

July 7, 2022

Mary Ellen Schloss
Conservation Administrator
Town Hall
75 Middle Street
Weymouth, MA 02189

A&M Project #: 2599-01
Re: Brookpoint
22 Washington Street
Weymouth, MA
**Request for Certificate of
Compliance
DEP File No. 081-1191 (Amended)**

Dear Ms. Schloss:

On behalf of the applicant, GND Realty Trust, Allen & Major Associates, Inc. (A&M) respectfully submits this Request for a Certificate of Compliance (RCoC) in accordance with Section (m) of §7-301, the Wetlands Protection Bylaw for the Town of Weymouth. Construction for the referenced Brookpoint project has been completed and appears in substantial conformance with the associated Amended Order of Conditions (OOC) issued April 16, 2019 with Massachusetts Department of Environmental Protection (MassDEP) File Number 081-1191 (Amended). The following Request for Certificate of Compliance will demonstrate that the work has been completed in general conformance with the 60 General and Special Conditions listed in the referenced Amended Order of Conditions.

The following Submittal Items have been included as enclosures with this Request for a Certificate of Compliance as required to aid the Weymouth Conservation Commission in their review and approval for the project:

1. WPA Form 8a – Request for Certificate of Compliance for DEP File No. 081-1191 (Amended) with Parcel Reference List.
2. As-Built Survey drawing entitled “As-Built – Brookpoint – 22 Washington Street, Weymouth, MA – Sheet No. 1”, 24”x36”, stamped and signed by a Registered Professionally Licensed Surveyor in the Commonwealth of Massachusetts, 1 total sheet, dated March 29, 2022. Six (6) total paper copies have been provided with this RCoC per Special Condition 55b.
3. An affidavit indicating completion of construction in substantial compliance with the referenced Notice of Intent Amended Order of Conditions and the approved plan set, stamped and signed by a Registered Professional Engineer in the Commonwealth of Massachusetts.
4. Site Photographs entitled “Site Visit Photographs for Request for Certification of Compliance - Brookpoint Mixed Use Development - #22 Washington Street, Weymouth MA,” dated June 14, 2022, and accompanying marked-up As-built plan showing locations of photographs.
5. Certificate of Compliance filing fee in the amount of \$50.00, made payable to Town of Weymouth, check number 54737 dated July 7, 2022.

Although the majority of the General and Special Conditions do not require individual responses, the Applicant offers the following responses to Conditions (denoted in *Italics*) and supporting Exhibits to select Conditions as warranted, in addition to the information provided above:

Condition 9: *No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within*

the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Granter Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.

Response to Condition 9:

The Final Order has been recorded with the Norfolk County Registry of Deeds on December 30, 2021 as Book 40206, Page 209, and is included as an attachment to this document as **Exhibit 1**.

Condition 41: *As agreed to at the public hearing for the original Notice of Intent (March 8, 2017), the applicant shall review and report back to the Conservation Commission regarding the existing condition of five (5) existing catch basins in the municipal parking lot. The report shall identify locations and document essential information (e.g., rim and invert elevations and sizes for all connections, size of sumps, existence of environmental hoods, etc.) For these five catch basins, those without deep sumps will be replaced with deep-sump, hooded catch basins and those with deep sumps but no hoods will be fitted with hoods for removal of oil and gas ("floatables").*

Response to Condition 41:

The Applicant requests to clarify that there are only three (3) existing catch basins within the adjacent Town of Weymouth municipal property. Of these three (3) catch basins, one (1) shall be converted to a drain manhole structure, one (1) shall be converted to a double-grated catch basin with a new hood installed on the outlet side of the structure, and one (1) shall remain and be retrofitted with a new hood installed on the outlet side of the structure. See **Exhibit 2**, attached to this narrative, for the Grading and Drainage plan revised through February 24, 2021, as well as photos documenting the completed work, and an email from the Weymouth Department of Public Works (DPW) indicating this work has been satisfactorily completed.

Condition 45: *Upon completion (final coating) of the road and driveways in the work area, all catch basins shall be cleaned. Documentation of cleaning shall be provided.*

Response to Condition 45:

All catch basins on-site have been cleaned. See **Exhibit 3**, an invoice from Crana & Sons, Inc. indicating the final cleaning/jetting of all manholes, catch basins and drains on-site on April 8, 2022.

Condition 52: *Prior to issuance of a Certificate of Compliance, the applicant shall submit to the Conservation Commission a duly executed maintenance contract providing for the cleaning and maintenance of stormwater infrastructure including catch basins, water quality inlets and other devices shown on the plans. Said contract shall specify at minimum:*

- a. Company or individual responsible for all work*
- b. Frequency of all cleaning and maintenance*
- c. Scheduling of cleaning and maintenance*

d. Use or disposition of all excavated materials

Response to Condition 52:

See enclosed **Exhibit 4**, an Operation and Maintenance (O&M) Plan and Maintenance Log for the post-construction project site. In addition to the Plan and Log, a Mosquito Management Document, Snow Storage Document from the MassDEP and Manufacturer's O&M Brochure for the CDS-2015-4 proprietary hydrodynamic separator (water quality unit) on-site, has been provided.

Condition 54: *Prior to occupancy of the building, if the project is not ready for a Partial or Final Certificate of Compliance, the applicant shall provide a signed and stamped as-built plan demonstrating compliance with the approved building location and limits of impervious areas/hardscapes and shall provide the engineer's certification that the stormwater drainage system complies with the approved plans and this Order, as required under General Condition #19(b).*

Response to Condition 54:

An As-Built plan has been provided with this RCoC, as detailed above in **Submittal Item #2**.

Condition 55: *Upon completion of the project, the applicant shall request a Certificate of Compliance. The applicant may request a Partial Certificate of Compliance upon completion of any discrete phase of the project. All Conditions in the Order must be complied with prior to the issuance of a Final Certificate of Compliance. The request shall be accompanied by the following items:*

- a. A written statement by a professional engineer or land surveyor registered in the Commonwealth of Massachusetts certifying compliance with the Notice of Intent, the approved plans, and this Order of Conditions and setting forth what deviations exist, if any;*
- b. Six sets of as-built site plans prepared by a registered land surveyor or a registered professional engineer showing those activities for which the Certificate of Compliance is sought.

 - i. The location of all buildings, parking areas, impervious surfaces, and landscaped areas.*
 - ii. The as-built plans shall include location of all drainage structures and pipes, along with invert elevations, pipe slope, pipe size and pipe composition.*
 - iii. The as-built plan (or separate plan submitted with the as-built) shall show the location of the daylighted culvert and the new Riverfront Area Boundary.**
- c. The work done to review and upgrade parking lot catch basins shall be described in the narrative and identified on the as-built plan.*
- d. Proof of recording of the easement to the Town of Weymouth for the daylighting of Smelt Brook (as per condition #24).*
- e. An executed Operation and Maintenance Compliance Statement as required by Condition # 19(c).*
- f. The appropriate local filing fee.*

Response to Condition 55:

- a. An affidavit prepared, stamped and signed by a Registered Professional Engineer in the Commonwealth of Massachusetts has been prepared and included with this RCoC as **Submittal Item 3** (as detailed above).
- b. Six (6) sets of the previously-referenced as-built survey have been included with this RCoC submission.
- c. See above Response to Condition 41.
- d. Proof of recording of the easement to Town of Weymouth for the Smelt Brook daylighting has been provided as **Exhibit 5**, Book 38260 Page 318 dated August 26, 2020 and recorded with the Registry of Deeds.
- e. An executed O&M Compliance Statement as required by Condition 19(c) has been provided to the Town previously. A copy of the O&M plan is included with this RCoC submission as Exhibit 4.
- f. The appropriate filing fee in the amount of \$50 has been provided with this RCoC submission, as described in **Submittal Item 5**, above.

If there are any questions or concerns, please do not hesitate to contact A&M at (781) 935-6889.

Very Truly Yours,

ALLEN & MAJOR ASSOCIATES, INC.



Nicholas Dellacava, PE
Project Manager
Ndellacava@allenmajor.com



SUBMITTAL ITEM 1

WPA FORM 8A



WPA Form 8A – Request for Certificate of Compliance

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

A. Project Information

Important:

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



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

1. This request is being made by:

GND Realty Trust, c/o Nicholas Delegas
 Name
 61 Soloman Pierce Road
 Mailing Address
 Lexington MA 02420
 City/Town State Zip Code
 (781) 249-8134
 Phone Number

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

GND Realty Trust, c/o Nicholas Delegas
 Applicant
 April 16, 2019
 Dated
 081-1191 (Amended)
 DEP File Number

3. The project site is located at:

22 Washington Street
 Street Address
 Weymouth
 City/Town
 Map 20
 Assessors Map/Plat Number
 Block 202, Lots 13 and 17 thru 21
 Parcel/Lot Number

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

GND Realty Trust, c/o Nicholas Delegas
 Property Owner (if different)
 Norfolk
 County
 N/A
 Certificate (if registered land)
 See attached Parcel Reference List (1 page)
 N/A
 Page

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

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

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



A. Project Information (cont.)

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

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

No

B. Submittal Requirements

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

APPLICANT: GND Realty Trust
 LOCATION: Brookpoint Mixed-Use Development, #4 - #50 Commercial Street, Weymouth
 DEP FILE #: 81-1191 (Amended)

Brookpoint Parcel Reference List

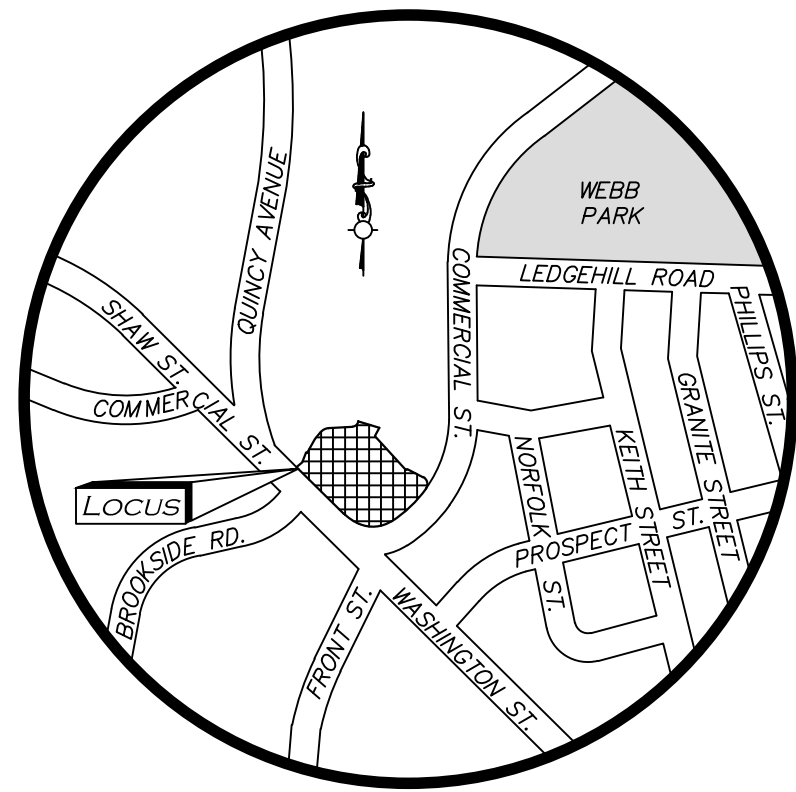
Owner*	Parcel Reference (Map-Block-Lot)	Address	Recording Info (Recorded Land)		Recording Info (Registered Land)	
			Book	Page	Book	Certificate #
TOW	20-202-10	80 Commercial St.	3183	440		
TOW	20-202-21	0 Commercial St.	2730	587		
GND	20-202-13	0 Commercial St.	34730	590		
GND	20-202-18	28-30 Commercial St.	13242	555		
GND	20-202-19	8 Commercial St.				154164
GND	20-202-20	4 Commercial St.	13242	555		
GND	20-202-17	40-50 Commercial St.	13242	555		

* TOW = Town of Weymouth; GND = GND Realty Trust



SUBMITTAL ITEM 2

AS-BUILT PLAN
(6 copies under separate cover)



LOCUS MAP
(NOT TO SCALE)

LOCUS REFERENCES

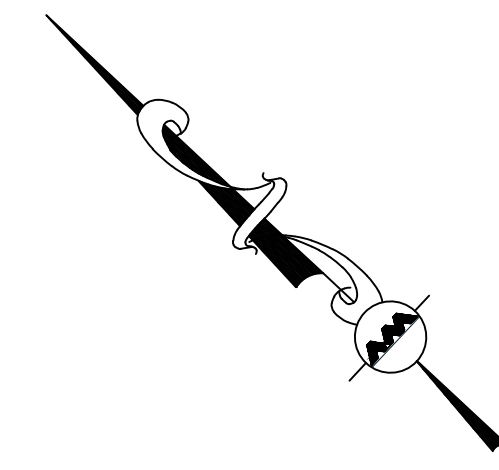
- TOWN OF WEYMOUTH ASSESSORS MAP 20, BLOCK 202,
- LOTS 13, 17, 18, 19, & 20
- DEED BOOK 13242, PAGE 555
- CERTIFICATE OF TITLE 154164

NOTES

1. NORTH ARROW IS BASED ON MASSACHUSETTS GRID COORDINATE SYSTEM (MAINLAND ZONE) (NAD 83).
2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM NORFOLK COUNTY REGISTRY OF DEEDS IN DEDHAM, MA.
3. ALL CURBING SHOWN HEREON IS GRANITE UNLESS OTHERWISE NOTED.

