



LOCATION MAP

1" = 100'

ASSESSORS MAP 46, PARCEL 028

ZONING DISTRICT AR-2

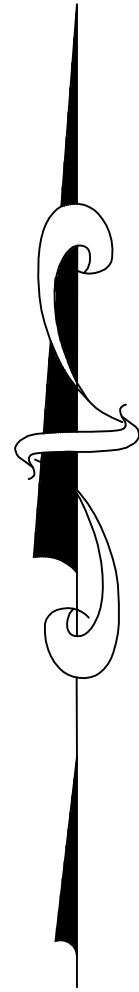
	REQUIRED	PROPOSED
AREA	30,000	241,175
FRONTAGE	150.00'	302.07'
FRONT YARD	35'	36'
SIDE YARD	15'	24'
REAR YARD	15'	18'
COVERAGE	30%	9%
BLDG HGT	35'	35'

MULTI FAMILY HOUSING OVERLAY

	REQUIRED	PROPOSED
AREA	30,000	241,175
FRONTAGE	150.00'	302.07'
FRONT YARD	35'	36'
SIDE YARD	15'	24'
REAR YARD	15'	18'
COVERAGE	30%	9%
BLDG HGT	40'	35'
DWELLINGS	8 PER ACRE*	6 PER ACRE
MAXIMUM #	24	18

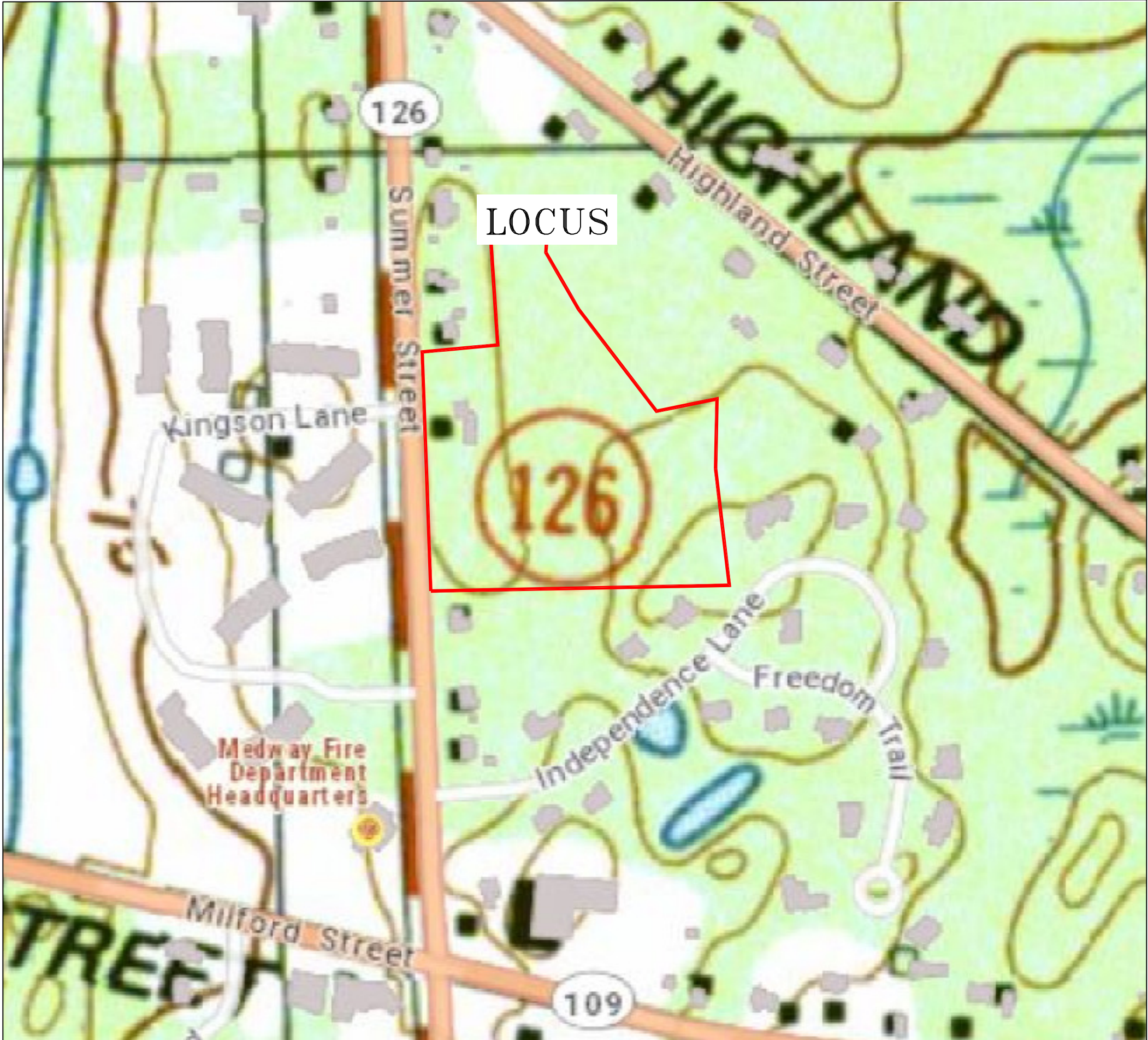
8 UNITS PER WHOLE AVAILABLE ACRES

REQUESTED WAIVER: LOCUS PLAN TO SHOW ROADS WITHIN 1,000' OF PROPERTY FOR THE SAKE OF CLARITY.



<div></div>	PRELIMINARY PLAN APPROVED MEDWAY PLANNING BOARD
DATE	

FOR REGISTRY OF DEEDS USE ONLY



USGS TOPOGRAPHIC MAP

SCALE: 1" = 200'

MOCKINGBIRD LANE


INDEX OF SHEETS

NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS
3	SITE PLAN
4	ROAD PLAN & PROFILE
5	STORMWATER MANAGEMENT PLAN
6	PHASE 1 & 2 LAND DISTURBANCE
7	GRADING & DRAINAGE PLAN PLAN
8	UTILITIES & DIMENSION PLAN
9	LANDSCAPE PLAN
10	SITE DETAILS & SPECIFICATIONS
11	SITE DETAILS & SPECIFICATIONS
12	SOIL LOGS: O & M SPECIFICATIONS
13	LSI LIGHTING PLAN

CURRENT OWNER:
TORTCON BUILDERS, LLC
70 BETHANY ROAD
FRAMINGHAM, MA 01701
508-380-0068

NORMAN G. HILL, PE DATE

LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy SCALE: 1" = 40'	REVIEWED BY: N. G. Hill PLAN NO.: S-22-35	SHEET: 1 OF 13 DATE: MAY 24, 2023
<div>ROBERT G. MURPHY & ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 RGMENVIRON@VERIZON.NET</div>		
MOCKINGBIRD LANE COVER SHEET 56 SUMMER STREET, MEDWAY, MA		
REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023		CE 216-1010

THE PROPOSED STRUCTURES ARE NOT
LOCATED WITHIN A FEDERAL FLOOD ZONE
FEMA Map 25021C0139E Dated 7-17-2012

ROBERT G. MURPHY & ASSOC., INC.
ENVIRONMENTAL CONSULTANTS
214 Worcester Street
No. Grafton, Massachusetts 01536
(508) 839-0310
Fax: (508) 839-5914



ZONING DISTRICT: AR-2

AREA	REQUIRED
AREA 2 FAMILY	22,500 SF
FRONTAGE	150'
FRONT YARD	35'
SIDE YARD	15'
REAR YARD	15'
COVERAGE	30%
MAX BLDG HGT	35'

ZONING DISTRICT OVERLAY:
MULTIFAMILY HOUSING OVERLAY

AREA	REQUIRED
AREA 2 FAMILY	22,500 SF
FRONTAGE	150'
FRONT YARD	35'
SIDE YARD	15'
REAR YARD	15'
COVERAGE	30%
MAX BLDG HGT	40'

I CERTIFY THAT THIS PLAN WAS CREATED BY AN INSTRUMENT
SURVEY AND THAT ALL STRUCTURES ARE LOCATED ON THE
GROUND AS SHOWN HEREON.



CHRISTOPHER CHARLTON P.L.S. No. 48649

OWNERS:
TORTCON BUILDERS, INC.

REFERENCES:
DEED: BOOK 39243, PAGE 398
PLAN 257 OF 1946
PLAN 561 OF 1947
PLAN 36 OF 1948
PLAN 505 OF 1952
PLAN 940 OF 1981
PLAN 725 OF 1983
PLAN 7 OF 2004

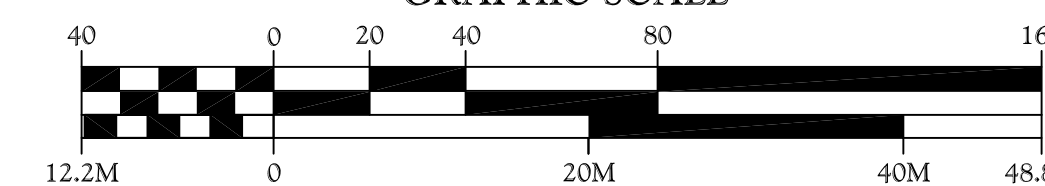
EXISTING CONDITIONS
PLAN OF LAND

LOCATED AT
56 SUMMER STREET
ASSESSORS PARCEL #46-028
MEDWAY, MA
NORFOLK COUNTY

CONTINENTAL LAND SURVEY, LLC
105 BEAVER STREET, FRANKLIN, MA
(508) 528 - 2528

SCALE: 1"=40' FEBRUARY 2, 2022
REVISED: MARCH 18, 2022
REVISED: APRIL 27, 2022
REVISED: MAY 22, 2022
REVISED: OCTOBER 2, 2023

GRAPHIC SCALE

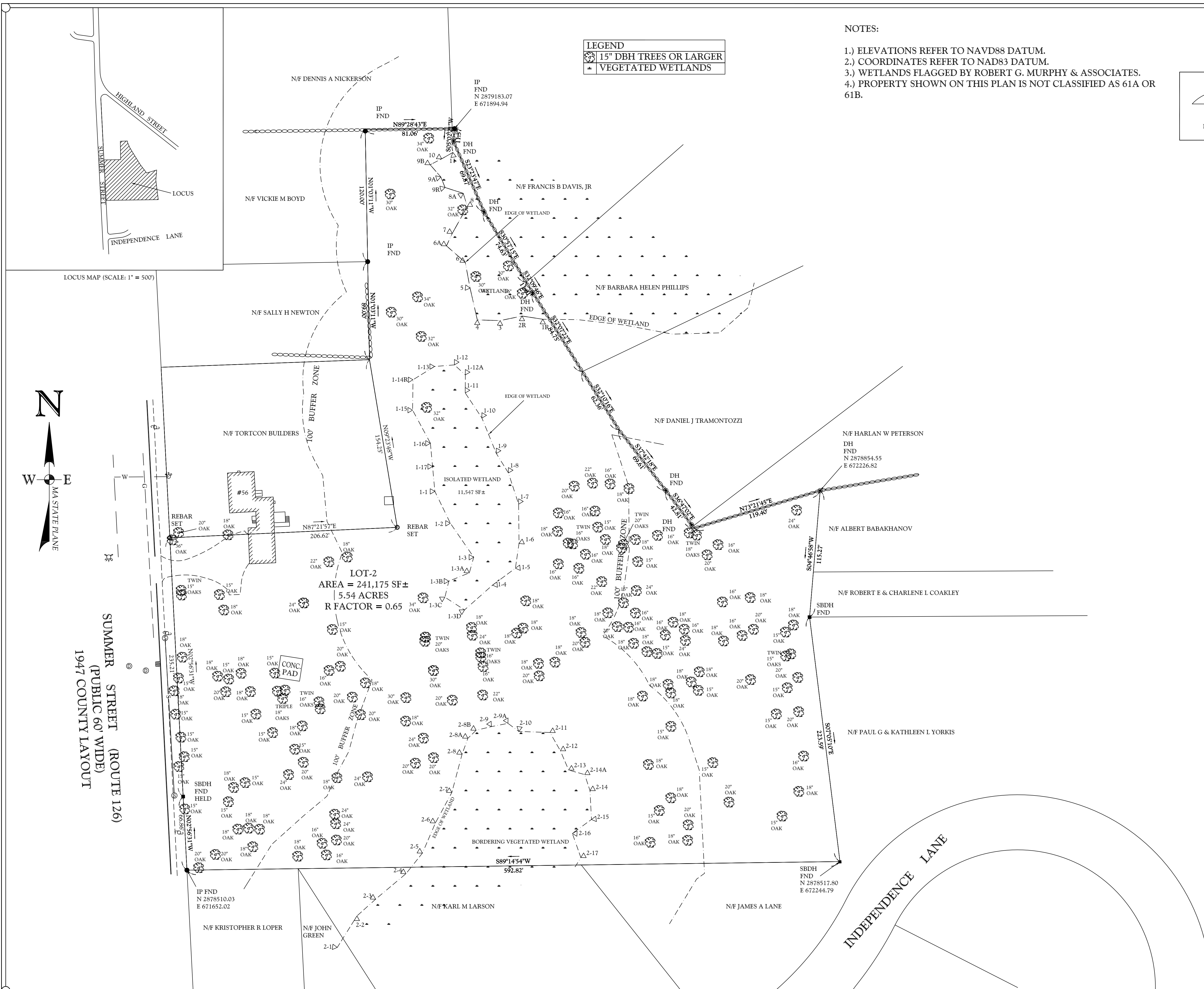


(IN FEET)
1 inch = 40 ft.

NOTES:

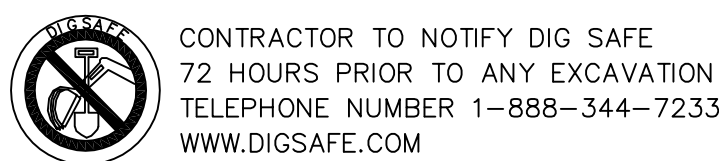
- 1.) ELEVATIONS REFER TO NAVD88 DATUM.
- 2.) COORDINATES REFER TO NAD83 DATUM.
- 3.) WETLANDS FLAGGED BY ROBERT G. MURPHY & ASSOCIATES.
- 4.) PROPERTY SHOWN ON THIS PLAN IS NOT CLASSIFIED AS 61A OR 61B.

LEGEND
15" DBH TREES OR LARGER
VEGETATED WETLANDS



EXIST SMH "A"
RIM = 266.14
8" INV = 258.65
EXIST SMH "B"
RIM = 264.55
8" INV = 256.80
SMH #1, 0+21
RIM = 265.23
INV = 258.50 in
INV = 258.25 out
SMH #2, 2+25
RIM = 268.41
INV = 260.55 8" in
INV = 260.30 8" out
SMH #3, 4+50
RIM = 268.83
INV 8" = 262.80
CB #1
STA 0+51, 12' R
RIM = 264.84
10" INV = 263.20
SUMP = 259.20
CB #2
STA 1+27, 9' L
RIM = 266.30
8" INV = 263.80
SUMP = 259.80
CB #3
STA 3+50, 9' R
RIM = 267.64
8" INV = 265.25
SUMP = 261.25
STC #1
RIM = 266.70
8" OUT = 264.25
SUMP = 260.25
STC #2
RIM = 266.60
8" OUT = 264.10
SUMP = 260.40
STC #3
RIM = 268.60
8" OUT = 265.80
SUMP = 261.80
STC #4
RIM = 268.60
8" OUT = 265.80
SUMP = 261.80
STC #5, CB #5
STA 3+50, 9' L
RIM = 267.64
8" IN = 265.00
8" OUT = 264.75
SUMP = 260.75
STC #6, CB #3
STA 1+27, 9' R
RIM = 266.30
8" IN = 263.60
8" OUT = 263.50
SUMP = 259.50

SCHEDULE OF ELEVATIONS

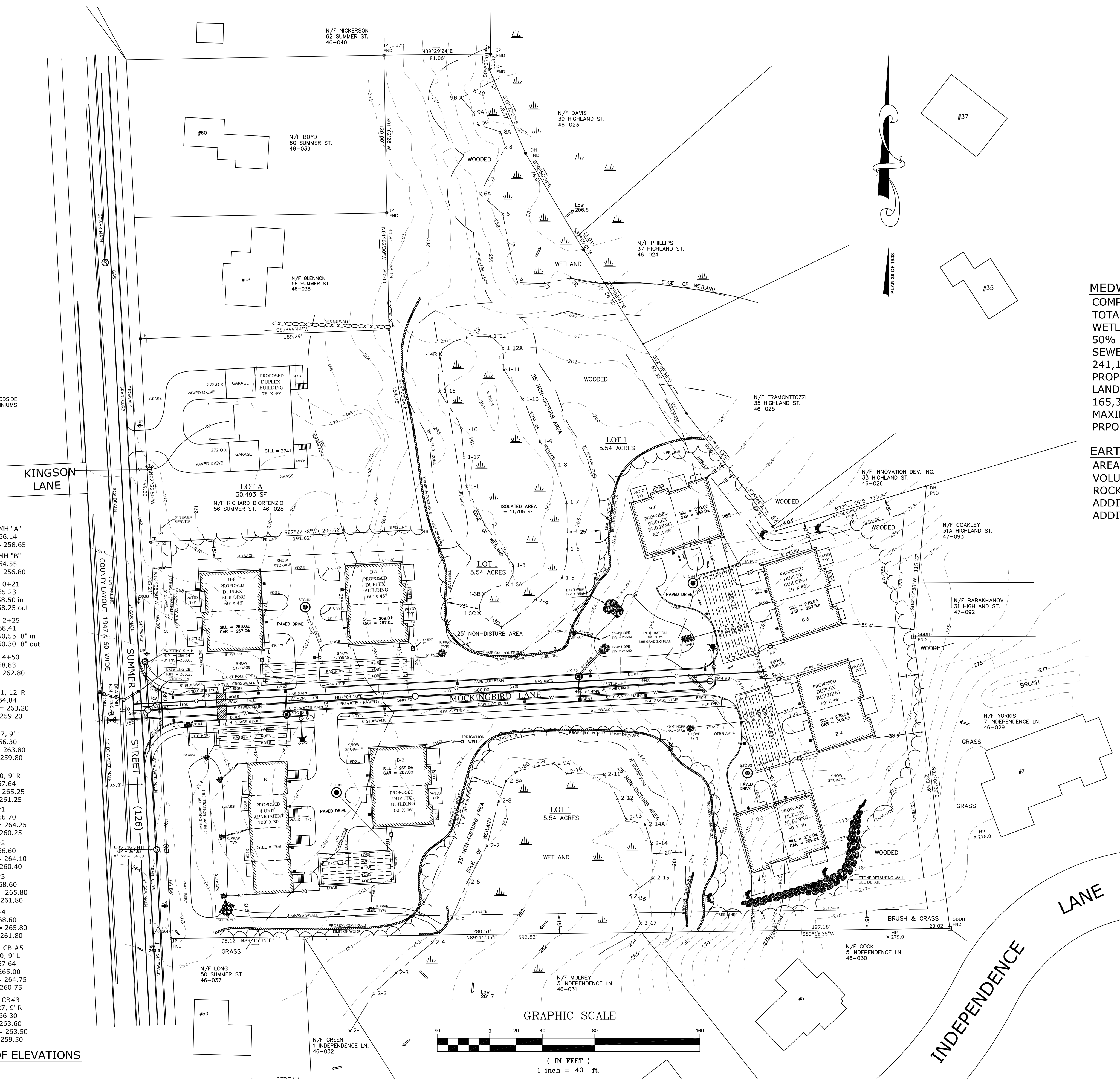
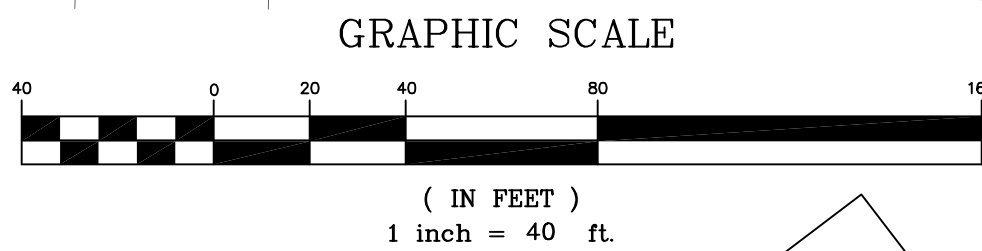


