STORMWATER POLLUTION CONTROL PLAN

Widening of U.S. Route 6
from Carol Drive to Peggy Lane
City of Bristol and Town of Farmington, CT

State Project No. 0017-0182

Applicant:

Connecticut Department of Transportation
District 1
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Connecticut Department of Transportation

July 27, 2016

This Stormwater Pollution Control Plan (SPCP) is prepared to comply with the requirements for the General Permit for Stormwater Discharges (GPSD) from Construction Activities. Also to be considered part of the SPCP are the proposed construction plans, special provisions, and the Connecticut Department of Transportation's "Standard Specifications for Roads, Bridges and Incidental Construction" (Form 816) including supplements thereto and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control

Table of Contents

1. Site Description 4
- Estimated Disturbed Area 4
- Estimated Runoff Coefficient 4
- Receiving Waters 5
- Extent of Wetlands On-Site 5

2. Construction Sequencing 5

3. Control Measures 7
- Erosion and Sedimentation (E&S) Controls 7
- Soil Stabilization and Protection 8
- Temporary Stabilization Practices 8
- Permanent Stabilization Practices 9
- Structural Measures 9
- Maintenance 9

4. Dewatering Wastewaters 10
- Dewatering Guidelines 10

5. Post-Construction Stormwater Management 11
- Post-Construction Guidelines 11
- Post-Construction Performance Standards and Control Measures 11
- Runoff Reduction and LID Practices 12
- Suspended Solids and Floatables Removal 12
- Velocity Dissipation 13

6. Other Controls 13
- Waste Disposal 13
- Washout Areas 13
- Anti-Tracking Pads and Dust Control 14
- Post-Construction 14
- Maintaining and Storing Vehicles and Equipment 14

7. Inspections 15
- Inspection Guidelines 15

8. Keeping Plans Current 16
- Revisions to Stormwater Pollution Control Plans 16

9. Monitoring Requirements **16**

10. Contractors **17**
General 17
Certification Statement 17

List of Applicable Figures and Forms **19**
Appendix A – Project Location / Project Figures 19
Appendix B – Drainage Calculations 19
Appendix C – Plan Sheets 19
Appendix D – Stormwater Monitoring Report Form 19
Appendix E – Notice of Termination Form 19

1. Site Description

This project consists of the widening of U.S. Route 6 at its intersection with Carol Drive in the City of Bristol, extending easterly for approximately 6,800 feet (1.3 miles) to Peggy Lane in the Town of Farmington. On Stafford Avenue, the limits of construction also extend approximately 400 feet northerly and 300 feet southerly from its intersection with U.S. Route 6. This corridor of Route 6 through the project limits is classified as an Urban Principal Arterial with a 2011 ADT of 28,600 vpd. It is primarily a three-lane (two-lane westbound and one-lane eastbound) roadway which traverses in the east-west direction through commercial and residential areas. Exclusive left-turn lanes currently exist at all signalized intersections, except the westbound approach at the Home Depot intersection. Exclusive right-turn lanes currently exist in the eastbound direction at the ShopRite Plaza and Camp Street signalized intersections, and in both directions at Stafford Avenue and Wal-Mart signalized intersections.

The project does not discharge directly to any impaired or coastal waterbodies; however, is located within the boundaries of A29 Mix Street Aquifer Protection Area (APA) and B28 Mechanic Street APA. The project is located outside of any public water supply watersheds.

The purpose of this project is to widen U.S. Route 6 to accommodate traffic operational improvements from Carol Drive in the City of Bristol easterly to Peggy Lane in the Town of Farmington. U.S. Route 6 would be widened to add a second eastbound through lane to address congestion, delay, gridlock, and safety concerns. This project was initiated based on a review of crashes on U.S. Route 6 and a request from the City of Bristol to reduce congestion at the intersection of U.S. Route 6 and Stafford Avenue. The purpose of the project is to provide safety and traffic operational improvements on this section of U.S. Route 6.

Site work associated with the widening of Route 6 includes full depth reconstruction along Route 6, widening with milling and overlay proposed to treat side streets, removal of an existing concrete pavement slab within Route 6, drainage modifications, retaining wall construction, and upgrades/modifications to the existing traffic signals to accommodate the proposed improvements. Overhead and underground utility relocations are also included in this project. Overhead utility work has already been initiated as part of a Utility Breakout Project.

Estimated Disturbed Area

The total area for this project site is 16.68 acres. Of this area, an estimated 5.11 acres will be disturbed by construction activities.

Estimated Runoff Coefficient

The runoff coefficient assumed for pavement is 0.9 and 1.0 for building roofs. For the pervious areas, a coefficient of 0.3 was assumed.

The pre-construction composite runoff coefficient (C) is 0.49 for the contributing drainage area of 141.92 acres.

$$\frac{(96.91ac.\cdot 0.3) + (39.01ac.\cdot 0.9) + (6.0ac.\cdot 1.0)}{96.91 + 39.01 + 6.0\ ac.} = \frac{70.18}{141.92} = 0.49$$

The post-construction composite runoff coefficient (C) is 0.52 for the contributing drainage area of 141.92 acres.

$$\frac{(91.91ac.\cdot 0.3) + (44.01ac.\cdot 0.9) + (6.0ac.\cdot 1.0)}{91.91 + 44.01 + 6.0\ ac.} = \frac{73.18}{141.92} = 0.52$$

The estimated runoff coefficients, with the corresponding contributing areas, are shown in Appendix B.

Receiving Waters

The name of the receiving waterbody is the Coppermine Brook, which drains to the Pequabuck River and ultimately to the Farmington River.

Extent of Wetlands On-Site

There are no wetlands adjacent to the site therefore no wetland area will be disrupted during construction activities.

2. Construction Sequencing

The Contractor will be given approximately two full construction seasons for the construction of all phases of the project.

The suggested sequence of construction is as follows:

Pre-Stage:

1. Conduct a preconstruction meeting.
2. Install erosion controls at the effected inlets and at limits of disturbed slopes.
3. Maintain driveway access.
4. Perform clearing and grubbing activities.
5. Coordinate utility work.
6. Begin utility pole relocation work on south side of Route 6 west of Stafford Avenue as continuation of Utility Breakout Project work.

7. Mill existing pavement approximately 4” to 5” until concrete pavement is encountered.
8. Areas with significant deterioration after the milling operation shall be patched with 1” of HMA S0.25 on top of the concrete pavement for temporary handling of traffic.

Stage 1:

Sequence A (South side of Route 6 from Sta. 47+50 to 61+50 & 80+50 to 94+50):

1. Shift traffic as shown on staging plans using traffic drums or temporary precast concrete barrier curb as required to delineate the work area from traffic.
2. Maintain driveway access unless agreement has been reached with property owner.
3. Saw cut and remove concrete pavement within the allowed work areas.
4. Excavate to the required grade and place 5” of S1.0 on top of 10” of processed aggregate.

Sequence B (North side of Route 6 from Sta. 61+50 to 80+50 & 94+50 to 115+00):

1. Shift traffic as shown on staging plans using traffic drums or temporary precast concrete barrier curb as required to delineate the work area from traffic.
2. Maintain driveway access unless agreement has been reached with property owner.
3. Saw cut and remove concrete pavement within the allowed work areas.
4. Excavate to the required grade and place 5” of S1.0 on top of 10” of processed aggregate.

Stage 2:

Sequence A (North side of Route 6 from Sta. 47+50 to 61+50 & 80+50 to 94+50):

1. Shift traffic as shown on staging plans using traffic drums or temporary precast concrete barrier curb as required to delineate the work area from traffic.
2. Maintain driveway access unless agreement has been reached with property owner.
3. Saw cut and remove concrete pavement within the allowed work areas.
4. Excavate to the required grade and place 5” of S1.0 on top of 10” of processed aggregate.

Sequence B (South side of Route 6 from Sta. 47+50 to 61+50 & 80+50 to 94+50):

1. Shift traffic as shown on staging plans using traffic drums or temporary precast concrete barrier curb as required to delineate the work area from traffic.
2. Maintain driveway access unless agreement has been reached with property owner.
3. Saw cut and remove concrete pavement within the allowed work areas.
4. Excavate to the required grade and place 5” of S1.0 on top of 10” of processed aggregate.

Post-Stage 2:

1. Finish resetting any structures.
2. Place final 2” pavement course.

3. Place final pavement markings and traffic signal equipment.
4. Complete all other contract items.
5. Grade grass slopes and immediately stabilize. Establish turf, per plan, on all remaining disturbed areas. Install landscaping.
6. Remove erosion controls once all disturbed areas have been stabilized as determined by the Engineer.
7. All post-construction stormwater structures shall be cleaned of construction sediment and any remaining silt fence shall be removed prior to the filing of the "Notice of Termination Form".
8. Perform project cleanup.

If the construction sequencing activities create an area of disturbance between two (2) acres and five (5) acres per discharge point, the Contractor must submit to the Engineer a revised SPCP for review and approval. The SPCP must include locations of the temporary sedimentation trap per discharge point with a capacity to contain 134 cubic yards per acre of material in accordance with the *2002 Guidelines*. The Contractor shall provide an inspection and maintenance plan for the temporary sedimentation trap as part of the amended SPCP.

3. Control Measures

Erosion and Sedimentation (E&S) Controls

CTDOT will have construction inspection personnel assigned to the project in order to oversee the Contractor's operations to ensure compliance with the provisions of the Standard Specifications. Further CTDOT oversight is provided by the District 1 Environmental Coordinator and the Office of Environmental Planning.

The following timelines will be followed for the proposed construction activities:

- If construction activities are complete or have been temporarily halted for more than seven (7) days, stabilization activities will be implemented within three (3) days.

- Areas that remain disturbed but inactive for at least 30 days shall receive temporary seeding or soil protection within seven (7) days.

- Disturbed areas that do not establish a vegetative cover within 30 days of seeding shall have erosion control blankets installed. Prior to the erosion control blanket installation, the soil would be prepared with the application of lime, fertilizer, and seed.

- Areas that will be disturbed past the planting season will be covered with a long-term, non-vegetative stabilization method that will provide protection through the winter.

- Stabilization practices will be implemented as quickly as possible in accordance with the Guidelines.

- The Contractor shall stabilize disturbed areas with temporary or permanent measures as quickly as possible after the land is disturbed. Requirements for soil stabilization are detailed in Form 816 Section 1.10.03, Best Management Practices.

Soil Stabilization and Protection

Temporary Stabilization Practices

The following methods of temporary stabilization shall be used:

- Silt Fence: Silt fence shall be placed at the base of embankments.

- Anti-Tracking Pads: Construction entrances (gravel anti-tracking pads) shall be constructed at truck access points to off –road route.

- Dust Control: Routine sweeping and application of dust suppression agents, including water and calcium chloride, over exposed sub base shall be completed for dust control.

- Catch Basin Inlet Protection: Catch basin inlet protection shall be used to reduce the amount of sediment entering the storm drainage system during construction.

Stabilization practices shall be implemented no more than three days after completion, as final grades are reached, or if work has been suspended for more than seven days.

Temporary seeding shall be spread over any disturbed areas which will remain inactive for at least 30 days. Areas to remain disturbed through winter shall be protected with non-vegetative stabilization measures. The Contractor must provide an E&S Control plan for each winter season during construction operations.

The Contractor may use other controls in the project, as necessary, if they conform to the *2002 Connecticut Guidelines for Erosion and Sediment Control* and are approved by the Engineer. The Contractor will be required to provide the necessary details for any erosion controls not specifically called for on the project plans.

During construction, all areas disturbed by the construction activity that have not been stabilized, structural control measures, and locations where vehicles enter or exit the site shall be inspected at least once every seven calendar days. These areas shall also be inspected within 24 hours following any storm in which 0.5 inches or greater of rain occurs.

Permanent Stabilization Practices

During construction, the following methods of permanent stabilization shall be installed:

- Permanent Seeding: Once soils have been brought to final grade, permanent seeding shall be used to stabilize the soil with a vegetative cover.

- Topsoiling: In conjunction with permanent seeding, once final grades have been established, topsoil shall be applied to provide a suitable growth medium for vegetation.

All new embankments disturbed by construction and unpaved areas that are graded or disturbed by construction will receive erosion control matting, topsoil and/or turf establishment. The Contractor may use other permanent stabilization practices approved by the Engineer and conforming to the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*.

Structural Measures

The following structural measures shall be used to divert flows, limit runoff, and minimize the discharge of pollutants:

- Deep Sump Catch Basins: Deep sump catch basins (4-foot sump) shall be used, especially adjacent to outlets, to intercept pollutants and debris.

Maintenance

All construction activities and related activities shall conform to the requirements of Section 1.10 "Environmental Compliance" of CTDOT's Standard Specifications, Form 816. In general, all construction activities shall proceed in such a manner so as not to pollute any wetlands, watercourses, waterbodies, and conduits carrying stormwater. The Contractor shall limit, in so far as possible, the surface area of earthen materials exposed by construction activity and immediately provide temporary and permanent pollution control to prevent soil erosion and contamination on the site. Water pollution control provisions and best management practices per Section 1.10.03 of the Standard Specifications shall be administered during construction. Control measures shall be inspected and maintained in accordance with the *2002 Guidelines* and as directed by the Engineer.

The Contractor shall be responsible for implementation, operation, and required maintenance of the erosion and sedimentation control measures described, shown and detailed on the Construction Documents. The Contractor will be familiar with all aspects of the named control measures and is responsible for the correction and repair of failures or modifications as may be recommended by an E&S professional in coordination with any approving agencies.

The following maintenance practices will be completed as part of the project:

- All E&S controls will be inspected within 24 hours of each storm event of at least 0.1 inch and at least daily during prolonged rainfall to ensure they are still properly located, anchored and in good working condition. All necessary repairs and/or replacements will be made promptly by the Contractor as needed. Build-up of sediment and debris will be removed by the Contractor as required based on the outcome of inspections.
- Perimeter sediment control systems will be inspected daily to ensure they are properly secured and functioning as designed. Cleaning will occur when accumulated sediments reach one-half of the original height of the silt or hay bale fence or as directed by the Engineer. If the perimeter fencing is breached at any location, the breach shall be immediately repaired by the Contractor and the repair will be verified by the Engineer and/or the inspecting agent.
- Following the completion of construction, the Contractor will repair any eroded areas as directed by the Engineer. The Contractor will repair all eroded slopes or geotextile matting and will clean any sediment from exposed surfaces.
- The Contractor will clean sediment and debris from all drainage structures and pipes as required in order to keep the system functioning properly during and after construction.
- Following final stabilization, the Contractor will remove all silt fencing.

4. Dewatering Wastewaters

Dewatering Guidelines

If encountered, dewatering wastewaters will be infiltrated into the ground unless otherwise directed by the Engineer. When dewatering is necessary, pumps used shall not be allowed to discharge directly into a wetland or watercourse. Prior to any dewatering, the Contractor must submit to the Engineer a written proposal for specific methods and devices to be used and obtain the Engineer's written approval of such methods and devices, including, but not limited to, the pumping of water into a temporary sedimentation basin, providing surge protection at the inlet or outlet of pumps, floating the intake of a pump, or any other method for minimizing and retaining the suspended solids. If the Engineer determines that a pumping operation is causing turbidity problems, the Contractor shall halt said operation until a means of controlling the turbidity is submitted by the Contractor in writing to the Engineer, approved in writing by the Engineer and implemented by the Contractor. No discharge of dewatering wastewater shall contain or cause visible oil sheen, floating solids or foaming in the receiving water. If required, all activities are to be performed in compliance with CTDOT Form 816.

The Contractor shall be aware that groundwater was observed at a depth of 11 feet below ground surface at approximate Station 68+25 LT where excavation for proposed drainage structures are

anticipated to be below this depth. In this area, dewatering is anticipated and shall be conducted in compliance with CTDOT Form 816.

A special provision has been provided in the contract regarding Handling Contaminated Groundwater. The Contractor shall use one or more of the following methods for the management and disposal of contaminated groundwater: On-Site Treatment System with Discharge to Sanitary Sewer, On-Site Treatment System with Discharge to Surface Water, or Off-Site Treatment and Disposal.

5. Post-Construction Stormwater Management

Post-Construction Guidelines

After the project is complete, the Department will perform the following maintenance and restorative measures:

- Litter/debris will be removed from the site regularly.
- Mowing and maintenance of the turf areas and vegetated areas will occur as needed.
- Riprap outlet protection will be inspected and repaired annually or as needed.
- The catch basins will be inspected and repaired annually or as needed. Sediment will be removed when it interferes with the detention capacity of the basins. Outlets will be checked for excessive scour and repaired as needed.

Post-Construction Performance Standards and Control Measures

	Water Quality Volume (ac-ft)	Water Quality Flow (cfs)
Outfall 1	0.292	3.07
Outfall 1A	0.074	0.78
Outfall 2	0.140	1.47
Outfall 3	2.528	26.54
Outfall 4	0.451	4.73
Outfall 5	0.146	1.53
Outfall 6	0.366	3.85
Outfall 7	0.103	1.08
Outfall 7A	0.020	0.21
Outfall 8	0.221	2.32

Effective impervious cover, water quality flow and water quality volume calculations may be found in Appendix B.

Runoff Reduction and LID Practices

Runoff reduction and options for Low Impact Development (LID) measures are limited due to the urban nature of this project, topographical constraints and state ROW. Runoff reduction measures included in the project design include maximizing sheet flow, staging slope disturbance during construction, use of anti-tracking pads in off-road construction areas, and catch basins with sumps.

This currently developed roadway is a linear project with 40% impervious or greater area and is therefore considered redevelopment. The urban development, existing utilities, right of way limitations, aquifer protection areas, areas of environmental concern, and overall site constraints make the retention and infiltration of the water quality volume via traditional above ground storage or underground detention infeasible.

A map showing the site soil drainage class is attached in Appendix A. The available data provided shows that most of the site is on well-drained soil; however, the urban characteristics of the site require the use of curb and gutter sections to collect runoff. Landscaping has been proposed where possible as a means to reduce surface runoff. A grass snow shelf has been proposed between the curb and sidewalks throughout the project to aid in reducing runoff.

Additionally grass swales were considered however there are multiple areas of environmental concern where infiltration is inappropriate therefore they were not proposed. Figures showing these areas have been included in Appendix A. Furthermore the location of this project within an Aquifer Protection Area limits the use of infiltration methods that can be utilized throughout the corridor.

Suspended Solids and Floatables Removal

The stormwater discharge for this project has been designed keeping in mind a goal of 80% removal of annual sediment. A limited right-of-way envelope and urban environment prevents the utilization of primary treatment systems. Hence, stormwater treatment options at this site are limited to secondary treatment within the drainage system. The quantification of these secondary treatments ability to remove sediment cannot easily be determined however their use will aid in decreasing the discharge reaching the established outfalls.

The use of hydrodynamic separators was considered however these structures require frequent maintenance to maintain efficiency. The limited owned property and density of underground utilities near the sag points of the drainage networks would require large relocations and right-of-way costs thus hydrodynamic separators were ultimately not proposed.

The use of deep sump catch basins were considered and utilized where appropriate while a majority of newly installed catch basins will have two-foot sumps. The deep sump catch basins are proposed near the sag points of the drainage networks, prior to discharging into existing drainage systems.

Velocity Dissipation

Field investigations were conducted to observe the conditions of existing outlets that are to be utilized for the proposed drainage included in this project. Field inspection has determined that the existing outlet protection is sufficient and stable and will not require additional work for velocity dissipation.

6. Other Controls

Waste Disposal

Construction site waste shall be properly managed and disposed of during the entire construction period. Additionally:

- A waste collection area will be designated. The selected area will minimize truck travel through the site and will not drain directly to the adjacent wetlands.
- Waste collection shall be scheduled regularly to prevent the containers from overfilling.
- Spills shall be cleaned-up immediately.
- Defective containers that may cause leaks or spills will be identified through regular inspection. Any found to be defective will be repaired or replaced immediately.
- Any stockpiling of materials should be confined to the designated area as defined by the Engineer.

Washout Areas

Washout of applicators, containers, vehicles and equipment for concrete shall be conducted in a designated washout area. No surface discharge of washout wastewaters from the area will be allowed. All concrete wash water will be directed into a container or pit such that no overflows can occur. Washout shall be conducted in an entirely self-contained system and will be clearly designed and flagged or signed where necessary. The washout area shall be located outside of any buffers and at least 50 feet from any stream, wetland or other sensitive water or natural resources as determined or designated by CTDOT Office of Environmental Planning.

The designated area shall be designed and maintained such that no overflows can occur during rainfall or after snowmelt. Containers or pits shall be inspected at least once a week to ensure structural integrity, adequate holding capacity and will be repaired prior to future use if leaks are present. The Contractor shall remove hardened concrete waste when it accumulates to a height of ½ of the container or pit or as necessary to avoid overflow. All concrete waste shall be disposed of in a manner consistent will all applicable laws, regulations and guidelines.

Anti-Tracking Pads and Dust Control

Off-site vehicle tracking of sediments and the generation of dust shall be minimized. Temporary anti-tracking pads from the active work site to the existing pavement will be installed and maintained at the locations shown on the plans. The Contractor shall:

- Maintain the entrance in a condition which will prevent tracking and washing of sediment onto paved surfaces.
- Provide periodic top dressing with additional stone or additional length as conditions demand.
- Repair any measures used to trap sediment, as needed.
- Immediately remove all sediment spilled, dropped, washed or tracked onto paved surfaces.
- Ensure that roads adjacent to a construction site are left clean at the end of each day.

If the construction entrance is being properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment, then the Contractor shall either:

- Increase the length of the construction entrance,
- Modify the construction access road surface, or
- Install washing racks and associated settling area or similar devices before the vehicle enters a paved surface.

For construction activities which cause airborne particulates, wet dust suppression shall be utilized. Construction site dust will be controlled by sprinkling the ground surface with water until it is moist on an as-needed basis. The volume of water sprayed shall be such that it suppresses dust yet also prevents the runoff of water.

Post-Construction

Upon completion of construction activities and stabilization of the site, all post-construction stormwater structures, including deep sump catch basins, shall be cleaned of construction sediment, remaining catch basin inlet protection removed and any remaining silt fence shall be removed prior to acceptance of the project by CTDOT. Sediment shall be properly disposed of in accordance with all applicable laws, regulations and guidelines.

Maintaining and Storing Vehicles and Equipment

The Contractor shall take measures to prevent any contamination to wetlands and watercourses while maintaining and storing construction equipment on the site. All chemical and petroleum containers stored on-site shall be provided with impermeable containment which will hold at least

110% of the volume of the largest container, or 10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. All chemicals and their containers shall be stored under a roofed area except for those stored in containers of 100 gallon capacity or more, in which case double-walled tanks will suffice.

7. Inspections

Inspection Guidelines

All construction activities shall be inspected initially for Plan implementation and then weekly for Routine Inspections.

During construction, all areas disturbed by the construction activity that have not been stabilized, all E&S control measures, all structural control measures, soil stockpile areas, washout areas and locations where vehicles enter or exit the site shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and impacts to receiving waters at least once every seven calendar days and within 24 hours of the end of a storm that generates a discharge.

For storms that end on a weekend, holiday or other time in which working hours will not commence within 24 hours, an inspection is required within 24 hours only for storms that equal or exceed 0.5 inches. For lesser storms, inspection shall occur immediately upon the start of subsequent normal working hours.

Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least once every month for three months.

Qualified personnel provided by the DOT District 1 Office shall conduct Inspections.

The following items shall be inspected as described below:

Item	Procedure
Silt Fence	Silt fence shall be inspected to ensure that the fence line is intact with no breaks or tears. The fence shall be firmly anchored to the ground. Areas where the fence is excessively sagging or where support posts are broken or uprooted shall be noted. Depth of sediment behind the fence shall be noted.

Catch Basin Protection	Protective measures shall be inspected to ensure that sediment is not entering the catch basins. Catch basin sumps shall be monitored for sediment deposition. Hay bales shall be inspected to ensure they have not clogged. Deep sump structures shall be inspected periodically to ensure proper functionality and cleaned out as necessary.
Vehicle Entrances / Exits	Locations where vehicles enter or exit the site shall be inspected for evidence of off-site tracking.
General	Construction areas and the perimeter of the site shall be inspected for any evidence of debris that may blow or wash off-site or that has blown or washed off-site. Construction areas shall be inspected for any spills or unsafe storage of materials that could pollute off-site waters.

8. Keeping Plans Current

Revisions to Stormwater Pollution Control Plans

CTDOT shall amend the Plan if the actions required by the Plan fail to prevent pollution or otherwise comply with provisions of the General Permit. The Plan shall also be amended whenever there is a change in Contractors or Subcontractors at the site. If the results of the inspections require modifications to the Stormwater Pollution Control Plan, the plans shall be revised as soon as practicable after the inspection. Such modifications shall provide for a timely implementation of any changes to non-engineered controls on the site within 24 hours and implementation of any changes to the plan within 3 (three) calendar days following the inspection. For engineered measures, corrective actions shall be implemented on-site within 7 (seven) days and incorporated into a revised Plan within 10 (ten) days of the date of inspection

In no event shall the requirements to keep the Plan current or update a Plan, relieve the permittee and their contactor(s) of the responsibility to properly implement any actions required to protect the waters of the State and to comply with all conditions of the permit.

9. Monitoring Requirements

A written report summarizing the scope of the inspection, the name(s) and qualifications of inspection personnel, the date and time of the inspection, major observations relative to the implementation of the Pollution Control Plan, and actions taken shall be completed within 24

hours of the inspection. This report shall be retained as part of the Stormwater Pollution Control Plan for at least five years after the date of the inspection.

Turbidity monitoring shall be conducted at the ten (10) locations depicted on the Plan utilizing a procedure consistent with 40 CFR Part 136 (http://www.epa.gov/region9/qa/pdfs/40cfr136_03.pdf) and may be taken manually or by an in-situ turbidity probe or other automatic sampling device equipped to take individual turbidity readings. The first sample shall be taken within the first hour of stormwater discharge from the site and at least three grab samples shall be taken during a storm event and shall be representative of the flow and characteristics of the discharge. Sampling shall be conducted at least monthly when there is a discharge of stormwater from the site while construction activity is ongoing, until final stabilization of the drainage area associated with each outfall is achieved.

Samples shall be taken during normal working hours, which for this project, shall be defined as Monday through Friday, 8 am to 6 pm. If a storm continues past working hours, sampling shall resume the following morning or the morning of the next working day following a weekend or holiday, as long as the discharge continues. Sampling may be temporarily suspended when conditions exist that may reasonably pose a threat to the safety of the person taking the sample.

Within 30 days following the end of each month, the stormwater sampling results shall be submitted on the Stormwater Monitoring Report (SMR) and in accordance with NetDMR. If there is no stormwater discharge during a month, sampling is not required; however, SMRs indicating "no discharge" shall still be submitted as required.

10. Contractors

General

This section shall identify all Contractors and Subcontractors who will perform on-site actions which may reasonably be expected to cause or have the potential to cause pollution of the waters of the State.

This Stormwater Pollution Control Plan (SPCP) is prepared to comply with the requirements for the General Permit for Stormwater Discharges (GPSD) from construction activities. Also to be considered part of the plan are the proposed construction plans, special provisions, and the Connecticut Department of Transportation's "Standard Specifications for Roads, Bridges, and Incidental Construction" (Form 816) including supplements thereto and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and 2004 Stormwater Quality Manual.

Certification Statement

All Contractors and Subcontractors must sign the attached statement. All certification will be included in the Stormwater Pollution Control Plan.

State Project No. 0017-0182

Widening of U.S. Route 6
from Carol Drive to Peggy Lane
City of Bristol and Town of Farmington, CT

"I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater associated with construction activity. I understand that as Contractor on the project, I am covered by this general permit and must comply with the terms and conditions of this permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for this project."

GENERAL CONTRACTOR

Signed: _____ Date: _____

Title: _____

Firm: _____ Telephone: _____

Address: _____

_____

_____

SUBCONTRACTOR

Signed: _____ Date: _____

Title: _____

Firm: _____ Telephone: _____

Address: _____

_____

_____

List of Applicable Figures and Forms

Appendix A – Project Location / Project Figures

USGS Map	A-01
Soils Map	A-02
Aquifer Protection Area Map	A-05
Areas of Environmental Concern Figures	A-06
Pre-Construction AI Conditions (Existing Drainage Areas)	A-14
Post-Construction AI Conditions (Proposed Drainage Areas)	A-20
Disturbed/Erodible Areas	A-26

Appendix B – Drainage Calculations

Water Quality Computations	B-01

Appendix C – Plan Sheets

Detail Sheet	C-01
Highway Plans	C-02
Drainage Plans	C-10
Landscape Plans	C-18

Appendix D – Stormwater Monitoring Report Form

http://www.ct.gov/deep/lib/deep/permits_and_licenses/water_discharge_general_permits/storm_const_SMR.pdf

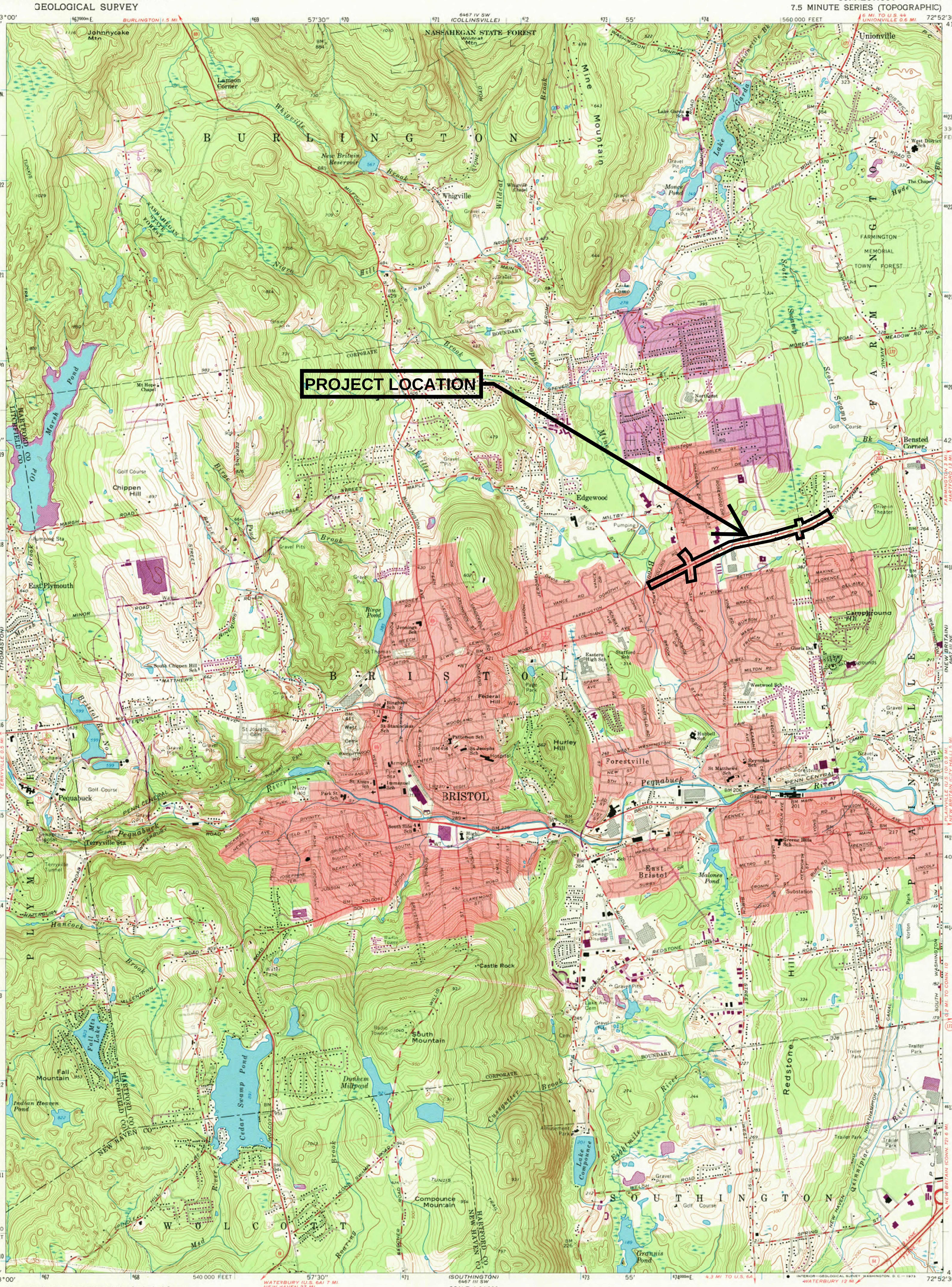
Appendix E – Notice of Termination Form

http://www.ct.gov/deep/lib/deep/permits_and_licenses/water_discharge_general_permits/storm_const_termination.pdf

Appendix A – Project Location / Project Figures

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BRISTOL QUADRANGLE
CONNECTICUT
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey
Revised in cooperation with Connecticut Highway Department

Control by USGS, USC&GS, and Connecticut Geodetic Survey

Topography by planetable surveys 1943. Revised 1966

Polyconic projection. 1927 North American datum
10,000-foot grid based on Connecticut coordinate system
1000 meter Universal Transverse Mercator grid ticks, zone 18, shown in blue

Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

Red tint indicates areas in which only landmark buildings are shown

UTM GRID AND 1972 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24000

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy-duty — Light-duty
Medium-duty — Unimproved dirt
Interstate Route — U. S. Route — State Route

Revisions shown in purple compiled in cooperation with Connecticut Highway Department from aerial photographs taken 1972. This information not field checked
Purple tint indicates extension of urban areas

SEP 4 1973
USGS Historical File Topographic Division

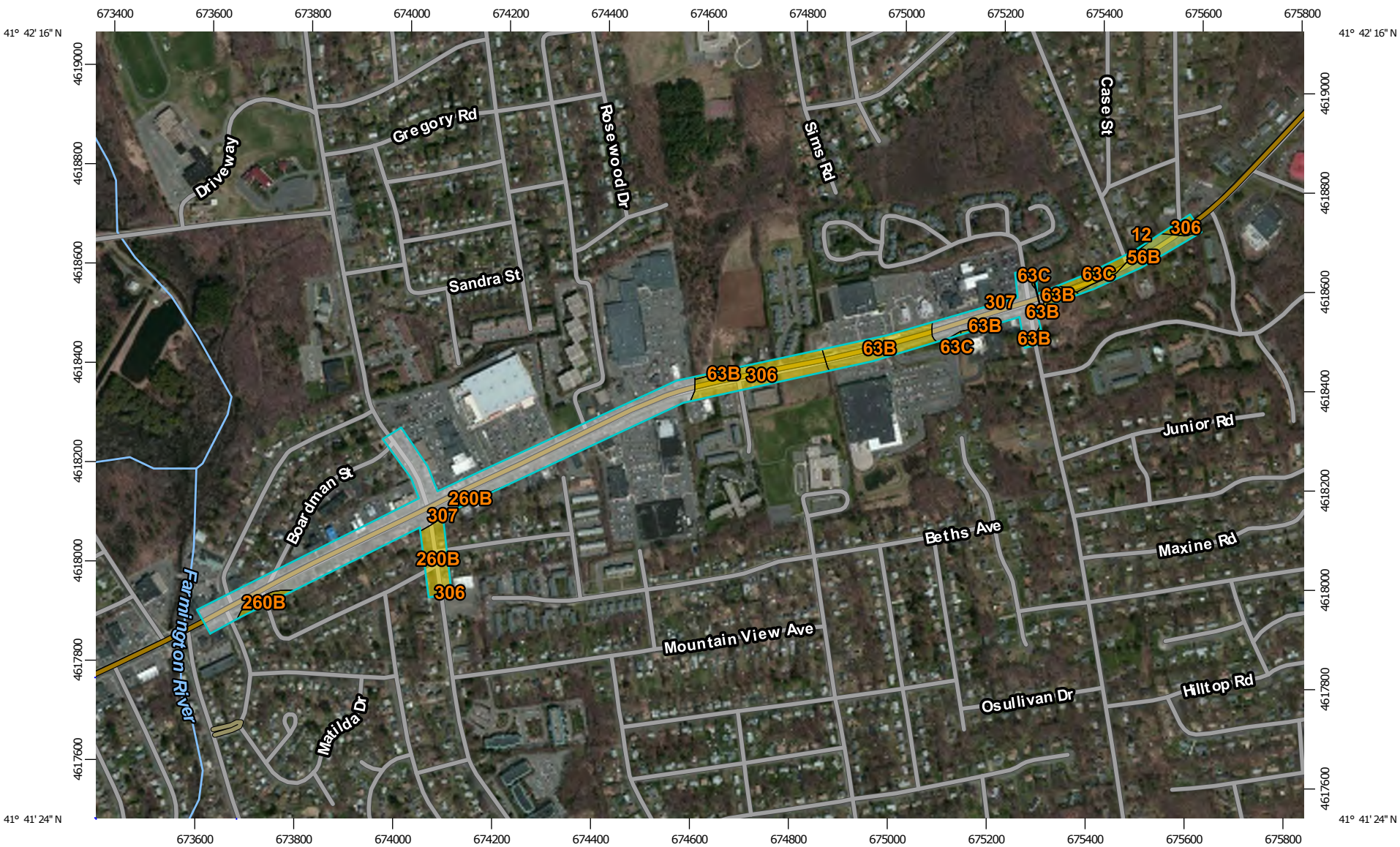
BRISTOL, CONN.
N4137.5—W7252.5/7.5

1966
PHOTOREVISED 1972
AMS 6467 III NW—SERIES V816

4370

A-01

Drainage Class—State of Connecticut
(0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane)



