

LEGEND

WOODS - A SOILS	
GRASS - A SOILS	
GRAVEL - A SOILS	
IMPERVIOUS	
BRUSH - A SOILS	
WATER	

LEGEND

TC LINE WITH ELEVATIONS	
SUBCATCHMENT AREA	
SOIL BOUNDARY	
REACH	
SUBCATCHMENT	

POND 5

JELLYFISH FILTER JF5
TYPE JFPD0406-4-1
(40'') TO SERVE BASIN
5 (500)

POND 5A

JELLYFISH FILTER
JF5A TYPE
JFPD0806-9-2 (40'')
TO SERVE BASIN 5A
(400)

JELLYFISH FILTER JF7
TYPE JFPD0806-7-2
(40'') TO SERVE BASIN
7 (300)

POND 11

JELLYFISH FILTER
JF11 TYPE
JFPD0806-6-2 (40'')
TO SERVE BASIN 11
(200)

POND 12

JELLYFISH FILTER
JF12 TYPE
JFPD0406-4-1 (40'')
TO SERVE BASIN 12
(100)

SCALE: 1"=80'
0 40' 80' 160'

Z:\DEVELOPMENT\PROJECTS\193-003-001 DANTE BOULEVARD\10 CAD DRAWINGS\193-003-WAMP.DWG PLOTTED: 1/9/2025

POST-DEVELOPMENT WATERSHED MAP
HIGHLAND AT HOPKINS HILL, PHASES 1G,1H,1I,1J,1M,1N

DiPrete Engineering

Two Stafford Court Cranston, RI 02920
Tel: 401-943-1000 Fax: 401-464-6006 www.diprete-eng.com
DE-008 NO. 193-003 COPYRIGHT 2025 BY DIPRETE ENGINEERING ASSOCIATES, INC.



Appendix F Contech Jellyfish Certification and Design Summaries

Brian Giroux
DiPrete Engineering Inc
2 Stafford Court
Cranston, RI 02920

January 8, 2025

**RE: Highlands at Hopkins Hill (Contech Reference No. 831,512)
Review of Jellyfish Filter Design**

Dear Mr. Giroux:

The purpose of this letter is to document Contech Engineered Solutions' review of the plans and the proposed application of the Jellyfish water quality unit for the Highlands at Hopkins Hill site in Coventry, RI.

Contech Engineered Solutions (Contech) has reviewed the Jellyfish Filter design for the Highlands at Hopkins Hill project. We believe the Jellyfish Filter is an appropriate water quality solution for this site. The Jellyfish system is approved for use by the Rhode Island Stormwater Technology Review Committee, with certification dates as revised on August 26, 2021 and will expire on August 10, 2026.

JF5

The engineer of record reports a drainage area of 0.671 acres (impervious) and a water quality flow rate of 0.59 cfs. The Jellyfish is designed in accordance with the tested hydraulic loading rate of the 40-inch cartridges at a maximum rate of 60 gpm with the inclusion of one draindown cartridge at a maximum rate of 30 gpm. To adequately treat the runoff from this area, Contech recommends a Jellyfish model JFPD0406-4-1 (40" cartridge length) with a treatment flow rate of 0.60 cfs.

JF5A

The engineer of record reports a drainage area of 1.783 acres (impervious) and a water quality flow rate of 1.25 cfs. The Jellyfish is designed in accordance with the tested hydraulic loading rate of the 40-inch cartridges at a maximum rate of 60 gpm with the inclusion of one draindown cartridge at a maximum rate of 30 gpm. To adequately treat the runoff from this area, Contech recommends a Jellyfish model JFPD00806-9-2 (40" cartridge length) with a treatment flow rate of 1.34 cfs.

JF11

The engineer of record reports a drainage area of 1.211 acres (impervious) and a water quality flow rate of 0.85 cfs. The Jellyfish is designed in accordance with the tested hydraulic loading rate of the 40-inch cartridges at a maximum rate of 60 gpm with the inclusion of one draindown cartridge at a maximum rate of 30 gpm. To adequately treat the runoff from this area, Contech recommends a Jellyfish model JFPD00806-6-2 (40" cartridge length) with a treatment flow rate of 0.94 cfs.

JF12

The engineer of record reports a drainage area of 0.647 acres (impervious) and a water quality flow rate of 0.53 cfs. The Jellyfish is designed in accordance with the tested hydraulic loading rate of the 40-inch cartridges at a maximum rate of 60 gpm with the inclusion of one draindown cartridge at a maximum rate of 30 gpm. To adequately treat the runoff from this area, Contech recommends a Jellyfish model JFPD0406-4-1 (40" cartridge length) with a treatment flow rate of 0.60 cfs.

JF7

The engineer of record reports a drainage area of 0.879 acres (impervious) and a water quality flow rate of 0.96 cfs. The Jellyfish is designed in accordance with the tested hydraulic loading rate of the 40-inch cartridges at a maximum rate of 60 gpm with the inclusion of one draindown cartridge at a maximum rate of 30 gpm. To adequately treat the runoff from this area, Contech recommends a Jellyfish model JFPD00806-7-2 (40" cartridge length) with a treatment flow rate of 1.07 cfs.

Our systems require periodic maintenance to continue operating properly. Given typical runoff pollutant loading rates, Contech recommends maintenance inspections on an annual basis. Maintenance should be performed when sediment depth reaches 12" of accumulation.

This system is expected to operate in accordance with Contech's design intent. Please feel free to contact me if you have any questions or concerns.

Sincerely,

(Sabrina) Zoe Maldonado
Stormwater Design Engineer
Contech Engineered Solutions LLC
(513) 512-5523
sabrina.maldonado@conteches.com



Jellyfish Filter Design Calculation

Contech Engineered Solutions, LLC Engineer:
Date Prepared:

SZM
12/17/2024

Site Information

Project Name	Highlands at Hopkins Hill
Project City	Coventry
Project State	RI
Site Designation	JF5
Total Drainage Area, Ad	0.67 ac
Post Development Impervious Area, Ai	0.67 ac
Pervious Area, Ap	0.00 ac
% Impervious	100%
Runoff Coefficient, Rc	0.95

Mass Loading Calculations

Mean Annual Rainfall, P	46 in
Agency Required % Removal	80%
Percent Runoff Capture	90%
Mean Annual Runoff, Vt	95,797 ft ³
Event Mean Concentration of Pollutant, EMC	70 mg/l
Annual Mass Load, M total	418 lbs

Filter System

Filtration Brand	Jellyfish
Cartridge Length	40 in

Jellyfish Sizing

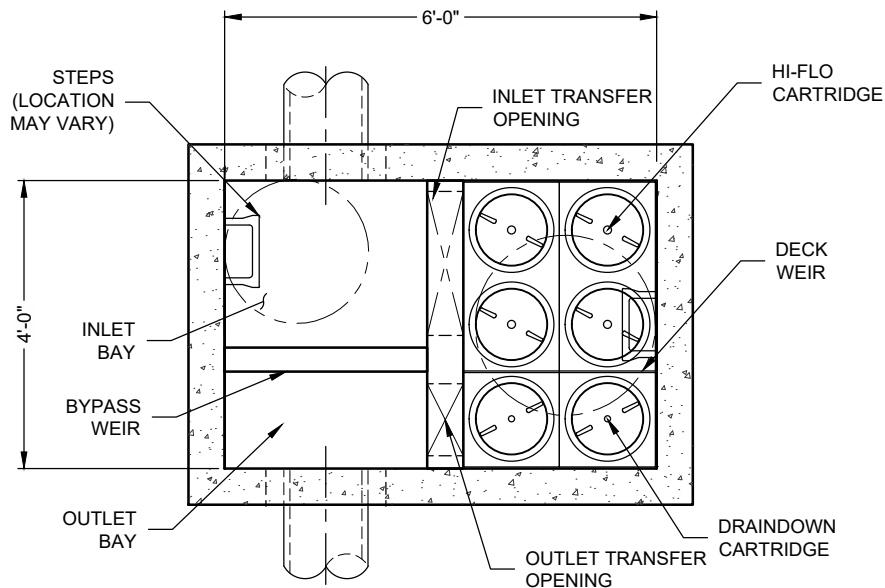
Water Quality Flow	0.59 cfs
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Method to Use

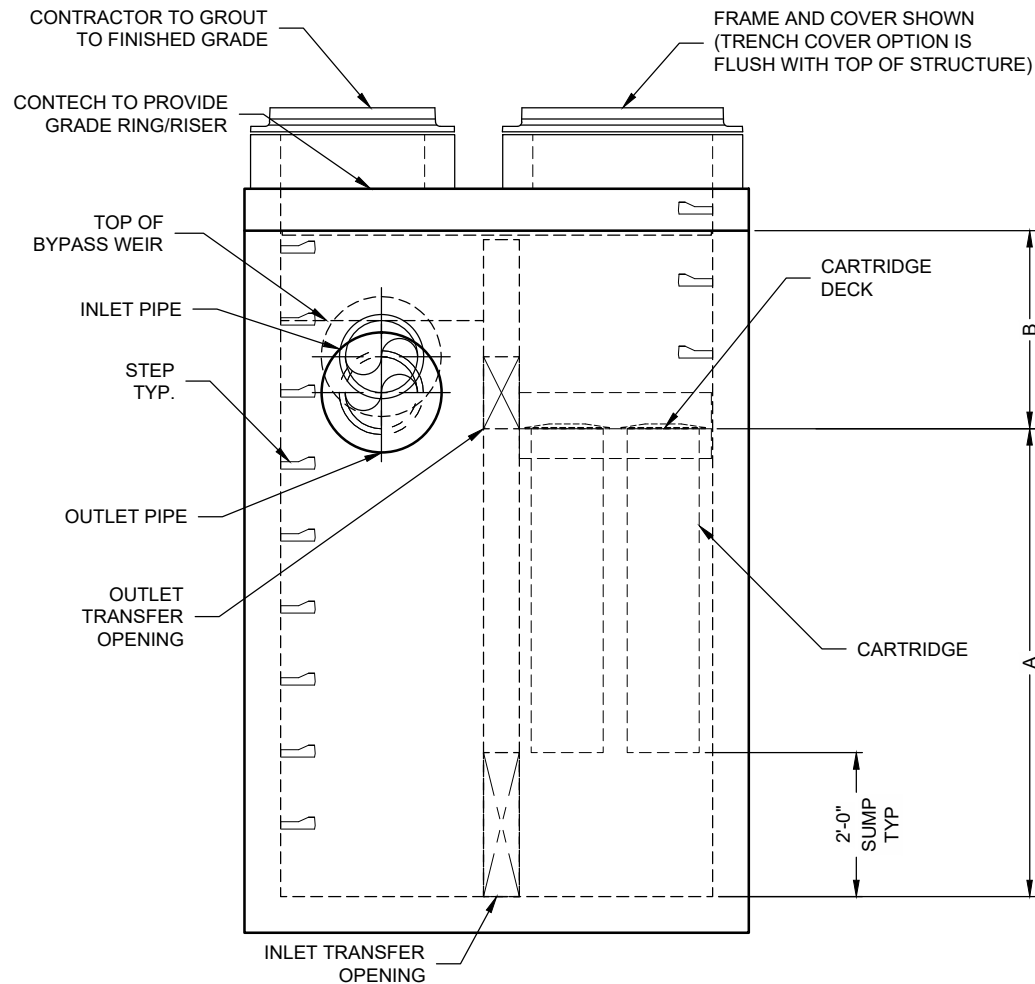
FLOW BASED

Summary		
Flow	Treatment Flow Rate	0.60 cfs
	Required Size	JFPD0406-4-1
	Mass Capture provided	418 lbs

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PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

Jellyfish Filter

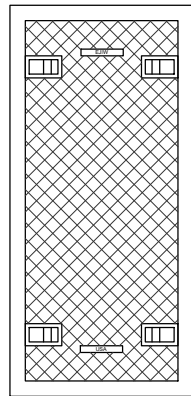
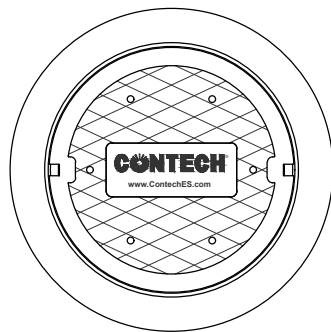
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,726; 8,221,618; US 8,123,935; OTHER INTERNATIONAL PATENTS PENDING

JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT, CURB INLET OR SHALLOW PIPE INLET OPTIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HIGH-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	0.89	0.67	0.45	0.25
DECK TO INSIDE TOP (MIN) (B)	5'-0"	4'-0"	4'-0"	4'-0"



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

24"
TRENCH COVER
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	*
WATER QUALITY FLOW RATE (cfs)	*
PEAK FLOW RATE (cfs)	*
RETURN PERIOD OF PEAK FLOW (yrs)	*
# OF CARTRIDGES REQUIRED (HF / DD)	*
CARTRIDGE LENGTH	*

PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION	*
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ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES:

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION AND SITE SPECIFIC EARTH COVER REQUIREMENT. TYPICAL CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE APPLICABLE) AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
- C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
- D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

CONTECH
ENGINEERED SOLUTIONS LLC

www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

800-338-1122 513-645-7000 513-645-7993 FAX

JELLYFISH JFPD0406
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION



Jellyfish Filter Design Calculation

Contech Engineered Solutions, LLC Engineer:
Date Prepared:

SZM
12/17/2024

Site Information

Project Name	Highlands at Hopkins Hill
Project City	Coventry
Project State	RI
Site Designation	JF5A
Total Drainage Area, Ad	1.78 ac
Post Development Impervious Area, Ai	1.78 ac
Pervious Area, Ap	0.00 ac
% Impervious	100%
Runoff Coefficient, Rc	0.95

Mass Loading Calculations

Mean Annual Rainfall, P	46 in
Agency Required % Removal	80%
Percent Runoff Capture	90%
Mean Annual Runoff, Vt	254,555 ft ³
Event Mean Concentration of Pollutant, EMC	70 mg/l
Annual Mass Load, M total	1,112 lbs

Filter System

Filtration Brand	Jellyfish
Cartridge Length	40 in

Jellyfish Sizing

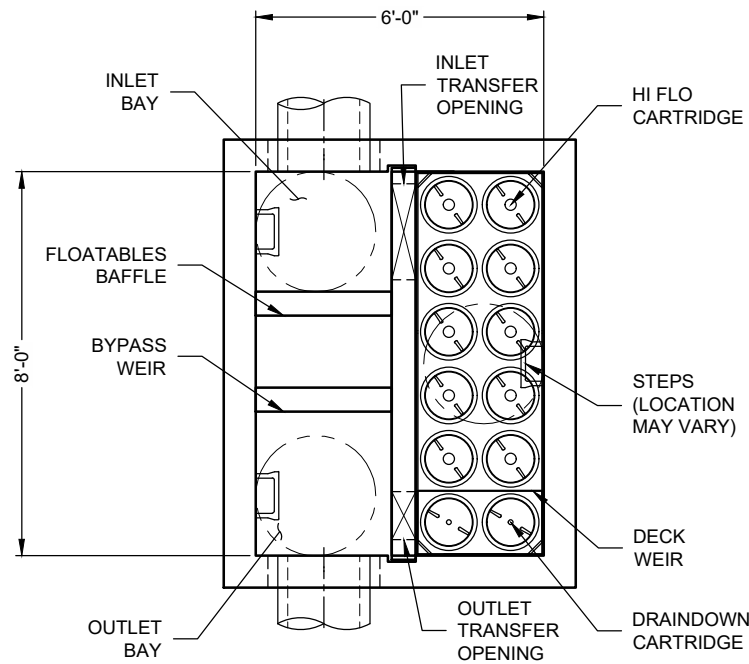
Water Quality Flow	1.25 cfs
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Method to Use