CONTRACTOR TO NOTIFY DIG SAFE
72 HOURS PRIOR TO ANY EXCAVATION
TELEPHONE NUMBER 1-888-344-7233
WWW.DIGSAFE.COM

THE PROPOSED STRUCTURES ARE NOT
LOCATED WITHIN A FEDERAL FLOOD ZONE
FEMA Map 25021C0139E Dated 7-17-2012

SITE PLAN

1" = 40'



ZONING DISTRICT AR-2		
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MAXIMUM #	24	18

8 UNITS PER WHOLE AVAILABLE ACRES

MEDWAY ZONING BYLAW, SECTION 5.6.4.D
COMPUTATION OF BUILDABLE AREA
TOTAL AREA = 241,175 S.F.
WETLAND JURISDICTION = 148,750 S.F.
50% OF WETLAND JURISDICTION = 74,375 S.F.
SEWER EASEMENT = 1,440 S.F.
241,175 - 74,375 - 1,440 = 165,360 S.F.
PROPOSED DEVELOPED AREA = 130,500 S.F. = 54%
LAND AVAILABLE FOR DEVELOPMENT
165,360 S.F. / 43,560 S.F. = 3.8 ACRES
MAXIMUM NUMBER OF DWELLINGS = 8 X 3 = 24
PRPOSED NUMBER OF DWELLINGS = 18

EARTHWORK CALCULATIONS, SECTION 204-3.H & 3.I
AREA TO BE STRIPPED OF TREES, ROCKS AND SOIL = 115,000 SF
VOLUME OF EXCAVATED ROCKS AND SOIL = 5,500 YDS
ROCKS AND SOIL ARE TO BE PROCESSED ON SITE
ADDITIONAL CLEAN FILL REQUIRED = 11,500 YDS
ADDITIONAL TOPSOIL REQUIRED = 1,100 YDS

CURRENT OWNER:
TORTCON BUILDERS, LLC
70 BETHANY ROAD
FRAMINGHAM, MA 01701
508-380-0068

PRELIMINARY PLAN
APPROVED
MEDWAY
PLANNING BOARD

DATE

FOR REGISTRY OF DEEDS USE ONLY

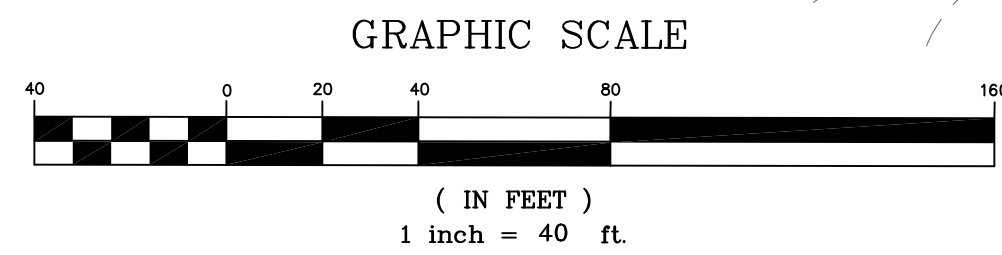
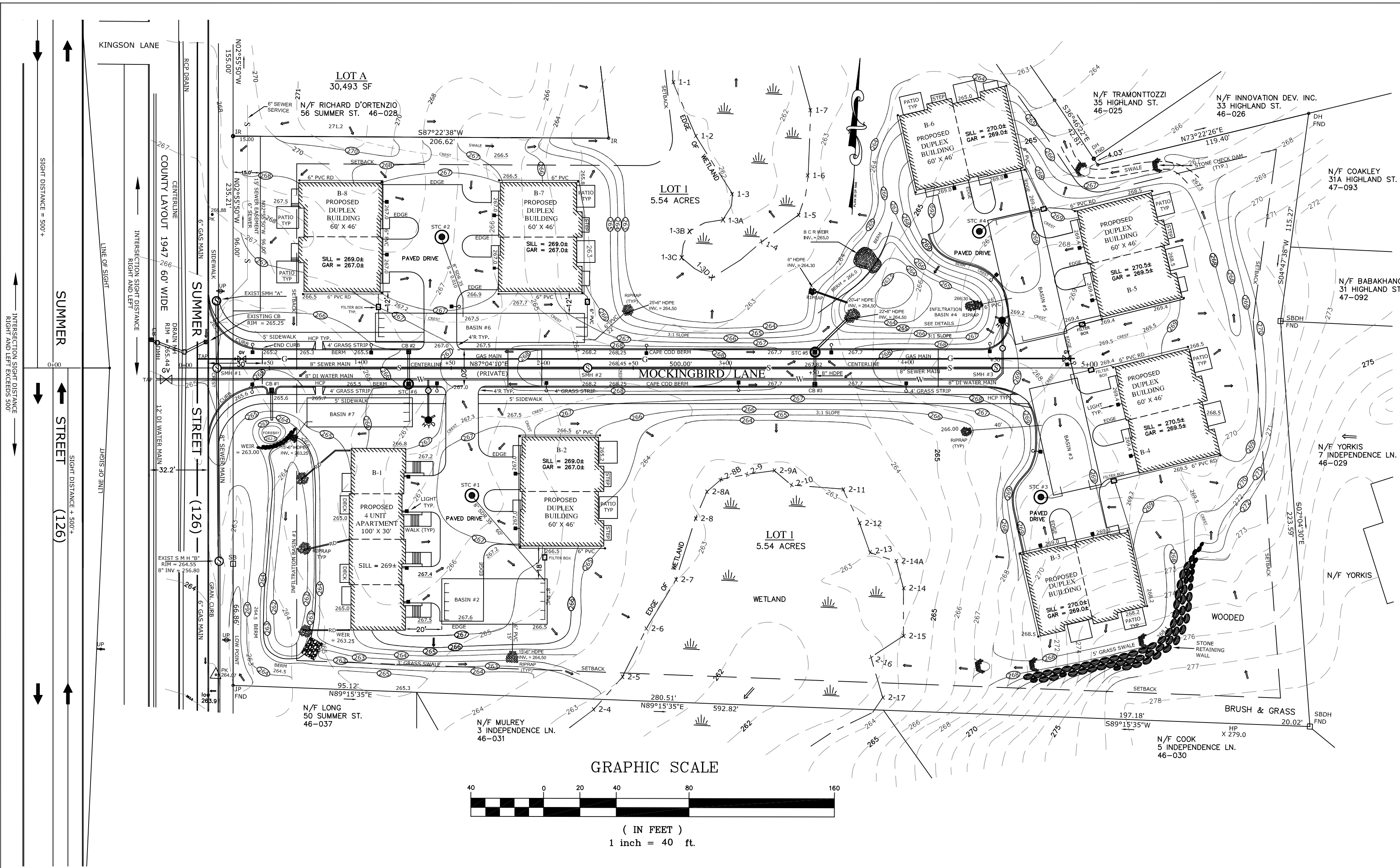
LEGEND

- SMH SEWER MANHOLE
- MH DRAIN MANHOLE
- CATCH BASIN
- EXISTING TOPO
- PROPOSED TOPO
- BUILDING SETBACK
- PROPOSED GRADE
- UTILITY POLE
- PROPOSED LIGHT
- DRAINAGE FLOW
- EROSION CONTROLS
- W WATER LINE
- S SEWER LINE
- E ELECTRIC LINE
- LANDSCAPING

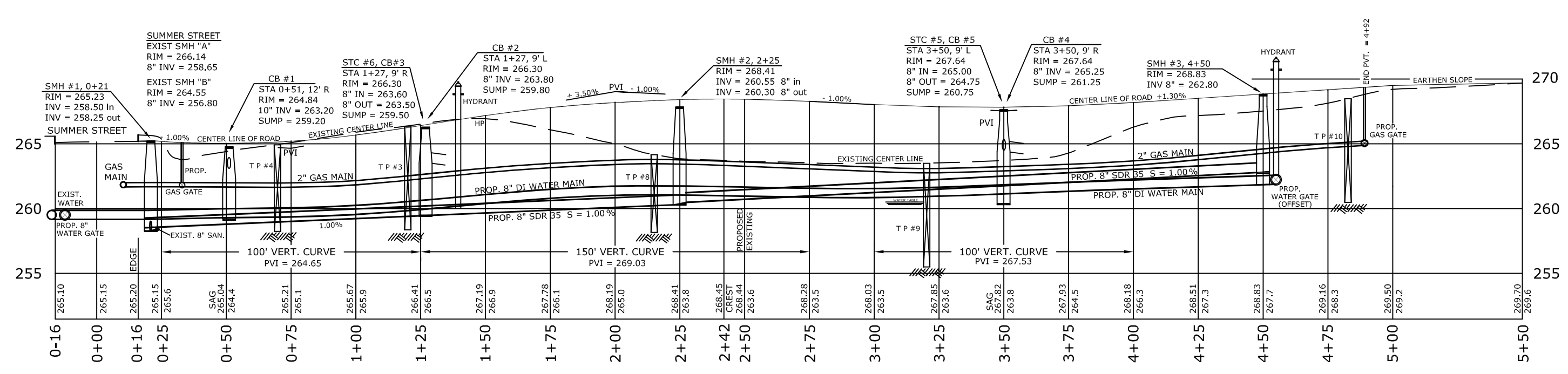
DATUM:
NAVD88

NORMAN G. HILL, PE DATE
LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536

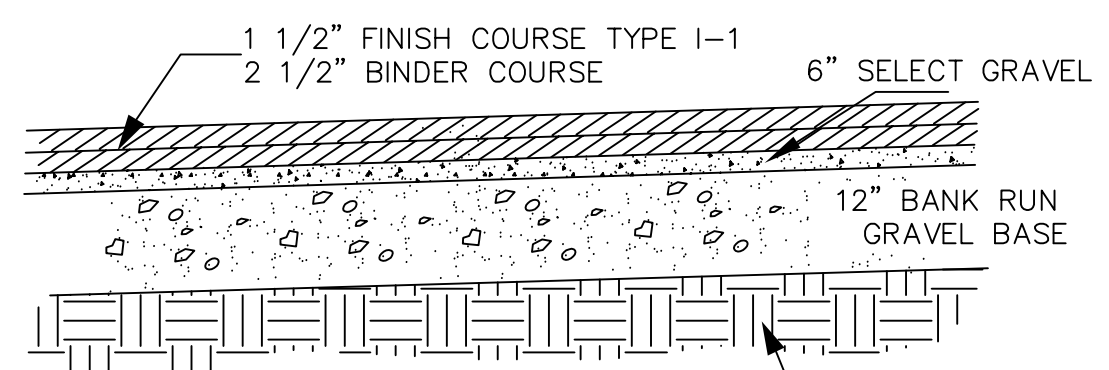
DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 3 OF 13
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023
 ROBERT G. MURPHY & ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 RGMENVIRON@VERIZON.NET		
MOCKINGBIRD LANE SITE PLAN 56 SUMMER STREET, MEDWAY, MA		
REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023		CE 216-1010



PLAN
1" = 40'



PROFILE
HOR. 1" = 40'
VERT. 1" = 8'



PAVEMENT DETAIL

CURRENT OWNER:
TORTCON BUILDERS, LLC
70 BETHANY ROAD
FRAMINGHAM, MA 01701
508-380-0068

FIRM COMMUNITY PANEL
NO. 25021C0139E
DATE: 07-17-2012

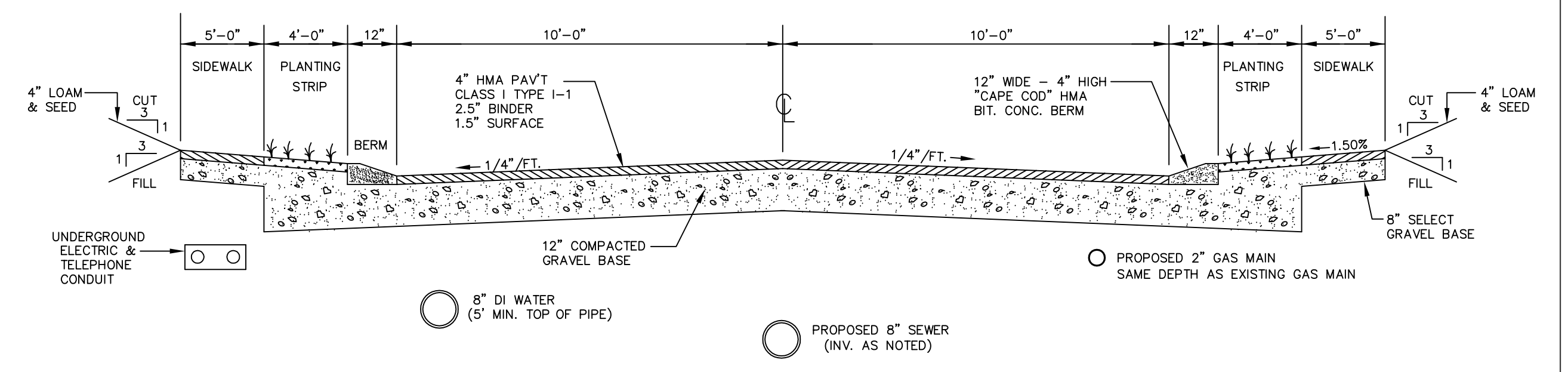
- LEGEND**
- SMH SEWER MANHOLE
 - MH DRAIN MANHOLE
 - CATCH BASIN
 - EXISTING TOPO
 - PROPOSED TOPO
 - BUILDING SETBACK
 - PROPOSED GRADE
 - UTILITY POLE
 - PROPOSED LIGHT
 - DRAINAGE FLOW
 - EROSION CONTROLS
 - W WATER LINE
 - S SEWER LINE
 - E ELECTRIC LINE
 - LANDSCAPING

DATUM:
NAVD88

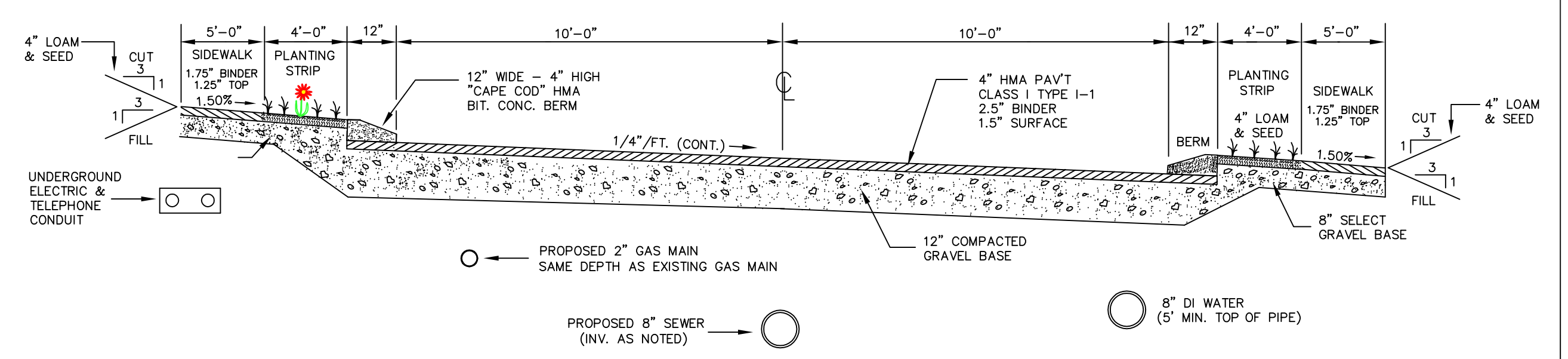
SITE PLAN
APPROVED
MEDWAY
PLANNING BOARD

DATE

FOR REGISTRY OF DEEDS USE ONLY



ROADWAY CROSS SECTION N.T.S.
STA. 1+00 TO STA. 4+50



SUPERELEVATION SECTION N.T.S.
STA. 0+16 TO STA. 1+00

NOTES:
LOCATION OF GAS AND ELECTRIC SERVICES
IS TO BE DETERMINED BY EVERSOURCE ENERGY.
ALL EXISTING UTILITIES ARE TO BE CONSIDERED
AS APPROXIMATE ONLY. THE PROPOSED SITE IS
TO BE SERVICED WITH MUNICIPAL WATER, SEWER,
GAS, TEL. & ELECTRIC AS REQUIRED.

NORMAN G. HILL, PE DATE
LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 4 OF 13
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023

ROBERT G. MURPHY & ASSOC., INC.
ENVIRONMENTAL CONSULTANTS
214 Worcester Street
No. Grafton, Massachusetts 01536
(508) 839-0310
RGMENVIRON@VERIZON.NET

MOCKINGBIRD LANE
ROAD PLAN & PROFILE
56 SUMMER STREET, MEDWAY, MA

REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023

PLAN & PROFILE

MOCKINGBIRD LANE, MEDWAY, MA
STORMWATER MANAGEMENT & SEQUENCE OF CONSTRUCTION

The following is a list of the proposed construction sequence and erosion controls for the development of the proposed Stormwater Management System to be located at Mockingbird Lane, Medway, Massachusetts. Due to the shallow topography within the site, the loamy soil and the close proximity to the Bordering Vegetated Wetlands, there are to be no land clearing activities performed within this site during frozen ground conditions, high groundwater conditions or periods of heavy rainfall. Strict compliance with the following specifications is required during the entire project.

- The contractor and all sub-contractors are to be made aware of the Stormwater Management Plan and the recorded Order of Conditions as issued by the Medway Conservation Commission. All construction personnel are required to be familiar with the plans and specifications applicable to this project. A copy of these documents are to be readily available on site at all times. The Massachusetts Department of Environmental Protection (DEP) file number is to be posted at the entrance to the site prior to commencement of construction. DEP File Number 216-1010.
- Prior to the commencement of construction, the owner of the project is to conduct an onsite predevelopment meeting with all concerned parties. Present at this meeting shall be an agent of the Medway Conservation Commission, the owner and or their legal representatives, the project superintendent for the general contractor, the environmental consultant and sub contractors responsible for the installation of the erosion and sedimentation controls. During this meeting, the limits of land clearing and perimeter of construction shall be clearly identified and agreed upon by all parties. The names and telephone numbers of these parties are to be supplied to the Medway Conservation Commission and Department of Public Works (DPW) in order to avoid time delays during emergency situations.
- The rough grading and crushed stone base for the entire central driveway is to be constructed as a single phased project. For this reason, all of the erosion controls are to be in place and inspected prior to the commencement of construction. The approved erosion controls and temporary construction entrance are to be installed where shown on the site plans. The erosion controls are to act as a limit of work and are to be maintained as such. The contractor is responsible for the daily maintenance of the erosion controls and to identify and correct all sources of erosion. Due to the possibility of high intensity rainfall during thunderstorms and hurricanes; a "proactive" approach to controlling erosion will be required. Attention to the weather forecasts is recommended during the period of land clearing and landscaping. Refer to the recorded Order of Conditions as issued by the Medway Conservation Commission.

- All tree removal and logging activities within the entire site are to be done with minimal amounts of scouring and removal of the existing topsoil to limit the potential for erosion. The staging areas for logging activities are to be located away from all wetland resource areas where possible. Additional erosion controls may be required along the perimeter of the temporary staging areas. Grinding of stumps is recommended along with the chipping of tree limbs to provide greater erosion control along exposed slopes. At no time are the chips to be directed into the adjacent wetlands. Construction materials are to be stockpiled away from the wetland buffer zone as shown on the Stormwater Pollution Prevention Plan and associated specifications (SWPPP).

- In places where the water table is encountered, special care is to be taken to avoid routing water through gullies toward the lower wetland resource areas. All utility trenches are to be filled on a daily basis. Under no circumstances are utility trenches to be left open for a period exceeding twenty-four hours. The contractor is to use proper judgment relative to construction practices during adverse weather conditions. No work is to be performed within 50 feet of the wetlands during periods of heavy rainfall. Staging areas for the fueling, maintenance and storage of construction equipment are to be located where they will not impact the wetland resource areas and all adjacent properties.