Map Scale: 1:11,200 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Soil Rating Lines

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Soil Rating Points

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 14, Sep 22, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2011—Apr 18, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Drainage Class

Drainage Class— Summary by Map Unit — State of Connecticut (CT600)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
12	Raypol silt loam	Poorly drained	0.0	0.1%
56B	Watchaug fine sandy loam, 2 to 8 percent slopes, very stony	Moderately well drained	1.3	4.6%
63B	Cheshire fine sandy loam, 3 to 8 percent slopes	Well drained	3.3	11.6%
63C	Cheshire fine sandy loam, 8 to 15 percent slopes	Well drained	0.9	3.1%
260B	Charlton-Urban land complex, 3 to 8 percent slopes	Well drained	2.2	7.5%
306	Udorthents-Urban land complex	Well drained	3.5	12.1%
307	Urban land		17.6	61.0%
Totals for Area of Interest			**28.8**	**100.0%**

Description

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

AQUIFER PROTECTION AREAS

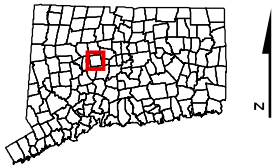
Bristol, CT

May 12, 2016

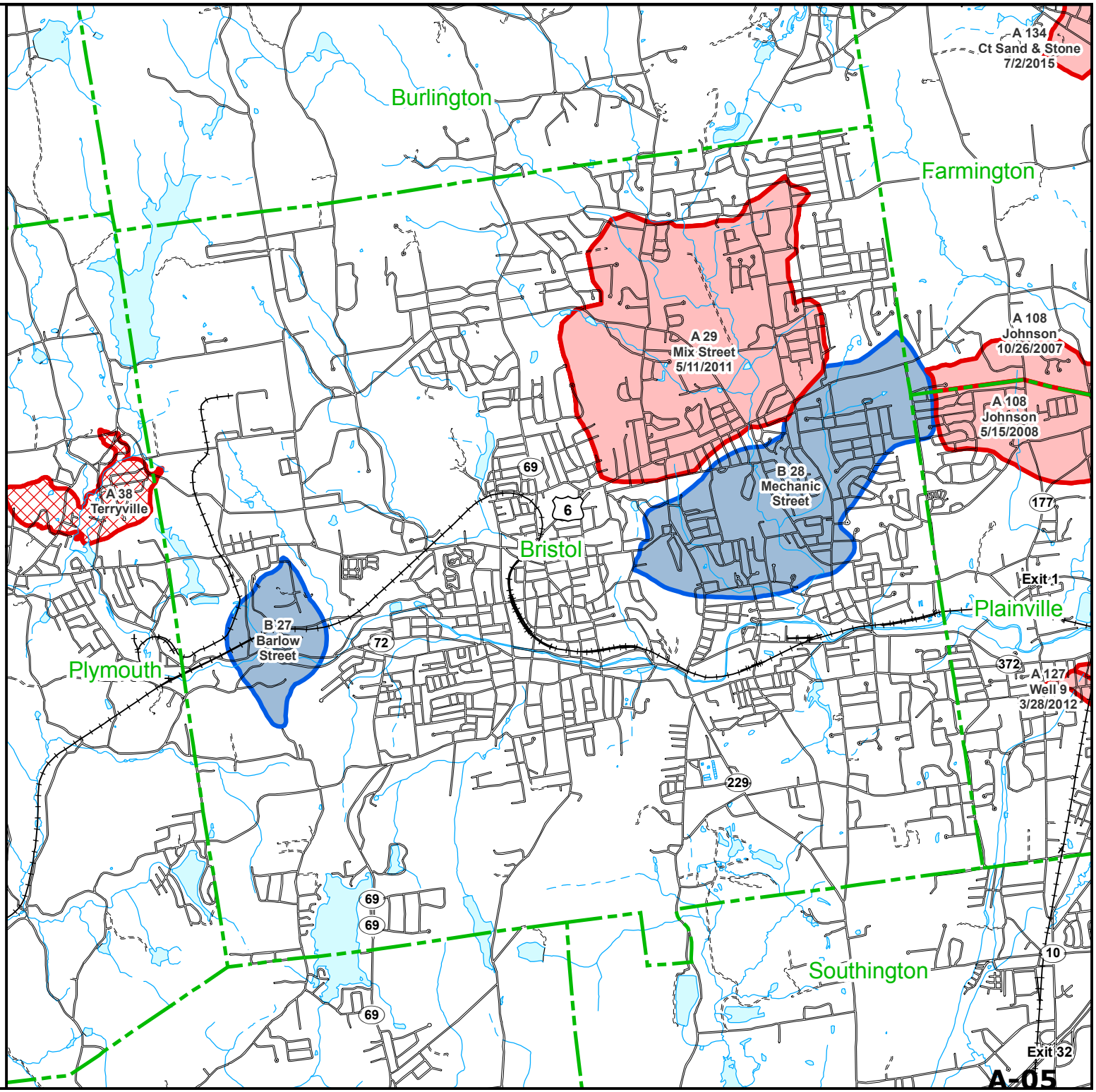
- Level A APA (Final Adopted)
- Level A APA (Final)
- Level B APA (Preliminary)
- Town Boundary

NOTE: The Aquifer Protection Areas were delineated through Connecitcut's Level A and Level B Mapping Processes. Aquifer Protection Areas are delineated for active public water supply wells in stratified drift that serve more than 1000 people, in accordance with Sections 22a-354c and 22a-354z of the Connecticut General Statutes. Level B Mapping delineates a preliminary aquifer protection area, providing an estimate of the land area from which the well draws its water. Level A Mapping delineates the final Aquifer Protection Area, which becomes the regulatory boundary for land use controls designed to protect the well from contamination. As Level A Mapping is completed for each well field and approved by DEEP, it replaces the Level B Mapping. Final Adopted Level A Areas are those where towns have land use regulations for them.
Masschusetts and Rhode Island Wellhead Protection Areas may be shown for informational purposes.

QUESTIONS:
Bureau of Water Protection and Land Reuse
Planning and Standards Division
Phone: (860) 424-3020
www.ct.gov/deep/aquiferprotection



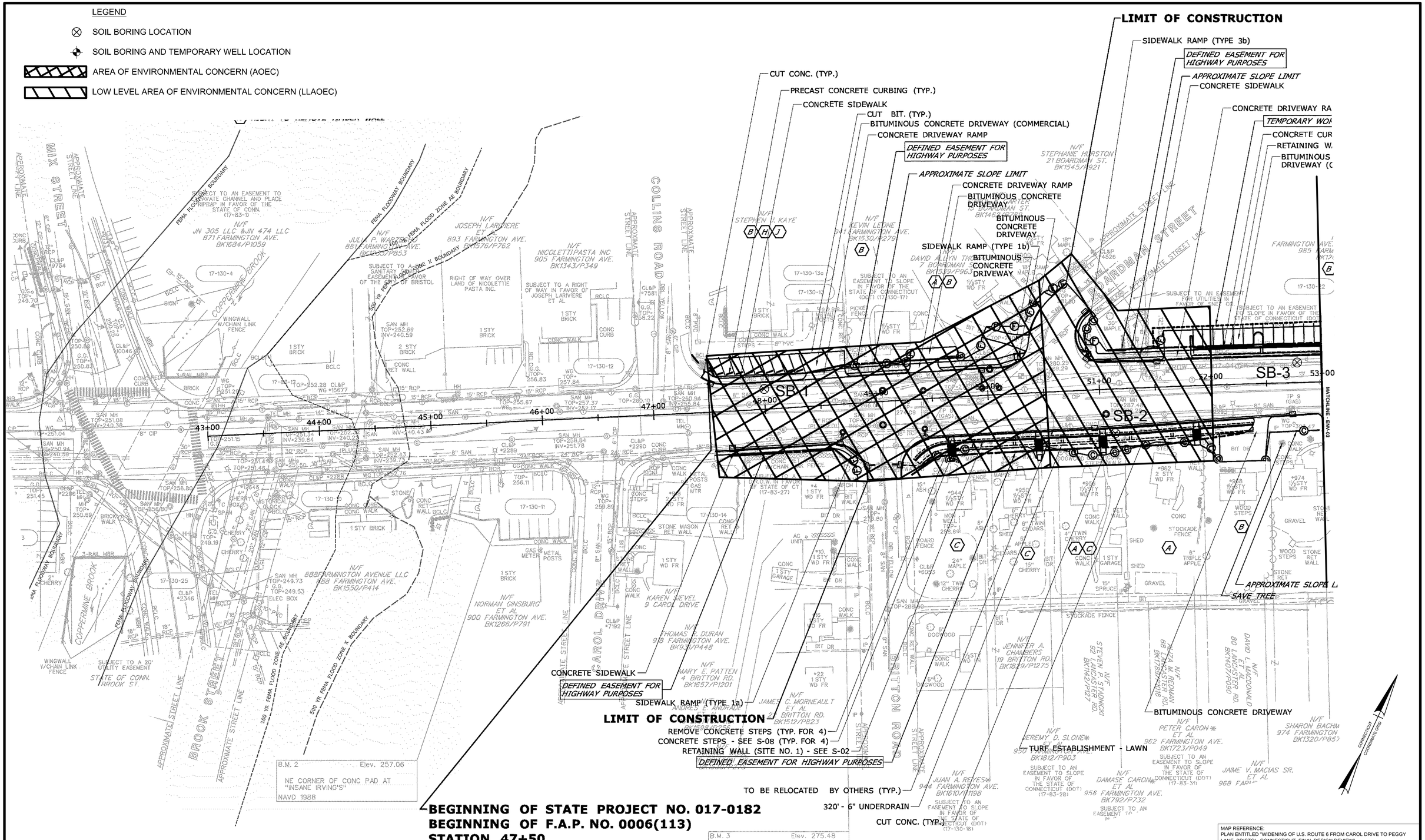
STATE OF CONNECTICUT
DEPARTMENT OF
ENERGY & ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127



A-05

LEGEND

- SOIL BORING LOCATION
- SOIL BORING AND TEMPORARY WELL LOCATION
- AREA OF ENVIRONMENTAL CONCERN (AOEC)
- LOW LEVEL AREA OF ENVIRONMENTAL CONCERN (LLAOEC)



MAP REFERENCE:
PLAN ENTITLED "WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE, BRISTOL, CONNECTICUT, FINAL DESIGN REVIEW"
PREPARED BY: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 03/21/2016

DESIGNER/DRAFTER: WAS/BOB
CHECKED BY: TRB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: V:_CONND\Bristol\US ROUTE 6 FROM CAROL DR TO PEGGY LN\CT030731\CADCT030731_BRBTOL316_ENV_PLAN_SHEETS

SIGNATURE/ BLOCK:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

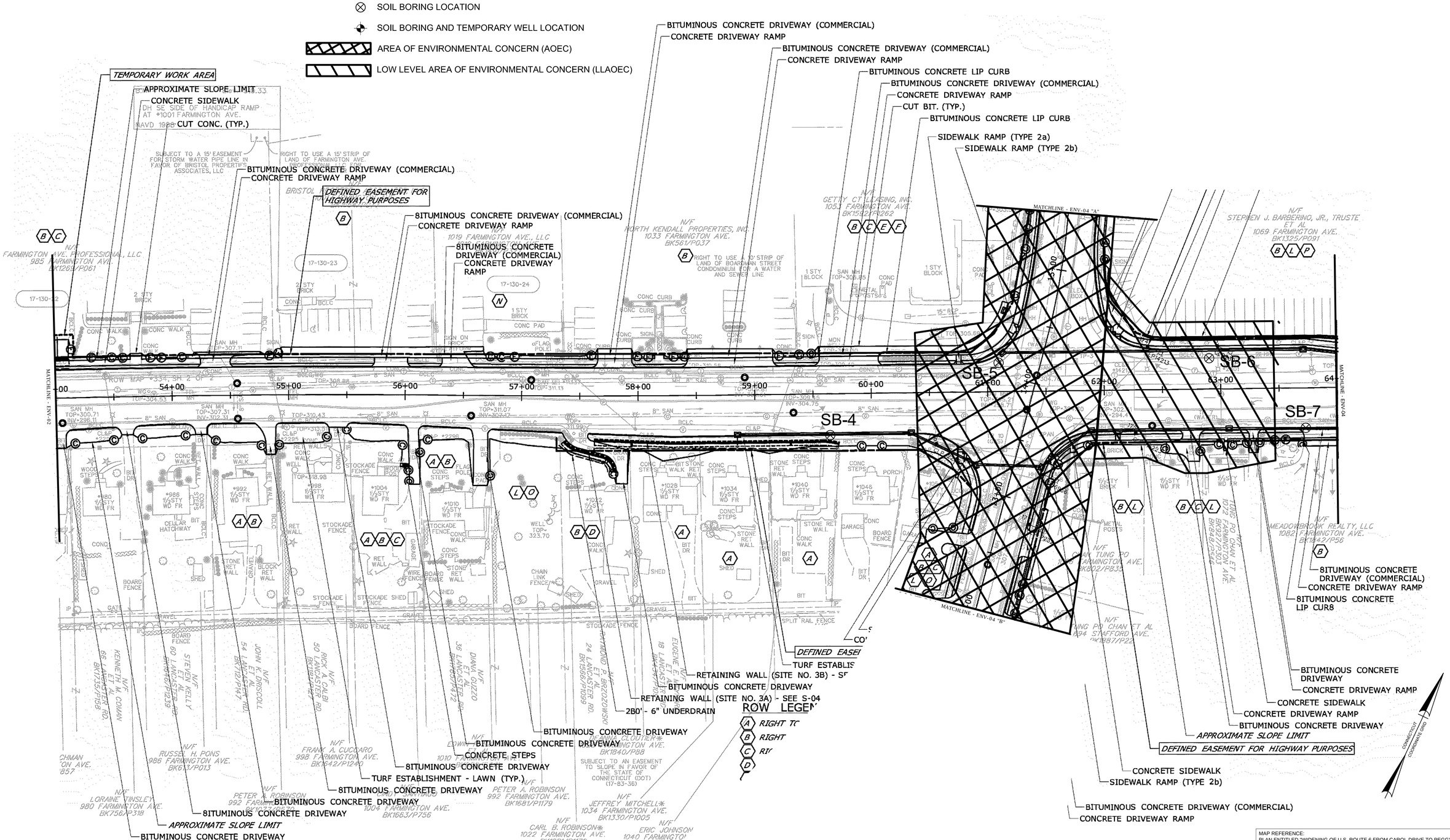
TOWN: BRISTOL

DRAWING TITLE:
AOECs WITH SOIL BORING LOCATIONS

PROJECT NO. 0017-0182
DRAWING NO. ENV-02
SHEET NO.

LEGEND

- SOIL BORING LOCATION
- SOIL BORING AND TEMPORARY WELL LOCATION
- AREA OF ENVIRONMENTAL CONCERN (AOEC)
- LOW LEVEL AREA OF ENVIRONMENTAL CONCERN (LLAOEC)



MAP REFERENCE:
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PREPARED BY: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 03/21/2016

DESIGNER/DRAFTER: WAS/BOB
CHECKED BY: TRB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: V:\...CONND \Beta\US ROUTE 6 FROM CAROL DR TO PEGGY LNCT03072310ZACTD302731_BRBTOL310_ENV_PLAN_SHEETS

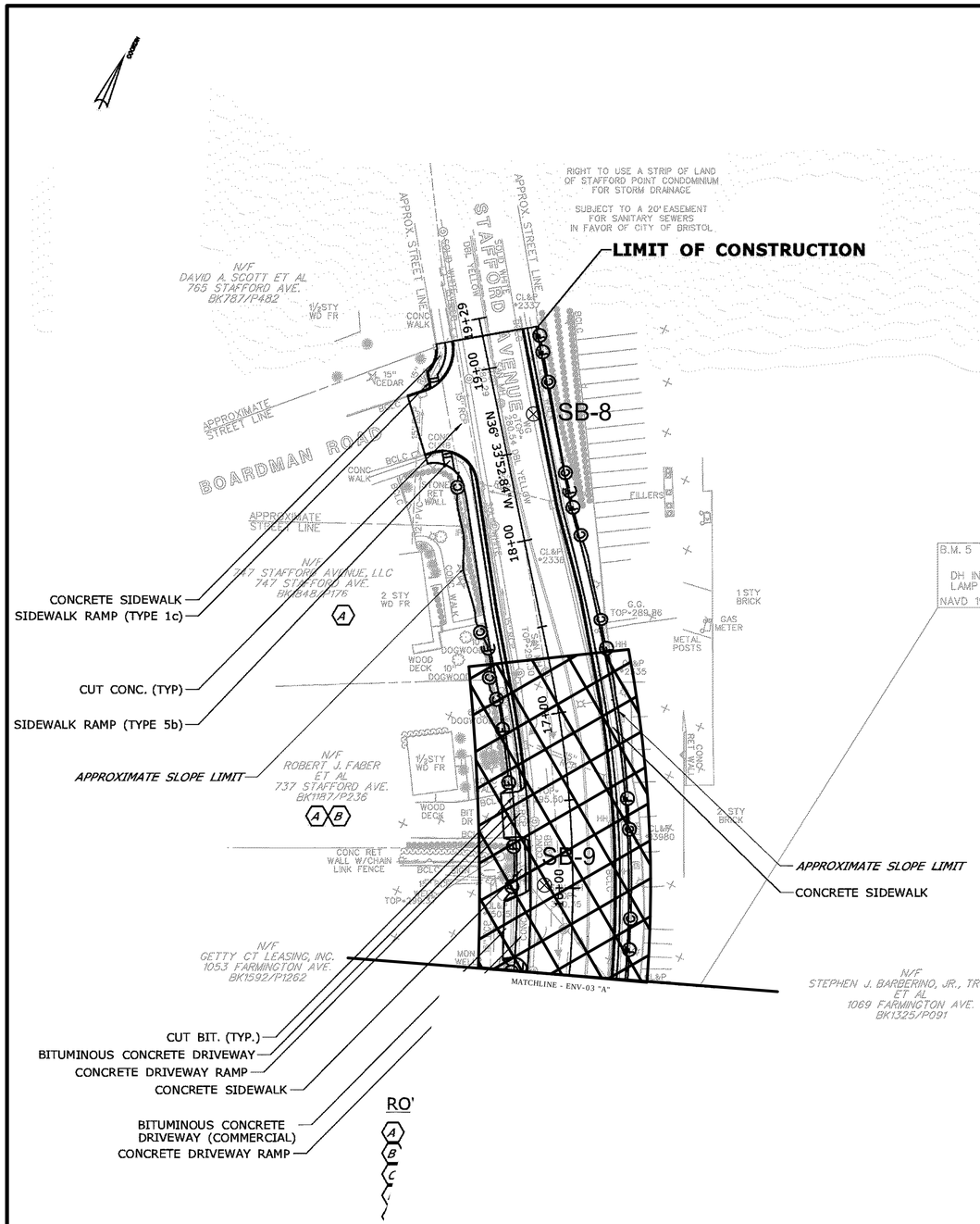
SIGNATURE/ BLOCK:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL

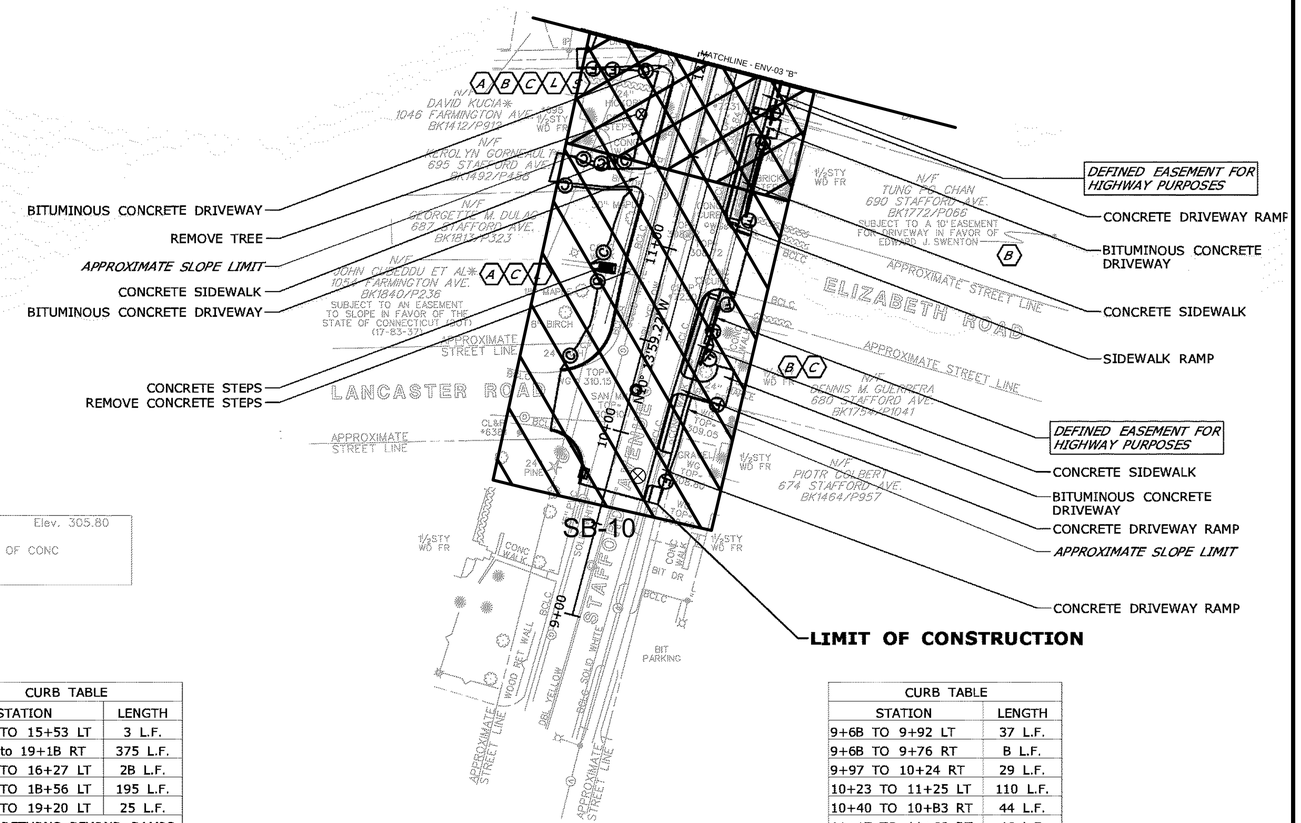
DRAWING TITLE:
AOECs WITH SOIL BORING LOCATIONS

PROJECT NO. 0017-0182
DRAWING NO. ENV-03
SHEET NO.



B.M. 5 Elev. 305.80
DH IN SW SIDE OF CONC LAMP BASE
NAVD 1988

CURB TABLE	
STATION	LENGTH
15+50 TO 15+53 LT	3 L.F.
15+50 to 19+1B RT	375 L.F.
16+00 TO 16+27 LT	2B L.F.
16+61 TO 1B+56 LT	195 L.F.
1B+99 TO 19+20 LT	25 L.F.
*CURB RETURNS BEYOND RAMPS AND CURB FOR MEDIANS ARE NOT INCLUDED IN THIS TABLE	



CURB TABLE	
STATION	LENGTH
9+6B TO 9+92 LT	37 L.F.
9+6B TO 9+76 RT	B L.F.
9+97 TO 10+24 RT	29 L.F.
10+23 TO 11+25 LT	110 L.F.
10+40 TO 10+B3 RT	44 L.F.
11+17 TO 11+66 RT	46 L.F.
11+40 TO 11+87 LT	48 L.F.
11+B0 TO 11+B3 RT	6 L.F.
*CURB RETURNS BEYOND RAMPS AND CURB FOR MEDIANS ARE NOT INCLUDED IN THIS TABLE	

LEGEND

- SOIL BORING LOCATION
- SOIL BORING AND TEMPORARY WELL LOCATION
- AREA OF ENVIRONMENTAL CONCERN (AOEC)
- LOW LEVEL AREA OF ENVIRONMENTAL CONCERN (LLAOEC)

CONNECTICUT COORDINATE GRID

MAP REFERENCE:
PLAN ENTITLED "WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE, BRISTOL, CONNECTICUT, FINAL DESIGN REVIEW"
PREPARED BY: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 03/21/2016

DESIGNER/DRAFTER: WAS/BOB
CHECKED BY: TRB
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SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: V:\...CONND \BristolUS ROUTE 6 FROM CAROL DR TO PEGGY LNCTD030731\CAD\CTD030731_ BRBTOL31G_ ENV_ PLAN_ SHEETS

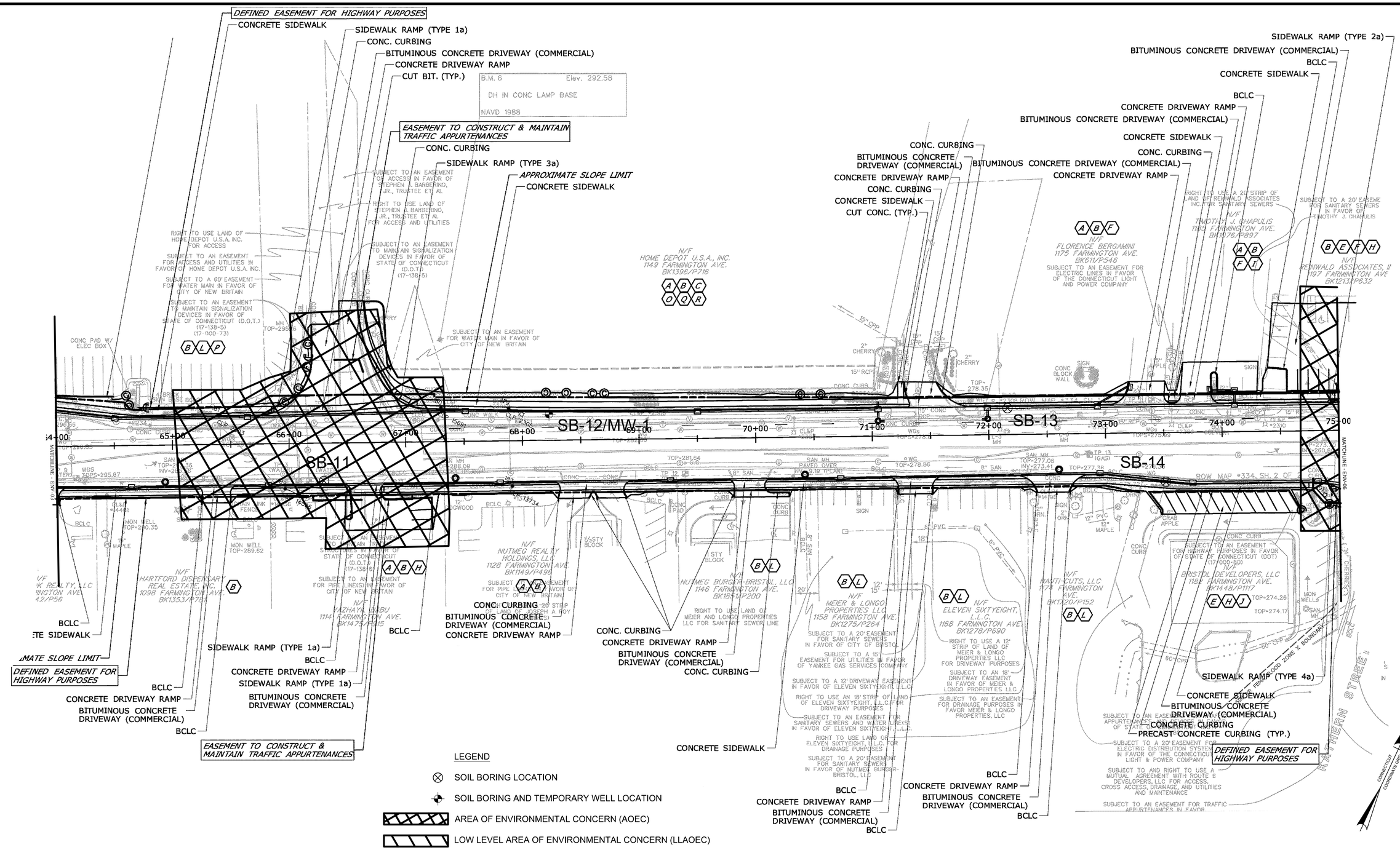
SIGNATURE/ BLOCK:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL

DRAWING TITLE: AOECs WITH SOIL BORING LOCATIONS

PROJECT NO. 0017-0182
DRAWING NO. ENV-04
SHEET NO.



MAP REFERENCE:
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PREPARED BY: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 03/21/2016

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CHECKED BY: TRB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: V:\...CDNND\Bristol\US ROUTE 6 FROM CAROL DR TO PEGGY LN\CTD030723\CAD\CTD030731_ BRBTOL310_ ENV_ PLAN_ SHEETS

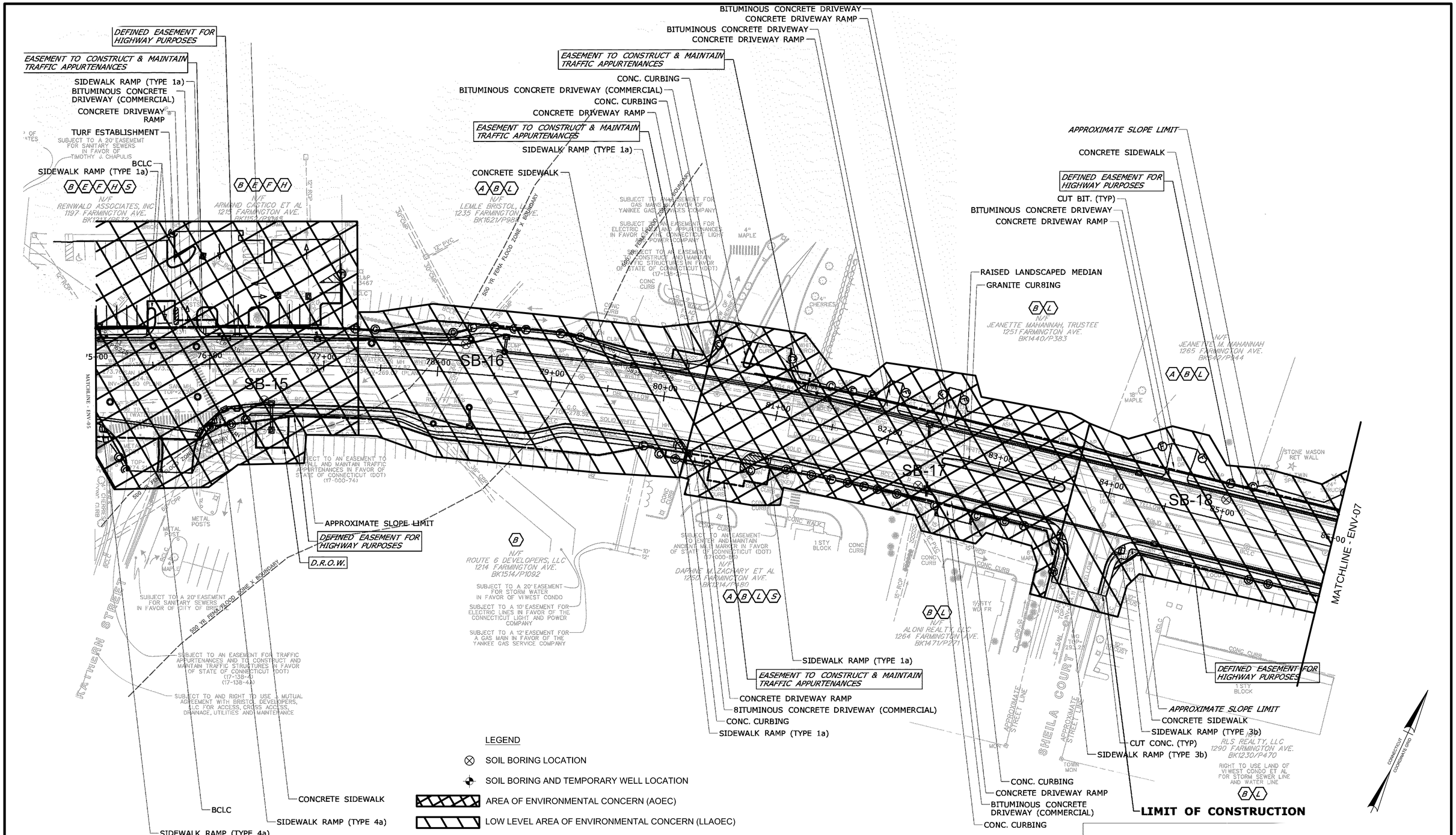
SIGNATURE/ BLOCK:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL

DRAWING TITLE: AOECs WITH SOIL BORING LOCATIONS

PROJECT NO. 0017-0182
DRAWING NO. ENV-05
SHEET NO.



MAP REFERENCE:
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PREPARED BY: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.

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Plotted Date: 03/21/2016

DESIGNER/DRAFTER: WAS/BOB
CHECKED BY: TRB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: V:\...CDAND \BristolUS ROUTE 6 FROM CAROL DR TO PEGGY LNCTD307231\CADCTD302731_ BRBTOL31C_ENV_ PLAN_ SHEETS

SIGNATURE/ BLOCK:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL

DRAWING TITLE:
AOECs WITH SOIL BORING LOCATIONS

PROJECT NO. 0017-0182
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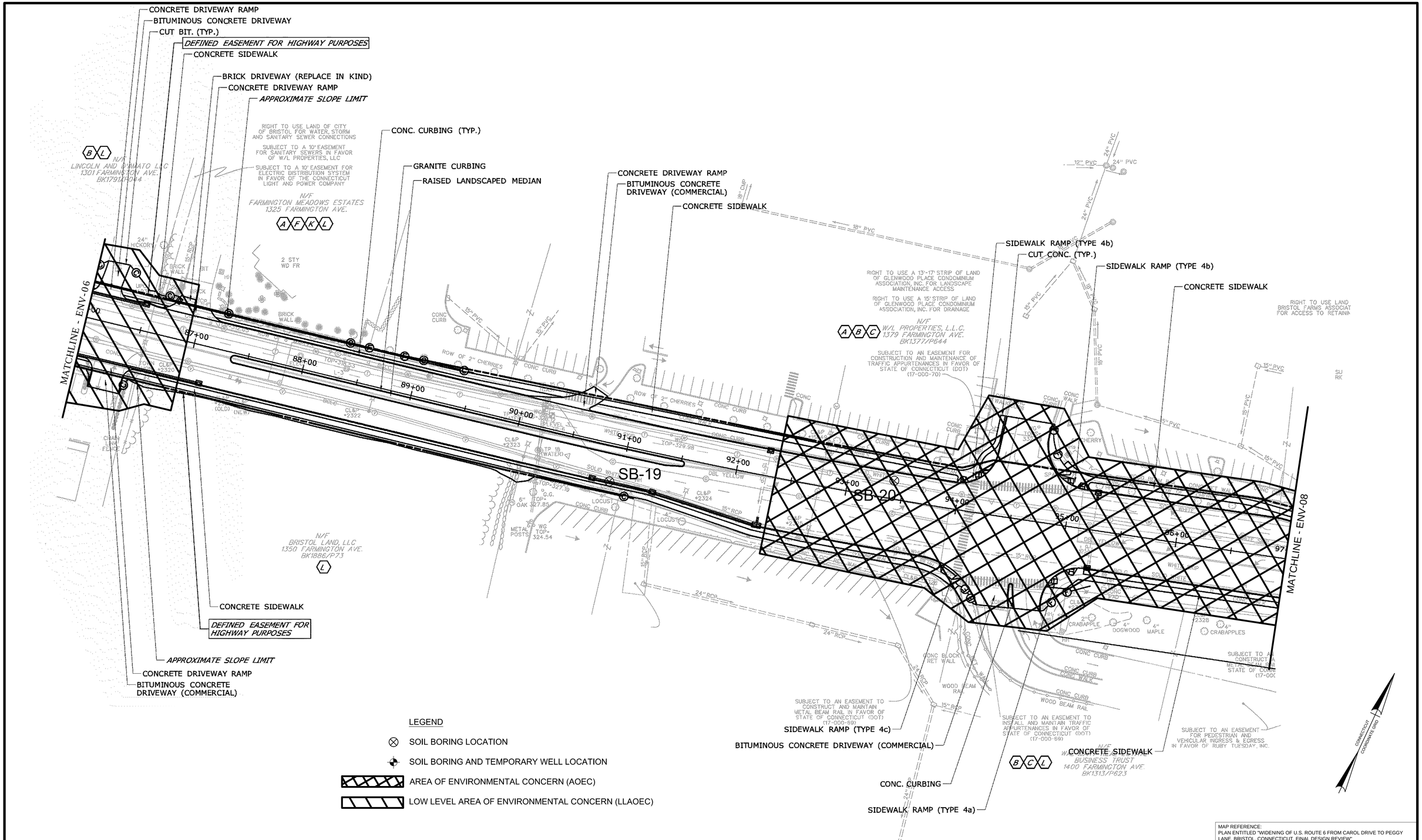

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PREPARED BY: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.