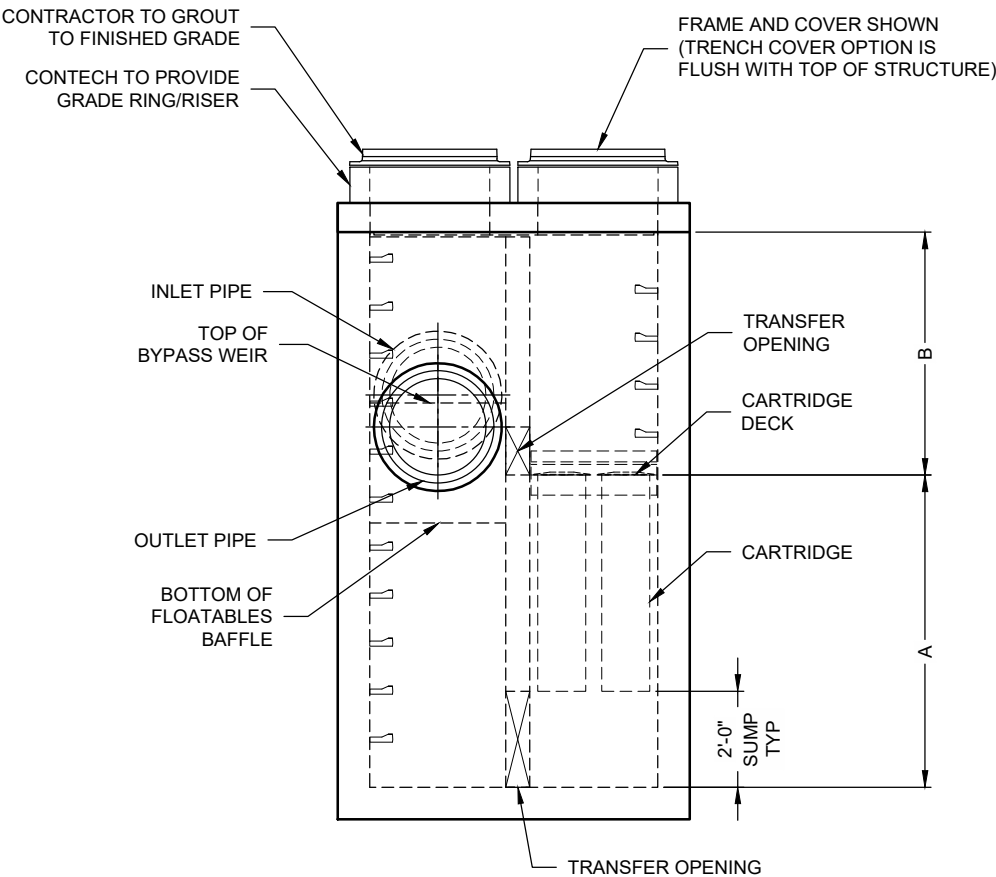
FLOW BASED

Summary		
Flow	Treatment Flow Rate	1.34 cfs
	Required Size	JFPD0806-9-2
	Mass Capture provided	929 lbs

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PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

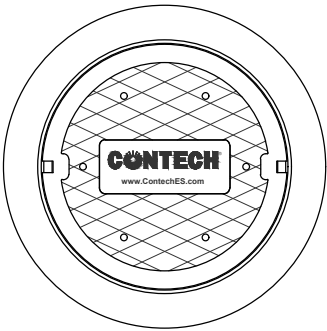
Jellyfish Filter

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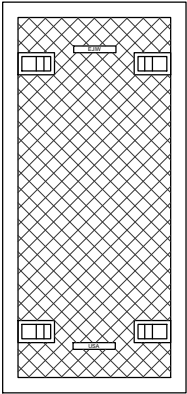
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CARTRIDGE SELECTION				
CARTRIDGE LENGTH	54"	40"	27"	15"
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FLOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	1.96	1.47	0.98	0.54
DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



24" TRENCH COVER
(LENGTH VARIES)
N.T.S.

GENERAL NOTES:

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**SITE SPECIFIC
DATA REQUIREMENTS**

STRUCTURE ID					*	
WATER QUALITY FLOW RATE (cfs)					*	
PEAK FLOW RATE (cfs)					*	
RETURN PERIOD OF PEAK FLOW (yrs)					*	
# OF CARTRIDGES REQUIRED (HF / DD)					*	
CARTRIDGE LENGTH					*	
PIPE DATA:		I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1		*	*	*	*	*
INLET #2		*	*	*	*	*
OUTLET		*	*	*	*	*
SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.						
RIM ELEVATION					*	
ANTI-FLOTATION BALLAST			WIDTH		HEIGHT	
			*		*	
NOTES/SPECIAL REQUIREMENTS:						
* PER ENGINEER OF RECORD						

CONTECH
ENGINEERED SOLUTIONS LLC

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800-338-1122

513-645-7000

513-645-7993 FAX

JELLYFISH JFPD0806
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION



Jellyfish Filter Design Calculation

Contech Engineered Solutions, LLC Engineer:
Date Prepared:

SZM
12/17/2024

Site Information

Project Name	Highlands at Hopkins Hill
Project City	Coventry
Project State	RI
Site Designation	JF11
Total Drainage Area, Ad	1.21 ac
Post Development Impervious Area, Ai	1.21 ac
Pervious Area, Ap	0.00 ac
% Impervious	100%
Runoff Coefficient, Rc	0.95

Mass Loading Calculations

Mean Annual Rainfall, P	46 in
Agency Required % Removal	80%
Percent Runoff Capture	90%
Mean Annual Runoff, Vt	172,892 ft ³
Event Mean Concentration of Pollutant, EMC	70 mg/l
Annual Mass Load, M total	755 lbs

Filter System

Filtration Brand	Jellyfish
Cartridge Length	40 in

Jellyfish Sizing

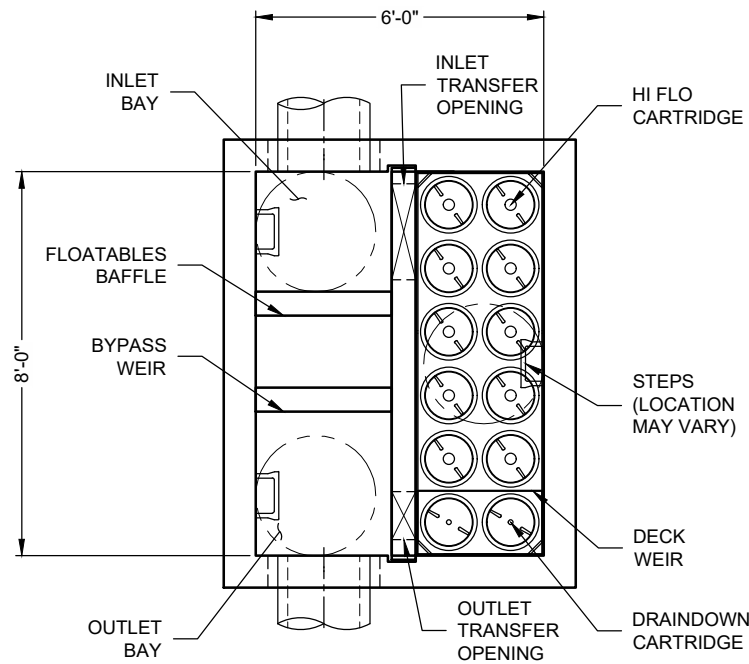
Water Quality Flow	0.85 cfs
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Method to Use

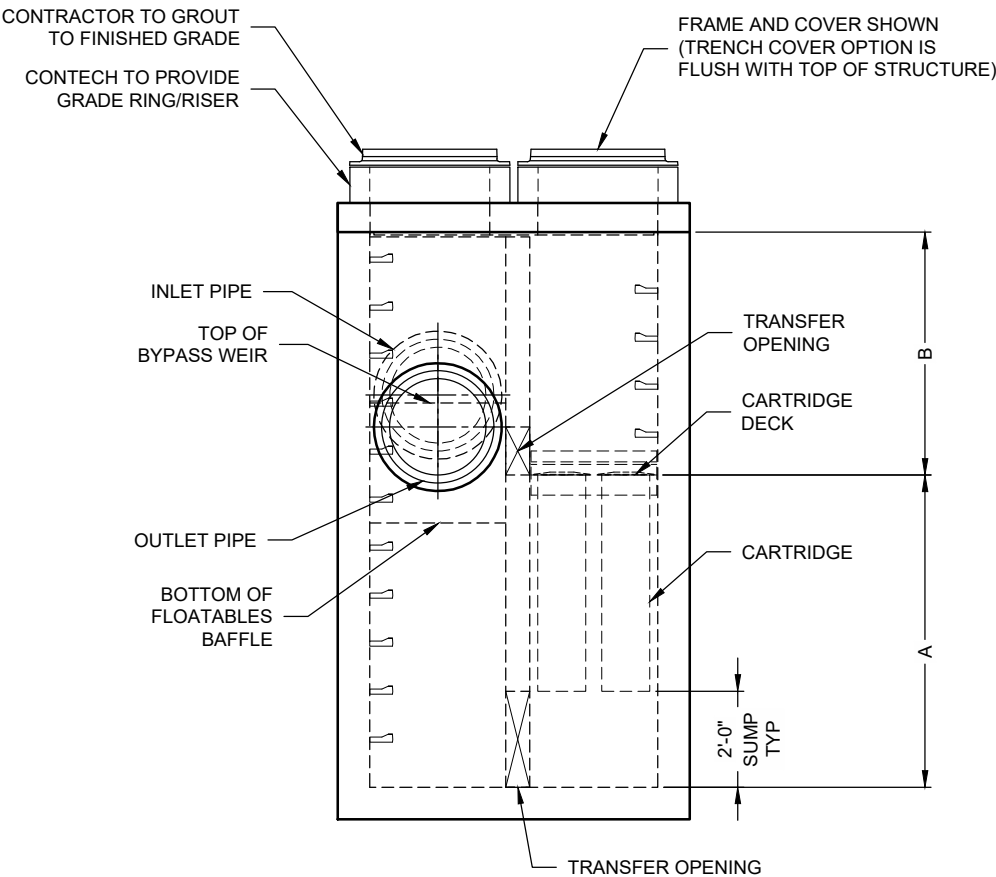
FLOW BASED

Summary		
Flow	Treatment Flow Rate	0.94 cfs
	Required Size	JFPD0806-6-2
	Mass Capture provided	650 lbs

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PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

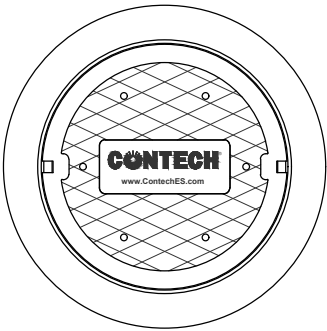
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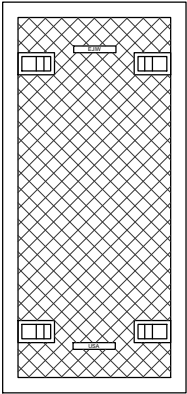
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DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00



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(DIAMETER VARIES)
N.T.S.



24" TRENCH COVER
(LENGTH VARIES)
N.T.S.

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**SITE SPECIFIC
DATA REQUIREMENTS**

STRUCTURE ID					*	
WATER QUALITY FLOW RATE (cfs)					*	
PEAK FLOW RATE (cfs)					*	
RETURN PERIOD OF PEAK FLOW (yrs)					*	
# OF CARTRIDGES REQUIRED (HF / DD)					*	
CARTRIDGE LENGTH					*	
PIPE DATA:		I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1		*	*	*	*	*
INLET #2		*	*	*	*	*
OUTLET		*	*	*	*	*
SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.						
RIM ELEVATION					*	
ANTI-FLOTATION BALLAST			WIDTH		HEIGHT	
			*		*	
NOTES/SPECIAL REQUIREMENTS:						
* PER ENGINEER OF RECORD						

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JELLYFISH JFPD0806
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION



Jellyfish Filter Design Calculation

Contech Engineered Solutions, LLC Engineer:
Date Prepared:

SZM
12/17/2024

Site Information

Project Name	Highlands at Hopkins Hill
Project City	Coventry
Project State	RI
Site Designation	JF12
Total Drainage Area, Ad	0.65 ac
Post Development Impervious Area, Ai	0.65 ac
Pervious Area, Ap	0.00 ac
% Impervious	100%
Runoff Coefficient, Rc	0.95

Mass Loading Calculations

Mean Annual Rainfall, P	46 in
Agency Required % Removal	80%
Percent Runoff Capture	90%
Mean Annual Runoff, Vt	92,371 ft ³
Event Mean Concentration of Pollutant, EMC	70 mg/l
Annual Mass Load, M total	403 lbs

Filter System

Filtration Brand	Jellyfish
Cartridge Length	40 in

Jellyfish Sizing

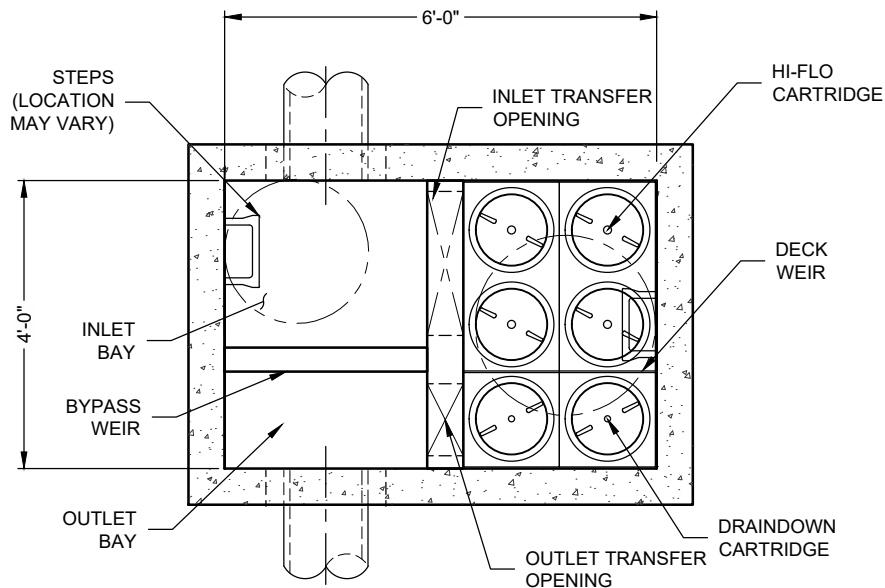
Water Quality Flow	0.53 cfs
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Method to Use

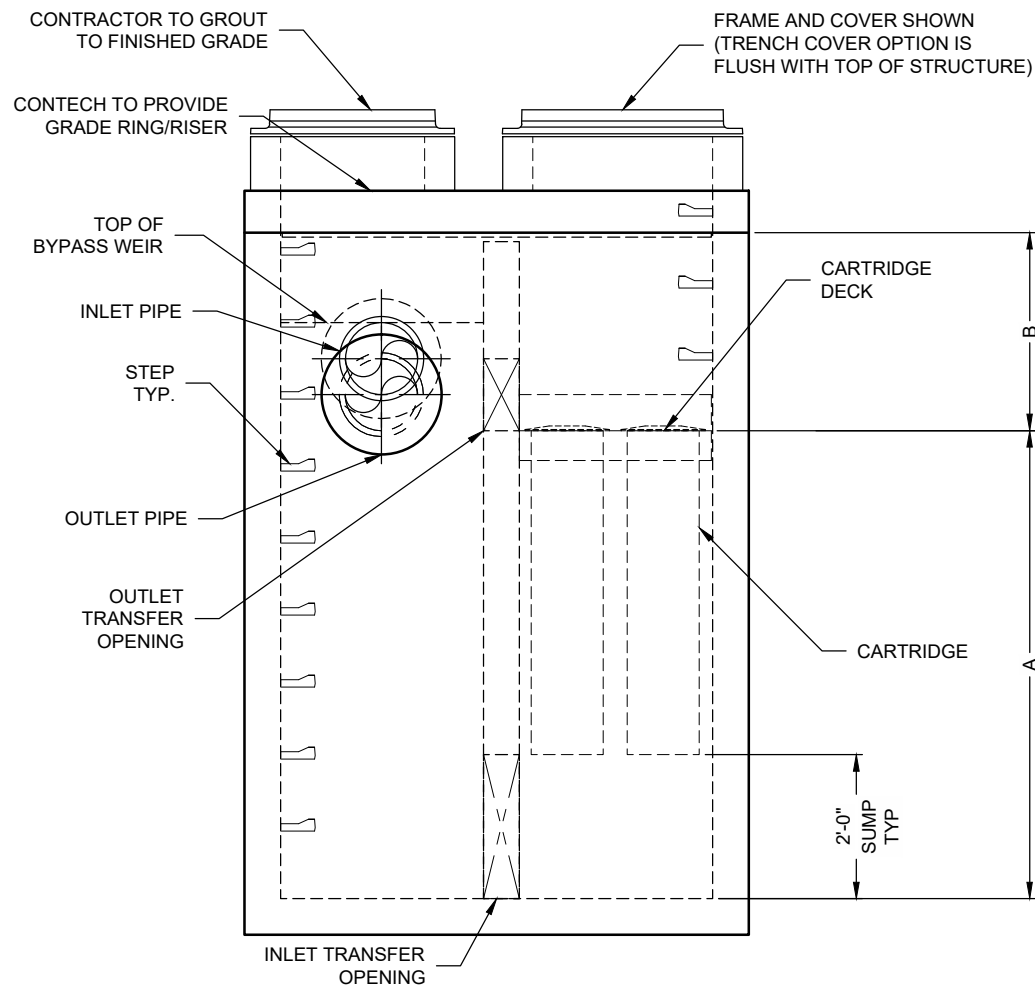
FLOW BASED

Summary		
Flow	Treatment Flow Rate	0.60 cfs
	Required Size	JFPD0406-4-1
	Mass Capture provided	418 lbs