- Earth removal and rough grading for the cleared areas should commence in the upper eastern area away from the wetland resources where possible. Progressing in a westerly direction in a stepped manner will allow the contractor to identify the potential runoff drainage routes before they become a problem. Stabilization of disturbed slopes with wood chips and stump grindings will provide protection at this stage of construction. Temporary sedimentation basins are to be developed at this time. It should be noted that the contractor will be responsible for the "common sense" approach of maintaining a series of temporary detention basins during all phases of this project. Low spots with evidence of concentrated drainage flow are good indicators of where temporary basins should be located.

- All work within the Summer Street Right of Way (ROW) shall be performed in accordance with the 1988 edition of the Commonwealth of Massachusetts Highway Department Standards and Specifications for Highways and Bridges and the Supplemental Specifications dated December 11, 2002. The Medway Department of Public Works (DPW) is to be contacted prior to the installation of utilities within and adjacent to Summer Street.

- No construction equipment is allowed to operate adjacent to the bordering vegetated wetlands without written authorization from the Medway Conservation Commission. Staging areas for the fueling, maintenance and storage of construction equipment are to be located outside of the buffer zones where possible. All spillage of petroleum products is to be cleaned immediately and disposed of following DEP guidelines. All construction debris is to be stored in dumpster trailers and removed in a timely fashion. In areas where the erosion control barriers have been damaged, they are to be repaired immediately. Extra straw wattles are to be stored on site for this purpose. All erosion control barriers shall be maintained at a minimum of five feet away from the proposed base of stone retaining walls and filled slopes. At no time are the erosion control barriers to be used as retaining walls along the base of filled slopes. Staked straw wattles and silt fences are to be installed as shown on the Site Plans.

- The permanent roof drainage infiltration basins and detention basins are to be developed once the upland slopes have been stabilized. While these infiltration structures are under construction, they shall be completed expeditiously in a manner that will assure the earliest stabilization of the exposed ground. A heavy fiber "Hydrosseed" mixture of 50 % Annual Ryegrass and 50% Chewing's Fescue is recommended once the loamed areas have been raked to meet the final grades. It may be necessary to water the seeded areas during dry periods to prevent excessive seed mortality.

- All exposed slopes are to be stabilized as soon as possible. No slopes are to be left untreated for a period exceeding fifteen days. A heavy fiber "Hydrosseed" mixture with a tackifier will limit the potential for erosion of fine sediments along graded slopes that are not yet completed. Special care is to be taken to limit drainage runoff from concentrating within the recently graded areas and channeling toward the lower wetland resource areas. Additional straw wattles are to be installed along the lower slopes and in areas subject to erosion once the earthen slopes have been seeded.

- Once the grading of the driveway and crushed stone base has been completed, the mobilization of various construction vehicles throughout the site will be possible. For this reason, the daily stabilization of the exposed cut and fill slopes should be a priority over all the other construction activities from this point on. Vegetated areas should be planted and stabilized in an immediate succession to the completion of underground utilities. Vegetated slopes greater than 3 to 1 are to be stabilized with a layer of organic matting to limit fine soil particles from eroding along the earthen slopes. The installation of all underground utilities within the site will require a coordinated effort by the various subcontractors to assure the least amount of time that open trenches are exposed within the buffer zones. In areas where exposed trenches may project through the stabilized slopes, it may be necessary to install temporary erosion control barriers to limit routing drainage through the unstabilized soils. This applies to rip rap swales as well.

- During construction of the paved areas, the installation of the subsurface infiltration basins should commence furthest away from the lower slopes where possible. This action will keep the infiltration system clear of sediments while limiting flows in the direction of the wetlands. Temporary sediment basins will be helpful once the trench work enters the areas adjacent to the infiltration basins. It is imperative that all infiltration structures be protected from sedimentation during periods of exposure to assure compliance with the individual permits.

- Once the subsurface utilities have been completed and inspected, the binder course of pavement is to be installed. The paving shall be completed in two phases in order to allow the rear property to be used as a staging area and to protect the compacted sub-base within the driveway from sedimentation due to erosion. As a result of the introduction of the increased impervious area as well as the redirection of drainage flows within the immediate site, there will be an increase in short term flows to the downslope areas. Prevention of concentrated discharges from bypassing the stormwater detention controls will be necessary at this time. All of the erosion control barriers will need to be inspected and maintained on a daily basis during this period.

- During periods of heavy rainfall, there may be occurrences of erosion of the unstabilized slopes once the graded slopes have been loamed and seeded. Immediate attention to the maintenance of these eroded areas will further insure the successful stabilization of the down gradient slopes while limiting the impacts to the specific areas. Additional erosion controls should be readily available and immediately installed in these problem areas. Wood chips and stump grindings provide an excellent source for creating temporary check dams to control drainage runoff during high intensity storms. During the summer months, it is crucial for the protection of all vegetated slopes that concentrated flows of runoff be directed away from recently stabilized areas. For this reason, the general contractor will be responsible to delegate authority to at least one individual who will be available at a moment's notice (7 days a week) to initiate emergency erosion control procedures. The telephone number of this individual shall be forwarded to the Medway Conservation Commission and the Medway DPW prior to the commencement of construction.

- Periodic inspections of the entire construction site are to be performed by a competent representative who will insure the adherence to the regulations as set forth in the Clean Water Act, as amended (33 USC 1251). An authorized agent of the Medway Conservation Commission shall be allowed to conduct inspections of the jurisdictional areas and consult with the project engineer as necessary before, during and after the commencement of construction.

- Robert G. Murphy is to be granted authority by the owner of the project to monitor the erosion and sedimentation controls and to cease and desist all construction activities if, in his discretion, said activities are in violation of the recorded Order of Conditions and supporting documents. The contractor is to allow unimpeded access to the site by all members of the Medway Conservation Commission in order that they may view the construction procedures. Members of the Conservation Commission and or their Agents shall not engage in the direction of construction procedures or enter into areas of present construction activity without first notifying the General Contractor and or their representatives. All complaints and or concerns are to be done through the proper "chain of command". No unauthorized individuals are to enter the construction area without the expressed consent of the owner and or their representatives. All parties are to be properly insured (with adequate proof) before entering the construction site.

- It is the responsibility of the owner and the general contractor to verify that all construction permits for this project are obtained and kept up to date. Once the project has been completed, the owner is to notify the Medway Conservation Commission in order to obtain the required Certificate of Compliance. This Certificate of Compliance is to be recorded at the Norfolk Registry of Deeds. A copy of the Stormwater Management Plan and Specifications is to be referenced in the Order of Conditions and recorded along with the Deed.

STORMWATER MANAGEMENT SYSTEM - OPERATION AND MAINTENANCE SCHEDULE

The stormwater management system shall be owned, operated and maintained by the owners of the site. Prior to the sale of the Single Family Residences, the current owner is to prepare a Homeowners Association Covenant that outlines the responsibilities of the homeowners to properly operate and maintain the approved Stormwater Management System. The drainage system is to consist of water quality swales, four subsurface infiltration basins and two open detention basins as shown on the Stormwater Management Plans. A copy of the approved plans and specifications is to be provided to the current owners along with a copy of the Homeowners Association Covenant during all transfers of the property.

Periodic inspections and maintenance of the infiltration structures and erosion controls is critical in order to guarantee optimal performance. The applicant and their contractors are responsible to maintain these structures until all vegetated slopes have been stabilized. It is especially important to use proper judgment when working within erosion prone areas with respect to periods of heavy rainfall. In the event of rainfall greater than ½ inch during a twenty four hour period, there is to be an inspection of the entire site to identify problems. All areas subject to erosion are to be repaired immediately.

MAINTENANCE SCHEDULE

- All erosion and sediment controls are to remain in place for one complete growing season. Silt fences and inorganic fabrics are to be removed once the site has been properly stabilized. Accumulated sediments are to be removed from all erosion control devices as required. Problem areas identified during the construction phases are to be reviewed and corrected by the job supervisor. Ideally, all erosion and sediment controls should be checked for sedimentation and damage after major storms for the first few months after construction. Exposed slopes are to be stabilized as soon as possible and are to be repaired as required. All exposed slopes and erosion controls are to be inspected after each ½" rainfall and on a weekly basis. Problem areas subject to scouring may be repaired with organic turf mats.

- All contractors working within areas subject to regulation by the recorded Order of Conditions are to be made aware of the permits for this project as issued by the Medway Planning Board and Conservation Commission. A copy of these approved plans and specifications are to be readily available on site at all times. It is the responsibility of the owner and their contractors to assure that all work complies with the current permits and to coordinate the required inspections with the design engineer and town officials.

MAINTENANCE OF THE WATER QUALITY SWALES

- The accumulation of sediments within the various infiltration structures will seriously impede the percolation of water through the underlying porous soils. In order to avoid clogging of the porous soils, it is imperative that an aggressive maintenance plan be implemented for all infiltration drainage structures within this site.

- The stone lined water quality trenches are to be inspected after every major storm for the first six months to check for proper functioning and to remove sediments as required. At this time the swales should be checked to determine if they are working as designed. If there are low wet spots for extended periods (over 72 hours) the design engineer shall be contacted to identify, review and correct the problem. Proper maintenance of all vegetated slopes above the infiltration structures will extend the life span of the structures within the immediate downstream areas.

- Once the vegetation has stabilized, the infiltration structures are to be inspected at least twice a year to check for improper settlement, erosion and sedimentation, unwanted tree and shrub growth and accumulation of debris. Grass clippings are to be removed from the swales and not allowed to accumulate and form an impervious organic mat. Avoid driving vehicles over the open trenches in order to retain the porosity of the soil and associated infiltration qualities.

MAINTENANCE OF THE SUBSURFACE INFILTRATION BASINS

- Specifications for the maintenance of all stormwater management facilities within this site are taken from the Stormwater Management Guidelines (Volume Two) as prepared by the Massachusetts Department of Environmental Protection. All parties responsible for the drainage facilities should review this document in order to more fully understand the function of the various components. Additional information may be obtained by visiting the DEP website at www.mass.gov/dep.

- The proper installation of the infiltration basins and protection from sedimentation is the best assurance that the basin will function as designed. All work on the Subsurface Infiltration Basins is to be done by an experienced installer who is familiar with the DEP Stormwater Management Guidelines. No heavy equipment is to drive over the exposed excavation of the basin during the placement of the chambers and stone aggregate. This action will prevent the compaction of the base material (resulting in the reduction of soil porosity). The constructed basin is to be inspected by the design engineer and an agent of the Medway Conservation Commission prior to covering the system with mirafi fabric. Failure to comply with the required inspections will result in the denial of the Certification. The observation ports within the Subsurface Infiltration Basin should be inspected at least once a month (for 3 consecutive months) during wet weather conditions to determine if the basin is functioning as designed. A minimum of two observation ports are required for each subsurface basin as shown on the site plans.

- Special care is to be taken during the construction of the drain inlets and landscape operations to avoid the contamination of the exposed drain inlets. A series of filter boxes has been added to the chamber system to assist in the removal of contaminants. Each of the filter boxes should be inspected during the spring and fall to remove organic matter that has fallen into the roof gutters and found its way into the chamber inlets.

MAINTENANCE OF THE DETENTION / INFILTRATION BASINS

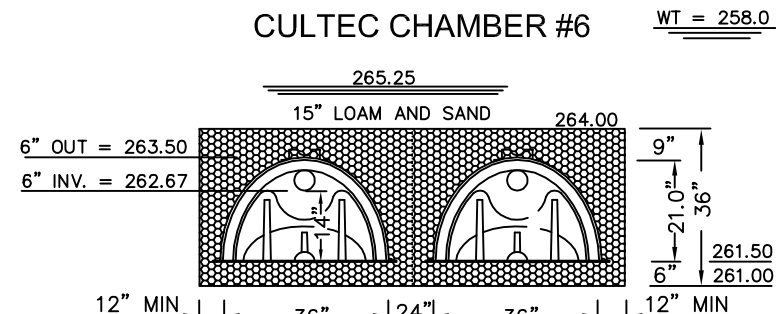
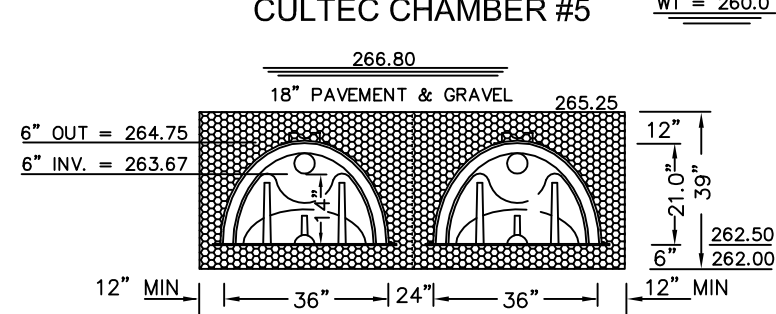
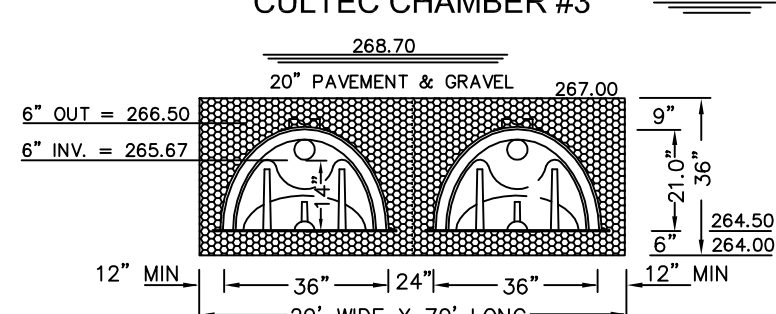
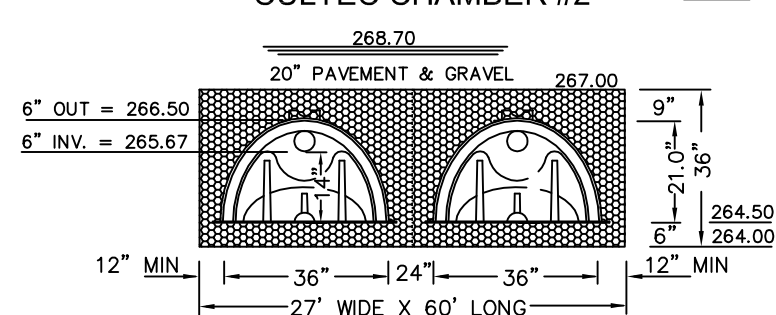
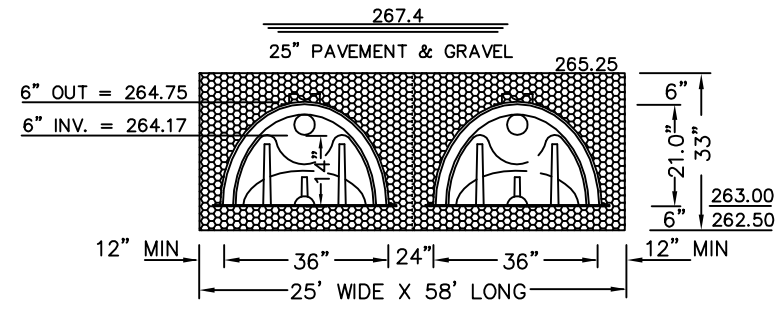
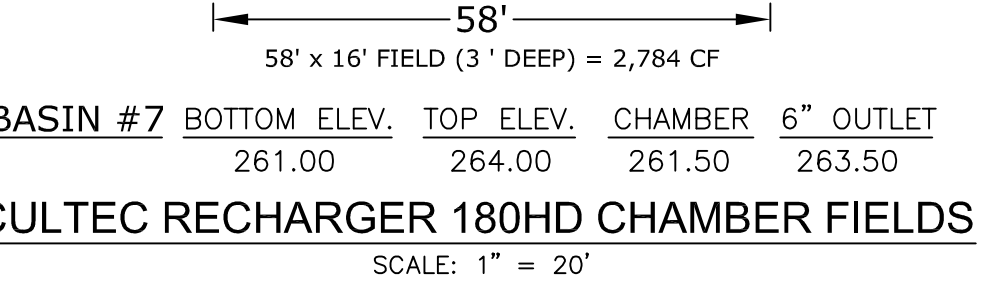
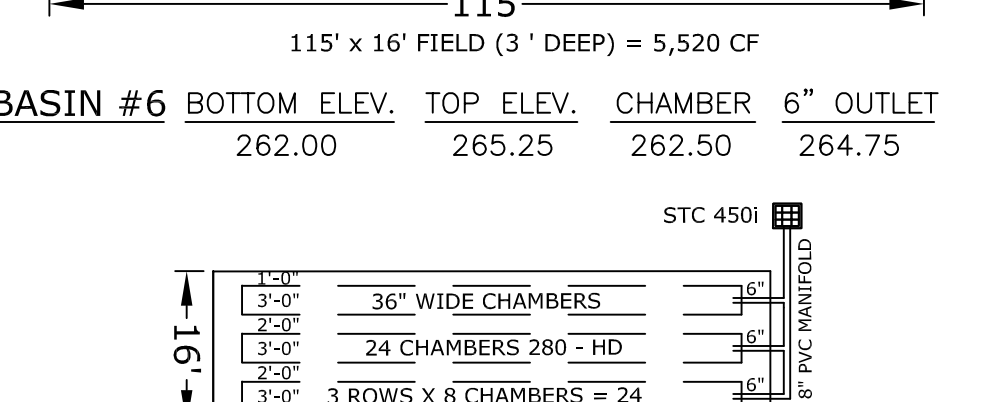
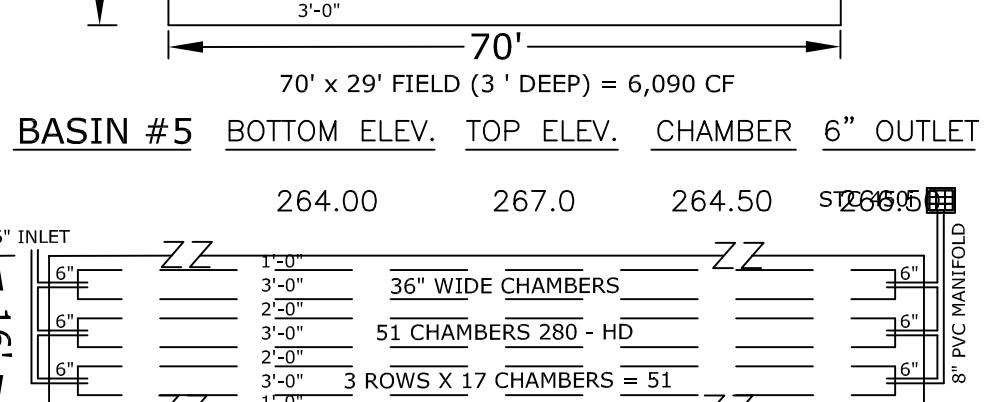
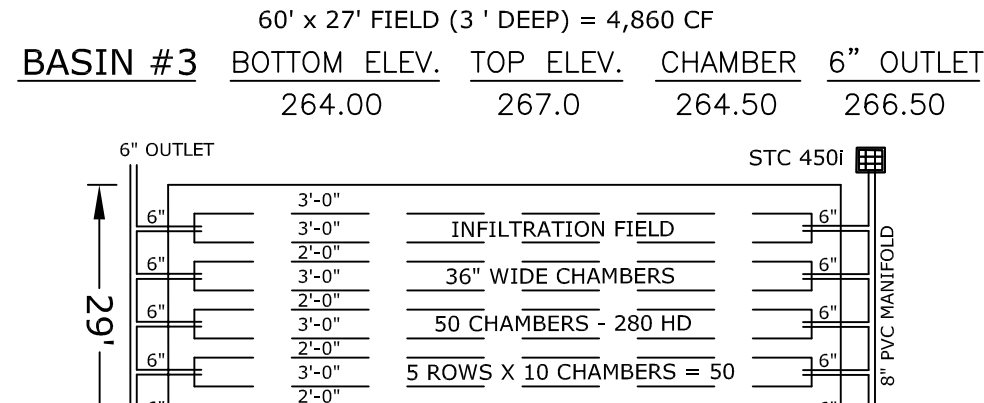
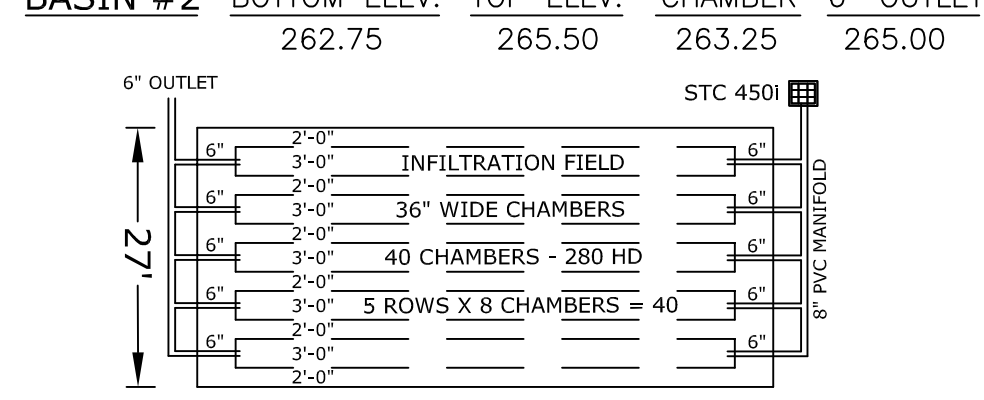
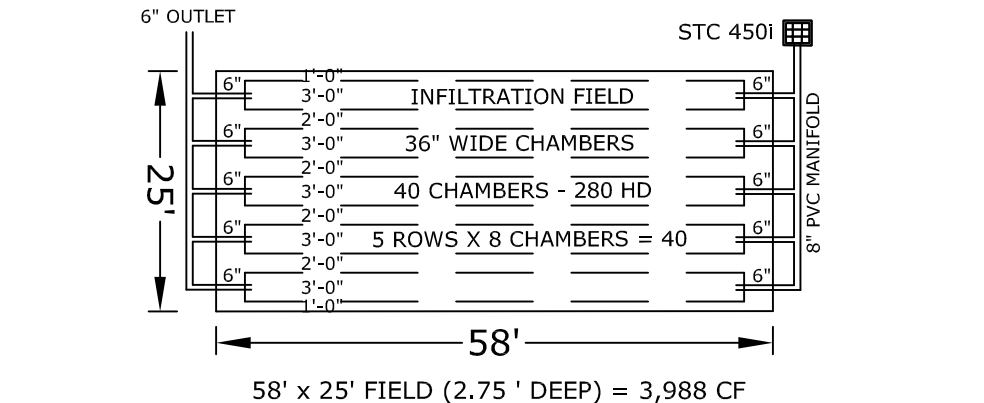
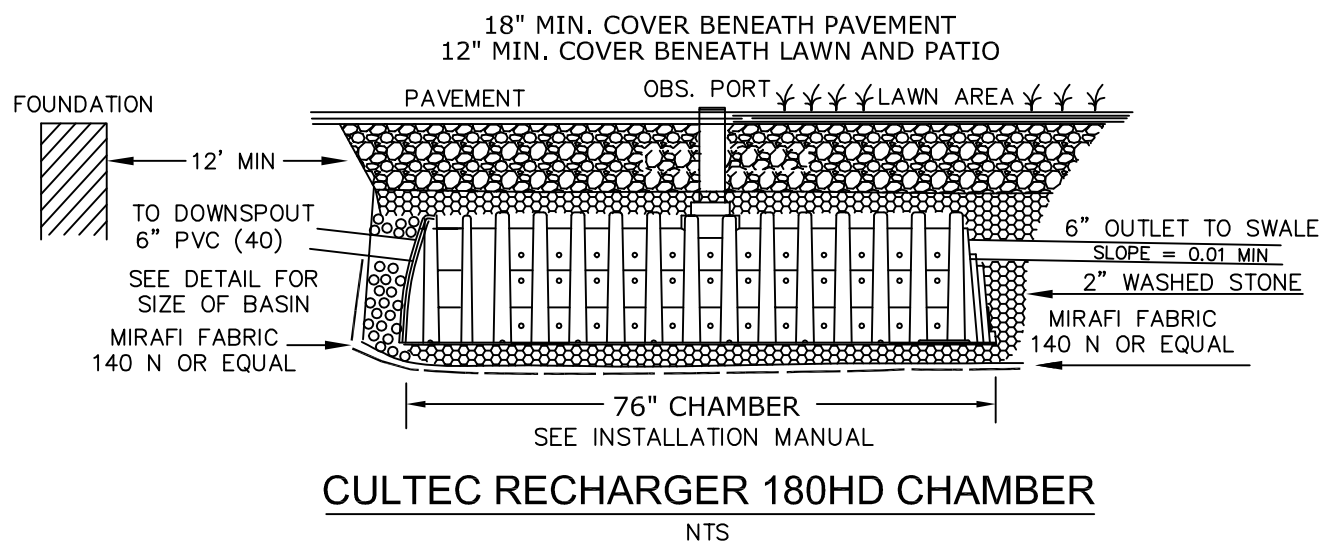
- Specifications for the maintenance of all stormwater management facilities within this site are taken from the Stormwater Management Guidelines (Volume Two) as prepared by the Massachusetts Department of Environmental Protection. All parties responsible for the drainage facilities should review this document in order to more fully understand the function of the various components. Additional information may be obtained by visiting the DEP website at www.mass.gov/dep.