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Plotted Date: 03/21/2016

DESIGNER/DRAFTER: WAS/BOB
CHECKED BY: TRB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: V:\...CONND \Beto\US ROUTE 6 FROM CAROL DR TO PEGGY LNCTD\307231\CADCTD\307231_BRBTOL310_ENV_PLAN_SHEETS

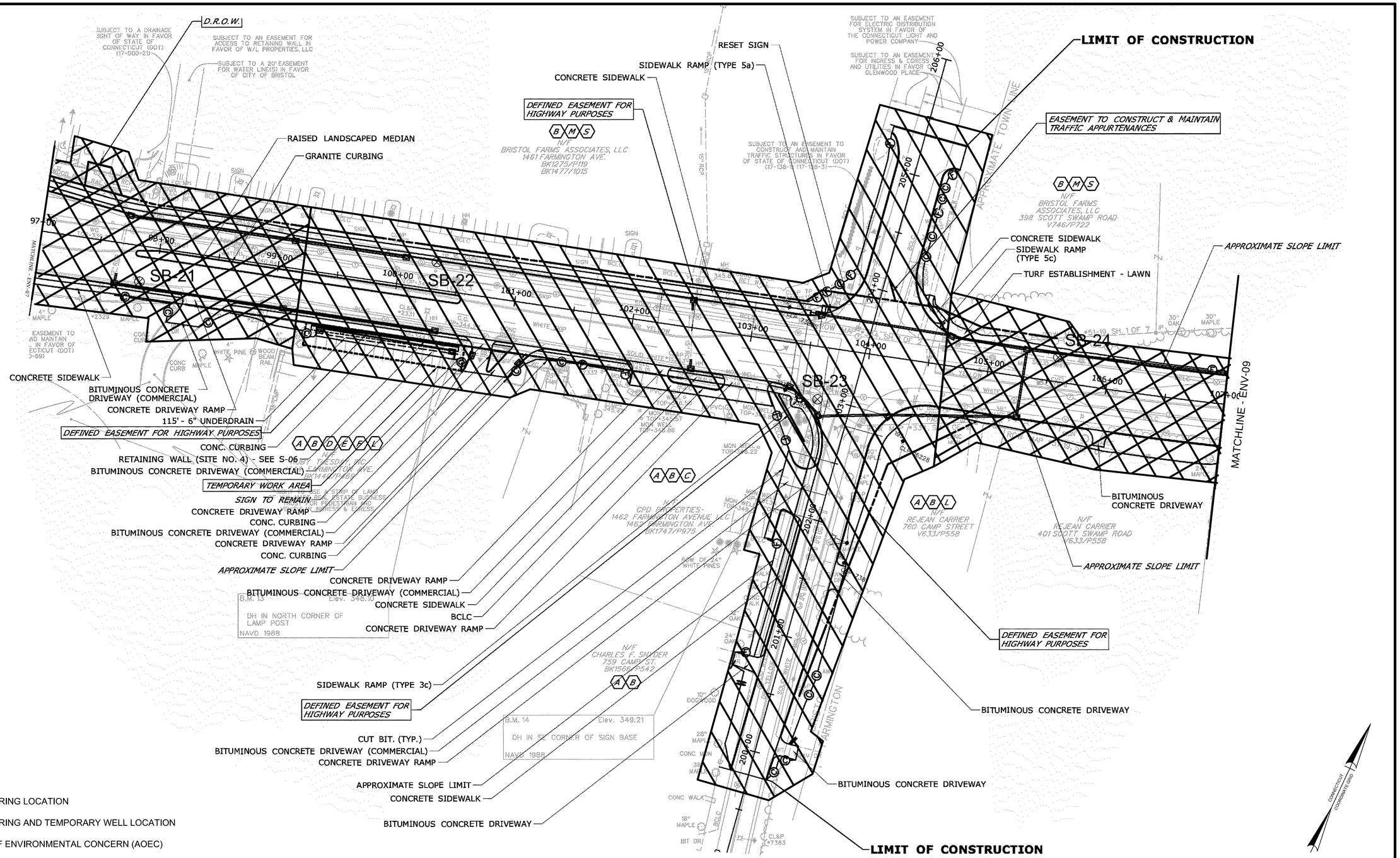
SIGNATURE/ BLOCK:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL

DRAWING TITLE: AOECs WITH SOIL BORING LOCATIONS

PROJECT NO. 0017-0182
DRAWING NO. ENV-07
SHEET NO.



LEGEND

- SOIL BORING LOCATION
- SOIL BORING AND TEMPORARY WELL LOCATION
- AREA OF ENVIRONMENTAL CONCERN (AOEC)
- LOW LEVEL AREA OF ENVIRONMENTAL CONCERN (LLAOEC)

MAP REFERENCE:
PLAN ENTITLED "WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE, BRISTOL, CONNECTICUT, FINAL DESIGN REVIEW"
PREPARED BY: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 03/21/2016

DESIGNER/DRAFTER: WAS/BOB
CHECKED BY: TRB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: V:\...CONND \Beta\US ROUTE 6 FROM CAROL DR TO PEGGY LNCTD0072310CADCTD002731_BRBTOL310_ENV_PLAN_SHEETS

SIGNATURE/ BLOCK:

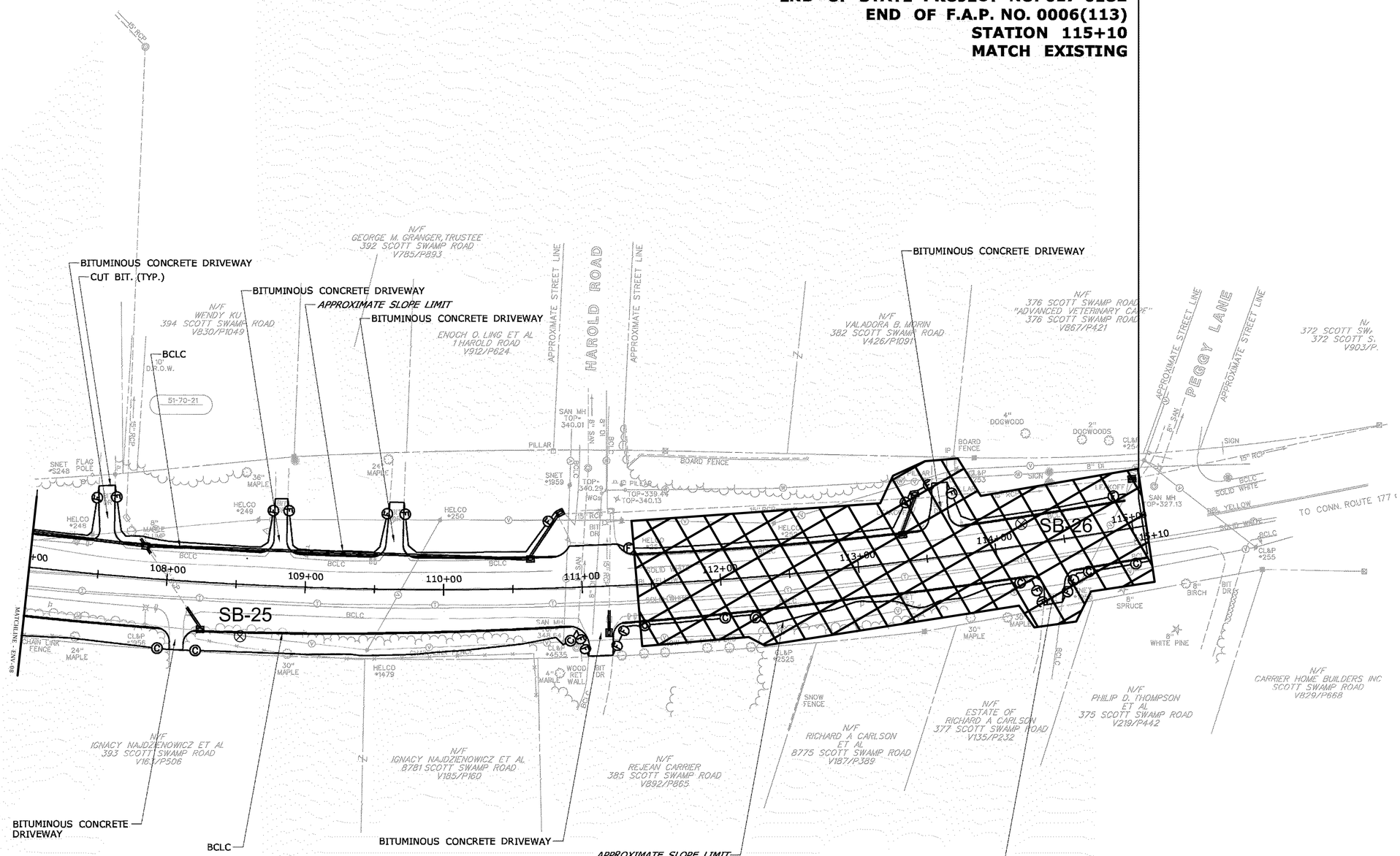
PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL

DRAWING TITLE:
AOECs WITH SOIL BORING LOCATIONS

PROJECT NO. 0017-0182
DRAWING NO. ENV-08
SHEET NO.

END OF STATE PROJECT NO. 017-0182
END OF F.A.P. NO. 0006(113)
STATION 115+10
MATCH EXISTING



LEGEND

- ⊗ SOIL BORING LOCATION
- SOIL BORING AND TEMPORARY WELL LOCATION
- AREA OF ENVIRONMENTAL CONCERN (AOEC)
- LOW LEVEL AREA OF ENVIRONMENTAL CONCERN (LLAOEC)

MAP REFERENCE:
PLAN ENTITLED "WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE, BRISTOL, CONNECTICUT, FINAL DESIGN REVIEW"
PREPARED BY: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 03/21/2016

DESIGNER/DRAFTER: WAS/BOB
CHECKED BY: TRB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: V:__CONND\Bristol\US ROUTE 6 FROM CAROL DR TO PEGGY LN\CTD007231\CAD\CTD002731_BRBTOL315_ENV_PLAN_SHEETS

SIGNATURE/ BLOCK:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL

DRAWING TITLE:
AOECs WITH SOIL BORING LOCATIONS

PROJECT NO. 0017-0182
DRAWING NO. ENV-09
SHEET NO.

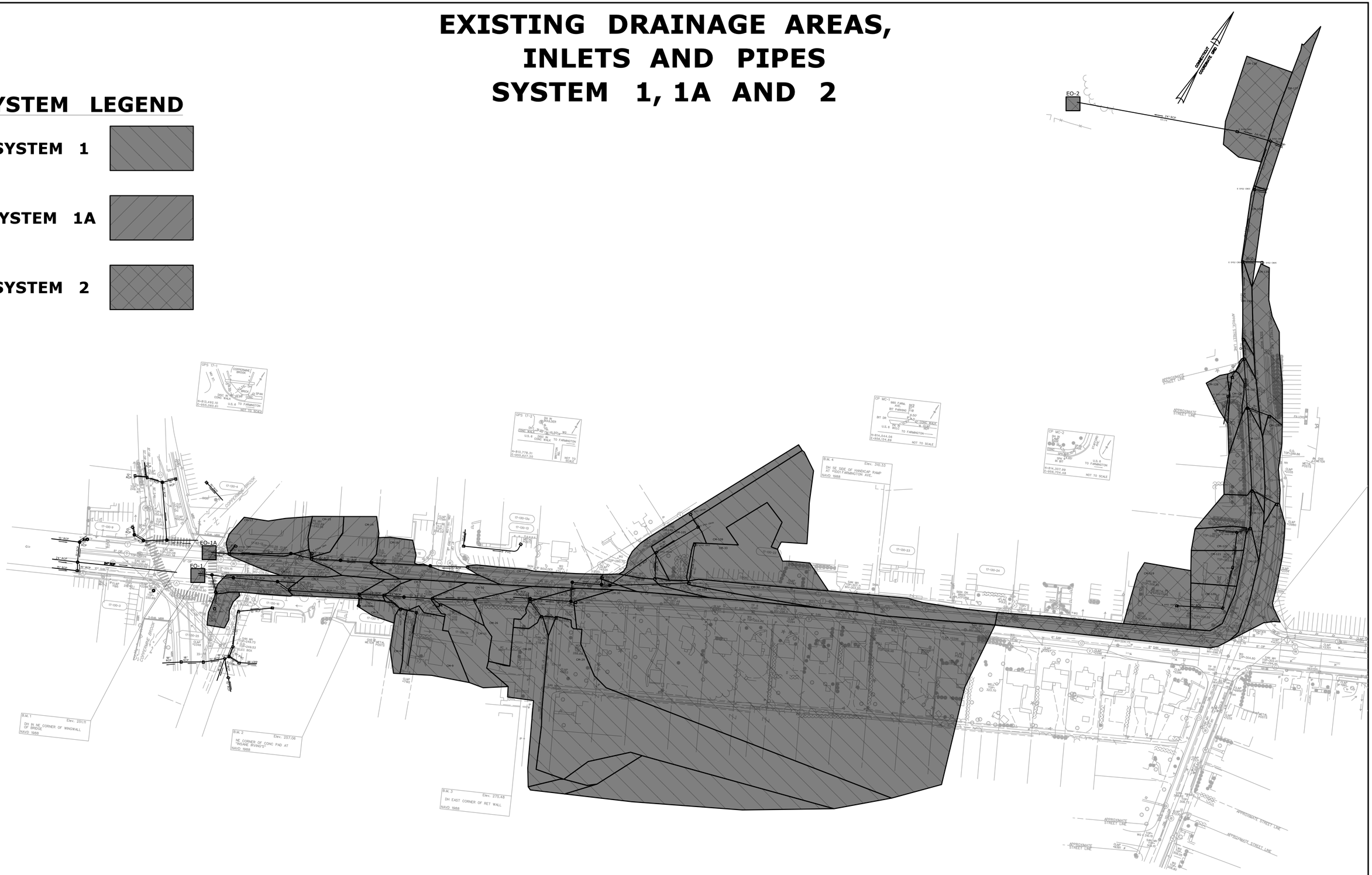
EXISTING DRAINAGE AREAS, INLETS AND PIPES SYSTEM 1, 1A AND 2

SYSTEM LEGEND

SYSTEM 1

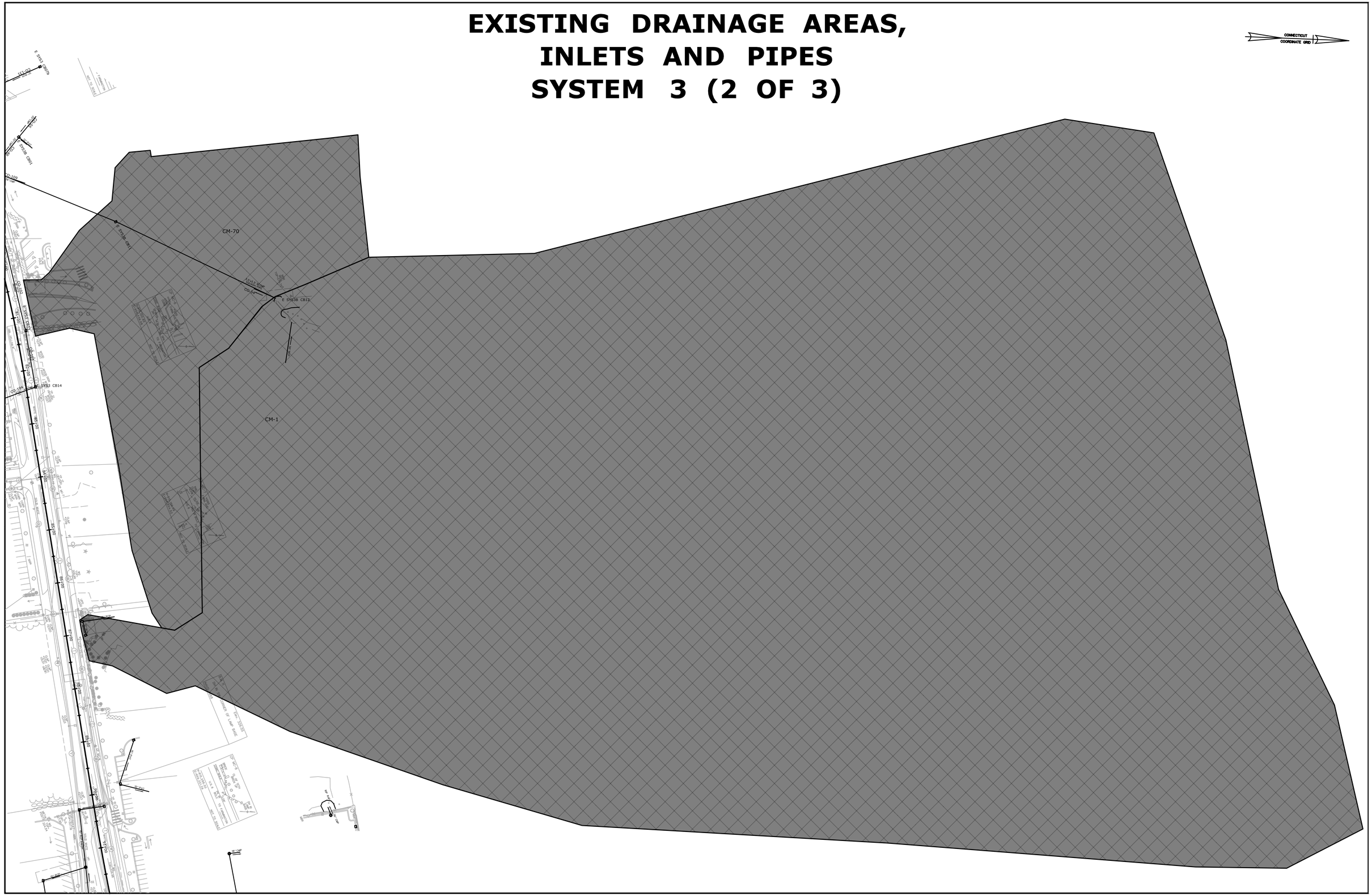
SYSTEM 1A

SYSTEM 2



EXISTING DRAINAGE AREAS, INLETS AND PIPES SYSTEM 3 (1 OF 3)

EXISTING DRAINAGE AREAS, INLETS AND PIPES SYSTEM 3 (2 OF 3)


CONNECTICUT COORDINATE GRID
CM-70
CM-1
E SY03B CB11
E SY03B CB12
E SY03 CB14
E SY03 CB13
E SY03B CB01
CO-109
CO-108
CO-107
CO-106
CO-105
CO-104
CO-103
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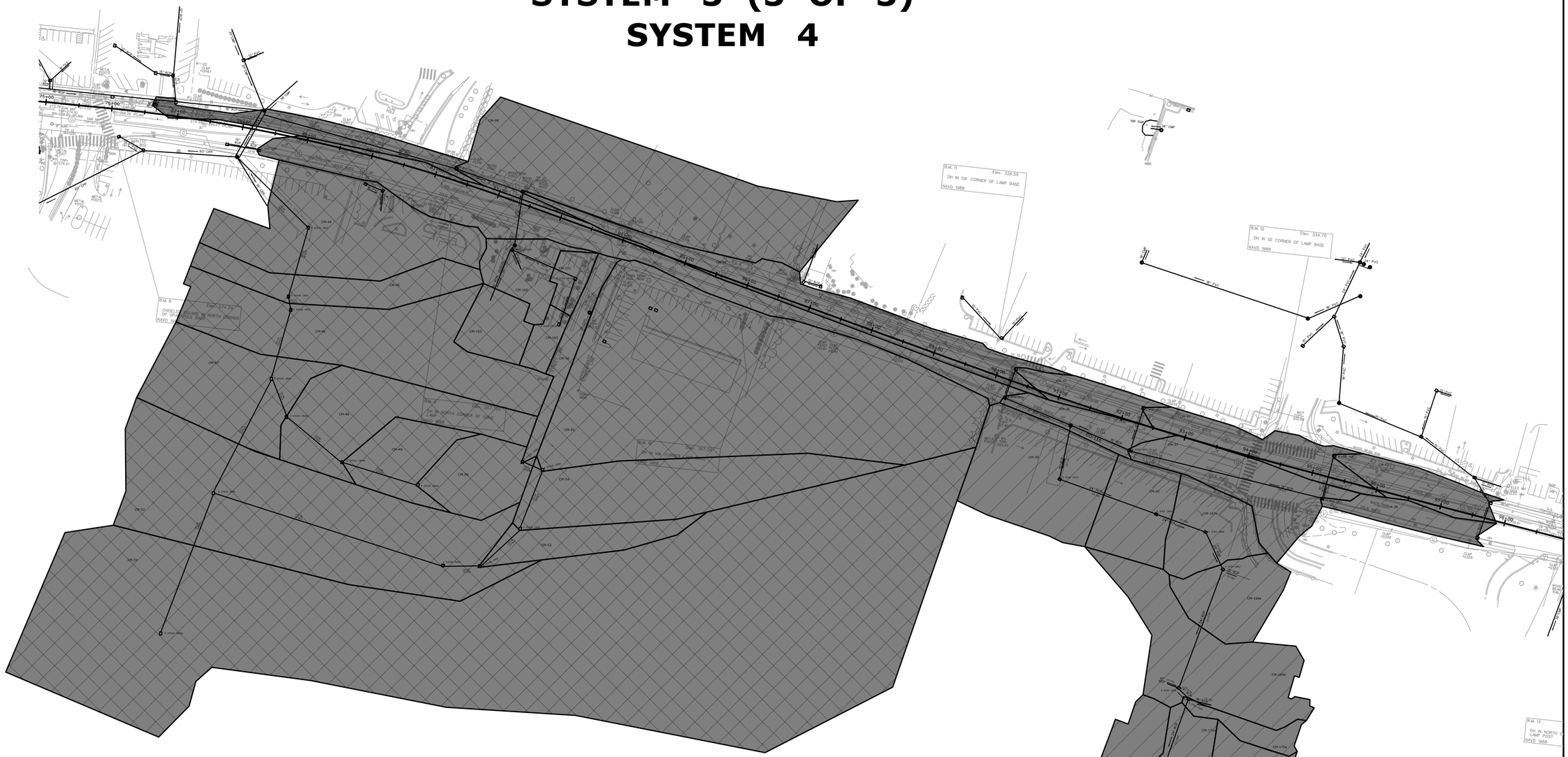
CO-10
CO-9
CO-8
CO-7
CO-6
CO-5
CO-4
CO-3
CO-2
CO-1
E SY03 CB03
E SY03 CB02
E SY03 CB01
E SY03 CB04
E SY03 CB05
E SY03 CB06
E SY03 CB07
E SY03 CB08
E SY03 CB09
E SY03 CB10
E SY03 CB15
E SY03 CB16
E SY03 CB17
E SY03 CB18
E SY03 CB19
E SY03 CB20
E SY03 CB21
E SY03 CB22
E SY03 CB23
E SY03 CB24
E SY03 CB25
E SY03 CB26
E SY03 CB27
E SY03

