions. The project must be done in accordance to all approved documents and plans listed.

31. **PRELIMINARY MEETING:** Prior to the start of ANY WORK, all contracted parties **MUST** set up a meeting with the Conservation Commission Agent. The purpose of the preliminary meeting is to review the approved remediation work. This meeting may take place in the field such that the best (minimal disturbance) access route and well locations are selected and agreed upon.

32. This project includes **FULL RESTORATION** of the area disturbed through the site remediation. Site Restoration specifics are to be determined at the Closure Meeting (See Conditions 33). A Restoration Bond is set in place. The Restoration Bond is to be valid for the LIFE of this permit, including Extensions and Amendments. To assist in the restoration plan, ECS, Inc. is to take inventory of all trees >6-inch DBH **PRIOR** to removal and installation of the injection wells—this inventory is to be on file with the Commission.

33. **CLOSURE MEETING:** Within one month of site remediation completion, the applicant is to set up a meeting with the Conservation Commission to establish the Restoration Plan of the area. Additionally, the Conservation Commission will determine how the site will remain, will the wells be abandoned in place or removed—whichever results in less wetland disturbance.

34. ECS, Inc. (or any other contracted Environmental Firm) shall submit a schedule of work to the Conservation Commission including but not limited to: clearing of vegetation, well installation, commencement of injections, monthly injections timeline, etc. This schedule shall include all work for the duration of the remediation and restoration. All amendments/changes to the schedule shall be submitted to the Commission.

35. The Applicant must take Stream Samples in the flow path of the Ground Water and report the results to the Conservation Commission. Measured parameters to include MBTE and specific conductivity. A Baseline Sample is to be taken prior to the installation of the injection wells, and twice per year of site remediation (Spring and Fall).

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Furthermore, the STURBRIDGE Conservation Commission hereby finds (check one that applies):

2. that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw specifically:

a. Municipal Ordinance or Bylaw

b. Citation

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

3. that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

Town of Sturbridge Wetlands Bylaw

Section 3.50

a. Municipal Ordinance or Bylaw

b. Citation

The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

See Conditions 30 through 35.

W

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

STURBRIDGE
I-90 AT CEDAR LAKE - LONG TERM REPAIRS

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	7
PROJECT FILE NO.		609481	

TITLE SHEET & INDEX

RESURFACING AND STORMWATER IMPROVEMENTS

INTERSTATE 90

IN THE TOWN OF

STURBRIDGE

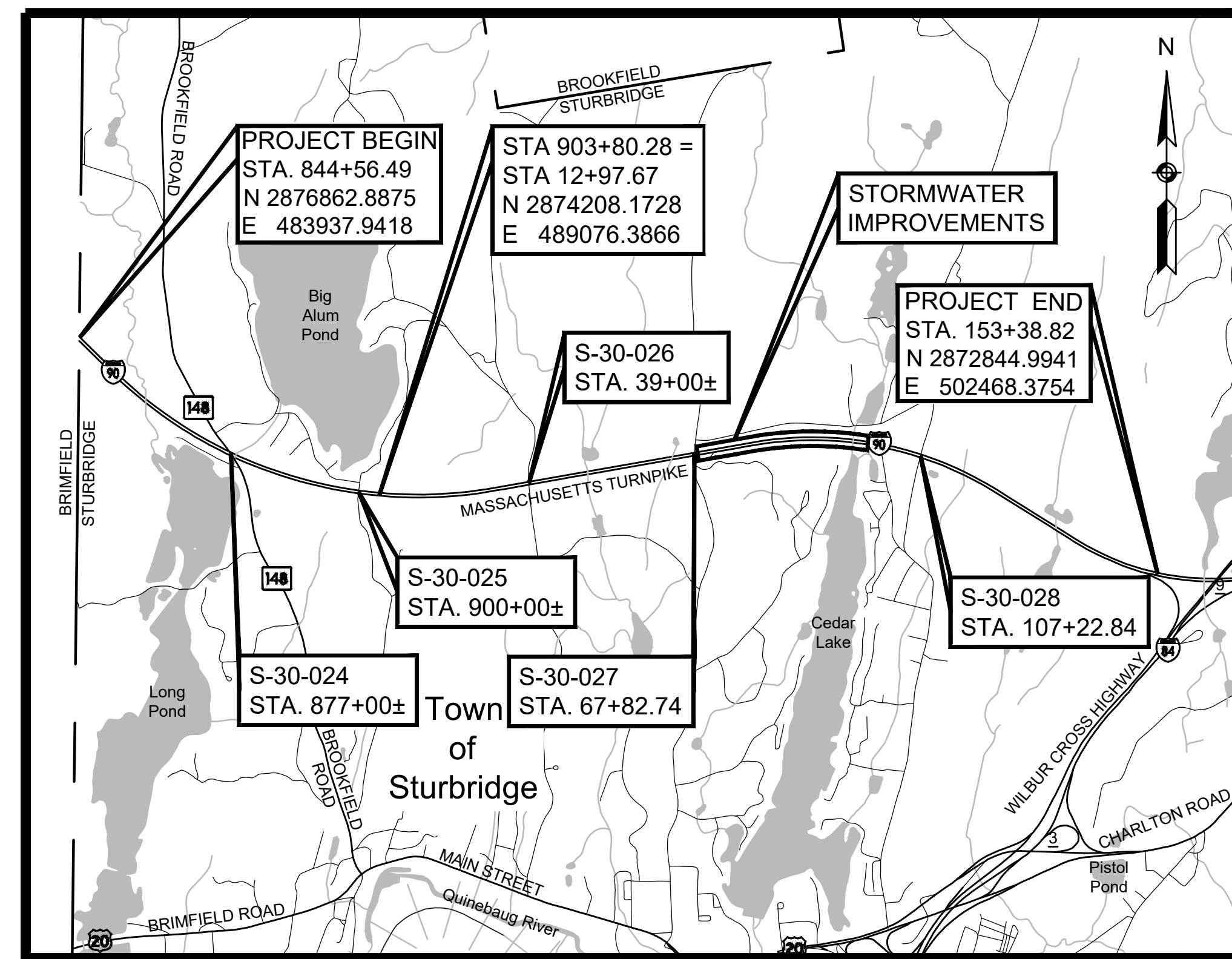
WORCESTER COUNTY

THE MASSACHUSETTS HIGHWAY DEPARTMENT 2020 STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, WILL GOVERN.

INDEX

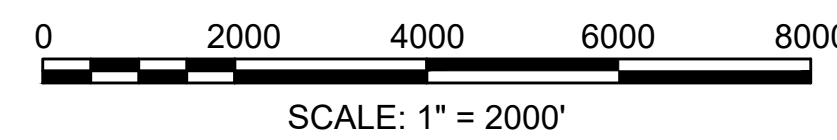
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1	TITLE SHEET & INDEX
2	KEY PLAN
3	AREAS 1, 2 & 6
4	AREA 3 & SECTIONS
4a	AREA 5 & SECTION
5	AREA 4 & CONSTRUCTION DETAILS
6-6a	PIPE PROFILES
7	TRAFFIC MANAGEMENT DETAILS

1



DESIGN DESIGNATION (INTERSTATE 90)

DESIGN SPEED	70 MPH
ADT (2018)	48,477
K	10%
D	51%
FUNCTIONAL CLASSIFICATION	INTERSTATE



LENGTH OF PROJECT = 19,964.94 FEET = 3.781 MILES

DATE	DESCRIPTION	REV #
2/18/2021	ADDED AREAS 5, 6 & PROP. ROCK SWALE	REV 1

BSC GROUP
803 Summer Street
Boston, Massachusetts 02127
www.bscgroup.com 617 896 4300

PLAN SHEET RESPONSIBILITY: 1-7 ONLY

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED:

DIVISION ADMINISTRATOR DATE

massDOT
Massachusetts Department of Transportation
Highway Division

RECOMMENDED FOR APPROVAL

CHIEF ENGINEER DATE

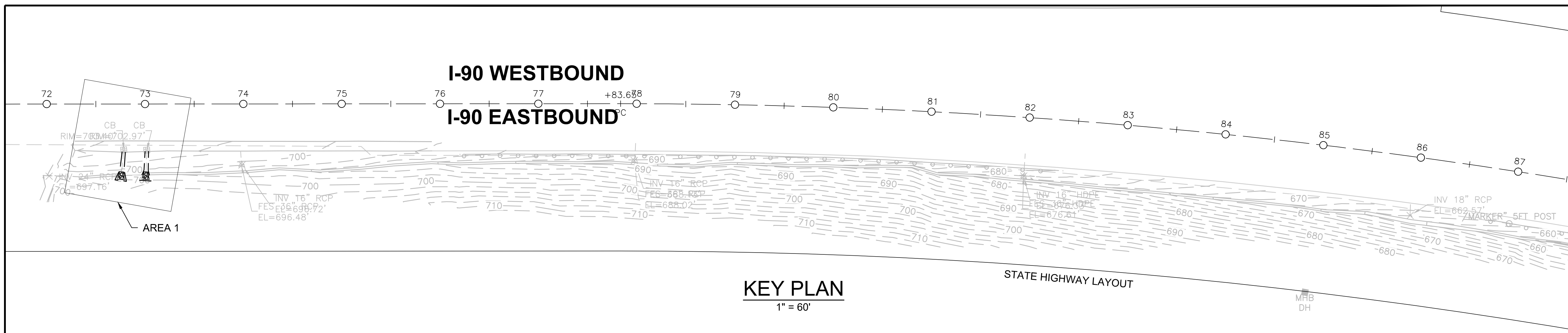
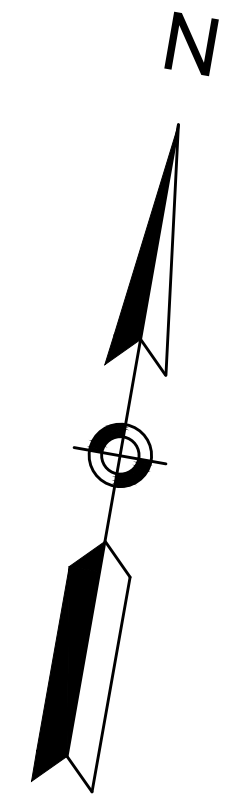
APPROVED

HIGHWAY ADMINISTRATOR DATE

STURBRIDGE
I-90 AT CEDAR LAKE - LONG TERM REPAIRS

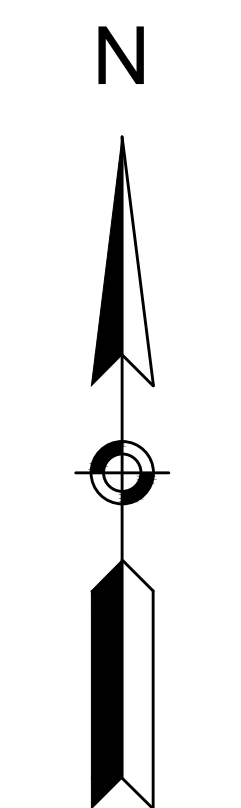
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PROJECT FILE NO.		609481	