C:\USERS\JOHN.WRIGHT\NEDRIVE - THE QUIKRETE COMPANIES\DESKTOP\STANDARD DETAILS\JFPD0406-DTL.DWG 11/15/2022 3:01 PM



PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

Jellyfish Filter

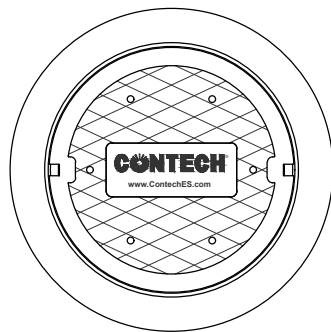
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,726; 8,221,618; US 8,123,935; OTHER INTERNATIONAL PATENTS PENDING

JELLYFISH DESIGN NOTES

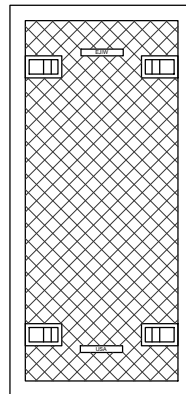
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT, CURB INLET OR SHALLOW PIPE INLET OPTIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HIGH-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	0.89	0.67	0.45	0.25
DECK TO INSIDE TOP (MIN) (B)	5'-0"	4'-0"	4'-0"	4'-0"



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



24"
TRENCH COVER
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	*
WATER QUALITY FLOW RATE (cfs)	*
PEAK FLOW RATE (cfs)	*
RETURN PERIOD OF PEAK FLOW (yrs)	*
# OF CARTRIDGES REQUIRED (HF / DD)	*
CARTRIDGE LENGTH	*

PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION	*
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ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES:

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
- JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION AND SITE SPECIFIC EARTH COVER REQUIREMENT. TYPICAL CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
- STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
- OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
- THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE APPLICABLE) AT EQUAL OR GREATER SLOPE.
- NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
- CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
- CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

CONTECH
ENGINEERED SOLUTIONS LLC

www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

800-338-1122

513-645-7000

513-645-7993 FAX

JELLYFISH JFPD0406
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION



Jellyfish Filter Design Calculation

Contech Engineered Solutions, LLC Engineer:
Date Prepared:

SZM
1/8/2025

Site Information

Project Name	Highlands at Hopkins Hill
Project City	Coventry
Project State	RI
Site Designation	JF7
Total Drainage Area, Ad	0.88 ac
Post Development Impervious Area, Ai	0.88 ac
Pervious Area, Ap	0.00 ac
% Impervious	100%
Runoff Coefficient, Rc	0.95

Mass Loading Calculations

Mean Annual Rainfall, P	46 in
Agency Required % Removal	80%
Percent Runoff Capture	90%
Mean Annual Runoff, Vt	125,628 ft ³
Event Mean Concentration of Pollutant, EMC	70 mg/l
Annual Mass Load, M total	549 lbs

Filter System

Filtration Brand	Jellyfish
Cartridge Length	40 in

Jellyfish Sizing

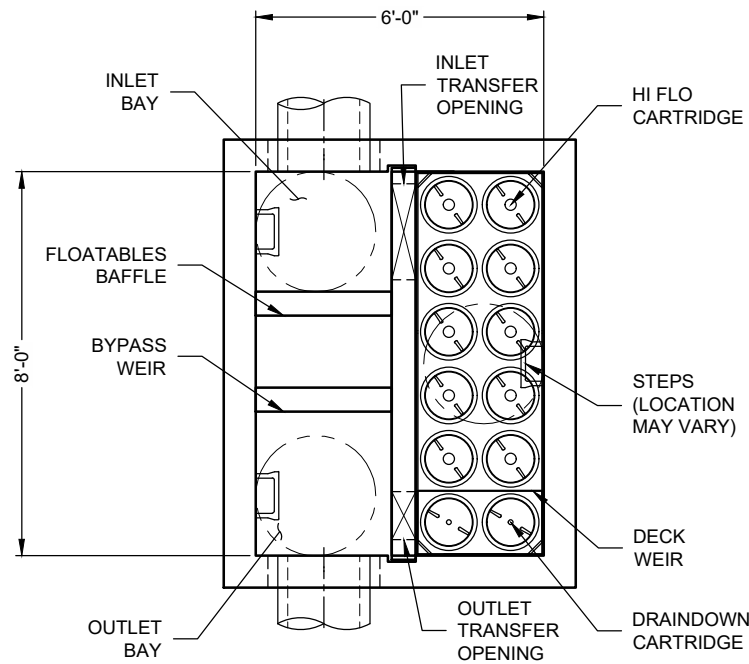
Water Quality Flow	0.96 cfs
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Method to Use

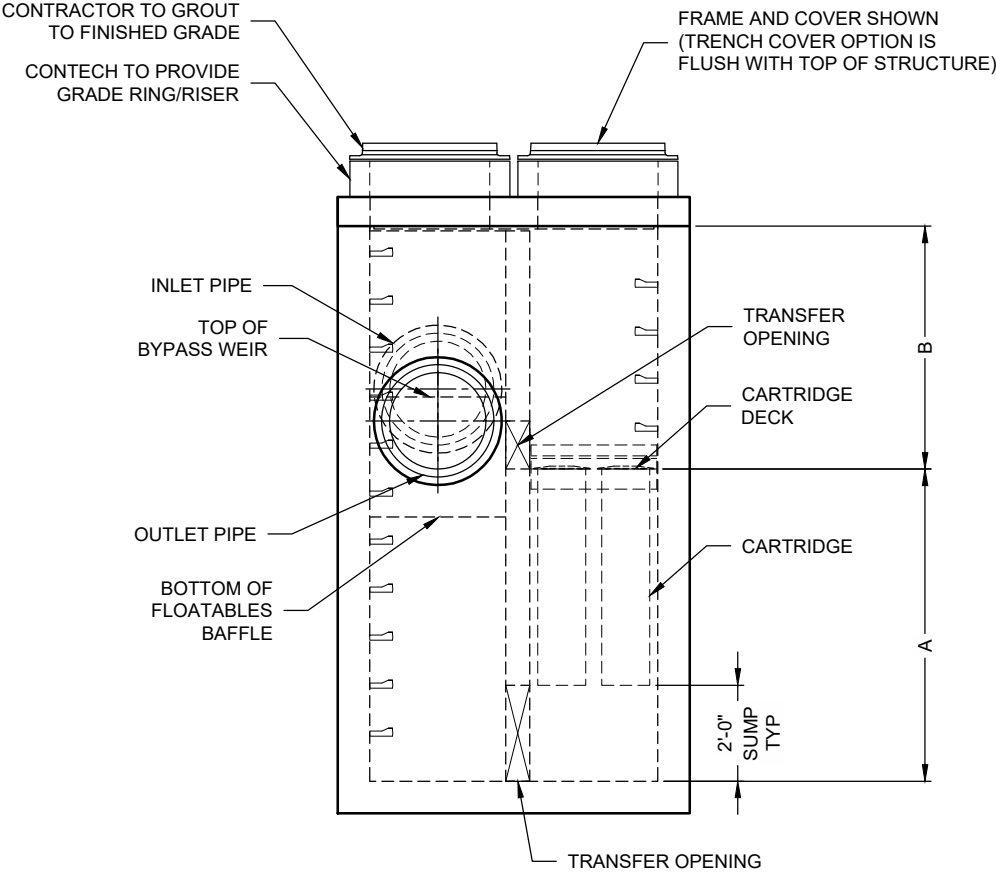
FLOW BASED

Summary		
Flow	Treatment Flow Rate	1.07 cfs
	Required Size	JFPD0806-7-2
	Mass Capture provided	743 lbs

I:\COMMON\CAD\TREATMENT\13 JELLYFISH FILTER\40 STANDARD DRAWINGS\JFPD0806-DTL NEW.DWG 1/29/2018 10:38 AM



PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

Jellyfish Filter

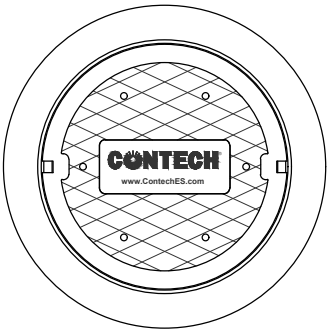
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,726; 8,221,618; US 8,123,935; OTHER INTERNATIONAL PATENTS PENDING

JELLYFISH DESIGN NOTES

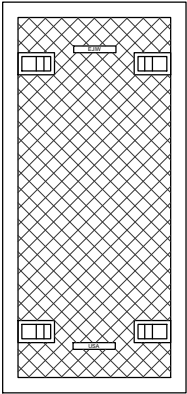
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FLOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	1.96	1.47	0.98	0.54
DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



24" TRENCH COVER
(LENGTH VARIES)
N.T.S.

GENERAL NOTES:

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- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
- JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 10', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
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**SITE SPECIFIC
DATA REQUIREMENTS**

STRUCTURE ID	*
WATER QUALITY FLOW RATE (cfs)	*
PEAK FLOW RATE (cfs)	*
RETURN PERIOD OF PEAK FLOW (yrs)	*
# OF CARTRIDGES REQUIRED (HF / DD)	*
CARTRIDGE LENGTH	*

PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION	*
---------------	---

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

CONTECH
ENGINEERED SOLUTIONS LLC

www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069

800-338-1122

513-645-7000

513-645-7993 FAX

JELLYFISH JFPD0806
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION

TAB H



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 Promenade Street, Providence, Rhode Island 02908-5767

January 15, 2025

Attention: Matthew McGowan, Receiver
Commerce Park Properties, LLC
50 Exchange Terrace, Suite 200
Providence, RI 02903

RE: WQC/STW File No. 24-194; RIPDES File No. RIR102743
Highlands at Hopkins Hill Phase 1G, 1H, 1I, 1J, 1M, 1N
Dante Boulevard, Stephanie Drive, Angelina Drive
Plat 13, Lot 22
Coventry, RI

Dear Mr. McGowan:

The Rhode Island Department of Environmental Management Office of Water Resources (RIDEM OWR) has reviewed the above-referenced project for compliance with the Rhode Island Pollutant Discharge Elimination System Construction General Permit (CGP). As stated in the application materials, the purpose of the project is to construct and maintain 66 residential dwellings and associated driveways and roadways on a previously disturbed and partially constructed site. The project includes construction of associated utilities, including connections to public water service and public sewer service, as well as closed drainage systems—portions of which have already been constructed—and five (5) proprietary stormwater water quality treatment practices. These water quality treatment practices will be situated near the discharge points of the closed drainage systems. Four of the five discharge points are situated upgradient of existing extended detention basins. The work is as further described in your application and detailed on site plans consisting of 12 sheets as prepared by Brian C. Giroux, P.E. of DiPrete Engineering, received by RIDEM-OWR on 1/13/2025.

This letter serves as your permit/authorization to discharge for the above-referenced project, provided that you comply with the application materials, the CGP and the following conditions:

- 1) This authorization is specific to the project, site alterations, and stormwater management system depicted on the site plans submitted with your application and received by RIDEM on 1/13/2025. Any alterations, additions or modifications to the project approved herein must be reviewed and approved by RIDEM OWR prior to implementation.
- 2) You must submit the Notice of Start of Construction Form prior to commencement of any permitted site alterations or construction activity. The Start of Construction Form can be found on the Stormwater Construction Permitting website.
- 3) Prior to construction, you must erect or post a sign resistant to the weather and at least twelve (12) inches wide and (eighteen) inches long, which identifies the initials “DEM” and the application number(s) assigned to this permit. The sign must be posted in a conspicuous location near the site access and maintained until the project is complete.

- 4) A copy of this permit, any inspection records, and a signed and updated SESC Plan, must be kept at the site at all times until the project is complete. Copies of this permit must be made available for review by any RIDEM or City/Town representative upon request. Electronic versions of required documents that are readily accessible from the construction site are acceptable.
- 5) All fill material shall be clean and free of matter that could cause pollution of the waters of the State.
- 6) The stormwater collection and treatment system approved herein is for the discharge of stormwater only. Any other discharge is prohibited.
- 7) You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales, and any other stormwater management practices have been constructed/installed in accordance with the site plans reviewed for this permit. This written certification is due upon completion of the project or within twenty (20) working days of the request of this Program.
- 8) You must submit the Notice of Termination Form upon completion of the project and final site stabilization. The Notice of Termination Form can be found on the Stormwater Construction Permitting website.
- 9) You are responsible for the long-term inspection, cleaning and maintenance of the stormwater collection and treatment system to ensure proper performance of all components until documentation is provided to indicate that this responsibility has been assumed by another entity. Long-term operation and maintenance is to be as described in the Post-Construction Operation and Maintenance Plan entitled "Stormwater System Operation & Maintenance Plan, Highlands at Hopkins Hill, Phases 1G, 1H, 1I, 1J, 1M, 1N, Assessor's Plat 13, Lot 22; Prepared for: D2 Homes, Inc., 420 Scrabbletown Road, Suite G, North Kingstown, RI 02852", dated January 10, 2025, dated received 1/13/2025, indicated as prepared by DiPrete Engineering.
- 10) The owner of the stormwater system must enter a maintenance contract for a minimum of two years from the starting time of the installation of the proposed Jellyfish ® Filter proprietary stormwater treatment devices. The contracted maintenance provided must receive training by Contech Engineering Solutions, LLC on how to properly maintain Jellyfish ® Filter devices unless the maintenance contractor is already a recognized, qualified provider by RIDEM to maintain Jellyfish ® Filter devices. A copy of this contract must be provided to RIDEM no later than 60 days after the completion of installation of the Jellyfish® Filter units.

This permit is not transferable to any person except after written notice to the Director, in the form of a Permit Transfer Form available on the RIDEM Stormwater Construction Permitting website.

RIDEM's Rules and Regulations Governing the Establishment of Various Fees require that RIPDES CGP permit holders pay an Annual Fee of \$100.00. An invoice will be sent to the owner on record in May/June of each year if the construction was still active as of December 31st of the previous year. The owner will be responsible for the Annual Fee until the construction activity has been completed, the site has been properly stabilized, and a completed Notice of Termination (NOT) has been received.

Your authorization to discharge **expires at midnight, on September 25, 2025**. If construction has not been completed by that date, there will be measures in place for you to reauthorize.

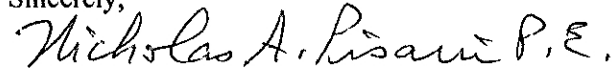
You are required to adhere to all above terms and conditions and carry out this project in compliance with the CGP at all times. Issuance of this permit does not bar the Rhode Island Department of Environmental Management, or any of its various Divisions, from initiating any investigation and/or enforcement actions that it may deem necessary for violations this permit or of any and all applicable statutes, regulations and/or permits.

This permit has the full force and effect of a permit issued by the Director. This permit does not relieve your obligation to obtain any other applicable local, state and federal permits prior to commencing construction and does not relieve

you of any duties owed to adjacent landowners with respect to changes in drainage. RIDEM assumes no responsibilities for damages resulting from faulty design or construction.

If you have any questions regarding the contents of the permit, you may contact me at nicholas.pisani@dem.ri.gov or 401-537-4151.

Sincerely,

A handwritten signature in cursive script that reads "Nicholas A. Pisani P.E.".