EXISTING DRAINAGE AREAS, INLETS AND PIPES SYSTEM 3 (3 OF 3) SYSTEM 4

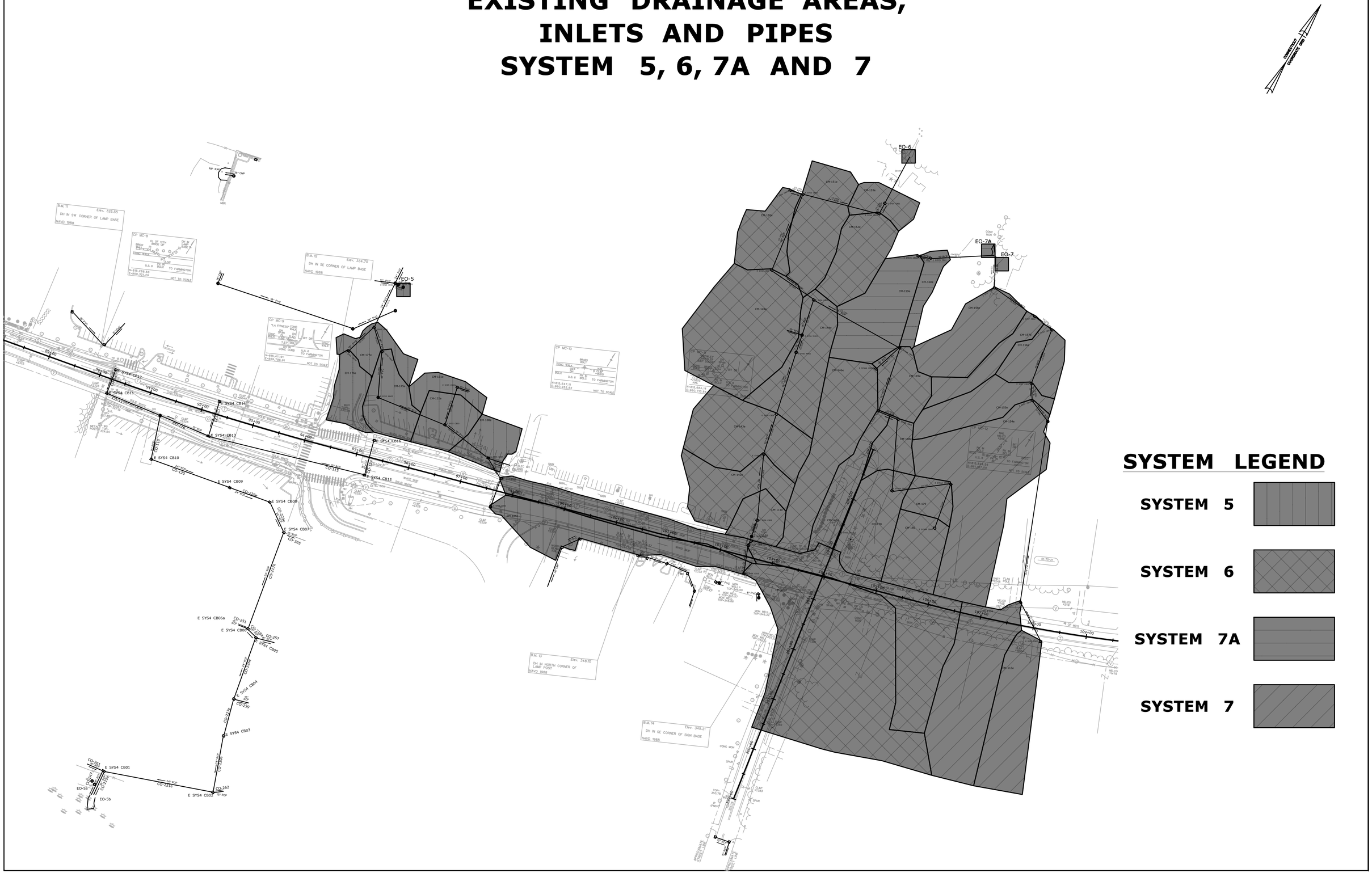


SYSTEM LEGEND

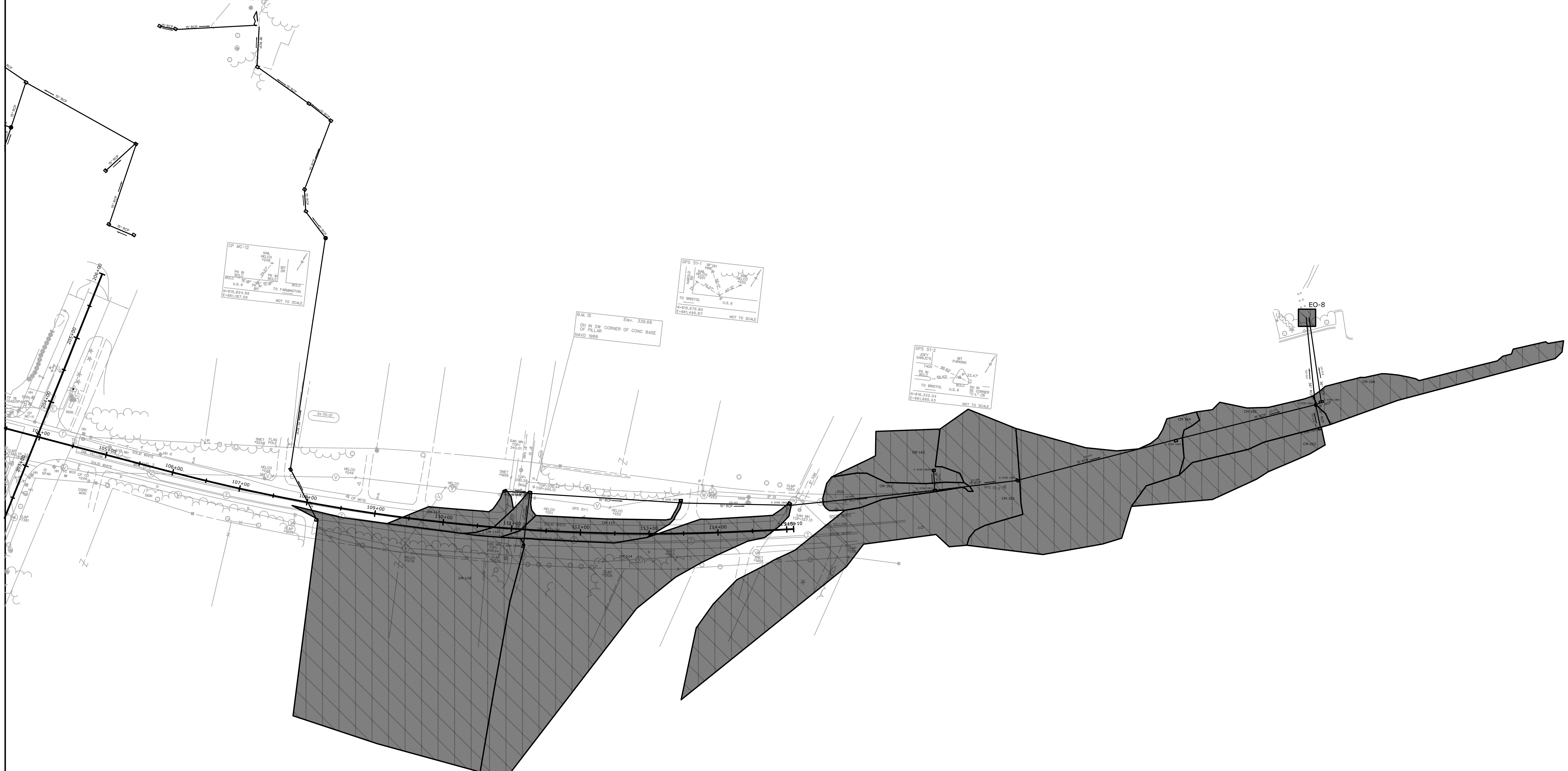
SYSTEM 3

SYSTEM 4

EXISTING DRAINAGE AREAS, INLETS AND PIPES SYSTEM 5, 6, 7A AND 7



EXISTING DRAINAGE AREAS, INLETS AND PIPES SYSTEM 8



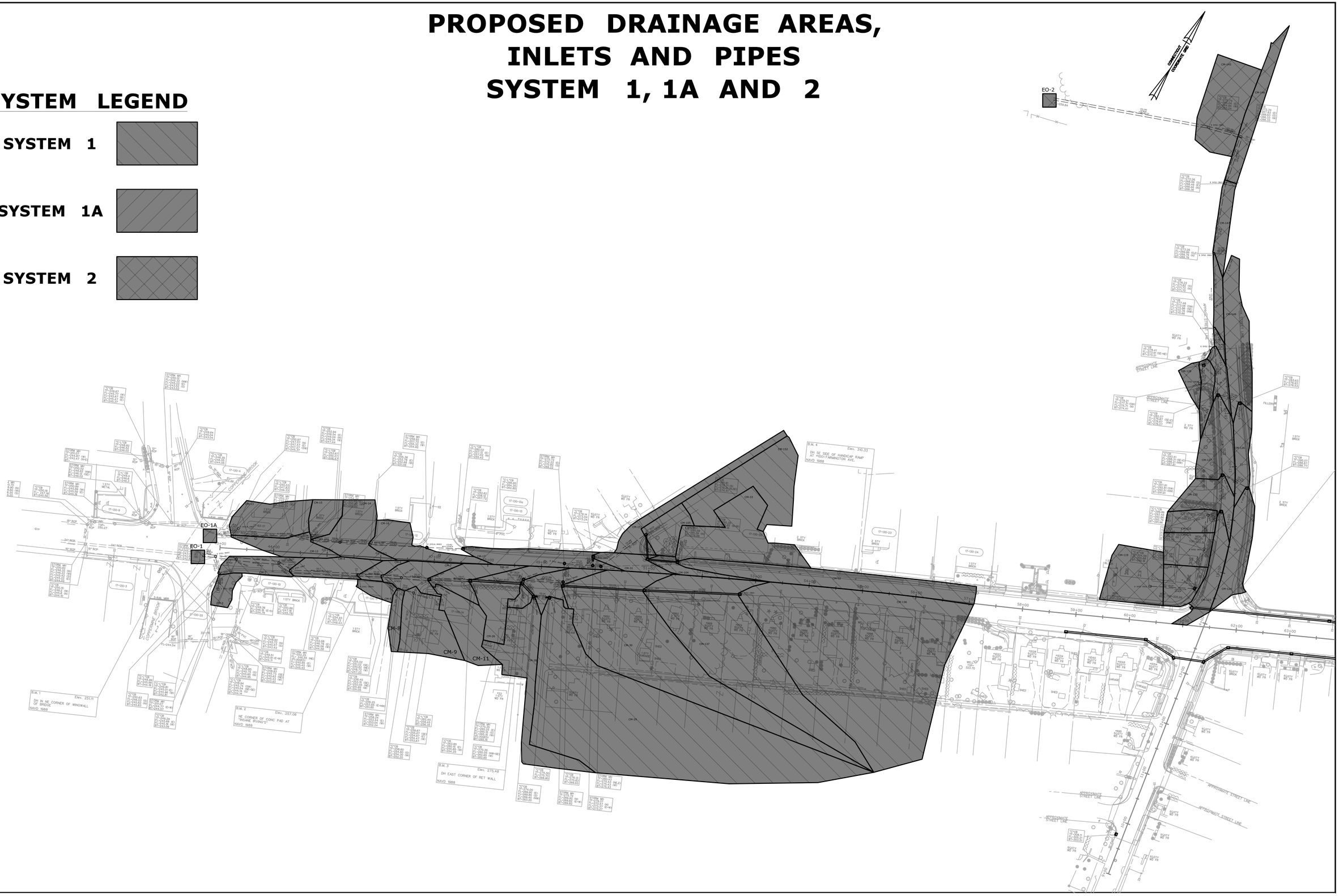
PROPOSED DRAINAGE AREAS, INLETS AND PIPES SYSTEM 1, 1A AND 2

SYSTEM LEGEND

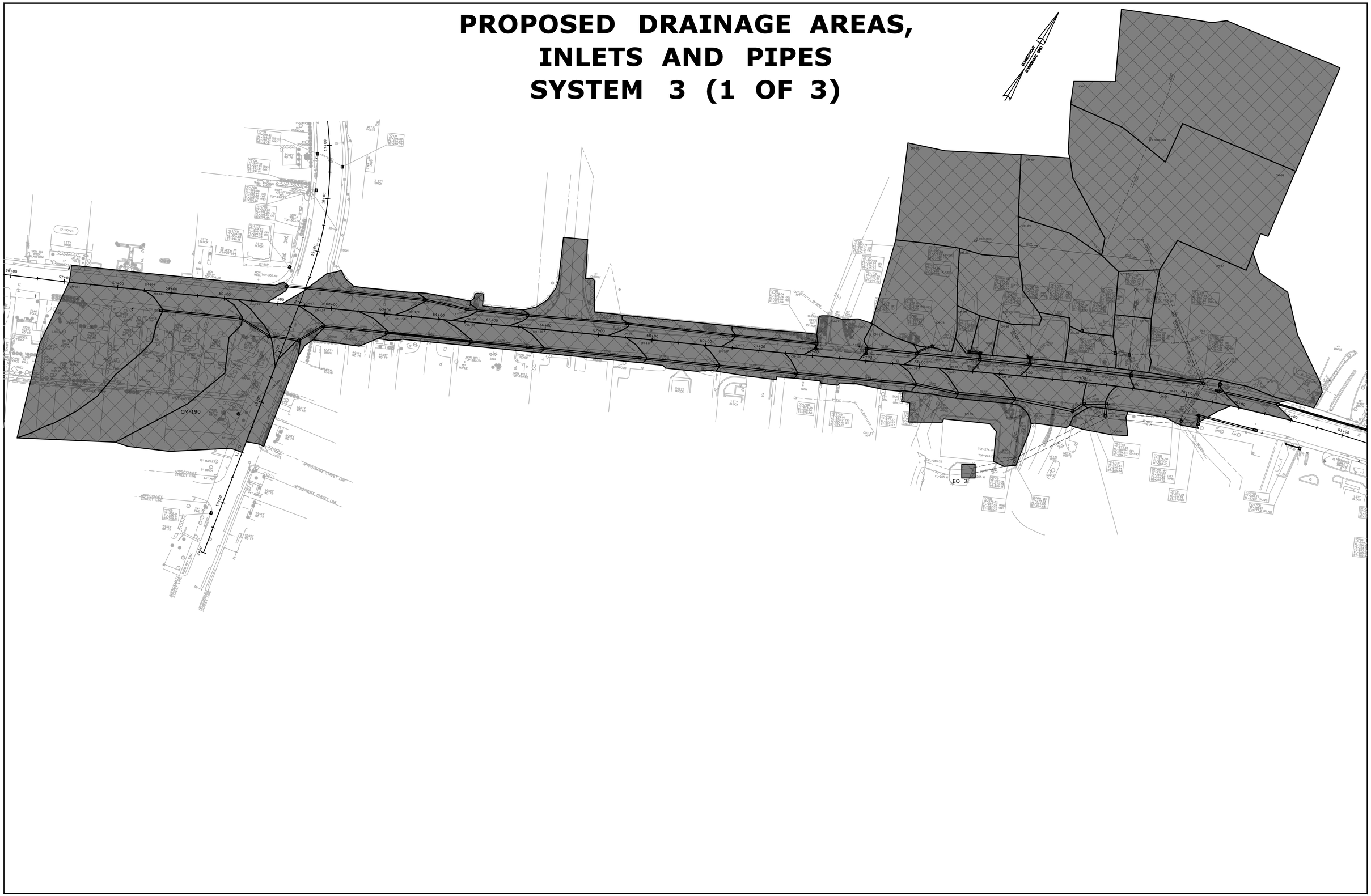
SYSTEM 1

SYSTEM 1A

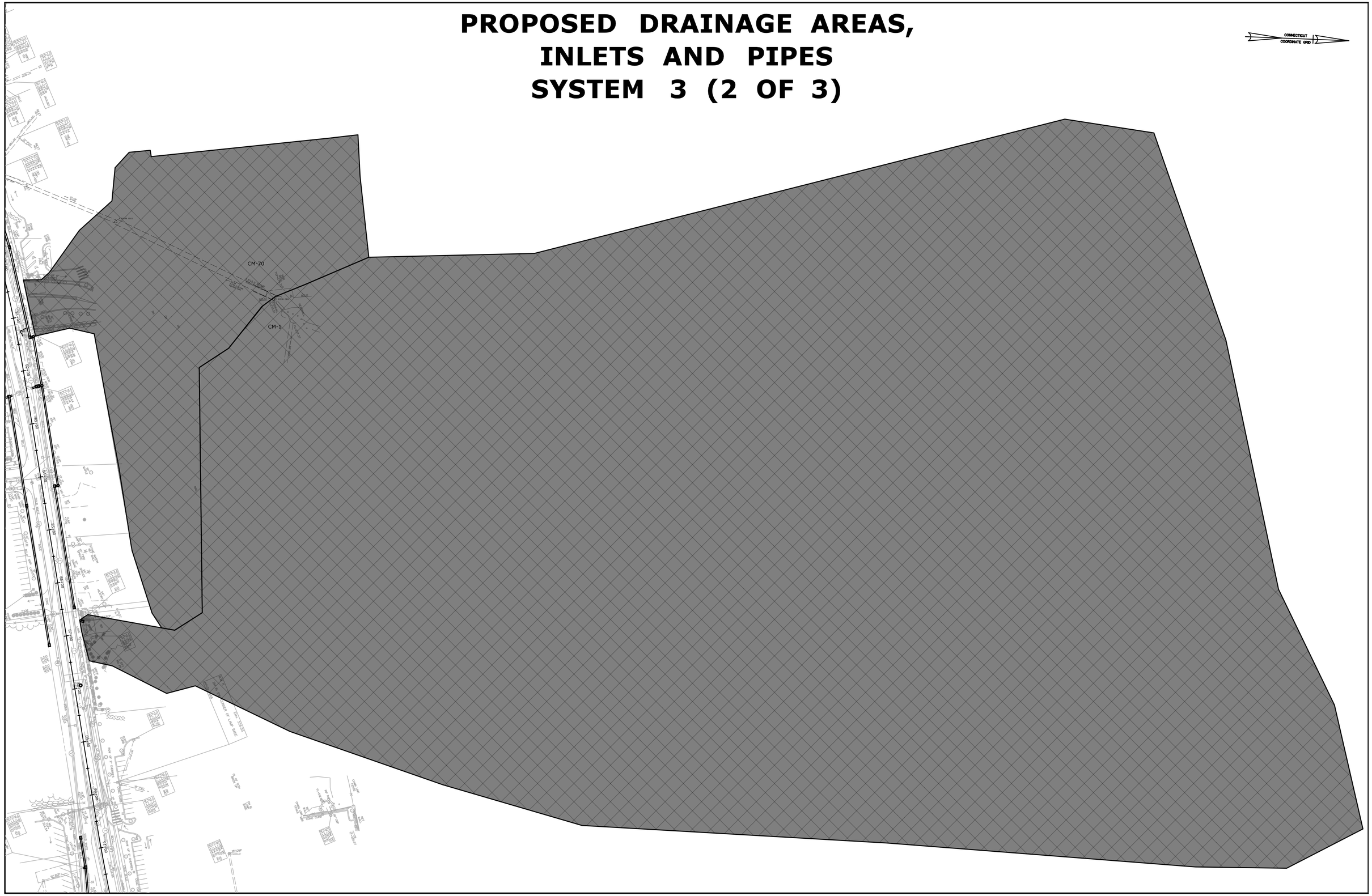
SYSTEM 2



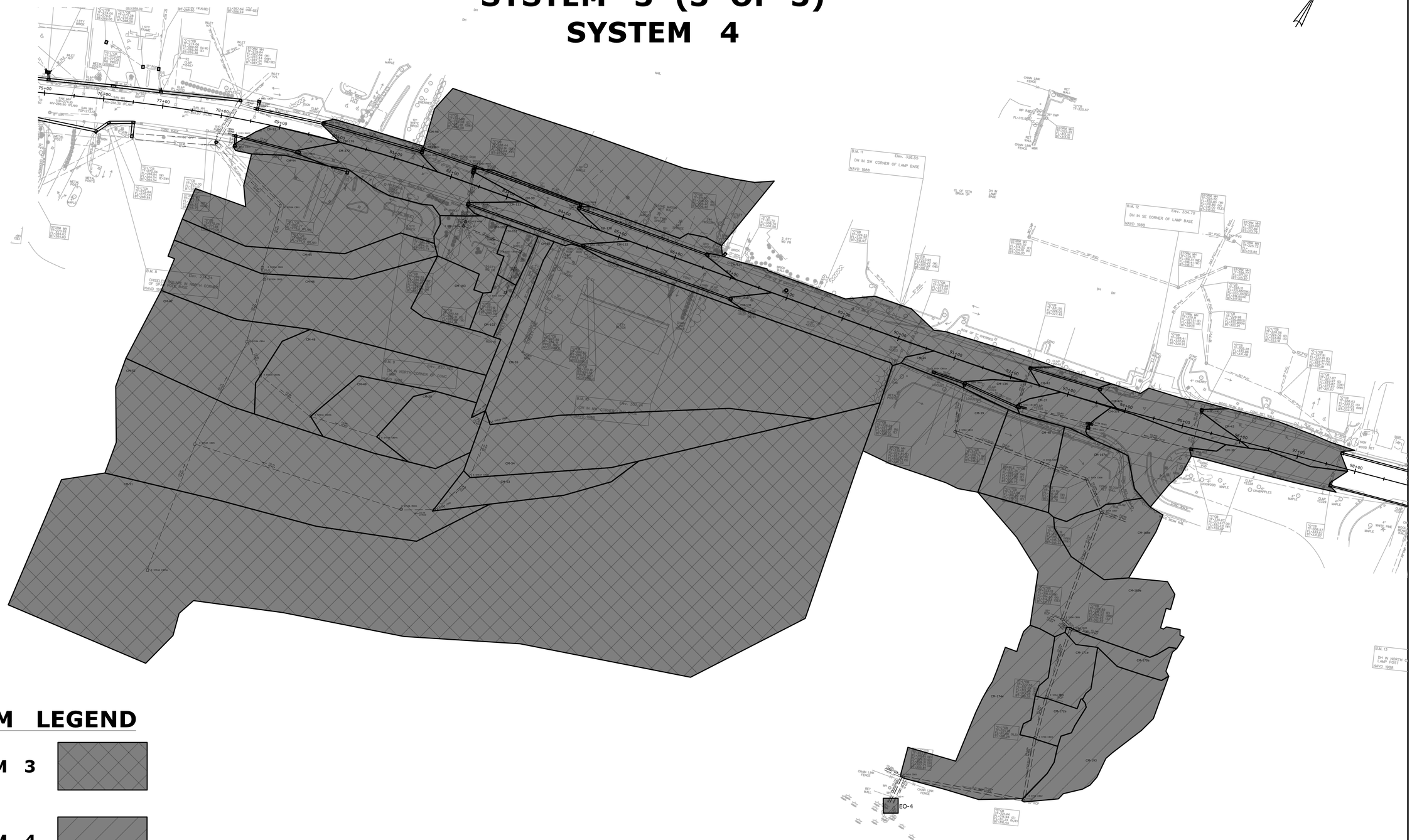
PROPOSED DRAINAGE AREAS, INLETS AND PIPES SYSTEM 3 (1 OF 3)



PROPOSED DRAINAGE AREAS, INLETS AND PIPES SYSTEM 3 (2 OF 3)



PROPOSED DRAINAGE AREAS, PIPES AND INLETS SYSTEM 3 (3 OF 3) SYSTEM 4

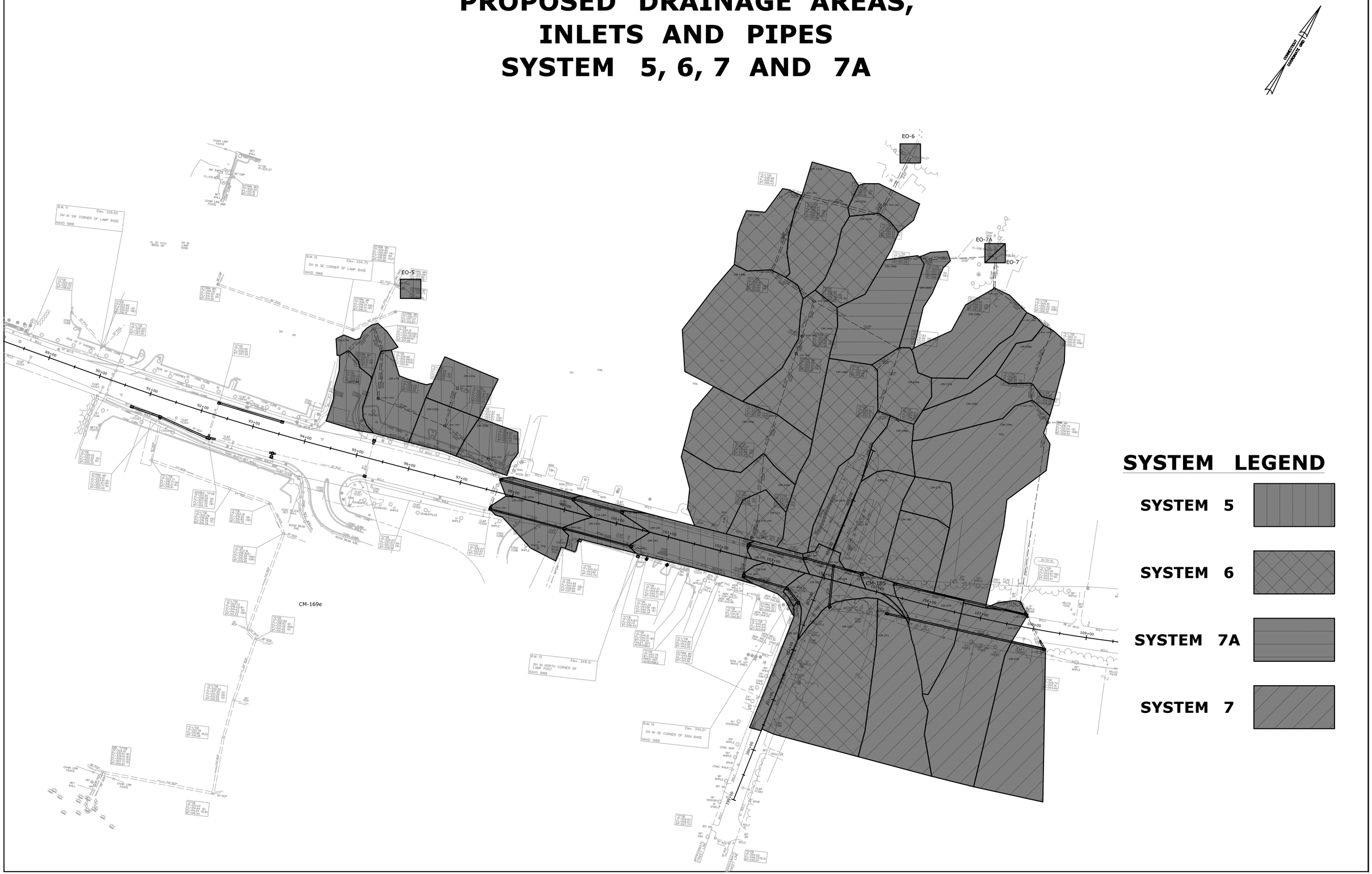


SYSTEM LEGEND

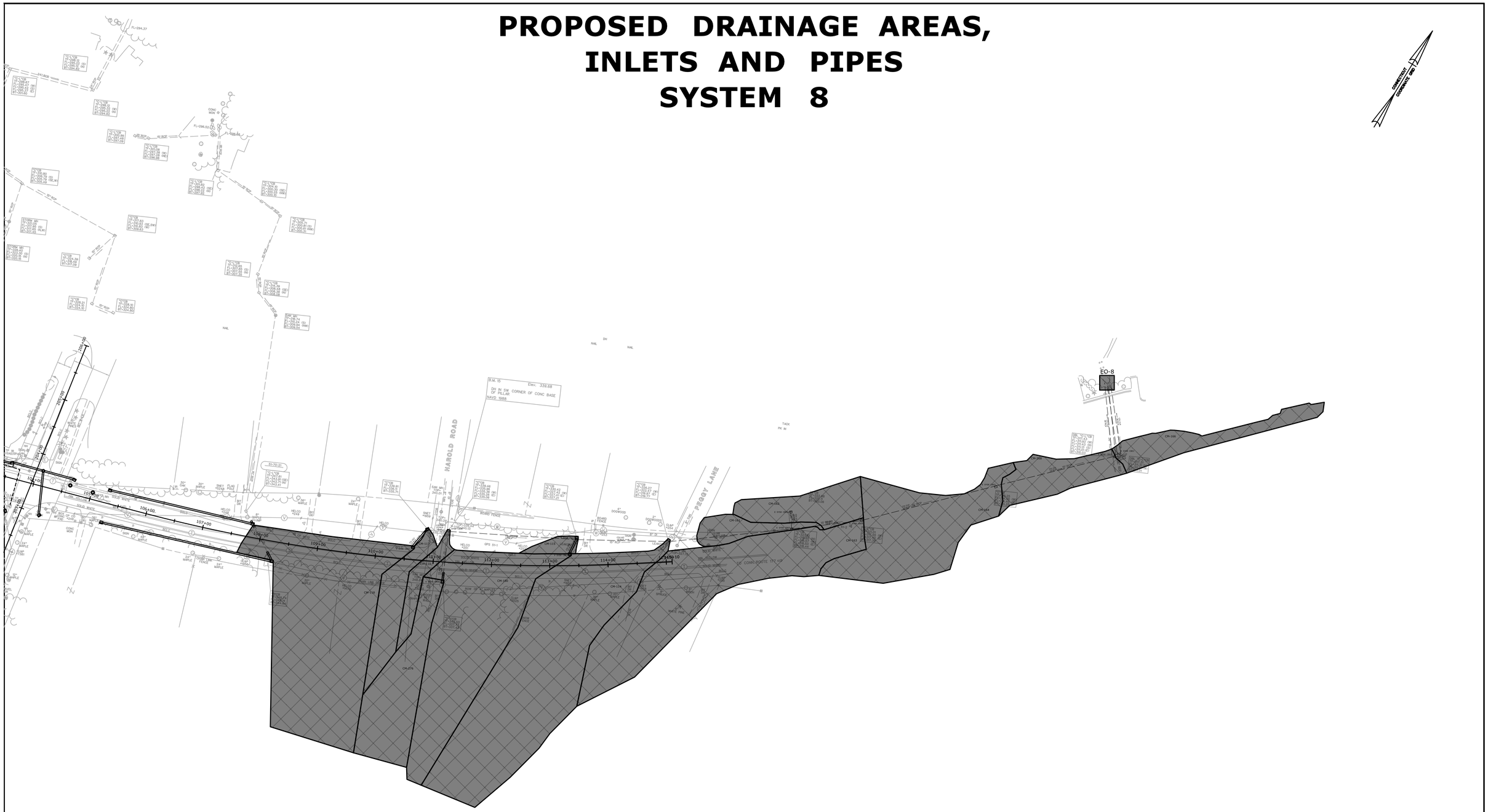
SYSTEM 3

SYSTEM 4

PROPOSED DRAINAGE AREAS, INLETS AND PIPES SYSTEM 5, 6, 7 AND 7A



PROPOSED DRAINAGE AREAS, INLETS AND PIPES SYSTEM 8



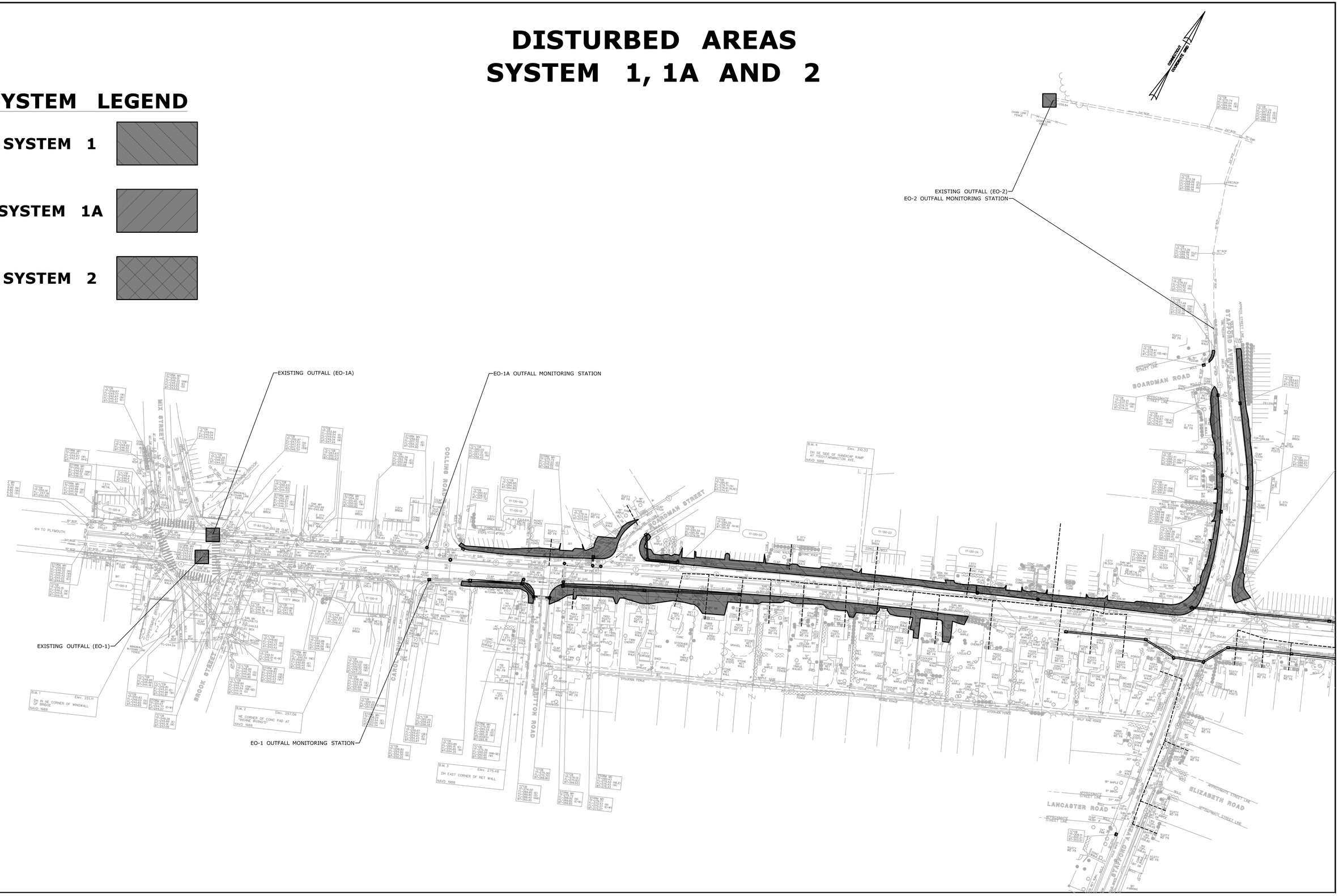
DISTURBED AREAS
SYSTEM 1, 1A AND 2

SYSTEM LEGEND

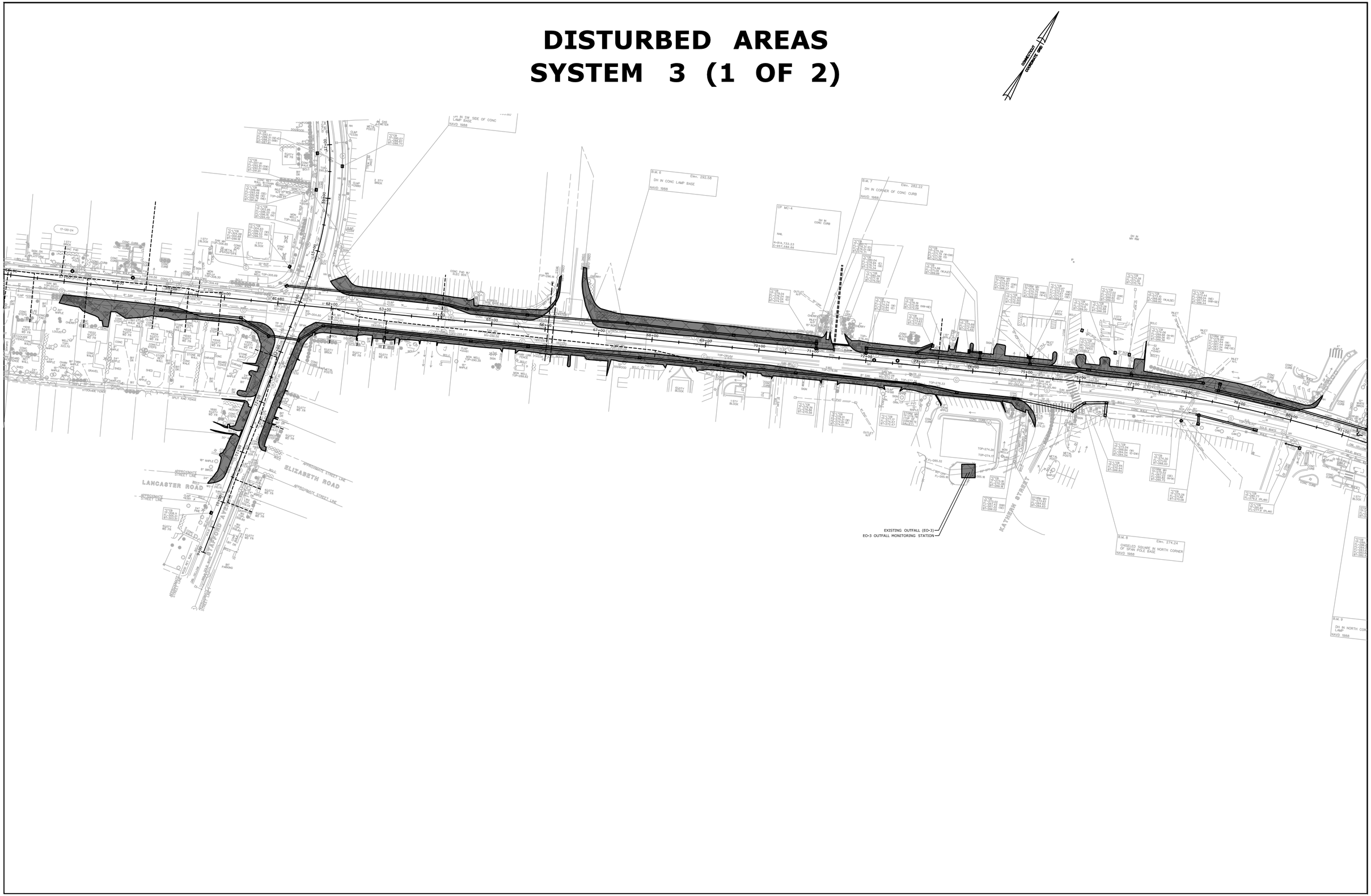
SYSTEM 1

SYSTEM 1A

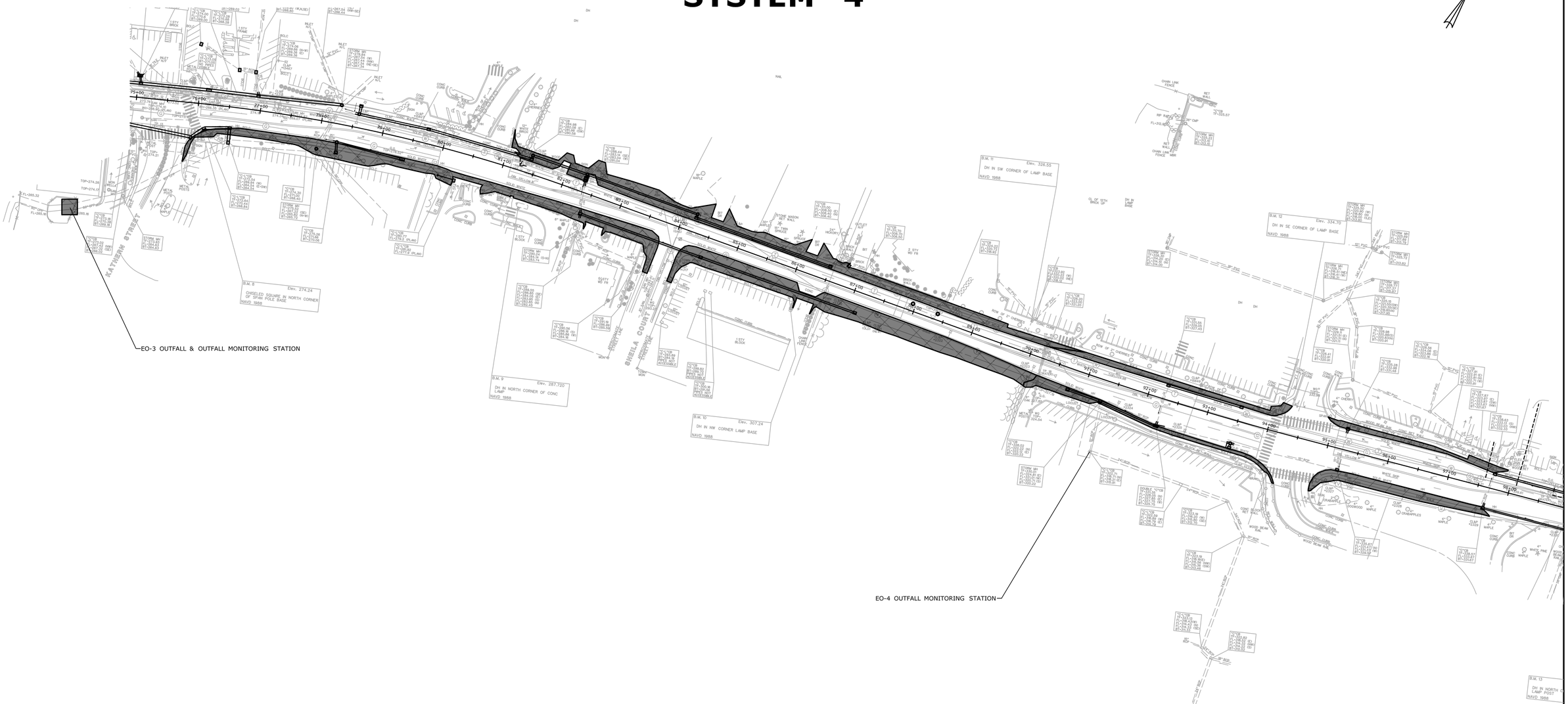
SYSTEM 2



DISTURBED AREAS
SYSTEM 3 (1 OF 2)



DISTURBED AREAS
SYSTEM 3 (2 OF 2)
SYSTEM 4

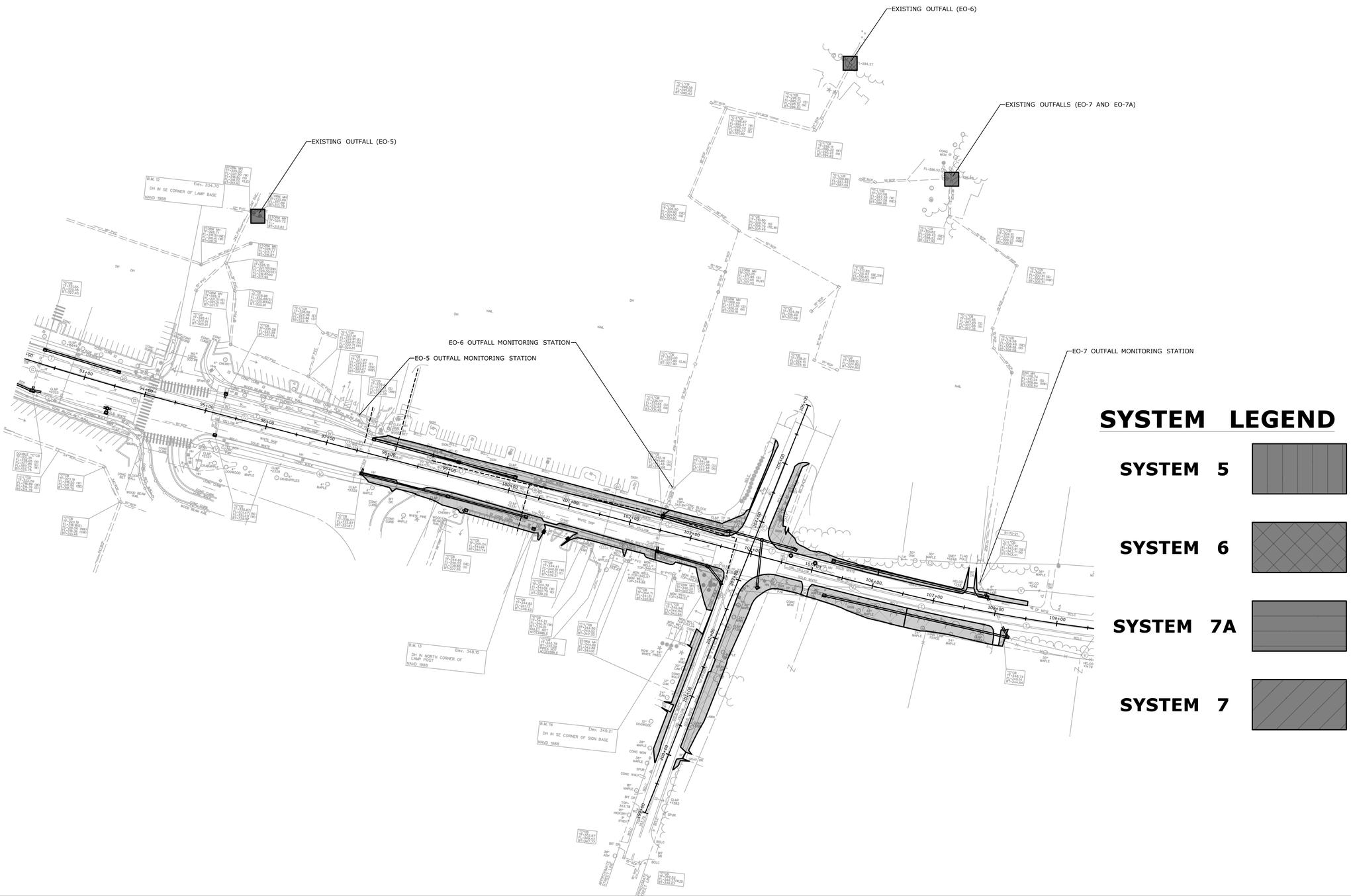


SYSTEM LEGEND

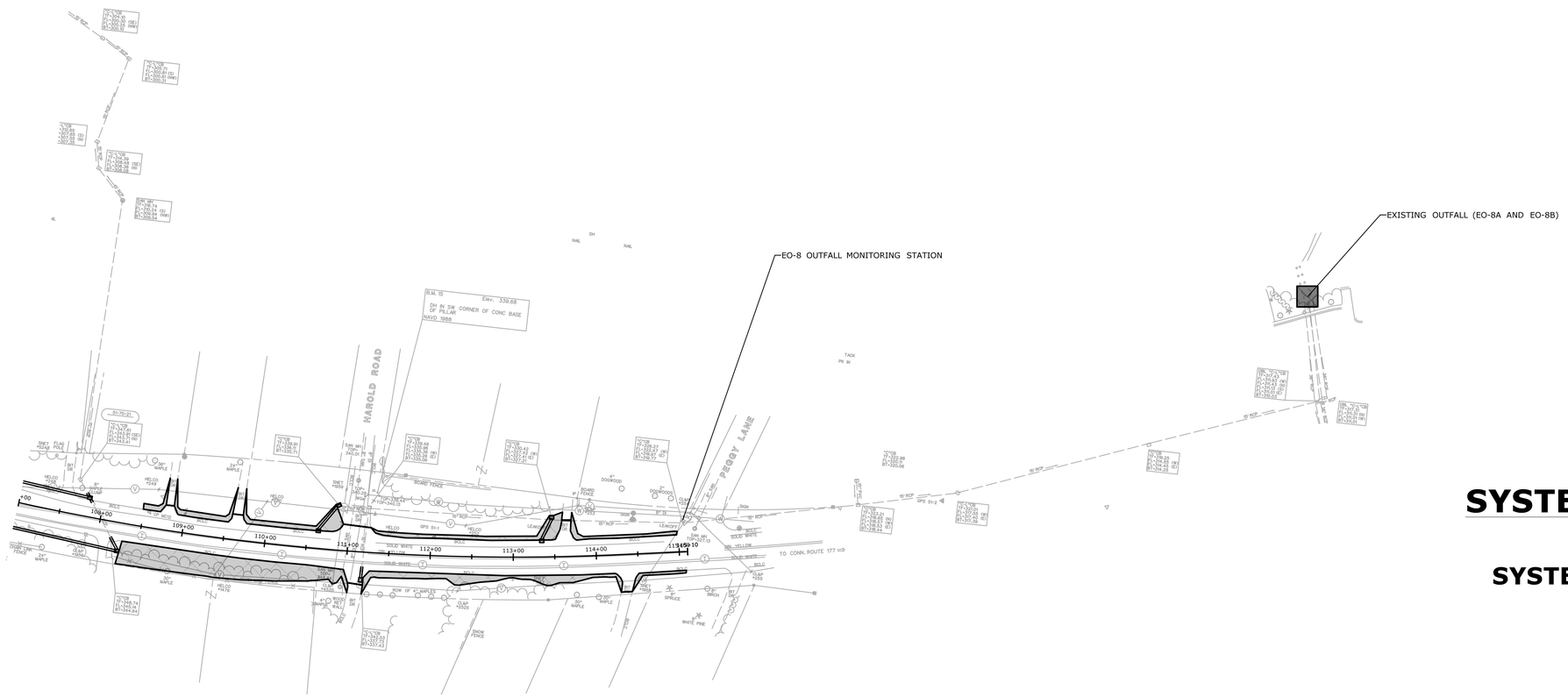
SYSTEM 3

SYSTEM 4

DISTURBED AREAS
SYSTEM 5, 6, 7 AND 7A



DISTURBED AREAS
SYSTEM 8



SYSTEM LEGEND

SYSTEM 8

Appendix B – Drainage Calculations

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	3/30/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

TOTALS

Drainage Area	Impervious Area	Total Area
System - 1	3.400	8.959
System - 1A	0.940	0.940
System - 2	1.736	2.450
System - 3	28.110	100.72
System - 4	5.669	6.168
System - 5	1.836	2.015
System - 6	4.465	7.553
System - 7	1.113	4.769
System - 7A	0.234	0.608
System - 8	2.512	7.736
	50.013	141.92

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	141.92	acres
Area (A) =	0.22174	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	35.24	
Volumetric Runoff Coefficient (R) =	0.367	

WQV =	**4.342**	**ac-ft**
1/2 WQV =	**2.1711**	**ac-ft**
=	**94,574**	**cu-ft**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 1

Drainage Area	Impervious Area	Total Area	
CM-2	4583	4583	
CM-3	2332	2332	
CM-4	5091	5091	
CM-5	1962	2000	
CM-6	1675	1675	
CM-7	5021	5025	
CM-8	2272	2275	
CM-9	6684	10625	
CM-10	4868	4870	
CM-11	3072	8124	
CM-26	2742	8783	
CM-27	3733	5639	
CM-28	2913	14411	
CM-29	6589	63240	
CM-30	8000	47260	
CM-31	2813	2813	
CM-32	14980	16340	
CM-33	14620	18050	
CM-104	2150	2350	
CM-105	1310	5200	
CM-136	18270	88930	
CM-137	10852	44942	
CM-151	7779	7980	
CM-152	13804	17725	
	148115	390263	sqft
	3.40	8.96	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	8.96	acres
Area (A) =	0.01400	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	37.95	
Volumetric Runoff Coefficient (R) =	0.392	
WQV =	**0.292**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.392	inches
CN =	92	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**3.07**	**cfs**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 1A