KEY PLAN

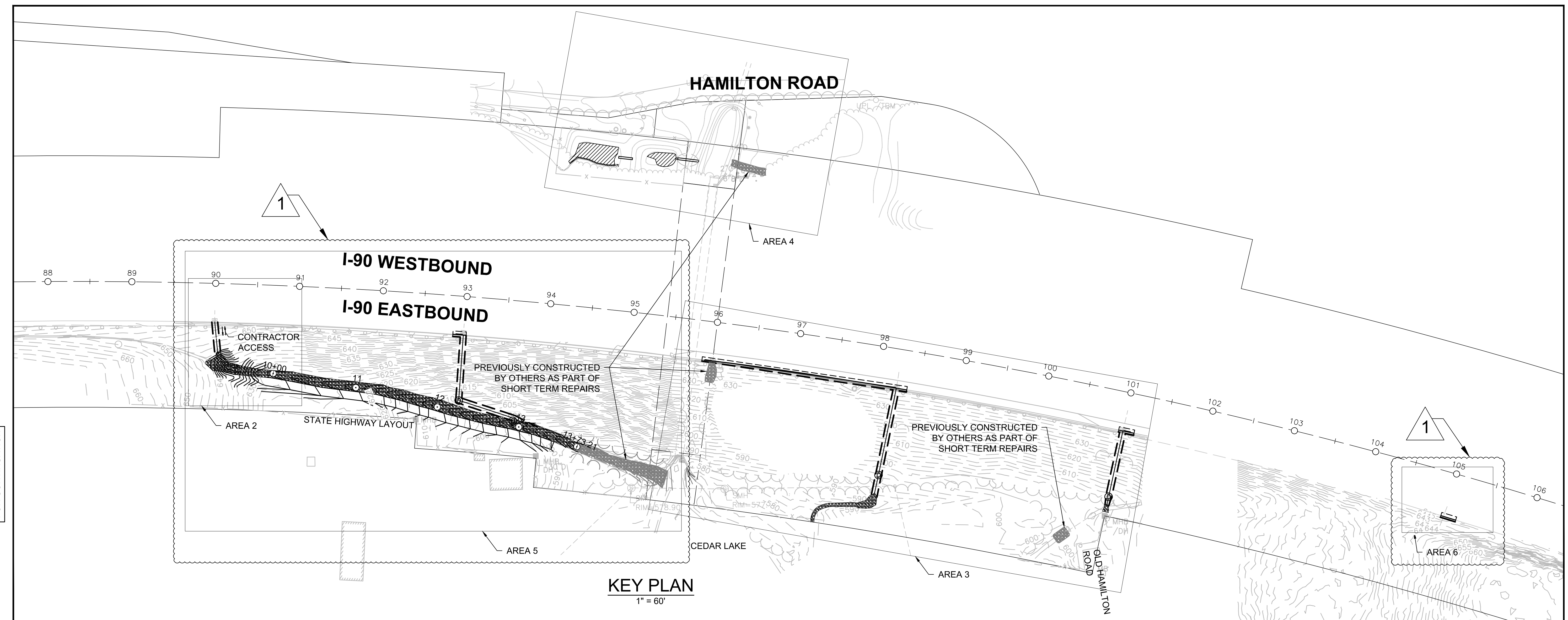


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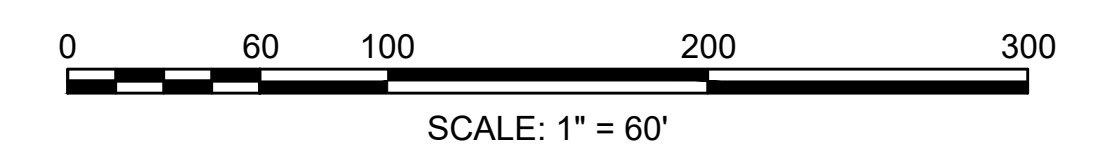
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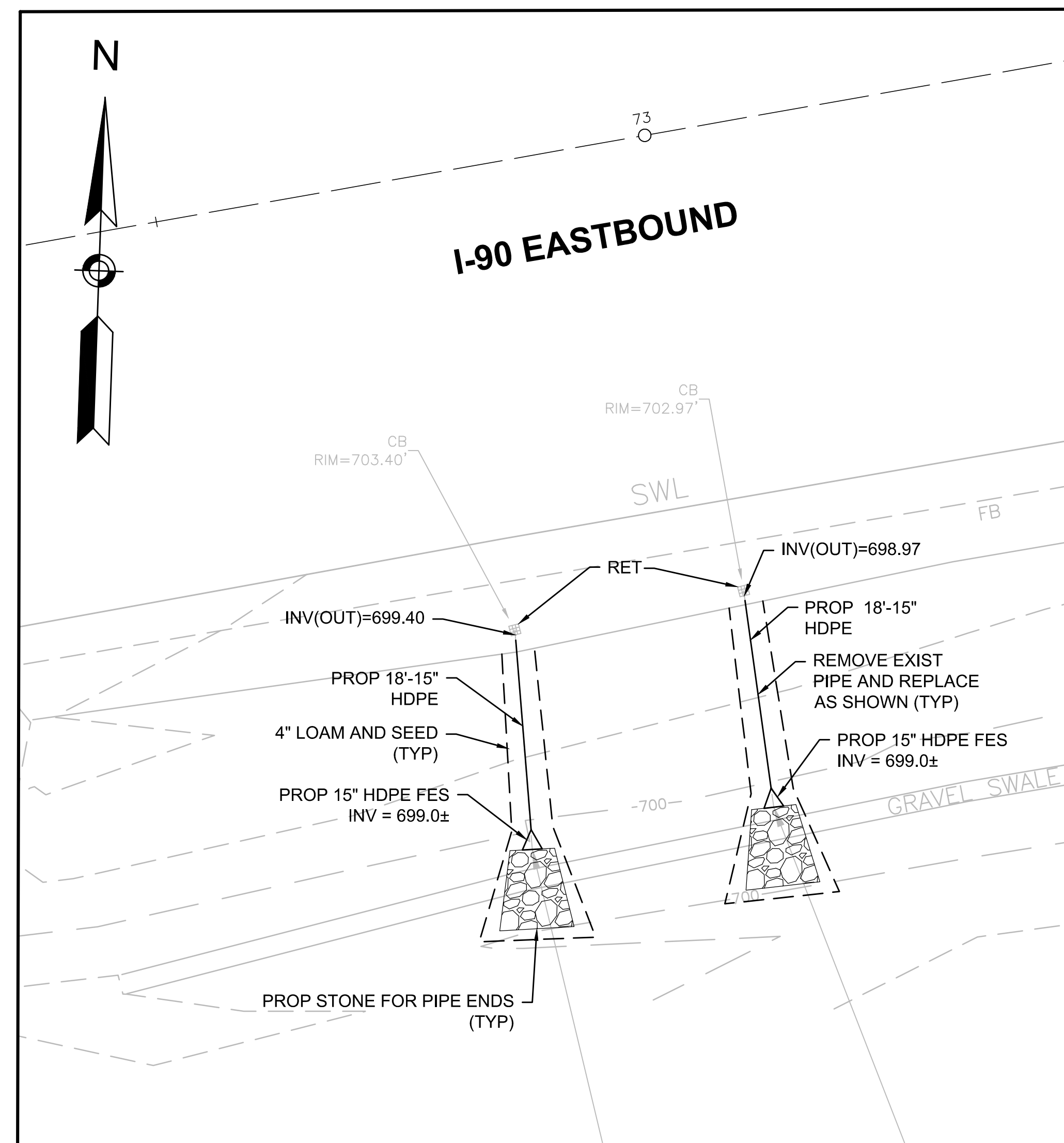
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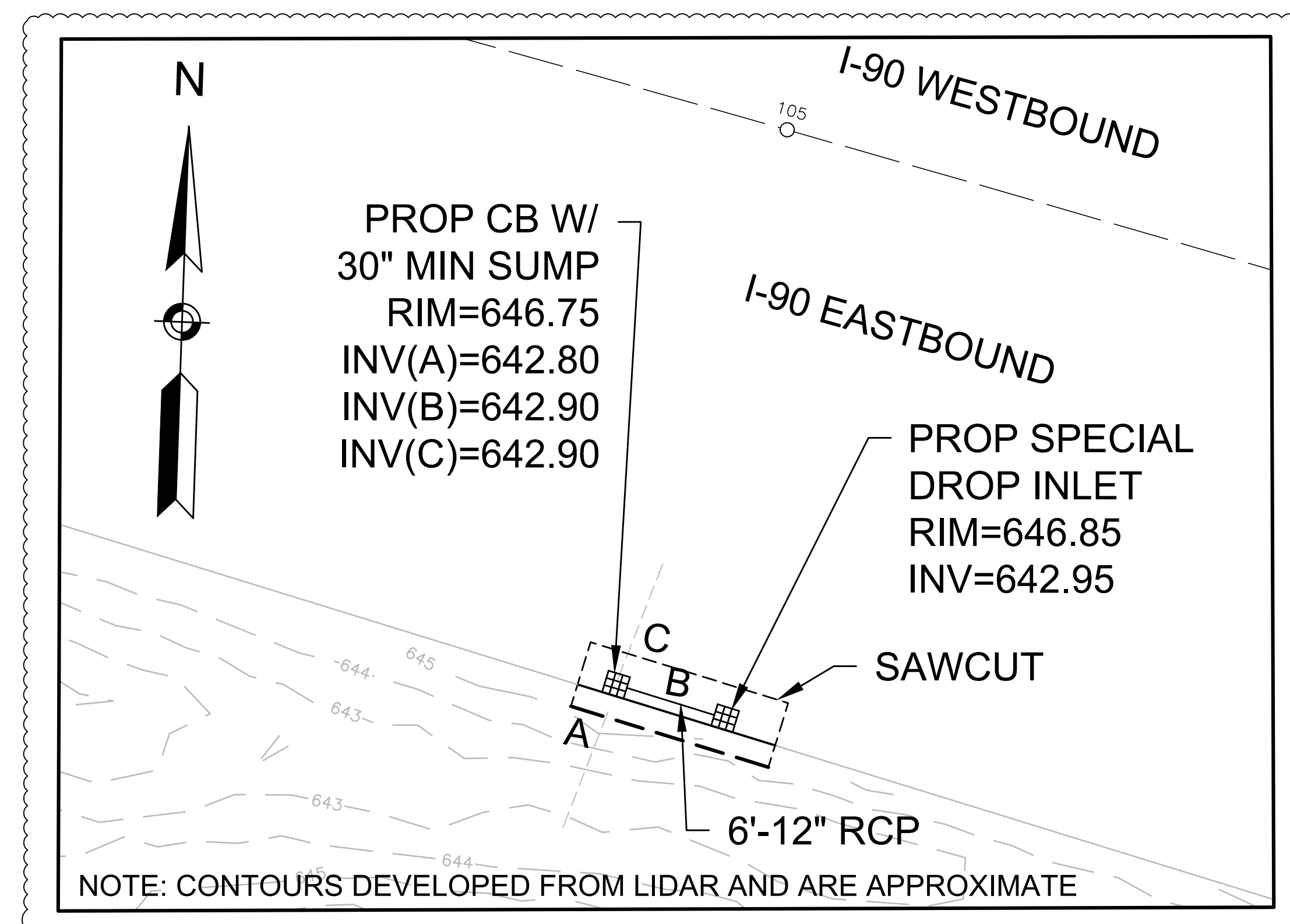
STURBRIDGE
I-90 AT CEDAR LAKE - LONG TERM REPAIRS

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PROJECT FILE NO.		609481	

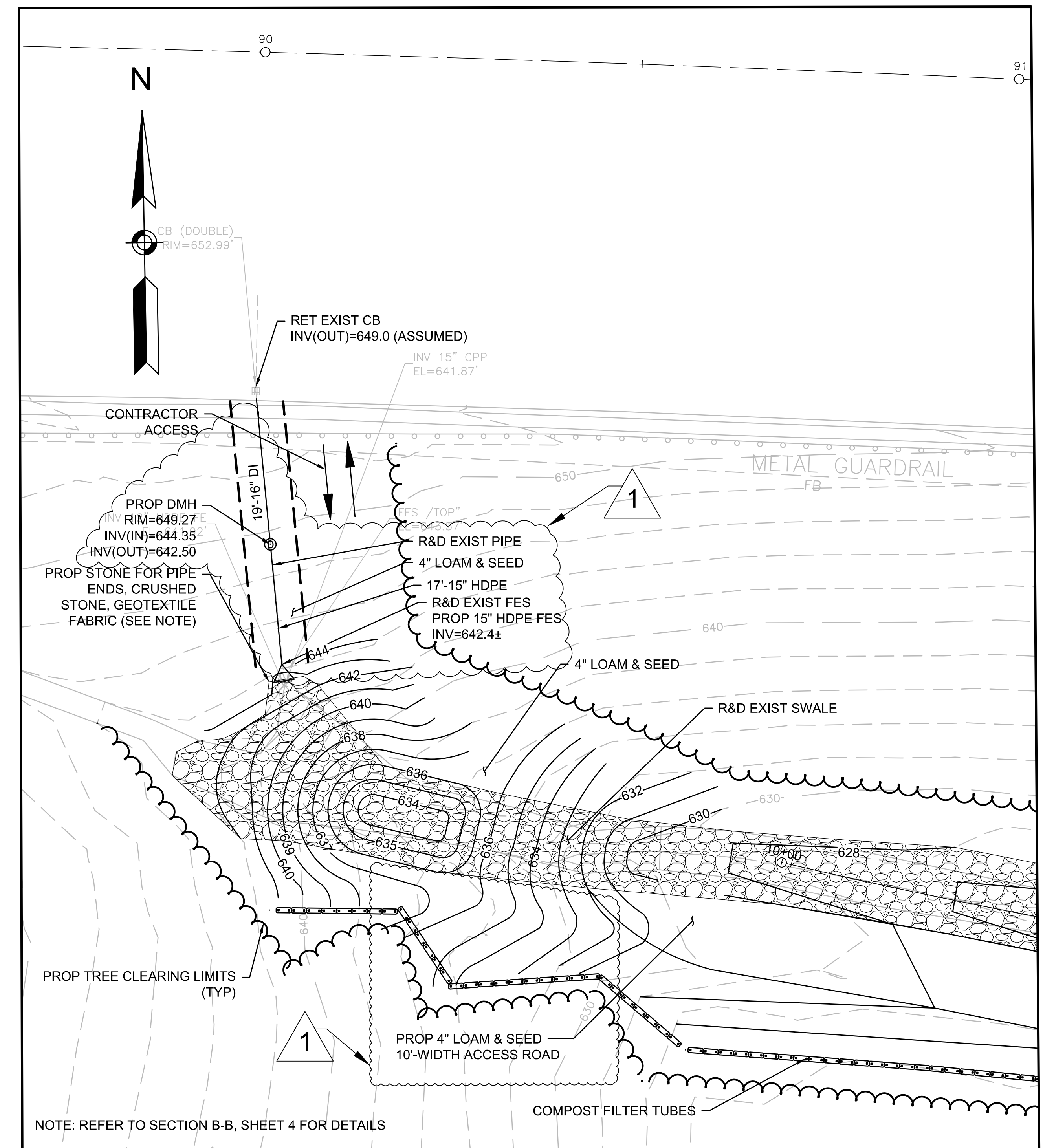
AREAS 1, 2 & 6



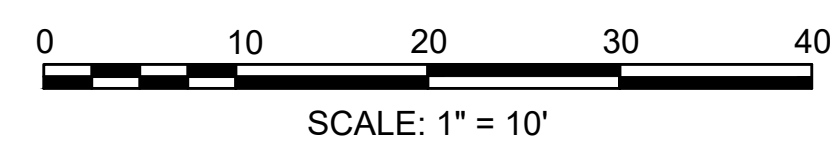
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AREA 6
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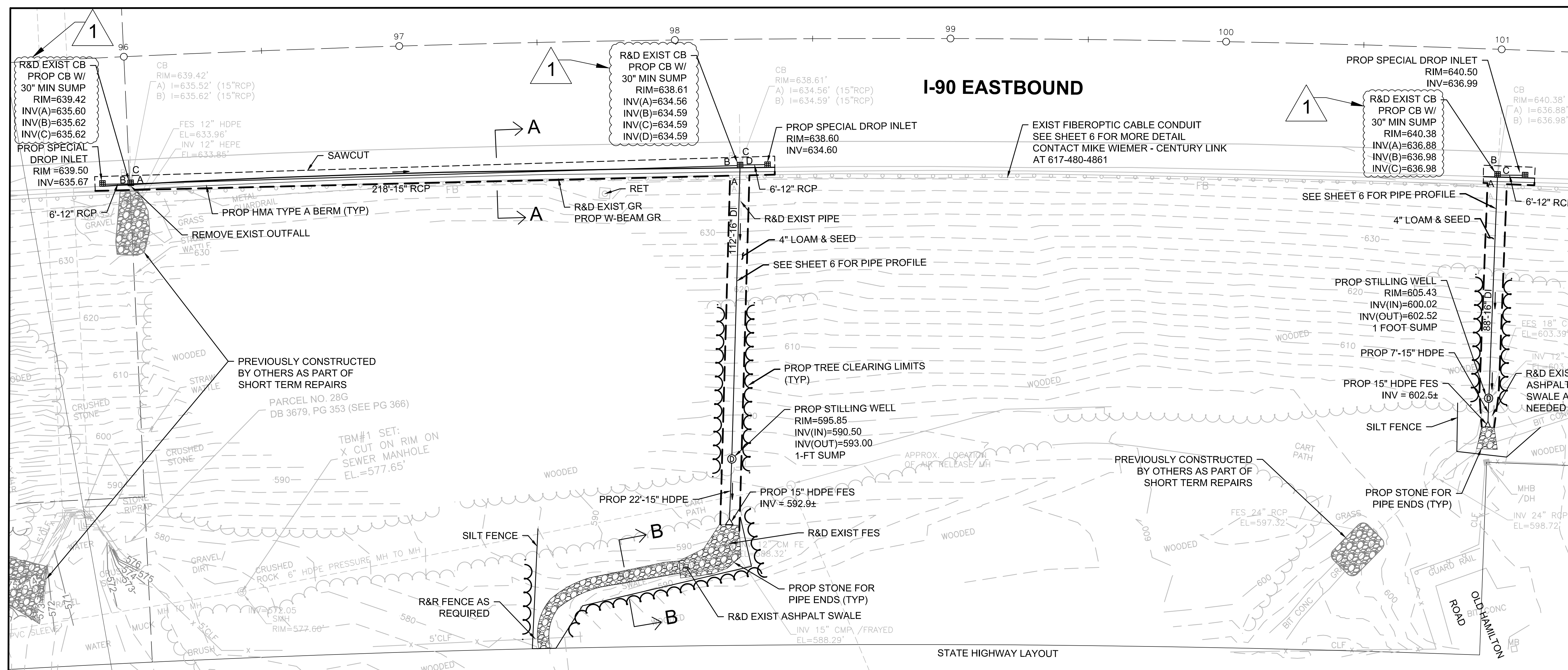
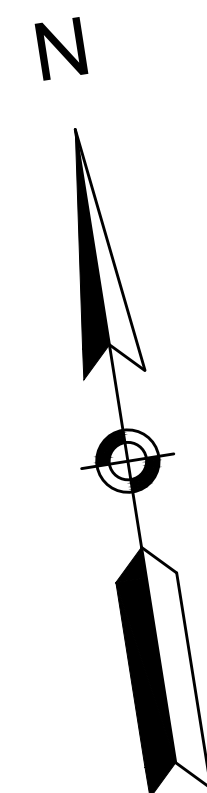
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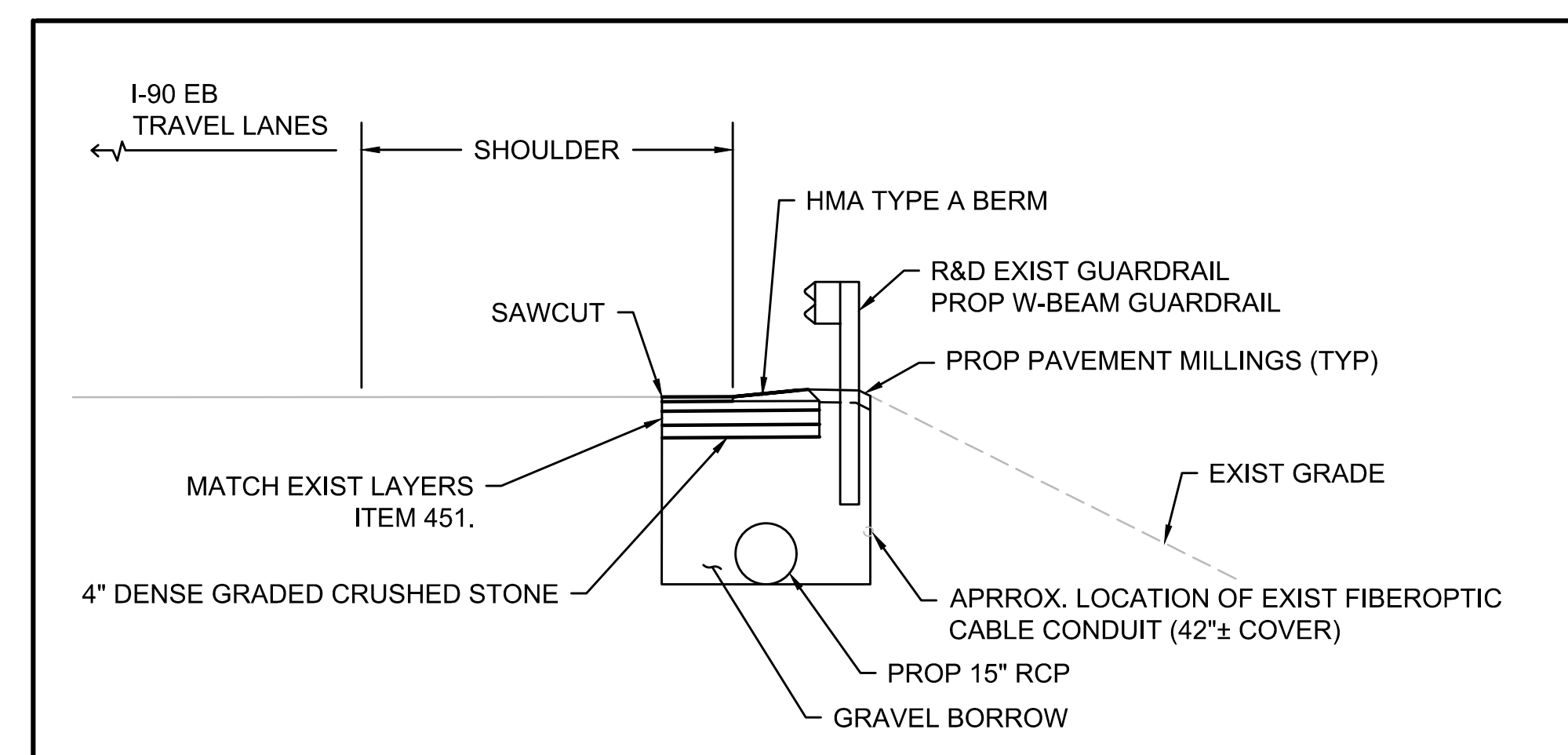
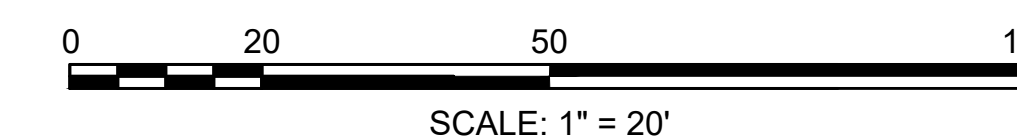
STURBRIDGE
I-90 AT CEDAR LAKE - LONG TERM REPAIRS