- While work is being conducted on the multi-family residential development, all completed infiltration structures shall be inspected on a bi-weekly basis (preferably during wet weather conditions) to determine if the basins are functioning as designed. The consultant engineer for the Town of Medway may need to be present to review the specific detention timing and overall performance of the inflow and outflow structures. Once the two phases of the residential development have been completed, the basins should be inspected and maintained at least twice a year for a minimum of three years. At this time, all of the downspout filter boxes are to be inspected and cleaned as necessary. It will be the responsibility of the Homeowners Association to insure that the required inspections are completed in a timely fashion. Proper maintenance of the entire drainage system will insure the extended life span of the subsurface drainage structures. The SWPPP Maintenance Schedule will assist the homeowners in keeping accurate inspection records.

- Standing water at low points for extended periods may signal the need to remove an accumulation of sediments within the bottom of the infiltration basin. When the basin is thoroughly dry and the threat of heavy rainfall is minimal, the sediments are to be removed with light excavation equipment in such a manner that will not compress the porous soils. Since the fine sediments are subject to migration during periods of heavy rainfall, it is imperative that all sediments within the entire system be removed at the same time when the infiltration basin is cleaned. For smaller amounts of sedimentation, it is recommended to use flat metal shovels to avoid compressing the underlying soils.

- At least twice a year during the growing season all vegetated slopes should be mowed to remove brush and tree saplings and inspected for erosion. The intent is to promote a healthy growth of native grasses and forbs that will serve to remove excess nutrients from the stormwater runoff. All vegetation that has been cut during mowing should be removed from the basin and properly disposed of. No trees should be allowed to grow on the earthen berm. Burrowing animals should be discouraged from tunneling within the earthen berms by placing large stones in the excavated entrance.

- Four times a year, all trash and debris should be removed from the infiltration basins. At that time the drainage swales and associated culverts should be checked for the accumulation of sediments and debris. It is especially important that the 6" outlet culvert and the broad crested weirs be inspected and cleaned on a regular basis in order to assure the optimum performance of the detention structures during periods of heavy rainfall. The detention basins have been designed to drain completely in less than 24 hours. Standing water within the basins for extended periods is a warning sign that the basins are not functioning properly and maintenance is required. Refer to the Stormwater Management Plan & Report.



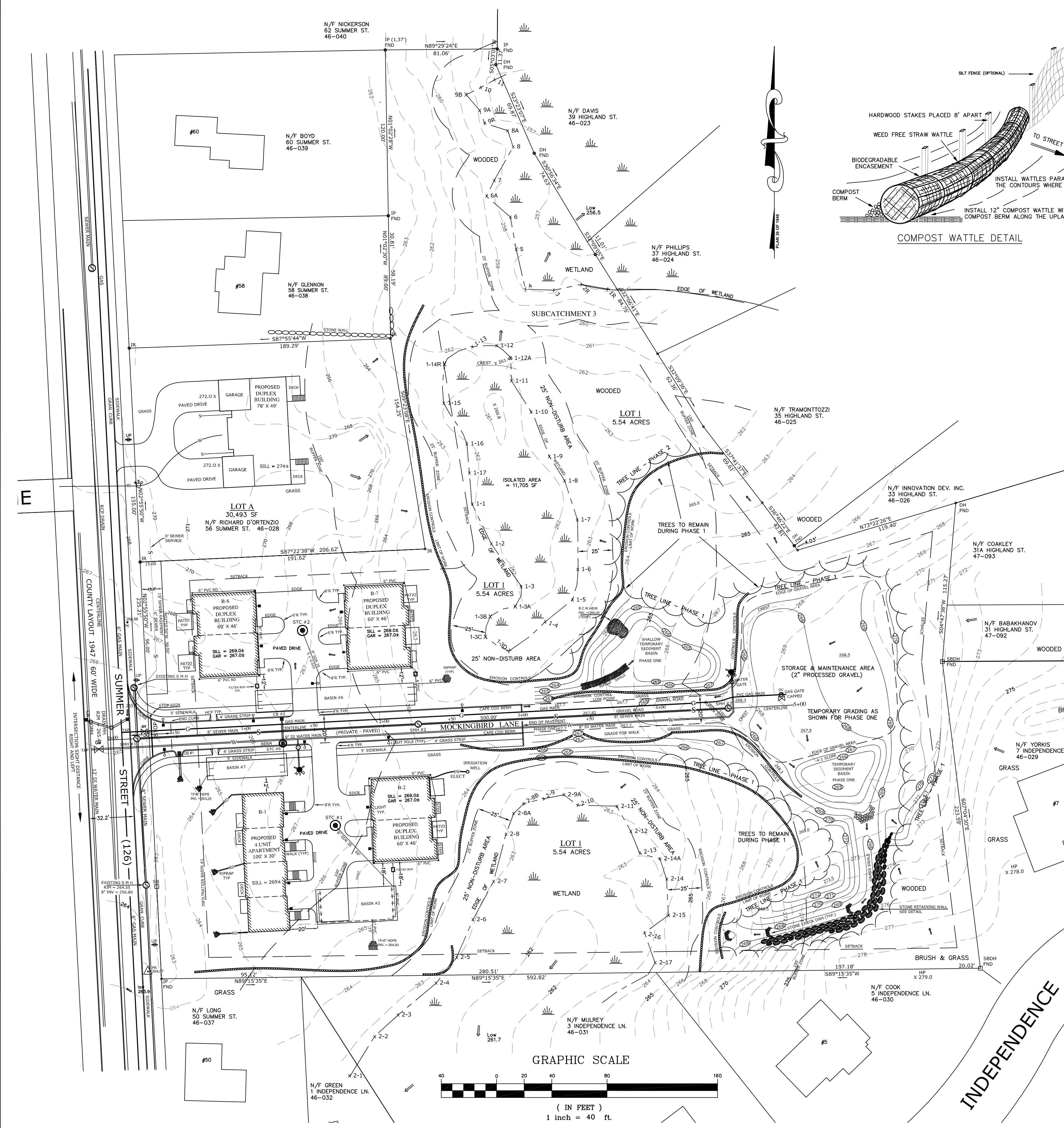
NORMAN G. HILL, PE DATE
LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 5 OF 13
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023



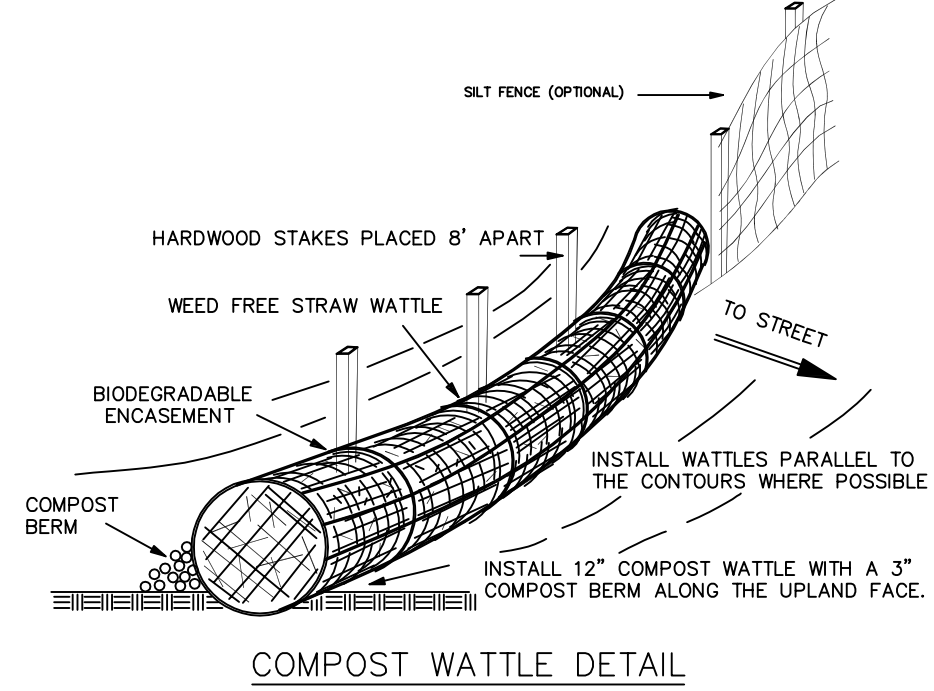
ROBERT G. MURPHY & ASSOC., INC.
ENVIRONMENTAL CONSULTANTS
214 Worcester Street
No. Grafton, Massachusetts 01536
(508) 839-0310

MOCKINGBIRD LANE STORMWATER POLLUTION PREVENTION PLAN MOCKINGBIRD LANE, MEDWAY, MA	
REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023	SWPPP



ZONING DISTRICT AR-2	
REQUIRED	
AREA	30,000
FRONTAGE	150.00'
FRONT YARD	35'
SIDE YARD	15'
REAR YARD	15'
COVERAGE	30%
BLDG HGT	35'

MULTI FAMILY HOUSING OVERLAY	
REQUIRED	
AREA	30,000
FRONTAGE	150.00'
FRONT YARD	35'
SIDE YARD	15'
REAR YARD	15'
COVERAGE	30%
BLDG HGT	40'
DWELLINGS	8 PER ACRE
MAXIMUM #	40



PHASES ONE & TWO - CONSTRUCTION SEQUENCE & EROSION CONTROL

- Introduction: In order to limit impacts to the nearby wetland resource areas and adjacent woodlands, this project is to be conducted in two phases as shown on the Construction Phase Plan. The first phase will allow for the construction of four buildings within the eastern portion of the property as well as the central driveway and underground utilities. The western half of the developed property will serve as a staging area for the storage of construction materials and maintenance of construction equipment during phase one. Phase two will be conducted in a manner that will have no impacts upon the completed phase one portion of the project while also protecting the adjacent resource areas. It should be noted that phase one is to be completed and approved for occupancy prior to the additional land clearing and commencement of phase two. The installation of underground utilities will follow the direction of the Medway Department of Public Works.
- While this narrative provides specific information relative to the development of the two phases, all construction personnel are to be aware of the Order of Conditions as issued by the Medway Conservation Commission and shall follow the additional specifications as outlined in the Stormwater Pollution Prevention Plan (SWPPP) and the associated documents. This project is also subject to the NPDES Permit as issued by the United States Department of Environmental Protection. Copies of these recorded documents and the approved site plans are to be available on-site at all times during the construction phases.
- Prior to all land clearing activities, the temporary construction entrance and erosion controls are to be installed as shown and approved by an agent of the Medway Conservation Commission. The location of erosion controls is shown in a general manner on the plans and may be moderately adjusted to preserve natural features such as large trees and rock outcrops. The specific erosion controls are to follow the topography where possible and are to be installed as shown on the details. In areas prone to erosion such as the slopes adjacent to the central driveway, the straw wattles are to be amended with straw bales and silt fence to limit the potential for erosion. Special care is to be taken during all filling activities to prevent damage to the erosion controls. The contractor is responsible for the maintenance of the straw wattles, silt fence and straw bales during the course of the entire project. Refer to the recorded Order of Conditions for additional information.
- Once the installed erosion controls have been approved by the Conservation Commission, the land clearing activities may commence. The initial roadway to the rear of the property is to be cleared to allow for the staging area to be developed as shown on the Phasing Plan. All equipment is to be stored and maintained outside of the 100' buffer zone within the staging area. The staging area is to be graded in a manner that provides for the containment of all stormwater runoff within the temporary detention basin as shown on the plan. Stockpiles of soil, boulders and logs are to be located away from the basin where possible and contained within a straw wattle perimeter. Wood chips from the cleared trees may be used to supplement the erosion controls. The contractor is responsible for adjusting the erosion controls within the staging area as necessary. This action also applies to the entire project with reference to the adjustment of erosion controls relative to specific activities.
- The installation of temporary sediment basins is to precede construction activities as they progress throughout the development of this site. The permanent infiltration basins are to be initially constructed with no outflow culverts and are to be maintained as sediment basins until the adjacent areas have been properly stabilized. Excavated building foundations and infiltration trenches may also serve as temporary sediment basins while the immediate areas are being excavated and graded. All sediments are to be removed from the sediment basins prior to their termination of use. All catch basin inlets are to be fitted with silt sacks in order to protect the subsurface infiltration systems during this phase of construction. The silt sacks are to remain in place until the landscaped areas have been completely stabilized.
- As shown on the site plans, the central portion of the roadway requires gravel fill in order to properly grade the finished driveway. This fill is to be brought in from off-site and will require specific approval from the Medway Planning Board relative to the number of vehicle trips per day and the timing of the filling activities. The Medway Police Department will need to be contacted in order to regulate the movement of vehicles within the public right of way during peak traffic periods.
- Once the central driveway has been graded with compacted processed gravel, the utilities are to be installed as shown on the approved plans. The pavement binder course may be installed when the Phase 1 activities are adequately stabilized. The finish coat will not be installed until the entire project is nearing completion. During this period, the development of the individual parking areas, buried utilities and building foundations is to commence. All construction materials not being immediately used for the construction of the buildings is to be stored within the staging area to the rear of the property. At this time, the stone retaining wall is to be constructed along the southern edge of the staging area. It is also recommended that the Arborvitae buffer strip be planted along the eastern boundary at this time.
- All of the buildings and parking areas are to be serviced with subsurface infiltration basins. It is extremely important that these subsurface structures be protected from sedimentation and dynamic compression prior to the final paving of the driveways. No heavy equipment is to drive over the basins until the final grading is completed and the pavement binder coat has been installed over the entire structure. The silt socks are to be inspected and maintained as necessary to insure that suspended solids do not enter into the subsurface chambers. All of the subsurface infiltration basins are to be inspected following the stormwater management guidelines to insure that they are completely draining within 72 hours. Each basin is to be inspected following rainfall events exceeding 1/2" in 24 hours.
- Generally, the landscaping is completed as the final phase when the need for the previous construction equipment is reduced. This allows for the excavation of gravel and replacement with soils that are specific to the individual plants. The landscape contractors are to be made aware of the need to protect the infiltration chambers from sedimentation caused by soil erosion during periods of heavy rainfall. All soil is to be stockpiled well away from the catch basins and excess soil is to be swept from the pavement on a daily basis. All lawn area are to be seeded with a rapid germinating seed mix and supplemented with an organic tackifier. It is imperative that the silt socks remain installed until all landscaped areas have been stabilized to a minimum of 90 %.
- Phase 1 is to be completed and approved for occupancy prior to the commencement of Phase 2. All construction vehicles are to access the rear of the site through the central driveway. No heavy equipment is to enter into the previously completed parking areas of Phase 1 without the approval of the Medway Planning Board. Phase 2 is to involve the completion of the entire project and shall commence immediately after Phase 1 has been approved as noted. All of the construction specifications as addressed in Phase 1 are to apply to Phase 2. Once the entire project has been stabilized to the satisfaction of the Medway Conservation Commission, the outlet structures for the open infiltration basins are to be installed. At this point, the owner shall be responsible to implement the Operation and Maintenance Schedule as noted in the Stormwater Pollution Prevention Plan and associated documents.