Drainage Area	Impervious Area	Total Area	
CM-12	5090	5090	
CM-13	9033	9033	
CM-14	8852	8852	
CM-15	3651	3651	
CM-16	7420	7420	
CM-17	6883	6883	
	40929	40929	sqft
	0.94	0.94	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	0.94	acres
Area (A) =	0.00147	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	100.00	
Volumetric Runoff Coefficient (R) =	0.950	
WQV =	**0.074**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.950	inches
CN =	100	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**0.78**	**cfs**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 2

Drainage Area	Impervious Area	Total Area	
CM-145	100	14203	
CM-146	6287	6300	
CM-147	3766	3800	
CM-148	2365	2365	
CM-149	7917	11131	
CM-150	732	732	
CM-130	2506	2566	
CM-129	1328	2831	
CM-128	1394	2100	
CM-127	5186	8634	
CM-126	3823	3823	
CM-125	2515	6205	
CM-124	8082	9142	
CM-123	6204	6204	
CM-122	2970	3899	
CM-121	5210	5500	
CM-120	4429	5604	
CM-119	10796	11700	
	75610	106739	sqft
	1.74	2.45	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	2.45	acres
Area (A) =	0.00383	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	70.84	
Volumetric Runoff Coefficient (R) =	0.688	
WQV =	**0.140**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.688	inches
CN =	97	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**1.47**	**cfs**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 3

Drainage Area	Impervious Area	Total Area
CM-94	2147	4200
CM-167	5408	5803
CM-93	1942	2032
CM-160	10090	10490
CM-95	5168	5598
CM-96	8991	15892
CM-159	3411	3811
CM-158	9864	10664
CM-187	6483	7283
CM-157	6221	6621
CM-156	8322	8522
CM-155	5896	6096
CM-188	6471	6971
CM-154	5406	7131
CM-153	4208	8413
CM-189	6084	6584
CM-190	7469	31622
CM-144	14183	46248
CM-191	11100	41260
CM-92	3692	5227
CM-272	11680	16553
CM-44	16864	16864
CM-45	7097	18486
CM-46	15532	52273
CM-47	24693	30958
CM-48	30874	30874
CM-49	14047	14047
CM-50	15318	15318
CM-52	46966	89974
CM-51	117806	345588
CM-53	2049	12385
CM-54	1521	39701
CM-55	52348	133225
CM-56	8144	8144
CM-177	4106	4263
CM-176	5500	5700
CM-98	5252	65348
CM-99	5000	5321
CM-178	7525	8756
CM-135	11352	14152
CM-133	8799	8999
CM-132	10815	11439
CM-131	12283	12945
CM-100	8266	10269
CM-101	4137	4137
CM-102	3066	4005

CM-103	5644	9350	
CM-87	8952	9802	
CM-90	6590	6646	
CM-97	6216	6216	
CM-88	6296	6296	
CM-89	21599	28320	
CM-86	6086	6467	
CM-175	2774	3034	
CM-83	11319	11319	
CM-84	15392	15392	
CM-82	3731	4511	
CM-81	3103	3103	
CM-80	2596	2596	
CM-78	862	6352	
CM-173	2659	4847	
CM-172	4402	7085	
CM-77	4524	6356	
CM-76	5931	8278	
CM-168	13233	15798	
CM-169	2472	3725	
CM-170	3662	4429	
CM-171	9776	10787	
CM-264	11900	12597	
CM-1	83000	2495000	
CM-57	49198	64525	
CM-58	82066	82066	
CM-59	2980	16864	
CM-60	5374	24767	
CM-70	168585	200554	
CM-71	89952	89952	
	1224470	4387226	sqft
	28.11	100.72	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	100.72	acres
Area (A) =	0.15737	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	27.91	
Volumetric Runoff Coefficient (R) =	0.301	
WQV =	**2.528**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.301	inches
CN =	89	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**26.54**	**cfs**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 4

Drainage Area	Impervious Area	Total Area	
CM-40	32923	33023	
CM-39	20730	27120	
CM-36	5190	5540	
CM-134	4297	4647	
CM-37	5390	6098	
CM-37a	15000	15633	
CM-38	6895	8125	
CM-43	10400	11825	
CM-42	5100	5250	
CM-42a	7660	8525	
CM-167e	12086	15486	
CM-168e	13420	15802	
CM-169e	34957	35000	
CM-170e	5100	5100	
CM-171e	7962	7962	
CM-172e	5383	5383	
CM-174e	34546	34546	
CM-193	19888	23625	
	246927	268690	sqft
	5.67	6.17	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	6.17	acres
Area (A) =	0.00964	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	91.90	
Volumetric Runoff Coefficient (R) =	0.877	
WQV =	**0.451**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.877	inches
CN =	99	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**4.73**	**cfs**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 5

Drainage Area	Impervious Area	Total Area	
CM-177e	6820	6820	
CM-176e	7846	7850	
CM-175e	11481	11500	
CM-132e	8225	8225	
CM-131e	8749	8800	
CM-108e	6550	7750	
CM-107e	4430	5000	
CM-106e	7370	10600	
CM-140	3595	4025	
CM-141	5028	6025	
CM-142	5871	6825	
CM-143	3998	4350	
	79963	87770	sqft
	1.84	2.01	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	2.01	acres
Area (A) =	0.00315	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	91.11	
Volumetric Runoff Coefficient (R) =	0.870	
WQV =	**0.146**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.870	inches
CN =	99	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**1.53**	**cfs**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 6

Drainage Area	Impervious Area	Total Area	
CM-153e	3398	6796	
CM-152e	0	15041	
CM-151e	7638	20079	
CM-150e	8520	12369	
CM-149e	20751	39420	
CM-144e	14575	20877	
CM-145e	6068	10658	
CM-147e	8264	11133	
CM-148e	1473	7216	
CM-146e	27130	28162	
CM-143e	24628	24628	
CM-142e	16751	16751	
CM-178	7267	18250	
CM-179	4617	6254	
CM-180	4886	13600	
CM-111e	6724	7754	
CM-110	3190	3621	
CM-109	3925	4200	
CM-184	4335	4601	
CM-185	1925	2141	
CM-181	8210	8344	
CM-182	4410	5021	
CM-183	5790	42112	
	194475	329028	sqft
	4.46	7.55	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	7.55	acres
Area (A) =	0.01180	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	59.11	
Volumetric Runoff Coefficient (R) =	0.582	
WQV =	**0.366**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.582	inches
CN =	95	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**3.85**	**cfs**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 7

Drainage Area	Impervious Area	Total Area	
CM-158e	392	18510	
CM-157e	6751	8300	
CM-156e	9840	10400	
CM-155e	8573	14000	
CM-154e	7473	50250	
CM-113e	153	1030	
CM-275	3404	28275	
CM-269	5701	35515	
CM-270	5750	13900	
CM-271	427	27550	
	48464	207730	sqft
	1.11	4.77	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	4.77	acres
Area (A) =	0.00745	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	23.33	
Volumetric Runoff Coefficient (R) =	0.260	
WQV =	**0.103**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.260	inches
CN =	88	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**1.08**	**cfs**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 7A

Drainage Area	Impervious Area	Total Area	
CM-159e	7060	20900	
CM-160e	3120	5600	
	10180	26500	sqft
	0.23	0.61	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	0.61	acres
Area (A) =	0.00095	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	38.42	
Volumetric Runoff Coefficient (R) =	0.396	
WQV =	**0.020**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.396	inches
CN =	92	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**0.21**	**cfs**

Water Quality Volume (WQV) & Water Quality Flow (WQF)

PROJECT	0017-0182 Widening of U.S. Route 6 from Carol Drive to Peggy Lane
DATE	5/10/2016
SUBJECT	Water Quality Volume Calculation
PREPARED BY	D. Racicot
CHECKED BY	S. Nikulin

SYSTEM 8

Drainage Area	Impervious Area	Total Area	
CM-166	9298	11298	
CM-268	11692	11692	
CM-164	18275	33086	
CM-163	21560	47762	
CM-162	11406	11406	
CM-161	5688	5688	
CM-114	8265	68050	
CM-115	0	2100	
CM-180	2610	46069	
CM-116	2030	4639	
CM-117	1990	10231	
CM-118	14600	64090	
CM-276	2000	20850	
	109414	336961	sqft
	2.51	7.74	acres

WATER QUALITY VOLUME (WQV) CALCULATION

Area (A) =	7.74	acres
Area (A) =	0.01209	square miles
Design Precipitation (P) =	1	inch
% Impervious Cover (I) =	32.47	
Volumetric Runoff Coefficient (R) =	0.342	
WQV =	**0.221**	**ac-ft**

WATER QUALITY FLOW (WQF) CALCULATION

RUNOFF CURVE NUMBER (CN)

Runoff Depth (Q) =	0.342	inches
CN =	91	Figure 2-1 (SWQM)

TIME OF CONCENTRATION (Tc), 10 minute minimum

Tc =	10	min
Tc =	0.17	hours
Initial Abstraction (Ia) =	0.174	Table 4-1 (SWQM)
Ia/P Calculation =	0.174	
Unit Peak Discharge (qu) =	560	Exhibit 4-111 (SWQM)
WQF =	**2.32**	**cfs**

Appendix C – Plan Sheets

NOTES

1. CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.

2. THE CONTRACTOR SHALL SUBMIT THE DESIGN, LOCATION AND SIZING OF THE CONCRETE WASHOUT AREA(S) WITH THE PROJECT'S EROSION AND SEDIMENTATION CONTROL PLAN AND SHALL BE APPROVED BY THE ENGINEER.

LOCATION: WASHOUT AREA(S) ARE TO BE LOCATED AT LEAST 50 FEET FROM ANY STREAM, WETLAND, STORM DRAINS, OR OTHER SENSITIVE RESOURCE. THE FLOOD CONTINGENCY PLAN MUST ADDRESS THE CONCRETE WASHOUT IF THE WASHOUT IS TO BE LOCATED WITHIN THE FLOODPLAIN.

SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING, BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.

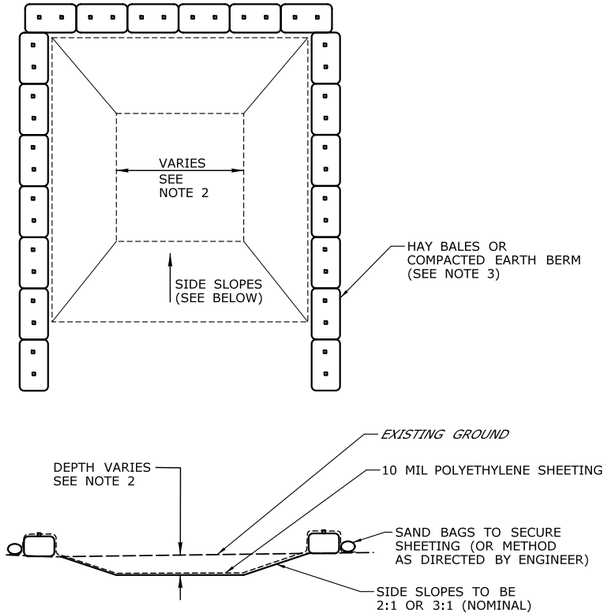
3. SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, HAY BALES OR OTHER CONTROL MEASURES, AS APPROVED BY THE ENGINEER, SHOULD BE USED AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONTAINMENT.

4. SIGNS SHOULD BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE AREA(S) AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. WASHOUT AREA(S) SHOULD BE FLAGGED WITH SAFETY FENCING OR OTHER APPROVED METHOD.

5. WASHOUT AREA(S) ARE TO BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTEGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. (AS REQUIRED BY THE CONSTRUCTION SITE ENVIRONMENTAL INSPECTION REPORT) WASHOUT AREA(S) SHOULD BE CHECKED AFTER HEAVY RAINS.

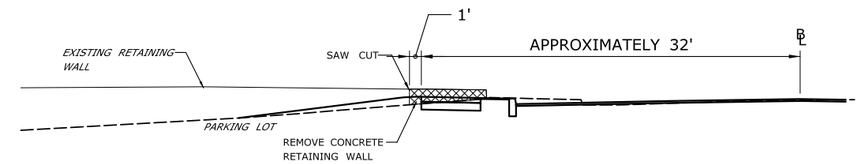
6. HARDENED CONCRETE WASTE SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S HEIGHT. THE WASTE CAN BE STORED AT AN UPLAND LOCATION, AS APPROVED BY THE ENGINEER. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS, AND GUIDELINES.

7. PAYMENT FOR THIS ITEM IS TO BE INCLUDED UNDER THE GENERAL COST OF THE WORK FOR THE PROJECT, INCLUDING SITE RESTORATION.



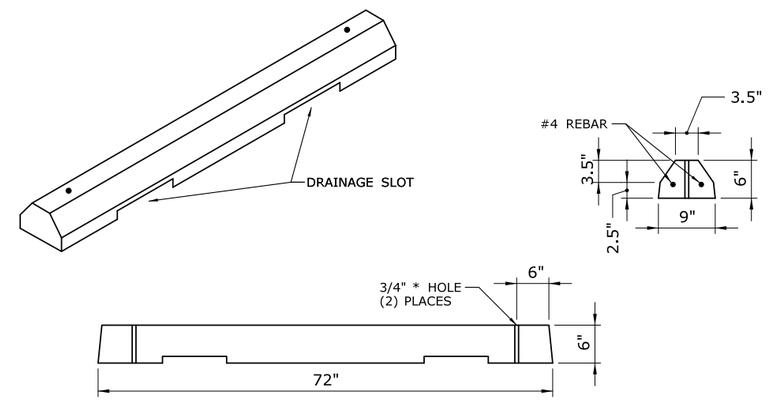
CONCRETE WASHOUT AREA

NOT TO SCALE
(SEE NOTE 2)



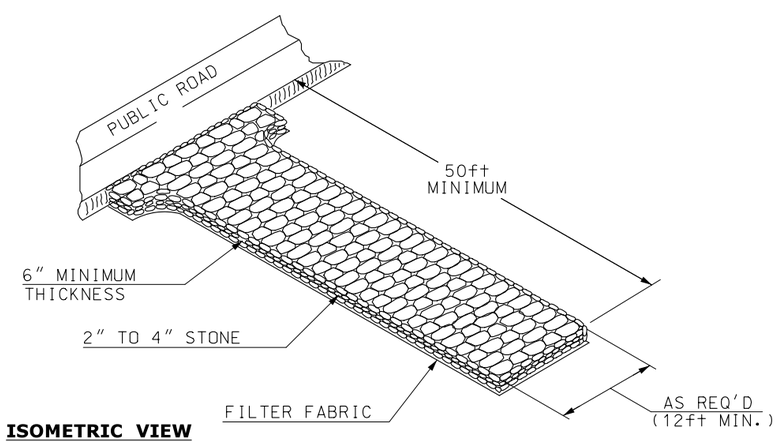
RETAINING WALL REMOVAL

1. REMOVAL AND SAW CUT OF RETAINING WALL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER C.Y. FOR ROCK EXCAVATION, WHICH SHALL INCLUDE ALL MATERIALS, TOOLS, EQUIPMENT, LABOR INCIDENTAL THERETO AND SHALL CONFORM TO SPECIFICATION 2.02 OF THE 816.
2. SAW CUT SHALL BE NEAT, STRAIGHT AND FREE OF BREAKBACKS. THE SAW CUT EDGE WILL BE VISIBLE AND SHALL EXHIBIT A FINISHED FACE.



CONCRETE WHEEL STOP

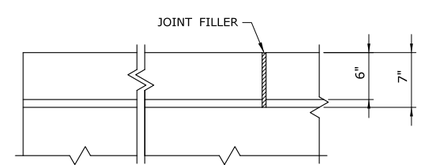
FOR LOCATIONS SEE GENERAL PLAN SHEETS



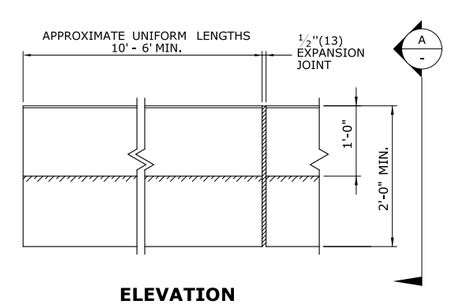
ISOMETRIC VIEW

ANTI-TRACKING PAD

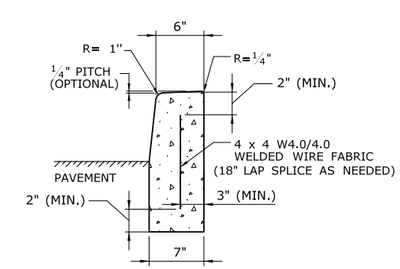
GENERAL NOTE
LOCATION OF ANTI-TRACKING PAD(S) SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER IN COORDINATION WITH THE CONTRACTOR.



PLAN

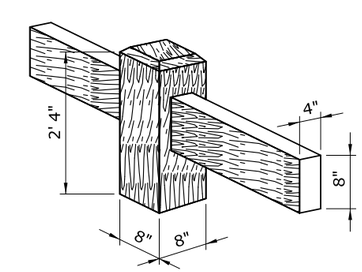


ELEVATION



SECTION A / -

SPECIAL CONCRETE CURBING



TIMBER BEAM RAIL

1. POSTS TO BE 8"x 8" X 5'4".
2. RAILS TO BE 4" X 8".
3. POSTS AND RAILS TO BE PRESSURE TREATED SOUTHERN YELLOW PINE.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/27/2016

DESIGNER/DRAFTER: DR
CHECKED BY: SN
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_MDS-05.dgn

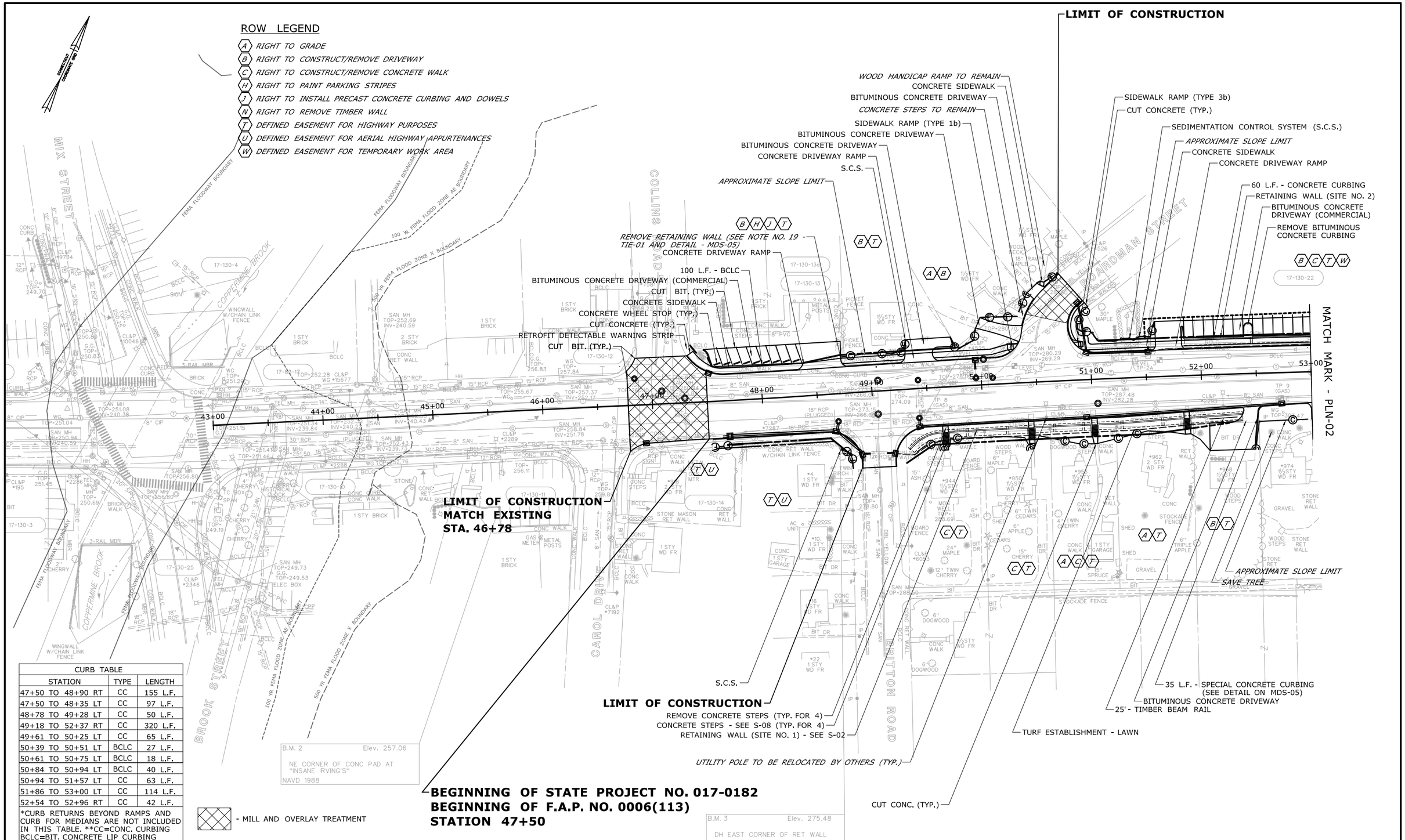
SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: MISC. DETAIL SHEET 5

PROJECT NO. 017-182
DRAWING NO. MDS-05
SHEET NO. C-01



CURB TABLE		
STATION	TYPE	LENGTH
47+50 TO 48+90 RT	CC	155 L.F.
47+50 TO 48+35 LT	CC	97 L.F.
48+78 TO 49+28 LT	CC	50 L.F.
49+18 TO 52+37 RT	CC	320 L.F.
49+61 TO 50+25 LT	CC	65 L.F.
50+39 TO 50+51 LT	BCLC	27 L.F.
50+61 TO 50+75 LT	BCLC	18 L.F.
50+84 TO 50+94 LT	BCLC	40 L.F.
50+94 TO 51+57 LT	CC	63 L.F.
51+86 TO 53+00 LT	CC	114 L.F.
52+54 TO 52+96 RT	CC	42 L.F.

*CURB RETURNS BEYOND RAMPS AND CURB FOR MEDIANS ARE NOT INCLUDED IN THIS TABLE. **CC=CONC. CURBING BCLC=BIT. CONCRETE LIP CURBING

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 7/1/2016

DESIGNER/DRAFTER: JB
CHECKED BY: SN
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_PLN-01.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: HIGHWAY PLAN

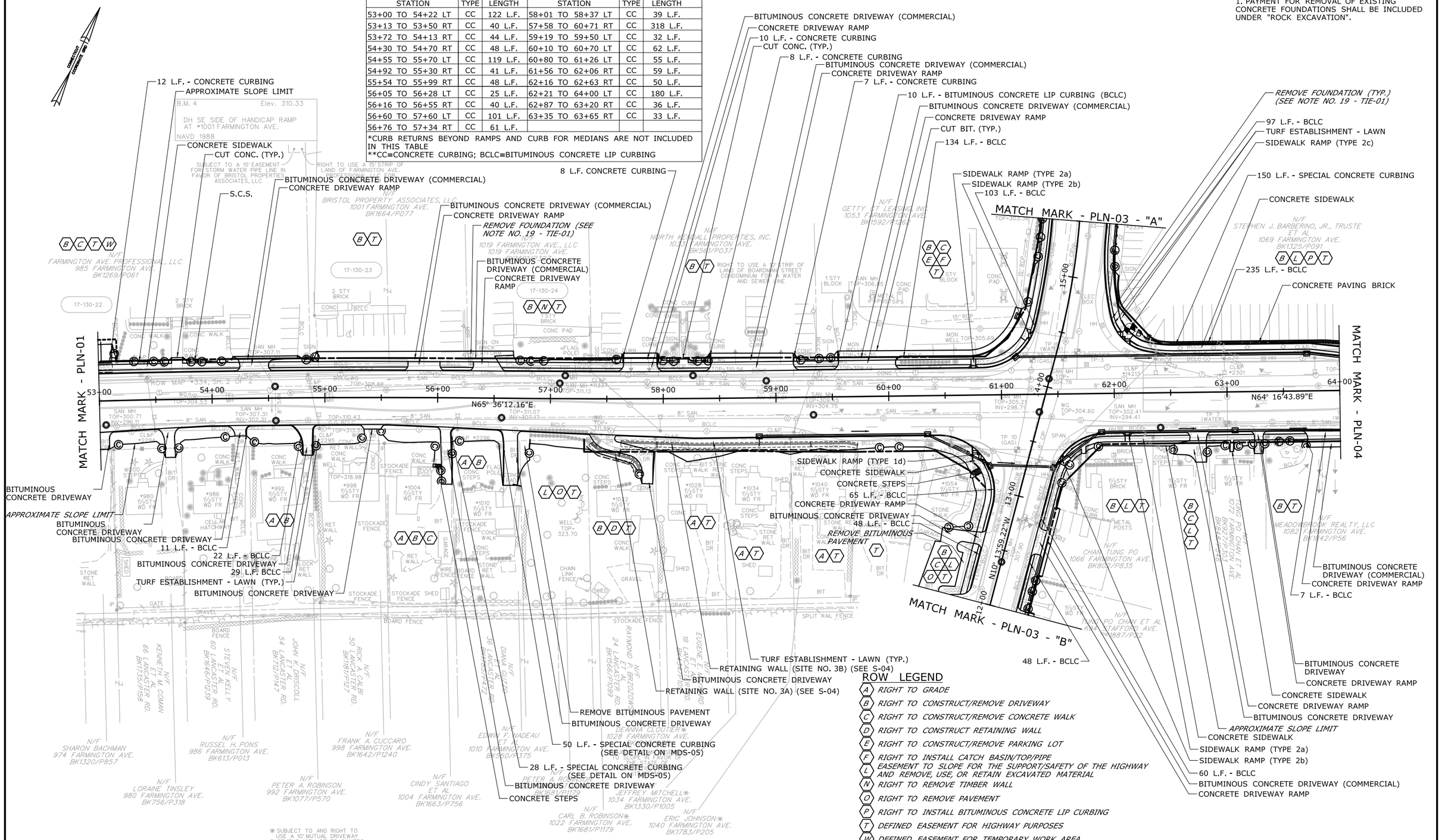
PROJECT NO. 017-182
DRAWING NO. PLN-01
SHEET NO. C-02

CURB TABLE					
STATION	TYPE	LENGTH	STATION	TYPE	LENGTH
53+00 TO 54+22 LT	CC	122 L.F.	58+01 TO 58+37 LT	CC	39 L.F.
53+13 TO 53+50 RT	CC	40 L.F.	57+58 TO 60+71 RT	CC	318 L.F.
53+72 TO 54+13 RT	CC	44 L.F.	59+19 TO 59+50 LT	CC	32 L.F.
54+30 TO 54+70 RT	CC	48 L.F.	60+10 TO 60+70 LT	CC	62 L.F.
54+55 TO 55+70 LT	CC	119 L.F.	60+80 TO 61+26 LT	CC	55 L.F.
54+92 TO 55+30 RT	CC	41 L.F.	61+56 TO 62+06 RT	CC	59 L.F.
55+54 TO 55+99 RT	CC	48 L.F.	62+16 TO 62+63 RT	CC	50 L.F.
56+05 TO 56+28 LT	CC	25 L.F.	62+21 TO 64+00 LT	CC	180 L.F.
56+16 TO 56+55 RT	CC	40 L.F.	62+87 TO 63+20 RT	CC	36 L.F.
56+60 TO 57+60 LT	CC	101 L.F.	63+35 TO 63+65 RT	CC	33 L.F.
56+76 TO 57+34 RT	CC	61 L.F.			

*CURB RETURNS BEYOND RAMPS AND CURB FOR MEDIANS ARE NOT INCLUDED IN THIS TABLE
**CC=CONCRETE CURBING; BCLC=BITUMINOUS CONCRETE LIP CURBING

GENERAL NOTES

1. PAYMENT FOR REMOVAL OF EXISTING CONCRETE FOUNDATIONS SHALL BE INCLUDED UNDER "ROCK EXCAVATION".



ROW LEGEND

- (A) RIGHT TO GRADE
- (B) RIGHT TO CONSTRUCT/REMOVE DRIVEWAY
- (C) RIGHT TO CONSTRUCT/REMOVE CONCRETE WALK
- (D) RIGHT TO CONSTRUCT RETAINING WALL
- (E) RIGHT TO CONSTRUCT/REMOVE PARKING LOT
- (F) RIGHT TO INSTALL CATCH BASIN/TOP/PIPE
- (L) EASEMENT TO SLOPE FOR THE SUPPORT/SAFETY OF THE HIGHWAY AND REMOVE, USE, OR RETAIN EXCAVATED MATERIAL
- (N) RIGHT TO REMOVE TIMBER WALL
- (O) RIGHT TO REMOVE PAVEMENT
- (P) RIGHT TO INSTALL BITUMINOUS CONCRETE LIP CURBING
- (T) DEFINED EASEMENT FOR HIGHWAY PURPOSES
- (W) DEFINED EASEMENT FOR TEMPORARY WORK AREA

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 7/1/2016

DESIGNER/DRAFTER: JB
CHECKED BY: SN
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_PLN-02.dgn

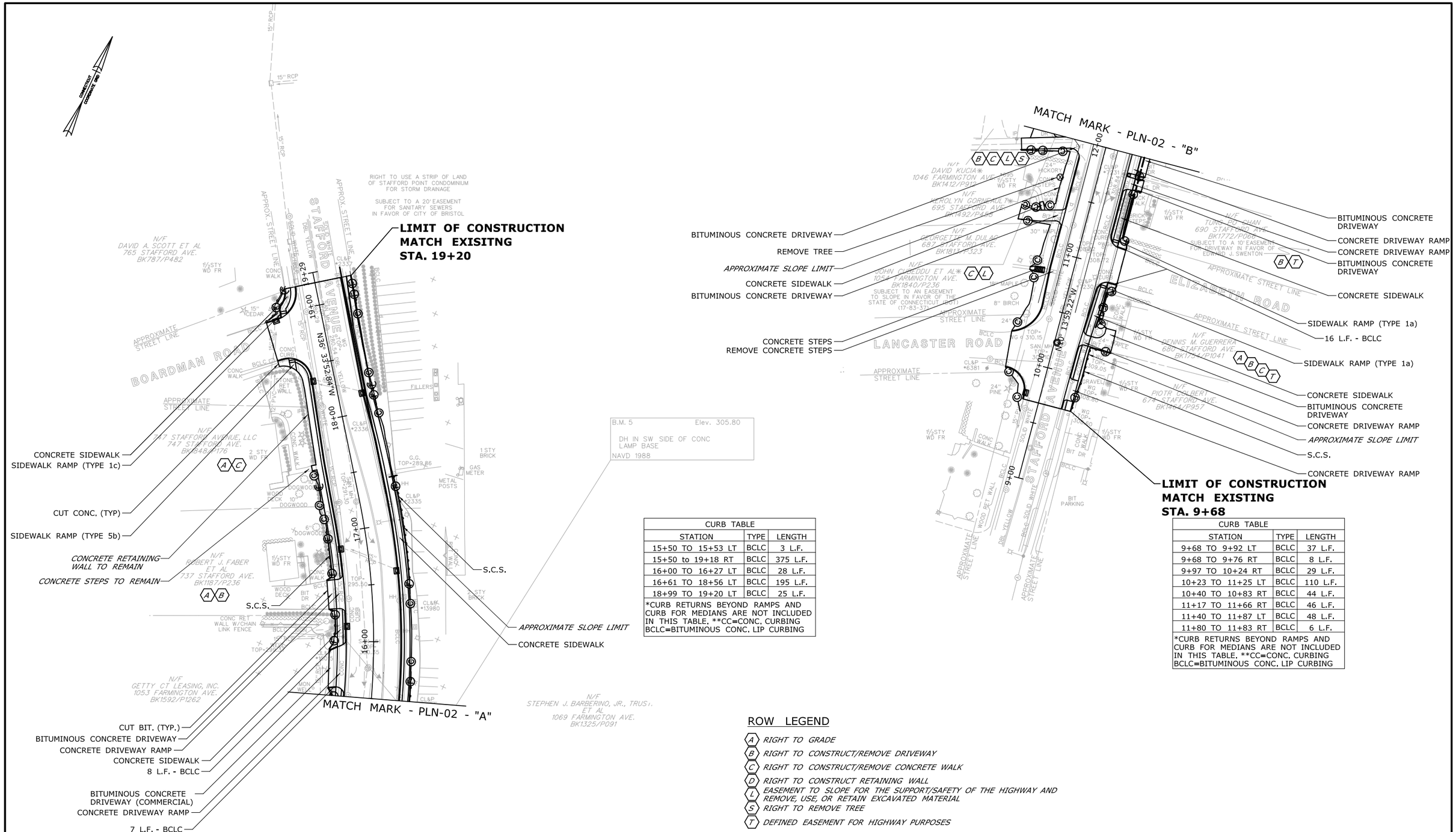
SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: HIGHWAY PLAN

PROJECT NO. 017-182
DRAWING NO. PLN-02
SHEET NO. C-03



CURB TABLE		
STATION	TYPE	LENGTH
15+50 TO 15+53 LT	BCLC	3 L.F.
15+50 to 19+18 RT	BCLC	375 L.F.
16+00 TO 16+27 LT	BCLC	28 L.F.
16+61 TO 18+56 LT	BCLC	195 L.F.
18+99 TO 19+20 LT	BCLC	25 L.F.

*CURB RETURNS BEYOND RAMPS AND CURB FOR MEDIANS ARE NOT INCLUDED IN THIS TABLE. **CC=CONC. CURBING BCLC=BITUMINOUS CONC. LIP CURBING

CURB TABLE		
STATION	TYPE	LENGTH
9+68 TO 9+92 LT	BCLC	37 L.F.
9+68 TO 9+76 RT	BCLC	8 L.F.
9+97 TO 10+24 RT	BCLC	29 L.F.
10+23 TO 11+25 LT	BCLC	110 L.F.
10+40 TO 10+83 RT	BCLC	44 L.F.
11+17 TO 11+66 RT	BCLC	46 L.F.
11+40 TO 11+87 LT	BCLC	48 L.F.
11+80 TO 11+83 RT	BCLC	6 L.F.