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PROJECT FILE NO. 609481			

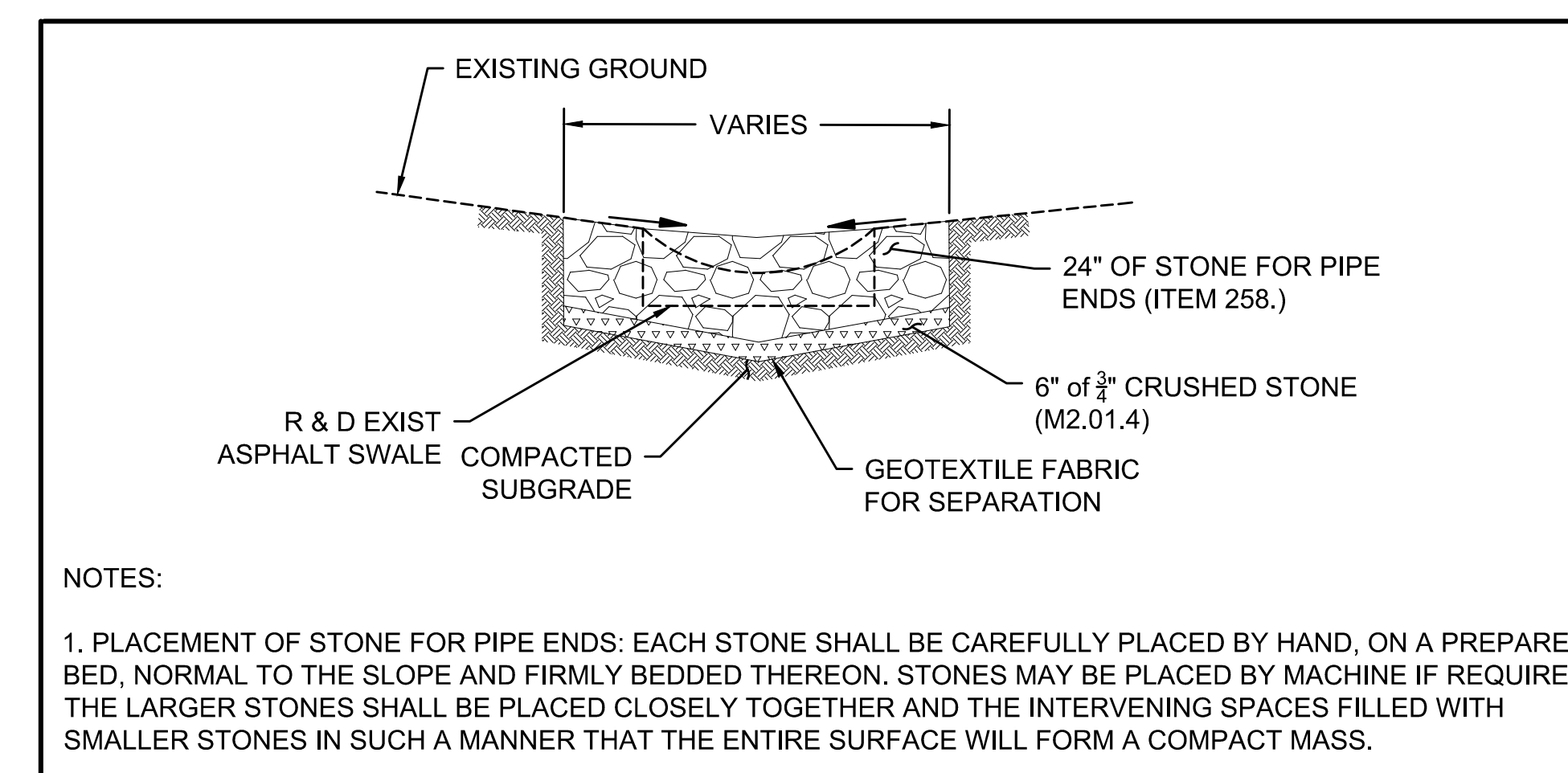
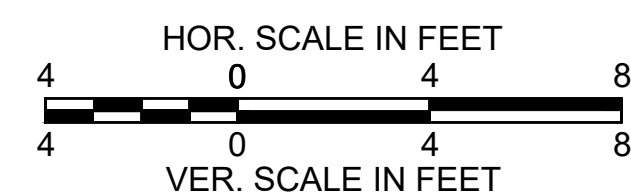
AREA 3 & SECTIONS



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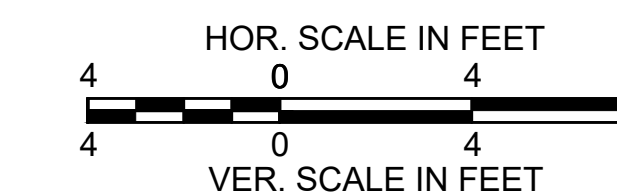
SECTION A-A
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NOTES:

1. PLACEMENT OF STONE FOR PIPE ENDS: EACH STONE SHALL BE CAREFULLY PLACED BY HAND, ON A PREPARED BED, NORMAL TO THE SLOPE AND FIRMLY BEDDED THEREON. STONES MAY BE PLACED BY MACHINE IF REQUIRED. THE LARGER STONES SHALL BE PLACED CLOSELY TOGETHER AND THE INTERVENING SPACES FILLED WITH SMALLER STONES IN SUCH A MANNER THAT THE ENTIRE SURFACE WILL FORM A COMPACT MASS.

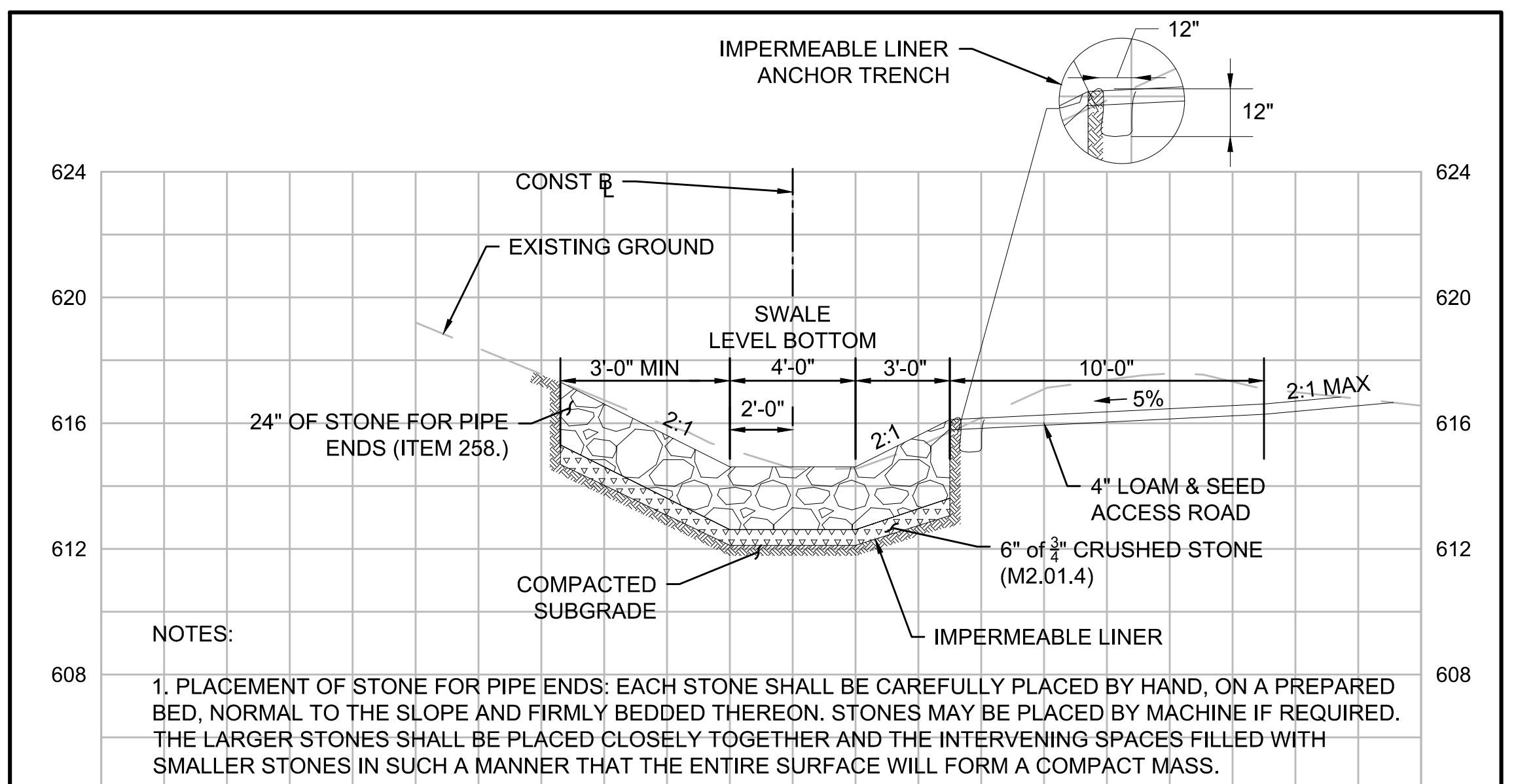
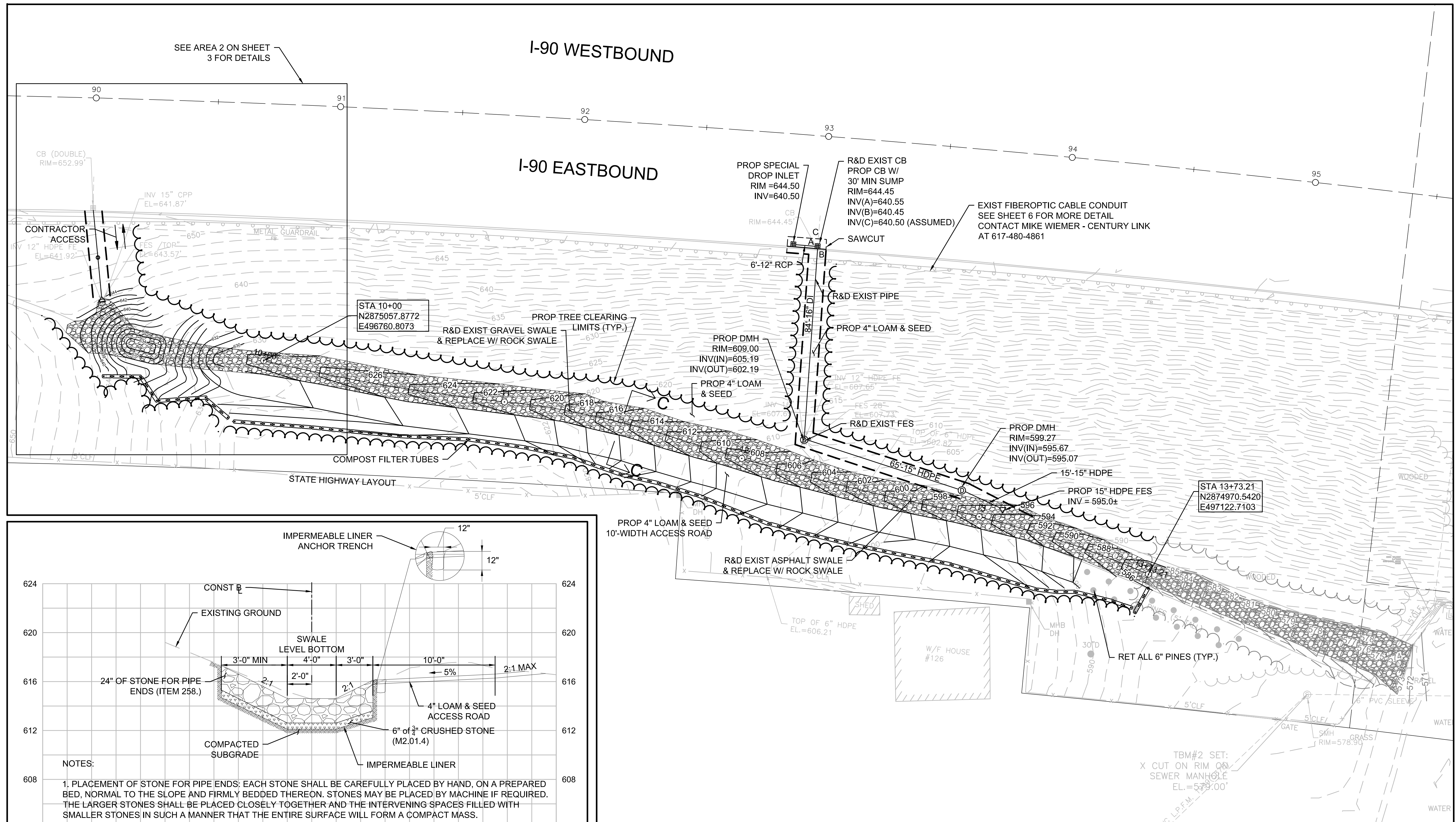
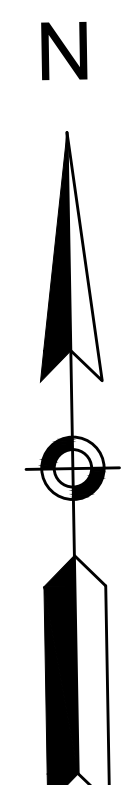
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STURBRIDGE
I-90 AT CEDAR LAKE - LONG TERM REPAIRS