PLAN REFERENCES

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- PLAN 937 OF 1953
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- L.C.C. 9361 A THRU D
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- 1926 COUNTY LAYOUT OF COMMERCIAL STREET
- 1960 COUNTY LAYOUT OF COMMERCIAL STREET



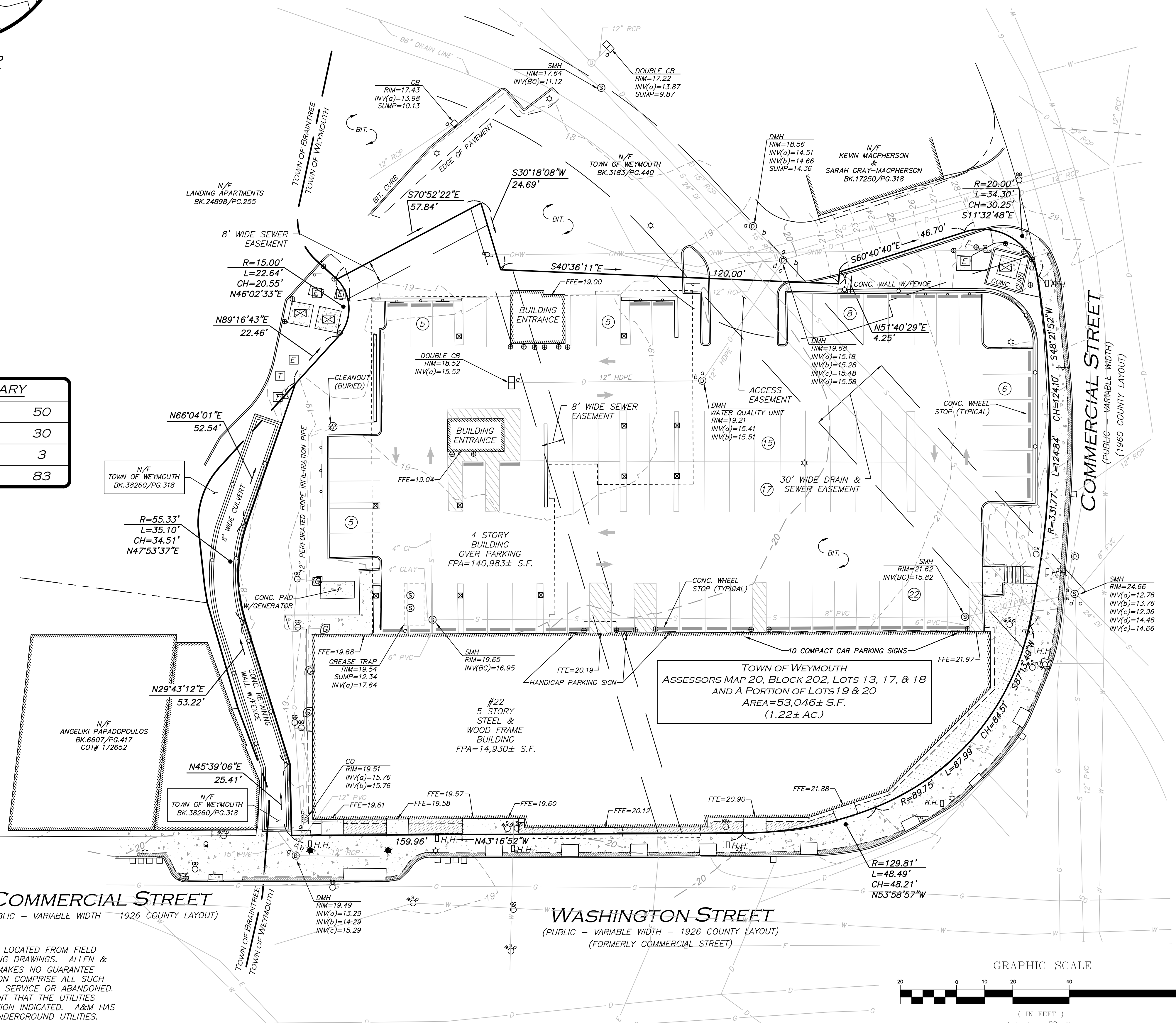
FOR REGISTRY USE ONLY

LEGEND

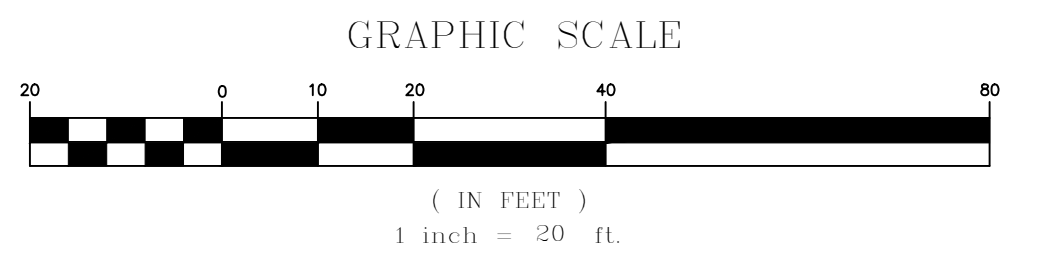
DRAIN MANHOLE (DMH)	⊙
SEWER MANHOLE (SMH)	⊕
CATCH BASIN (CB)	⊠
UTILITY POLE	⊡
UTILITY POLE W/LIGHT	⊡⊡
GUY WIRE	⊥
FIRE HYDRANT	⊕⊕
WATER GATE	⊕
GAS GATE	⊕
BOLLARD	⊙
CLEANOUT	⊙
TREE	⊙
AREA DRAIN	⊙
SIGN	⊙
TRANSFORMER	⊙
DOWNSPOUT	⊙
HAND HOLE	⊙
LIGHT	⊙
TRAFFIC SIGNAL	⊙
ELECTRIC BOX	⊙
GAS METER	⊙
IRRIGATION CONTROL VALVE	⊙
PARKING SPACE COUNT	⊙
CONCRETE	▨
LANDSCAPED AREA (LSA)	▨
BRICK	▨
BUILDING	▨
BUILDING OVERHANG	▨
EASEMENT LINE	---
1' CONTOUR	-19-
5' CONTOUR	-20-
PROPERTY LINE	---
ABUTTERS LINE	---
TOWN LINE	---
CONCRETE RETAINING WALL	▨
EDGE OF PAVEMENT	---
EDGE OF GRAVEL	---
CURB	---
CHAIN LINK FENCE	x
STOCKADE FENCE	⊠
METAL FENCE	⊠
GUARDRAIL	⊠
WATER LINE	W
SEWER LINE	S
DRAIN LINE	D
GAS LINE	G
OVERHEAD WIRES	OHW
FOOTPRINT AREA	FPA
FINISHED FLOOR ELEVATION	FFE
BUILDING HEIGHT	BH
BITUMINOUS	BIT.
CONCRETE	CONC.
GRANITE	GRAN.
BOTTOM CENTER	(BC)
INVERT	INV
REINFORCED CONCRETE PIPE	RCP
POLYVINYL CHLORIDE PIPE	PVC
CAST IRON PIPE	CI
HIGH DENSITY POLYETHYLENE PIPE	HDPE
FOUND	FND
NOW OR FORMERLY	N/F
BOOK	BK.
PAGE	PG.
CERTIFICATE OF TITLE	COT
LAND COURT	L.C.
LAND COURT CASE	L.C.C.

PARKING SUMMARY

STANDARD STALLS	50
COMPACT STALLS	30
HANDICAPPED STALLS	3
TOTAL STALLS	83



UTILITY STATEMENT
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. ALLEN & MAJOR ASSOCIATES, INC. (A&M) MAKES NO GUARANTEE THAT THE UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. A&M FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. A&M HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



WE HEREBY CERTIFY THAT:
THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN MARCH 20, 2019 AND MARCH 29, 2022.
THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 1, 1976 AND REVISED JANUARY 12, 1988.
ACCORDING TO DEEDS AND PLANS OF RECORD, THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIP, AND THE LINES OF THE STREETS OR WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS AND WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.
THE ABOVE CERTIFICATION IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS FOR THE RECORDING OF PLANS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF WEYMOUTH AND TOWN OF BRAINTREE ASSESSOR'S INFORMATION.
THE ABOVE IS CERTIFIED TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF.

ALLEN & MAJOR ASSOCIATES, INC.
MAR 29, 2022
PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.
03/29/22

NORMAN I. LIPSITZ
No. 28446
REGISTERED PROFESSIONAL LAND SURVEYOR AND ACTIVE VOTE

REV	DATE	DESCRIPTION
1.	03/29/22	VARIOUS REVISIONS

OWNER:
GND REALTY TRUST
61 SOLOMON PIERCE ROAD
LEXINGTON, MA 02420

APPLICANT:
CALLAHAN CONSTRUCTION MANAGERS
80 FIRST STREET
BRIDGEWATER, MA 02324

PROJECT:
BROOKPOINT
22 WASHINGTON STREET
WEYMOUTH, MA

PROJECT NO. 1694-13 **DATE:** 03/25/22
SCALE: 1" = 20' **DWG. NAME:** S-1694-13-AB
DRAFTED BY: COB/KAC **CHECKED BY:** NIL

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY
WOBURN MA 01801-8501
TEL: (781) 935-6889
FAX: (781) 935-2896

WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE: AS-BUILT **SHEET No.** 1

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SUBMITTAL ITEM 3

ENGINEER'S CERTIFICATION

July 7, 2021

Mary Ellen Schloss
Conservation Administrator
Town Hall
75 Middle Street
Weymouth, MA 02189

A&M Project #: 2599-01
Re: Brookpoint
22 Washington Street
Weymouth, MA
**Affidavit of Substantial
Compliance**
DEP File No. 081-1191 (Amended)

Dear Ms. Schloss:

Allen & Major Associates, Inc., on behalf of the Applicant, GND Realty Trust; is herewith submitting a Request for Certificate of Compliance for DEP file #081-1191 (Amended) for the recently completed multi-use project at 22 Washington Street, known as Brookpoint. Please consider this letter as our Affidavit certifying compliance with the Notice of Intent Order of Conditions for the referenced project. At this time, site improvements and construction have been completed in substantial compliance with the approved drawings and referenced Order of Conditions. This letter has been prepared as part of a WPA Form 8A Request for Certificate of Compliance for the above referenced Order of Conditions, and in compliance with Special Condition 55a. of the Amended Order dated April 16, 2019.

I, Timothy J. Williams, Massachusetts Registration No. 43119 being a Registered Professional Civil Engineer consider the site improvements to be satisfactorily completed and are generally in compliance with the approved site plans and Order of Conditions on file with the Town of Weymouth. The construction site has been stabilized and is in acceptable condition.

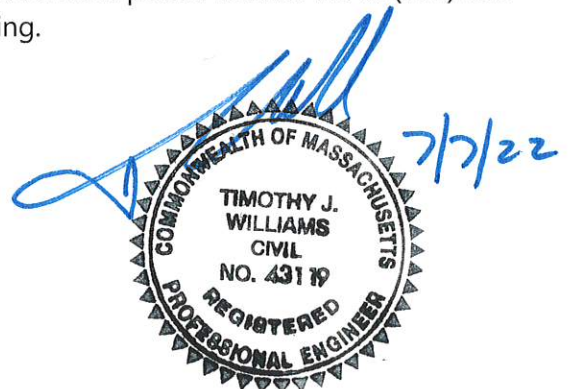
Enclosed is a narrative with the required WPA Form 8a, copies of the final site as-built for the project, supporting documentation and the appropriate filing fee check, as well post-construction color photographs and a photograph key. We thank you in advance for your consideration and please contact me at (781) 935-6889 with the time and date of the Conservation Commission hearing.

Very Truly Yours,

ALLEN & MAJOR ASSOCIATES, INC.



Timothy J. Williams, Commonwealth of Massachusetts PE #43119
Principal
twilliams@allenmajor.com





SUBMITTAL ITEM 4

SITE PHOTOS WITH PLAN KEY

Site Visit Photographs for Request for Certification of Compliance

Brookpoint Mixed Use Development – 22 Washington Street, Weymouth MA

All photos taken June 13, 2022. See photo locations on attached marked-up As-Built plan.

Location 1



View of portion of site looking North-Northeast from opposite side of Washington Street.



Curb and sidewalk view.

Location 2



View of portion of front of site looking North-Northeast from opposite side of Washington Street.



Doorway entrance.

Location 3



View of portion of site looking North-Northeast from opposite side of Washington Street.



View of doorway entrance into building.



View of landscaped area and plantings.

Location 4



View of side of building looking North-Northeast from Washington street.



View of gas meters

Location 5



View of building's side facing East. Planted trees and landscape also visible.



View of building's side facing East. Planted trees and landscape also visible.

Location 6



View of curbing, planted trees, and car charging station facing West.



View of building entrance, curb, planted trees, and building support column.

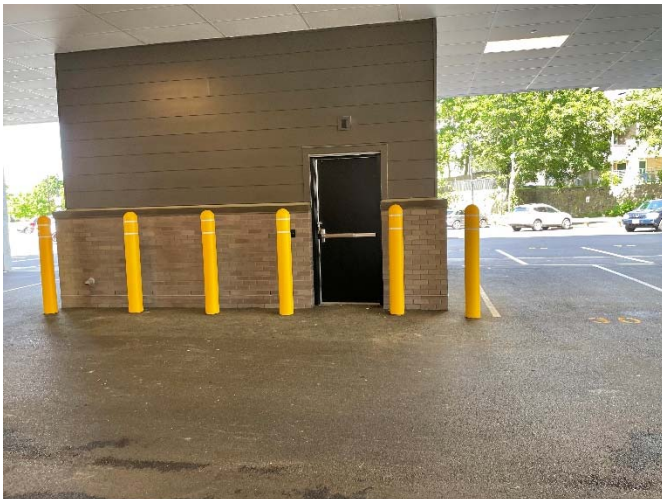


View of parking curb stops under building facing east.

Location 7



View of parking lot under building facing East.



View of doorway entrance facing West.

Location 8



View of parking lot from opposite side of Location 7 facing West. Building entrance and handicapped parking in view.

Location 9



View of freshly paved pavement meeting existing pavement. Facing South-Southwest.



Side of building facing South. Landscaped area in view.

Location 10



View of curbing near site entrance facing North-Northeast.



View of top of retaining wall and fence. Facing south-southwest.



View of building facing North.



View of landscaped area and fence that run along edge of property line.

Location 11



Generator surrounded by bollards near ADA ramp on sidewalk facing West.



Sidewalk flush to curb facing West.

Location 12



View of doorway entrance and parking paint. Facing North, slightly Northwest.



View of building intersection facing True North.



Facing Northwest, view of drive aisle under building, building face, bollards, and support structures.



Facing West, slightly Northwest, view of building face and building intersection.



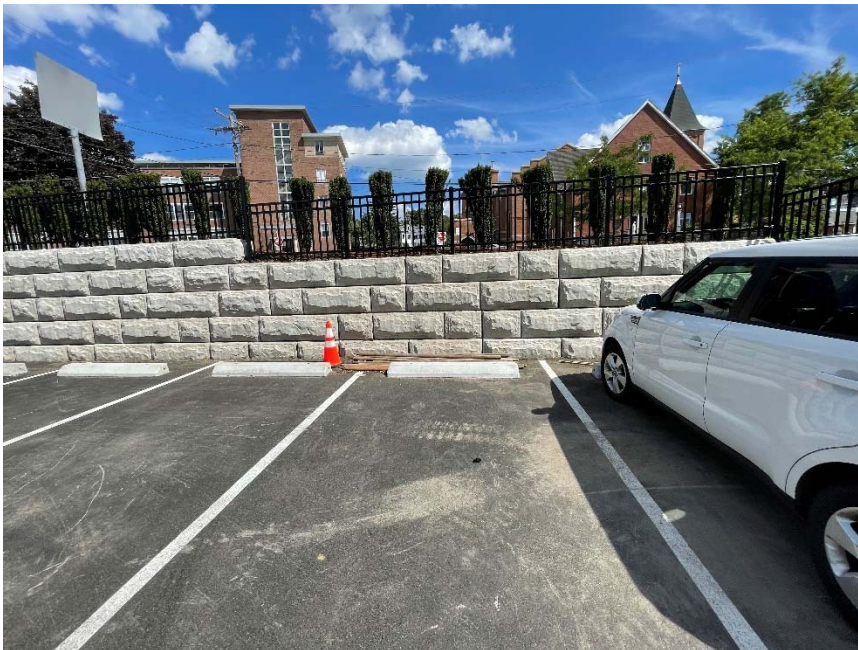
Facing West, view of building which extends to edge of sidewalk on Washington Street.

Location 13



View of Landscaped area and stairs with guardrails facing Southeast.

Location 14



View of retaining wall and fence facing Southeast.



View of building and parking lot facing North-Northwest.

Location 15



View of site from opposite side of Commercial Street. Facing Northwest.



Alternate view of site from opposite side of Commercial Street. Facing Northwest.

Location 16



View of building and landscaped bed and plantings on Commercial Street facing Northwest.