*CURB RETURNS BEYOND RAMPS AND CURB FOR MEDIANS ARE NOT INCLUDED IN THIS TABLE. **CC=CONC. CURBING BCLC=BITUMINOUS CONC. LIP CURBING

ROW LEGEND

- (A) *RIGHT TO GRADE*
- (B) *RIGHT TO CONSTRUCT/REMOVE DRIVEWAY*
- (C) *RIGHT TO CONSTRUCT/REMOVE CONCRETE WALK*
- (D) *RIGHT TO CONSTRUCT RETAINING WALL*
- (L) *EASEMENT TO SLOPE FOR THE SUPPORT/SAFETY OF THE HIGHWAY AND REMOVE, USE, OR RETAIN EXCAVATED MATERIAL*
- (S) *RIGHT TO REMOVE TREE*
- (T) *DEFINED EASEMENT FOR HIGHWAY PURPOSES*

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 7/1/2016

DESIGNER/DRAFTER: **JB**

CHECKED BY: **SN**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_PLN-03.dgn

SIGNATURE/BLOCK: **OFFICE OF ENGINEERING**

APPROVED BY:

PROJECT TITLE: **WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE**

TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **HIGHWAY PLAN**

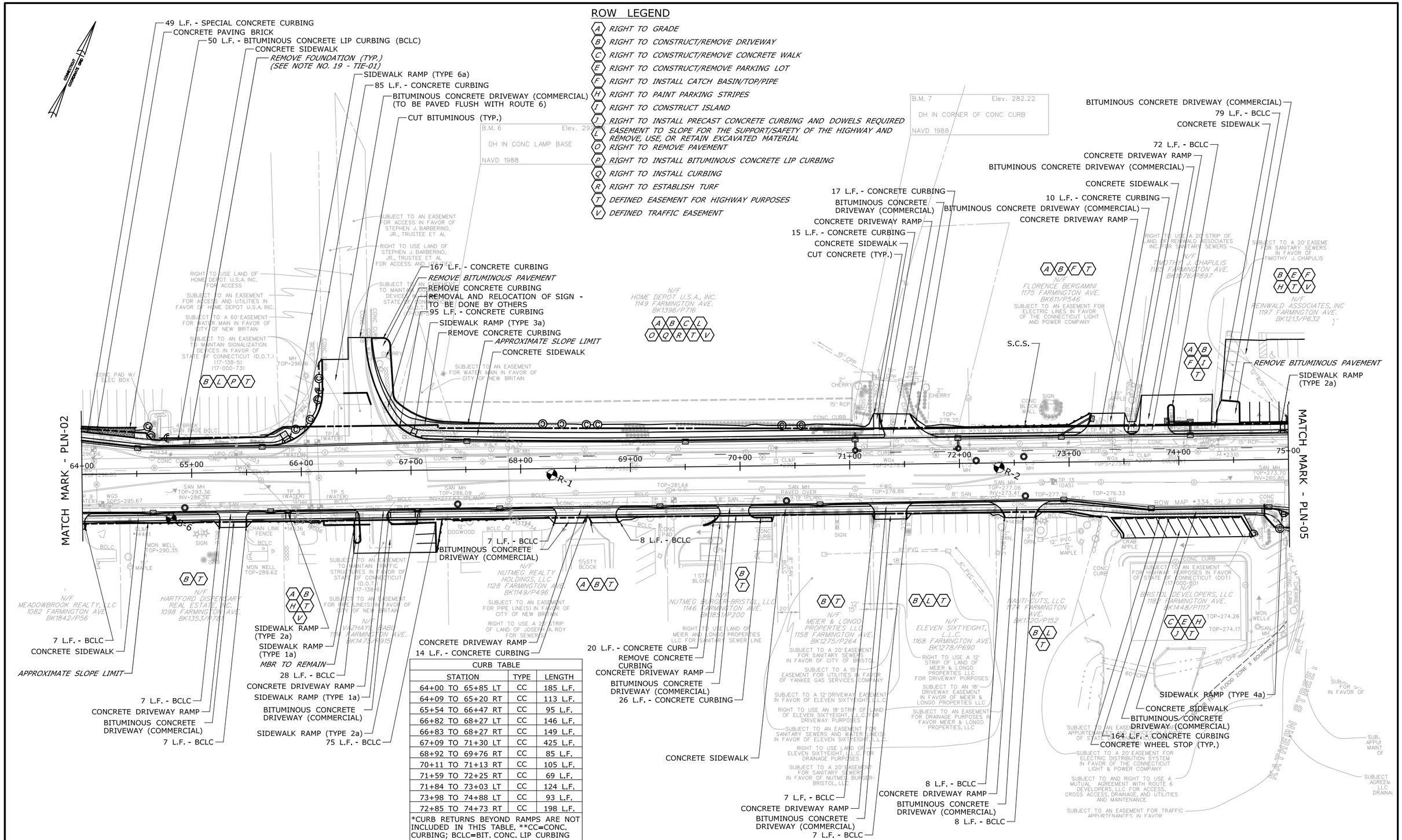
PROJECT NO. **017-182**

DRAWING NO. **PLN-03**

SHEET NO. **C-04**

ROW LEGEND

- (A) RIGHT TO GRADE
- (B) RIGHT TO CONSTRUCT/REMOVE DRIVEWAY
- (C) RIGHT TO CONSTRUCT/REMOVE CONCRETE WALK
- (E) RIGHT TO CONSTRUCT/REMOVE PARKING LOT
- (F) RIGHT TO INSTALL CATCH BASIN/TOP/PIPE
- (H) RIGHT TO PAINT PARKING STRIPES
- (I) RIGHT TO CONSTRUCT ISLAND
- (J) RIGHT TO INSTALL PRECAST CONCRETE CURBING AND DOWELS REQUIRED
- (L) EASEMENT TO SLOPE FOR THE SUPPORT/SAFETY OF THE HIGHWAY AND REMOVE, USE, OR RETAIN EXCAVATED MATERIAL
- (O) RIGHT TO REMOVE PAVEMENT
- (P) RIGHT TO INSTALL BITUMINOUS CONCRETE LIP CURBING
- (Q) RIGHT TO INSTALL CURBING
- (R) RIGHT TO ESTABLISH TURF
- (T) DEFINED EASEMENT FOR HIGHWAY PURPOSES
- (V) DEFINED TRAFFIC EASEMENT



CURB TABLE		
STATION	TYPE	LENGTH
64+00 TO 65+85 LT	CC	185 L.F.
64+09 TO 65+20 RT	CC	113 L.F.
65+54 TO 66+47 RT	CC	95 L.F.
66+82 TO 68+27 LT	CC	146 L.F.
66+83 TO 68+27 RT	CC	149 L.F.
67+09 TO 71+30 LT	CC	425 L.F.
68+92 TO 69+76 RT	CC	85 L.F.
70+11 TO 71+13 RT	CC	105 L.F.
71+59 TO 72+25 RT	CC	69 L.F.
71+84 TO 73+03 LT	CC	124 L.F.
73+98 TO 74+88 LT	CC	93 L.F.
72+85 TO 74+73 RT	CC	198 L.F.

*CURB RETURNS BEYOND RAMPS ARE NOT INCLUDED IN THIS TABLE. **CC=CONC. CURBING; BCLC=BIT. CONC. LIP CURBING

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 7/1/2016

DESIGNER/DRAFTER: JB
CHECKED BY: SN
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_PLN-04.dgn

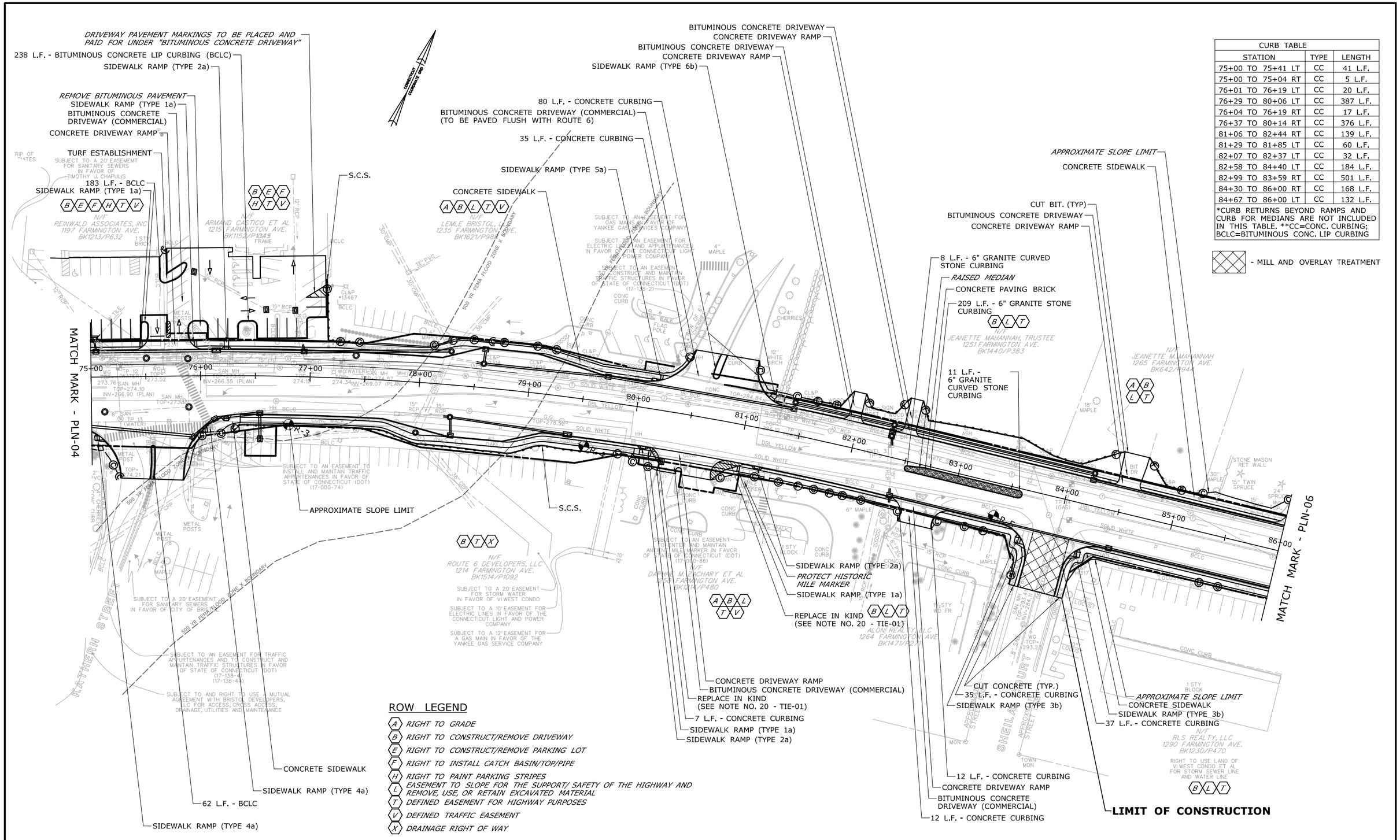
SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: HIGHWAY PLAN

PROJECT NO. 017-182
DRAWING NO. PLN-04
SHEET NO. C-05



CURB TABLE		
STATION	TYPE	LENGTH
75+00 TO 75+41 LT	CC	41 L.F.
75+00 TO 75+04 RT	CC	5 L.F.
76+01 TO 76+19 LT	CC	20 L.F.
76+29 TO 80+06 LT	CC	387 L.F.
76+04 TO 76+19 RT	CC	17 L.F.
76+37 TO 80+14 RT	CC	376 L.F.
81+06 TO 82+44 RT	CC	139 L.F.
81+29 TO 81+85 LT	CC	60 L.F.
82+07 TO 82+37 LT	CC	32 L.F.
82+58 TO 84+40 LT	CC	184 L.F.
82+99 TO 83+59 RT	CC	501 L.F.
84+30 TO 86+00 RT	CC	168 L.F.
84+67 TO 86+00 LT	CC	132 L.F.

*CURB RETURNS BEYOND RAMPS AND CURB FOR MEDIANS ARE NOT INCLUDED IN THIS TABLE. **CC=CONC. CURBING; BCLC=BITUMINOUS CONC. LIP CURBING

- MILL AND OVERLAY TREATMENT

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 7/1/2016

DESIGNER/DRAFTER: JB
CHECKED BY: SN
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_PLN-05.dgn

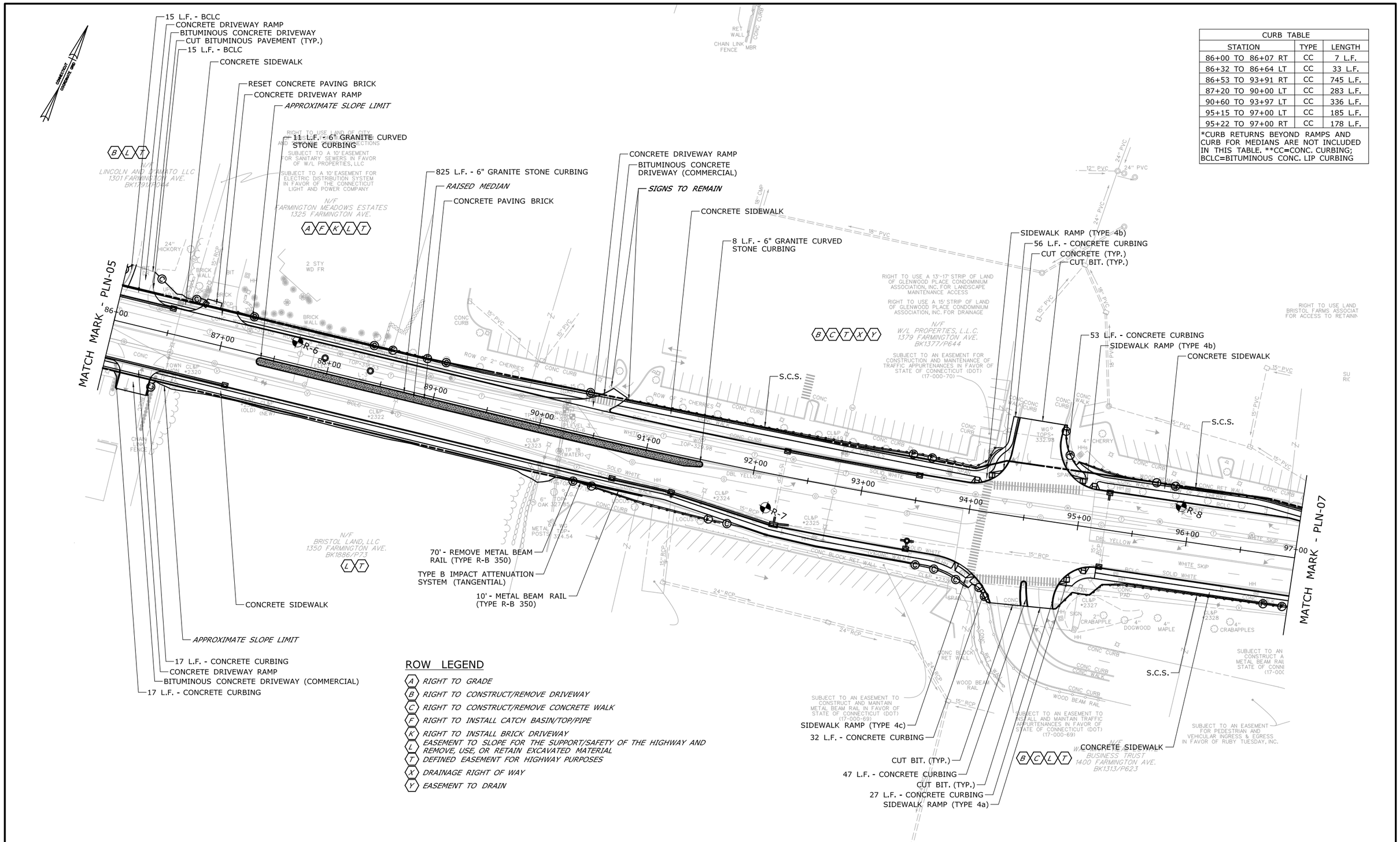
SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: HIGHWAY PLAN

PROJECT NO. 017-182
DRAWING NO. PLN-05
SHEET NO. C-06



CURB TABLE		
STATION	TYPE	LENGTH
86+00 TO 86+07 RT	CC	7 L.F.
86+32 TO 86+64 LT	CC	33 L.F.
86+53 TO 93+91 RT	CC	745 L.F.
87+20 TO 90+00 LT	CC	283 L.F.
90+60 TO 93+97 LT	CC	336 L.F.
95+15 TO 97+00 LT	CC	185 L.F.
95+22 TO 97+00 RT	CC	178 L.F.

*CURB RETURNS BEYOND RAMPS AND CURB FOR MEDIANS ARE NOT INCLUDED IN THIS TABLE. **CC=CONC. CURBING; BCLC=BITUMINOUS CONC. LIP CURBING

ROW LEGEND

- (A) RIGHT TO GRADE
- (B) RIGHT TO CONSTRUCT/REMOVE DRIVEWAY
- (C) RIGHT TO CONSTRUCT/REMOVE CONCRETE WALK
- (F) RIGHT TO INSTALL CATCH BASIN/TOP/PIPE
- (K) RIGHT TO INSTALL BRICK DRIVEWAY
- (L) EASEMENT TO SLOPE FOR THE SUPPORT/SAFETY OF THE HIGHWAY AND REMOVE, USE, OR RETAIN EXCAVATED MATERIAL
- (T) DEFINED EASEMENT FOR HIGHWAY PURPOSES
- (X) DRAINAGE RIGHT OF WAY
- (Y) EASEMENT TO DRAIN

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 7/1/2016

DESIGNER/DRAFTER: JB
CHECKED BY: SN
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_PLN-06.dgn

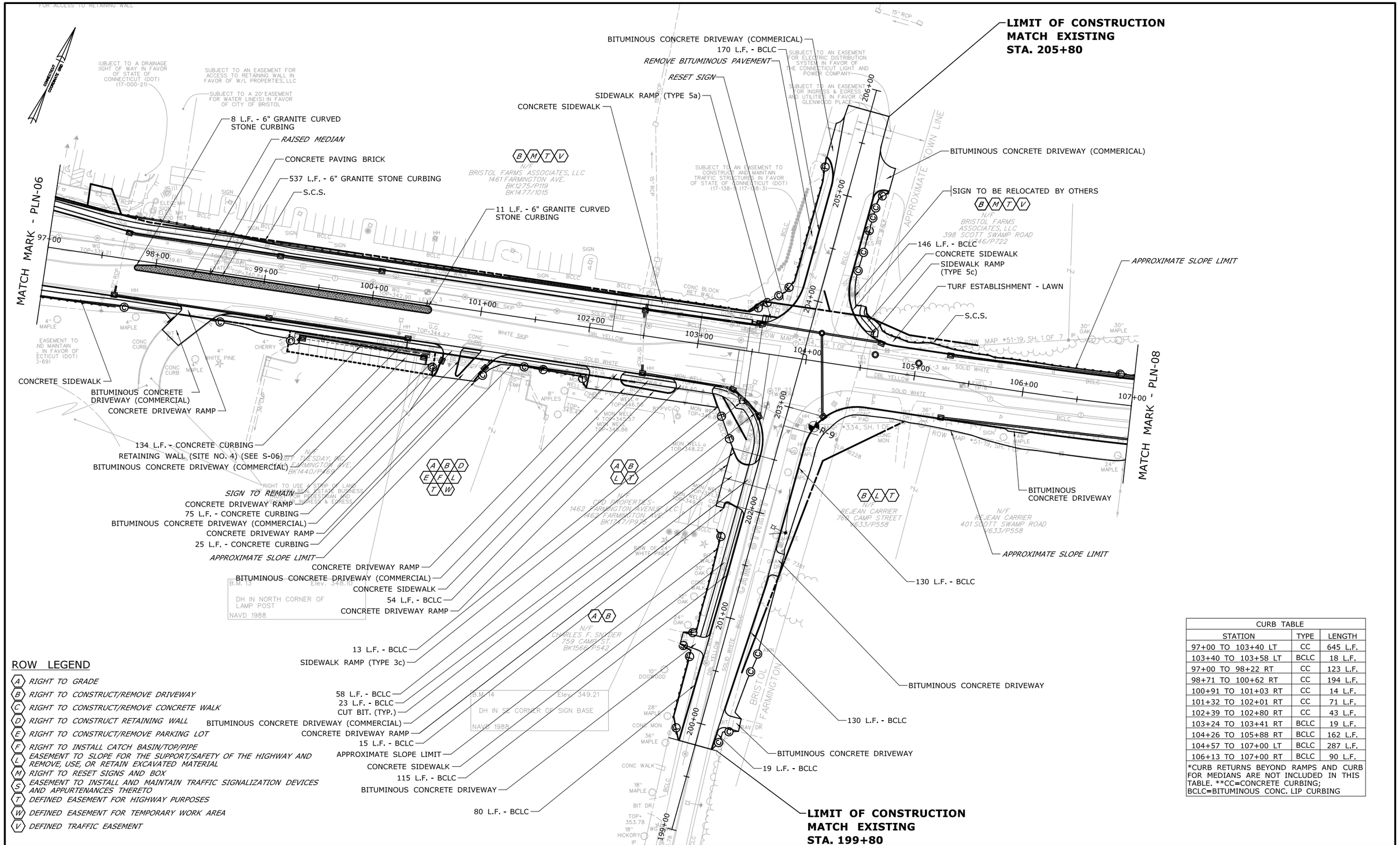
SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: HIGHWAY PLAN

PROJECT NO. 017-182
DRAWING NO. PLN-06
SHEET NO. C-07



ROW LEGEND

- (A) *RIGHT TO GRADE*
- (B) *RIGHT TO CONSTRUCT/REMOVE DRIVEWAY*
- (C) *RIGHT TO CONSTRUCT/REMOVE CONCRETE WALK*
- (D) *RIGHT TO CONSTRUCT RETAINING WALL*
- (E) *RIGHT TO CONSTRUCT/REMOVE PARKING LOT*
- (F) *RIGHT TO INSTALL CATCH BASIN/TOP/PIPE*
- (L) *EASEMENT TO SLOPE FOR THE SUPPORT/SAFETY OF THE HIGHWAY AND REMOVE, USE, OR RETAIN EXCAVATED MATERIAL*
- (M) *RIGHT TO RESET SIGNS AND BOX*
- (S) *EASEMENT TO INSTALL AND MAINTAIN TRAFFIC SIGNALIZATION DEVICES AND APPURTENANCES THERETO*
- (T) *DEFINED EASEMENT FOR HIGHWAY PURPOSES*
- (W) *DEFINED EASEMENT FOR TEMPORARY WORK AREA*
- (V) *DEFINED TRAFFIC EASEMENT*

CURB TABLE

STATION	TYPE	LENGTH
97+00 TO 103+40 LT	CC	645 L.F.
103+40 TO 103+58 LT	BCLC	18 L.F.
97+00 TO 98+22 RT	CC	123 L.F.
98+71 TO 100+62 RT	CC	194 L.F.
100+91 TO 101+03 RT	CC	14 L.F.
101+32 TO 102+01 RT	CC	71 L.F.
102+39 TO 102+80 RT	CC	43 L.F.
103+24 TO 103+41 RT	BCLC	19 L.F.
104+26 TO 105+88 RT	BCLC	162 L.F.
104+57 TO 107+00 LT	BCLC	287 L.F.
106+13 TO 107+00 RT	BCLC	90 L.F.

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 7/1/2016

DESIGNER/DRAFTER: JB
CHECKED BY: SN
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_PLN-07.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

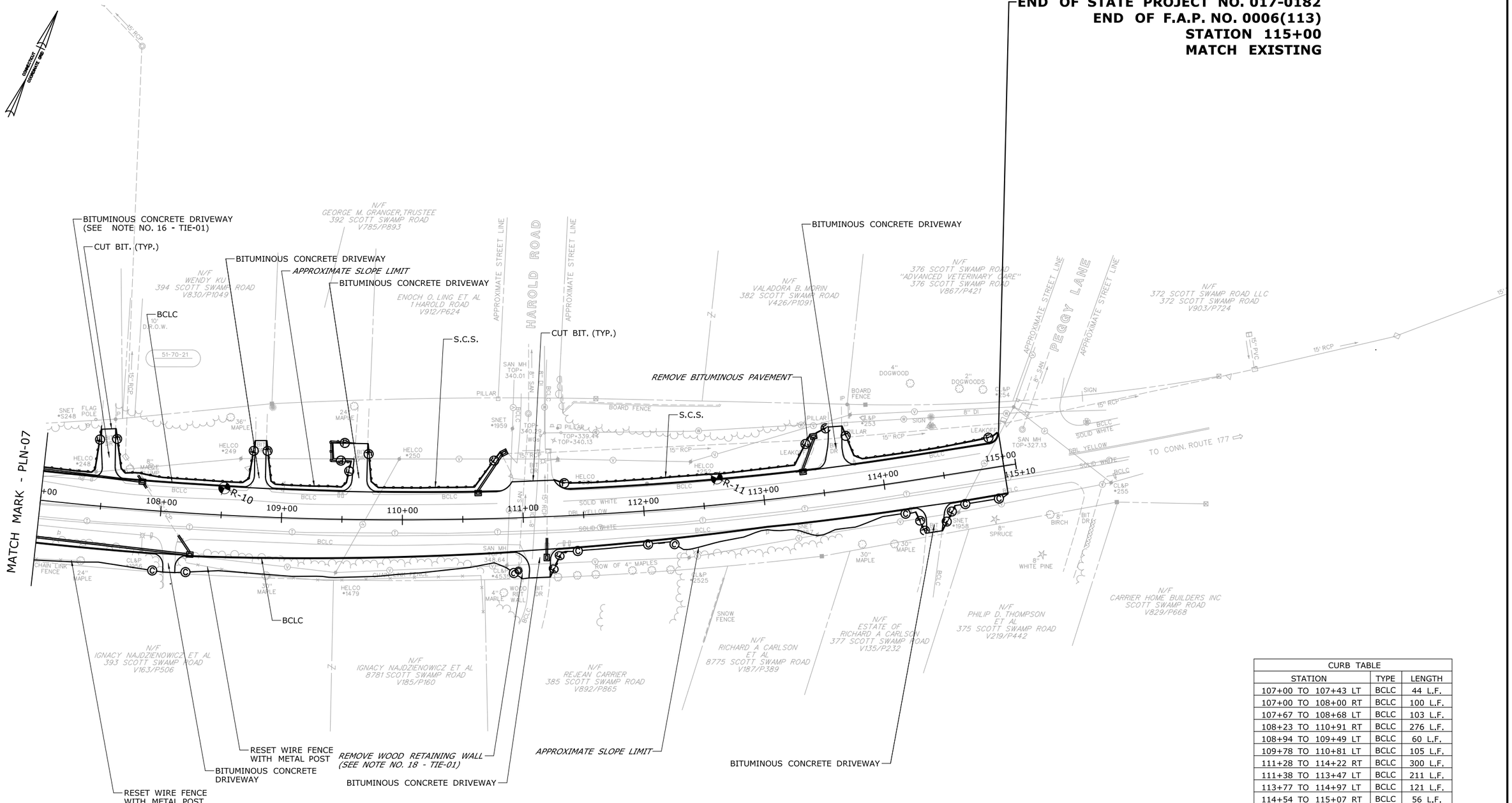
PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: HIGHWAY PLAN

PROJECT NO. 017-182
DRAWING NO. PLN-07
SHEET NO. C-08

END OF STATE PROJECT NO. 017-0182
END OF F.A.P. NO. 0006(113)
STATION 115+00
MATCH EXISTING



CURB TABLE		
STATION	TYPE	LENGTH
107+00 TO 107+43 LT	BCLC	44 L.F.
107+00 TO 108+00 RT	BCLC	100 L.F.
107+67 TO 108+68 LT	BCLC	103 L.F.
108+23 TO 110+91 RT	BCLC	276 L.F.
108+94 TO 109+49 LT	BCLC	60 L.F.
109+78 TO 110+81 LT	BCLC	105 L.F.
111+28 TO 114+22 RT	BCLC	300 L.F.
111+38 TO 113+47 LT	BCLC	211 L.F.
113+77 TO 114+97 LT	BCLC	121 L.F.
114+54 TO 115+07 RT	BCLC	56 L.F.

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 7/1/2016

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CHECKED BY: SN
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_PLN-08.dgn

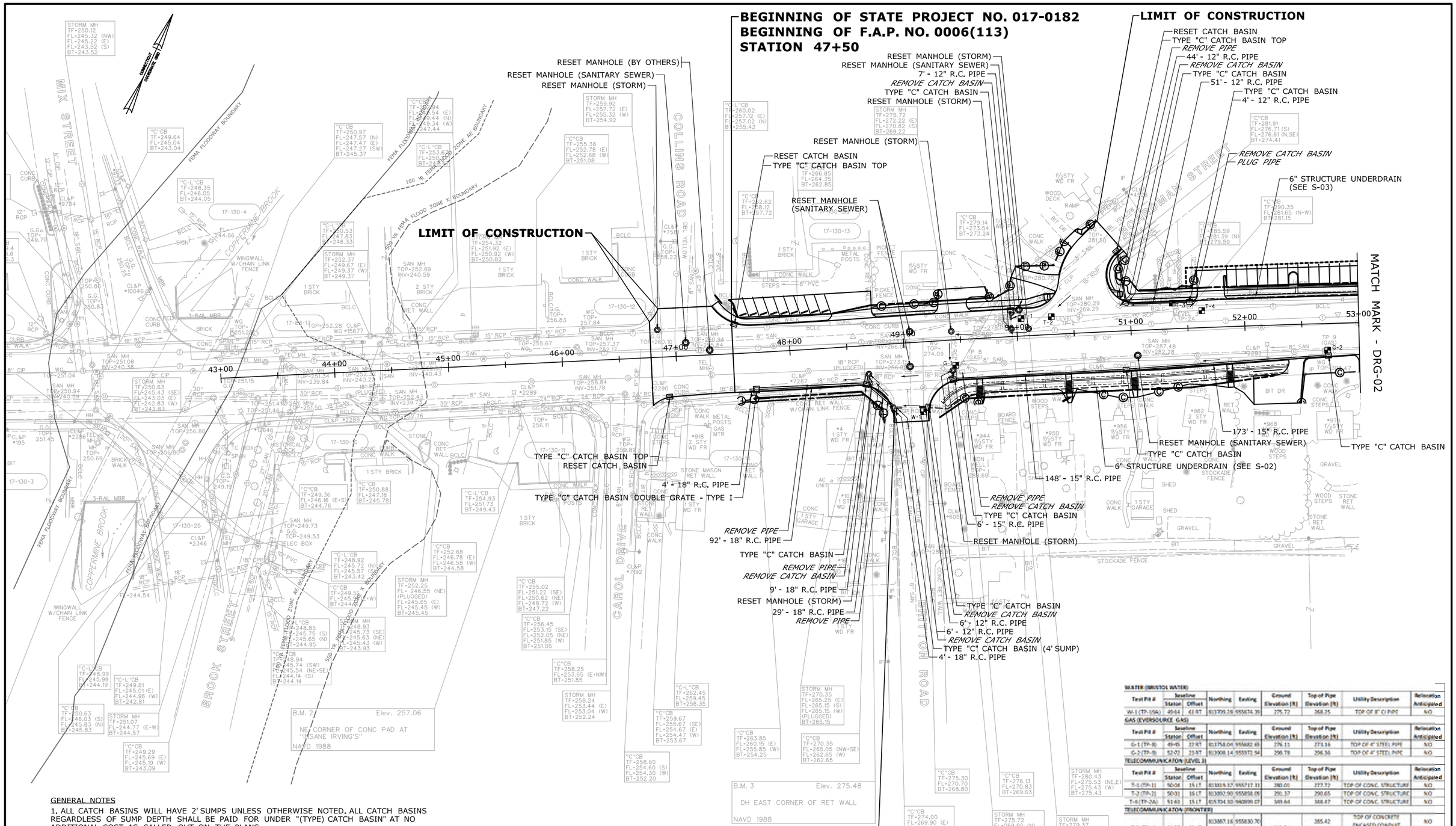
SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: HIGHWAY PLAN

PROJECT NO. 017-182
DRAWING NO. PLN-08
SHEET NO. C-09



GENERAL NOTES

1. ALL CATCH BASINS WILL HAVE 2' SUMPS UNLESS OTHERWISE NOTED. ALL CATCH BASINS REGARDLESS OF SUMP DEPTH SHALL BE PAID FOR UNDER "(TYPE) CATCH BASIN" AT NO ADDITIONAL COST AS CALLED OUT ON THE PLANS.
2. ALL EXISTING DRAINAGE SYSTEMS WITHIN THE PROJECT LIMITS ARE TO BE CLEANED AS DIRECTED BY THE ENGINEER.
3. REMOVAL OF EXISTING PIPE AND STRUCTURES SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR "TRENCH EXCAVATION" AND "ROCK EXCAVATION", RESPECTIVELY.

WATER (BRISTOL WATER)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
W-1 (TP-19A)	49+64	41 RT	803799.26	955674.39	275.72	268.25	TOP OF 8" CI PIPE	NO

GAS (EVERSOURCE GAS)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
G-1 (TP-8)	49+95	37 RT	803758.04	955682.65	276.11	273.16	TOP OF 4" STEEL PIPE	NO
G-2 (TP-9)	52+72	23 RT	803908.14	955973.94	298.78	296.36	TOP OF 4" STEEL PIPE	NO

TELECOMMUNICATION (LEVEL 3)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
T-1 (TP-1)	50+04	15 LT	803824.37	955717.31	283.00	277.77	TOP OF CONC. STRUCTURE	NO
T-2 (TP-2)	50+31	16 LT	803892.90	955858.09	290.37	290.65	TOP OF CONC. STRUCTURE	NO
T-4 (TP-2A)	51+63	15 LT	804304.30	956099.07	349.64	348.47	TOP OF CONC. STRUCTURE	NO

TELECOMMUNICATION (FRONTIER)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
T-3 (TP-4)	51+07	23 LT	803887.16	955830.70	289.74	285.42	TOP OF CONCRETE ENCASED CONDUIT	NO
			803888.37	955832.86		284.97	TOP EDGE OF CONCRETE ENCASED CONDUIT	NO

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REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/27/2016

DESIGNER/DRAFTER: JB

CHECKED BY: SN

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_DRG-01.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

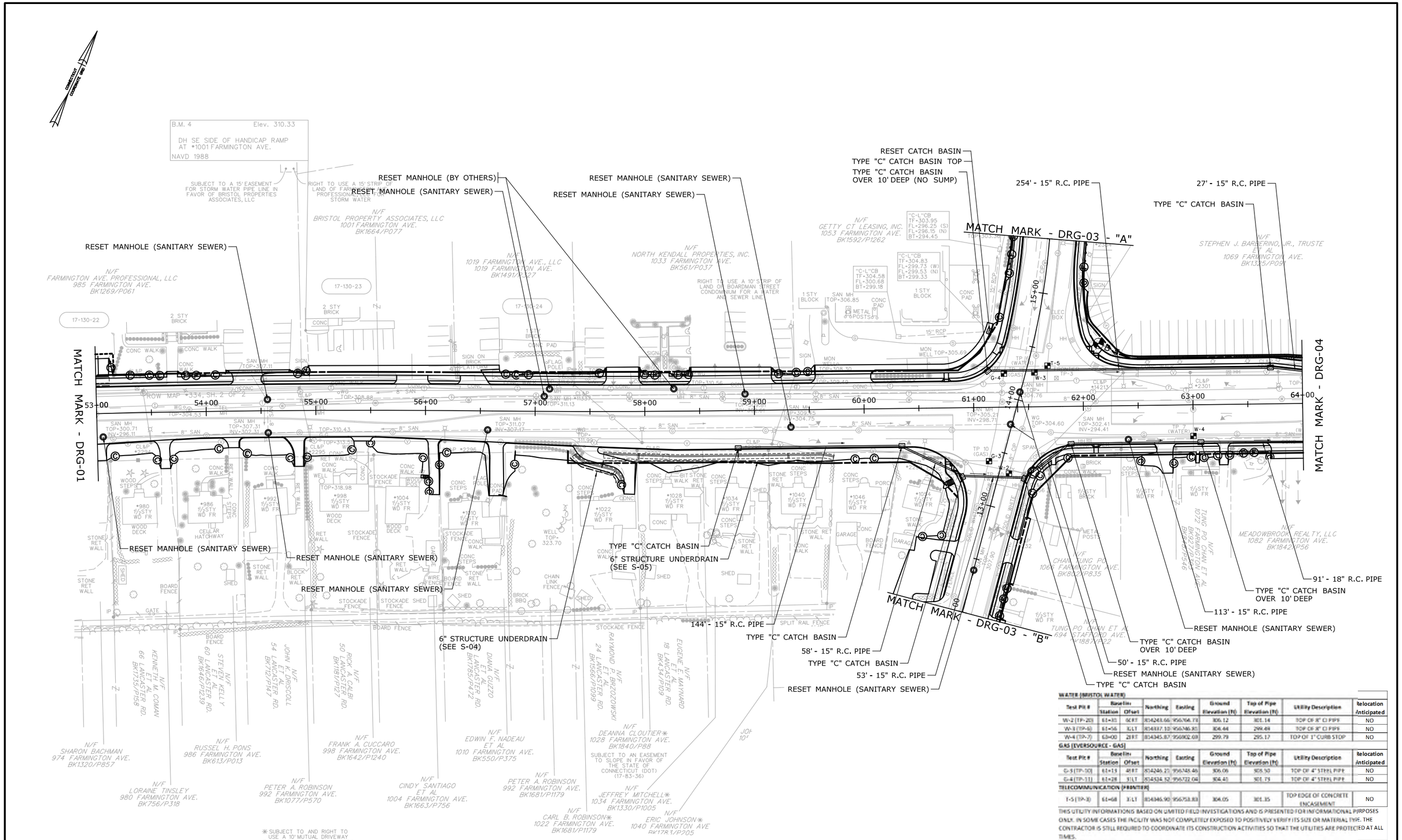
TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: DRAINAGE PLAN

PROJECT NO. 017-182

DRAWING NO. DRG-01

SHEET NO. C-10



WATER (BRISTOL WATER)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
W-2 (TP-20)	61+35	0RT	854243.66	956766.78	306.12	301.14	TOP OF 8" CI PIPE	NO
W-3 (TP-6)	61+56	3LT	854337.10	956746.35	304.44	299.49	TOP OF 8" CI PIPE	NO
W-4 (TP-7)	63+00	28RT	854345.87	956902.69	299.79	295.17	TOP OF 1" CURB STOP	NO

GAS (EVERSOURCE - GAS)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
G-3 (TP-30)	61+13	4RT	854246.21	956748.46	306.06	303.50	TOP OF 4" STEEL PIPE	NO
G-4 (TP-31)	61+28	1LT	854334.32	956722.04	304.41	301.75	TOP OF 4" STEEL PIPE	NO

TELECOMMUNICATION (FIBER)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
T-5 (TP-3)	61+68	3LT	854346.90	956753.83	304.05	301.35	TOP EDGE OF CONCRETE ENCASEMENT	NO

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Plotted Date: 5/27/2016

DESIGNER/DRAFTER: JB
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SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_DRG-02.dgn