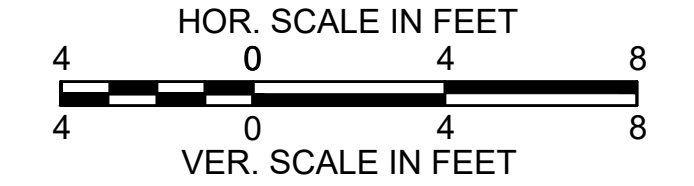
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PROJECT FILE NO. 609481			

AREA 5 & SECTION

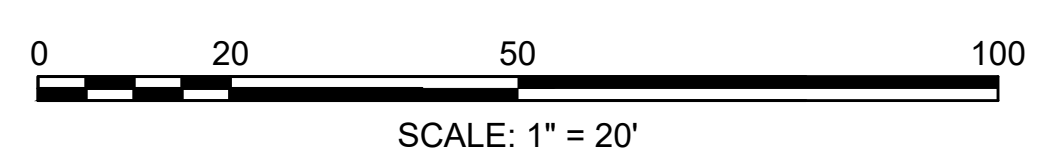


NOTES:
 1. PLACEMENT OF STONE FOR PIPE ENDS: EACH STONE SHALL BE CAREFULLY PLACED BY HAND, ON A PREPARED BED, NORMAL TO THE SLOPE AND FIRMLY BEDDED THEREON. STONES MAY BE PLACED BY MACHINE IF REQUIRED. THE LARGER STONES SHALL BE PLACED CLOSELY TOGETHER AND THE INTERVENING SPACES FILLED WITH SMALLER STONES IN SUCH A MANNER THAT THE ENTIRE SURFACE WILL FORM A COMPACT MASS.

SECTION C-C
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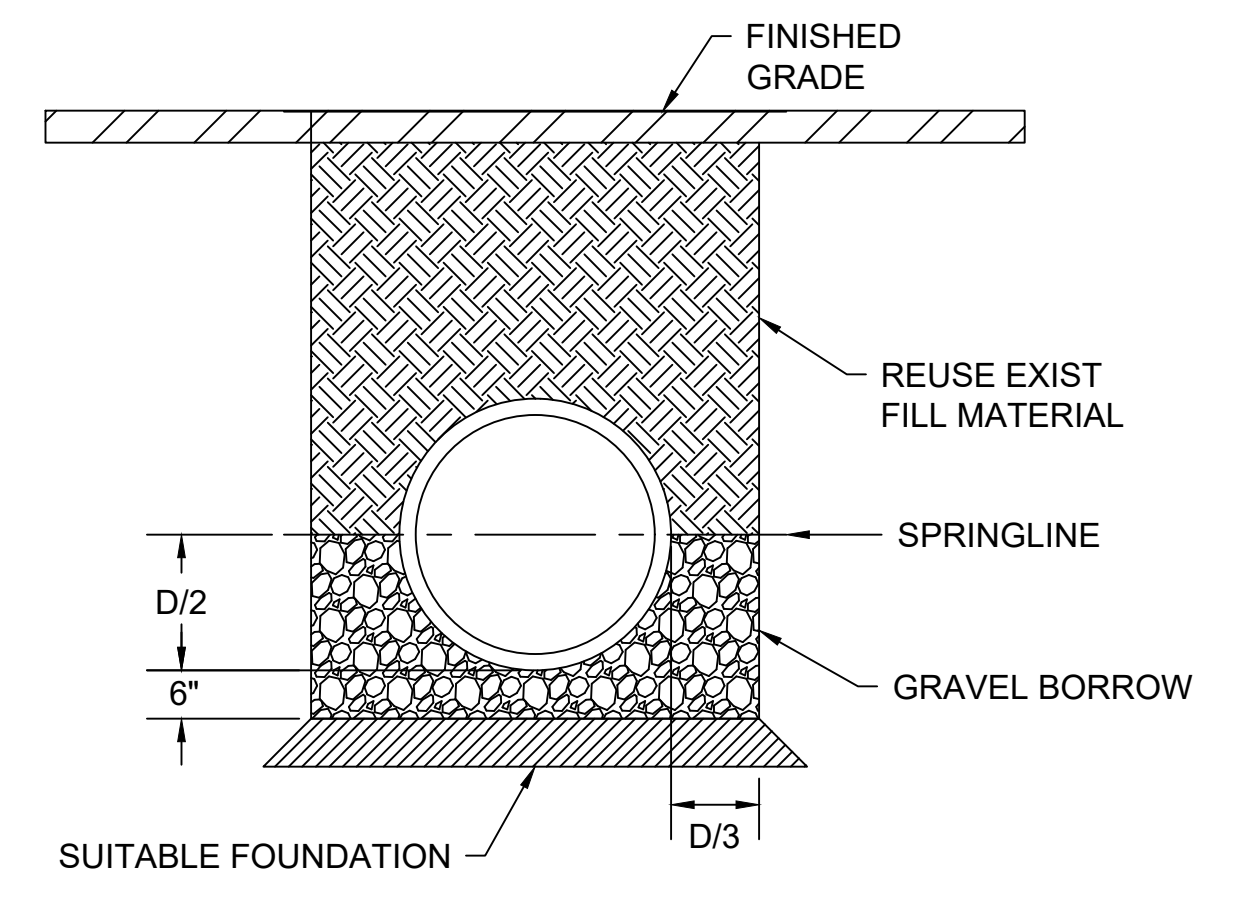
AREA 5



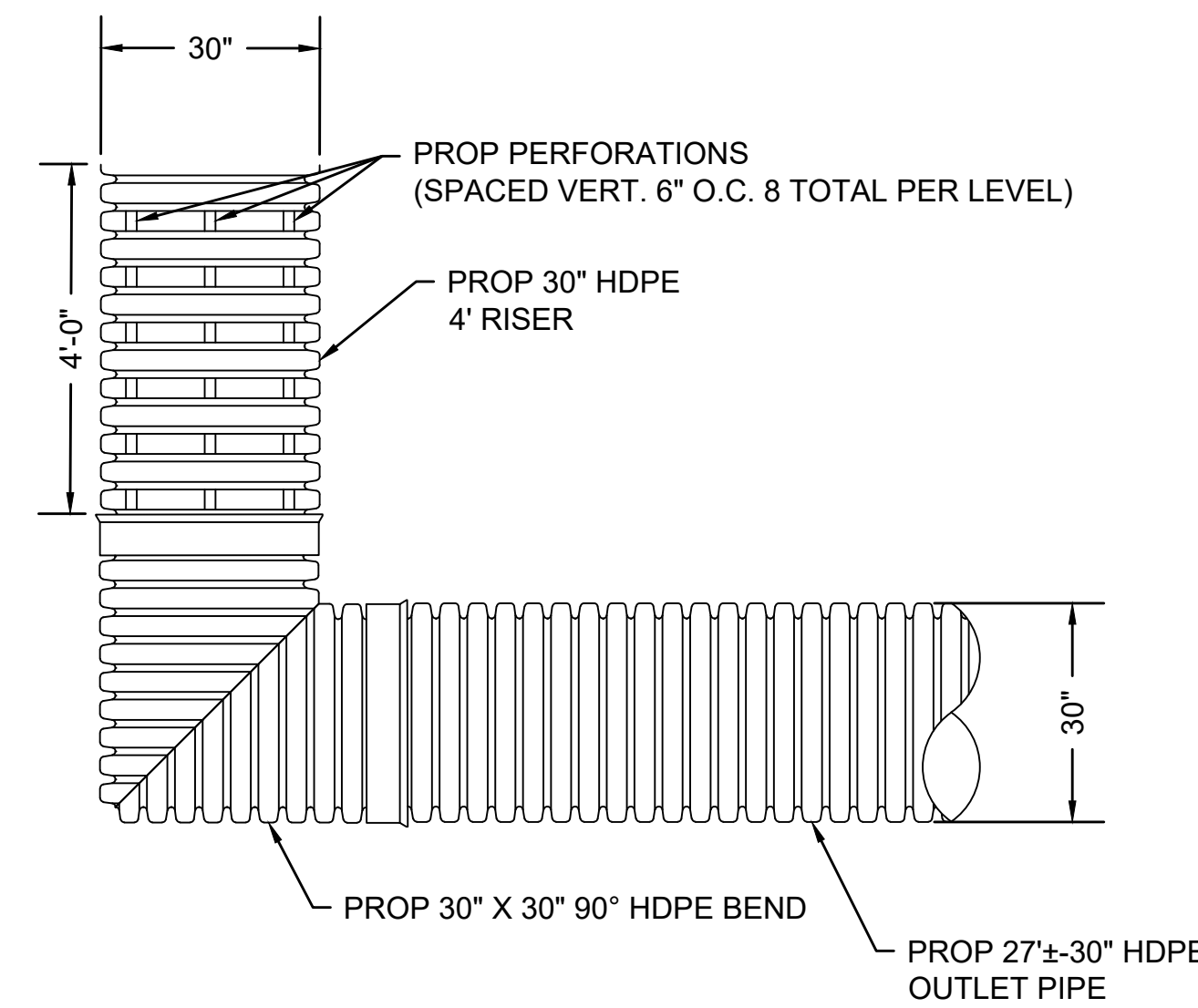
**STURBRIDGE
I-90 AT CEDAR LAKE - LONG TERM REPAIRS**