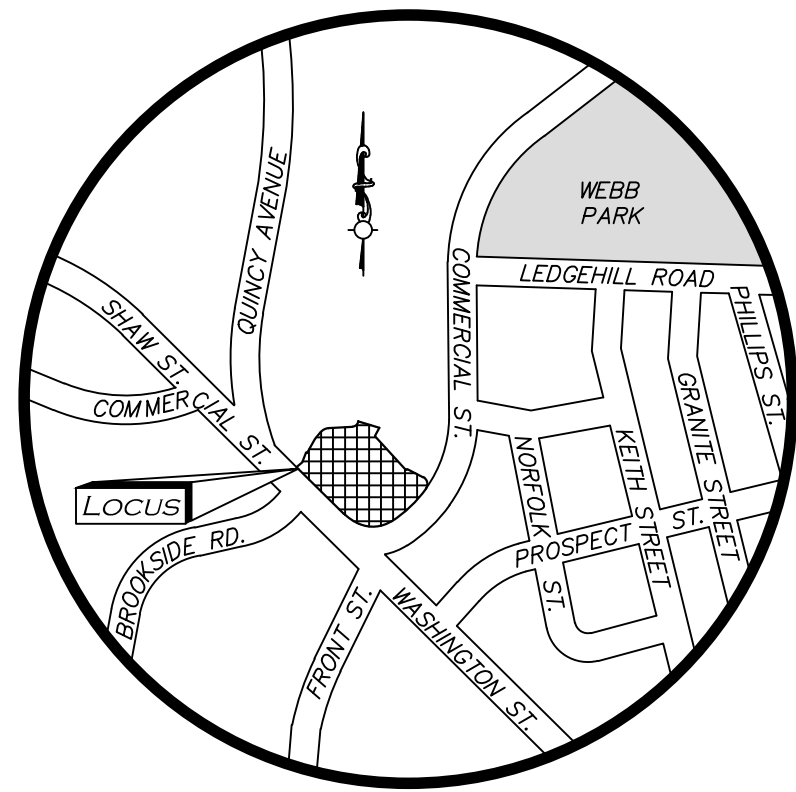


View of curb, sidewalk, hydrant, and landscape plantings facing North.

Location 17



View of building entrance to the fire sprinkler room.



LOCUS MAP
(NOT TO SCALE)

LOCUS REFERENCES

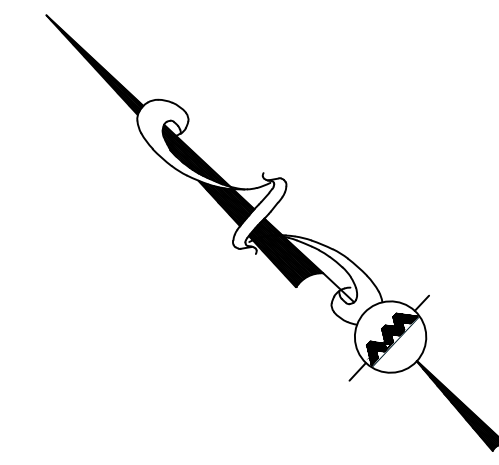
- TOWN OF WEYMOUTH ASSESSORS MAP 20, BLOCK 202,
- LOTS 13, 17, 18, 19, & 20
- DEED BOOK 13242, PAGE 555
- CERTIFICATE OF TITLE 154164

NOTES

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- 1960 COUNTY LAYOUT OF COMMERCIAL STREET



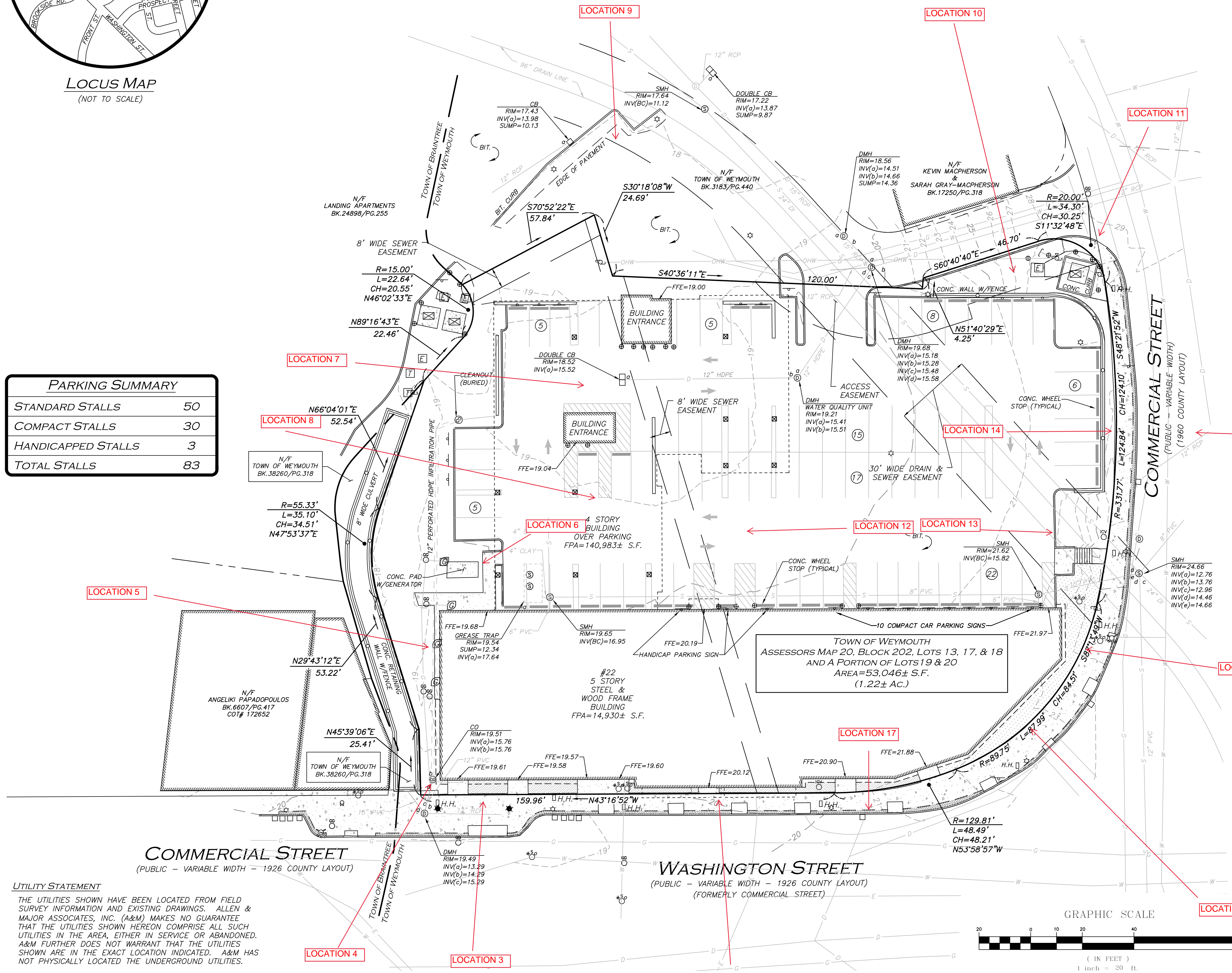
FOR REGISTRY USE ONLY

LEGEND

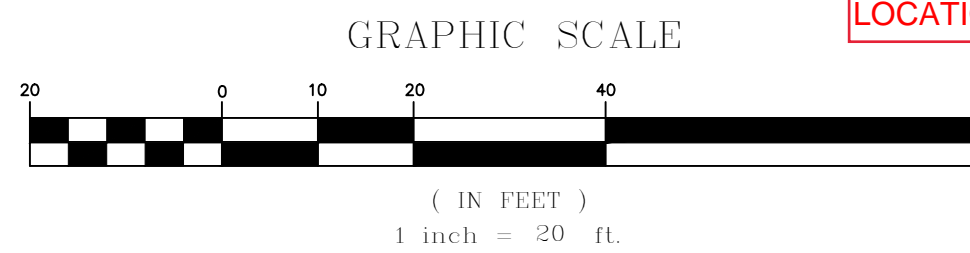
DRAIN MANHOLE (DMH)	⊙
SEWER MANHOLE (SMH)	⊙
CATCH BASIN (CB)	⊙
UTILITY POLE	⊙
UTILITY POLE W/LIGHT	⊙
GUY WIRE	⊙
FIRE HYDRANT	⊙
WATER GATE	⊙
GAS GATE	⊙
BOLLARD	⊙
CLEANOUT	⊙
TREE	⊙
AREA DRAIN	⊙
SIGN	⊙
TRANSFORMER	⊙
DOWNSPOUT	⊙
HAND HOLE	⊙
LIGHT	⊙
TRAFFIC SIGNAL	⊙
ELECTRIC BOX	⊙
GAS METER	⊙
IRRIGATION CONTROL VALVE	⊙
PARKING SPACE COUNT	⊙
CONCRETE	⊙
LANDSCAPED AREA (LSA)	⊙
BRICK	⊙
BUILDING	⊙
BUILDING OVERHANG	⊙
EASEMENT LINE	⊙
1' CONTOUR	⊙
5' CONTOUR	⊙
PROPERTY LINE	⊙
ABUTTERS LINE	⊙
TOWN LINE	⊙
CONCRETE RETAINING WALL	⊙
EDGE OF PAVEMENT	⊙
EDGE OF GRAVEL	⊙
CURB	⊙
CHAIN LINK FENCE	⊙
STOCKADE FENCE	⊙
METAL FENCE	⊙
GUARDRAIL	⊙
WATER LINE	⊙
SEWER LINE	⊙
DRAIN LINE	⊙
GAS LINE	⊙
OVERHEAD WIRES	⊙
FOOTPRINT AREA	⊙
FINISHED FLOOR ELEVATION	⊙
BUILDING HEIGHT	⊙
BITUMINOUS	⊙
CONCRETE	⊙
GRANITE	⊙
BOTTOM CENTER	⊙
INVERT	⊙
REINFORCED CONCRETE PIPE	⊙
POLYVINYL CHLORIDE PIPE	⊙
CAST IRON PIPE	⊙
HIGH DENSITY POLYETHYLENE PIPE	⊙
FOUND	⊙
NOW OR FORMERLY	⊙
BOOK	⊙
PAGE	⊙
CERTIFICATE OF TITLE	⊙
LAND COURT	⊙
LAND COURT CASE	⊙

PARKING SUMMARY

STANDARD STALLS	50
COMPACT STALLS	30
HANDICAPPED STALLS	3
TOTAL STALLS	83



UTILITY STATEMENT
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. ALLEN & MAJOR ASSOCIATES, INC. (A&M) MAKES NO GUARANTEE THAT THE UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. A&M FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. A&M HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



WE HEREBY CERTIFY THAT:
THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN MARCH 20, 2019 AND MARCH 29, 2022.
THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 1, 1976 AND REVISED JANUARY 12, 1988.
ACCORDING TO DEEDS AND PLANS OF RECORD, THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIP, AND THE LINES OF THE STREETS OR WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS AND WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.
THE ABOVE CERTIFICATION IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS FOR THE RECORDING OF PLANS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF WEYMOUTH AND TOWN OF BRAINTREE ASSESSOR'S INFORMATION.
THE ABOVE IS CERTIFIED TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF.

ALLEN & MAJOR ASSOCIATES, INC.
MAR 29, 2022
PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.
NORMAN I. LIPSITZ No. 28446
03/29/22

REV	DATE	DESCRIPTION
1.	03/29/22	VARIOUS REVISIONS

OWNER:
GND REALTY TRUST
61 SOLOMON PIERCE ROAD
LEXINGTON, MA 02420

APPLICANT:
CALLAHAN CONSTRUCTION MANAGERS
80 FIRST STREET
BRIDGEWATER, MA 02324

PROJECT:
BROOKPOINT
22 WASHINGTON STREET
WEYMOUTH, MA

PROJECT NO. 1694-13 DATE: 03/25/22
SCALE: 1" = 20' DWG. NAME: S-1694-13-AB
DRAFTED BY: COB/KAC CHECKED BY: NIL
PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY
WOBURN MA 01801-8501
TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE: AS-BUILT SHEET No. 1
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SUBMITTAL ITEM 5

FILING FEE CHECK

DATE	INVOICE NO.	COMMENT	AMOUNT	NET AMOUNT
07/07/2022	070722	Certificate of Compliance		50.00
DATE 07/07/22			VENDOR Town of Weymouth	TOTAL 50.00

ALLEN & MAJOR ASSOCIATES, INC.

OPERATING ACCOUNT
100 COMMERCE WAY
WOBURN, MA 01801

NORTHERN BANK & TRUST COMPANY

53-309
113

54737

Fifty and no/100

DATE	CHECK NO.	AMOUNT
07/07/22	54737	\$50.00

PAY TO THE ORDER OF
TOWN OF WEYMOUTH

ALLEN & MAJOR ASSOCIATES, INC.



AUTHORIZED SIGNATURE

⑈054737⑈ ⑆011303097⑆ ⑈480 286 1⑈



EXHIBIT 1

PROOF OF FINAL ORDER RECORDATION
(Per Condition 9)

1111

53-7192/2113
BRANCH 16661

CHECK ARMOR
FRAUD PROTECTION

WEYLEX LLC
61 SOLOMON PIERCE RD
LEXINGTON MA 02420-2537

DATE 12/30/2021

\$ 106 ^{NO}/₁₀₀

DOLLARS

Photo
Safe
Deposit
Details on back

PAY
TO THE
ORDER OF

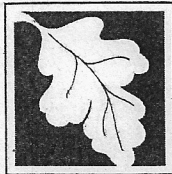
Resin of deeds

one hundred six dollars

bank Hometown

FOR

⑈001111⑈ ⑆211371926⑆ 490 08216 3⑈



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

WPA Form 7 – Extension Permit for Orders of Conditions

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

DEP File Number:

81-1191
(Amended)

Provided by DEP

A. General Information

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



1. Applicant:

Nicholas Delegas, GND Realty Trust

Name

61 Solomon Pierce Road

Mailing Address

Lexington

City/Town

MA

State

02420

Zip Code

2. Property Owner (if different):

Name

Mailing Address

City/Town

State

Zip Code

B. Authorization

The Order of Conditions (or Extension Permit) issued to the applicant or property owner listed above on:

(04/16/19) (amended order)

Issued by:

Weymouth (original OOC issued 03-29-17)

Conservation Commission

for work at:

22 Washington St (f/k/a 4-50 Commercial St.)

Map 20, Block 202

Assessor's Map/Plat Number

Lot 13,17-20

Parcel/Lot Number

recorded at the Registry of Deeds for:

(Amended Order) Norfolk

County

154164

Certificate (if registered land)

37541

Book

568

Page

is hereby extended until:

08/24/2022

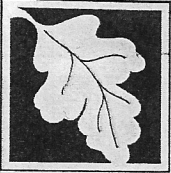
Date

03/29/2021

Date the Order was last extended (if applicable)

This date can be no more than 3 years from the expiration date of the Order of Conditions or the latest extension. Only unexpired Orders of Conditions or Extension may be extended.

This Extension Permit must be signed by a majority of the Conservation Commission and a copy sent to the applicant and the appropriate DEP Regional Office (<https://www.mass.gov/service-details/massdep-regional-offices-by-community>).



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

WPA Form 7 – Extension Permit for Orders of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

81-1191
(Amended)
Provided by DEP

C. Recording Confirmation

The applicant shall record this document in accordance with General Condition 8 of the Order of Conditions (see below), complete the form attached to this Extension Permit, have it stamped by the Registry of Deeds, and return it to the Conservation Commission.

Note: General Condition 8 of the Order of Conditions requires the applicant, prior to commencement of work, to record the final Order (or in this case, the Extension Permit for the Order of Conditions) in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, it shall be noted in the Registry's Granter Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, it shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done.

Detach this page and submit it to the Conservation Commission prior to the expiration of the Order of Conditions subject to this Extension Permit.