Nicholas A. Pisani, P.E.
Environmental Engineer IV
Stormwater Engineering and 401 Permitting
Office of Water Resources
Rhode Island Department of Environmental Management

cc: Brian C. Giroux, P.E., DiPrete Engineering

TAB I1



RHODE ISLAND

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

November 30, 2004

Commerce Park Realty, LLC; Commerce Park Commons, LLC;
 Commerce Park Properties, LLC; Commerce Park Associates 8, LLC
 c/o Roney A. Malafronte, Manager
 207 Quaker Lane, Suite 300
 West Warwick, RI 02893

DEC 14 2004

Insignificant Alteration - Permit

Re: Application No. 04-0516 in reference to the location below:

Approximately 2800 feet northeast of the intersection of Centre of New England Boulevard and Hopkins Hill Road, Assessor's Plat 5, Lots 8, 12, and 21.1; Assessor's Plat 6, lot 2, Assessor's Plat 13, Lots 14, 22 and 26, Assessor's Plat 21, Lot 102, Coventry, RI

Dear Mr. Malafronte:

Kindly be advised that the Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has completed its review of your **Request for Preliminary Determination** application. This review included a site inspection of the above referenced property ("subject property") and an evaluation of the proposed 311-unit condominium community development with associated roads, drainage system, utilities and landscaping as illustrated and detailed on site plans submitted with your application. These site plans were received on October 13, 2004.

Our observations of the subject property, review of the site plans and evaluation of the proposed project reveals that alterations of freshwater wetlands are proposed. However, pursuant to Rule 9.03 of the Rules and Regulations Governing the Administration and Enforcement of the Fresh Water Wetlands Act (Rules), this project may be permitted as an **insignificant alteration** to freshwater wetlands under the following terms and conditions:

Terms and Conditions for Application No. 04-0516:

1. This letter is the DEM's permit for this project under the R.I. Fresh Water Wetlands Act, Rhode Island General Laws (RIGL) Section 2-1-18 et seq.
2. This permit is specifically limited to the project, site alterations and limits of disturbance as detailed on the site plans submitted with your application and received by the on October 13, 2004. A copy of the site plans stamped approved by the DEM is enclosed. Changes or revisions to the project which would alter freshwater wetlands are not authorized without a permit from the DEM.
3. Where the terms and conditions of the permit conflict with the approved site plans, these terms and conditions shall be deemed to supersede the site plans.
4. You must notify this Program in writing immediately prior to the commencement of site alterations and upon completion of the project.

5. A copy of the stamped approved site plans and a copy of this permit must be kept at the site at all times during site preparation, construction, and final stabilization. Copies of this permit and the stamped approved plans must be made available for review by any DEM representative upon request.
- ⑥ Within ten (10) days of the receipt of this permit, you must record this permit in the land evidence records of the Town of Coventry and supply this Program with written documentation obtained from the Town showing this permit was recorded.
- ⑦ The effective date of this permit is the date this letter was issued. This permit expires four (4) years from the date of issue.
8. Any material utilized in this project must be clean and free of matter that could pollute any freshwater wetland.
- ⑨ Prior to commencement of site alterations, you shall erect or post a sign resistant to the weather and at least twelve (12) inches wide and eighteen (18) inches long, which boldly identifies the initials "DEM" and the application number of this permit. This sign must be maintained at the site in a conspicuous location until such time that the project is complete.
10. Temporary erosion and sediment controls detailed or described on the approved site plans or as otherwise determined to be necessary to control erosion and prevent sediment transport into regulated freshwater wetlands shall be properly installed at the site prior to and commensurate with construction activities on this site. Such controls, including haybales and/or silt fence, check dams, temporary sediment basins, and temporary diversion berms must be properly and diligently maintained, replaced, supplemented, or modified as necessary throughout the life of this project to minimize soil erosion and to prevent sediment from being deposited in any wetlands not subject to disturbance under this permit. You are encouraged to place temporary sediment settling basins in the locations of the proposed detention basins and direct storm flow to these basins during construction, provided that the detention basins are completed as approved prior to pavement of any areas draining to them.
11. Upon permanent stabilization of all disturbed soils, temporary erosion and/or sediment controls consisting of Haybales and/or siltfence must be removed.
12. You are responsible for the proper installation, operation, maintenance and stability of any mitigative features, facilities, and systems of treatment and control which are installed or used in compliance with this permit to prevent harm to adjacent wetlands until such time that you document that this responsibility has been assumed by another person or organization.
13. You are obligated to install, utilize and follow all best management practices detailed or described on the approved site plans in the construction of the project to minimize or prevent adverse impacts to any adjacent freshwater wetlands and the functions and values provided by such wetlands.
14. All plantings of shrubs, trees or other forms of vegetation as shown or detailed on the approved plans, or detailed in this permit, must be installed as soon as possible after completion of final grading; weather and season permitting. Any plantings which fail to survive one full growing season shall be replaced. Replacement plantings shall be similarly guaranteed for one full growing season.

Application No. 04-0516

3

15. Buffer zone plantings of trees and/or shrubs proposed between the project and any adjacent freshwater wetland areas, except for necessary replacement, must be allowed to develop naturally without being subjected to mowing or manicuring.
16. You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales and any other stormwater management control features have been constructed/installed in accordance with the site plans approved by this permit. This written certification must be submitted to this Program within twenty (20) days of its request or upon completion of the project.

This permit is valid for the original applicant only and is not transferable to another person unless the new owner completes and submits an **Application for Permit Transfer** in accordance with Rule 9.08.

Kindly be advised that this permit is not equivalent to a determination of the type or extent of freshwater wetlands on the subject property. Should you wish to obtain such a verification, you may submit an application in accordance with Rule 9.02.

You are required to comply with the terms and conditions of this permit and to carry out this project in compliance with the Rules at all times. Failure to do so may result in an enforcement action by this Department. You are advised that the issuance of this permit does not in any way represent resolution of any current or pending enforcement actions that other offices of DEM may be involved in.

Furthermore, with respect to the extension of Center of New England Boulevard, issuance of this permit is not to be construed as any indication that DEM expects to permit any further extension or connection of this roadway across wetlands to the west to connect to other phases, with specific reference to the phase approved under Application No. 04-0324. At this time, DEM strongly recommends that alternatives to any wetlands crossings be thoroughly examined and considered before proceeding further. You are put on notice that alternatives appear available that would avoid or further minimize anticipated impacts to wetland resources, but that would dictate substantial revisions to what appears to be planned in the future. DEM is available upon written request to discuss options with you.

In permitting the proposed alterations, the DEM assumes no responsibility for damages resulting from faulty design or construction.

This permit does not remove your obligation to obtain any local, state, or federal approvals or permits required by ordinance or law and does not relieve you from any duties owed to adjacent landowners with specific reference to any changes in drainage.

Please contact Andrew Charpentier of this office (telephone: 401-222-6820, ext. 7414) should you have any questions regarding this letter.

Sincerely,



Charles A. Horbert, Permitting Supervisor
Office of Water Resources
Freshwater Wetlands Program
CAH/AC/ac

Application No. 04-0516

4

Enclosure: Approved site plans

xc: David Chopy, Office of Compliance & Inspection
Russell Chateauf, Office of Water Resources
Harold K. Ellis, Office of Compliance & Inspection
Eric Beck, DEM RIPDES Program
Bruce Zaloudek, Coventry Building Official
Brent Narkawicz, Coventry Town Planner
John P. Caito, P.E., John P. Caito Corporation
Joseph P. McCue, Natural Resources Services, Inc.

TOWN OF COVENTRY

2004 DEC - 8 AM 10:13

04-12579

Robert H. Johnson
TOWN CLERK

TAB I2

STATE OF RHODE ISLAND
KENT, SC.

SUPERIOR COURT

D2 HOMES, INC.; and
MATTHEW J. MCGOWAN, as and only as
Receiver for COMMERCE PARK REALTY, LLC;
COMMERCE PARK PROPERTIES, LLC;
COMMERCE PARK COMMONS, LLC;
COMMERCE PARK ASSOCIATES 4, LLC;
CATAPULT REALTY, LLC; and COMMERCE
PARK MANAGEMENT, LLC in P.M. No. 13-0350
and P.B. No. 13-5001,
Plaintiffs

v.

TERRENCE GRAY, in his capacity as
Director of the STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT,
Defendant.

C.A. No. KC-2024-0766

CONSENT ORDER

Pursuant to the agreement of the Parties in the above-captioned matter and upon the approval of the Court, the following is hereby:

ORDERED, ADJUDGED AND DECREED

1. There are no jurisdictional wetlands located on that portion of land located in Coventry, Rhode Island known as Assessor's Plat 13, Lot 22, comprising sub-phases 1-G, 1-H, 1-I, 1-J, 1-M, and 1-N on the approved master plan with the Town of Coventry,¹ and otherwise described in the Purchase and Sale Agreement between the Receiver and D2 Homes approved by the Court via a March 19, 2024 Order in the Receivership Proceedings² ("Property"). Therefore,

¹ The subject Property is part of a residential development within the Centre of New England known as the "Highlands at Hopkins Hill" condominium development ("Highlands").

² *Nicholas E. Cambio, Trustee, The Nicholas E. Cambio, Roney A. Malafronte and Vincent Cambio Trust v. Commerce Park Realty, LLC, Commerce Park Property, LLC, Commerce Park Commons, LLC, Commerce Park Associates 4, LLC and Catapult Realty, LLC*, P.M. No. 13-0350 and *Matthew J. McGowan, as Receiver v.*

no wetlands permitting is required for the Property and the construction of 52-66 condominium units at the Property ("Project").

2. The Project requires only a Rhode Island Pollutant Discharge Elimination System Construction General Permit ("RIPDES Permit") from the Rhode Island Department of Environmental Management ("RIDEM"), as well as any other permits required from other local and state agencies, as applicable. The parties further agree that:

a. In the application for a RIPDES Permit, the applicant will demonstrate that the watersheds and impervious area for the Project generally matches the watersheds and impervious areas from the 2007-0381 application for the Property, submitted to RIDEM, as previously reviewed by RIDEM.

b. In the application for a RIPDES Permit, the RIDEM will agree that the existing detention ponds in place at the Property and in close off-site proximity will be considered as the existing conditions and considered adequate for runoff control and no further analysis, design or construction will be required by RIDEM to satisfy the requirement for peak runoff control for the RIPDES application or permit. The requirements to do a pre- and post-analysis and to meet the recharge standards set forth in the RIDEM's Stormwater Management, Design and Installation Rules ("Rules") are waived for the Project.

c. The parties recognize that the existing ponds were not reviewed nor approved for water quality purposes and the applicant for the Project will analyze, design and construct the site to meet current water quality standards through potential modifications to the ponds or outlets, and/or installing water quality devices, roof

Commerce Park Management, LLC, C.A. No. PB 13-5001, each pending before this Court as Providence County-docketed matters (the "Receivership Proceedings"),

runoff infiltration, and/or other methods to achieve this under the Rules,
Minimum Standard 3.

3. The applicant will agree that the dwelling units in the Project will obtain potable water from the Kent County Water Authority.
4. The Parties agree and acknowledge that the next steps shall be:
 - a. The applicant will cut the brush and vegetation on the Property to allow the existing infrastructure to be easily accessed;
 - b. The applicant will field-survey the elevations and existing infrastructure in place at the Property;
 - c. The applicant will conduct soils testing throughout the Property to determine the appropriateness of runoff infiltration and to assess the re-grading that occurred previously;
 - d. The applicant will prepare a stormwater plan and supporting data and information for a RIPDES application submission;
 - e. The applicant and RIDEM staff will meet prior to the submission of the RIPDES Application; and
 - f. The applicant will submit a complete RIPDES application to RIDEM, and the RIDEM will review the same within two (2) months of submission.

ENTER:

BY ORDER:


Richard Licht

JUDGE **Richard Licht**

Associate Justice

Dated: September 23, 2024


Michael C. Rampone

CLERK **Michael C. Rampone**

Deputy Clerk I

D2 HOMES, INC.,
By and through its Attorney,

/s/ Joelle C. Rocha
Joelle C. Rocha, Esq.
RI Bar No. 7590
DUFFY & SWEENEY, LTD
321 South Main Street, Suite 400
Providence, RI 02903
Tel: (401) 455-0700
jrocha@duffysweeney.com

And

COMMERCE PARK REALTY, LLC
COMMERCE PARK PROPERTIES, LLC,
COMMERCE PARK COMMONS, LLC,
COMMERCE PARK ASSOCIATES 4, LLC,
CATAPULT REALTY, LLC, and
COMMERCE PARK MANAGEMENT, LLC
in P.M. No. 13-0350 and P.B. No. 13-5001

TERRENCE GRAY, in his capacity as
Director of the STATE OF RHODE
ISLAND DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT,

By and through its Attorney,

/s/Johann Donall
Johann Donall, Esq.
RI Bar No. 9274
235 Promenade Street, Suite 425
Providence, RI 02908
Tel: (401) 537-4081
Fax: (401) 222-3378
johann@donall@dem.ri.gov

/s/ Matthew J. McGowan
Matthew J. McGowan, Esq. as Receiver
RI Bar No. 2770
Sylvia & Kishfy, LLC
56 Exchange Terrace, Suite 200
Providence, RI 02903
Tel: (401)-600-0140
mmcgowan@sklawri.com

CERTIFICATE OF SERVICE

I hereby certify that on this 10th day of September, 2024, a copy of the foregoing document was filed and served through the Rhode Island ECF system and will be sent electronically to the counsel who are registered participants identified on the Notice of Electronic Filing

The document electronically filed and served is available for viewing and/or downloading from the Rhode Island Judiciary's Electronic Filing System.

/s/ Joan Durand

TAB J



January 21, 2025

Mr. Robert DeBlois
D2 Homes, Inc.
420 Scrabbletown Road, Suite G
North Kingstown, RI 02852

RE: Proposed Residential Development
AP 13, Lot 22, Phases 1G, 1H, 1I, 1J and 1M
Highlands at Hopkins Hill
Dante Boulevard, Coventry, Rhode Island

Dear Mr. DeBlois:

Crossman Engineering, in accordance with our scope of services, has completed a planning level assessment of the immediate servicing roadways to a proposed residential development that includes construction of the final phases of the *Highlands at Hopkins Hill* condominium neighborhood, in the Town of Coventry, Rhode Island. The study was completed for submission to the town as part of the preliminary plan approval process, and provides a summary of existing roadway conditions, and an estimate of future traffic conditions if the project was to be approved and constructed. The subject property, approximately 14 acres in size, is located within the *Highlands* residential neighborhood portion of the existing, large scale mixed-use site known as the *Centre of New England*. Figure 1 on the following page depicts the general vicinity of the project in the community.