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PROJECT FILE NO. 609481			

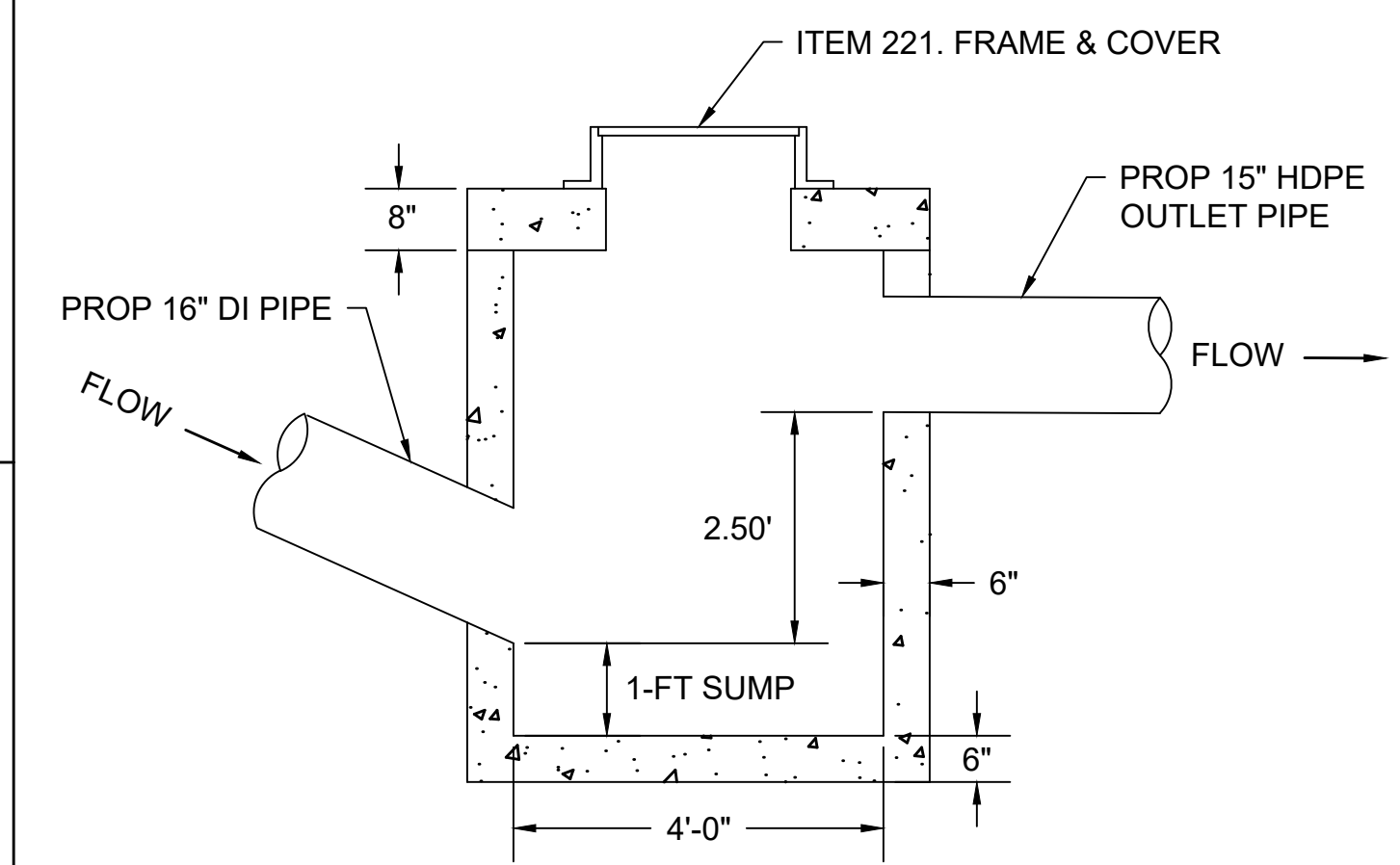
**AREA 4 & CONSTRUCTION
DETAILS**



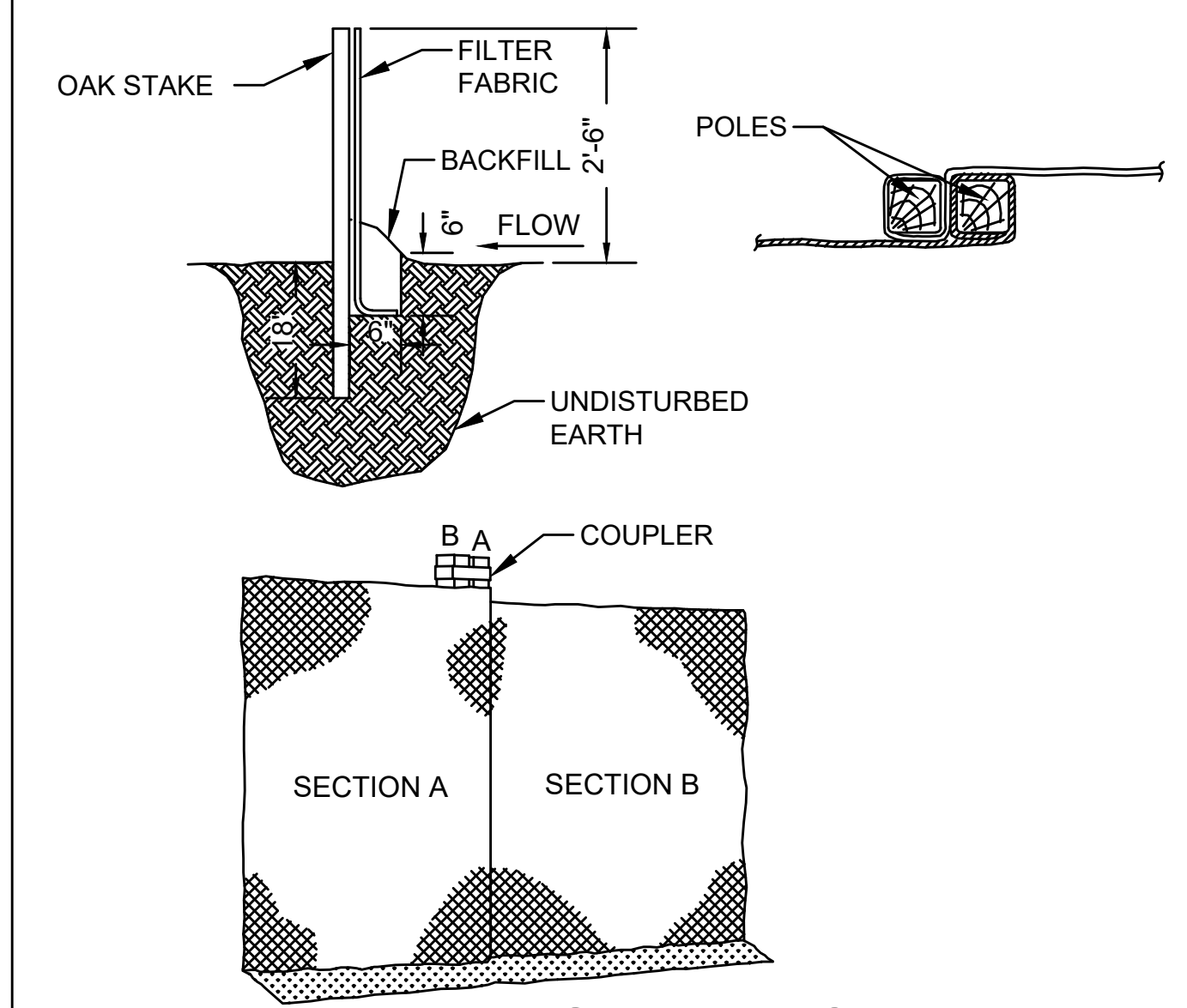
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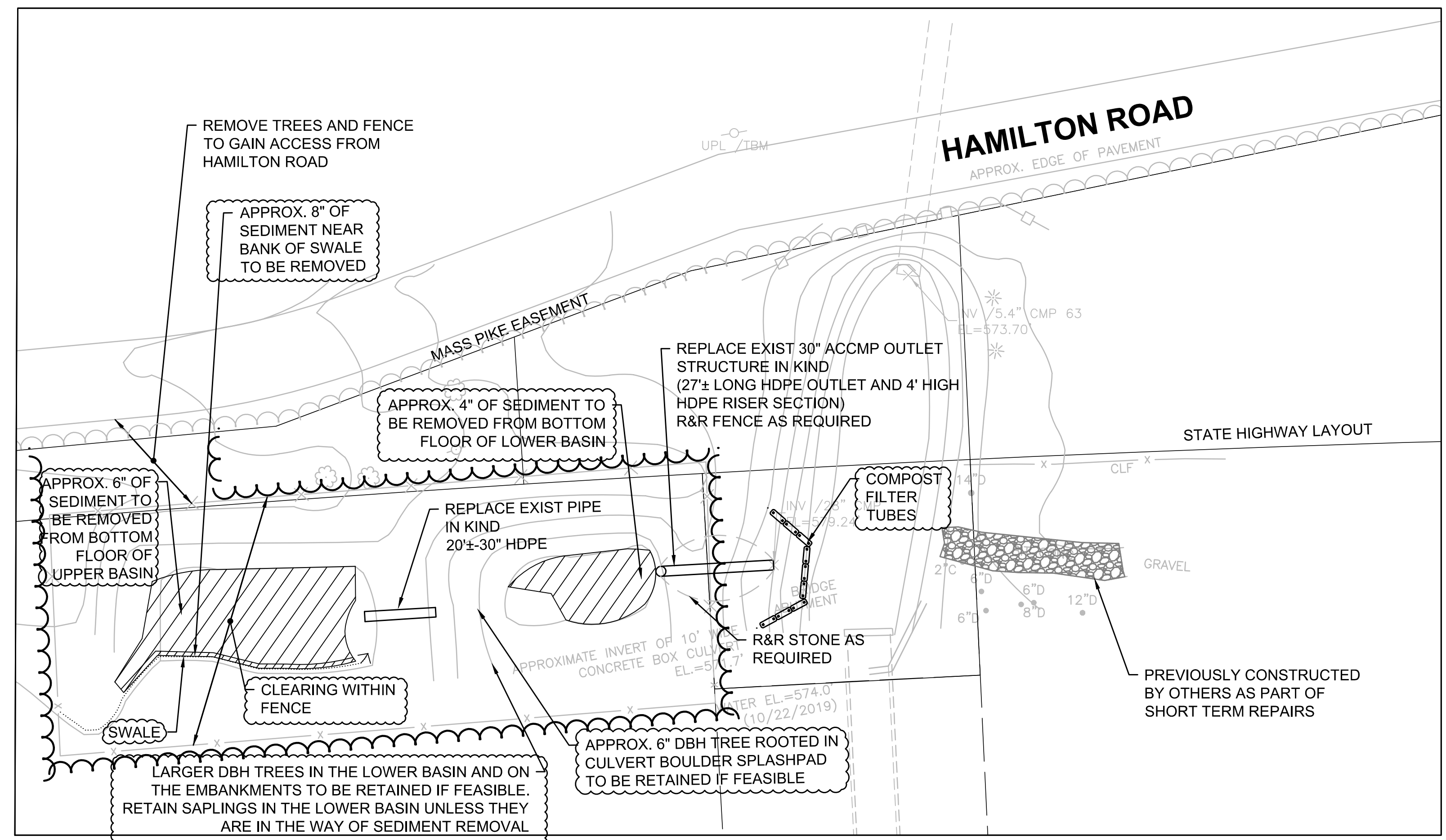
HDPE OUTLET STRUCTURE
NOT TO SCALE



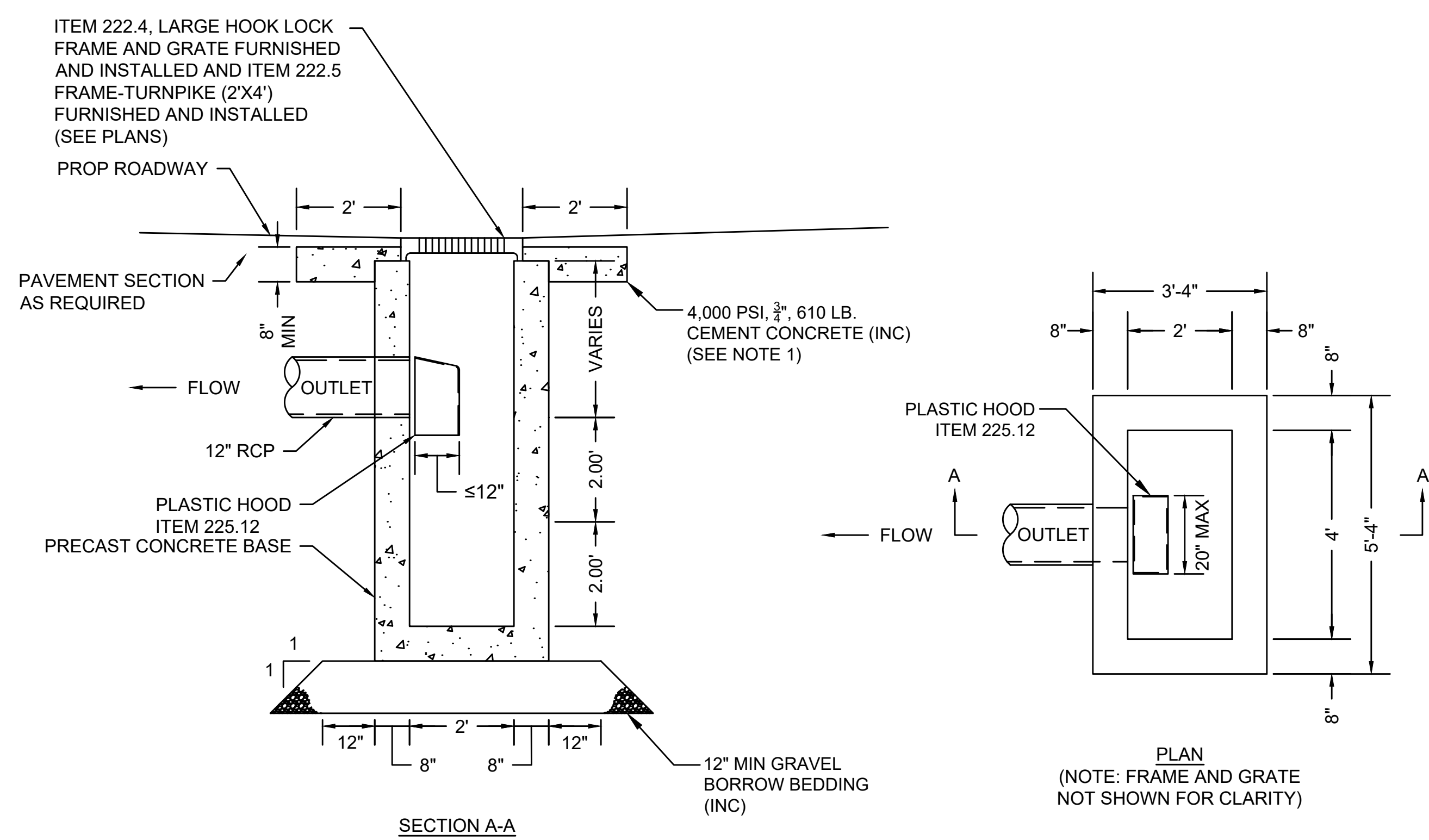
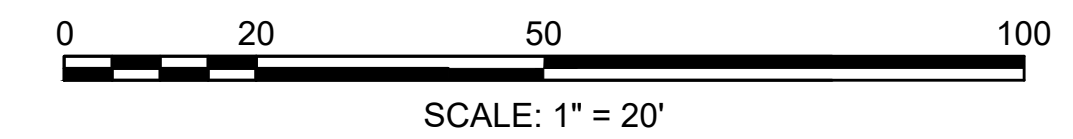
STILLING WELL
NOT TO SCALE



SILT FENCE
NOT TO SCALE

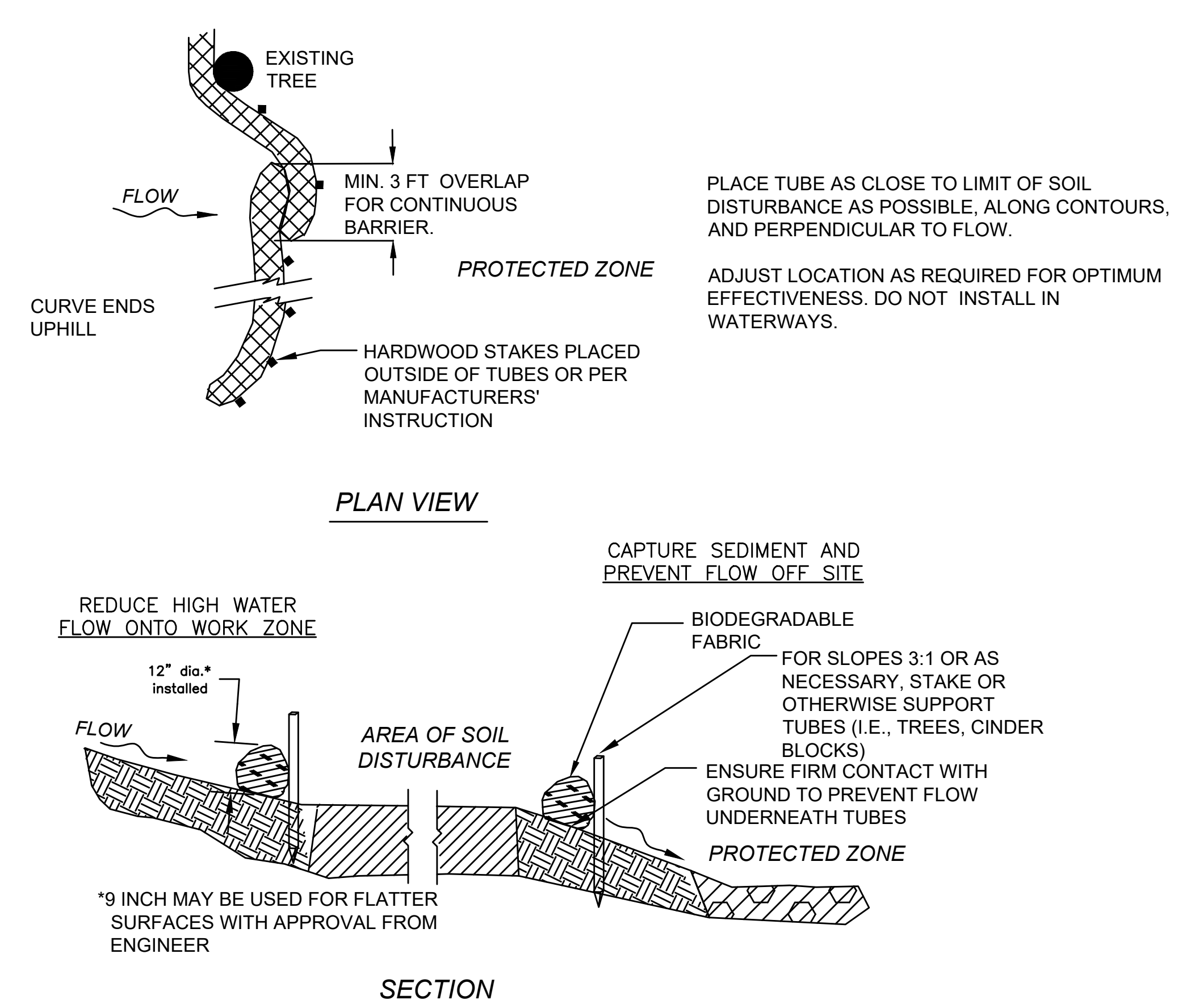


1 AREA 4
SCALE: 1" = 20'



SPECIAL DROP INLET
NOT TO SCALE

NOTE:
1. 4,000 PSI, 3/4", 6' 0 LB. CEMENT CONCRETE REQUIRED FOR 2'-0" AROUND BASIN, CEMENT CONCRETE REQUIRED AS NECESSARY BETWEEN INLET AND BARRIER. GRADE ALL CEMENT CONCRETE TOWARD DRAIN TO INLET. PAYMENT INCLUDED IN COST OF ITEM 209.2