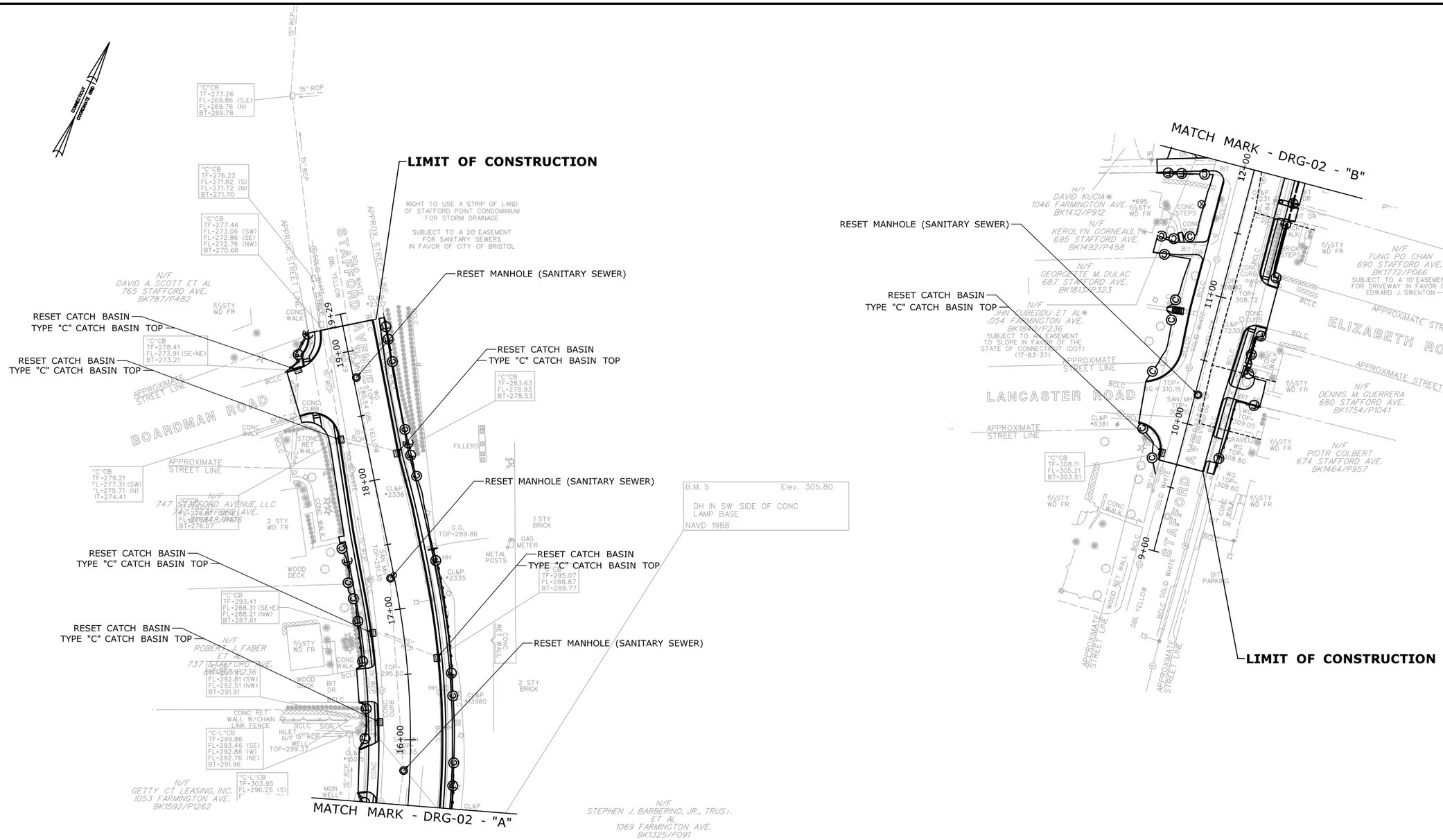
SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: DRAINAGE PLAN

PROJECT NO. 017-182
DRAWING NO. DRG-02
SHEET NO. C-11



REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/27/2016

DESIGNER/DRAFTER: JB
CHECKED BY: SN
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ..\HW-MSH-0017-0182-DRG-03.dgn

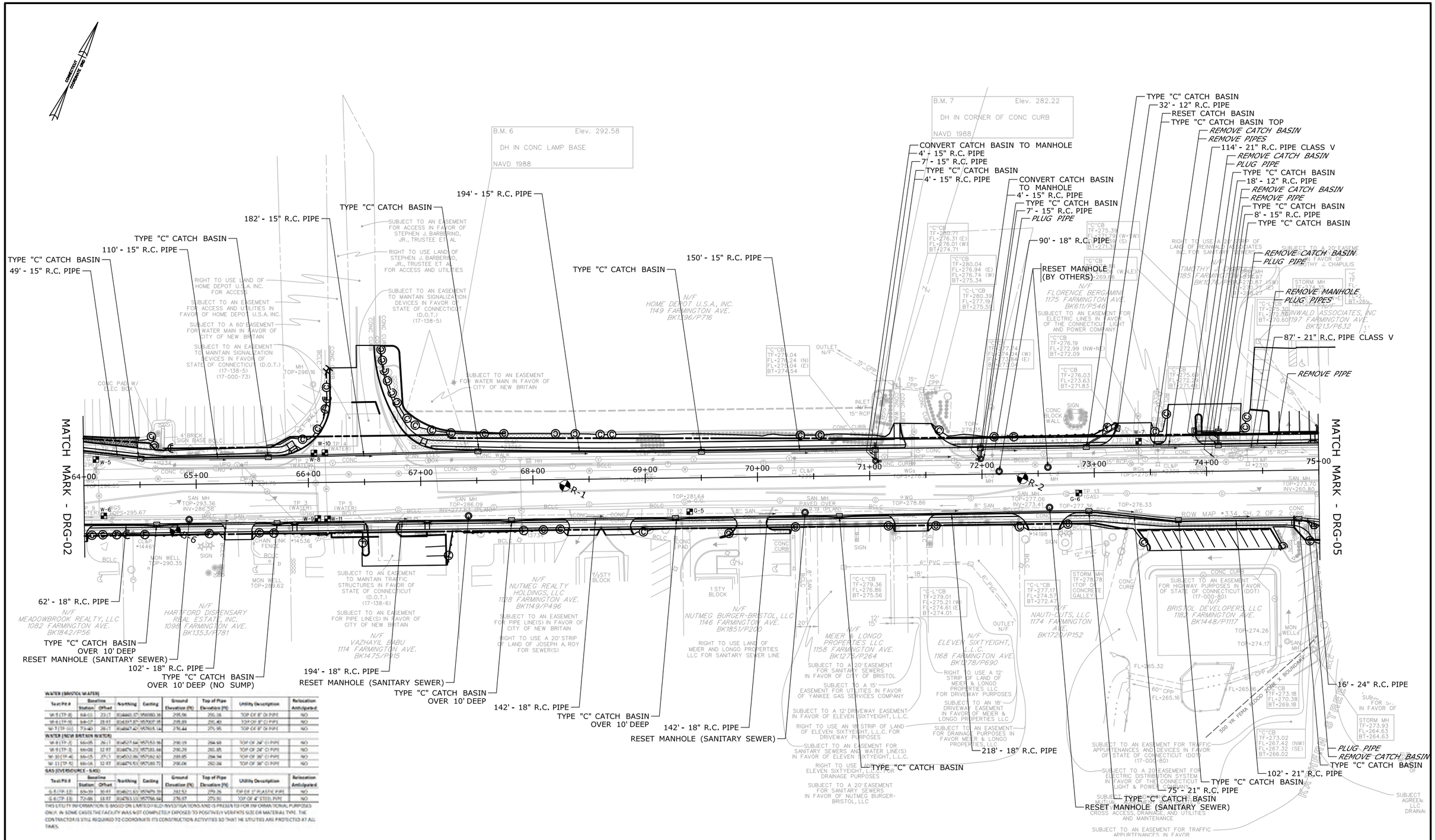
SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: DRAINAGE PLAN

PROJECT NO. 017-182
DRAWING NO. DRG-03
SHEET NO. C-12



REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/27/2016

DESIGNER/DRAFTER: **JB**

CHECKED BY: **SN**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_DRG-04.dgn

SIGNATURE/BLOCK: **OFFICE OF ENGINEERING**

APPROVED BY: DATE:

PROJECT TITLE: **WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE**

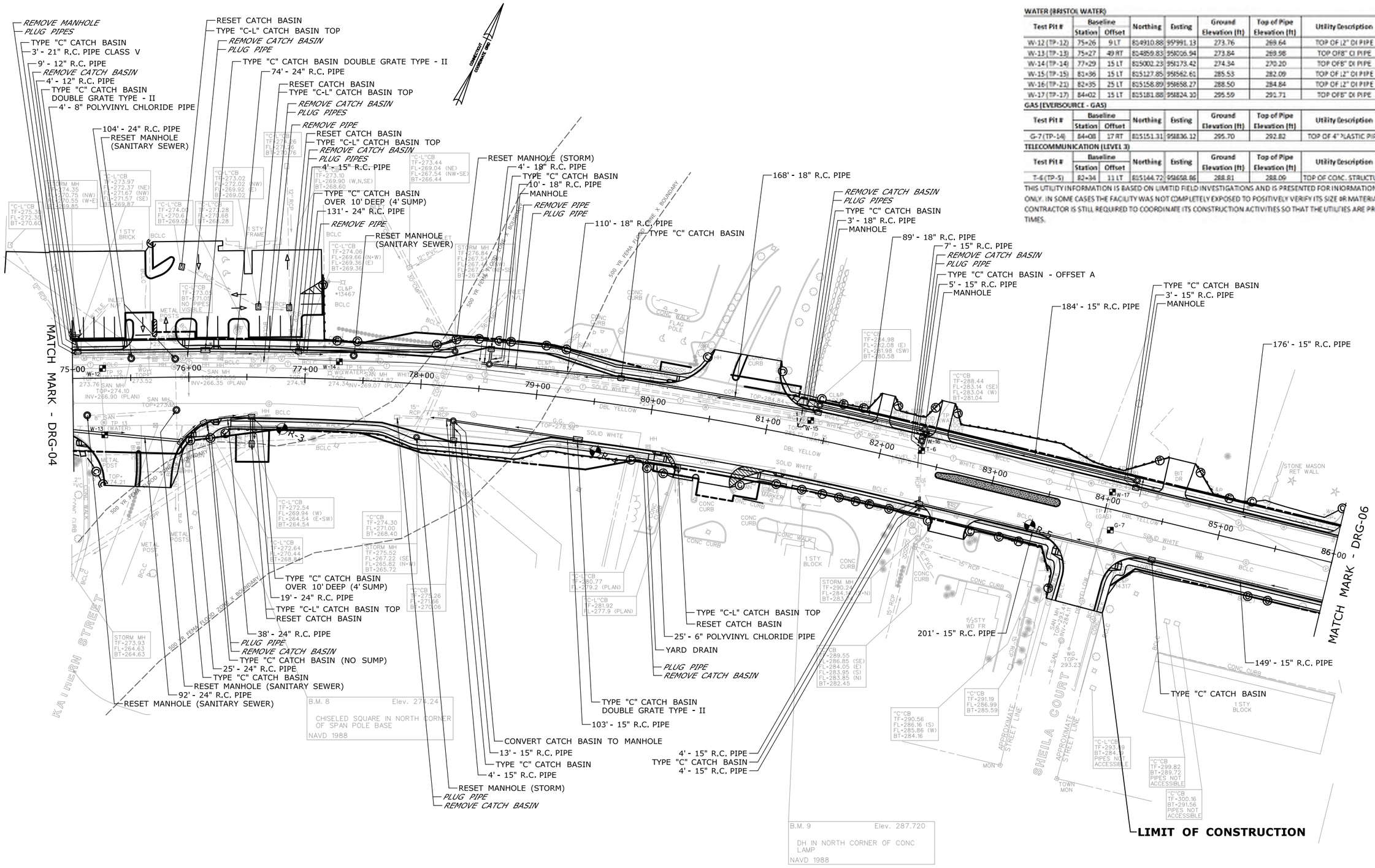
TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **DRAINAGE PLAN**

PROJECT NO. **017-182**

DRAWING NO. **DRG-04**

SHEET NO. **C-13**



WATER (BRISTOL WATER)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
W-12 (TP-12)	75+26	9 LT	814910.88	959991.13	273.76	269.64	TOP OF 12" DI PIPE	NO
W-13 (TP-13)	75+27	49 RT	814859.83	958006.94	273.84	269.98	TOP OF 8" CI PIPE	NO
W-14 (TP-14)	77+29	15 LT	815002.23	958173.42	274.34	270.20	TOP OF 8" DI PIPE	YES
W-15 (TP-15)	81+96	15 LT	815127.85	958562.61	285.53	282.09	TOP OF 12" DI PIPE	NO
W-16 (TP-21)	82+35	25 LT	815158.89	958658.27	288.50	284.84	TOP OF 12" DI PIPE	NO
W-17 (TP-17)	84+02	15 LT	815181.88	958824.30	295.59	291.71	TOP OF 8" DI PIPE	NO

GAS (EVERSOURCE - GAS)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
G-7 (TP-14)	84+08	17 RT	815151.31	958836.12	295.70	292.82	TOP OF 4" PLASTIC PIPE	NO

TELECOMMUNICATION (LEVEL 3)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
T-6 (TP-5)	82+34	11 LT	815144.72	958658.86	288.81	288.09	TOP OF CONC. STRUCTURE	NO

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SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

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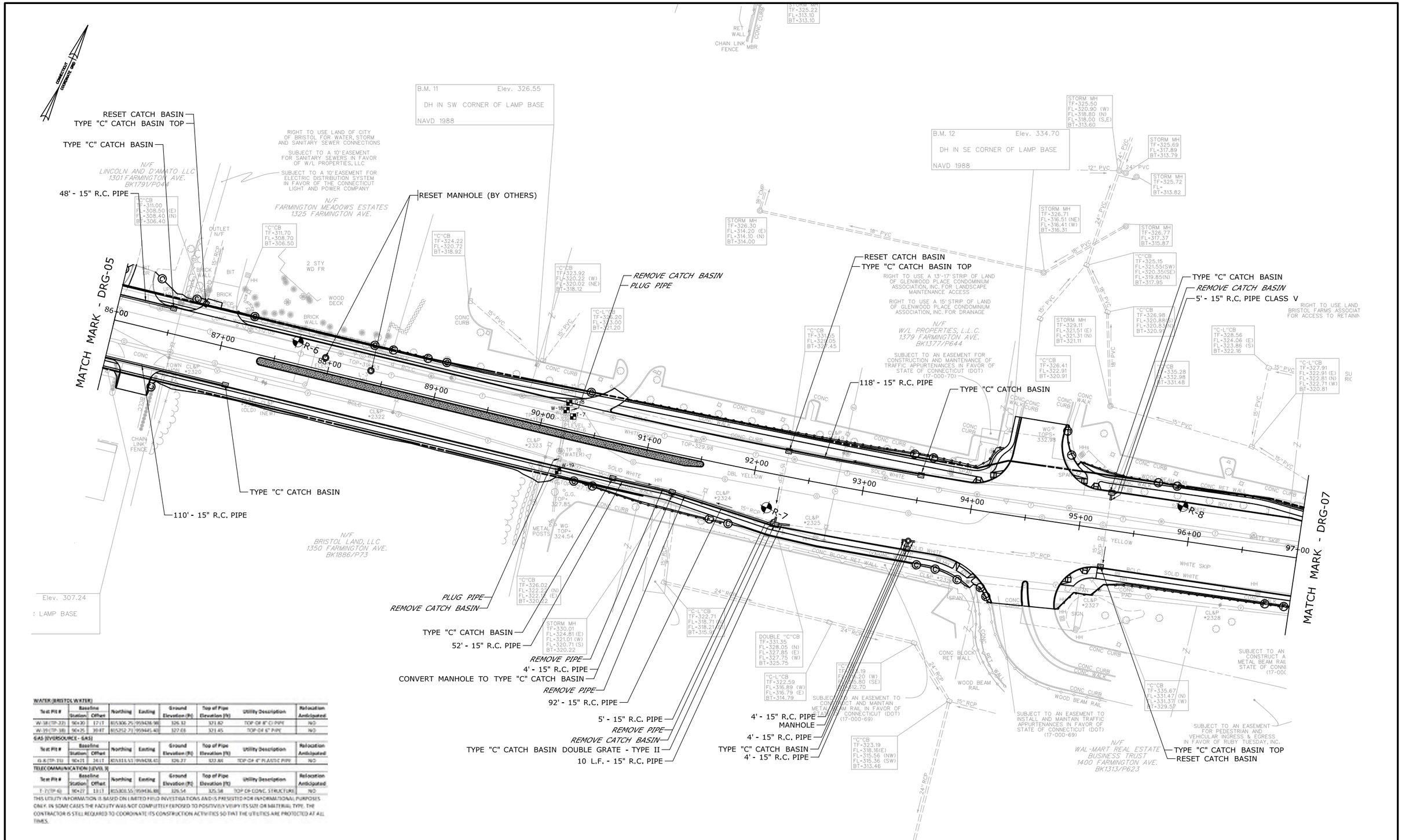
TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: DRAINAGE PLAN

PROJECT NO. 017-182
DRAWING NO. DRG-05
SHEET NO. C-14



WATER (BRISTOL WATER)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
W-18 (TP-32)	90+20	17 LT	855306.25	959438.98	326.32	321.82	TOP OF 8" CI PIPE	NO
W-19 (TP-38)	90+25	30 RT	855252.73	959445.40	327.68	321.45	TOP OF 6" PIPE	NO

GAS (EVERSOURCE - GAS)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
G-8 (TP-31)	90+21	26 LT	855315.53	959438.42	326.37	323.84	TOP OF 4" PLASTIC PIPE	NO

TELECOMMUNICATION (LEVEL 3)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
T-7 (TP-4)	90+27	13 LT	855308.55	959436.88	326.54	325.58	TOP OF CONC. STRUCTURE	NO

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Plotted Date: 5/27/2016

DESIGNER/DRAFTER: **JB**

CHECKED BY: **SN**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_DRG-06.dgn

SIGNATURE/BLOCK:

OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE:

WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

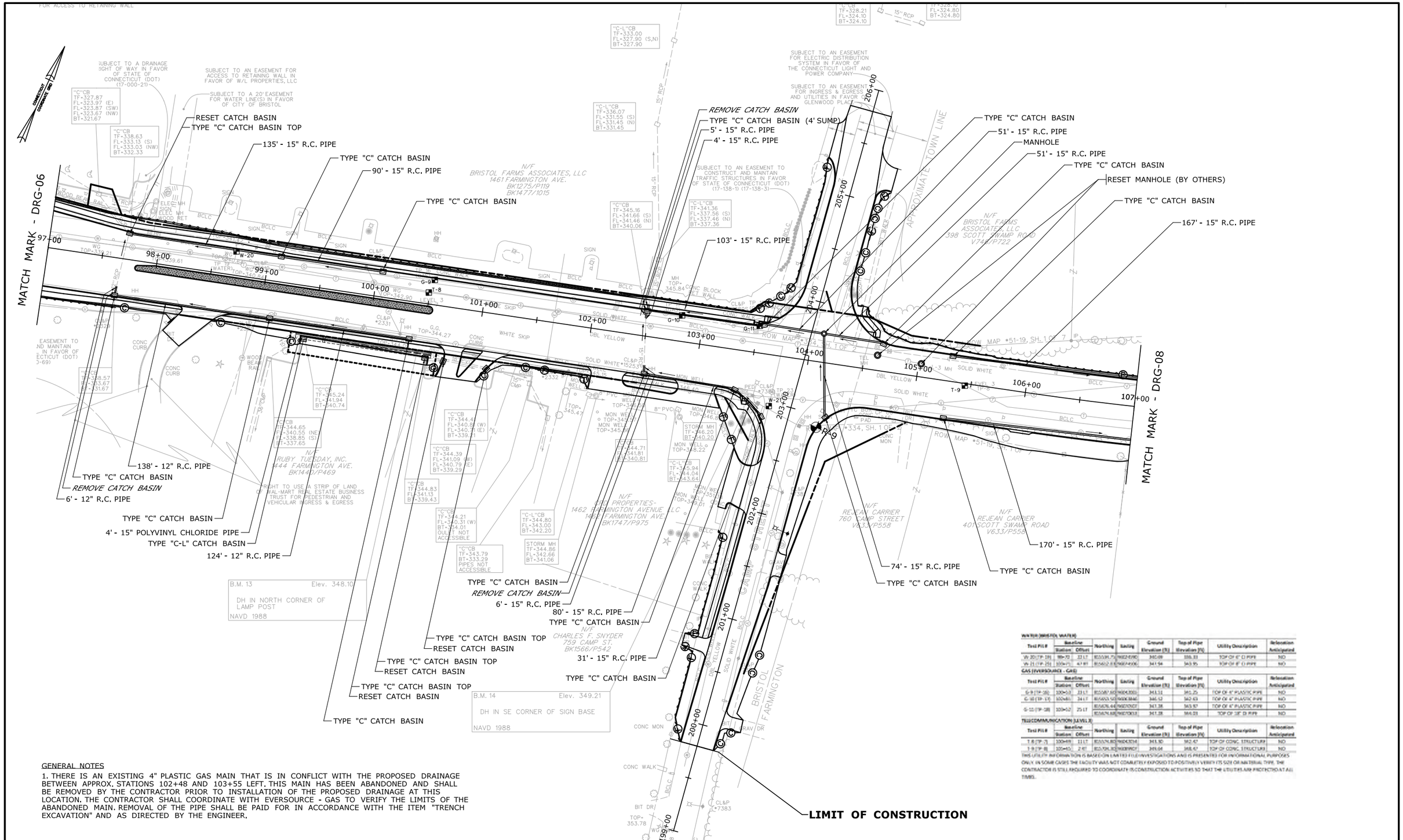
TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **DRAINAGE PLAN**

PROJECT NO. **017-182**

DRAWING NO. **DRG-06**

SHEET NO. **C-15**



GENERAL NOTES

1. THERE IS AN EXISTING 4" PLASTIC GAS MAIN THAT IS IN CONFLICT WITH THE PROPOSED DRAINAGE BETWEEN APPROX. STATIONS 102+48 AND 103+55 LEFT. THIS MAIN HAS BEEN ABANDONED AND SHALL BE REMOVED BY THE CONTRACTOR PRIOR TO INSTALLATION OF THE PROPOSED DRAINAGE AT THIS LOCATION. THE CONTRACTOR SHALL COORDINATE WITH EVERSOURCE - GAS TO VERIFY THE LIMITS OF THE ABANDONED MAIN. REMOVAL OF THE PIPE SHALL BE PAID FOR IN ACCORDANCE WITH THE ITEM "TRENCH EXCAVATION" AND AS DIRECTED BY THE ENGINEER.

WATER (WMIS FOR WATER)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
W-20 (TP-19)	98+70	23 LT	1003381.75	960249.6192	340.69	336.33	TOP OF 6" CI PIPE	NO
W-21 (TP-25)	100+25	47.89	1003402.33	960244.9006	341.94	343.95	TOP OF 8" CI PIPE	NO

GAS (EVERSOURCE - GAS)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
G-9 (TP-20)	100+50	23 LT	1003387.60	960243.8001	341.11	345.25	TOP OF 4" PLASTIC PIPE	NO
G-10 (TP-17)	102+85	24 LT	1003653.52	960236.3846	346.12	342.63	TOP OF 4" PLASTIC PIPE	NO
G-11 (TP-18)	103+52	25 LT	1003676.44	960230.027	347.38	343.97	TOP OF 4" PLASTIC PIPE	NO
G-12 (TP-28)	103+52	25 LT	1003676.44	960230.013	347.38	344.01	TOP OF 18" CI PIPE	NO

TELECOMMUNICATION (LEVEL 3)

Test Pit #	Baseline Station	Baseline Offset	Northing	Easting	Ground Elevation (ft)	Top of Pipe Elevation (ft)	Utility Description	Relocation Anticipated
T-8 (TP-7)	100+69	11 LT	1003374.80	960243.3014	343.30	342.47	TOP OF CONC. STRUCTURE	NO
T-9 (TP-8)	100+65	2 RT	1003371.30	960239.9027	345.04	344.47	TOP OF CONC. STRUCTURE	NO

THIS UTILITY INFORMATION IS BASED ON LIMITED INVESTIGATIONS AND IS PRESENTED FOR INFORMATIONAL PURPOSES ONLY. IN SOME CASES THE FACILITY WAS NOT COMPLETELY EXPOSED TO POSITIVELY VERIFY ITS SIZE OR MATERIAL TYPE. THE CONTRACTOR IS STILL REQUIRED TO COORDINATE ITS CONSTRUCTION ACTIVITIES SO THAT THE UTILITIES ARE PROTECTED AT ALL TIMES.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/27/2016

DESIGNER/DRAFTER: JB
CHECKED BY: SN
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ..\HW_MSH_0017_0182_DRG-07.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

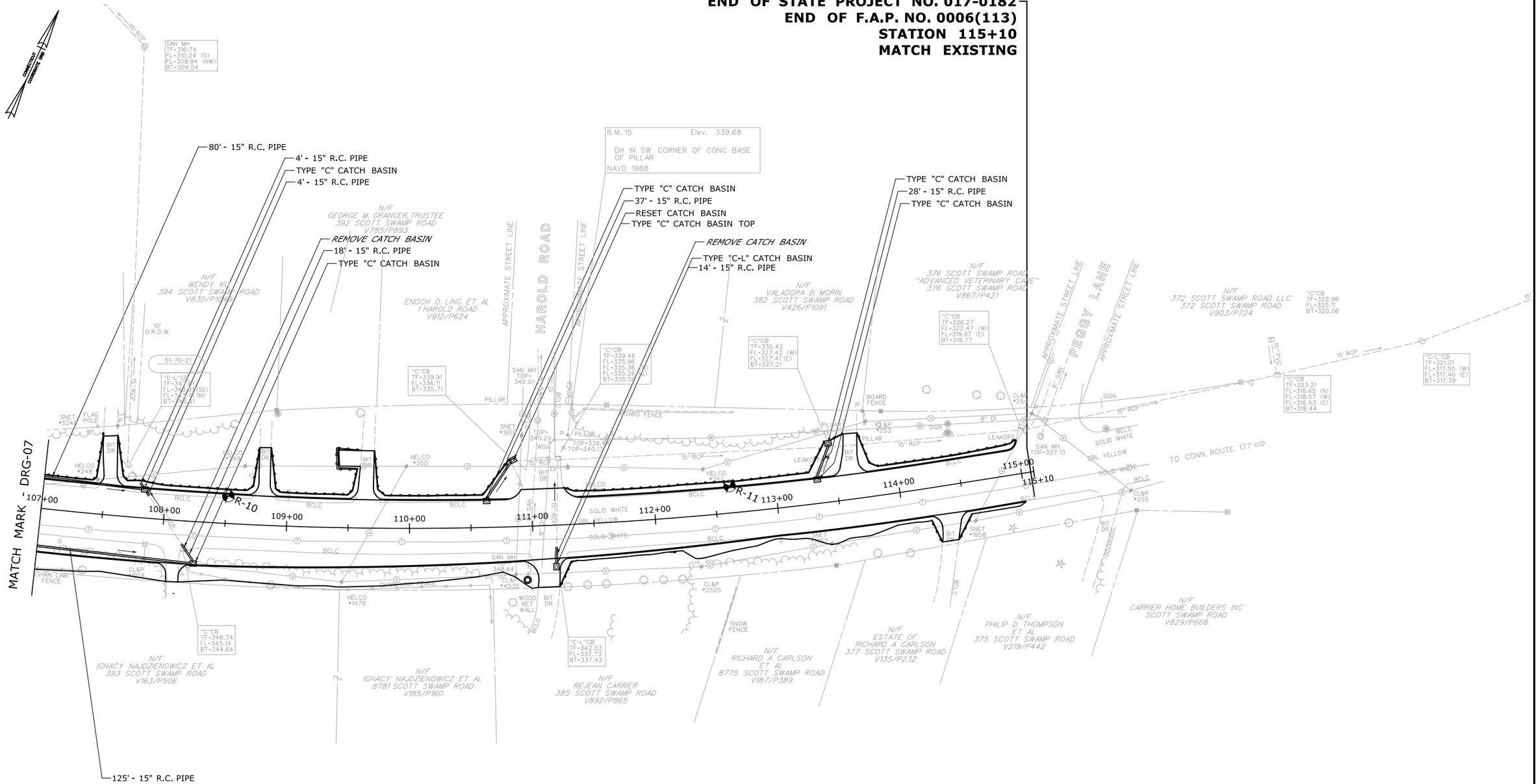
PROJECT TITLE: WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: BRISTOL/FARMINGTON

DRAWING TITLE: DRAINAGE PLAN

PROJECT NO. 017-182
DRAWING NO. DRG-07
SHEET NO. C-16

END OF STATE PROJECT NO. 017-0182
END OF F.A.P. NO. 0006(113)
STATION 115+10
MATCH EXISTING



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Plotted Date: 5/27/2016

DESIGNER/DRAFTER: **JB**
CHECKED BY: **SN**
SCALE IN FEET
0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_DRG-08.dgn

SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN:
BRISTOL/FARMINGTON

DRAWING TITLE:
DRAINAGE PLAN

PROJECT NO. **017-182**
DRAWING NO. **DRG-08**
SHEET NO. **C-17**

LANDSCAPE ITEMS

TREES

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	COMMENTS
A.b.	Acer buergerianum	Trident Maple	1 1/2" -2" Cal. B.B.	11	
A.r.	Acer rubrum 'Columnaris'	Columnar Red Maple	2"-2 1/2" Cal. B.B.	7	
B.n.	Betula nigra 'Heritage'	Heritage Birch Tree	8'-10' Ht. B.B.	16	
C.c.	Crataegus crusgalli inermis 'Crusader'	Crusader Hawthorn	8'-10' Ht. B.B.	11	2" Cal. Min.
G.b.	Ginko biloba	Maidenhair Tree	2 1/2"-3" Cal.	6	
G.t.	Gleditsia triacanthos 'inermis' Shademaster	Shademaster Honeylocust	1 3/4"-2" Cal. B.B.	7	
M.s.	Malus 'Snowdrift'	Snowdrift Flowering Crabapple	2" -2 1/2" Cal. B.B.	6	
P.k.	Picea Kosteri	Koster Blue Spruce	8'-10' Ht. B.B.	4	
Pl.a.	Platanus acerfolia	London Plane Tree	2"-2 1/2" Cal. B.B.	2	
*Q.p.	Quercus palustris	Pin Oak	2"-2 1/2" Cal. B.B.	7	
S.r.	Syringa reticulata 'Ivory Silk'	Japanse Tree Lilac	2"- 2 1/2" Cal. B.B.	10	
T.o.	Thuja occidentalis Emerald	Emerald Green Arbovitae	6'-8' Ht. B.B.	58	

SHRUBS

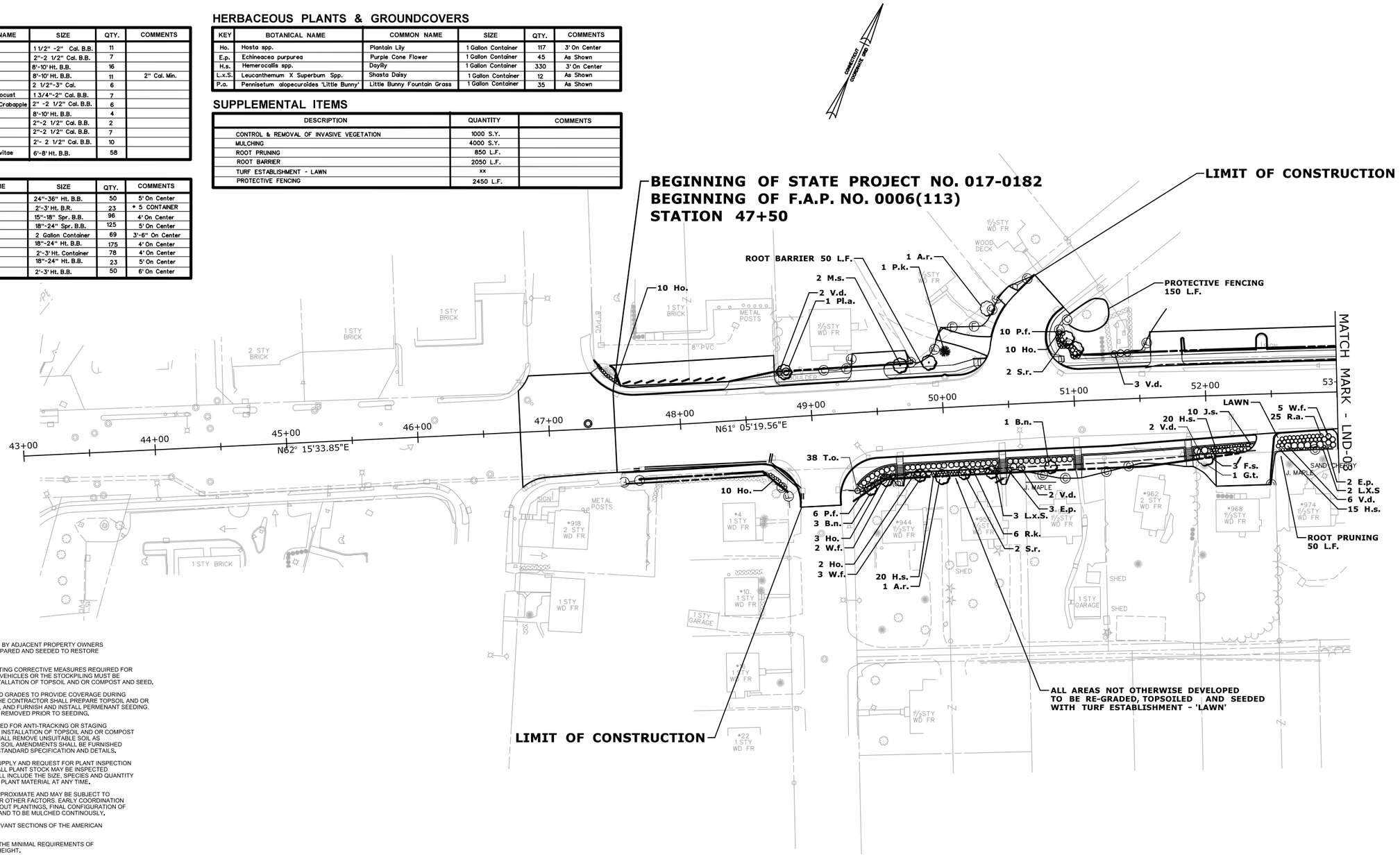
KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	COMMENTS
C.s.	Cornus sericea	Red Osier Dogwood	24"-36" Ht. B.B.	50	5' On Center
F.s.	Forsythia suspensa	Weeping Forsythia	2'-3' Ht. B.B.	23	* 5 CONTAINER
J.s.	Juniperus sabina tamariscifolia	Tam's Juniper	15"-18" Spr. B.B.	96	4' On Center
J.p.	Juniperus pfitzeriana 'Compactus'	Compact Pfitzer Juniper	18"-24" Spr. B.B.	125	5' On Center
P.f.	Potentilla 'Goldfinger'	Goldfinger Potentilla	2 Gallon Container	69	3'-6" On Center
R.a.	Rhus aromatica 'Gro-Low'	Fragrant Sumac	18"-24" Ht. B.B.	175	4' On Center
R.k.	Rosa 'Knock out'	Knock out Rose	2'-3' Ht. Container	78	4' On Center
W.f.	Weigela floribunda	Old Fashioned Weigela	18"-24" Ht. B.B.	23	5' On Center
V.d.	Viburnum dilitatum	Linden Viburnum	2'-3' Ht. B.B.	50	6' On Center

HERBACEOUS PLANTS & GROUNDCOVERS

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	COMMENTS
Ho.	Hosta spp.	Plantain Lily	1 Gallon Container	117	3' On Center
E.p.	Echineacea purpurea	Purple Cone Flower	1 Gallon Container	45	As Shown
H.s.	Hemerocallis spp.	Daylily	1 Gallon Container	330	3' On Center
L.x.S.	Leucanthemum X Superbum Spp.	Shasta Daisy	1 Gallon Container	12	As Shown
P.a.	Pennisetum alopecuroides 'Little Bunny'	Little Bunny Fountain Grass	1 Gallon Container	35	As Shown

SUPPLEMENTAL ITEMS

DESCRIPTION	QUANTITY	COMMENTS
CONTROL & REMOVAL OF INVASIVE VEGETATION	1000 S.Y.	
MULCHING	4000 S.Y.	
ROOT PRUNING	850 L.F.	
ROOT BARRIER	2050 L.F.	
TURF ESTABLISHMENT - LAWN	xx	
PROTECTIVE FENCING	2450 L.F.	



NOTES

1. ALL AREAS DEVELOPED AND MAINTAINED AS LAWN BY ADJACENT PROPERTY OWNERS PRIOR TO CONSTRUCTION SHALL BE GRADED, PREPARED AND SEEDED TO RESTORE OR IMPROVE EXISTING CONDITIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR ANTICIPATING CORRECTIVE MEASURES REQUIRED FOR SEEDING. AREAS COMPACTED BY CONSTRUCTION VEHICLES OR THE STOCKPILING MUST BE MADE FRIABLE AND FREE-DRAINING PRIOR TO INSTALLATION OF TOPSOIL AND OR COMPOST AND SEED.
3. TEMPORARY SEEDING SHALL BE USED ON FINISHED GRADES TO PROVIDE COVERAGE DURING THE MONTHS OF JULY OR AUGUST. OTHERWISE, THE CONTRACTOR SHALL PREPARE TOPSOIL AND OR COMPOST, BLEND SLOPES INTO EXISTING GRADES, AND FURNISH AND INSTALL PERMENANT SEEDING. ANY WEEDS OR UNWANTED VEGETATION MUST BE REMOVED PRIOR TO SEEDING.