DESIGNED BY: R. G. Murphy
SCALE: 1" = 40'

REVIEWED BY: N. G. Hill
PLAN NO.: S-22-35

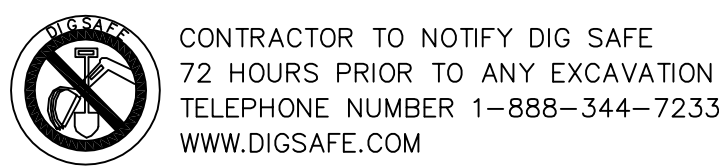
SHEET: 6 OF 13
DATE: MAY 24, 2023

ROBERT G. MURPHY & ASSOC., INC.
ENVIRONMENTAL CONSULTANTS
214 Worcester Street
No. Grafton, Massachusetts 01536
(508) 839-0310
RGMENVIRON@VERIZON.NET

MOCKINGBIRD LANE
PHASE 1 & 2 LAND DISTURBANCE
56 SUMMER STREET, MEDWAY, MA

REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023

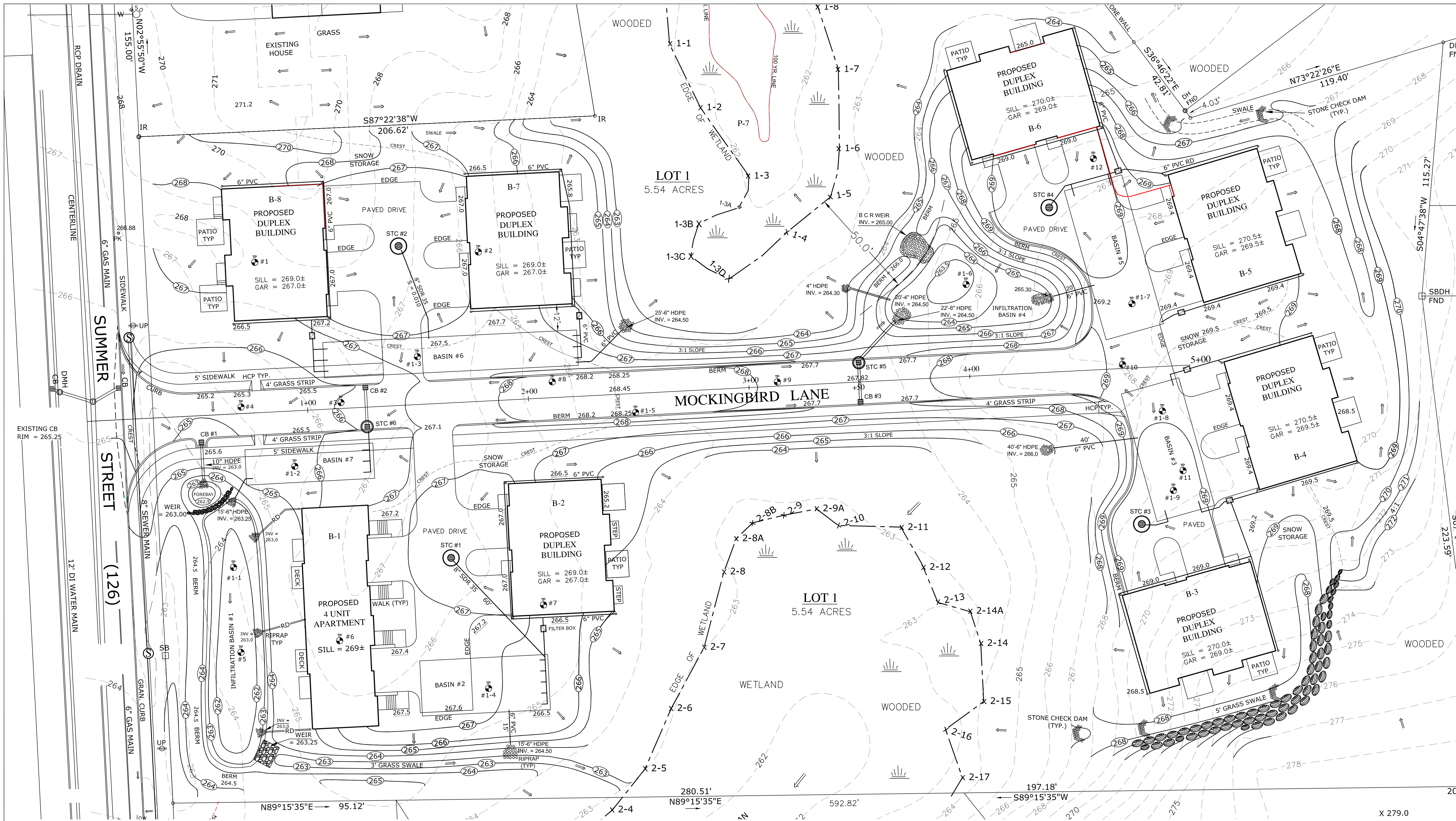
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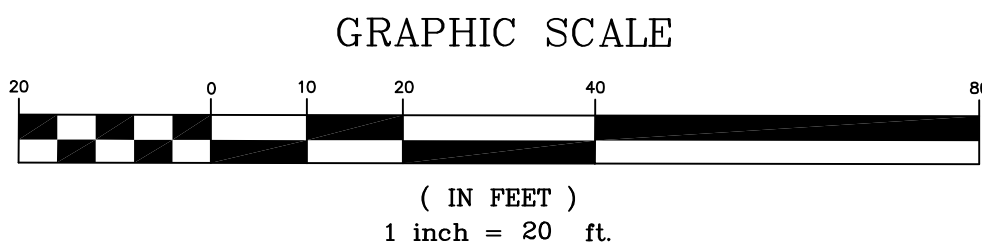
NOTE:
THE OWNER, TORTCON BUILDERS, LLC SHALL PROVIDE, AT NO COST TO THE TOWN OF MEDWAY, ALL FACILITIES SHOWN ON THE PLANS INCLUDING BUT NOT LIMITED TO ROADWAYS, CURBS, BOUNDS, DRAINAGE SYSTEMS, SANITARY SEWER SYSTEMS, UTILITIES, STREET LIGHTS AND EARTHWORKS, EXCEPT AS OTHERWISE NOTED AND LOCATED ON THE APPROVED PLANS THAT ARE TO BE RECORDED.

PHASE PLAN
1" = 40'

NORMAN G. HILL, PE DATE
LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536



GRADING & DRAINAGE PLAN



FIRM COMMUNITY PANEL
NO. 25021C0139E
DATE: 07-17-2012



DATUM:
NAVD88

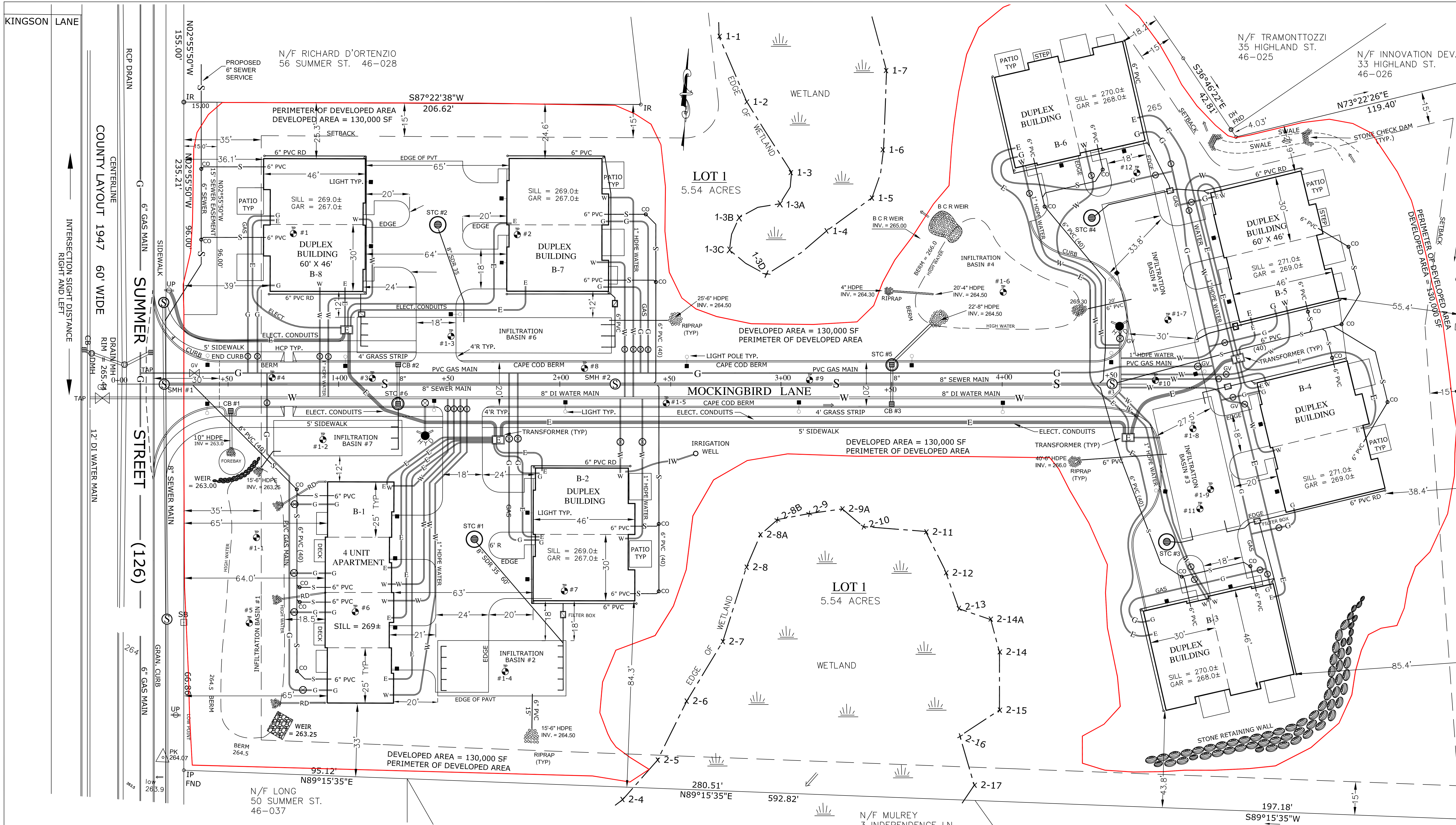
NORMAN G. HILL, PE DATE
LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536

NOTES: ALL IRRIGATION COMPONENTS ARE TO BE
INSTALLED AFTER ALL OF THE BURIED UTILITIES ARE
INSTALLED AND INSPECTED. THE DRILLED WELL IS NOT
TO BE USED AS A SOURCE OF POTABLE WATER.

ALL EXISTING UTILITIES ARE TO BE CONSIDERED
AS APPROXIMATE ONLY. THE PROPOSED SITE IS
TO BE SERVICED WITH MUNICIPAL WATER, SEWER,
GAS, TEL. & ELECTRIC AS REQUIRED.

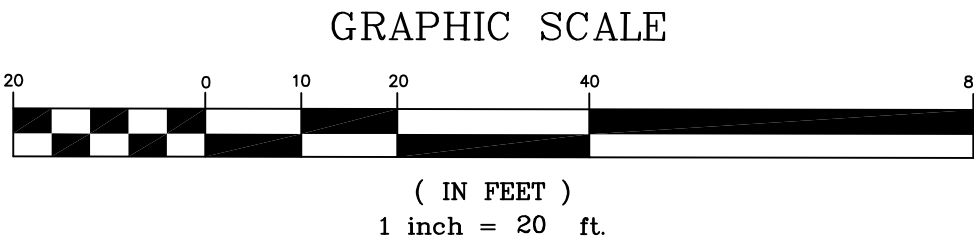
CURRENT OWNER:
TORTCON BUILDERS, LLC
70 BETHANY ROAD
FRAMINGHAM, MA 01701
508-380-0068

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 7 OF 13
SCALE: 1" = 20'	PLAN NO.: S-22-35	DATE: OCT 10, 2023
<div><div><div>ROBERT G. MURPHY & ASSOCIATES, INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310</div></div><div><div>ROBERT G. MURPHY & ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310</div></div></div>		
RGMENVIRON@VERIZON.NET		
MOCKINGBIRD LANE GRADING & DRAINAGE PLAN 56 SUMMER STREET, MEDWAY, MA		
REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023		GRADING & DRAINAGE



NOTES: ALL IRRIGATION COMPONENTS ARE TO BE INSTALLED AFTER ALL OF THE BURIED UTILITIES ARE INSTALLED AND INSPECTED. THE DRILLED WELL IS NOT TO BE USED AS A SOURCE OF POTABLE WATER.

ALL EXISTING UTILITIES ARE TO BE CONSIDERED AS APPROXIMATE ONLY. THE PROPOSED SITE IS TO BE SERVICED WITH MUNICIPAL WATER, SEWER, GAS, TEL. & ELECTRIC AS REQUIRED.