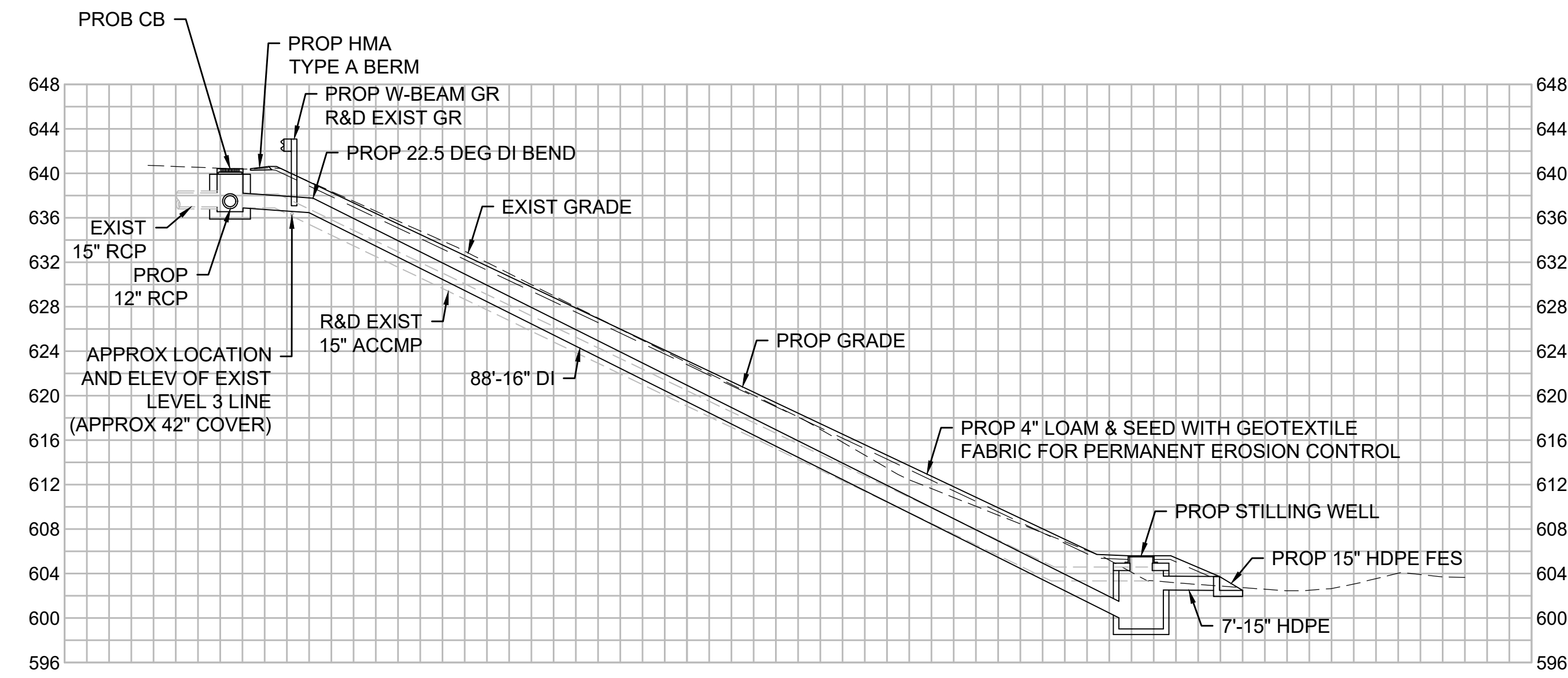


SEDIMENT BARRIER - COMPOST FILTER TUBE
NOT TO SCALE

STURBRIDGE
I-90 AT CEDAR LAKE - LONG TERM REPAIRS

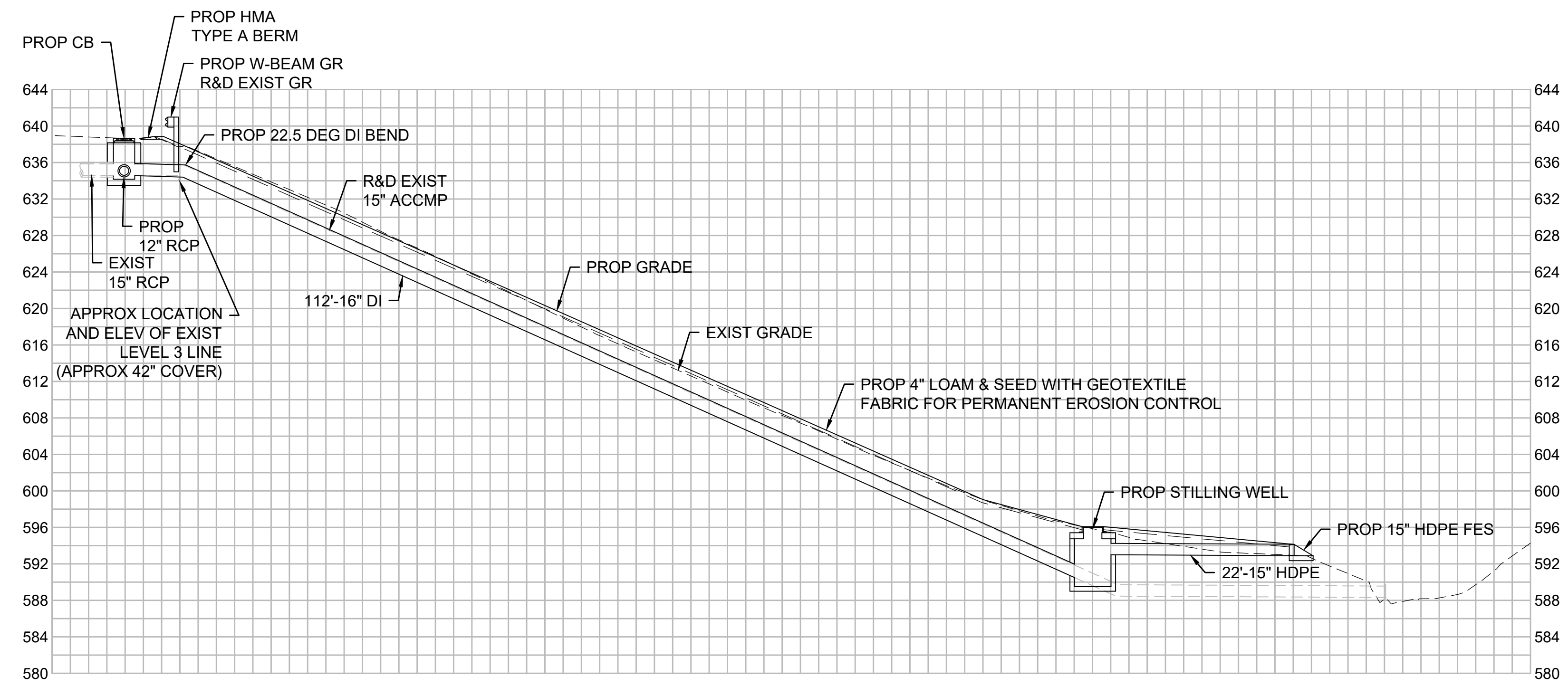
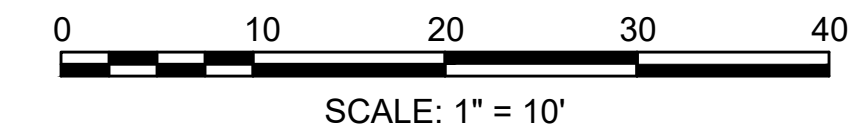
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MA	-	6	7
PROJECT FILE NO.		609481	

PIPE PROFILES



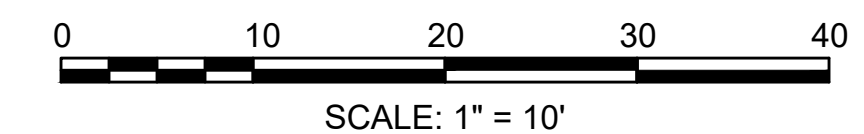
PIPE PROFILE - STA 101+00± RT

SCALE: 1" = 10'



PIPE PROFILE - STA 98+00± RT

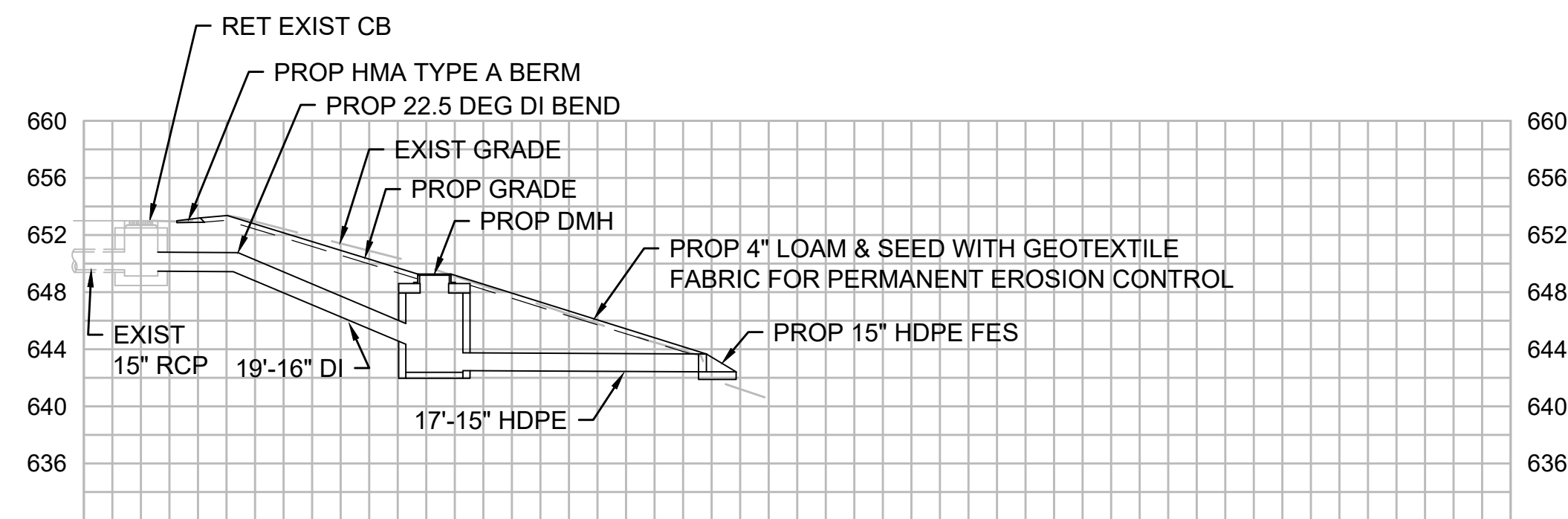
SCALE: 1" = 10'



STURBRIDGE
I-90 AT CEDAR LAKE - LONG TERM REPAIRS

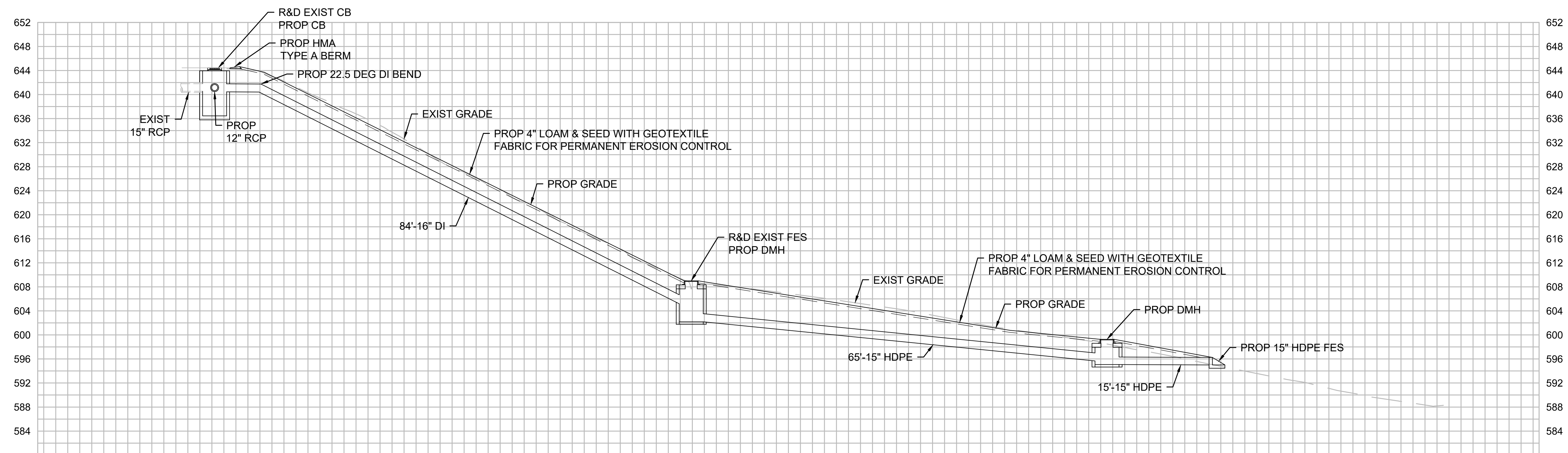
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	6a	7
PROJECT FILE NO.		609481	

PIPE PROFILES



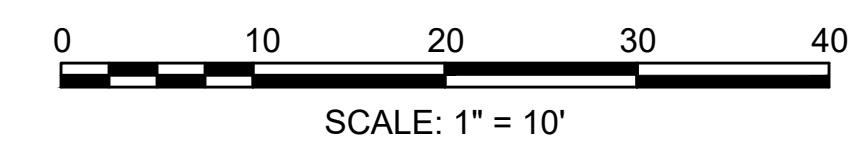
PIPE PROFILE - STA 90+00± RT

SCALE: 1" = 10'



PIPE PROFILE - STA 93+00± RT

SCALE: 1" = 10'



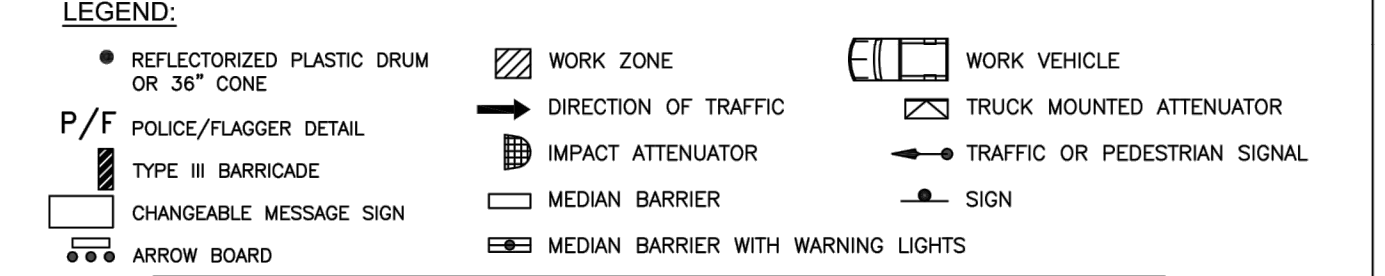
1 NEW SHEET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	7	7
PROJECT FILE NO.		609481	

**TRAFFIC MANAGEMENT
DETAILS**

NOTES:

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES," AND/OR MASH "MANUAL FOR ASSESSING SAFETY HARDWARE."
- CONTRACTORS SHALL NOTIFY EACH ADJUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT REPLACEMENT AND SIMILAR OPERATIONS.
- THE FIRST TEN PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A SEQUENTIAL FLASHING LIGHTS.
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF CHANNELIZING DEVICE OR BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.



THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL) IN WORK ZONES ON A MULTI-LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

NORMAL (existing)	OPEN (to traffic)	Number of Studies	Average Capacity	
			VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	4	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dubek, C., *Notes on Work Zone Capacity and Level of Service*. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48-HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

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Notes for Traffic Management

FIGURE Gen-1
GENERAL GUIDELINES

SUGGESTED WORK ZONE WARNING SIGN SPACING

Road Type	Distance Between Signs**		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS*	350	350	350
MOST OTHER ROADWAYS*	500	500	500
FREEWAYS AND EXPRESSWAYS*	1,000	1,500	2,640

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTC SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (I.E. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (I.E. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

MA-R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA-R2-10a, MA-R2-10e AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 MUTCD LATEST EDITION

STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

SPEED* (mph)	DISTANCE (ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED.

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR BUFFER SPACING.

Source: Table 6C-2 MUTCD LATEST EDITION

massDOT Massachusetts Department of Transportation Highway Division

Notes for Traffic Management

FIGURE Gen-2
NOTES ON WORK ZONE DISTANCES

CONVENTIONAL ROADWAY— A STREET OR HIGHWAY OTHER THAN A LOW-VOLUME ROAD, EXPRESSWAY, OR FREEWAY.

EXPRESSWAY— A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.

FREEWAY— A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

LOW-VOLUME ROAD— A FACILITY LYING OUTSIDE OF BUILT-UP AREAS OF CITIES, TOWNS, AND COMMUNITIES, AND IT SHALL HAVE A TRAFFIC VOLUME OF LESS THAN 400 ADT. IT SHALL NOT BE A FREEWAY, EXPRESSWAY, INTERCHANGE RAMP, FREEWAY SERVICE ROAD, OR A ROAD ON A DESIGNATED STATE HIGHWAY SYSTEM.

Source: MUTCD LATEST EDITION

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

Type of Taper	Taper Length (L)*
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT MINIMUM 100 FT MAXIMUM
DOWNSTREAM TAPER	50 FT MINIMUM 100 FT PER LANE

Source: Table 6C-3 MUTCD LATEST EDITION

FORMULAS FOR DETERMINING TAPER LENGTHS

Speed Limit (S)	Taper Length (L) Feet
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	$L = WS$

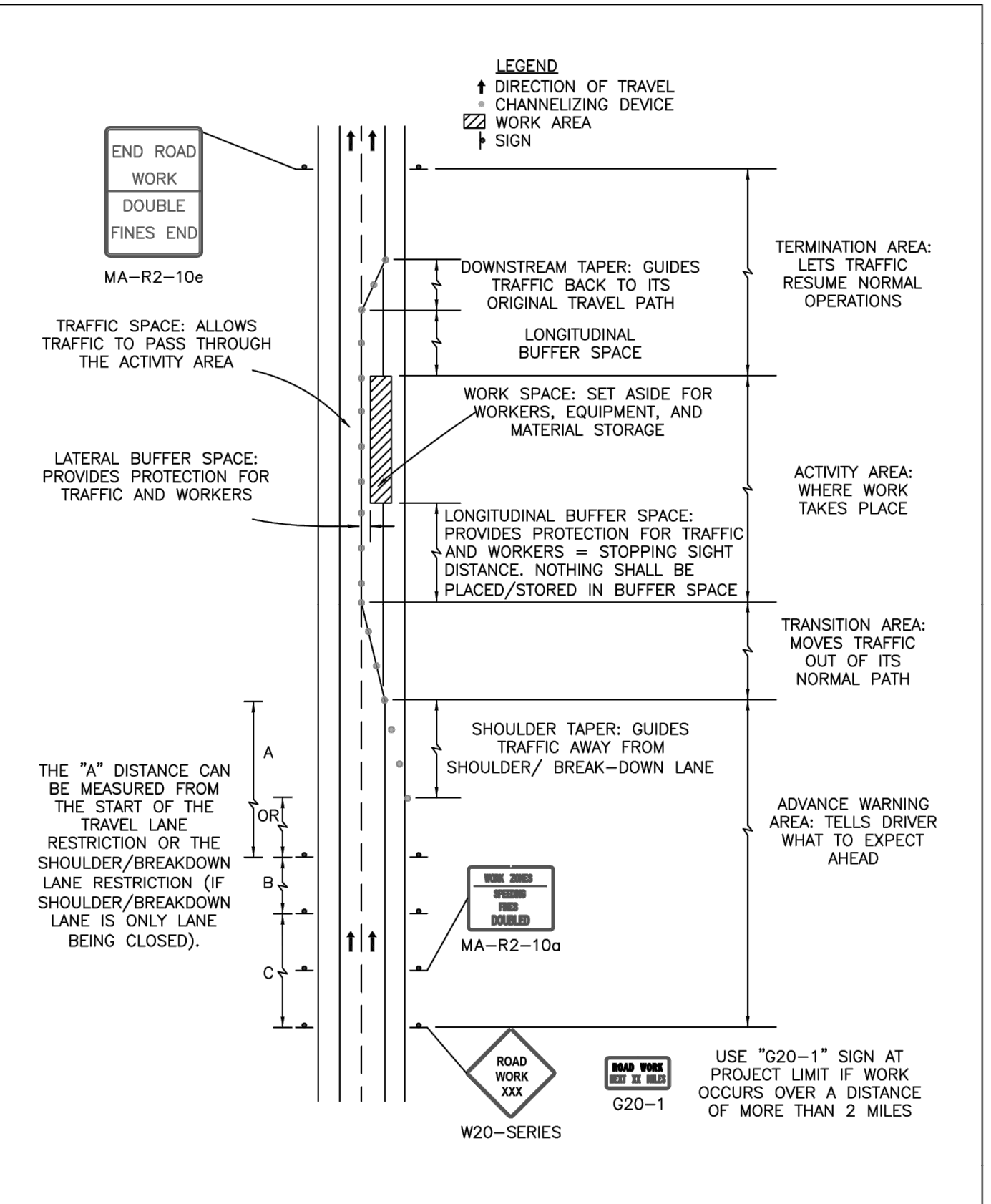
WHERE: L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH

Source: Table 6C-4 MUTCD LATEST EDITION

massDOT Massachusetts Department of Transportation Highway Division

Notes for Traffic Management

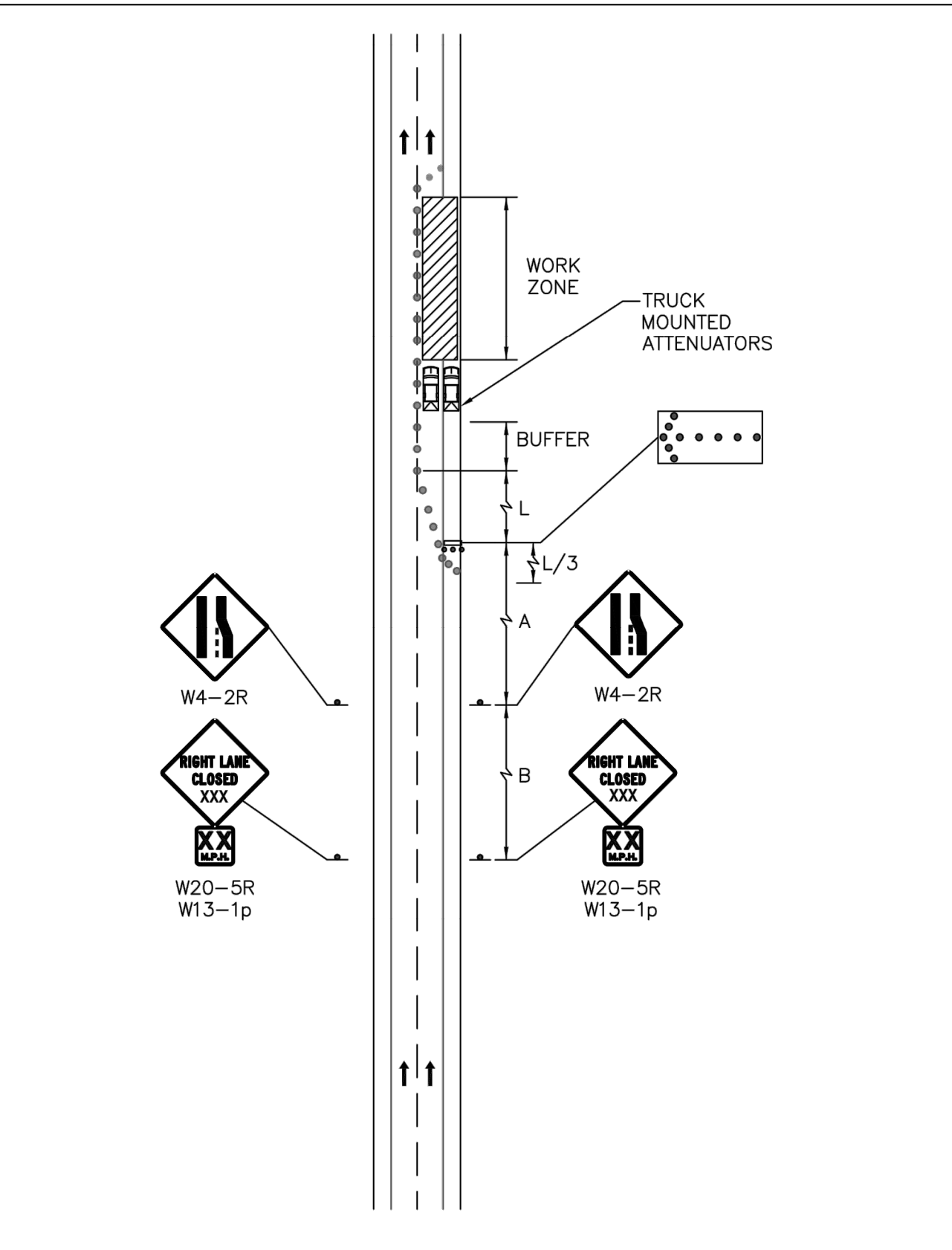
FIGURE Gen-3
NOTES ON WORK ZONE DISTANCES



massDOT Massachusetts Department of Transportation Highway Division

Standard Details and Drawings for the Development of Temporary Traffic Control Plans

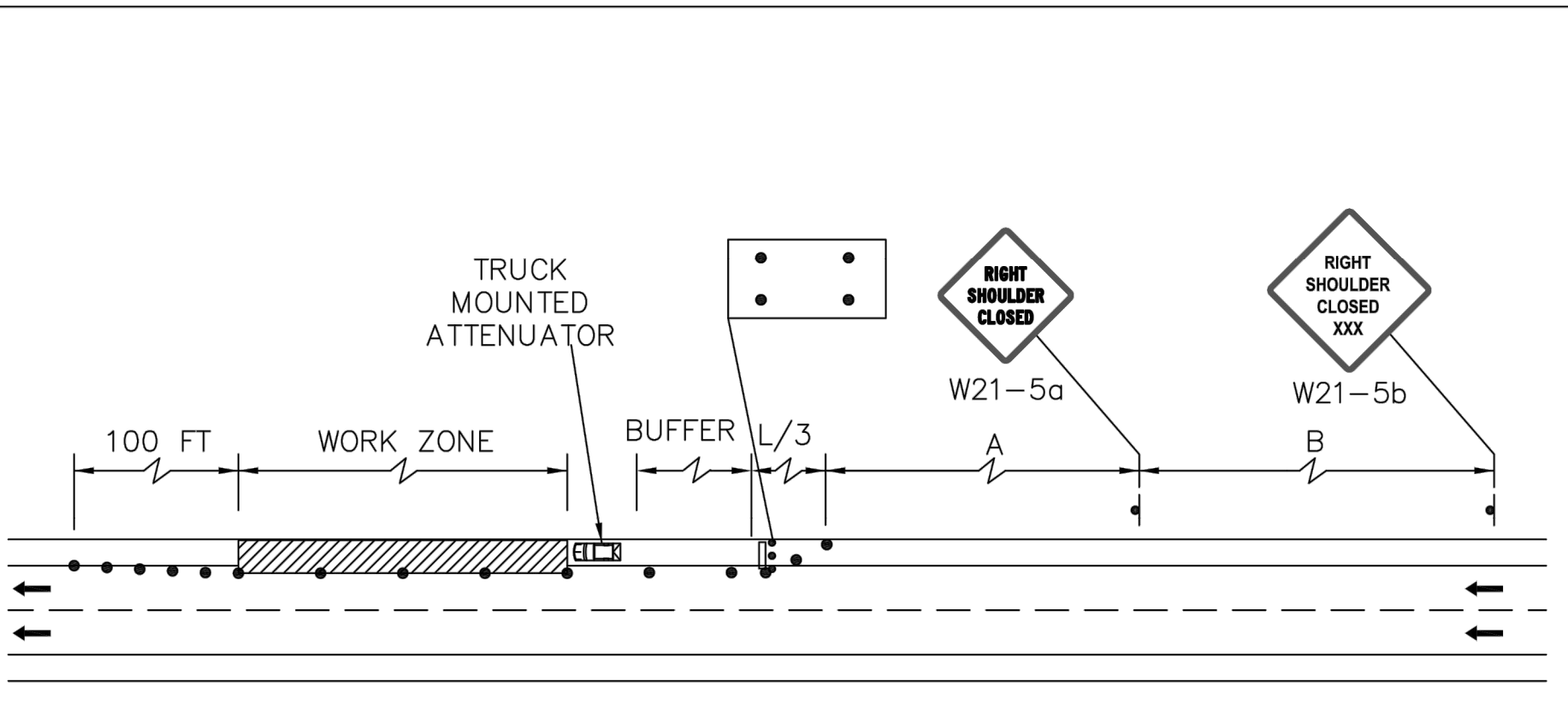
FIGURE Gen-4
COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE
NOT TO SCALE



massDOT Massachusetts Department of Transportation Highway Division

Standard Details and Drawings for the Development of Temporary Traffic Control Plans

FIGURE Div-2
DIVIDED HIGHWAY/ LANE CLOSURE (SHORT TERM)
NOT TO SCALE



massDOT Massachusetts Department of Transportation Highway Division

Standard Details and Drawings for the Development of Temporary Traffic Control Plans

FIGURE Div-9
DIVIDED HIGHWAY SHOULDER CLOSED
NOT TO SCALE

EBT Environmental Consultants, Inc.
GLENN E. KREVOSKY, CONSULTANT

601 Main Street

North Oxford, MA 01537

glenn.krevosky@charter.net

Cell: (508)769-3659 Office: (508)987-0979

Rebecca Gendreau
Sturbridge Conservation Commission
301 Main Street
Sturbridge, MA 01566

February 2, 2021

Re: 27 Ladd Road, Sturbridge – Restoration Plan per June 20, 2019 Enforcement Order

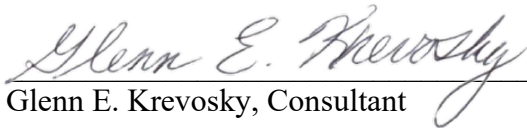
Dear Conservation Commission,

Per the SCC Enforcement Order, dated 6/20/2019, 508 International LLC will adhere to Order #5 by removing the 6' wide by ±40' long telephone bridge (see attached photo exhibit, dated 7/19/2020 and existing conditions plan, dated 8/18/2020). The applicant will:

1. Remove the screws holding the planks and plywood to the telephone poles.
2. Utilize a 20-ton track excavator with a 29' reach (John Deere 160G or similar) to pick up one pole at a time and place it to the north of the machine.
3. Strap all poles and wood product together and walk the machine out once across the field to the road.
4. All wood product will be removed from the lot.

The preexisting soil surface at the wetland crossing is composed of course gravel; this material had not been altered by the telephone bridge. Once the poles are removed the applicant will seed underneath the bridge with New England Wetmix from NEWP. Although the machine will only be position on the upland in the field, this work will take place when the ground is frozen/stable.