   PROCESSED AGGREGATE OR OTHER MATERIAL USED FOR ANTI-TRACKING OR STAGING MUST BE REMOVED PRIOR TO FINAL GRADING AND INSTALLATION OF TOPSOIL AND OR COMPOST AND SEEDING OR PLANTING. THE CONTRACTOR SHALL REMOVE UNSUITABLE SOIL AS DIRECTED (PAID FOR UNDER EARTH EXCAVATION). SOIL AMENDMENTS SHALL BE FURNISHED PLANTING PITS SHALL BE PREPARED AS PER THE STANDARD SPECIFICATION AND DETAILS.
4. THE CONTRACTOR SHALL SUBMIT A SOURCE OF SUPPLY AND REQUEST FOR PLANT INSPECTION TO THE ENGINEER IN A TIMELY FASHION SO THAT ALL PLANT STOCK MAY BE INSPECTED PRIOR TO SHIPPING. THE SOURCE OF SUPPLY SHALL INCLUDE THE SIZE, SPECIES AND QUANTITY OF EACH PLANT. LANDSCAPE DESIGN MAY REJECT PLANT MATERIAL AT ANY TIME.
5. THE LOCATION OF PLANTINGS ON THE PLANS IS APPROXIMATE AND MAY BE SUBJECT TO COORDINATION WITH STAKEHOLDERS, UTILITIES OR OTHER FACTORS. EARLY COORDINATION WITH LANDSCAPE DESIGN IS REQUIRED TO STAKE OUT PLANTINGS, FINAL CONFIGURATION OF PLANTING BEDS TO BE DETERMINED IN THE FIELD AND TO BE MULCHED CONTINOUSLY.
6. CONTAINER PLANTS MUST CONFORM TO THE RELEVANT SECTIONS OF THE AMERICAN STANDARD FOR NURSERY STOCK AS FOLLOWS.
   - A. SHADE AND FLOWERING TREES MUST MEET THE MINIMAL REQUIREMENTS OF TRUNK CALIPER, ROOT MASS, AND BRANCH HEIGHT.
   - B. SHRUBS MUST MEET THE MINIMUM REQUIREMENTS FOR THE CONTAINER SIZE, ROOT MASS, NUMBER OF CANES FOR EACH 'TYPE' AND THE HIEGHT SPECIFED.
   - C. HERBACEOUS PLANTS AND ORNAMENTAL GRASSES MUST MEET THE MINIMUM REQUIREMENTS FOR CONTAINER SIZE AND ROOT MASS SPECIFIED.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/25/2016

DESIGNER/DRAFTER: **S.F.**

CHECKED BY: **M.C.**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_LDS-02.dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE:

WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

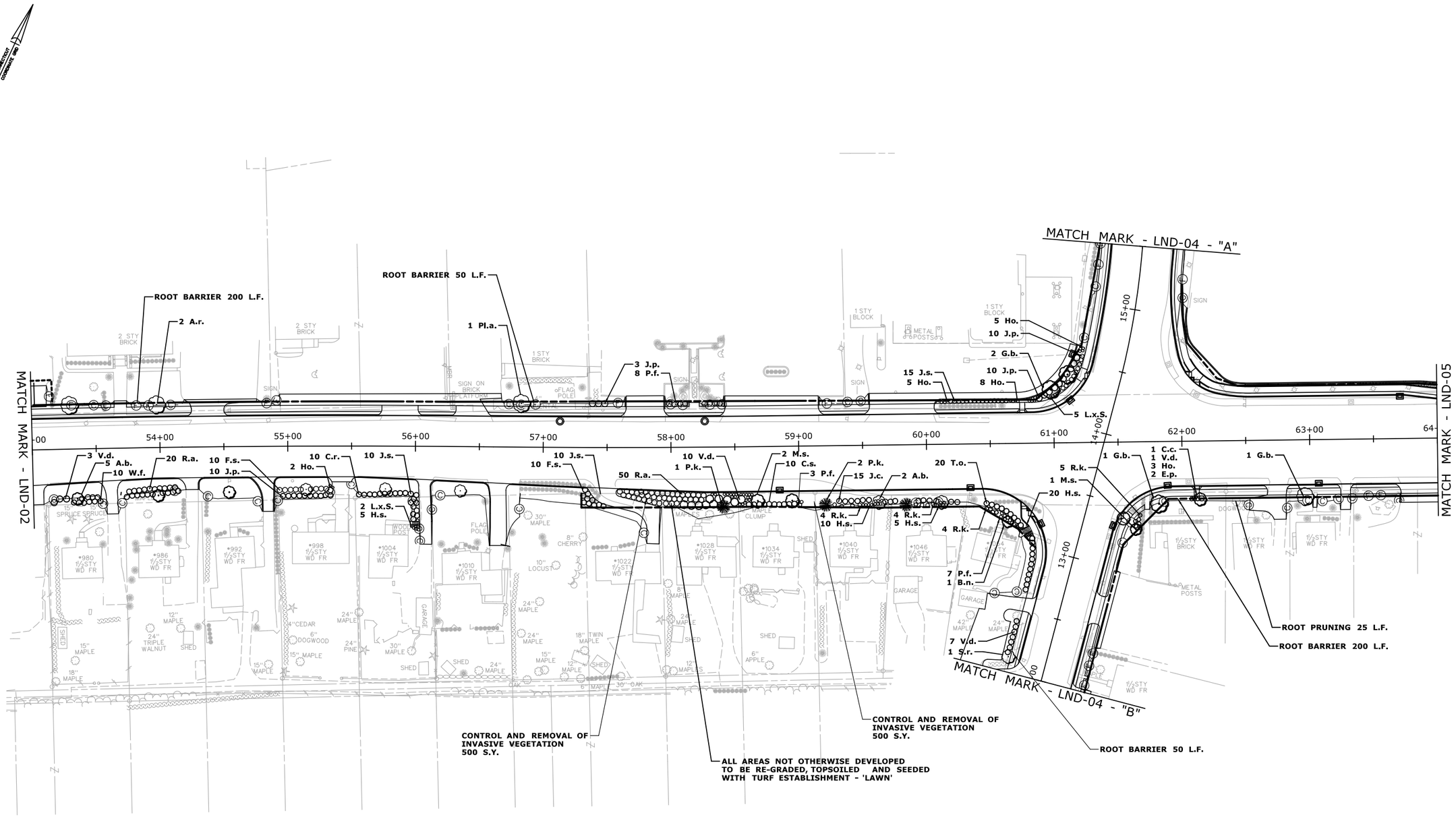
TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **LANDSCAPE DESIGN SHEET**

PROJECT NO. **17-182**

DRAWING NO. **LND-02**

SHEET NO. **C-18**



SEE LND-02 FOR PLANT LIST AND OTHER INFORMATION

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/25/2016

DESIGNER/DRAFTER: SF

CHECKED BY: MC

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_LDS-03.dgn

SIGNATURE/BLOCK:
OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE:
WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

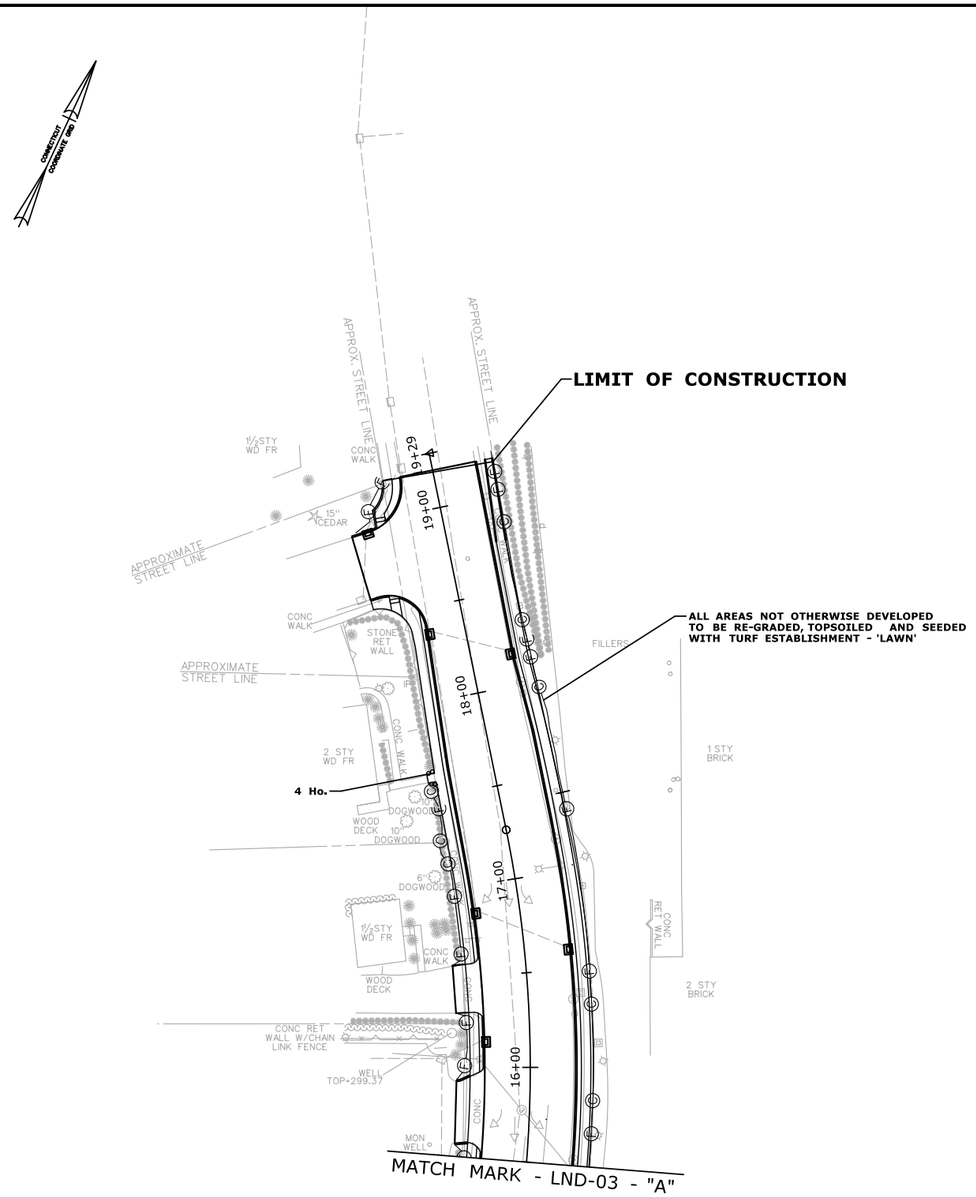
TOWN: **BRISTOL/FARMINGTON**

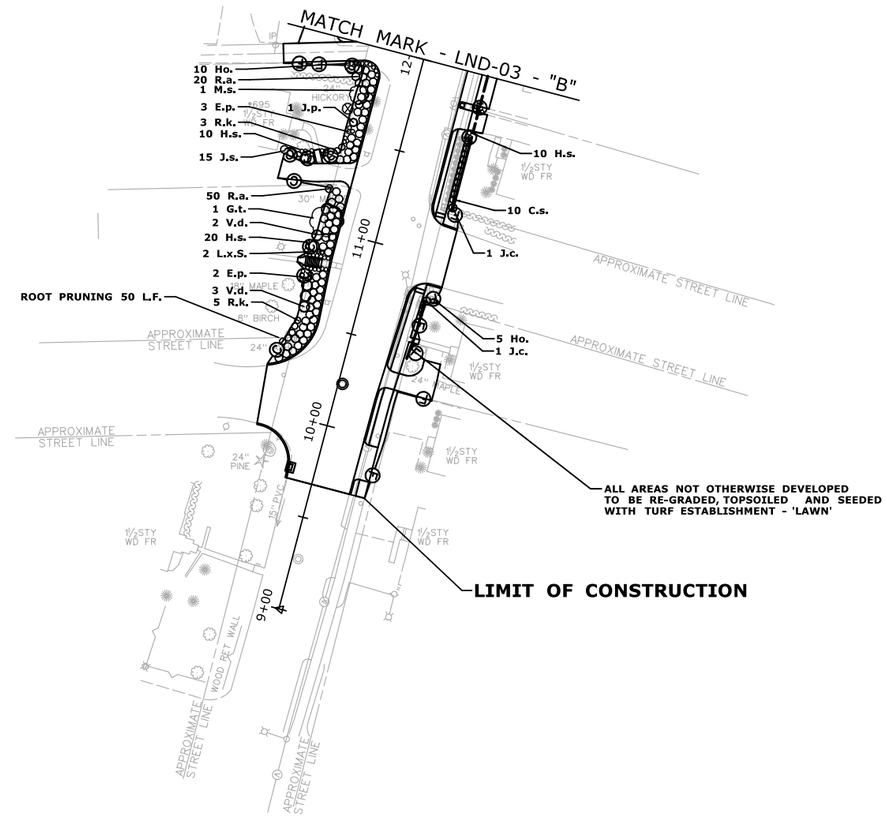
DRAWING TITLE: **HIGHWAY PLAN**

PROJECT NO. **17-182**

DRAWING NO. **LND-03**

SHEET NO. **C-19**





SEE LND-02 FOR PLANT LIST AND OTHER INFORMATION

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/25/2016

DESIGNER/DRAFTER: **SF**

CHECKED BY: **MC**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_LDS-04.dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:

WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

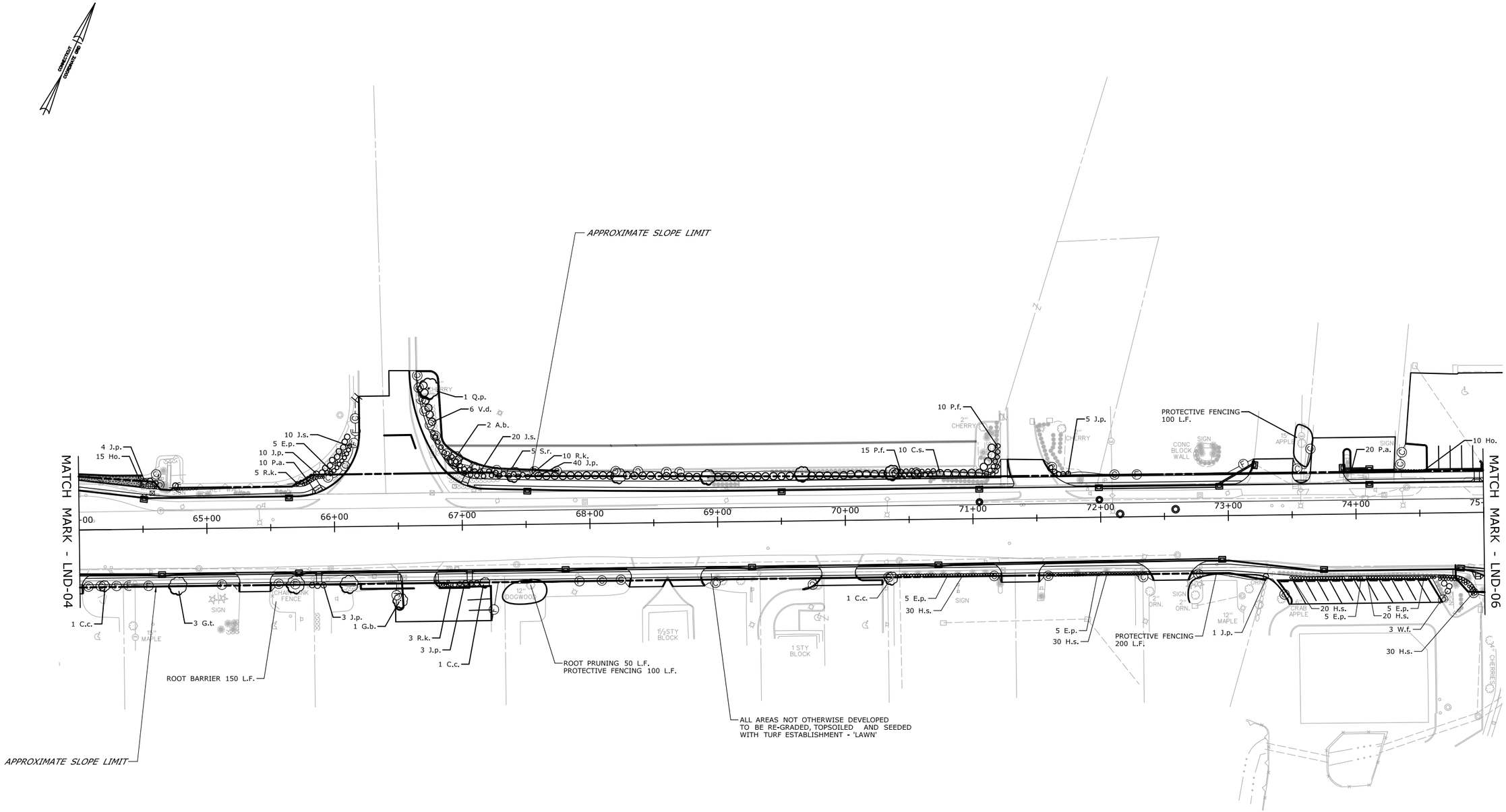
TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **LANDSCAPE DESIGN SHEET**

PROJECT NO. **17-182**

DRAWING NO. **LND-04**

SHEET NO. **C-20**



SEE LND-02 FOR PLANT LIST AND OTHER INFORMATION

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/25/2016

DESIGNER/DRAFTER: **SF**

CHECKED BY: **MC**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_LDS-05.dgn

SIGNATURE/BLOCK:

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APPROVED BY: DATE:

PROJECT TITLE:

WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

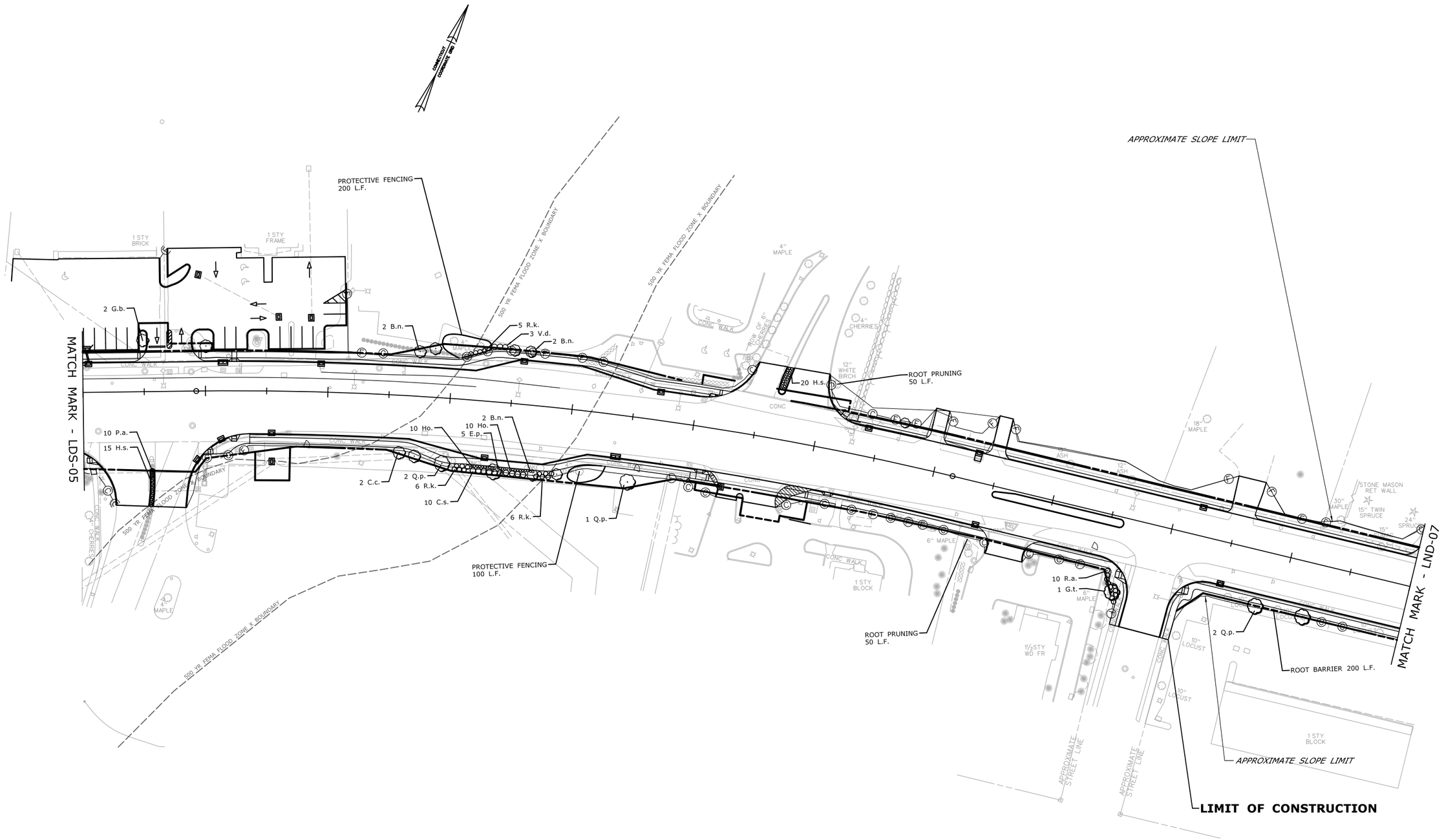
TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **LANDSCAPE DESIGN SHEET**

PROJECT NO. **17-182**

DRAWING NO. **LND-05**

SHEET NO. **C-21**



SEE LDS-02 FOR PLANT LIST AND OTHER INFORMATION

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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DESIGNER/DRAFTER: **SF**

CHECKED BY: **MC**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_LDS-06.dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE:

WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

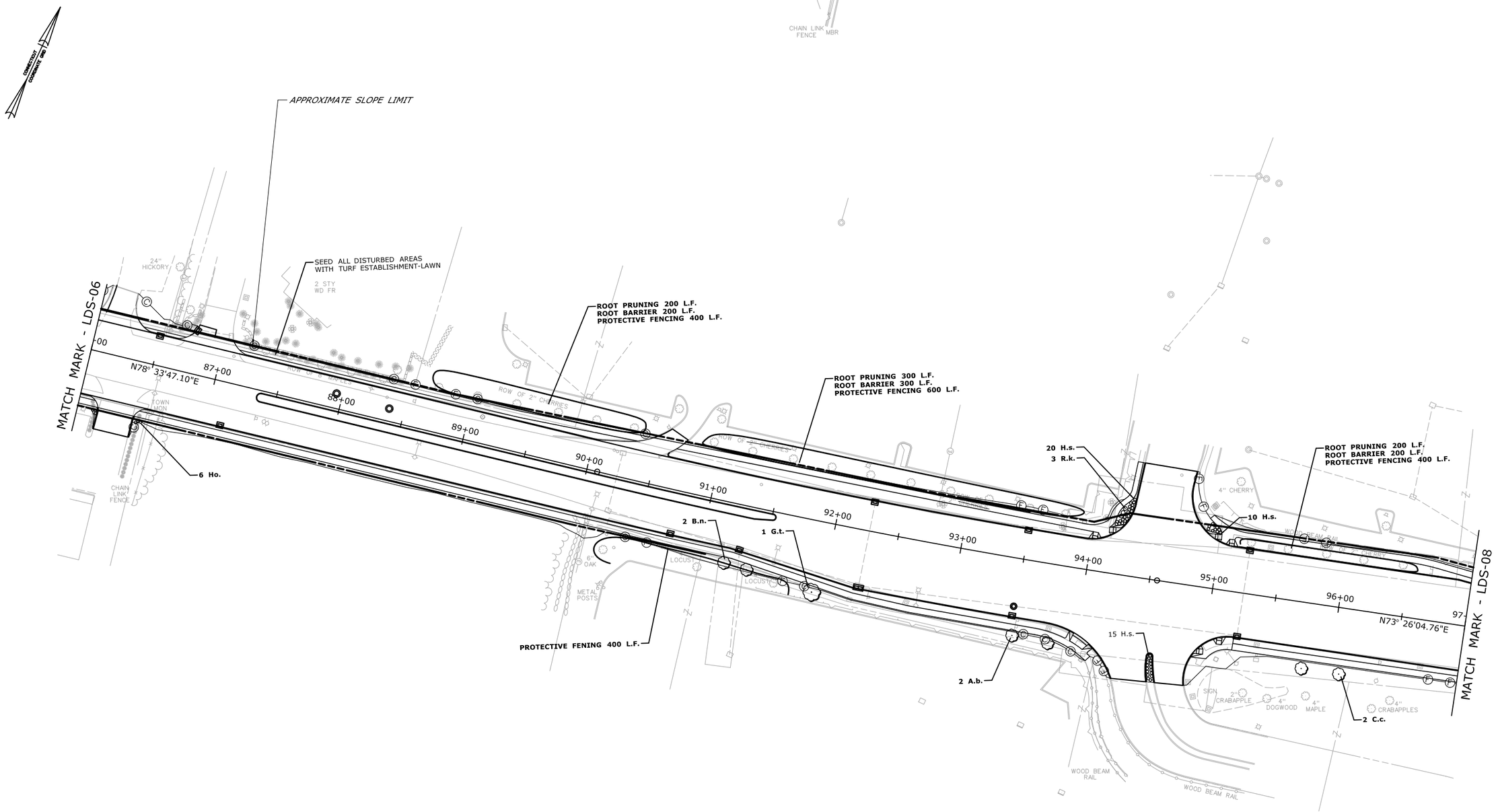
TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **LANDSCAPE DESIGN SHEET**

PROJECT NO. **17-182**

DRAWING NO. **LND-06**

SHEET NO. **C-22**



SEE LND-02 FOR PLANT LIST AND OTHER INFORMATION

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Plotted Date: 5/25/2016

DESIGNER/DRAFTER: **SF**

CHECKED BY: **MC**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_LDS-07.dgn

SIGNATURE/ BLOCK: **OFFICE OF ENGINEERING**

APPROVED BY: DATE:

PROJECT TITLE: **WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE**

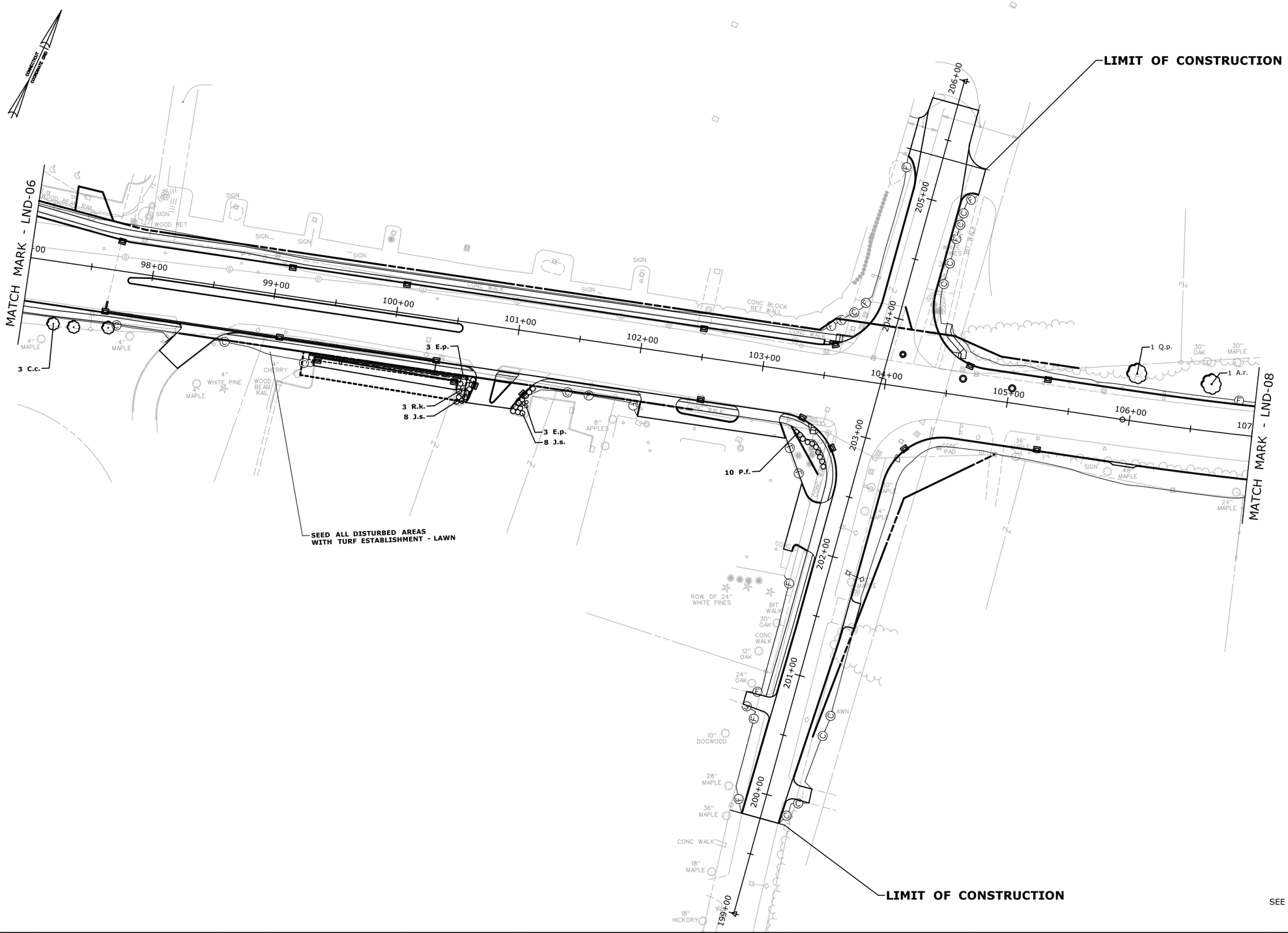
TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **LANDSCAPE DESIGN SHEET**

PROJECT NO. **17-182**

DRAWING NO. **LND-07**

SHEET NO. **C-23**



SEE LND-02 FOR PLANT LIST AND OTHER INFORMATION

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/25/2016

DESIGNER/DRAFTER: **SF**

CHECKED BY: **MC**

SCALE IN FEET

0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_LDS-08.dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE:

WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

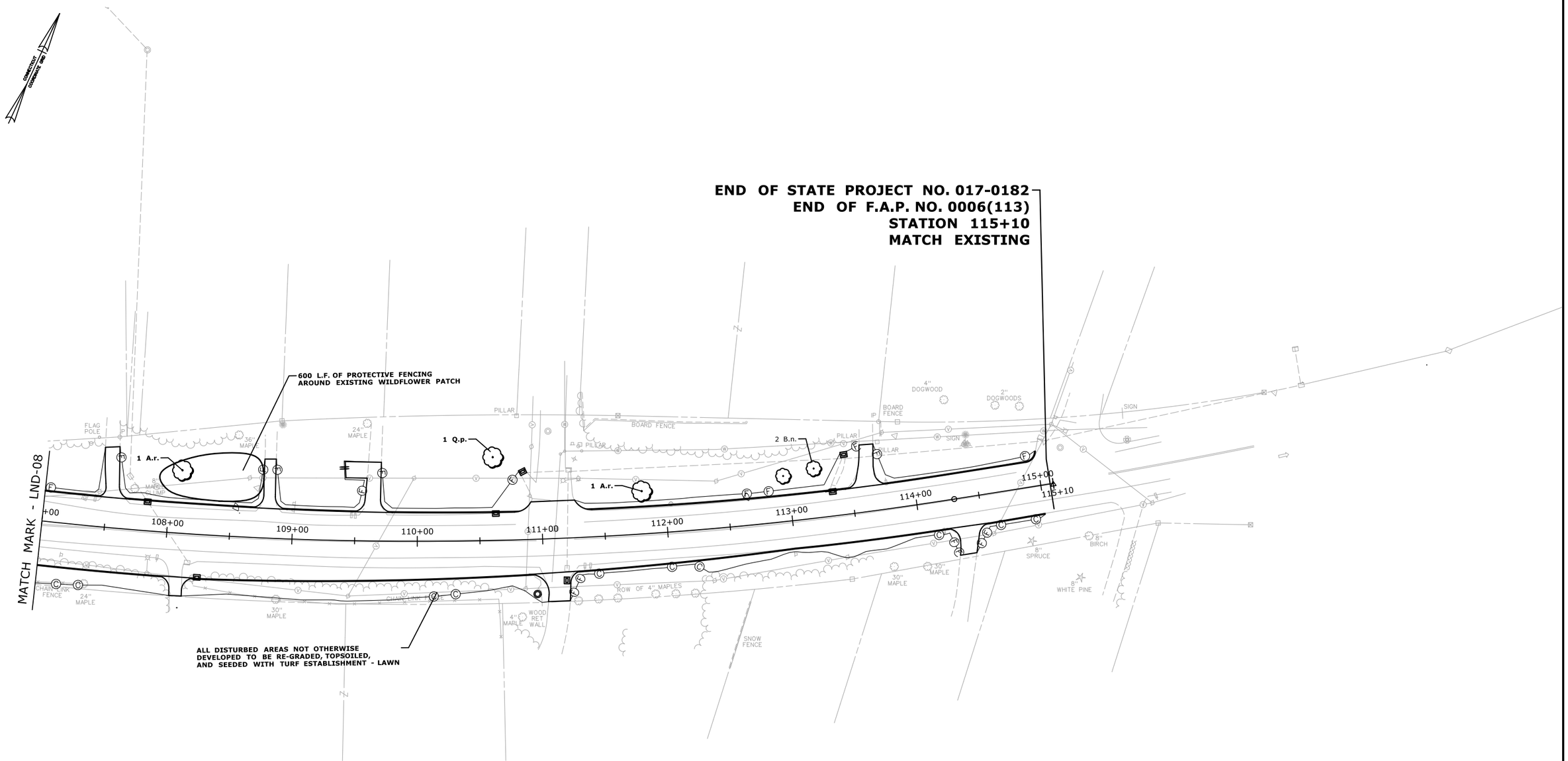
TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **LANDCAPE DESIGN**

PROJECT NO. **17-182**

DRAWING NO. **LND-08**

SHEET NO. **C-24**



SEE LND-02 FOR PLANT LIST AND OTHER INFORMATION

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 5/25/2016

DESIGNER/DRAFTER: **SF**

CHECKED BY: **MC**

SCALE IN FEET 0 40 80

SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\HW_MSH_0017_0182_LDS-09.dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE:

WIDENING OF U.S. ROUTE 6 FROM CAROL DRIVE TO PEGGY LANE

TOWN: **BRISTOL/FARMINGTON**

DRAWING TITLE: **LANDSCAPE DESIGN**

PROJECT NO. **17-182**

DRAWING NO. **LND-09**

SHEET NO. **C-25**

Appendix D – Stormwater Monitoring Report Form

Connecticut Department of
Energy & Environmental Protection
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, issued 8/21/13, effective 10/1/13
Stormwater Monitoring Report

SITE INFORMATION

Permittee: _____

Mailing Address: _____

Business Phone: _____ ext.: _____ Fax: _____

Contact Person: _____ Title: _____

Site Name: _____

Site Address: _____

Receiving Water (name, basin): _____

Stormwater Permit No. GSN _____

SAMPLING INFORMATION (Submit a separate form for each outfall)

Outfall Designation: _____ Date/Time Collected: _____

Outfall Location(s) (lat/lon or map link): _____

Person Collecting Sample: _____

Storm Magnitude (inches): _____ Storm Duration (hours): _____

Size of Disturbed Area at any time: _____

MONITORING RESULTS

Sample #	Parameter	Method	Results (units)	Laboratory (if applicable)
1	Turbidity			
2	Turbidity			
3	Turbidity			
4	Turbidity			

(provide an attachment if more than 4 samples were taken for this outfall) Avg =

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: _____

Signature: _____ Date: _____

Please send completed form to:

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE
79 ELM STREET
HARTFORD, CT 06106-5127
ATTN: NEAL WILLIAMS

Appendix E – Notice of Termination Form

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Notice of Termination Form

Please complete and submit this form in accordance with the general permit (DEP-PED-GP-015) in order to ensure the proper handling of your termination. Print or type unless otherwise noted.

Note: Ensure that for commercial and industrial facilities, registrations under the *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (DEP-PED-GP-014) or the *General Permit for the Discharge of Stormwater from Commercial Activities* (DEP-PED-GP-004) have been filed where applicable. For questions about the applicability of these general permits, please call the Department at 860-424-3018.

Part I: Registrant Information

1. Permit number: ***GSN***
2. Fill in the name of the registrant(s) as indicated on the registration certificate:

   Registrant:
3. Site Address:

   City/Town: State: Zip Code:
4. Date all storm drainage structures were cleaned of construction sediment:

   Date of Completion of Construction:

   Date of Last Inspection (must be at least three months after final stabilization pursuant to Section 6(b)(6)(D) of the general permit):
5. Check the post-construction activities at the site (check all that apply):

   ☐ Industrial ☐ Residential ☐ Commercial ☐ Capped Landfill

   ☐ Other (describe):

Part II: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Signature of Permittee	Date
Name of Permittee (print or type)	Title (if applicable)

Note: Please submit this Notice of Termination Form to:

STORMWATER PERMIT COORDINATOR
BUREAU OF WATER MANAGEMENT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127