To:

Weymouth
Conservation Commission

Please be advised that the Extension Permit to the Order of Conditions for the project at:

22 Washington Street
Project Location

81-1191 (Amended)
DEP File Number

has been recorded at the Registry of Deeds of:

Norfolk
County

for:

Property Owner

and has been noted in the chain of title of the affected property in accordance with General Condition 8 of the original Order of Conditions on:

Date

Book

Page

If recorded land the instrument number which identifies this transaction is:

Instrument Number

If registered land, the document number which identifies this transaction is:

Document Number

Signature of Applicant



EXHIBIT 2

GRADING & DRAINAGE PLAN, PHOTOS OF
OFF-SITE DRAINAGE STRUCTURE
IMPROVEMENTS AND DPW EMAIL CHAIN
(Per Condition 41)

Exhibit 2 - Off-Site Drainage Improvements Photos for Condition 41 – Brookpoint 22 Washington St



Photo 1 – Installed Off-Site Double Catch Basin



Photo 2 – Installed Oil Snout/Hood #1 Retrofit



Photo 3 – Installed Oil Snout/Hood #2 Retrofit



Photo 4 – Existing Off-Site Catch Basin

David Robinson

From: cfontaine@weymouth.ma.us
Sent: Friday, December 13, 2019 11:20 AM
To: Nicholas Dellacava
Cc: RLuongo@weymouth.ma.us; KConnell@weymouth.ma.us; JMcgrath@weymouth.ma.us; JRichards@weymouth.ma.us; Richard Evans
Subject: RE: Comments on Brookpoint PP resubmittal

Looks good. Thanks!

Andrew P. (Chip) Fontaine, P.E.

Town Engineer
Weymouth DPW
120 Winter St.
Weymouth, MA 02188
W: 781-927-0848
C: 781-858-4292

From: Nicholas Dellacava [mailto:ndellacava@allenmajor.com]
Sent: Friday, December 13, 2019 11:06 AM
To: Fontaine, Andrew <cfontaine@weymouth.ma.us>
Cc: Luongo, Robert <RLuongo@weymouth.ma.us>; Connell, Kenan <KConnell@weymouth.ma.us>; Mcgrath, James <JMcgrath@weymouth.ma.us>; Richards, Jeffrey <JRichards@weymouth.ma.us>; Richard Evans <revans@callahan-inc.com>
Subject: RE: Comments on Brookpoint PP resubmittal

Chip,
I agree and think that's a great idea. I've updated the plan accordingly and attached for final review. I wont be able to have the plan stamped/signed until Monday morning as Tim Williams is out of the office today.

Thanks, Nick



From: cfontaine@weymouth.ma.us <cfontaine@weymouth.ma.us>
Sent: Thursday, December 12, 2019 3:17 PM
To: Nicholas Dellacava <ndellacava@allenmajor.com>
Cc: RLuongo@weymouth.ma.us; KConnell@weymouth.ma.us; JMcgrath@weymouth.ma.us; JRichards@weymouth.ma.us; Richard Evans <revans@callahan-inc.com>
Subject: RE: Comments on Brookpoint PP resubmittal

Hi Nick,

To give me a little peace of mind, especially given the number of deciduous trees* that are right above the CB that you say will take whatever runoff would have otherwise entered the CB that you propose to convert to a DMH, can you convert that CB to a double grate? (*I have pix if you want to see them.)

I believe what's there is a flat top structure but this needs to be verified. If I am right, the existing flat top could just be replaced with one that will accept the double grate and the frame and grate replaced.

If you're agreeable to that, I'll go along with the conversion of the in-line CB to a DMH. Just identify on the plan that the DMH frame & cover (F&C) is to be Town of Weymouth Standard (see the detail drawing I sent you earlier).

And if you want to have that revised plan sheet (C-103) PE-stamped, signed and scanned, you can just email me the scan and I'll print it and use it to replace the one in the sets I have now.

Thanks!!

Andrew P. (Chip) Fontaine, P.E.

Town Engineer
Weymouth DPW
120 Winter St.
Weymouth, MA 02188
W: 781-927-0848
C: 781-858-4292

From: Nicholas Dellacava [<mailto:ndellacava@allenmajor.com>]
Sent: Thursday, December 12, 2019 9:42 AM
To: Fontaine, Andrew <cfontaine@weymouth.ma.us>
Cc: Luongo, Robert <RLuongo@weymouth.ma.us>; Connell, Kenan <KConnell@weymouth.ma.us>; Mcgrath, James <JMcgrath@weymouth.ma.us>; Richards, Jeffrey <JRichards@weymouth.ma.us>
Subject: RE: Comments on Brookpoint PP resubmittal

Chip,
Upon closer inspection the CB in question is no longer needed with the proposed grading. The watershed area bubbled in red on the attached plan is only 9k s.f. which will drain to the existing CB at the top of the sketch if we eliminate the CB in question. Therefore, I'd like to propose replacing the existing CB frame/grate with a new DMH frame and cover as I don't think a new DMH and/or CB structure is necessary. It's my understanding that this structure is only about 10 years old and was installed when the parking lot was constructed. You will see in the attached picture that the existing structure has no sump (as previously indicated) and is in good condition for a DMH conversion.

If you agree and find this to be an acceptable alternative, we will update the plan accordingly and submit for your review.

Thanks,
Nick

Nicholas Dellacava, PE

Allen & Major Associates, Inc.
100 Commerce Way, Suite 5
Woburn, MA 01801-8501
Dir: (781) 305-9458
Tel: (781) 935-6889
ndellacava@allenmajor.com



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From: cfontaine@weymouth.ma.us <cfontaine@weymouth.ma.us>

Sent: Wednesday, December 11, 2019 9:25 AM

To: revans@callahan-inc.com

Cc: RLuongo@weymouth.ma.us; KConnell@weymouth.ma.us; JMcgrath@weymouth.ma.us; Nicholas Dellacava <ndellacava@allenmajor.com>; JRichards@weymouth.ma.us

Subject: RE: Comments on Brookpoint PP resubmittal

Hi Richard,

I've reviewed the recently re-submitted plans and have only 2 remaining comments.

1. With respect to my comment (# 3, below) regarding the USACE approval of the proposed work in the drain easement, I am willing to issue the DPW's PP, and associated "sill slip", under the condition that our approval is predicated on the USACE approval. Construction should not begin until said approval is obtained. Please plan to send me a copy of said approval once it is received.
2. I didn't initially realize that the existing CB being proposed for replacement in my comment # 6 below is an "in line" CB that has piped inflow coming into it from upstream sources. We do not allow new installations with this configuration. Instead, the existing CB should be replaced with a new drain

manhole (DMH) and the new CB, to replace the existing CB, will be piped into the new DMH. This will also require that a DMH detail be added to the plans.

I'm sorry that I missed the in line configuration of the existing CB but if you can just get me an updated drawing sheet C-103 (Grading and Drainage Plan) showing the new configuration, I will swap out that sheet with the one in my set(s). And if another sheet is modified for the DMH detail, I will need that one too.

Hopefully this is a quick and easy change. I will plan to issue our PP and sill slip as soon as possible once I receive the updated plan sheets. Thanks!

Andrew P. (Chip) Fontaine, P.E.

Town Engineer
Weymouth DPW
120 Winter St.
Weymouth, MA 02188
W: 781-927-0848
C: 781-858-4292

From: Fontaine, Andrew
Sent: Tuesday, December 3, 2019 11:35 AM
To: 'revans@callahan-inc.com' <revans@callahan-inc.com>
Cc: Luongo, Robert <RLuongo@weymouth.ma.us>; 'Connell, Kenan (KConnell@weymouth.ma.us)' <KConnell@weymouth.ma.us>; jmcgrath@weymouth.ma.us; 'Nicholas Dellacava' <ndellacava@allenmajor.com>
Subject: Comments on Brookpoint PP resubmittal

Hi Richard,

As we briefly discussed yesterday, the following are my comments on the resubmitted Building Permit Plot Plan (PP) dated 11/1/19 for the Brookpoint project. These comments also address the Allen & Major Associates (A&M) memo dated 11/4/19 that was their response to the DPW comments memo dated 10/23/19.

1. A few minor discrepancies were noted on the newly submitted Existing Conditions Plan (Sheet V-101): the existing access easement along the easterly side of Parcel 20-202-13 is not shown; the 24" diameter sewer main in Commercial St. and the sewer easement is ductile iron (DI), not cast iron (CI); and our records indicate that the existing sewer pipe entering the sewer

manhole (SMH) in Commercial St. with the designation “b” is 8”, not 10”, PVC.

2. The “Cotton Gin Spindle” that was set in the beginning of bituminous walkway just off of the Washington St. sidewalk as Benchmark # 2 is considered a temporary benchmark and must be protected from disturbance during construction.
3. In regard to DPW comment # 5, the response provides a U.S. Army Corps of Engineers (USACE) letter dated 8/27/18 that references 4 documents that they reviewed in reaching their conclusion that a Section 408 approval is not required. But the proposed work within the subject easement* that they describe does not include the connection of the proposed sewer system to the existing Weymouth SMH within the easement. And the referenced 4 documents have also not been provided. This leaves it unclear that the USACE has actually been made aware of the currently proposed work. (*Drain easement held by the Weymouth-Braintree Regional Recreation-Conservation District, or WBRRCD, for the 96” diameter pressure conduit.)
4. The DPW requirement that Controlled Density Fill (CDF) be used as backfill for any trenches in Washington St. or Commercial St. (DPW comment # 8) will affect the Trench Detail on Sheet C-504.
5. DPW comment # 9 proposed use of an inside drop for the connection to the existing SMH and detail drawing S-05 was provided. However, the plans have incorporated our detail drawing S-02, which is an outside drop. Please confirm that it is the intent of the project to use an outside, not inside, drop sewer connection to the existing SMH.
6. DPW comment # 10 identified catch basins (CBs) that require inspection and confirmation of deep sumps and hoods per the Conservation Commission Order of Conditions. An email from Nick Dellacava of A&M sent on 11/8/19 identified 3 existing CBs that have been inspected. One of the CBs will need to be replaced with a new deep sump CB with outlet hood and the other two need hoods. This proposed work needs to be shown on this PP.

Let me know if you need any further information or clarification.

Thanks!

Andrew P. (Chip) Fontaine, P.E.

Town Engineer
Weymouth DPW
120 Winter St.
Weymouth, MA 02188
W: 781-927-0848
C: 781-858-4292

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Town of Weymouth, 75 Middle Street, Weymouth, MA, 02189

www.weymouth.ma.us



EXHIBIT 3

PROOF OF DRAINAGE STRUCTURE
CLEANING (Per Condition 45)

Crana & Sons Inc
283 Westminster Rd
Weymouth, MA 02189

INVOICE

Phone 617-293-4442

Email cranaandsons@gmail.com

INVOICE NO. 219

BILL TO

SHIP TO

Genesis Utilities Corp
1135 Pearl St
Brockton, MA 02301

Same as recipient

DESCRIPTION

AMOUNT

Final cleaning/jetting of all manholes, catch basins and drains @
Weymouth Landing - April 8th 2022 **\$1,500.00**

Total **\$1,500.00**

Make all checks payable to Crana & Sons

If you have any questions concerning this invoice, contact Stephen Cassidy (617)293 4442. Thank you for your business.



EXHIBIT 4

POST-CONSTRUCTION OPERATION &
MAINTENANCE (O&M) PLAN
(Per Condition 52)

OPERATION & MAINTENANCE PLAN

Mixed-Use Development
22 Washington Street, Weymouth, MA

A&M Project # 2599-01
July 7, 2022

OPERATION AND MAINTENANCE PLAN

In accordance with the standards set forth by the Stormwater Management Policy issued by the Department of Environmental Protection (DEP), Allen & Major Associates, Inc. (A&M) has prepared the following Operation and Maintenance plan for the recently completed Mixed-Use project located at #22 Washington Street, Weymouth, MA.

This Operations & Maintenance (O&M) Plan is devoted to a post-development operation and maintenance for the drainage system recently installed on-site. An operation and maintenance schedule has also been included with this report.

Stormwater Management System Owner: GND Realty Trust
61 Soloman Pierce Road
Lexington, MA 02420

Emergency Contact Information:

- GND Realty Trust (Owner) Phone (781) 249-8134
- Allen & Major Associates, Inc. (Site Civil Engineer) Phone (781) 935-6889
- Weymouth Public Works Phone (781) 337-5100
- Weymouth Fire Department (business line) Phone (781) 337-5151

INTRODUCTION

The stormwater management system (SMS) for this project is owned by GND Realty Trust; and shall be legally responsible for long-term operation and maintenance for this SMS as outlined in this Operation and Maintenance (O&M) Plan. Should ownership of the SMS change the succeeding owner will be presented with this O&M Plan and supporting attachments at or before legal conveyance of ownership and will assume the obligations of the O&M Plan.

In the event that the SMS will be operated and maintained by an entity other than that listed in this document, the applicant shall provide a plan and easement deed that provides a right of access for the legal entity to be able to perform said operation and maintenance functions. In the event the SMS will serve multiple lots/owners, the applicant shall also provide a copy of the legal instrument (deed, homeowner’s association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the entire SMS.

OPERATION & MAINTENANCE PLAN

Mixed-Use Development
22 Washington Street, Weymouth, MA

A&M Project # 2599-01
July 7, 2022

POST CONSTRUCTION MAINTENANCE PLAN

The SMS shall be inspected immediately after construction. A maintenance log will be kept (i.e. report) summarizing inspections, maintenance, and any corrective actions taken. The log will include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, the location where the sediment and debris was disposed after removal will be indicated. The log will be made accessible to department staff and a copy provided to the department upon request.

Inspection and Maintenance Frequency and Corrective Measures:

The following areas, facilities, and measures will be inspected and the identified deficiencies will be corrected. Clean-out must include the removal and legal disposal of any accumulated sediments, trash, and debris. In any and all cases, operations, inspections, and maintenance activities shall utilize best practical measures to avoid and minimize impacts to wetland resource areas outside the foot print of the SMS.

Attached is an Operation and Maintenance Plan illustrating the location of the following SMS components that will require continuing inspections as outlined in this document:

- Deep Sump Catch Basins & Drain Manholes
- Proprietary Hydrodynamic Separator (CDS-2015-4)
- Subsurface Infiltration System (Drywell)

Monthly Post Construction Inspection (First three months only)

- **Sub-surface Infiltration System (Drywell):**

Inspect the Infiltration system after all rainfalls greater than 1" to ensure that the system is draining within 72 hours. Repair as required.

Quarterly Inspections (specifically after foliage and snow season)

Deep Sump Catch Basins:

Inspect catch basins to ensure that the catch basins are working in their intended fashion and that they are free of debris. Structures will be skimmed of floatable debris at each inspection and sediment will be removed at a minimum once per year (typically after snow season) or when sediment has accumulated to within 2 feet of the outlet invert. If the basin outlet is designed with a hood to trap floatable materials (i.e. Snout), check to ensure watertight seal is working.

OPERATION & MAINTENANCE PLAN

Mixed-Use Development
22 Washington Street, Weymouth, MA

A&M Project # 2599-01
July 7, 2022

Proprietary Separators:

Separators shall be operated in strict accordance with manufacturer's recommend practices. Available manufacturer specific O&M plans attached as Appendix. Separators shall be inspected to ensure that they are working in their intended fashion and that they are free of debris. Structures shall be cleaned with a vacuum truck at least once annually (typically after snow season) or when sediment has accumulated to a depth of six inches (6"), whichever is more frequent.

Sub-surface Infiltration System (Drywell):

The sub-surface structures will be inspected 24 hours or several days after large rain events (greater than 1.5"), to look for ponded water. Inspection can be accomplished by using the observation well, inspection port, and/or access structure for underground chamber systems.

Semi-Annual Inspection (specifically after foliage & snow season)

Culverts:

Inspect culverts to ensure that the culverts are working in their intended fashion and that they are free of debris. Remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit and to repair any erosion damage at the culvert's inlet and outlet. Multiple 60" diameter culverts exist on site and A&M recommends thoroughly cleaning and inspecting these culverts prior to construction.