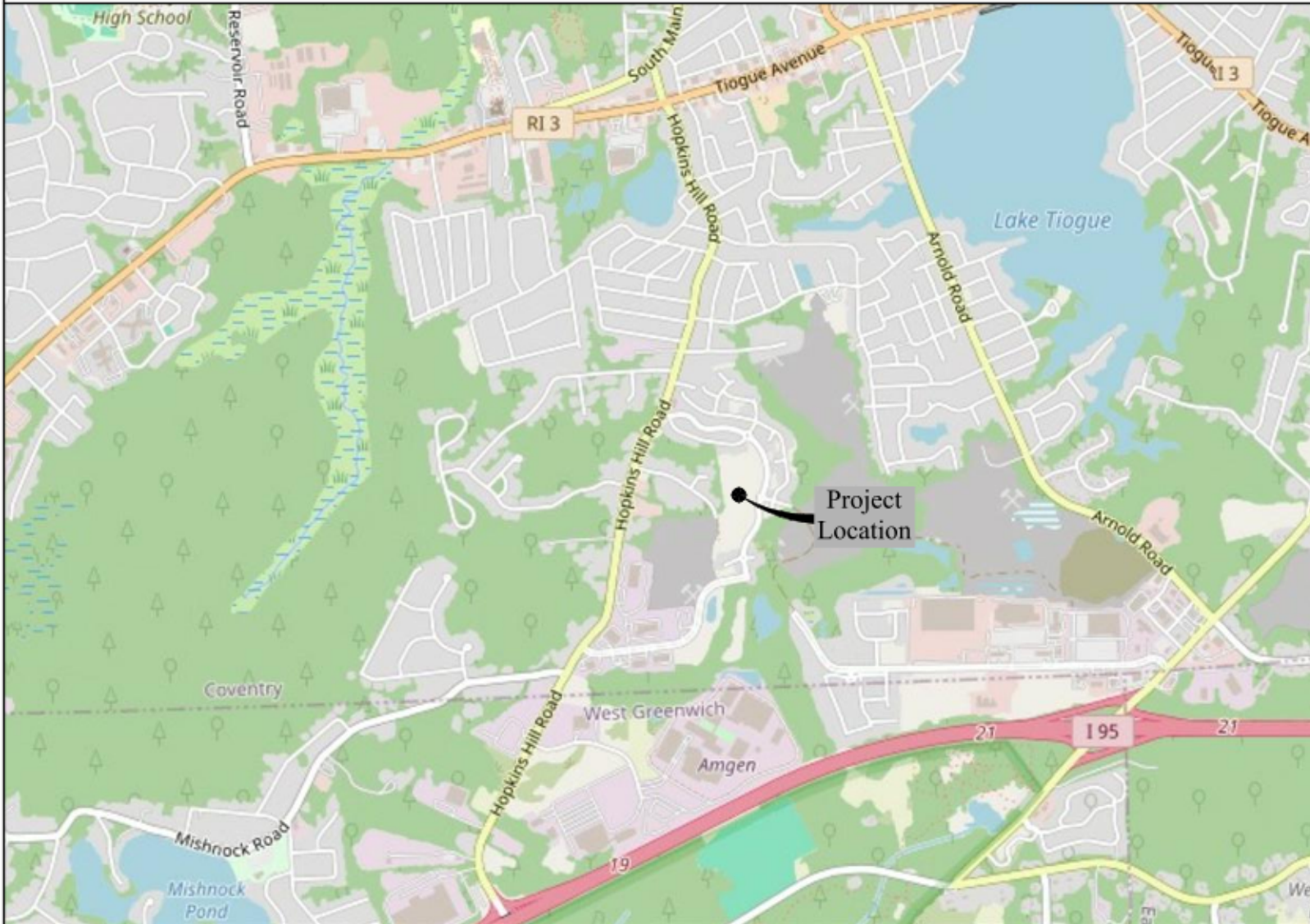
As part of the initial approvals for the *Highlands* condominium neighborhood identified as Phase 1 of the residential component within the *Centre of New England*, a Traffic Impact Study was prepared by BETA Group in May 2004. That study assessed the impact of a larger, residential project that has since been reduced in size based upon the final buildout of the *Highlands*. It is our understanding from information provided by your office, and a review of the current site plan prepared by *DiPrete Engineering*, that the subject property will be developed consistent with and similar to original approvals for Phase 1. The site will contain a 66 single family homes in a condominium configuration, resulting in a total of 218 units within the *Highlands* neighborhood, a reduction from the original 304 units that began construction in the early 2000's. Access to the new homes will be provided from two internal roadways, intersecting with Dante Boulevard on the south and Stephanie Drive to the north.

The study summarized herein focused on both traffic flow efficiency and safety along the immediate servicing roadways of Centre of New England Boulevard and Dante Boulevard, including the existing and proposed site access road intersections. The potential impacts associated with the site related traffic have been defined and evaluated in accordance with standard traffic engineering guidelines and procedures.



Highlands at Hopkins Hill

COVENTRY, RHODE ISLAND



Project Approach

The objective of this traffic study is to determine if any traffic operational and/or safety concerns presently exist along the neighborhood roadways servicing the subject property. A review of the existing roadway features was completed to determine if any potential deficiencies presently warrant mitigation. In addition to existing conditions, the analysis also included the assessment of potential impacts resulting from the additional traffic generated by completion of the final phase of the *Highlands* condominium neighborhood. The study focused on these issues and made recommendations for improvements if determined necessary, based upon the findings of the data collection and analysis phases of the study.

In order to complete our analysis, the following scope of work was completed for the project:

- An inventory of the physical roadway characteristics of Centre of New England Boulevard, Dante Boulevard and Stephanie Drive in the immediate site vicinity to determine the adequacy of the existing roadway geometric features in reference to safety and operations.
- A data collection program was completed including a manual turning movement count (TMC) at the Centre of New England Boulevard intersection with Dante Boulevard and review of record traffic count data for the servicing roadways including TMC's at the Hopkins Hill Road intersections with Centre of New England Boulevard and Dante Boulevard, and an Automatic Traffic Recorder Count (ATR) on Hopkins Hill Road.
- An analysis of crash records obtained from the Coventry Police Department to determine if there are any safety concerns relative to the frequency, severity, or pattern of crashes in the project area.
- An estimate of future traffic volumes for the proposed residential development was calculated using data from the *Trip Generation Manual*, an informational report published by the Institute of Transportation Engineers (ITE).
- Evaluation and analysis of the traffic safety and operations for existing and future build traffic conditions and development of recommendations where necessary, that would be required to maintain safe and efficient traffic flow in the project area.

Project Area

The *Centre of New England* was initially approved in 2003 with a comprehensive master development plan of land uses that included a mixture of large big box stores, small strip retail buildings, restaurants, hotels, offices, commercial buildings and various residential style buildings. This approval also included a *Transportation Master Plan* prepared by Rizzo Associates/Tetra Tech that outlined an off-site infrastructure mitigation program based upon a phased approach to the development, and traffic monitoring as the project was to be completed over an extended period of time. Construction of elements within the expansive 431-acre property began in the late 1990's and have been continuing on a lot-by-lot basis over the last 20 years with the initial, major focus being the commercial portions directly off of New London Turnpike and Hopkins Hill Road.

Centre of New England Boulevard was approved as a primary arterial road servicing the abutting lots within the project, and was designed to extend as a through road between New London Turnpike and Hopkins Hill Road. The road has been constructed in sections over time, starting at either end as lots were developed

along its length. The short segments of road completed as part of the initial phase in the early 2000's, were constructed to service the *Cracker Barrel*, *Wendy's*, *Applebee's*, *Hampton Inn* and *BJ's Wholesale Club* on the east, and in conjunction with Dante Boulevard servicing office, warehousing and contractor buildings and the *Highlands* condominiums on the west.

Much of the current buildout of the *Centre of New England* was completed in subsequent phases by 2010. During this initial period off of Hopkins Hill Road, Dante Boulevard was constructed for access to the *Highlands* residential neighborhood element of the project. This residential street provides a second means of access from Hopkins Hill Road to the western section of Centre of New England Boulevard, intersecting at its current easterly terminus that extends to the wetland boundary limits.

Permitting to extend and connect the main boulevard to create the through road was initially denied by the RIDEM, and for years permitting for the crossing was not pursued. As a result of safety and operational concerns identified by town public safety officials the dead-ended boulevard created, modifications to the original six lane boulevard style road were made, reducing its width to only two lanes through the wetland complex. This design was approved by the RIDEM in May 2024 allowing for completion of the boulevard that will provide a through connection between New London Turnpike and Hopkins Hill Road. Construction was initiated at the beginning of August 2024, and it is anticipated that this work will be completed within a 12-month period, and open for traffic during the summer of 2025.

The connection will result in a major redistribution of traffic on the local roadways providing access to the *Centre of New England* including New London Turnpike, Hopkins Hill Road, Arnold Road, and the I-95 interchanges. This change will require a future analysis of these roadways and intersections to document the traffic redistribution, and what if any modifications to the existing points of access to the *Centre of New England* servicing the development are necessary. These potential improvements will be dictated by the redistribution of traffic resulting from the boulevard completion, in combination with development of the remaining vacant lots that propose primarily residential uses abutting the *Highlands* neighborhood.

These undeveloped lots are presently under review by the town, and would represent full development of the 431-acre site in accordance with the previous 2005 Master Plan approvals. A Traffic Impact Study prepared by Crossman Engineering was recently completed and submitted with the application for development of these final lots within the *Centre of New England*. The study provided analysis of the project area including Hopkins Hill Road and Centre of New England Boulevard and included development of the subject property as part of the overall site analysis. A supplemental additional study will be completed in accordance with a condition of the recent Planning Board approval as part of final project reviews. The updated study will incorporate the traffic redistribution impacts resulting from completion of Centre of New England Boulevard. This will be done in order to provide updated base conditions to determine the appropriate final infrastructure improvements along the servicing roadways based upon final travel patterns realized for the *Centre of New England*.

The necessary mitigation to accommodate traffic demands of the full *Centre of New England* development, including potential signalization of the Hopkins Hill Road intersection with Centre of New England Boulevard as identified in the original *Transportation Master Plan*, will be monitored and implemented as part of the overall *Centre of New England* development infrastructure responsibilities of the current owner. Property sales and site infrastructure improvements are the responsibility of the court appointed receiver that is managing the property. The receiver recently implemented the roadway maintenance program completed

in 2024, and the roadway connection construction project to be completed in 2025 that were funded through property sales.

The subject project, which is a completion of the final phase of the *Highlands* condominium neighborhood, is a minor, negligible component of the overall *Centre of New England* development. This small project will have no bearing on the timing and extent of potential additional infrastructure needs noted above, where the other factors as described, will drive any future improvements that may be warranted. Therefore, noting the previous studies that have been completed that incorporate the subject site, in combination with the supplemental study that will be completed in 2025 to document the traffic redistribution associated with the roadway connection, for the subject project, this study focused primarily on the *Highlands* local neighborhood street system to ensure proper design treatments and measures are incorporated to provide safe and efficient access to the new homes. The limits of our analysis included Dante Boulevard between Hopkins Hill Road and Centre of New England Boulevard, and Stephanie Drive that will provide the northern point of access to the new internal streets. Figure 2 on the following page depicts the general project area of the study.

Roadways and Intersections

Centre of New England Boulevard

The section of Centre of New England Boulevard under study for this project extends from Hopkins Hill Road to its easterly dead-end terminus as previously described. It is an east/west local roadway servicing a small portion of the large-scale mixed-use *Centre of New England* development. The roadway as it presently exists was constructed between 1998 and 2007, extending from Hopkins Hill Road to the east to initially service the small group of commercial buildings in the immediate vicinity of Hopkins Hill Road. It was extended further east to intersect with Dante Boulevard as that portion of the project containing a residential use was constructed, providing a loop connection to Hopkins Hill Road. As noted earlier, the original design of the boulevard style roadway was to extend the new six lane road fully between New London Turnpike and Hopkins Hill Road to the west paralleling I-95. The roadway was never completed and presently extends approximately 5,000 feet from New London Turnpike and 2,600 feet from Hopkins Hill Road, both ending at a dead-end terminus. A short 800-foot section was not constructed as it required a wetland crossing that has recently been permitted by RIDEM. The construction work for this segment was initiated in August 2024, and is expected to be completed by the summer of 2025. The roadway as originally designed, will provide a transportation benefit in the communities surrounding this large-scale development by limiting unnecessary travel along the local arterials.





Highlands at Hopkins Hill

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The boulevard style roadway extending between Hopkins Hill Road and Dante Boulevard is typically 84-feet wide consisting of 36-foot-wide curb to curb pavement section on either side of a raised 12-foot median that separates each direction of travel. The final surface course and other minor maintenance improvements were completed in the fall of 2024, though short sections in advance of the wetland crossing segment were not upgraded and will be completed under finalization of the roadway connection in 2025. The maintenance work also included replacement of the travel and turning lane delineation that had been worn or was nonexistent due to age. The new markings include delineation of two travel lanes in each direction, and a left turn lane adjacent to the center median, providing for safe and efficient access to the driveways along its length.

As noted, the roadway infrastructure is substantially complete with granite curbing and concrete/brick sidewalks that are provided along the majority of both sides of the road. There are sections of sidewalk missing along the frontage of the few vacant lots that require installation when these properties are developed. The roadway median area provides for a landscaped boulevard environment that includes lighting for the roadway for proper nighttime illumination. As part of the roadway maintenance program, 30 mph speed limit signs will be installed to maintain appropriate speeds along the major route within the *Centre of New England*.

Dante Boulevard

Dante Boulevard is a local neighborhood street extending between Hopkins Hill Road and Centre of New England Boulevard. It serves as the main collector road within the condominium neighborhood, linking to parallel residential streets that provide direct access to the homes. There are no homes or driveways located directly along Dante Boulevard, where all traffic entering and exiting the neighborhood must travel for property access.

The roadway was designed in a curvilinear manner with single travel lanes and numerous horizontal curves, serving to maintain proper, low travel speeds through the residential neighborhood. The boulevard style road is 40 feet wide with a 15-foot travel lane in each direction, separated



by a 10-foot landscaped median with ornamental lighting. Concrete curbing and sidewalks are provided along both sides of the road.

Three small roundabouts (traffic circles), are utilized at the intersecting side streets for intersection control as seen in the photograph on the following page. It should be noted that there are no standard signs or pavement markings at these junctions to properly direct drivers, or indicate required movement control and

right-of-way around the circles. It is recommended that standard regulatory signing and pavement markings be installed along the road and at intersections during the maintenance upgrade of the streets.

Similar to Centre of New England Boulevard, these roads were never completed and had been surfaced with only a binder course since construction over 15 years ago. Completion of these residential roads with placement of the final surface course was initiated last fall within this neighborhood.



Hopkins Hill Road at Dante Boulevard

Hopkins Hill Road intersects Dante Boulevard to form an unsignalized, three-way junction. Hopkins Hill Road forms the north and south legs, while Dante Boulevard forms the eastern leg. The northbound movements are delineated with a single through/right turn lane. The southbound approach consists of one through/left travel lane. The westbound approach is comprised of a single left/right turn lane. Sidewalks are provided on all quadrant with accessible ramps limited to Dante Boulevard, though they appear not to be ADA compliant. The sidewalk is concrete along the westerly side of Hopkins Hill Road but are a paver material on Dante Boulevard, extending onto Hopkins Hill Road along the site frontage. Crosswalks are available across the northern and eastern legs of the intersection, though no curb ramps are provided for full pedestrian accessibility to the crosswalk on Hopkins Hill Road. The minor approach is properly signed with stop control (sign and pavement marking).

Centre of New England Boulevard at Dante Boulevard

Centre of New England Boulevard intersects Dante Boulevard to form an unsignalized, three-way junction. Dante Boulevard forms the northern leg, while Centre of New England Boulevard forms the eastern and western legs. As noted, the eastern leg (westbound approach), is currently under construction for completion in 2025 and will be narrowed from its existing 36-foot width. Presently there are no pavement markings or intersection control signing at the junction. These features can be seen in the adjacent photograph.



As part of the roadway completion project currently underway, appropriate signing and markings are proposed to be installed. The intersection will also be physically modified to provide single through travel lanes on Centre of New England Boulevard, with a separate eastbound left turn lane onto Dante Boulevard. The Dante Boulevard southbound approach provides a single all-purpose lane for left and right turning traffic. Concrete sidewalks are available on all quadrant with accessible ramps, though they appear not to be ADA compliant. No crosswalk is available across the northern leg of the intersection. It is recommended that a crosswalk linking to the two wheelchair ramps be installed as part of the current roadway construction project.

Dante Boulevard at Site Access Road Intersections

Access to this phase of the *Highlands* condominiums will be provided at two locations that had been established for access into to property including to a local residential street at Stephanie Drive that links to Dante Boulevard at two locations. The second, and primary access will be to the main collector road within the neighborhood, Dante Boulevard, directly at a roundabout intersection to the south. The roundabout will provide for single lane approaches with yield control, limiting all entering traffic to right turns at low speeds and safe turning movements. Concrete and brick sidewalks are provided on all quadrant with accessible ramps at the Dante Road junction. No crosswalks are available on any of the intersection approaches.

Traffic

Existing traffic flow characteristics for this area were developed from a traffic counting program completed by Crossman, and review of historical traffic count data from the initial *Centre of New England Transportation Master Plan* that also included a traffic monitoring program, and subsequent studies for other projects completed in the area. Automatic Traffic Recorder (ATR) counts were reviewed from data collected on Hopkins Hill Road south of Centre of New England Boulevard in June 2024 to obtain daily traffic volume, speed and classification data for the roadway. Manual Turning Movement Counts (TMC) were also completed in June and July 2024 at the Hopkins Hill Road intersections with Centre of New England Boulevard and Dante Boulevard, and in January 2025 at the Centre of New England Boulevard intersection Dante Boulevard. Data was obtained during the morning and afternoon peak hours of traffic to define daily peak traffic demands and patterns of the roadways providing access to the site.