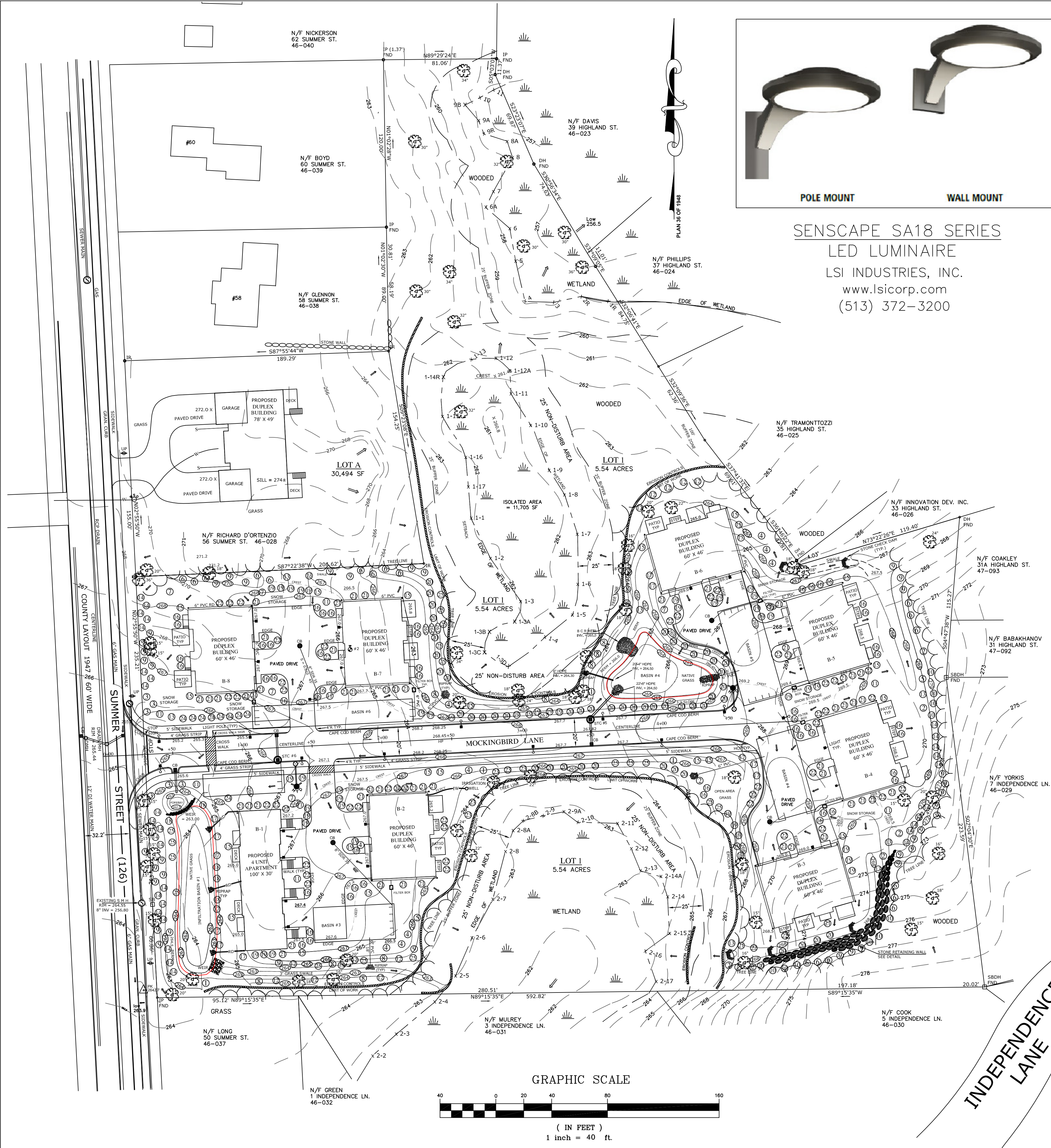
UTILITY PLAN

CURRENT OWNER:
TORTCON BUILDERS, LLC
70 BETHANY ROAD
FRAMINGHAM, MA 01701
508-380-0068

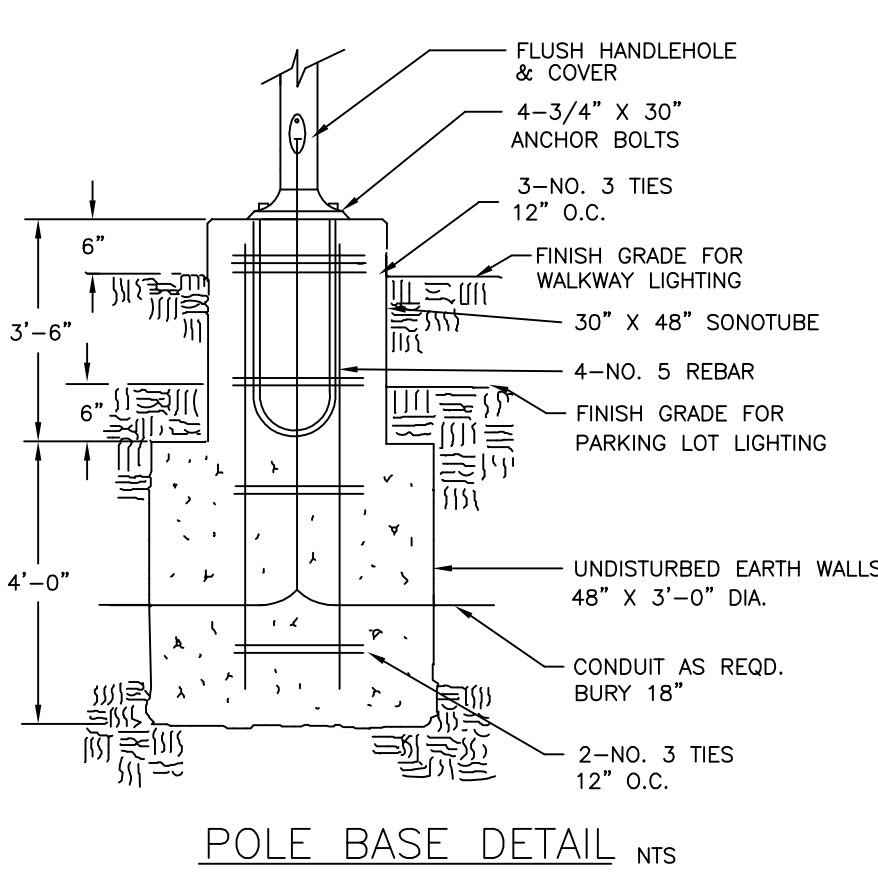
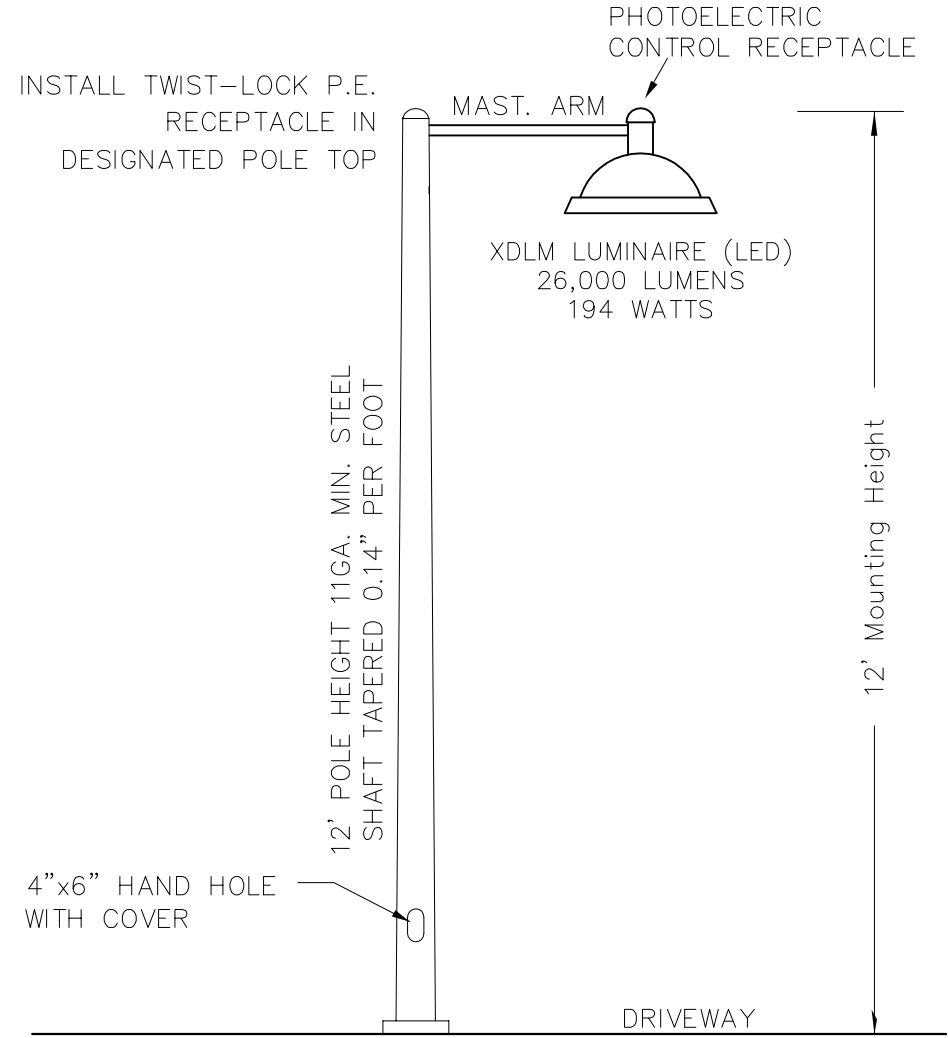
FIRM COMMUNITY PANEL
NO. 25021C0139E
DATE: 07-17-2012

NORMAN G. HILL, PE DATE
LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 8 OF 13
SCALE: 1" = 20'	PLAN NO.: S-22-35	DATE: OCT 10, 2023
<div>ROBERT G. MURPHY & ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 RGMENVIRON@VERIZON.NET</div>		
MOCKINGBIRD LANE UTILITIES & DIMENSION PLAN 56 SUMMER STREET, MEDWAY, MA		
REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023		UTILITIES & DIMENSIONS



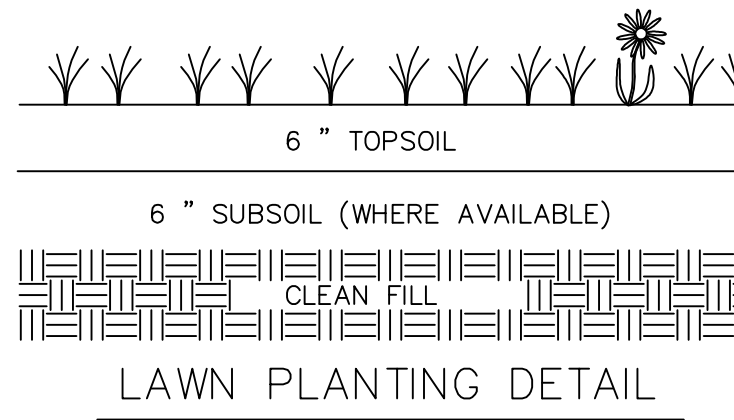
SENSCAPE SA18 SERIES
LED LUMINAIRE
LSI INDUSTRIES, INC.
www.lsicorp.com
(513) 372-3200



SITE PLAN
APPROVED
MEDWAY
PLANNING BOARD

DATE

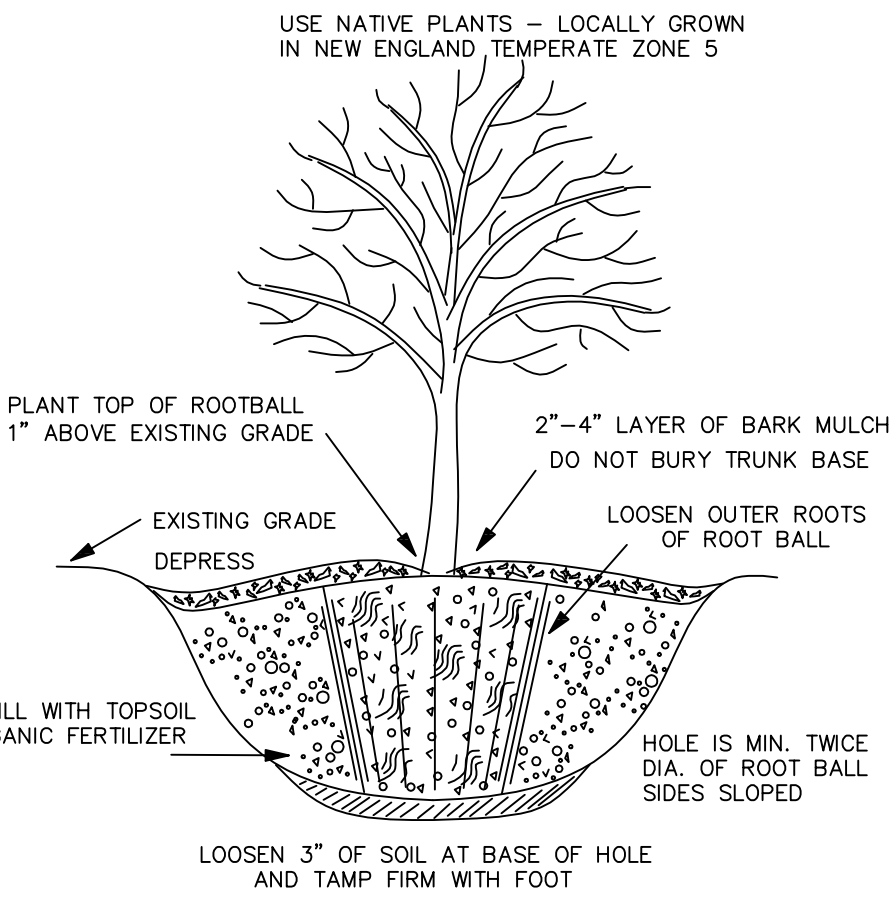
TYPICAL LIGHT POLE
20' POLE 5' BASE
N T S



PLANTING SPECIFICATIONS:

LOAM MAY BE SUPPLEMENTED WITH ORGANIC FERTILIZER. NO COMMERCIAL FERTILIZERS OR PESTICIDES ARE TO BE USED. SPREAD A MINIMUM OF 6 INCHES OF LOAM WITH A BASE OF 6\"/>

SLOPE STABILIZATION



TREE PLANTING DETAIL

LIST OF PLANT MATERIALS

USE NATIVE PLANTS - LOCALLY GROWN IN NEW ENGLAND
TEMPERATE ZONE 5


- # TREES
- 4 ① Amelanchier canadensis - Serviceberry 3-5'
- 8 ② Betula nigra - Black Birch 3-5'
- 6 ③ Betula populifolia - White Birch 3-5'
- 9 ④ Carpinus carolina - Hornbeam 1\" Dia.
- 2 ⑤ Fagus grandifolia - American Beech - 2\" Dia.
- 18 ⑥ Juniperus virginia - Red Cedar 3-5'
- 6 ⑦ Cornus florida, Flowering Dogwood 2 1/2\" Dia
- 11 ⑧ Nyssa sylvatica - Black Tupelo 3-5'
- 38 ⑨ Picea glauca - White Spruce 4-5'
- 10 ⑩ Pinus strobus - Eastern White Pine 4-5'
- 8 ⑪ Crataegus coccinea - Scarlet Hawthorn 4-5'
- 11 ⑫ Quercus rubra - Red Oak 4-5'
- 8 ⑬ Sorbus americana - Mountain ash 4-5'
- 31 ⑭ Thuja occidentalis - White Cedar 3-4'
- SHRUBS
- 20 ⑮ Buddleia davidii - Butterfly bush #3 pot
- 50 ⑯ Buxus sempervirens - Boxwood 24"
- 14 ⑰ Ilex opaca - American Holly 24"
- 5 ⑱ Ilex verticillata - Winterberry Holly 18"
- 47 ⑲ Juniperus wiltoni - Wiltoni Juniper 15"
- 50 ⑳ Kalmia latifolia - Mountain Laurel 18"
- 53 ㉑ Rhododendron catawba - Catawba Rhodo. 24"
- 52 ㉒ Rhododendron arborescens - Sweet Azalea 24"
- 5 ㉓ Sambucus canadensis - Elderberry 24"
- 10 ㉔ Syringa vulgaris - Purple Lilac 24"
- 18 ㉕ Vaccinium corymbosum - H. Blueberry 18"

NOTE: ALL IRRIGATION COMPONENTS ARE TO BE INSTALLED AFTER ALL OF THE BURIED UTILITIES ARE INSTALLED AND INSPECTED. THE DRILLED WELL IS NOT TO BE USED AS A SOURCE OF POTABLE WATER.

LANDSCAPE PLAN

NOTES: PRIOR TO CONSTRUCTION, ALL TREES TO REMAIN ARE TO BE FLAGGED WITH ORANGE RIBBON. EROSION CONTROLS ARE TO BE UPDATED AS REQUIRED DURING ALL CONSTRUCTION PHASES TO PREVENT SEDIMENTS FROM ENTERING THE ADJACENT WETLANDS.

NORMAN G. HILL, PE DATE
LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 9 OF 13
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023
 ROBERT G. MURPHY & ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 Fax: (508) 839-5914 RGMENVIRON@VERIZON.NET		
MOCKINGBIRD LANE LANDSCAPE & LIGHTING PLAN 56 SUMMER STREET, MEDWAY, MA		
REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023		LANDSCAPE

ALL RIP RAP IS TO BE 10LB. MIN. MIXED WITH LARGE STONES.
MA SPEC. M 2.02.0 WRAPPED IN MIRAFI 140N OR EQUAL FABRIC.
ALL VOIDS ARE TO BE PACKED WITH 2" STONE.

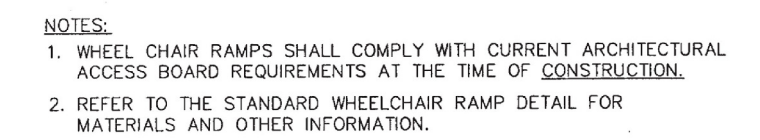


FILTER BOX DETAIL



A cross-section diagram of a gutter installation. The diagram shows a gutter line at the top, with a 1'-0" dimension from the gutter line to the level of the loam & seed. Below the gutter line, there is a 4" vertical dimension from the gutter line to the top of the binder course. The binder course is labeled "BINDER COURSE". Below the binder course is a layer of "BITUMEN FOR TACK COAT". Below the tack coat is a layer of "12" GRAVEL". The gravel layer is labeled "12" GRAVEL". Above the gravel layer is a layer of "LOAM & SEED". The loam & seed layer is labeled "LOAM & SEED". The vertical dimension from the top of the gravel to the level of the loam & seed is 6".

MODIFIED CAPE COD BERM



WHEELCHAIR RAMP WITH GRASS STRIP

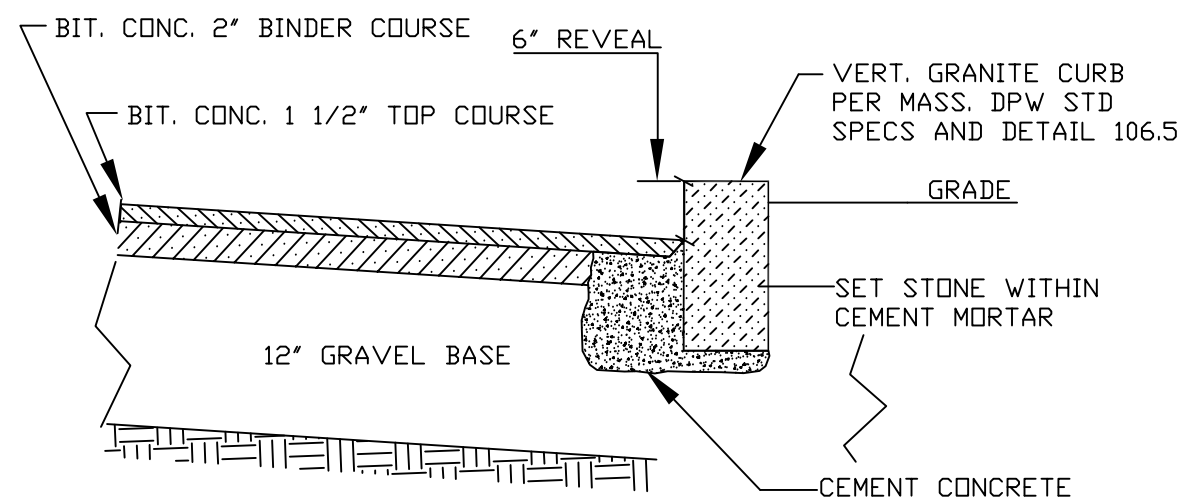


HOODS SHALL BE THE "SNOOT" MANUFACTURED BY BEST MANAGEMENT PRODUCTS, INC. OR APPROVED EQUAL POSITION HOOD SUCH THAT BOTTOM FLANGE IS A DISTANCE OF 1/2 OUTLET PIPE DIA. (MIN) BELOW THE PIPE INVERT. MINIMUM DISTANCE FOR PIPES < 12" I.D. IS 6".