Vegetated Areas:

Inspect slopes and embankments early in the growing season to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

Roadways and Parking Surfaces:

Sweep paved areas as soon as possible after snow melt and no less than four times annually. Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping.

Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader.

OPERATION & MAINTENANCE PLAN

Mixed-Use Development
22 Washington Street, Weymouth, MA

A&M Project # 2599-01
July 7, 2022

LANDSCAPE MANAGEMENT PLAN

It should be recognized that this is a general guideline towards achieving high quality and well-groomed landscaped areas. The grounds staff / landscape contractor must recognize the shortcomings of a general maintenance program such as this, and modify and/or augment it based on weekly, monthly, and yearly observations. In order to assure the highest quality conditions, the staff must also recognize and appreciate the need to be aware of the constantly changing conditions of the landscaping and be able to respond to them on a proactive basis.

Additional care must be taken in landscape areas that are functioning as BMP drainage structures. These areas have been specifically designed to treat and convey stormwater and shall be maintained as such.

Fertilizer

Maintenance practices should be aimed at reducing environmental, mechanical and pest stresses to promote healthy and vigorous growth. When necessary, pest outbreaks should be treated with the most sensitive control measure available. Synthetic chemical controls should be used only as a last resort to organic and biological control methods. Fertilizer, synthetic chemical controls and pest management applications (when necessary) should be performed only by licensed applicators in accordance with the manufacturer's label instructions when environmental conditions are conducive to controlled product application.

Only slow-release, phosphorous-free organic fertilizers should be used in the landscaped areas to limit the amount of nutrients that could enter downstream resource areas. Fertilization of developed areas on site will be performed within manufacturers labeling instructions. Additionally, the fertilizer will include a slow release element and be Phosphorous free.

Suggested Aeration Program

In-season aeration of lawn areas is good cultural practice, and is recommended whenever feasible. It should be accomplished with a solid thin tine aeration method to reduce disruption to the use of the area. The depth of solid tine aeration is similar to core type, but should be performed when the soil is somewhat drier for a greater overall effect.

Depending on the intensity of use, it can be expected that all landscaped lawn areas will need aeration to reduce compaction at least once per year. The first operation should occur in late May following the spring season. Methods of reducing compaction will vary based on the nature of the compaction. Compaction on newly established landscaped areas is generally limited to the top 2-3" and can be alleviated using hollow core or thin tine aeration methods.

OPERATION & MAINTENANCE PLAN

Mixed-Use Development
22 Washington Street, Weymouth, MA

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The spring aeration should consist of two passes at opposite directions with 1/4" hollow core tines penetrating 3-5" into the soil profile. Aeration should occur when the soil is moist but not saturated. The cores should be shattered in place and dragged or swept back into the turf to control thatch. If desired the cores may also be removed and the area top-dressed with sand or sandy loam. If the area drains on average too slowly, the topdressing should contain a higher percentage of sand. If it is draining on average too quickly, the top dressing should contain a higher percentage of soil and organic matter.

Landscape Maintenance Program Practices:

Lawn

- Mow a minimum of once a week in spring, to a height of 2" to 2 1/2" high. Mowing should be frequent enough so that no more than 1/3 of grass blade is removed at each mowing. The top growth supports the roots; the shorter the grass is cut, the less the roots will grow. Short cutting also dries out the soil and encourages weeds to germinate.
- Mow approximately once every two weeks from July 1st to August 15th depending on lawn growth.
- Mow on a ten-day cycle in fall, when growth is stimulated by cooler nights and increased moisture.
- Do not remove grass clippings after mowing. (Except in Drainage BMP's)
- Keep mower blades sharp to prevent ragged cuts on grass leaves, which cause a brownish appearance and increase the chance for disease to enter a leaf.
- Supplemental irrigation of lawn areas should provide 1" of water per week in two watering's per week—when no natural rainfall has occurred.

Shrubs

- Mulch not more than 3" depth with shredded pine or fir bark.
- Hand pruning shall be performed annually based on the natural growth characteristics of each species to keep plants from overgrowing walks and windows. NO SHEARING OF SHRUBS IS PERMITTED. Typically, pruning of each variety shall be immediately after blooming.
- Fertilize with 1/2 lb. slow-release fertilizer (see above section on Fertilizer) every second year.
- Hand prune evergreen shrubs only as needed to remove dead and damaged wood and to maintain the naturalistic form of the shrub. Never mechanically shear evergreen shrubs.

Trees

- Provide aftercare for new tree plantings for the first three years.
- Do not fertilize trees, it artificially stimulates them (unless tree health warrants).

OPERATION & MAINTENANCE PLAN

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- Water once a week for the first year; twice a month the second, once a month the third year.
- Prune trees on a four-year cycle.

Maintenance Phase

By the fourth growing season, the planted grasslands should be reaching maturity. At this time, half of the grassland habitat area should be mown annually in mid- August to maintain the grassland habitat, limiting the opportunity for shrubs and late-blooming forbs to spread, and allowing the grasses time to recover before dormancy.

Management of Deicing Chemicals and Snow

Snow shall not be plowed towards any area protected by the Massachusetts Wetlands Protection Act. If the stockpiles of snow do not fit within the designated areas, then snow will be disposed off-site. It will be the responsibility of the snow removal contractor to properly dispose of transported snow according to the Massachusetts DEP, Bureau of Resource Protection – Snow Disposal Guideline #BRPG01-0, governing the proper disposal of snow, or current version. It will be the responsibility of the snow removal contractor to follow these guidelines and all applicable laws and regulations. A copy of the MA DEP Snow Disposal Guideline #BRPG01-01 has been included at the end of Section 2 for reference.

The sites maintenance staff (or its designee) will be responsible for the clearing of the sidewalk and building entrances. The site may be required to use a de-icing agent such as potassium chloride (or approved equal) to maintain a safe walking surface; however, these are to be used at the minimum amount practicable. The de-icing agent for the walkways and building entrances will be kept within the storage rooms located within the buildings. De-icing agents will not be stored outside.

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Spill Prevention and Response

Sources of potential spill hazards include vehicle fluids, liquid fuels, pesticides, paints, solvents, and liquid cleaning products. The majority of the spill hazards would likely occur within the building and would not enter the stormwater drainage system. However, there are spill hazards from vehicle fluids or liquid fuels located outside of the buildings. These exterior spill hazards have the potential to enter the stormwater drainage system and are to be addressed as follows:

1. Spill Hazards of pesticides, paints, and solvents shall be remediated using the Manufacturers' recommended spill cleanup protocol.
2. Vehicle fluids and liquid fuel spill shall be remediated according to the local and state regulations governing fuel spills.
3. The owner shall have the following equipment and materials on hand to address a spill clean-up: brooms, dust pans, mops, rags, gloves, absorptive material, sand, sawdust, plastic and metal trash containers.
4. All spills shall be cleaned up immediately after discovery
5. Spills of toxic or hazardous material shall be reported, regardless of size, to the Massachusetts Department of Environmental Protection at 888-304-1133.
6. Should a spill occur, the pollution prevention plan will be adjusted to include measures to prevent another spill of a similar nature. A description of the spill, along with the causes and cleanup measures will be included in the updated pollution prevention plan.

OPERATION & MAINTENANCE PLAN SCHEDULE

Project: Mixed-Use Development
Address: 22 Washington Street
 Weymouth, MA

Party Responsible for Maintenance: NGD Realty Trust
Address: 61 Soloman Pierce Road
 Lexington, MA 02420

Date: 7/6/2022
Revised: TBD

Phone: (781)-249-8134

Structure or Task	Maintenance Activity	Schedule/Notes	Annual Maintenance Cost	Inspection Performed	
				Date:	By:
Deep Sump Catch Basins(s)	Clam shell or vacuum sumps	Inspect at least twice annually. Clean when sediment is within 2.5 feet of the outlet invert.	\$1,500		
		Submit information that confirms that all catch basin sediments have been disposed in accordance with state and local requirements			
Storm Water Management System					
Proprietary Separators	See the CDS Maintenance package for the inspection, maintenance and cleaning procedure.	Inspect at least four times annually as well as following storms exceeding 1" of rainfall. Devices shall be cleaned at least once annually or when sediment reaches 6 inches of depth whichever is more frequent. See also note #1 below.	\$1,000		
		Submit information that confirms that all water quality inlets sediments have been disposed in accordance with state and local requirements			
Subsurface Infiltration System (Drywell)	Inspect to ensure it is draining properly.	Perform every other month as well as after every storm event over 1/2". See also note #1 below.	\$2,000		
	Inspect using inspection port/access cover and remove any accumulated sediment when average depth reaches 1" per the manufacturers recommendation.	On a semi-annual basis.			
Mosquito Control	CB management targeted larviciding treatment to CB's and all storm drains to control mosquitoes in their aquatic stages.	Surveillance is a non chemical inspection method that involves classification of mosquito breeding sites, larval presents, and survey.	\$500		
Snow Storage	Debris shall be cleared from the site and properly disposed of at the end of the snow season, but shall be cleared no later than May 15.	Avoid dumping snow removal over catch basins, in detention ponds, sediment forebays, rivers, wetlands, and flood plain. It is also prohibited to dump snow in the bioretention basins or gravel swales. (See Site Plan for appropriate locations)	\$1,500		

Note #1 - During the first year of operation, all of the BMP's shall be inspected during and after large storm events to ensure they are functioning properly. The subsurface infiltration systems should be fully drained within 72 hours after a rain event. If they are not drained within this time period, the systems shall be evaluated and corrective actions should be implemented.



Energy and Environmental Affairs

[Home](#) > [Agencies](#) > [MassDEP](#) > [Water Resources](#) > [Laws & Rules](#) > [Snow Disposal Guidance](#)

Snow Disposal Guidance

Effective Date: March 8, 2001

Guideline No. BRPG01-01

Applicability: Applies to all federal, state, regional and local agencies, as well as to private businesses.

Supersedes: BRP Snow Disposal Guideline BRPG97-1 issued 12/19/97, and all previous snow disposal guidance

Approved by: Glenn Haas, Assistant Commissioner for Resource Protection

PURPOSE: To provide guidelines to all government agencies and private businesses regarding snow disposal site selection, site preparation and maintenance, and emergency snow disposal options that are acceptable to the Department of Environmental Protection, Bureau of Resource Protection.

APPLICABILITY: These Guidelines are issued by the Bureau of Resource Protection on behalf of all Bureau Programs (including Drinking Water Supply, Wetlands and Waterways, Wastewater Management, and Watershed Planning and Permitting). They apply to public agencies and private businesses disposing of snow in the Commonwealth of Massachusetts.

INTRODUCTION

Finding a place to dispose of collected snow poses a challenge to municipalities and businesses as they clear roads, parking lots, bridges, and sidewalks. While we are all aware of the threats to public safety caused by snow, collected snow that is contaminated with road salt, sand, litter, and automotive pollutants such as oil also threatens public health and the environment.

As snow melts, road salt, sand, litter, and other pollutants are transported into surface water or through the soil where they may eventually reach the groundwater. Road salt and other pollutants can contaminate water supplies and are toxic to aquatic life at certain levels. Sand washed into waterbodies can create sand bars or fill in wetlands and ponds, impacting aquatic life, causing flooding, and affecting our use of these resources.

There are several steps that communities can take to minimize the impacts of snow disposal on public health and the environment. These steps will help communities avoid the costs of a contaminated water supply, degraded waterbodies, and flooding. Everything we do on the land has the potential to impact our water resources. Given the authority of local government over the use of the land, municipal officials and staff have a critically important role to play in protecting our water resources.

The purpose of these guidelines is to help municipalities and businesses select, prepare, and maintain appropriate snow disposal sites before the snow begins to accumulate through the winter.

RECOMMENDED GUIDELINES

These snow disposal guidelines address: (1) site selection; (2) site preparation and maintenance; and (3) emergency snow disposal.

1. SITE SELECTION

The key to selecting effective snow disposal sites is to locate them adjacent to or on pervious surfaces in upland areas away from water resources and wells. At these locations, the snow meltwater can filter in to the soil, leaving behind sand and debris which can be removed in the springtime. The following areas should be avoided:

- Avoid dumping of snow into any waterbody, including rivers, the ocean, reservoirs, ponds, or wetlands. In addition to water quality impacts and flooding, snow disposed of in open water can cause navigational hazards when it freezes into ice blocks.
- Do not dump snow within a Zone II or Interim Wellhead Protection Area (IWPA) of a public water supply well or within 75 feet of a private well, where road salt may contaminate water supplies.
- Avoid dumping snow on MassDEP-designated high and medium-yield aquifers where it may contaminate groundwater (see the next page for information on ordering maps from MassGIS showing the locations of aquifers, Zone II's, and IWPAs in your community).
- Avoid dumping snow in sanitary landfills and gravel pits. Snow meltwater will create more contaminated leachate in landfills posing a greater risk to groundwater, and in gravel pits, there is little opportunity for pollutants to be filtered out of the meltwater because groundwater is close to the land surface.



- Avoid disposing of snow on top of storm drain catch basins or in stormwater drainage swales or ditches. Snow combined with sand and debris may block a storm drainage system, causing localized flooding. A high volume of sand, sediment, and litter released from melting snow also may be quickly transported through the system into surface water.

Site Selection Procedures

1. It is important that the municipal Department of Public Works or Highway Department, Conservation Commission, and Board of Health work together to select appropriate snow disposal sites. The following steps should be taken:
2. Estimate how much snow disposal capacity is needed for the season so that an adequate number of disposal sites can be selected and prepared.
3. Identify sites that could potentially be used for snow disposal such as municipal open space (e.g., parking lots or parks).
4. Sites located in upland locations that are not likely to impact sensitive environmental resources should be selected first.
5. If more storage space is still needed, prioritize the sites with the least environmental impact (using the site selection criteria, and local or MassGIS maps as a guide).

MassGIS Maps of Open Space and Water Resources

If local maps do not show the information you need to select appropriate snow disposal sites, you may order maps from MassGIS (Massachusetts Geographic Information System) which show publicly owned open spaces and approximate locations of sensitive environmental resources (locations should be field-verified where possible). Different coverages or map themes depicting sensitive environmental resources are available from MassGIS on the map you order. At a minimum, you should order the Priority Resources Map. The Priority Resources Map includes aquifers, public water supplies, MassDEP-approved Zone II's, Interim Wellhead Protection Areas, Wetlands, Open Space, Areas of Critical Environmental Concern, NHESP Wetlands Habitats, MassDEP Permitted Solid Waste facilities, Surface Water Protection areas (Zone A's) and base map features. The cost of this map is \$25.00. Other coverages or map themes you may consider, depending on the location of your city or town, include Outstanding Resource Waters and MassDEP Eelgrass Resources. These are available at \$25.00 each, with each map theme being depicted on a separate map. Maps should be ordered from [MassGIS](#). Maps may also be ordered by fax at 617-626-1249 (order form available from the MassGIS web site) or mail. For further information, contact MassGIS at 617-626-1189.

2. SITE PREPARATION AND MAINTENANCE

In addition to carefully selecting disposal sites before the winter begins, it is important to prepare and maintain these sites to maximize their effectiveness. The following maintenance measures should be undertaken for all snow disposal sites:

- A silt fence or equivalent barrier should be placed securely on the downgradient side of the snow disposal site.
- To filter pollutants out of the meltwater, a 50-foot vegetative buffer strip should be maintained during the growth season between the disposal site and adjacent waterbodies.
- Debris should be cleared from the site prior to using the site for snow disposal.
- Debris should be cleared from the site and properly disposed of at the end of the snow season and no later than May 15.