Utilizing this data, a weekday average daily traffic volume of approximately 10,200 vehicles per day was determined for Hopkins Hill Road to the immediate south of Centre of New England Boulevard. On a typical weekday along this section of Hopkins Hill Road, traffic volumes begin to increase at 6:00 AM, until the morning peak hour between 7:00 and 8:00 AM with a total volume of approximately 725 vehicles. The volumes then decrease and range between 500 and 650 vehicles per hour until 2:00 PM before gradually increasing to the daily afternoon peak hour of traffic between 4:00 to 5:00 PM of 940 vehicles. During the morning peak period between 60 to 70 percent of the traffic is destined to the south, while in the afternoon peak period approximately 65 percent is northbound. The 2024 traffic volume data was compared to the 2004 record information available for this same section of Hopkins Hill Road. A review of the daily and hourly volumes found a minor growth rate in traffic of less than 0.5 percent per year. The 2004 daily volume of 9,350 vpd increased by approximately 850 vehicles per day over the 20-year review period. During the daily peak hours of traffic, the morning peak hour was determined to be 25 vehicles less today, and the afternoon peak hour 125 vehicles more within the range of daily volume fluctuations, and which are both negligible in relation to peak hour intersection operations and delay.

In addition to the ATR counts, Crossman completed manual turning movement counts at the study intersections noted along Dante Boulevard. Data was collected during the peak weekday periods between 7:00 to 9:00 AM and 4:00 to 6:00 PM when the proposed site and surrounding roadway would service the highest combined peak volume of traffic. The turning movement count data found that during the busiest periods approximately 26 vehicles are serviced on Dante Boulevard to the east of Hopkins Hill Road during the 7:00 to 8:00 AM period with approximately 5 vehicles eastbound and 21 vehicles westbound. During the PM peak between 4:00 and 5:00 PM approximately 69 vehicles are serviced with approximately 43 eastbound vehicles and 26 vehicles westbound. During these periods Hopkins Hill Road at this intersection serviced approximately 750 AM and 1,030 PM vehicles per hour. The manual traffic counts corroborated the ATR data and also the minor changes in peak hour volumes that have occurred in the project area over the last 20 years. Complete count information can be found in the Attachment.

Safety Analysis

In order to determine if there are any limiting factors affecting safety relating to access to the proposed residential project, the physical characteristics of Hopkins Hill Road, Centre of New England Boulevard and Dante Boulevard in the project area were investigated. These limiting factors would potentially include horizontal or vertical roadway geometric changes or roadside obstructions that limit sight distances for vehicles traveling along the road or entering the road from a side street or driveway location. In this instance, the *Stopping Sight Distance* requirement is a design standard necessary to permit turning vehicles to safely enter and exit the development at the existing intersections serving the property and at the proposed site access road intersection with Stephanie Drive.

STOPPING SIGHT DISTANCE

Stopping Sight Distance (SSD) is the minimum distance that a driver travelling along a roadway at or near the design speed, requires in order to adequately perceive, react and safely come to a stop prior to reaching an object in its travel path and avoid a collision. The available and required SSD are a function of the roadway geometry and design speed respectively, and are factored in when determining the appropriate and safe location of a site driveway or roadway intersection.

A review of the existing roadway geometry at the major points of access to the neighborhood off of Hopkins Hill Road were completed. The geometry Hopkins Hill Road in the defined project area can be described as curvilinear with multiple horizontal and vertical curves along its length. The roadway has two minor horizontal curves to the north and south of the Dante Boulevard intersection, which is located on the tangent between these two curves. The roadway gradient is relatively level to the north with a gradual incline heading in a southerly direction, up to the crest of the curve in the vicinity of Bestwick Trail. In the immediate vicinity of the Centre of New England Boulevard intersection, a reverse horizontal curve extending to both the north and south of the minor side street is present, and the vertical alignment can be described as generally level with several minor crest vertical curves that do not limit sight lines while travelling along the road. The vertical and horizontal alignment of Dante Boulevard in the vicinity of the site access road intersections that are roundabout controlled, are generally level with horizontal approach curvature typical over the boulevard length.

Based upon the roadway geometry as described and the available sight distances determined at the study intersections, a review of the required stopping sight distance was undertaken to ensure safe operations. The *required* SSD is based upon the speed of traffic travelling along the roadway and this value is compared to the available or *measured* SSD to determine if this safety measure is satisfied. In determining the required

SSD, the design speed of the roadway must be established. The most recent edition of the American Association of State Highway and Transportation Officials' (AASHTO's) publication ***A Policy on Geometric Design of Highways and Streets***, Table 3-1 is referenced in determining the required stopping sight distances, which is based on the design speeds for each roadway.

One method of determining the design speed of a roadway is referenced in the ***RIDOT Highway Design Manual***. On roadways with a posted speed limit less than 40 mph, the design speed is estimated to be the posted speed limit, plus 5 mph in urban areas, and plus 10 mph in rural areas. To determine if the minimum requirements for safe SSDs were met in this study, design speeds of 40 mph and 20 mph were utilized for evaluating the stopping sight distance on Hopkins Hill Road in the vicinity of the Centre of New England Boulevard and the Dante Boulevard roundabout intersections respectfully.

In addition to evaluating the SSD based upon the posted *speed limit* and resultant *design speed*, to be conservative, actual speed data was also obtained to determine the 85th percentile speed for drivers travelling along Hopkins Hill Road in the project area. The 85th percentile speed represents the speed at which 85 percent of drivers are travelling at or slower and is utilized when available in the analysis of required sight distances. Based on speed data obtained as part of the data collection program, the 85th percentile speed for Hopkins Hill Road in the 4-lane section with a posted speed limit of 35 mph was determined to be 47 miles per hour for southbound and 49 mph for northbound traffic.

Based upon the roadway geometry as defined for Hopkins Hill Road, the sight distances available at the Centre of New England Boulevard intersection were determined to be in excess of 450 feet in both directions, which is greater than the required safe stopping sight distance of 250 feet based on the posted speed of 35 mph, 305 feet for the AASHTO requirements for design speed established per RIDOT policy, and the 414 feet for the 85th percentile travel speeds between 47 and 49 mph recorded along this section of road. Based on observations of the intersection, it is recommended that landscaping to the south of Centre of New England Boulevard be properly maintained to have the low-level shrubs maintained at less than two feet, and the branches on the mature trees removed/trimmed up to a height of 10 feet to allow for unimpeded sight lines in this direction.

Based upon the roadway geometry of Hopkins Hill Road in the vicinity of the Dante Boulevard intersection, the available sight distances were determined to be in excess of 500 feet in both directions. These values are greater than the required safe stopping sight distance of 155 feet based on the posted speed of 25 mph, 200 feet for the AASHTO requirements for design speed established per RIDOT policy, and the 305 feet for observed travel speeds between 30 and 40 mph along this section of road.

Based upon the roadway geometry of Dante Boulevard in the vicinity of the local residential street intersections, the available sight distances were determined to be in excess of 150 feet on all approaches. These values are greater than the required safe stopping sight distance of 115 feet based on the yield-controlled condition on all of the approaches to the intersection and observed travel speeds between 15 and 20 mph required to traverse the roundabout intersections as there is no posted speed limit on this private residential street.

Based upon the review of existing roadway geometry and operations, roadway or traffic related safety enhancements could be implemented to improve safety within the immediate project area. As previously noted, landscaping should be maintained along the frontage of Hopkins Hill Road as not to hinder sight lines south of Centre of New England Boulevard, and roadway striping specifically at the Centre of New England Boulevard intersection should also be completed including installation of a *Stop* sign as part of the current roadway maintenance project to improve lane delineation and proper utilization. Yield signs and markings

should also be placed at the roundabout intersections along Dante Boulevard along with proper advanced signing.

Trip Generation and Operational Analysis

To determine the traffic impact of a proposed development, estimates of anticipated traffic to be generated by a particular land use must be calculated. As previously discussed, development proposal includes construction of a total of 66 residential condominium units as part of the final phase of the *Highlands* neighborhood that began construction in the early 2000's. The new homes are proposed on a single 13.6-acre site that had been cleared and partially graded as part of the initial construction phases. Access/egress to the new residential homes will be provided at two locations that had been established as part of the original plans at two locations, Stephanie Drive to the north and Dante Boulevard at a roundabout to the south. Figure 3 on the following page depicts the site layout and access plan provided by *DiPrete Engineering*.

For this site, projected traffic volumes for the residential project were based on use of trip generation factors. These factors are taken from the "Trip Generation" manual, an informational report published by the Institute of Transportation Engineers (ITE), a national professional organization for traffic and transportation engineers. For the proposed residential project, Land Use Code 210 Single Family Detached housing was utilized based upon the layout and configuration of the homes. The table below provides a summary of peak hour trips estimated for the residential development project.

Trip Generation Summary

<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
<i>Two Way Trip Total:</i>	46	<i>Two Way Trip Total:</i>	62
Entering:	12	Entering:	39
Exiting:	34	Exiting:	23

As indicated in the table, the proposed residential use results in a relatively low volume estimate of vehicles entering and exiting the site during the morning and afternoon peak traffic periods. It should be noted that the values presented in the table are highly conservative due the ITE land use classification utilized for this study for the new neighborhood. Though they are physically "single family" detached homes, these new types of residential condominium projects that are a variation of a typical senior living or age restricted developments, generate much less traffic than a standard single-family residential neighborhood where families with children are more prevalent. The demographics of these types of developments are typically residents that are empty nesters or retired.

Information provided in the ITE rate sheet included in the Attachment, reference these types of developments as "patio home" style neighborhoods that are configured as single units in a condominium layout instead of duplex/townhouse units, where lower rates (0.26 AM/0.47 PM) have been demonstrated



Highlands at Hopkins Hill

COVENTRY, RHODE ISLAND



over a conventional single family style neighborhood. This was found to be consistent with the current units in the *Highlands* which is not age restricted, and where trip rates are substantially less than a typical family style neighborhood. This type of land use would be expected to generate between 50 and 65 percent fewer peak hour trips than the number of vehicle trips that have been estimated in the table. Using the existing *Highlands* neighborhood site trip rates, 16 and 32 trips would be expected to be generated during the AM and PM peak periods respectively for the final phase of the project.

To determine future operations of the servicing roadways, the analysis completed under the major 712-unit residential development recently approved at the concept stage by the town that included the subject development, was reviewed. At the Hopkins Hill Road intersections, it was determined that the estimated volumes of left turning traffic from Hopkins Hill Road into the minor side streets of Dante Boulevard and Centre of New England Boulevard would operate efficiently at LOS B or better with delays of 10 seconds or less during both the future weekday morning and afternoon peak hours. The Dante Boulevard minor approach exiting traffic is estimated to operate at an acceptable LOS D or better during the morning and afternoon peak periods with average queues of one to two vehicles and no congestion. The existing roundabout intersections along Dante Boulevard providing access to the new homes would also operate with minor delays and no congestion due to the minor hourly volumes serviced through the neighborhood.

The Centre of New England Boulevard intersection was estimated to experience the greatest delays in the future under full buildout conditions due to the higher exiting volumes anticipated for the primary road providing access to the *Centre of New England* when this area of the site is fully developed. As expected, the westbound left turn exiting movement from Centre of New England Boulevard is estimated to operate at LOS F with delays in excess of 50 seconds, while the right turn exiting traffic, with a dedicated lane, will operate efficiently at LOS B or better during peak daily traffic conditions. The delays for left turning traffic are estimated to result in average queuing of 5 to 10 vehicles during the morning and afternoon peak periods respectively.

Under existing conditions, and with the subject 66-unit residential development, delays and queuing of the minor approach are acceptable. But as additional development occurs over an extended period of time within the *Centre of New England*, operations will continue to deteriorate to a point where improved control including signalization, will be required to maintain safe and adequate operations at this junction. It is recommended through coordination with the town, that a traffic monitoring program be established through the receiver to review future conditions associated with the roadway connection, and under additional development, in order to determine the appropriate schedule for the upgrade. Under a future signal-controlled junction upgrade, the report determined that the intersection with signal control would operate overall at a good LOS A during both peak periods reviewed for this study with all movements operating at LOS B or better.

Conclusions and Recommendations

In summary, based upon the data obtained and analysis completed as presented in this letter, it has been determined that the proposed final phase of the *Highlands* condominium development project within the *Centre of New England* mixed use center, with the recommendations to maintain landscaped areas at intersections for proper sight lines, and to provide final signing and striping improvements, will not adversely impact the local servicing roadways. The final portion of the residential project is consistent with the previously approved project and the original traffic study conclusions remain valid where the proposed use

will not have a negative impact on public safety or welfare in the defined study area, and adequate and safe access is available to the property.

We trust that this letter sufficiently addresses the requirements of the Town of Coventry to obtain your local approvals. If you should have any questions, please do not hesitate to contact our office.

Very truly yours,
Crossman Engineering, Inc.



Paul J. Bannon
Senior Project Director

ATTACHMENTS

-
- A. Traffic Count Data
 - B. Trip Generation

ATTACHMENT A – Traffic Count Data

Automatic Traffic Recorder Count (ATR)

Hopkins Hill Road

Intersection Turning Movement Count (TMC)

Hopkins Hill Road at Dante Boulevard

Centre of New England Boulevard at Dante Boulevard

A

Automatic Traffic Recorder Count (ATR)

Hopkins Hill Road

Hopkins Hill Road

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

tel (781)587-0086 cell (781)439-4999

Page 1

Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

05824AVOLUME
Site Code: 2873

Start Time	6/3/2024 Mon	6/4/2024 Tue	6/5/2024 Wed	6/6/2024 Thu	6/7/2024 Fri	Weekday Average	6/8/2024 Sat	6/9/2024 Sun
12:00 AM	33	44	47	63	53	48	92	73
01:00	22	25	21	15	21	21	29	45
02:00	20	11	16	14	14	15	23	28
03:00	22	17	28	20	22	22	20	15
04:00	70	69	76	72	78	73	24	24
05:00	205	199	227	213	229	215	90	61
06:00	518	508	507	522	477	506	183	127
07:00	762	753	752	662	683	722	282	189
08:00	671	711	685	668	736	694	413	280
09:00	526	602	612	541	516	559	536	367
10:00	530	508	535	490	575	528	591	460
11:00	532	598	581	490	601	560	682	539
12:00 PM	633	632	658	675	676	655	696	559
01:00	556	563	615	578	602	583	622	509
02:00	709	743	742	729	719	728	605	511
03:00	824	899	903	834	800	852	568	518
04:00	982	972	937	911	883	937	603	506
05:00	745	823	854	780	807	802	511	447
06:00	500	584	521	506	492	521	450	380
07:00	419	427	445	386	413	418	367	336
08:00	288	320	323	300	331	312	309	258
09:00	192	223	207	217	239	216	214	144
10:00	103	112	110	121	164	122	199	109
11:00	76	76	72	92	117	87	120	49
Total	9938	10419	10474	9899	10248		8229	6534
Percentage	97.5%	102.2%	102.7%	97.1%	100.5%		80.7%	64.1%
AM Peak	07:00	07:00	07:00	08:00	08:00	-	11:00	11:00
Vol.	762	753	752	668	736	-	682	539
PM Peak	16:00	16:00	16:00	16:00	16:00	-	12:00	12:00
Vol.	982	972	937	911	883	-	696	559
Total		10419	10474					

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

tel (781)587-0086 cell (781)439-4999

Page 1

Hopkins Hill Road south of
Centre of New England Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

05824A volume
Site Code: 2873

Start Time	6/3/2024		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	19	14	32	12	32	15	47	16	37	16	33	15	74	18	51	22
01:00	16	6	18	7	13	8	10	5	15	6	14	6	23	6	29	16
02:00	12	8	4	7	9	7	9	5	9	5	9	6	17	6	23	5
03:00	6	16	4	13	15	13	7	13	12	10	9	13	14	6	8	7
04:00	26	44	14	55	19	57	16	56	23	55	20	53	8	16	15	9
05:00	57	148	51	148	62	165	59	154	65	164	59	156	34	56	14	47
06:00	171	347	184	324	174	333	166	356	163	314	172	335	70	113	44	83
07:00	275	487	297	456	295	457	234	428	256	427	271	451	121	161	95	94
08:00	322	349	318	393	290	395	288	380	338	398	311	383	188	225	133	147
09:00	242	284	295	307	287	325	254	287	255	261	267	293	257	279	174	193
10:00	273	257	259	249	282	253	251	239	281	294	269	258	315	276	226	234
11:00	288	244	356	242	314	267	257	233	323	278	308	253	363	319	291	248
12:00 PM	359	274	329	303	356	302	343	332	361	315	350	305	377	319	316	243
01:00	322	234	318	245	364	251	314	264	347	255	333	250	365	257	285	224
02:00	416	293	461	282	455	287	437	292	430	289	440	289	354	251	298	213
03:00	541	283	599	300	586	317	540	294	515	285	556	296	327	241	305	213
04:00	663	319	635	337	619	318	589	322	549	334	611	326	358	245	290	216
05:00	502	243	565	258	545	309	513	267	504	303	526	276	305	206	272	175
06:00	292	208	362	222	313	208	310	196	279	213	311	209	256	194	216	164
07:00	247	172	252	175	273	172	231	155	266	147	254	164	229	138	212	124
08:00	195	93	205	115	208	115	187	113	215	116	202	110	189	120	171	87
09:00	117	75	138	85	139	68	144	73	152	87	138	78	139	75	99	45
10:00	63	40	85	27	79	31	76	45	112	52	83	39	126	73	68	41
11:00	56	20	50	26	51	21	61	31	76	41	59	28	79	41	33	16
Total Day	5480	4458	5831	4588	5780	4694	5343	4556	5583	4665	5605	4592	4588	3641	3668	2866
AM Peak	08:00	07:00	11:00	07:00	11:00	07:00	08:00	07:00	08:00	07:00	08:00	07:00	11:00	11:00	11:00	11:00
Vol.	322	487	356	456	314	457	288	428	338	427	311	451	363	319	291	248
PM Peak	16:00	16:00	16:00	16:00	16:00	16:00	16:00	12:00	16:00	16:00	16:00	16:00	12:00	12:00	12:00	12:00
Vol.	663	319	635	337	619	318	589	332	549	334	611	326	377	319	316	243