Respectfully,



Glenn E. Krevosky, Consultant

CC: Amber Howard
Russ Jennings
Attorney Donald O'Neil

**EBT Environmental Consultants, Inc.
GLENN E. KREVOSKY, CONSULTANT**

601 Main Street

North Oxford, MA 01537

glenn.krevosky@charter.net

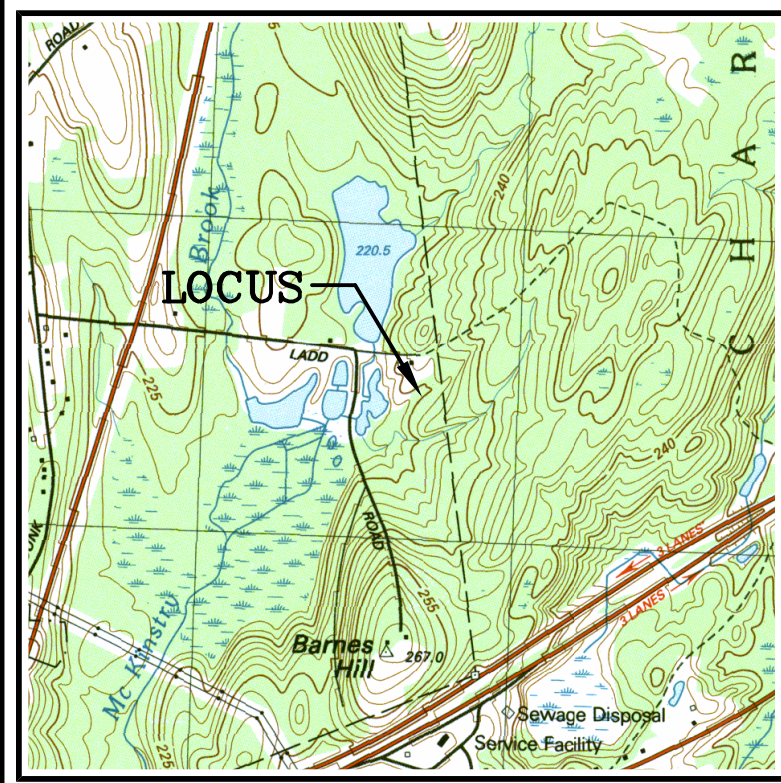
Cell: (508)769-3659 Office: (508)987-0979



Photo 1 taken by EBT, Inc. on 7/19/2020 – Showing the 40.36’ long foot bridge with a section of plywood decking which needs to be replaced.



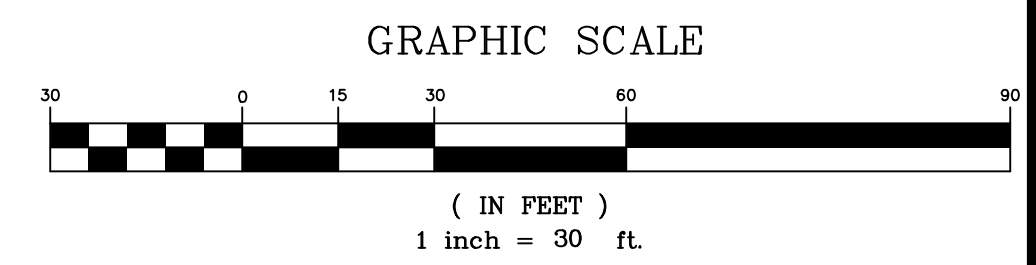
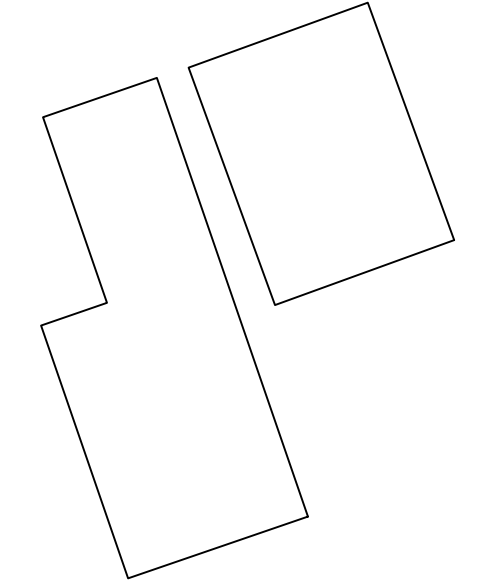
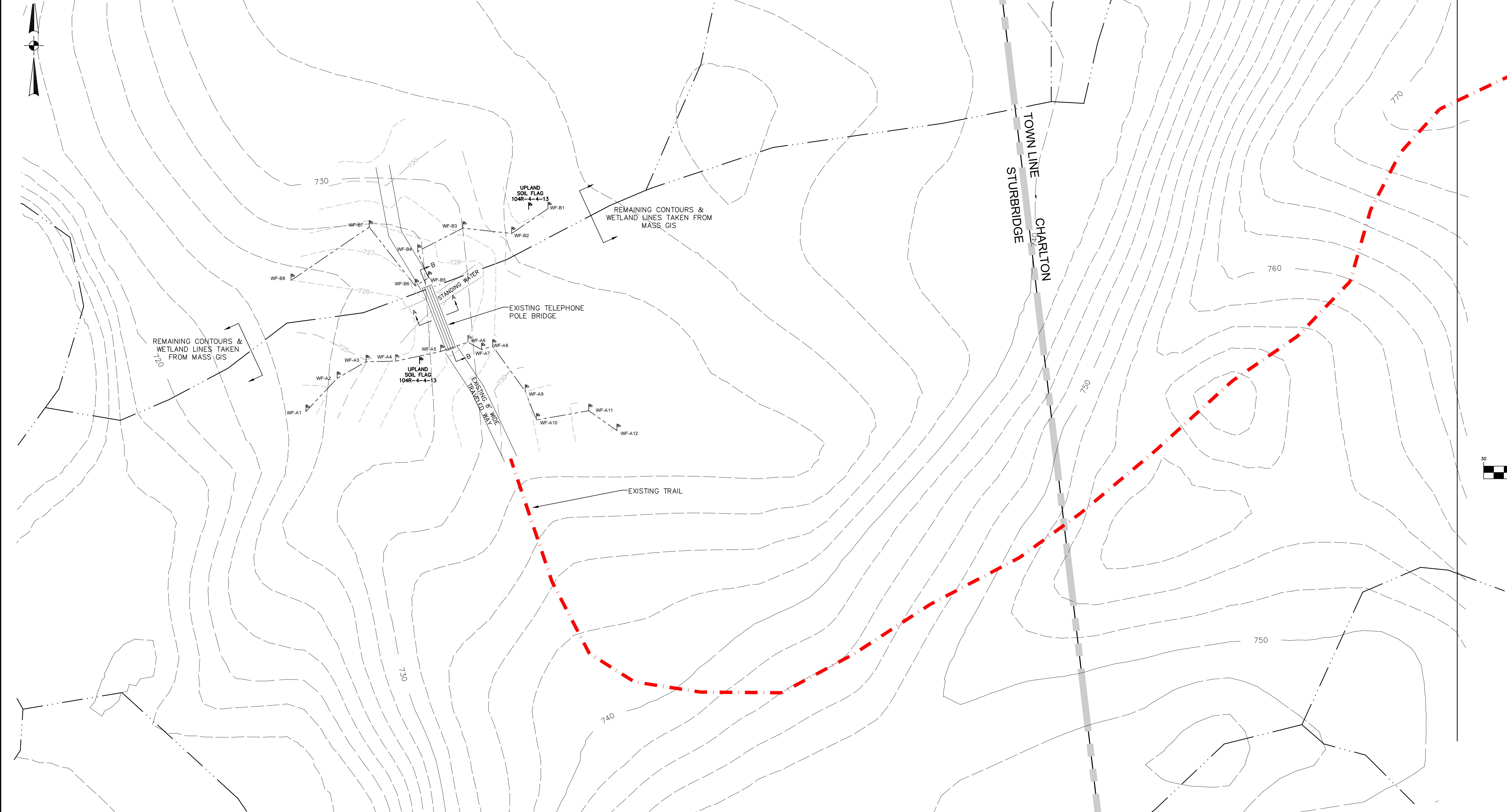
Photo 2 taken by EBT, Inc. on 7/19/2020 – Showing the general spacing of the 2” planking and the 8” height of the bottom of the pole at the brook flow location over the intermittent stream bottom.



LOCUS MAP
1" = 2000'

NOTES:

1. PURPOSE OF THIS PLAN IS TO SHOW PROPOSED WETLAND CROSSING.
2. WETLANDS SHOWN WERE DELINEATED BY EBT ENVIRONMENTAL, INC. IN JUNE 2020 AND LOCATED BY SUMMIT ENGINEERING, INC. IN JUNE 2020 VIA RTK GPS.
3. BOUNDARY INFORMATION SHOWN TAKEN FROM MASS GIS AND ARE NOT THE RESULT OF A BOUNDARY SURVEY.
4. TOPOGRAPHY SHOWN IS EXTRACTED FROM GOOGLE EARTH WITH A 10 FOOT X 10 FOOT SAMPLE GRID.
5. ELEVATIONS AND HORIZONTAL ALIGNMENT ARE BASED UPON MASS STATE PLANE, NAD 83.
6. REFER TO U.S. DEPARTMENT OF AGRICULTURE FORESTRY SERVICE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF TRAILS AND BRIDGES.

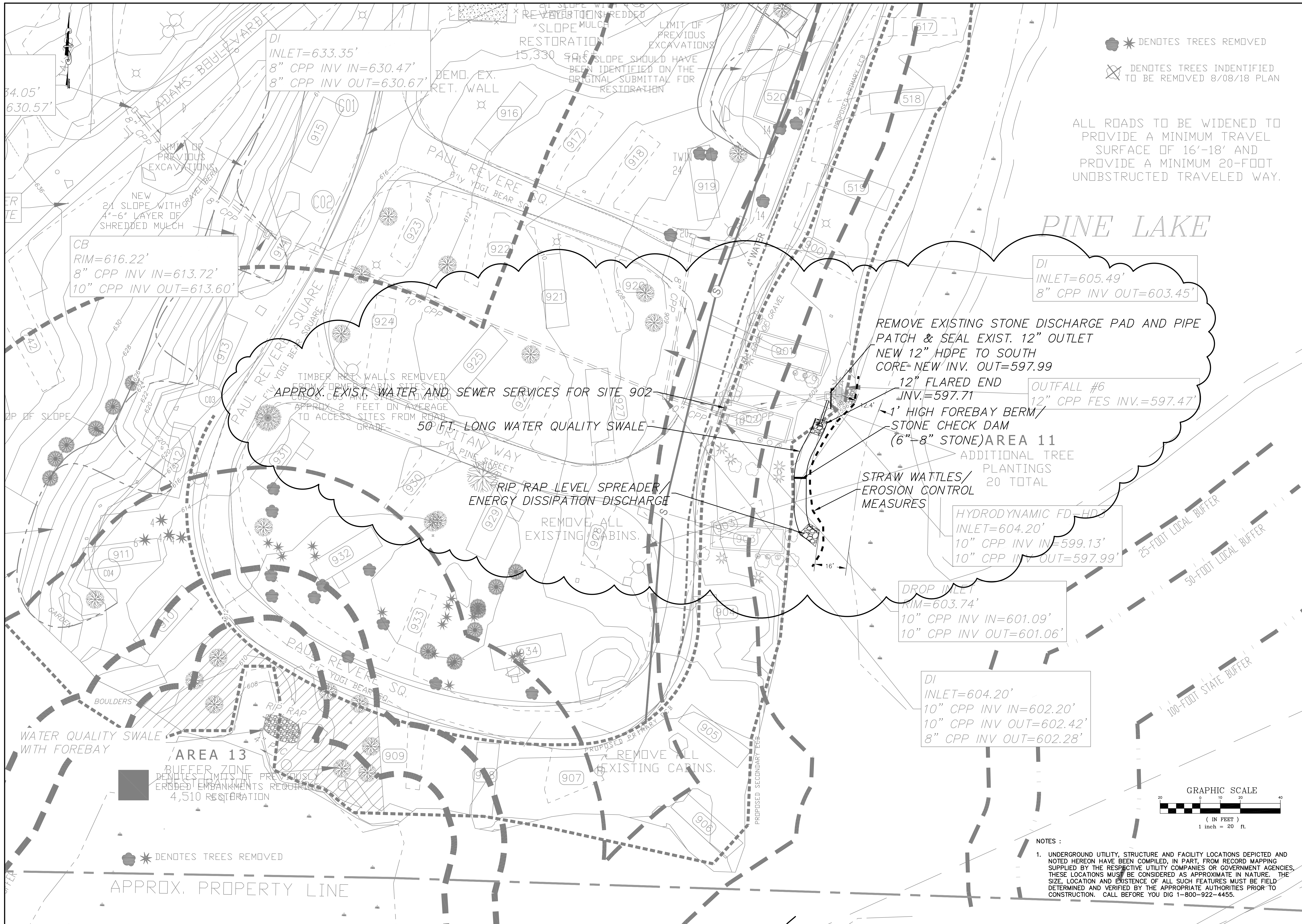


8/18/20 - DRAFT REVIEW FOR CON. COM.
REVISIONS

SUMMIT
Engineering & Survey, Inc.
710 MAIN STREET
NORTH OXFORD, MA 01537
P:(508) 987-8783 F:(508) 987-8784

WETLAND CROSSING PLAN
at
508 INTERNATIONAL STURBRIDGE, MA
PREPARED FOR
508 BASE, LLC

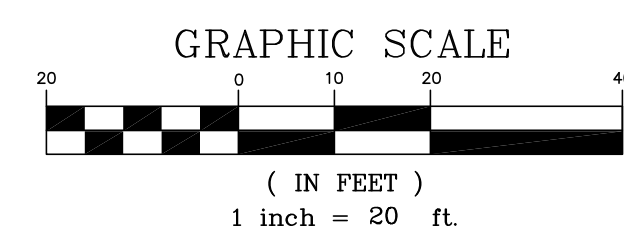
SCALE: 1" = 80'
DATE: AUGUST 17, 2020
JOB NO: 20-228
PLAN NO: 20-228 WETLAND LOCATION
SHEET NO: 1 OF 2



DENOTES TREES REMOVED
 DENOTES TREES IDENTIFIED TO BE REMOVED 8/08/18 PLAN
 ALL ROADS TO BE WIDENED TO PROVIDE A MINIMUM TRAVEL SURFACE OF 16'-18' AND PROVIDE A MINIMUM 20-FOOT UNOBSTRUCTED TRAVELED WAY.

Designed By: CMB	Drawn By: DME	Checked By: CMB	CAD File:
Drawing Scale: AS NOTED			
Drawing date: 2-22-21			
Rev.	Date	By	
DRAINAGE IMPROVEMENT PLAN PREPARED FOR PINE LAKE RV PARK 30 RIVER ROAD STURBRIDGE, MA			
Lenard Engineering, Inc. Civil, Environmental and Hydrogeological Consultants 2210 Main Street Grafton, MA 01860 (860) 689-2100			
Drawing #: 1 OF 1			
Job #: 20-716			

NOTES :
 1. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENT AGENCIES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.



PINE LAKE RV PHOTOS OF OUTLET 6



Figure 1: Looking at Hydrodynamic Separator East Toward Pond



Figure 2: Standing on Hydrodynamic Separator Looking South at Proposed Swale in Site 902/903



*Figure 3: Facing Northeast at Hydrodynamic Separator from Proposed Swale in Site 902
(yellow tape indicates rough location of swale)*



Figure 4: Facing Southeast in Site 902 Showing Outlet of Proposed Swale (yellow tape indicates rough location of swale)