3. EMERGENCY SNOW DISPOSAL

As mentioned earlier, it is important to estimate the amount of snow disposal capacity you will need so that an adequate number of upland disposal sites can be selected and prepared.

If despite your planning, upland disposal sites have been exhausted, snow may be disposed of near waterbodies. A vegetated buffer of at least 50 feet should still be maintained between the site and the waterbody in these situations. Furthermore, it is essential that the other guidelines for preparing and maintaining snow disposal sites be followed to minimize the threat to adjacent waterbodies.

Under extraordinary conditions, when all land-based snow disposal options are exhausted, disposal of snow that is not obviously contaminated with road salt, sand, and other pollutants may be allowed in certain waterbodies under certain conditions. In these dire situations, notify your Conservation Commission and the appropriate MassDEP Regional Service Center before disposing of snow in a waterbody.

Use the following guidelines in these emergency situations:

- Dispose of snow in open water with adequate flow and mixing to prevent ice dams from forming.
- Do not dispose of snow in saltmarshes, vegetated wetlands, certified vernal pools, shellfish beds, mudflats, drinking water reservoirs and their tributaries, Zone IIs or IWPA's of public water supply wells, Outstanding Resource Waters, or Areas of Critical Environmental Concern.
- Do not dispose of snow where trucks may cause shoreline damage or erosion.
- Consult with the municipal Conservation Commission to ensure that snow disposal in open water complies with local

ordinances and bylaws.

FOR MORE INFORMATION

If you need more information, contact one of MassDEP's Regional Service Centers:

Northeast Regional Office, Wilmington, 978-694-3200

Southeast Regional Office, Lakeville, 508-946-2714

Central Regional Office, Worcester, 508-792-7683

Western Regional Office, Springfield, 413-755-2214

or

Call Thomas Maguire of DEP's Bureau of Resource Protection in Boston at 617-292-5602.

Chapter 5 Miscellaneous Stormwater Topics

Mosquito Control in Stormwater Management Practices

Both aboveground and underground stormwater BMPs have the potential to serve as mosquito breeding areas. Good design, proper operation and maintenance and treatment with larvicides can minimize this potential.

EPA recommends that stormwater treatment practices dewater within 3 days (72 hours) to reduce the number of mosquitoes that mature to adults, since the aquatic stage of many mosquito species is 7 to 10 days. Massachusetts has had a 72-hour dewatering rule in its Stormwater Management Standards since 1996. The 2008 technical specifications for BMPs set forth in Volume 2, Chapter 2 of the Massachusetts Stormwater Handbook also concur with this practice by requiring that all stormwater practices designed to drain do so within 72 hours.

Some stormwater practices are designed to include permanent wet pools. These practices – if maintained properly – can limit mosquito breeding by providing habitat for mosquito predators. Additional measures that can be taken to reduce mosquito populations include increasing water circulation, attracting mosquito predators by adding suitable habitat, and applying larvicides.

The Massachusetts State Reclamation and Mosquito Control Board (SRMCB), through the Massachusetts Mosquito Control Districts, can undertake further mosquito control actions specifically for the purpose of mosquito control pursuant to Massachusetts General Law Chapter 252. The Mosquito Control Board, <http://www.mass.gov/agr/mosquito/>, describes mosquito control methods and is in the process of developing guidance documents that describe Best Management Practices for mosquito control projects.

The SRMCB and Mosquito Control Districts are not responsible for operating and maintaining stormwater BMPs to reduce mosquito populations. The owners of property that construct the stormwater BMPs or municipalities that “accept” them through local subdivision approval are responsible for their maintenance.¹ The SRMCB is composed of officials from MassDEP, Department of Agricultural Resources, and Department of Conservation and Recreation. The nine (9) Mosquito Control Districts overseen by the SRMCB are located throughout Massachusetts, covering 176 municipalities.

Construction Period Best Management Practices for Mosquito Control

To minimize mosquito breeding during construction, it is essential that the following actions be taken to minimize the creation of standing pools by taking the following actions:

- **Minimize Land Disturbance:** Minimizing land disturbance reduces the likelihood of mosquito breeding by reducing silt in runoff that will cause construction period controls to clog and retain standing pools of water for more than 72 hours.
- **Catch Basin inlets:** Inspect and refresh filter fabric, hay bales, filter socks or stone dams on a regular basis to ensure that any stormwater ponded at the inlet drains within 8 hours after precipitation stops. Shorter periods may be necessary to avoid hydroplaning in roads

¹ MassDEP and MassHighway understand that the numerous stormwater BMPs along state highways pose a unique challenge. To address this challenge, the 2004 MassHighway Stormwater Handbook will provide additional information on appropriate operation and maintenance practices for mosquito control when the Handbook is revised to reflect the 2008 changes to the Stormwater Management Standards..

caused by water ponded at the catch basin inlet. Treat catch basin sumps with larvicides such as *Bacillus sphaericus* (*Bs*) using a licensed pesticide applicator.

- **Check Dams:** If temporary check dams are used during the construction period to lag peak rate of runoff or pond runoff for exfiltration, inspect and repair the check dams on a regular basis to ensure that any stormwater ponded behind the check dam drains within 72 hours.
- **Design construction period sediment traps** to dewater within 72 hours after precipitation. Because these traps are subject to high silt loads and tend to clog, treat them with the larvicide *Bs* after it rains from June through October, until the first frost occurs.
- **Construction period open conveyances:** When temporary manmade ditches are used for channelizing construction period runoff, inspect them on a regular basis to remove any accumulated sediment to restore flow capacity to the temporary ditch.
- **Revegetating Disturbed Surfaces:** Revegetating disturbed surfaces reduces sediment in runoff that will cause construction period controls to clog and retain standing pools of water for greater than 72 hours.
- **Sediment fences/hay bale barriers:** When inspections find standing pools of water beyond the 24-hour period after a storm, take action to restore barrier to its normal function.

Post-Construction Stormwater Treatment Practices

- Mosquito control begins with the environmentally sensitive site design. Environmentally sensitive site design that minimizes impervious surfaces reduces the amount of stormwater runoff. Disconnecting runoff using the LID Site Design credits outlined in the Massachusetts Stormwater Handbook reduces the amount of stormwater that must be conveyed to a treatment practice. Utilizing green roofs minimizes runoff from smaller storms. Storage media must be designed to dewater within 72 hours after precipitation.
- Mosquito control continues with the selection of structural stormwater BMPs that are unlikely to become breeding grounds for mosquitoes, such as:
 - **Bioretention Areas/Rain Gardens/Sand Filter:** These practices tend not to result in mosquito breeding. If any level spreaders, weirs or sediment forebays are used as part of the design, inspect them and correct them as necessary to prevent standing pools of water for more than 72 hours.
 - **Infiltration Trenches:** This practice tends not to result in mosquito breeding. If any level spreaders, weirs, or sediment forebays are used as part of the design, inspect them and correct them as necessary to prevent standing pools of water for more than 72 hours.
- Another mosquito control strategy is to select BMPs that can become habitats for mosquito predators, such as:
 - **Constructed Stormwater Wetlands:** Habitat features can be incorporated in constructed stormwater wetlands to attract dragonflies, amphibians, turtles, birds, bats, and other natural predators of mosquitoes.
 - **Wet Basins:** Wet basins can be designed to incorporate fish habitat features, such as deep pools. Introduce fish in consultation with Massachusetts Division of Fisheries and Wildlife. Vegetation within wet basins designed as fish habitat must be properly managed to ensure that vegetation does not overtake the habitat. Proper design to ensure that no low circulation or “dead” zones are created may reduce the potential for mosquito breeding. Introducing bubblers may increase water circulation in the wet basin.

Effective mosquito controls require proponents to design structural BMPs to prevent ponding and facilitate maintenance and, if necessary, the application of larvicides. Examples of such design practices include the following:

- **Basins:** Provide perimeter access around wet basins, extended dry detention basins and dry detention basins for both larviciding and routine maintenance. Control vegetation to ensure that access pathways stay open.
- **BMPs without a permanent pool of water:** All structural BMPs that do not rely on a permanent pool of water must drain and completely dewater within 72 hours after precipitation. This includes dry detention basins, extended dry detention basins, infiltration basins, and dry water quality swales. Use underdrains at extended dry detention basins to drain the small pools that form due to accumulation of silts. Wallace indicates that extended dry extended detention basins may breed more mosquitoes than wet basins. It is, therefore, imperative to design outlets from extended dry detention basins to completely dewater within the 72-hour period.
- **Energy Dissipators and Flow Spreaders:** Currier and Moeller, 2000 indicate that shallow recesses in energy dissipators and flow spreaders trap water where mosquitoes breed. Set the riprap in grout to reduce the shallow recesses and minimize mosquito breeding.
- **Outlet control structures:** Debris trapped in small orifices or on trash racks of outlet control structures such as multiple stage outlet risers may clog the orifices or the trash rack, causing a standing pool of water. Optimize the orifice size or trash rack mesh size to provide required peak rate attenuation/water quality detention/retention time while minimizing clogging.
- **Rain Barrels and Cisterns:** Seal lids to reduce the likelihood of mosquitoes laying eggs in standing water. Install mosquito netting over inlets. The cistern system should be designed to ensure that all collected water is drained into it within 72 hours.
- **Subsurface Structures, Deep Sump Catch Basins, Oil Grit Separators, and Leaching Catch Basins:** Seal all manhole covers to reduce likelihood of mosquitoes laying eggs in standing water. Install mosquito netting over the outlet (CALTRANS 2004).

The Operation and Maintenance Plan should provide for mosquito prevention and control.

- **Check dams:** Inspect permanent check dams on the schedule set forth in the O&M Plan. Inspect check dams 72 hours after storms for standing water ponding behind the dam. Take corrective action if standing water is found.
- **Cisterns:** Apply *Bs* larvicide in the cistern if any evidence of mosquitoes is found. The Operation and Maintenance Plan shall specify how often larvicides should be applied to waters in the cistern.
- **Water quality swales:** Remove and properly dispose of any accumulated sediment as scheduled in the Operation and Maintenance Plan.
- **Larvicide Treatment:** The Operation and Maintenance Plan must include measures to minimize mosquito breeding, including larviciding.
- The party identified in the Operation and Maintenance Plan as responsible for maintenance shall see that larvicides are applied as necessary to the following stormwater treatment practices: catch basins, oil/grit separators, wet basins, wet water quality swales, dry extended detention basins, infiltration basins, and constructed stormwater wetlands. The Operation and Maintenance Plan must ensure that all larvicides are applied by a licensed pesticide applicator and in compliance with all pesticide label requirements.
- The Operation and Maintenance Plan should identify the appropriate larvicide and the time and method of application. For example, *Bacillus sphaericus* (*Bs*), the preferred

larvicide for stormwater BMPs, should be hand-broadcast.² Alternatively, Altosid, a Methopren product, may be used. Because some practices are designed to dewater between storms, such as dry extended detention and infiltration basins, the Operation and Maintenance Plan should provide that larviciding must be conducted during or immediately after wet weather, when the detention or infiltration basin has a standing pool of water, unless a product is used that can withstand extended dry periods.

REFERENCES

- California Department of Transportation, 2004, BMP Retrofit Pilot Program, Final Report, Report ID CTSW – RT – 1 – 050,
http://www.dot.ca.gov/hq/env/stormwater/special/newsetup/pdfs/new_technology/CTSW-RT-01-050.pdf#xml=http://dap1.dot.ca.gov/cgi-bin/texis/webinator/search/pdfhi.txt?query=mosquito&db=db&pr=www&prox=page&rorder=500&rprox=500&rdfreq=500&rwfreq=500&rlead=500&sufs=0&order=r&cq=&id=4673373b7
Appendix E: Vector Monitoring and Abatement,
http://www.dot.ca.gov/hq/env/stormwater/special/newsetup/pdfs/new_technology/
California Department of Transportation, 2001, Final Vector Report, Caltrans BMP Retrofit Project Sites, Districts 7 and 11,
http://www.dot.ca.gov/hq/env/stormwater/special/newsetup/pdfs/new_technology/CTSW-RT-01-050/AppendixE/01_FinalVectorReport.pdf
Currier, Brian, and Moeller, Glenn, 2000, Glenn, Lessons Learned: The CALTRANS Storm Water Best Management Practice Retrofit Pilot Study, prepared by the California State University Sacramento and University of California Davis for the California Department of Transportation,
<http://www.owp.csus.edu/research/papers/papers/PP015.pdf>
Massachusetts Department of Environmental Protection, 2001, West Nile Virus, Application of Pesticides to Wetland Resource Areas and Buffer Zones and Public Water systems, Guideline No. BRPG01-02, <http://www.mass.gov/dep/water/wnvpolicy.doc>
O’Meara, G.F., 2003, Mosquitoes Associated With Stormwater Detention/Retention Areas, ENY627, University of Florida, Institute of Food and Agricultural Sciences Extension,
<http://edis.ifas.ufl.edu/mg338>
Taylor, Scott M., and Currier, Brian, 1999, A Wet Pond as a Storm Water Runoff BMP – Case Study, presented at Department of Environmental Resources Engineering, Humboldt State University, Arcata, California <http://www.owp.csus.edu/research/papers/papers/PP004.pdf>
U.S. EPA, 2005, Stormwater Structures and Mosquitoes, EPA 833-F-05-003,
http://www.epa.gov/npdes/pubs/sw_wnv.pdf
U.S. EPA, 2003, Do Stormwater Retention Ponds Contribute to Mosquito Problems, Nonpoint source News-Notes, Issue No. 71, <http://notes.tetrattech-ffx.com/newsnotes.nsf/0/143f7fa99c3ea25485256d0100618bc9?OpenDocument>
Virginia Department of Conservation and Recreation, 2003, Vector Control, Mosquitoes and Stormwater Management, Stormwater Management Technical Bulletin No. 8,
http://www.dcr.virginia.gov/soil_&_water/documents/tecbltn8.pdf
Wallace, John R., Stormwater Management and Mosquito Ecology, Stormwater Magazine, March/April 2007, http://www.gradingandexcavation.com/sw_0703_management.html

² *Bacillus thuringiensis israelensis* or *Bti* is usually applied by helicopter to wetlands and floodplains

CDS Guide

Operation, Design, Performance and Maintenance



CDS®

Using patented continuous deflective separation technology, the CDS system screens, separates and traps debris, sediment, and oil and grease from stormwater runoff. The indirect screening capability of the system allows for 100% removal of floatables and neutrally buoyant material without blinding. Flow and screening controls physically separate captured solids, and minimize the re-suspension and release of previously trapped pollutants. Inline units can treat up to 6 cfs, and internally bypass flows in excess of 50 cfs (1416 L/s). Available precast or cast-in-place, offline units can treat flows from 1 to 300 cfs (28.3 to 8495 L/s). The pollutant removal capacity of the CDS system has been proven in lab and field testing.