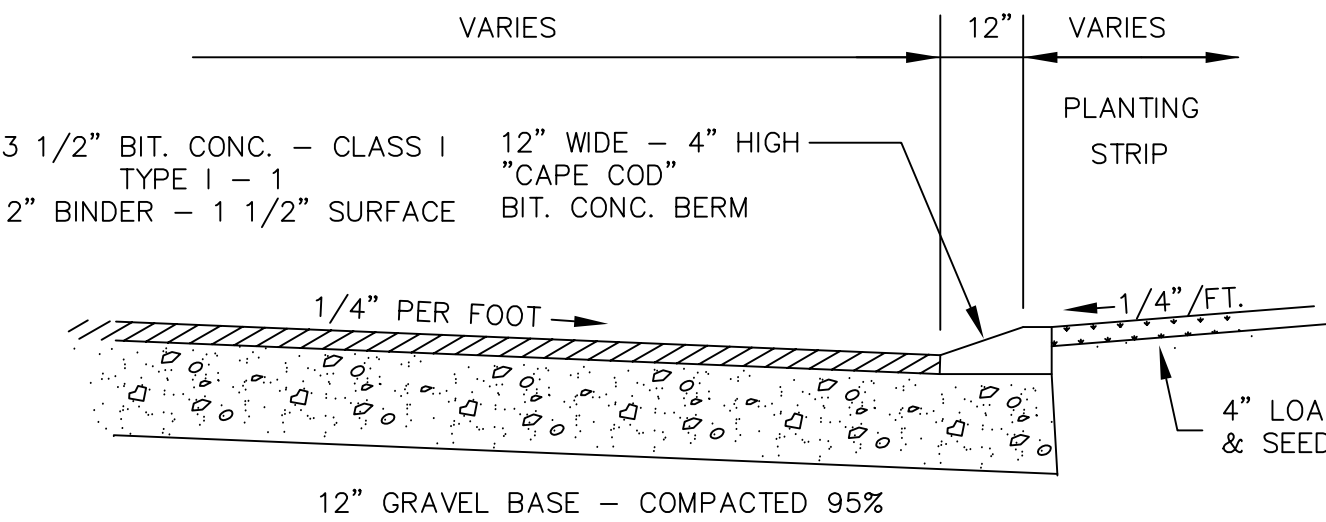


REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023

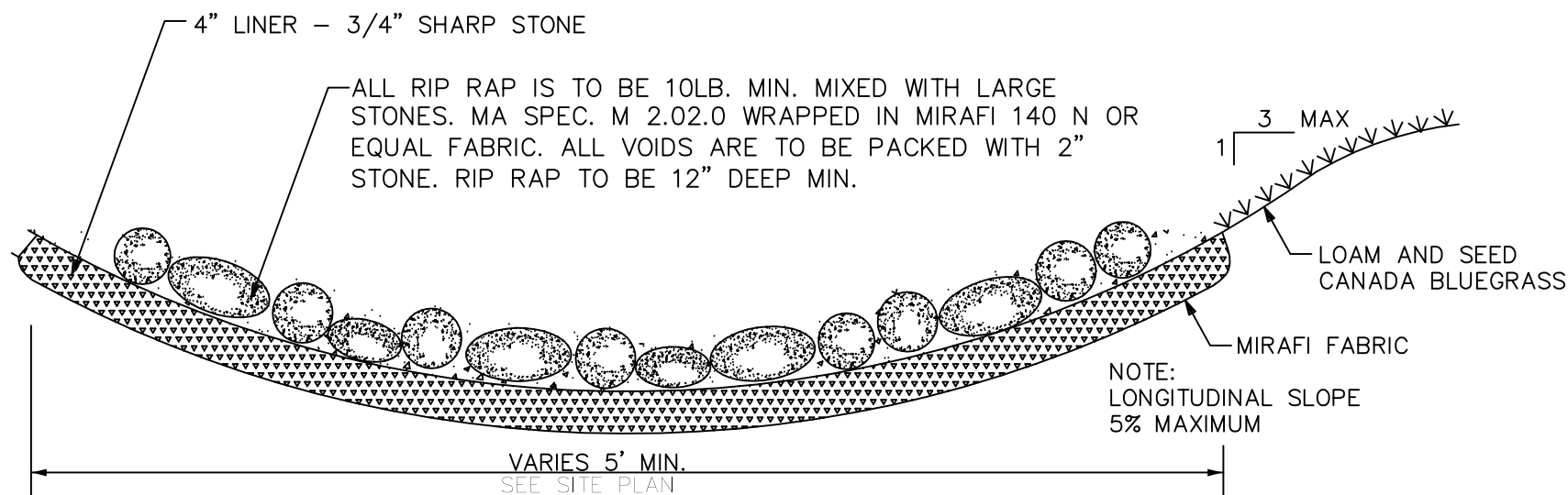
DETAILS-1



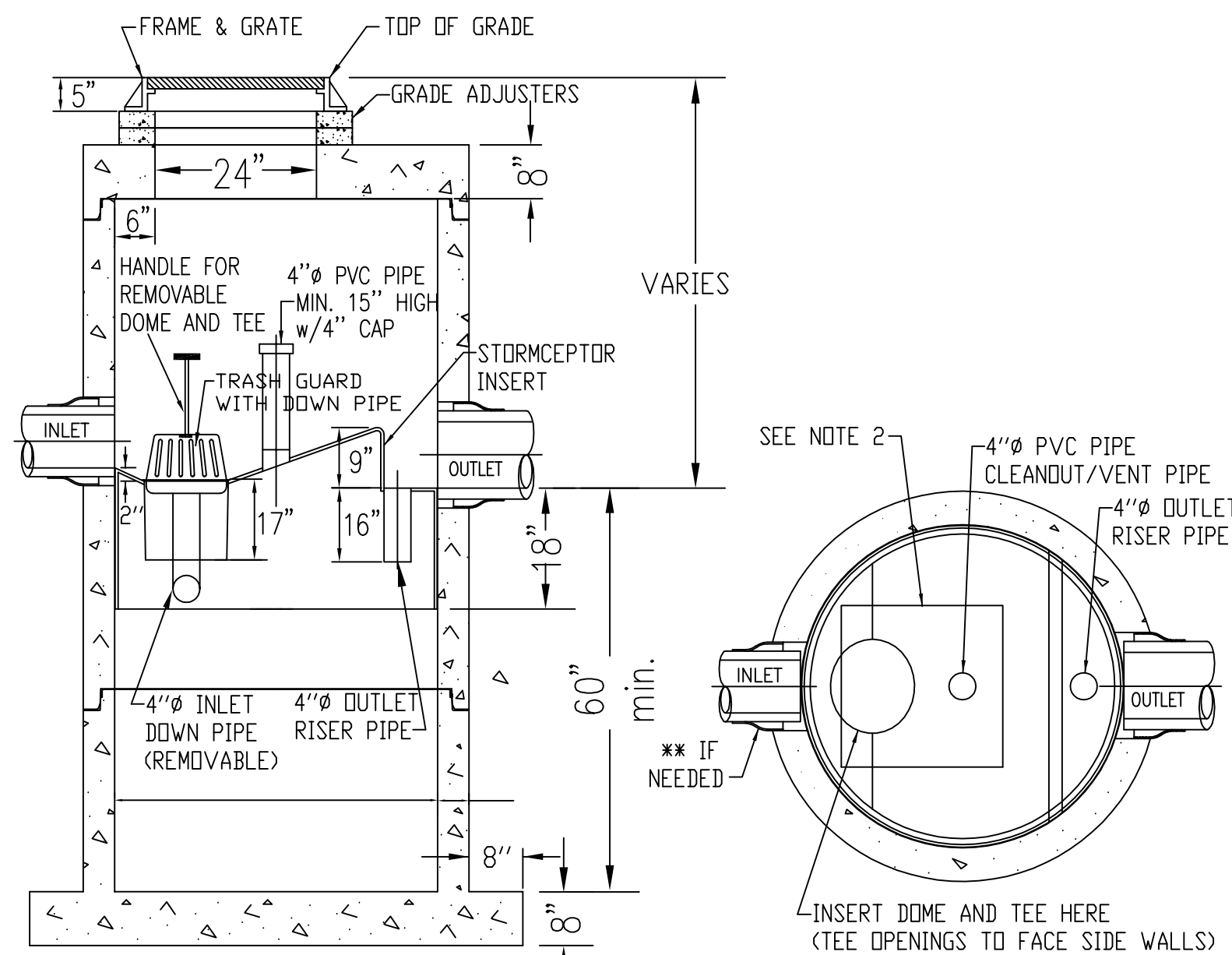
VERTICAL GRANITE CURB N.T.S.



PAVEMENT & CURB DETAIL
NTS

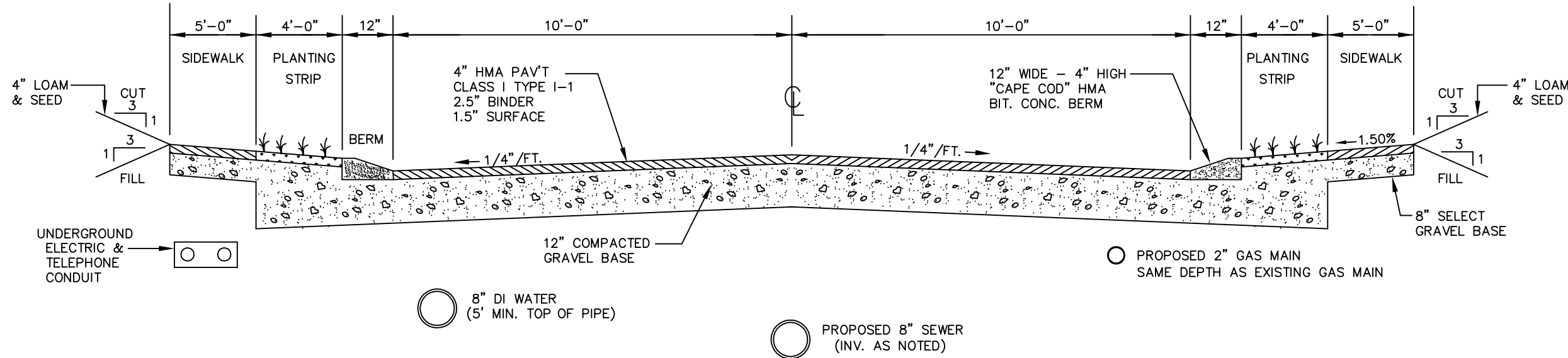


RIPRAP CHANNEL DETAIL N.T.S.

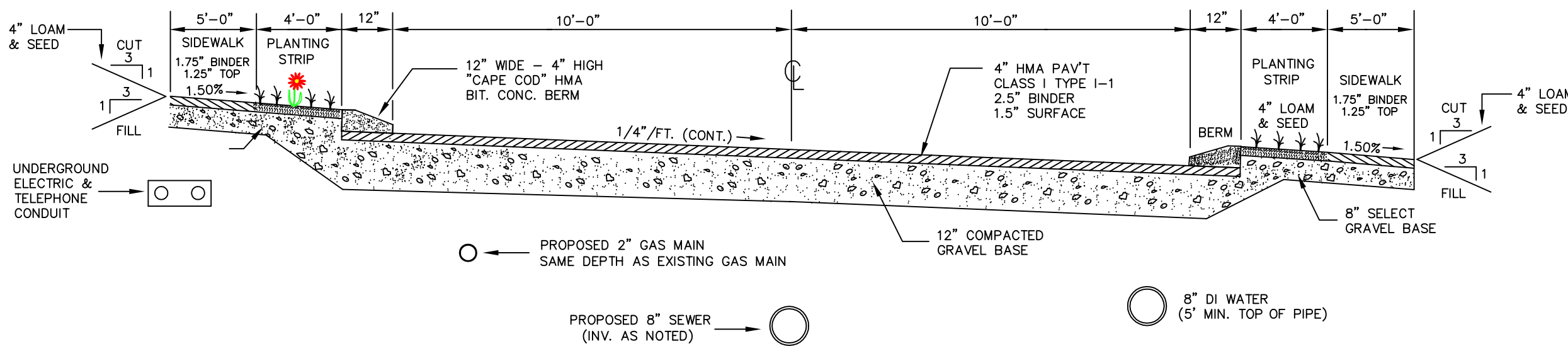


- NOTE :
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE OUTLET WHERE APPLICABLE.
 2. THE COVER SHOULD BE POSITIONED OVER THE 4"Ø CLEANOUT/VENT PIPE AND THE 4"Ø INLET DOWN PIPE.
 3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OFF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181.
 4. CONTRACTOR TO PROVIDE CRANE TO SET UNIT (HEAVIEST SECTION WEIGHS 5000 LB)

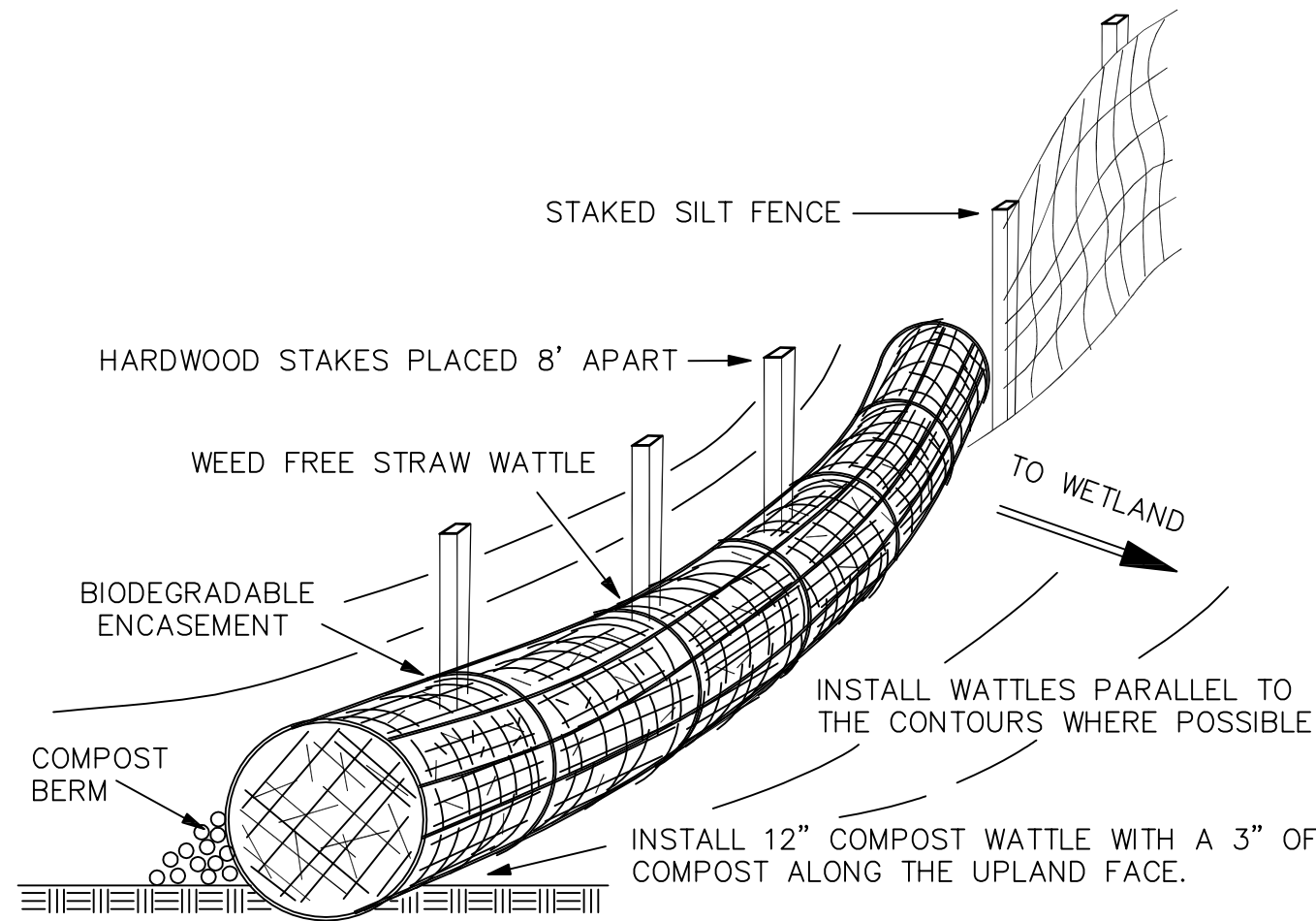
STC 450i Precast Concrete Stormceptor
(450 US Gallon Capacity)



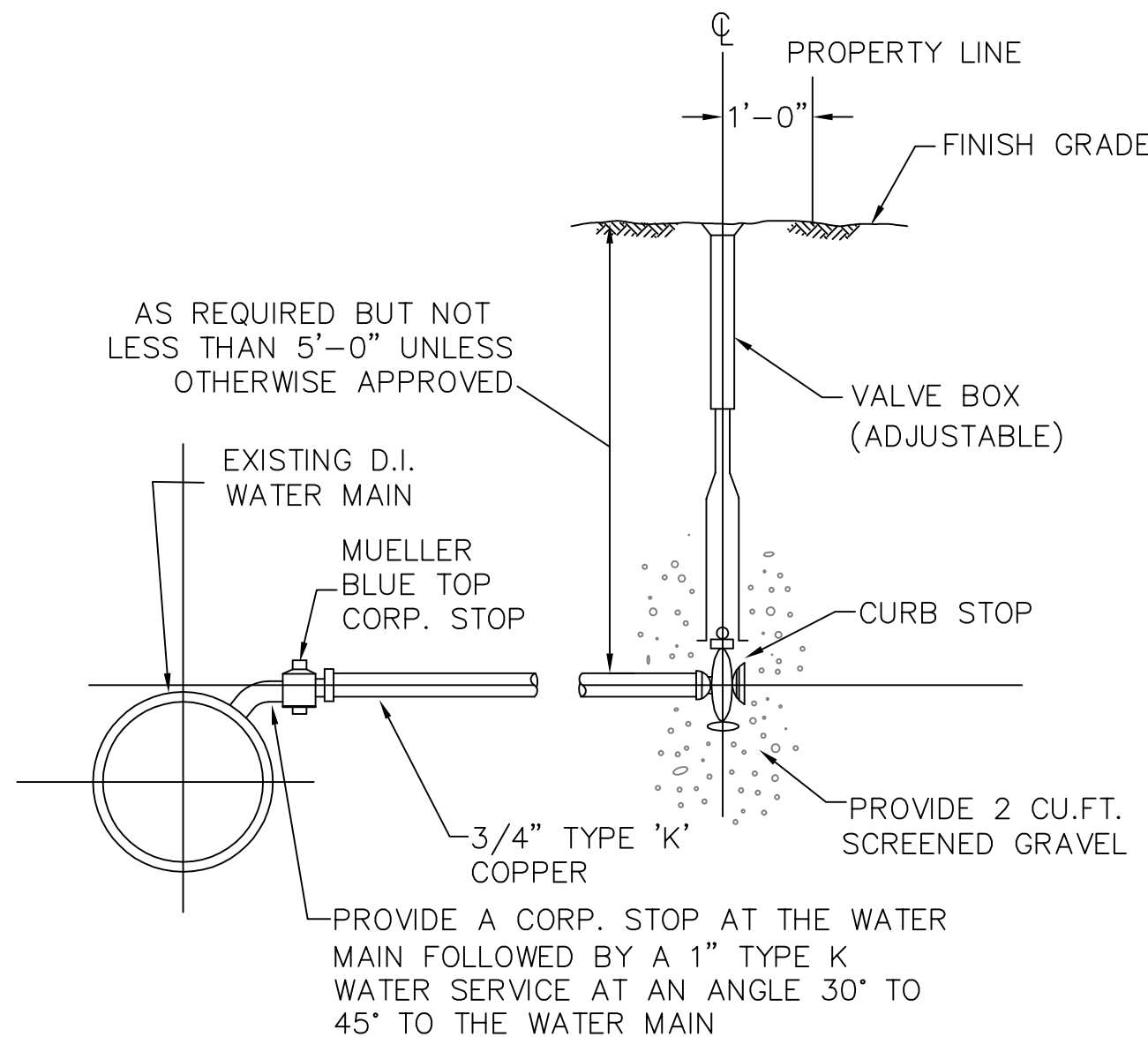
ROADWAY CROSS SECTION N.T.S.
STA. 1+00 TO STA. 4+50



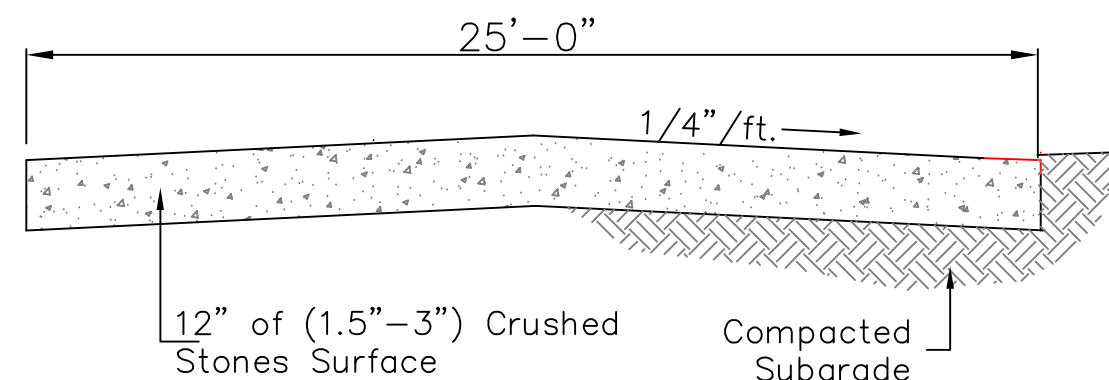
SUPERELEVATION SECTION N.T.S.
STA. 0+16 TO STA. 1+00