Comb. Total	9938	10419	10474	9899	10248	10197	8229	6534
ADT	ADT 9,392	AADT 9,392						

A

Intersection Turning Movement Count (TMC)

Hopkins Hill Road at Dante Boulevard

Centre of New England Boulevard at Dante Boulevard

Hopkins Hill Road at Dante Boulevard

tel (781)587-0086 cell (781)439-4999

File Name : 05824B
Site Code : 2873
Start Date : 6/12/2024
Page No : 1

	Hopkins Hill Road From North			Dante Boulevard From East			Hopkins Hill Road From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	130	1	0	2	1	1	1	66	0	202
07:15 AM	132	1	0	4	4	0	0	61	0	202
07:30 AM	109	0	0	4	3	0	1	64	0	181
07:45 AM	106	1	0	1	2	3	0	71	0	184
Total	477	3	0	11	10	4	2	262	0	769
08:00 AM	97	2	0	3	7	0	0	54	0	163
08:15 AM	96	1	0	1	3	1	2	65	0	169
08:30 AM	78	1	0	1	6	0	0	63	0	149
08:45 AM	85	2	0	4	3	0	1	77	0	172
Total	356	6	0	9	19	1	3	259	0	653
Grand Total	833	9	0	20	29	5	5	521	0	1422
Apprch %	98.9	1.1	0	37	53.7	9.3	1	99	0	
Total %	58.6	0.6	0	1.4	2	0.4	0.4	36.6	0	
Cars & Peds	811	9	0	20	28	5	4	493	0	1370
% Cars & Peds	97.4	100	0	100	96.6	100	80	94.6	0	96.3
Trucks & Buses	22	0	0	0	0	0	0	27	0	49
% Trucks & Buses	2.6	0	0	0	0	0	0	5.2	0	3.4
Bikes by Direction	0	0	0	0	1	0	1	1	0	3
% Bikes by Direction	0	0	0	0	3.4	0	20	0.2	0	0.2

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Transportation Data Corporation

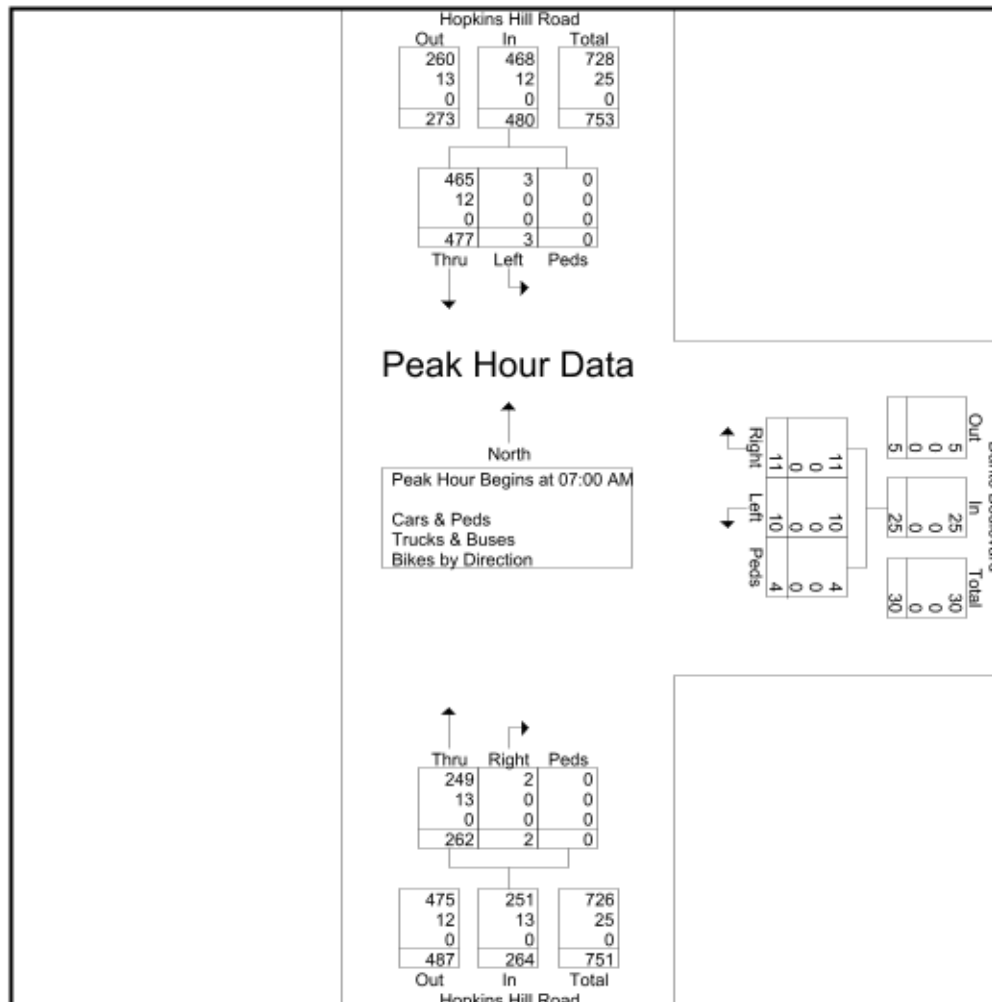
Mario Perone, mperone1@verizon.net

tel (781)587-0086 cell (781)439-4999

N/S: Hopkins Hill Road
E: Dante Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05824B
Site Code : 2873
Start Date : 6/12/2024
Page No : 1

	Hopkins Hill Road From North				Dante Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	130	1	0	131	2	1	1	4	1	66	0	67	202
07:15 AM	132	1	0	133	4	4	0	8	0	61	0	61	202
07:30 AM	109	0	0	109	4	3	0	7	1	64	0	65	181
07:45 AM	106	1	0	107	1	2	3	6	0	71	0	71	184
Total Volume	477	3	0	480	11	10	4	25	2	262	0	264	769
% App. Total	99.4	0.6	0		44	40	16		0.8	99.2	0		
PHF	.903	.750	.000	.902	.688	.625	.333	.781	.500	.923	.000	.930	.952
Cars & Peds	465	3	0	468	11	10	4	25	2	249	0	251	744
% Cars & Peds	97.5	100	0	97.5	100	100	100	100	100	95.0	0	95.1	96.7
Trucks & Buses	12	0	0	12	0	0	0	0	0	13	0	13	25
% Trucks & Buses	2.5	0	0	2.5	0	0	0	0	0	5.0	0	4.9	3.3
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0



tel (781)587-0086 cell (781)439-4999

File Name : 05824BB
Site Code : 2873
Start Date : 6/12/2024
Page No : 1

	Hopkins Hill Road From North			Dante Boulevard From East			Hopkins Hill Road From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
03:00 PM	93	4	0	4	3	0	6	103	0	213
03:15 PM	78	8	0	6	6	0	6	112	0	216
03:30 PM	89	8	0	8	2	0	6	150	0	263
03:45 PM	78	5	0	5	0	0	2	159	0	249
Total	338	25	0	23	11	0	20	524	0	941
04:00 PM	101	4	0	4	2	0	5	172	0	288
04:15 PM	77	7	0	3	2	0	6	161	0	256
04:30 PM	86	2	0	5	1	0	2	154	0	250
04:45 PM	81	6	0	3	3	2	3	156	0	254
Total	345	19	0	15	8	2	16	643	0	1048
05:00 PM	84	2	0	3	2	0	1	150	0	242
05:15 PM	76	5	0	5	2	0	5	140	0	233
05:30 PM	63	1	0	2	2	0	5	138	0	211
05:45 PM	71	6	0	2	2	0	3	104	0	188
Total	294	14	0	12	8	0	14	532	0	874
Grand Total	977	58	0	50	27	2	50	1699	0	2863
Apprch %	94.4	5.6	0	63.3	34.2	2.5	2.9	97.1	0	
Total %	34.1	2	0	1.7	0.9	0.1	1.7	59.3	0	
Cars & Peds	968	58	0	50	27	2	50	1686	0	2841
% Cars & Peds	99.1	100	0	100	100	100	100	99.2	0	99.2
Trucks & Buses	8	0	0	0	0	0	0	12	0	20
% Trucks & Buses	0.8	0	0	0	0	0	0	0.7	0	0.7
Bikes by Direction	1	0	0	0	0	0	0	1	0	2
% Bikes by Direction	0.1	0	0	0	0	0	0	0.1	0	0.1

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Transportation Data Corporation

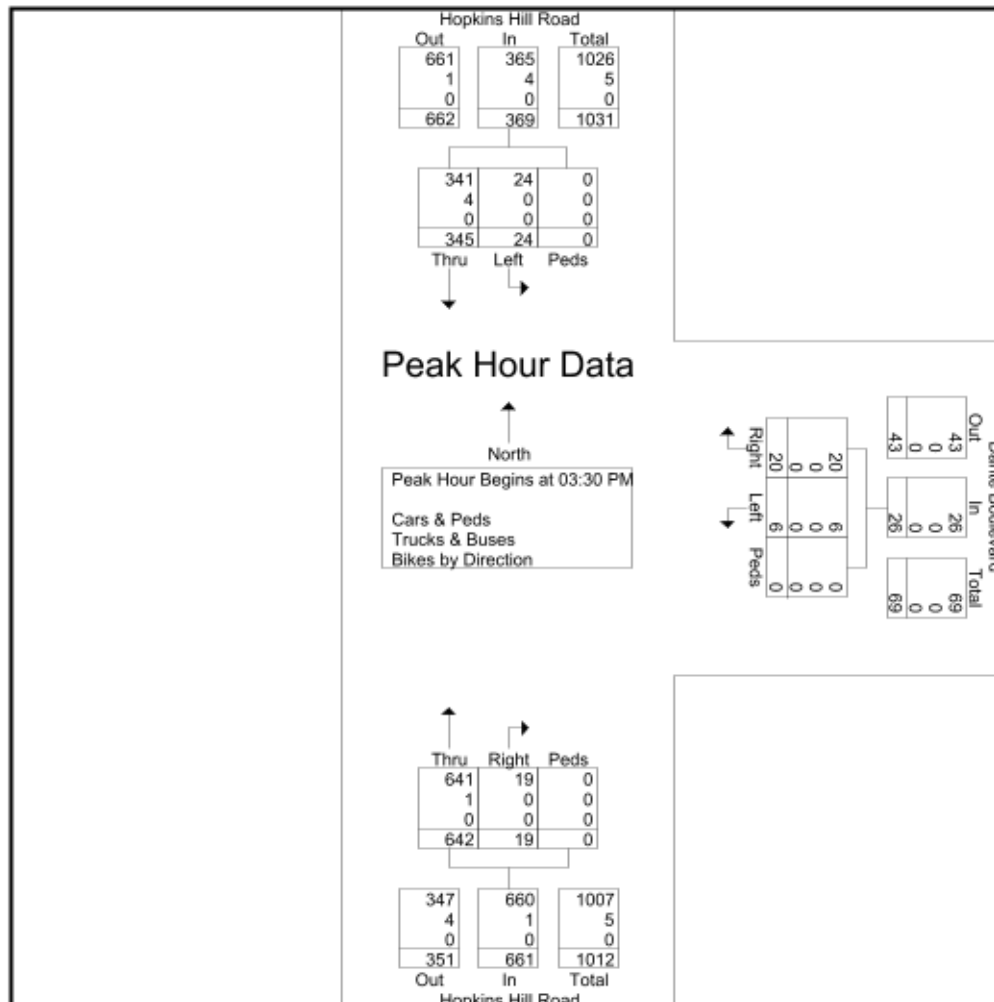
Mario Perone, mperone1@verizon.net

tel (781)587-0086 cell (781)439-4999

N/S: Hopkins Hill Road
E: Dante Boulevard
City, State: Coventry, RI
Client: Crossman/P. Bannon

File Name : 05824BB
Site Code : 2873
Start Date : 6/12/2024
Page No : 1

	Hopkins Hill Road From North				Dante Boulevard From East				Hopkins Hill Road From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:30 PM													
03:30 PM	89	8	0	97	8	2	0	10	6	150	0	156	263
03:45 PM	78	5	0	83	5	0	0	5	2	159	0	161	249
04:00 PM	101	4	0	105	4	2	0	6	5	172	0	177	288
04:15 PM	77	7	0	84	3	2	0	5	6	161	0	167	256
Total Volume	345	24	0	369	20	6	0	26	19	642	0	661	1056
% App. Total	93.5	6.5	0		76.9	23.1	0		2.9	97.1	0		
PHF	.854	.750	.000	.879	.625	.750	.000	.650	.792	.933	.000	.934	.917
Cars & Peds	341	24	0	365	20	6	0	26	19	641	0	660	1051
% Cars & Peds	98.8	100	0	98.9	100	100	0	100	100	99.8	0	99.8	99.5
Trucks & Buses	4	0	0	4	0	0	0	0	0	1	0	1	5
% Trucks & Buses	1.2	0	0	1.1	0	0	0	0	0	0.2	0	0.2	0.5
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0



Centre of New England Boulevard at Dante Boulevard

Intersection Turning Movement Count

File Name : dante at cne blvd
Site Code : 00000046
Start Date : 1/16/2025
Page No : 1

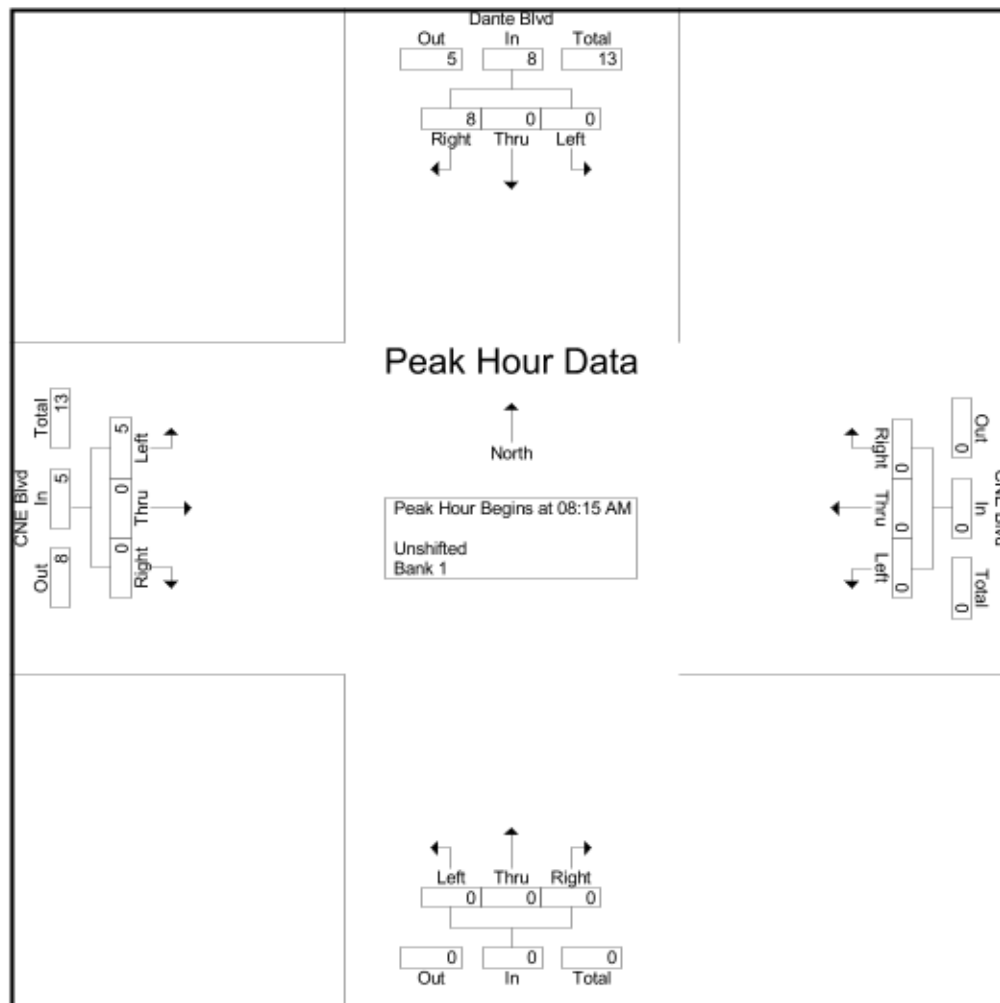
CROSSMAN ENGINEERING

Intersection Turning Movement Count

Project: Highlands
Community: Coventry
Location: CNE at Dante Blvd
Weather: Sunny/Cold