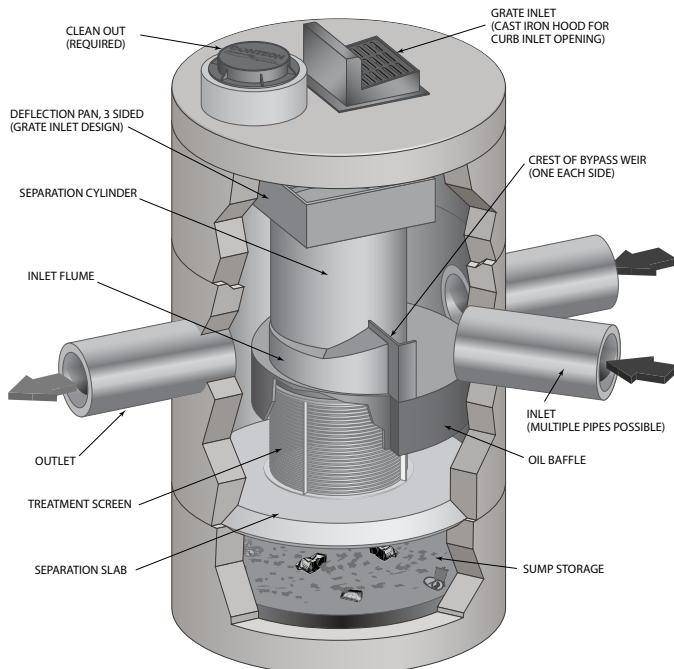
Operation Overview

Stormwater enters the diversion chamber where the diversion weir guides the flow into the unit's separation chamber and pollutants are removed from the flow. All flows up to the system's treatment design capacity enter the separation chamber and are treated.

Swirl concentration and screen deflection force floatables and solids to the center of the separation chamber where 100% of floatables and neutrally buoyant debris larger than the screen apertures are trapped.

Stormwater then moves through the separation screen, under the oil baffle and exits the system. The separation screen remains clog free due to continuous deflection.

During the flow events exceeding the treatment design capacity, the diversion weir bypasses excessive flows around the separation chamber, so captured pollutants are retained in the separation cylinder.



Design Basics

There are three primary methods of sizing a CDS system. The Water Quality Flow Rate Method determines which model size provides the desired removal efficiency at a given flow rate for a defined particle size. The Rational Rainfall Method™ or the Probabilistic Method is used when a specific removal efficiency of the net annual sediment load is required.

Typically in the United States, CDS systems are designed to achieve an 80% annual solids load reduction based on lab generated performance curves for a gradation with an average particle size (d50) of 125 microns (μm). For some regulatory environments, CDS systems can also be designed to achieve an 80% annual solids load reduction based on an average particle size (d50) of 75 microns (μm) or 50 microns (μm).

Water Quality Flow Rate Method

In some cases, regulations require that a specific treatment rate, often referred to as the water quality design flow (WQQ), be treated. This WQQ represents the peak flow rate from either an event with a specific recurrence interval, e.g. the six-month storm, or a water quality depth, e.g. 1/2-inch (13 mm) of rainfall.

The CDS is designed to treat all flows up to the WQQ. At influent rates higher than the WQQ, the diversion weir will direct most flow exceeding the WQQ around the separation chamber. This allows removal efficiency to remain relatively constant in the separation chamber and eliminates the risk of washout during bypass flows regardless of influent flow rates.

Treatment flow rates are defined as the rate at which the CDS will remove a specific gradation of sediment at a specific removal efficiency. Therefore the treatment flow rate is variable, based on the gradation and removal efficiency specified by the design engineer.

Rational Rainfall Method™

Differences in local climate, topography and scale make every site hydraulically unique. It is important to take these factors into consideration when estimating the long-term performance of any stormwater treatment system. The Rational Rainfall Method combines site-specific information with laboratory generated performance data, and local historical precipitation records to estimate removal efficiencies as accurately as possible.

Short duration rain gauge records from across the United States and Canada were analyzed to determine the percent of the total annual rainfall that fell at a range of intensities. US stations' depths were totaled every 15 minutes, or hourly, and recorded in 0.01-inch increments. Depths were recorded hourly with 1-mm resolution at Canadian stations. One trend was consistent at all sites; the vast majority of precipitation fell at low intensities and high intensity storms contributed relatively little to the total annual depth.

These intensities, along with the total drainage area and runoff coefficient for each specific site, are translated into flow rates using the Rational Rainfall Method. Since most sites are relatively small and highly impervious, the Rational Rainfall Method is appropriate. Based on the runoff flow rates calculated for each intensity, operating rates within a proposed CDS system are

determined. Performance efficiency curve determined from full scale laboratory tests on defined sediment PSDs is applied to calculate solids removal efficiency. The relative removal efficiency at each operating rate is added to produce a net annual pollutant removal efficiency estimate.

Probabilistic Rational Method

The Probabilistic Rational Method is a sizing program Contech developed to estimate a net annual sediment load reduction for a particular CDS model based on site size, site runoff coefficient, regional rainfall intensity distribution, and anticipated pollutant characteristics.

The Probabilistic Method is an extension of the Rational Method used to estimate peak discharge rates generated by storm events of varying statistical return frequencies (e.g. 2-year storm event). Under the Rational Method, an adjustment factor is used to adjust the runoff coefficient estimated for the 10-year event, correlating a known hydrologic parameter with the target storm event. The rainfall intensities vary depending on the return frequency of the storm event under consideration. In general, these two frequency dependent parameters (rainfall intensity and runoff coefficient) increase as the return frequency increases while the drainage area remains constant.

These intensities, along with the total drainage area and runoff coefficient for each specific site, are translated into flow rates using the Rational Method. Since most sites are relatively small and highly impervious, the Rational Method is appropriate. Based on the runoff flow rates calculated for each intensity, operating rates within a proposed CDS are determined. Performance efficiency curve on defined sediment PSDs is applied to calculate solids removal efficiency. The relative removal efficiency at each operating rate is added to produce a net annual pollutant removal efficiency estimate.

Treatment Flow Rate

The inlet throat area is sized to ensure that the WQQ passes through the separation chamber at a water surface elevation equal to the crest of the diversion weir. The diversion weir bypasses excessive flows around the separation chamber, thus preventing re-suspension or re-entrainment of previously captured particles.

Hydraulic Capacity

The hydraulic capacity of a CDS system is determined by the length and height of the diversion weir and by the maximum allowable head in the system. Typical configurations allow hydraulic capacities of up to ten times the treatment flow rate. The crest of the diversion weir may be lowered and the inlet throat may be widened to increase the capacity of the system at a given water surface elevation. The unit is designed to meet project specific hydraulic requirements.

Performance

Full-Scale Laboratory Test Results

A full-scale CDS system (Model CDS2020-5B) was tested at the facility of University of Florida, Gainesville, FL. This CDS unit was evaluated under controlled laboratory conditions of influent flow rate and addition of sediment.

Two different gradations of silica sand material (UF Sediment & OK-110) were used in the CDS performance evaluation. The particle size distributions (PSDs) of the test materials were analyzed using standard method "Gradation ASTM D-422 "Standard Test Method for Particle-Size Analysis of Soils" by a certified laboratory.

UF Sediment is a mixture of three different products produced by the U.S. Silica Company: "Sil-Co-Sil 106", "#1 DRY" and "20/40 Oil Frac". Particle size distribution analysis shows that the UF Sediment has a very fine gradation (d50 = 20 to 30 μm) covering a wide size range (Coefficient of Uniformity, C averaged at 10.6). In comparison with the hypothetical TSS gradation specified in the NJDEP (New Jersey Department of Environmental Protection) and NJCAT (New Jersey Corporation for Advanced Technology) protocol for lab testing, the UF Sediment covers a similar range of particle size but with a finer d50 (d50 for NJDEP is approximately 50 μm) (NJDEP, 2003).

The OK-110 silica sand is a commercial product of U.S. Silica Sand. The particle size distribution analysis of this material, also included in Figure 1, shows that 99.9% of the OK-110 sand is finer than 250 microns, with a mean particle size (d50) of 106 microns. The PSDs for the test material are shown in Figure 1.

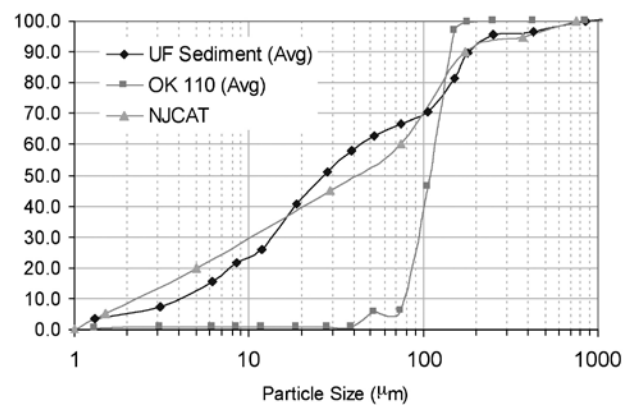


Figure 1. Particle size distributions

Tests were conducted to quantify the performance of a specific CDS unit (1.1 cfs (31.3-L/s) design capacity) at various flow rates, ranging from 1% up to 125% of the treatment design capacity of the unit, using the 2400 micron screen. All tests were conducted with controlled influent concentrations of approximately 200 mg/L. Effluent samples were taken at equal time intervals across the entire duration of each test run. These samples were then processed with a Dekaport Cone sample splitter to obtain representative sub-samples for Suspended Sediment Concentration (SSC) testing using ASTM D3977-97 "Standard Test Methods for Determining Sediment Concentration in Water Samples", and particle size distribution analysis.

Results and Modeling

Based on the data from the University of Florida, a performance model was developed for the CDS system. A regression analysis was used to develop a fitting curve representative of the scattered data points at various design flow rates. This model, which demonstrated good agreement with the laboratory data, can then be used to predict CDS system performance with respect

to SSC removal for any particle size gradation, assuming the particles are inorganic sandy-silt. Figure 2 shows CDS predictive performance for two typical particle size gradations (NJCAT gradation and OK-110 sand) as a function of operating rate.

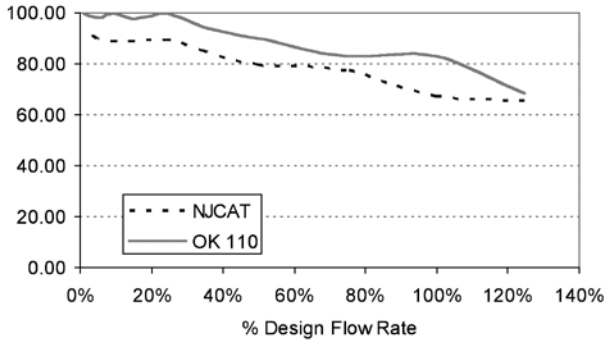


Figure 2. CDS stormwater treatment predictive performance for various particle gradations as a function of operating rate.

Many regulatory jurisdictions set a performance standard for hydrodynamic devices by stating that the devices shall be capable of achieving an 80% removal efficiency for particles having a mean particle size (d_{50}) of 125 microns (e.g. Washington State Department of Ecology — WASDOE - 2008). The model can be used to calculate the expected performance of such a PSD (shown in Figure 3). The model indicates (Figure 4) that the CDS system with 2400 micron screen achieves approximately 80% removal at the design (100%) flow rate, for this particle size distribution ($d_{50} = 125 \mu\text{m}$).

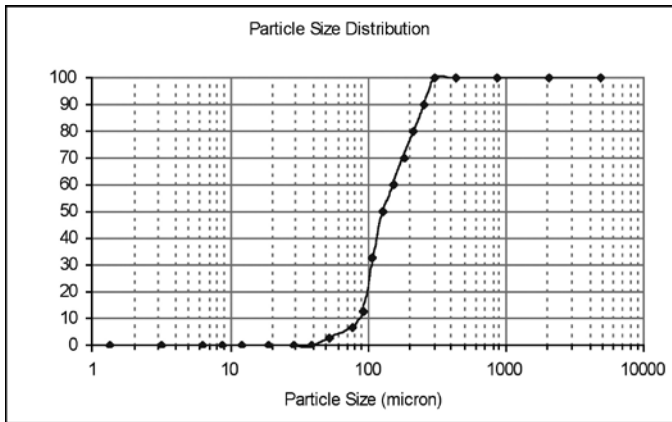


Figure 3. WASDOE PSD

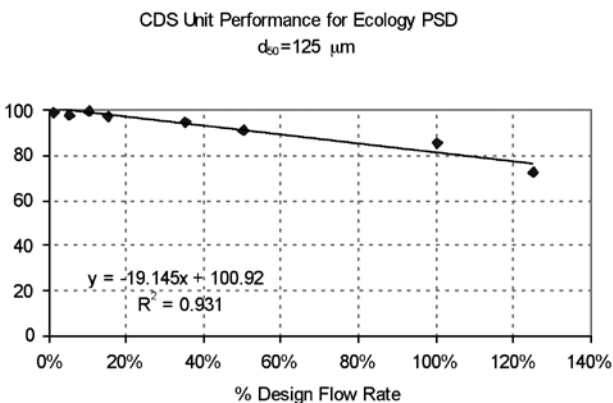


Figure 4. Modeled performance for WASDOE PSD.

Maintenance

The CDS system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size of the unit. For example, unstable soils or heavy winter sanding will cause the grit chamber to fill more quickly but regular sweeping of paved surfaces will slow accumulation.

Inspection

Inspection is the key to effective maintenance and is easily performed. Pollutant transport and deposition may vary from year to year and regular inspections will help ensure that the system is cleaned out at the appropriate time. At a minimum, inspections should be performed twice per year (e.g. spring and fall) however more frequent inspections may be necessary in climates where winter sanding operations may lead to rapid accumulations, or in equipment washdown areas. Installations should also be inspected more frequently where excessive amounts of trash are expected.

The visual inspection should ascertain that the system components are in working order and that there are no blockages or obstructions in the inlet and separation screen. The inspection should also quantify the accumulation of hydrocarbons, trash, and sediment in the system. Measuring pollutant accumulation can be done with a calibrated dipstick, tape measure or other measuring instrument. If absorbent material is used for enhanced removal of hydrocarbons, the level of discoloration of the sorbent material should also be identified



during inspection. It is useful and often required as part of an operating permit to keep a record of each inspection. A simple form for doing so is provided.

Access to the CDS unit is typically achieved through two manhole access covers. One opening allows for inspection and cleanout of the separation chamber (cylinder and screen) and isolated sump. The other allows for inspection and cleanout of sediment captured and retained outside the screen. For deep units, a single manhole access point would allow both sump cleanout and access outside the screen.

The CDS system should be cleaned when the level of sediment has reached 75% of capacity in the isolated sump or when an appreciable level of hydrocarbons and trash has accumulated. If absorbent material is used, it should be replaced when significant discoloration has occurred. Performance will not be impacted until 100% of the sump capacity is exceeded however it is recommended that the system be cleaned prior to that for easier removal of sediment. The level of sediment is easily determined by measuring from finished grade down to the top of the sediment pile. To avoid underestimating the level of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Particles at the top of the pile typically offer less resistance to the end of the rod than consolidated particles toward the bottom of the pile. Once this measurement is recorded, it should be compared to the as-built drawing for the unit to determine whether the height of the sediment pile off the bottom of the sump floor exceeds 75% of the total height of isolated sump.

Cleaning

Cleaning of a CDS system should be done during dry weather conditions when no flow is entering the system. The use of a vacuum truck is generally the most effective and convenient method of removing pollutants from the system. Simply remove the manhole covers and insert the vacuum hose into the sump. The system should be completely drained down and the sump fully evacuated of sediment. The area outside the screen should also be cleaned out if pollutant build-up exists in this area.

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, the system should be cleaned out immediately in the event of an oil or gasoline spill. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use absorbent pads since they are usually less expensive to dispose than the oil/water emulsion that may be created by vacuuming the oily layer. Trash and debris can be netted out to separate it from the other pollutants. The screen should be cleaned to ensure it is free of trash and debris.

Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and also to ensure that proper safety precautions have been followed. Confined space entry procedures need to be followed if physical access is required. Disposal of all material removed from the CDS system should be done in accordance with local regulations. In many jurisdictions, disposal of the sediments may be handled in the same manner as the disposal of sediments removed from catch basins or deep sump manholes. Check your local regulations for specific requirements on disposal.