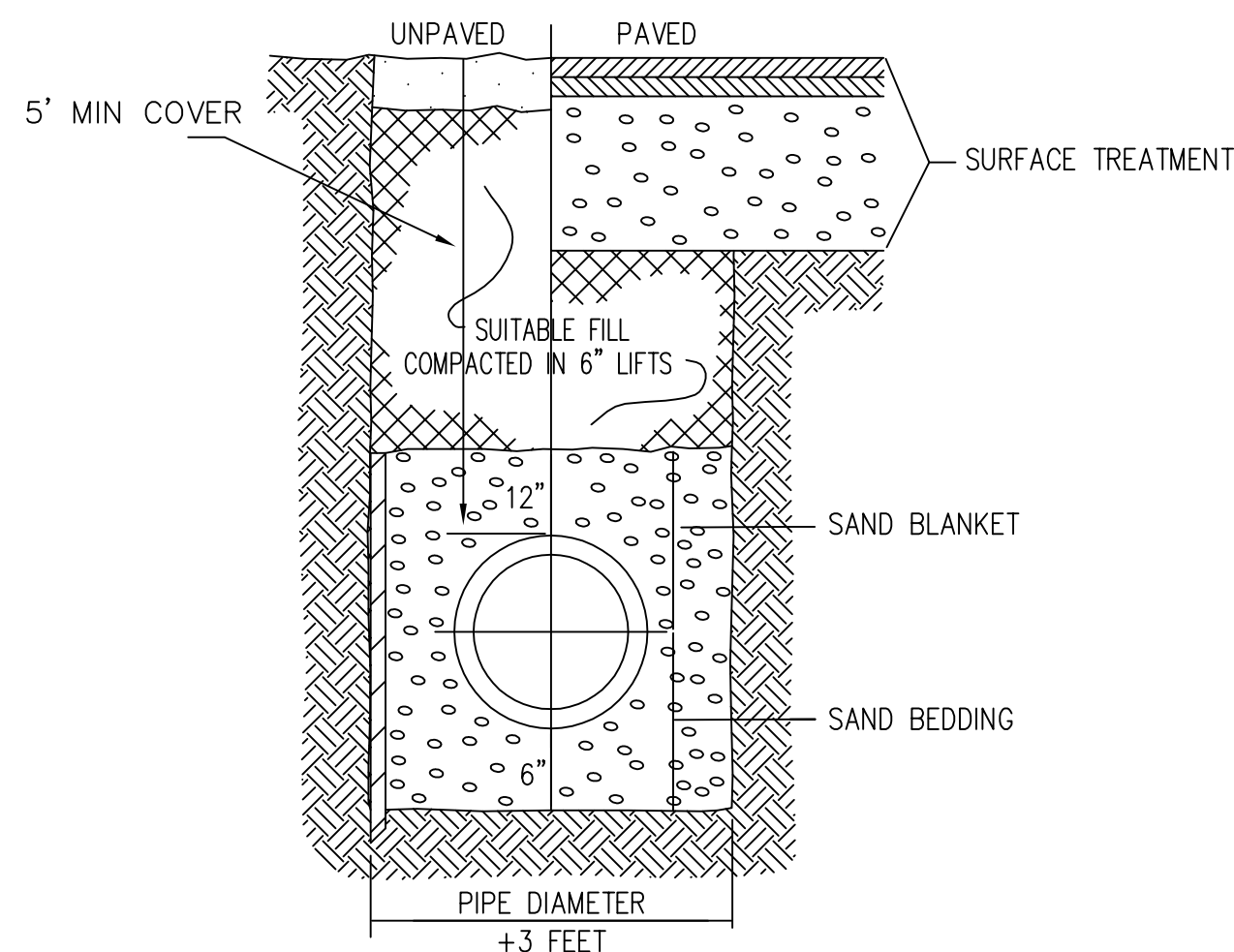
COMPOST WATTLE DETAIL



TYPICAL PERMANENT SERVICE CONNECTION
N T S

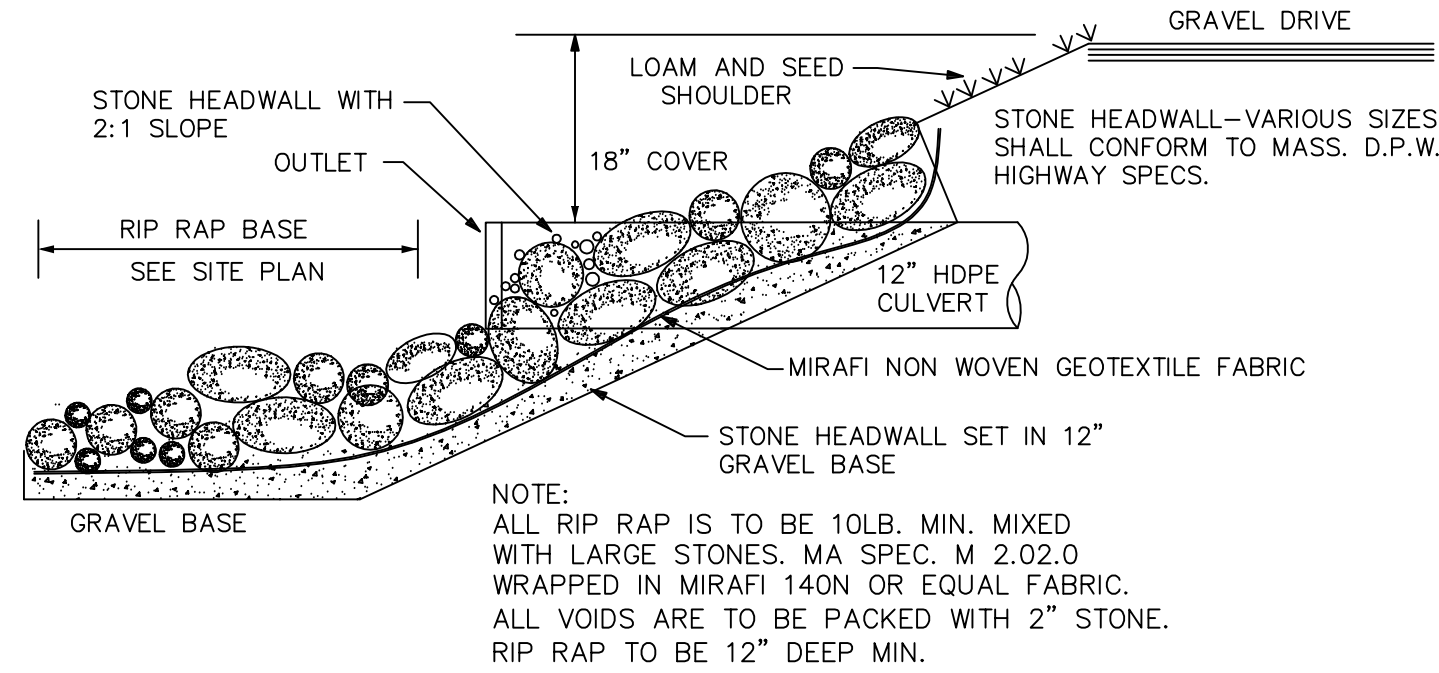


TEMPORARY 25' CONSTRUCTION ENTRANCE
NTS

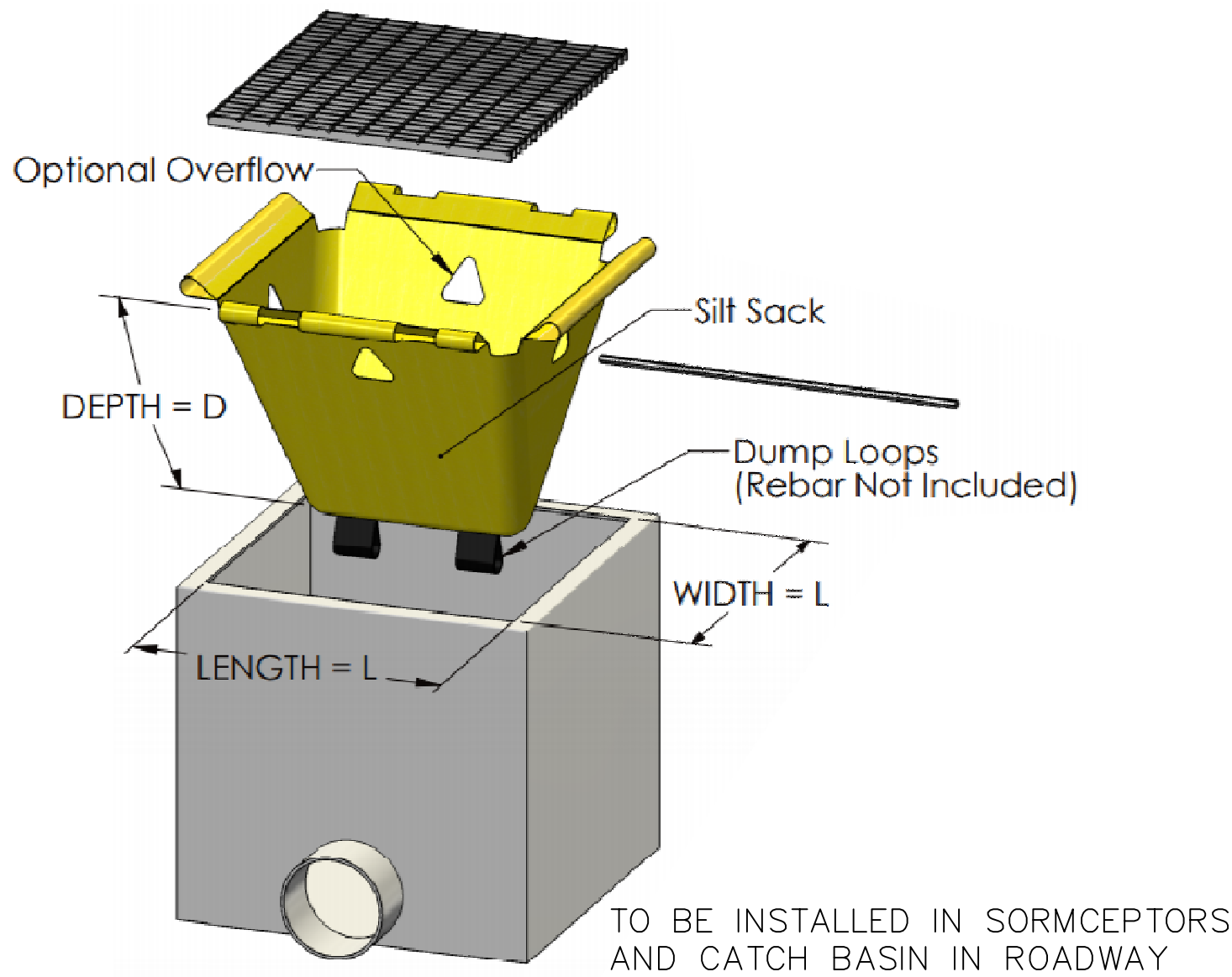


- FOR SHEETED TRENCH $W_s = 4/D + 32"$ OR 50", WHICHEVER IS GREATER.
FOR UNSHEETED TRENCH $W_u = 4/3 D + 18"$ OR 36", WHICHEVER IS GREATER.
- NOTES:
1. TRENCHES MAY BE EXCAVATED WIDER THAN THE TRENCH WIDTH W_s ABOVE THE "LINE OF NARROW TRENCH LIMIT".
 2. BELOW THE "LINE OF NARROW TRENCH LIMIT" THE TRENCH SHALL NOT BE EXCAVATED BEYOND THE TRENCH WIDTH W_s .
 3. SHEETING, IF USED, IN ALL CASES SHALL BE LEFT IN PLACE BELOW A LINE ONE FOOT ABOVE THE TOP OF THE PIPE, UNLESS OTHERWISE INDICATED OR DIRECTED.
 4. "COVER" AT ANY POINT SHALL BE DEFINED AS THE VERTICAL DISTANCE FROM THE UPPERMOST POINT OF THE PIPE TO A LINE WHICH CONNECTS THE SURFACE OF UNDISTURBED GROUND AT EITHER SIDE OF THE TRENCH AND IS AT RIGHT ANGLES TO THE DIRECTION OF THE PIPE.
 5. WHERE FUTURE EXTENSION OF A PLUGGED PIPE OR PLUGGED BRANCH WILL ENTAIL ROCK EXCAVATION, TRENCH EXCAVATION IN ROCK SHALL BE EXTENDED FOR A DISTANCE OF FIVE FEET BEYOND THE PLUG.

TYPICAL WATER MAIN TRENCH SECTION
NOT TO SCALE



HDPE CULVERT- RIP RAP HEADWALL DETAIL N.T.S.



POLYPROPYLENE SILT SACK

NORMAN G. HILL, PE DATE
LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 11 OF 13
SCALE: 1" = 40'	PLAN NO.: S-22-35	DATE: MAY 24, 2023
ROBERT G. MURPHY & ASSOC., INC. ENVIRONMENTAL CONSULTANTS 214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310 Fax: (508) 839-5914 RGMENVIRON@VERIZON.NET		
MOCKINGBIRD LANE SITE DETAILS & SPECIFICATIONS MOCKINGBIRD LANE, MEDWAY, MA		
REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023		DETAILS-2



EXPURE

LIGHTING — CONTROLS — ELECTRICAL

#	Date	Comments

Revisions

Drawn By: AH

Checked By:

Date: 7/31/2023

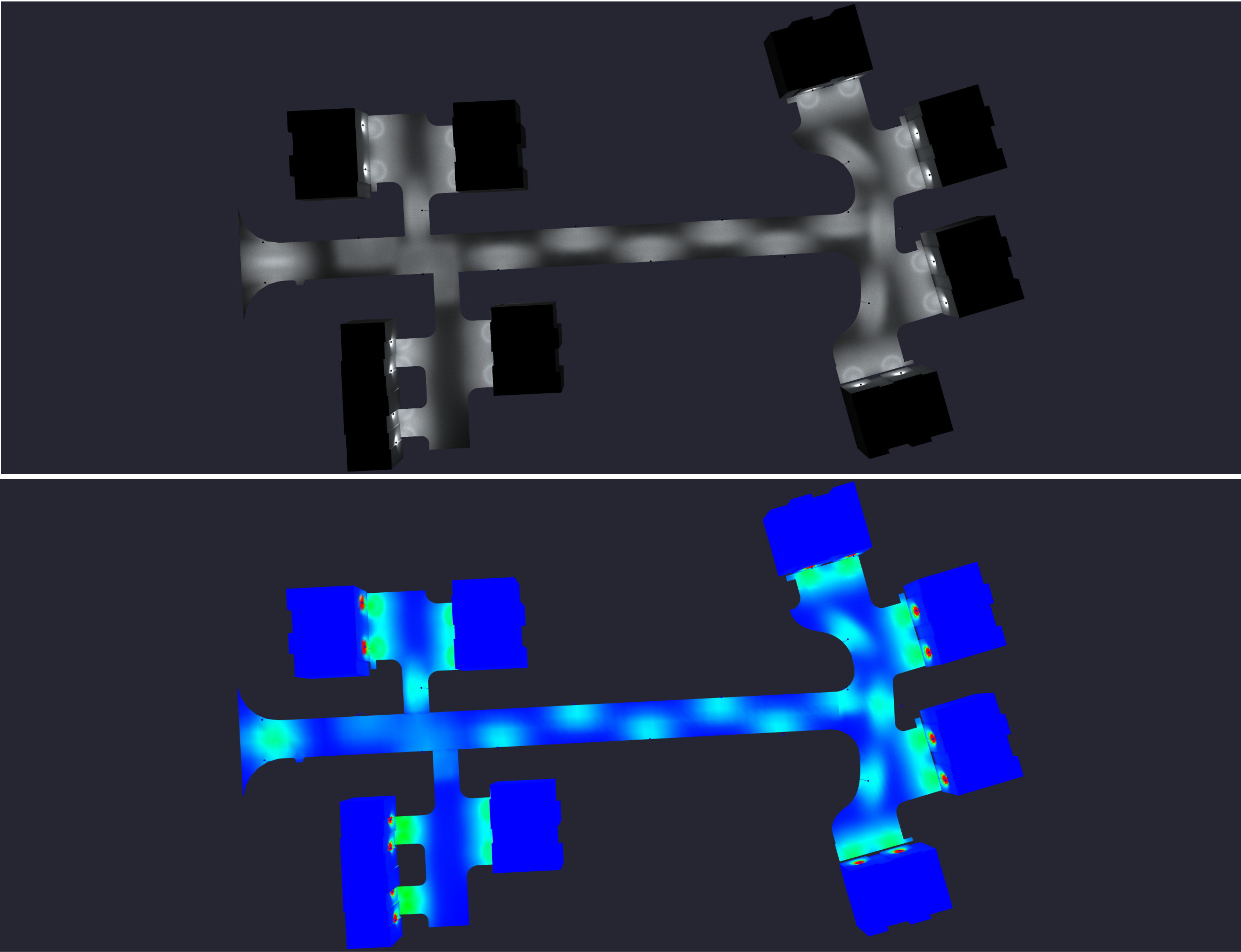
Scale: NTS

56 Summer St. Medway, MA

Site Lighting Analysis

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
○	2	P1-5	Single	SA18-PM-FINISH-5S-W-S-P-30L-40K7-DCC-DV-ICM	0.900	4327	35	70
○	18	W1-2	Single	SA18-WM-FINISH-4-W-S-P-30L-40K7-DCC-DV-ICM	0.900	4162	35	630
○	12	P1-2	Single	SA18-PM-FINISH-2-W-S-P-30L-40K7-DCC-DV-ICM	0.900	4107	35	420

Calculation Summary							
Label	Calc Type	Units	Avg	Max	Min	Avg/Min	Max/Min
B1-B2 Paved Drive_Planar	Illuminance	Fc	2.16	8.4	0.1	21.60	84.00
B3, B4, B5, B6 Paved Drive_Planar	Illuminance	Fc	2.67	7.2	0.2	13.35	36.00
B7-B8 Paved Drive_Planar	Illuminance	Fc	2.87	7.2	0.0	N.A.	N.A.
Mockingbird Lane_Planar	Illuminance	Fc	1.87	7.4	0.1	18.70	74.00



56 Summer St. Medway, MA

Site Lighting Analysis

Drawn By: AH
Checked By:
Date:7/31/2023

Scale: NTS

Revisions

#	Date	Comments

EXPOSURE
— LIGHTING — CONTROLS — ELECTRICAL —

SOIL TEST DATA

APPLICANT: CHRIS TORTI
ADDRESS: 56 SUMMER ST. MEDWAY, MA
PERFORMED BY: ROBERT G MURPHY, SE 1713
DATE OF TEST: 8-05-2022 & 10-04-2023


I, Robert G. Murphy certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been reviewed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017. I further certify that the results of the soil evaluation, as indicated on this construction detail sheet, are accurate in accordance with 310 CMR 15.100 through 15.107.

SE 1713

REFER TO SHEET 7 FOR LOCATION OF TEST PITS SOIL IS CHARLTON FINE SANDY LOAM

SOIL EVALUATION CONDUCTED ON AUGUST 5, 2022						
O.H. # ELEV.	Depth (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling (Redox)	Other (Structures, Stones, Boulders, Consistency)
#1 267.6	0-6" 6"-28" 28"-84"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FIRM, BOULDERS LEDGE @ 84"
#2 265.5	0-6" 6"-28" 28"-84"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FIRM, BOULDERS LEDGE @ 84"
#3 266.4	0-8" 8"-30" 30"-96"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM LEDGE @ 96"
#4 265.2	0-6" 6"-28" 28"-84"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FRIABLE, FIRM FIRM, BOULDERS
#5 264.7	0-8" 8"-32" 32"-120"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	108"	GRANULAR, FIRM FRIABLE, FIRM LEDGE @ 120", DRY
#6 266.4	0-8" 6"-28" 28"-84"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FRIABLE, FIRM FIRM, BOULDERS
#7 265.4	0-8" 8"-32" 32"-120"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	108"	GRANULAR, FIRM FRIABLE, FIRM LEDGE @ 120", DRY
#8 264.5	0-8" 8"-30" 30"-96"	A Bw C	SL SL FLS	10YR 3/2 10YR 6/6 2.5 Y 5/4	66"	GRANULAR, FIRM FRIABLE, FIRM LEDGE @ 96", DRY
#9 263.4	0-8" 8"-30" 30"-96"	A Bw C	SL SL FLS	10YR 3/2 10YR 6/6 2.5 Y 5/4	36"	GRANULAR, FIRM FRIABLE, FIRM LEDGE @ 96", DRY
#10 268.1	0-6" 6"-30" 30"-96"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM SHARP, BOULDERS, DRY
#11 268.5	0-8" 8"-32" 32"-120"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM LEDGE @ 120", DRY
#12 266.4	0-6" 6"-30" 30"-96"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM LEDGE @ 96", DRY

SOIL EVALUATION CONDUCTED ON OCTOBER 4, 2023						
#1-1 264.7	0-8" 8"-30" 30"-124"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM LEDGE @ 124", DRY
#1-2 265.6	0-8" 8"-32" 32"-96"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FRIABLE, FIRM BOULDER @ 96", DRY
#1-3 266.6	0-6" 6"-30" 30"-110"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM COBBLES, LEDGE, DRY
#1-4 265.4	0-6" 6"-32" 32"-100"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FRIABLE, FIRM SHARP, FEW STONES
#1-5 264.0	0-8" 8"-32" 32"-90"	A Bw C	SL SL FLS	10YR 3/2 10YR 6/6 2.5 Y 5/4	66"	GRANULAR, FIRM FRIABLE, FIRM GRAVEL, WATER @ 80"
#1-6 265.7	0-8" 8"-32" 32"-84"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	68"	GRANULAR, FIRM FRIABLE, FIRM, COBBLES GRAVEL, WATER @ 74"
#1-7 268.6	0-6" 6"-30" 30"-90"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 5/4	NONE	GRANULAR, FIRM FRIABLE, FIRM BOULDER @ 96", DRY
#1-8 268.5	0-8" 8"-32" 32"-86"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM FRIABLE, FIRM COBBLES, LEDGE, DRY
#1-9 268.5	0-6" 6"-30" 30"-108"	A Bw C	SL SL FLS	10YR 3/3 10YR 6/6 2.5 Y 6/4	NONE	GRANULAR, FIRM STONES, FIRM GRAVEL, DRY

DESIGNED BY: R. G. Murphy	REVIEWED BY: N. G. Hill	SHEET: 12 OF 13
SCALE: 1" = 20'	PLAN NO.: S-22-35	DATE: OCT 10, 2023
<div><div><div>Robert G. Murphy & Associates, Inc. ENVIRONMENTAL CONSULTANTS</div></div><div><div>ROBERT G. MURPHY & ASSOC., INC.</div><div>ENVIRONMENTAL CONSULTANTS</div><div>214 Worcester Street No. Grafton, Massachusetts 01536 (508) 839-0310</div></div></div>		
<div><div>MOCKINGBIRD LANE</div><div>SOIL LOGS & CONSTRUCTION NOTES</div><div>56 SUMMER STREET, MEDWAY, MA</div></div>		
REVISION: SEE TETRA TECH REVIEW 6-30-2023 RGM & NGH 10-10-2023		SOIL LOGS

DATUM:
NAVD88

FIRM COMMUNITY PANEL
NO. 25021C0139E
DATE: 07-17-2012

NORMAN G. HILL, PE DATE

LAND PLANNING, INC.
214 Worcester Street
North Grafton, Massachusetts 01536