CDS Model	Diameter		Distance from Water Surface to Top of Sediment Pile		Sediment Storage Capacity	
	ft	m	ft	m	y ³	m ³
CDS1515	3	0.9	3.0	0.9	0.5	0.4
CDS2015	4	1.2	3.0	0.9	0.9	0.7
CDS2015	5	1.5	3.0	0.9	1.3	1.0
CDS2020	5	1.5	3.5	1.1	1.3	1.0
CDS2025	5	1.5	4.0	1.2	1.3	1.0
CDS3020	6	1.8	4.0	1.2	2.1	1.6
CDS3025	6	1.8	4.0	1.2	2.1	1.6
CDS3030	6	1.8	4.6	1.4	2.1	1.6
CDS3035	6	1.8	5.0	1.5	2.1	1.6
CDS4030	8	2.4	4.6	1.4	5.6	4.3
CDS4040	8	2.4	5.7	1.7	5.6	4.3
CDS4045	8	2.4	6.2	1.9	5.6	4.3
CDS5640	10	3.0	6.3	1.9	8.7	6.7
CDS5653	10	3.0	7.7	2.3	8.7	6.7
CDS5668	10	3.0	9.3	2.8	8.7	6.7
CDS5678	10	3.0	10.3	3.1	8.7	6.7

Table 1: CDS Maintenance Indicators and Sediment Storage Capacities

Note: To avoid underestimating the volume of sediment in the chamber, carefully lower the measuring device to the top of the sediment pile. Finer silty particles at the top of the pile may be more difficult to feel with a measuring stick. These finer particles typically offer less resistance to the end of the rod than larger particles toward the bottom of the pile.

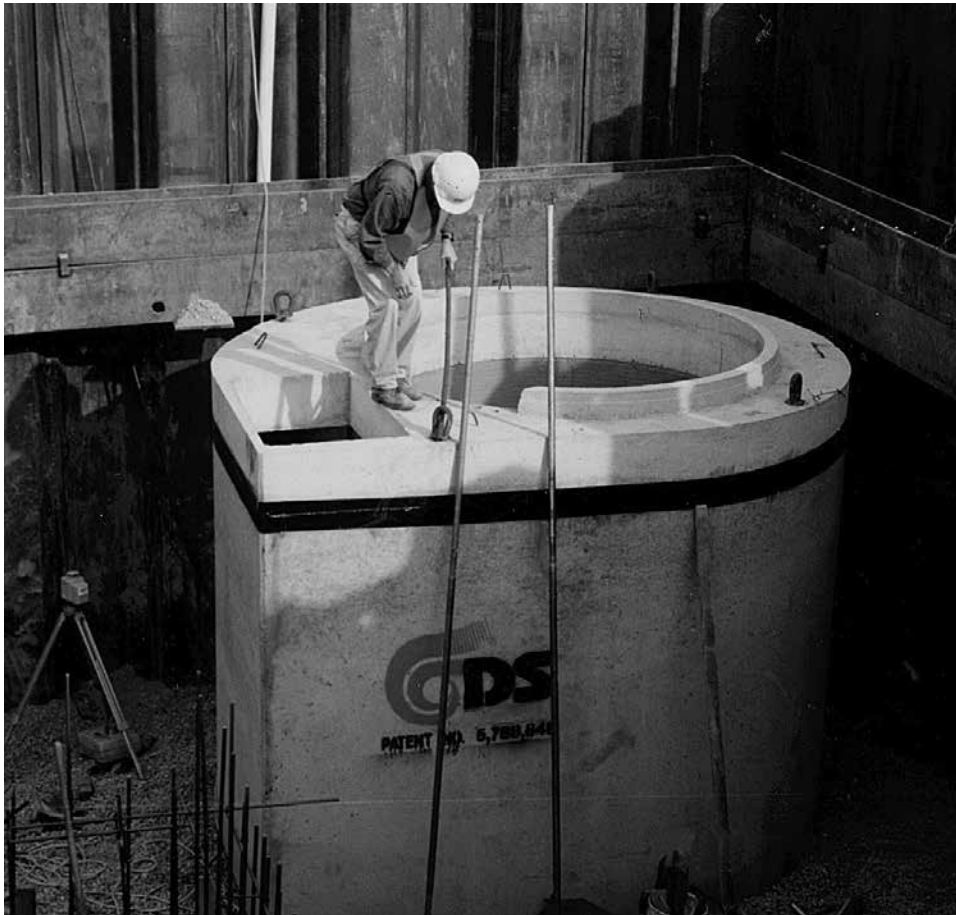




EXHIBIT 5

PROOF OF RECORDING OF EASEMENT TO
TOWN OF WEYMOUTH FOR DAYLIGHTING
OF SMELT BROOK
(Per Condition 24 & 55d)

DEED OF LAND
and
GRANT OF EASEMENT

Nicholas Delegas and George Delegas, Trustees of the GND REALTY TRUST, under Declaration of Trust dated February 19, 1999 ("*GND Realty*") having a principal place of business at 96 Ridge Street, Winchester, MA 01890, for consideration paid, and in full consideration of less than One Hundred Dollars (\$100.00), hereby grant to the TOWN OF WEYMOUTH, a municipal corporation duly organized under the laws of the Commonwealth of Massachusetts, having a principal place of business at Town Hall, 75 Middle Street, Weymouth, Massachusetts 02189 ("*Town*"), through its Department of Public Works, with quitclaim covenants, certain parcels of land together with the improvements thereon to be held and managed by said Department of Public Works for the purposes of flood control, storm damage prevention, storm-water management, public facilities, public landscaped areas under section 4-207 of the Town's General Ordinances, as it may be from time to time amended, located at 22 Washington Street formerly known as 0-50 Commercial Street, Weymouth, and bounded and described as follows:

Parcel One: All right, title, and interest in the land under a portion of Smelt Brook and as further described below:

BEGINNING at a point on northeasterly sideline of Washington Street formerly Commercial Street at the Weymouth/Braintree town line;

Thence turning and running along the Weymouth/Braintree town line and land of Papadopoulos and Landing Apartments, LLC in eight courses:

N 51° E +/- for a distance of 6 feet +/-,

along a curve to the left with a radius of 38 feet +/- for a distance of 16 feet +/-,
N 26° 25' 11" E for a distance of 24.04 feet,

N 30° 51' 15" E for a distance of 39.05 feet,

N 37° 49' 55" E for a distance of 5.85 feet,

N 40° 48' 55" E for a distance of 19.80 feet,

along a curve to the right with a radius of 29.00 feet for a distance of 24.56 feet,

N 89° 19' 31" E for a distance of 15.06 feet to a point on the northwest face of the Smelt Brook culvert, and

22 Washington Street, Weymouth, Massachusetts

N 89° 19' 31" E for a distance of 25.09 feet to a point at land of GND Realty and a corner of proposed Park Easement # 5;

Thence turning and running along Proposed Park Easement # 5 land and along land of GND Realty, an extension of the southerly face of the Smelt Brook Culvert and the southerly face of the Smelt Brook Culvert in four courses:

S 66° 07' 42" W for a distance of 52.59 feet,

along a curve to the left with a radius of 55.33 feet a distance of 35.10 feet,

S 29° 46' 44" W for a distance of 53.22 feet, and

S 45° 42' 38" W for a distance of 25.41 feet to a point on the northeasterly sideline of Washington Street formerly Commercial Street;

Thence turning and running along the northeasterly sideline of Washington Street formerly Commercial Street:

N 43° 13' 20" W for a distance of 8.75 feet to the point of BEGINNING.

Meaning and intending to describe Parcel A, to be deeded from GND Realty to the Town as shown on an Easement & Property Plan prepared for the Town, dated January 15, 2020, recorded herewith.

Said Parcel A contains 1,903 +/- square feet of land.

Parcel Two: All right, title, and interest in the land adjacent to the Smelt Brook and as further described below:

BEGINNING at a point on northeasterly sideline of Washington Street formerly Commercial Street at land of Papadopoulos 3.93 feet westerly of the Weymouth/Braintree town line;

Thence turning and running along land of Papadopoulos in three courses:

N 51° 17' 23" E for a distance of 19.21 feet,

N 23° 42' 05" E for a distance of 28.00 feet, and

S 48° 12' 40" E for a distance of 3.31 feet to a point on the Weymouth/Braintree town line and Parcel A;

Thence turning and running along the Weymouth/Braintree town line and Parcel A in three courses:

S 26° 25' 11" W for a distance of 24.04 feet,

along a curve to the right with a radius of 38 feet +/- for a distance of 16 feet +/-, and
S 51° W +/- for a distance of 6 feet +/- feet to a point on the northeasterly sideline of
Washington Street formerly Commercial Street;

Thence turning and running along the northeasterly sideline of Washington Street formerly
Commercial Street:

N 43° 13' 20" W for a distance of 3.93 feet to the point of BEGINNING.

Meaning and intending to describe Parcel B, to be deeded from GND Realty to the Town as
shown on an Easement & Property Plan prepared for The Town dated January 15, 2020.

Said Parcel B contains 136 +/- square feet of land.

Parcel three: A perpetual interest in the land adjacent to the Smelt Brook, for the purposes of an access
easement, by foot and not vehicle, and as further described below:

BEGINNING at a point on northeasterly sideline of Washington Street formerly Commercial
Street 8.75 feet southeasterly of the Weymouth/Braintree town line;

Thence turning and running along the southerly outside face of the Smelt Brook culvert and
Parcel A in three courses:

N 45° 42' 38" E for a distance of 25.41 feet,

N 29° 46' 44" E for a distance of 53.22 feet, and

along a curve to the right with a radius of 55.33 feet for a distance of 35.10 feet to a
point;

Thence turning and running along the southerly outside face of the Smelt Brook culvert and an
extension of the outside face of the culvert N 66° 07' 42" E for a distance of 52.59 feet to a point
the Weymouth/Braintree town line:

Thence turning and running along the Weymouth/Braintree town line in two courses:

N 89° 19' 31" E for a distance of 22.41 feet, and

and along a curve to the left with a radius of 15.00 feet for a distance of 22.63 feet to a
point at the common lot corner of land owned by The Town and GND Realty;

Thence turning and running along the common lot line of land owned by The Town and GND
Realty S 70° 49' 16" E for a distance of 13.42 feet to a point:

Thence turning and running on land of GND Realty in seven courses:

S 46° 24' 14" E for a distance of 11.72 feet

S 43° 34' 48" E for a distance of 1.38 feet

S 46° 24' 34" E for a distance of 48.71 feet

N 43° 35' 46" W for a distance of 18.00 feet

S 46° 22' 23" W for a distance of 13.64 feet

N 43° 13' 20" W for a distance of 4.75 feet and

S 46° 46' 40" W for a distance of 129.51 feet to a point on the northeasterly sideline of Washington Street formerly Commercial Street;

Thence turning and running on the northeasterly sideline of Washington Street formerly Commercial Street N 43° 13' 20" W for a distance of 8.02 feet to the point of BEGINNING.

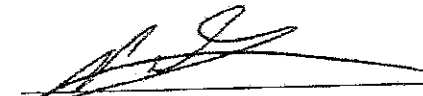
Meaning and intending to describe Proposed Park Easement # 5 on the GND Realty property as shown on an Easement & Property Plan prepared for The Town dated January 15, 2020.

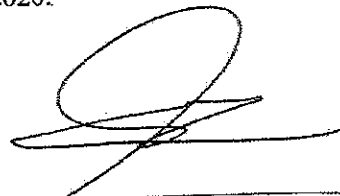
Said access easement containing 3,688 +/- square feet of land.

The above-described premises also are conveyed subject to and with the benefit of all agreements, easements, appurtenances, and restrictions of record insofar as now in force and applicable. The above-described premises are also conveyed subject to all taxes for fiscal year.

For Grantor's title, see that certain deed and transfer certificate dated February 19, 1999, recorded with the Norfolk Registry of Deeds in book 13242, page 555 and both a certain Transfer Certificate of Title 154164 registered with the Norfolk Registry District of the Land Court as Instrument No. 820647 on February 1, 1999.

EXECUTED under seal this 26th day of March 2020.


Name: Nicholas Delegas
Title: Trustee of GND Realty Trust

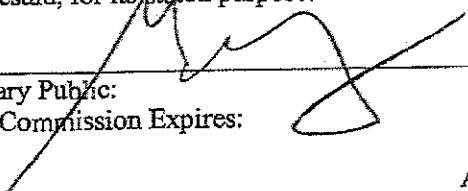

Name: George Delegas
Title: Trustee of GND Realty Trust

COMMONWEALTH OF MASSACHUSETTS

MIDDLESEX, ss.

Before me, the undersigned notary public, on this 26th day of March 2020, personally appeared Nicholas Delegas and George Delegas, proved to me to be the persons through satisfactory evidence of identification which consisted of MA driver's license, to be the persons whose names are signed to the foregoing instrument and acknowledged to me that they signed it as their joint and deed, as trustees as aforesaid, for its stated purpose.

Notary Public:
My Commission Expires:




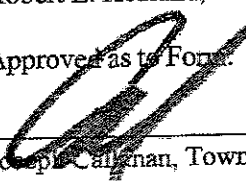
ACCEPTANCE

I, the undersigned, Mayor of the Town of Weymouth, duly authorized by vote of a majority vote of the Town of Weymouth Town Council, Ord. No. 19-048, do hereby accept on behalf of the Town of Weymouth, this deed of land and grant of easement of GND Realty Trust conveying all the right, title, and interests herein described.

Witness my hands and seal, this _____ day of March 2020.

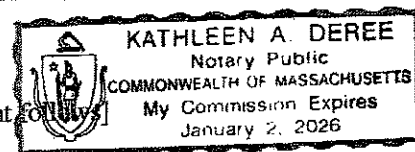
For the Town of Weymouth:


Robert L. Hedlund, Mayor

Approved as to Form:

Joseph Callinan, Town Solicitor

I hereby certify that this Deed of Land and Grant of Easement was accepted, and signed by the Mayor of Weymouth, Robert L. Hedlund, on the date first written above, for its intended and stated purpose.


Kathleen A. Deree, Clerk



[Copy of Ordinance allowing acceptance of grant for 10/1/19]

TOWN OF WEYMOUTH

IN COUNCIL

ORDER NO. 19 048

APRIL 11, 2019

INTRODUCED: MAYOR

ACCEPTANCE OF GRANT OF LAND AND AN EASEMENT FROM GND REALTY TRUST AND ABANDONMENT OF EASEMENTS

Upon request of his Honor, Mayor Hedlund, the Town of Weymouth, through the Weymouth Town Council, with the approval of the Mayor, hereby consents and authorizes (1) the Mayor to accept, consistent with General Laws, chapter 30B, § 16 (e) (2), a deed and grant of an easement from GND Realty Trust for land and an easement on, over, and adjacent to the Smelt Brook in Weymouth landing and in exchange for; and (ii) abandoning various sewer and access easements, consistent with General Laws, chapter 40, § 15 and Section 2-206 of the Town's General Ordinances, on other land of GND Realty Trust. The Town council finds, declares, and specifies the minimum amount to be paid for the abandonment of easements to be one dollar and zero cents (\$1.00) as GND Realty Trust is conveying to the Town Land and easements in a greater quantity than the easements the Town is abandoning.

Passed in Council -- May 6, 2019
Presented to Mayor -- May 7, 2019
A True Copy. Attest:

Approved 5/9/19
Date


Kathleen A. Derec, Town Clerk


Mayor

YEAS: DiFazio, Hackett, Happel, Harrington, Haugh, Heffernan
Kiely, Mathews, McDonald, Molisse, Smart,

NAYS: DiFazio, Hackett, Happel, Harrington, Haugh, Heffernan
Kiely, Mathews, McDonald, Molisse, Smart

ABSENT: Hackett