File Name : dante at cne blvd
Site Code : 00000046
Start Date : 1/16/2025
Page No : 3

	Dante Blvd Southbound				CNE Blvd Westbound				Northbound				CNE Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:15 AM																	
08:15 AM	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3
08:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	2	0	0	2	3
08:45 AM	0	0	2	2	0	0	0	0	0	0	0	0	2	0	0	2	4
09:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	1	0	0	1	3
Total Volume	0	0	8	8	0	0	0	0	0	0	0	0	5	0	0	5	13
% App. Total	0	0	100		0	0	0		0	0	0		100	0	0		
PHF	.000	.000	.667	.667	.000	.000	.000	.000	.000	.000	.000	.000	.625	.000	.000	.625	.813



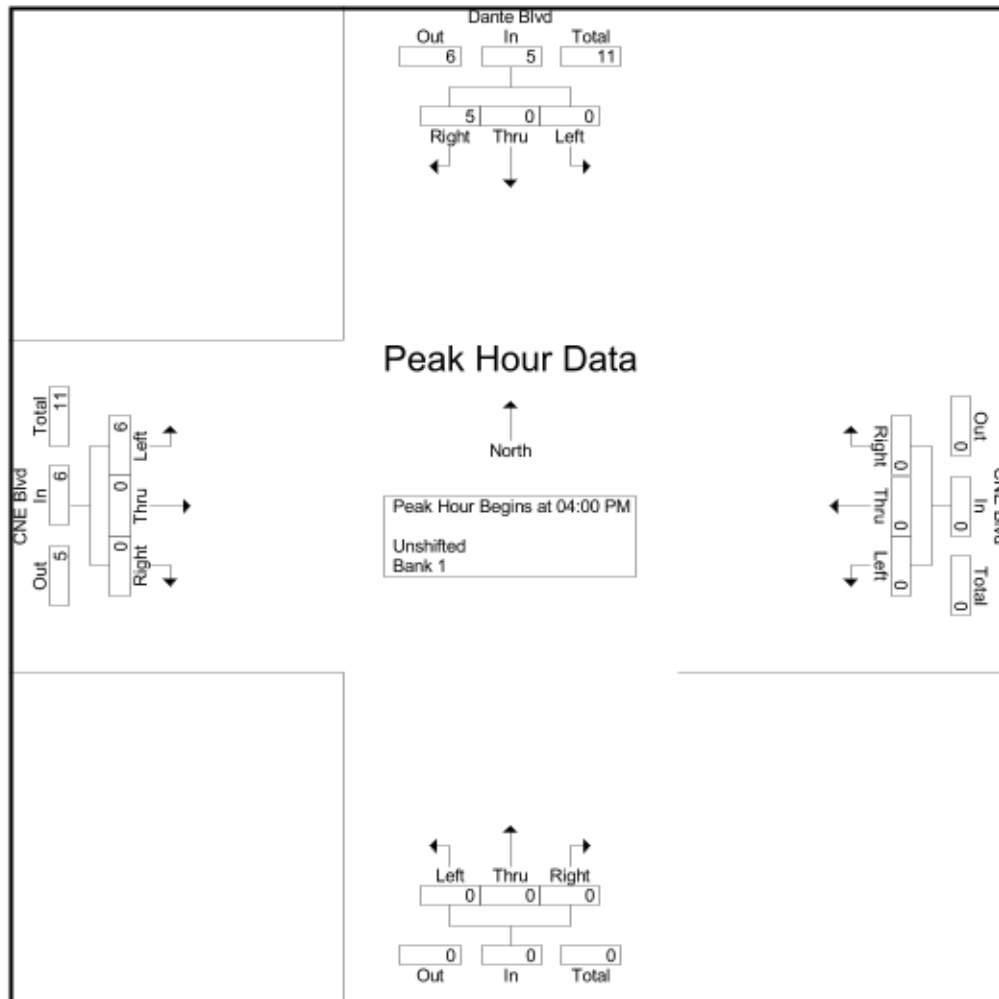
CROSSMAN ENGINEERING

Intersection Turning Movement Count

Project: Highlands
Community: Coventry
Location: CNE at Dante Blvd
Weather: Sunny/Cold

File Name : dante at cne blvd
Site Code : 00000046
Start Date : 1/16/2025
Page No : 4

	Dante Blvd Southbound				CNE Blvd Westbound				Northbound				CNE Blvd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	2	2	0	0	0	0	0	0	0	0	3	0	0	3	5
04:15 PM	0	0	2	2	0	0	0	0	0	0	0	0	1	0	0	1	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	5	5	0	0	0	0	0	0	0	0	6	0	0	6	11
% App. Total	0	0	100		0	0	0		0	0	0		100	0	0		
PHF	.000	.000	.625	.625	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.500	.550



ATTACHMENT B – Trip Generation

ITE Trip Generation Summary

ITE Land Use Code

ITE Land Use Code 210 – Single Family Detached Housing

B

ITE Trip Generation Summary

Trip Generation Summary

Summary:

	<u>Description</u>	<u>Enter</u>	<u>Exit</u>	<u>Total</u>
<u>AM PEAK HOUR</u>				
ITE Land Use Code 210	Single Family Detached	12	34	46
<u>PM PEAK HOUR</u>				
ITE Land Use Code 210	Single Family Detached	39	23	62

Calculations:

Code 210 – Single Family Detached Housing (66 Units)

Independent Variable (X) = Number of Units X = 66

AM Peak *Directional Distribution 26% Entering, 74% Exiting*

T = 0.70 (X)	Enter: 12
T = 0.70 (66)	<u>Exit: 34</u>
T = 46	Total 46

PM Peak *Directional Distribution 63% Entering, 37% Exiting*

T = 0.94 (X)	Enter: 39
T = 0.94 (66)	<u>Exit: 23</u>
T = 62	Total 62

B

ITE Land Use Code

ITE Land Use Code 210 – Single Family Detached Housing

Land Use: 210

Single-Family Detached Housing

Description

A single-family detached housing site includes any single-family detached home on an individual lot. A typical site surveyed is a suburban subdivision.

Specialized Land Use

Data have been submitted for several single-family detached housing developments with homes that are commonly referred to as patio homes. A patio home is a detached housing unit that is located on a small lot with little (or no) front or back yard. In some subdivisions, communal maintenance of outside grounds is provided for the patio homes. The three patio home sites total 299 dwelling units with overall weighted average trip generation rates of 5.35 vehicle trips per dwelling unit for weekday, 0.26 for the AM adjacent street peak hour, and 0.47 for the PM adjacent street peak hour. These patio home rates based on a small sample of sites are lower than those for single-family detached housing (Land Use 210), lower than those for single-family attached housing (Land Use 251), and higher than those for senior adult housing – single-family (Land Use 251). Further analysis of this housing type will be conducted in a future edition of *Trip Generation Manual*.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

For 30 of the study sites, data on the number of residents and number of household vehicles are available. The overall averages for the 30 sites are 3.6 residents per dwelling unit and 1.5 vehicles per dwelling unit.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Arizona, California, Connecticut, Delaware, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Jersey, North Carolina, Ohio, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Vermont, Virginia, and West Virginia.

Source Numbers

100, 105, 114, 126, 157, 167, 177, 197, 207, 211, 217, 267, 275, 293, 300, 319, 320, 356, 357, 367, 384, 387, 407, 435, 522, 550, 552, 579, 598, 601, 603, 614, 637, 711, 716, 720, 728, 735, 868, 869, 903, 925, 936, 1005, 1007, 1008, 1010, 1033, 1066, 1077, 1078, 1079

Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 174

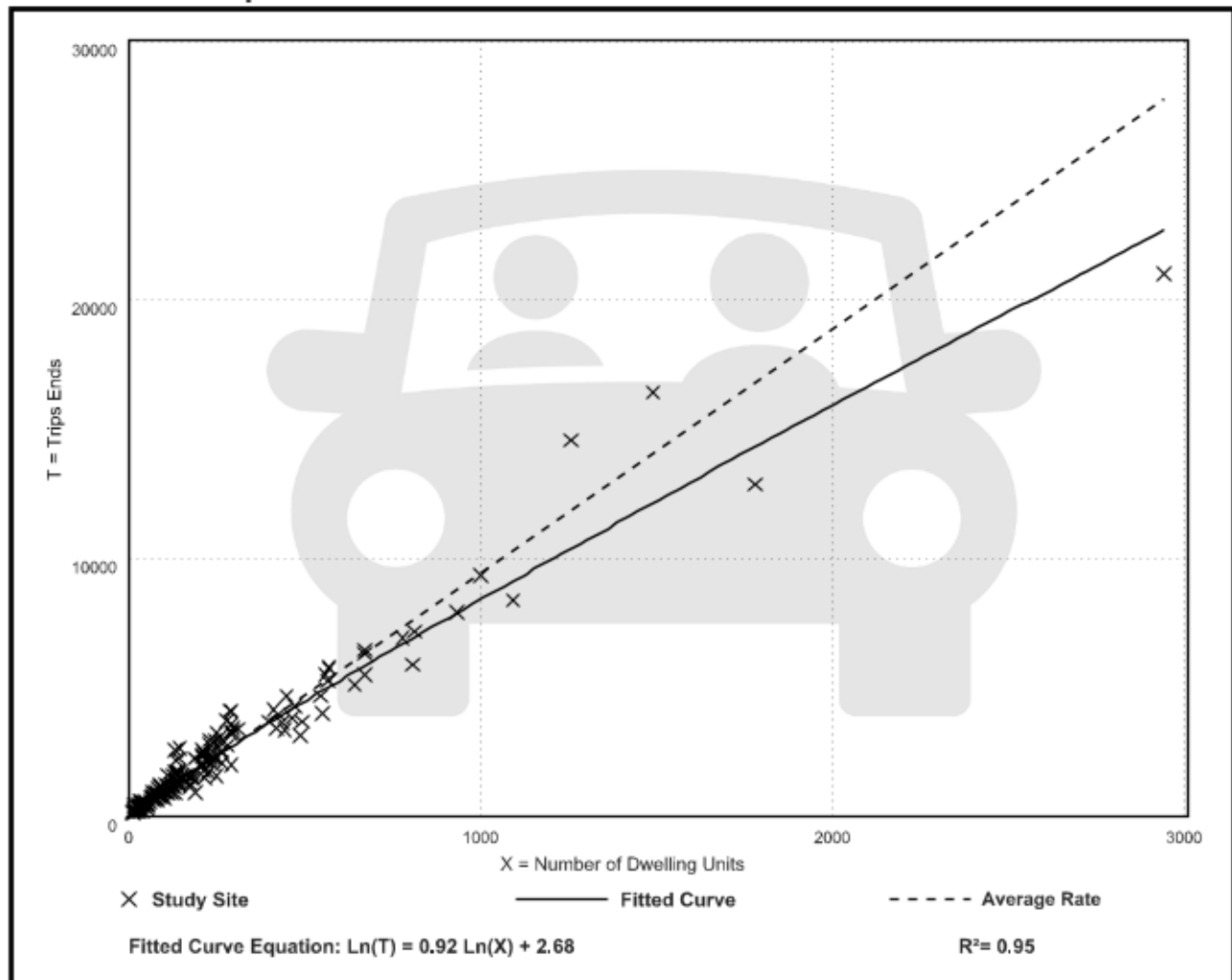
Avg. Num. of Dwelling Units: 246

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 192

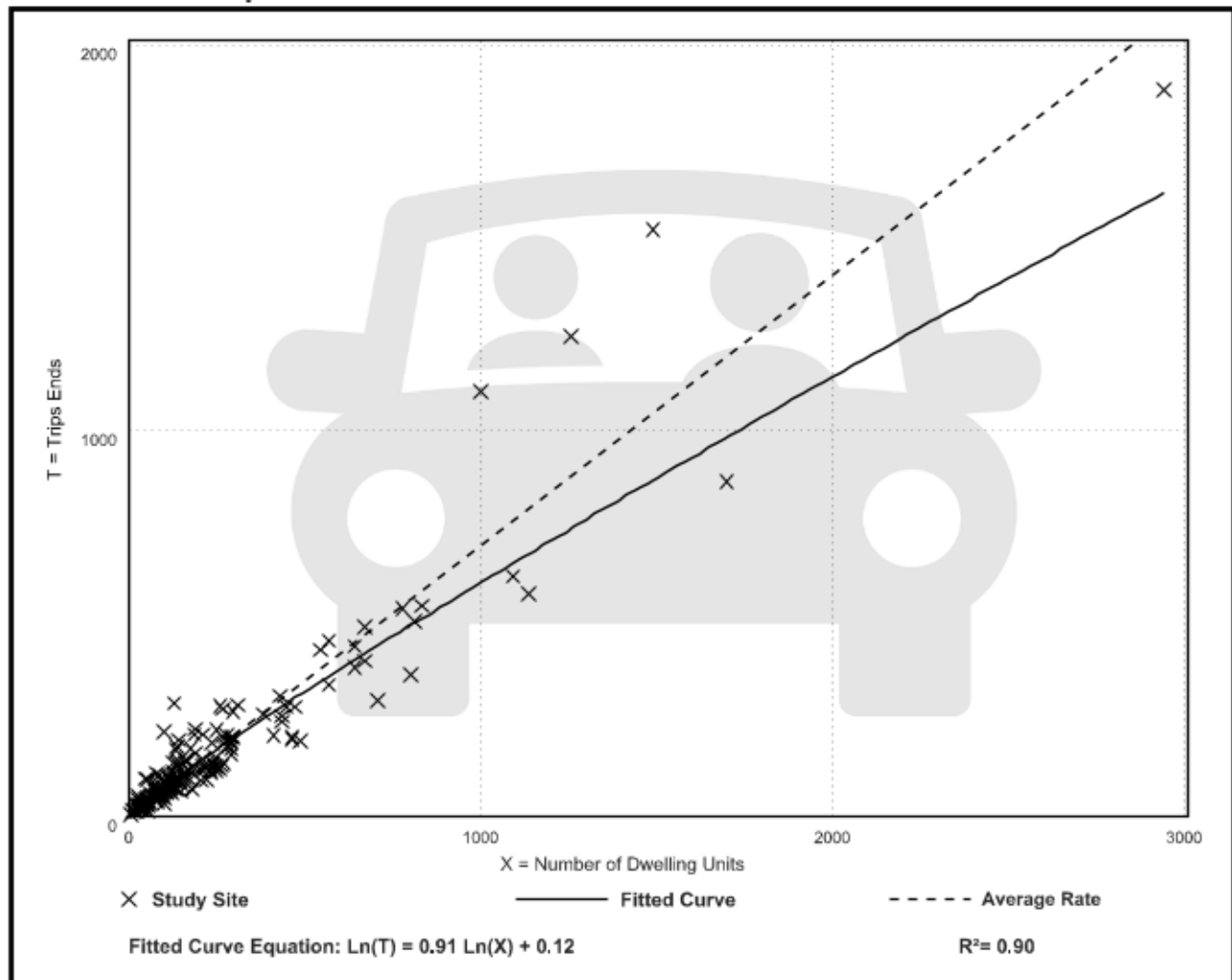
Avg. Num. of Dwelling Units: 226

Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 208

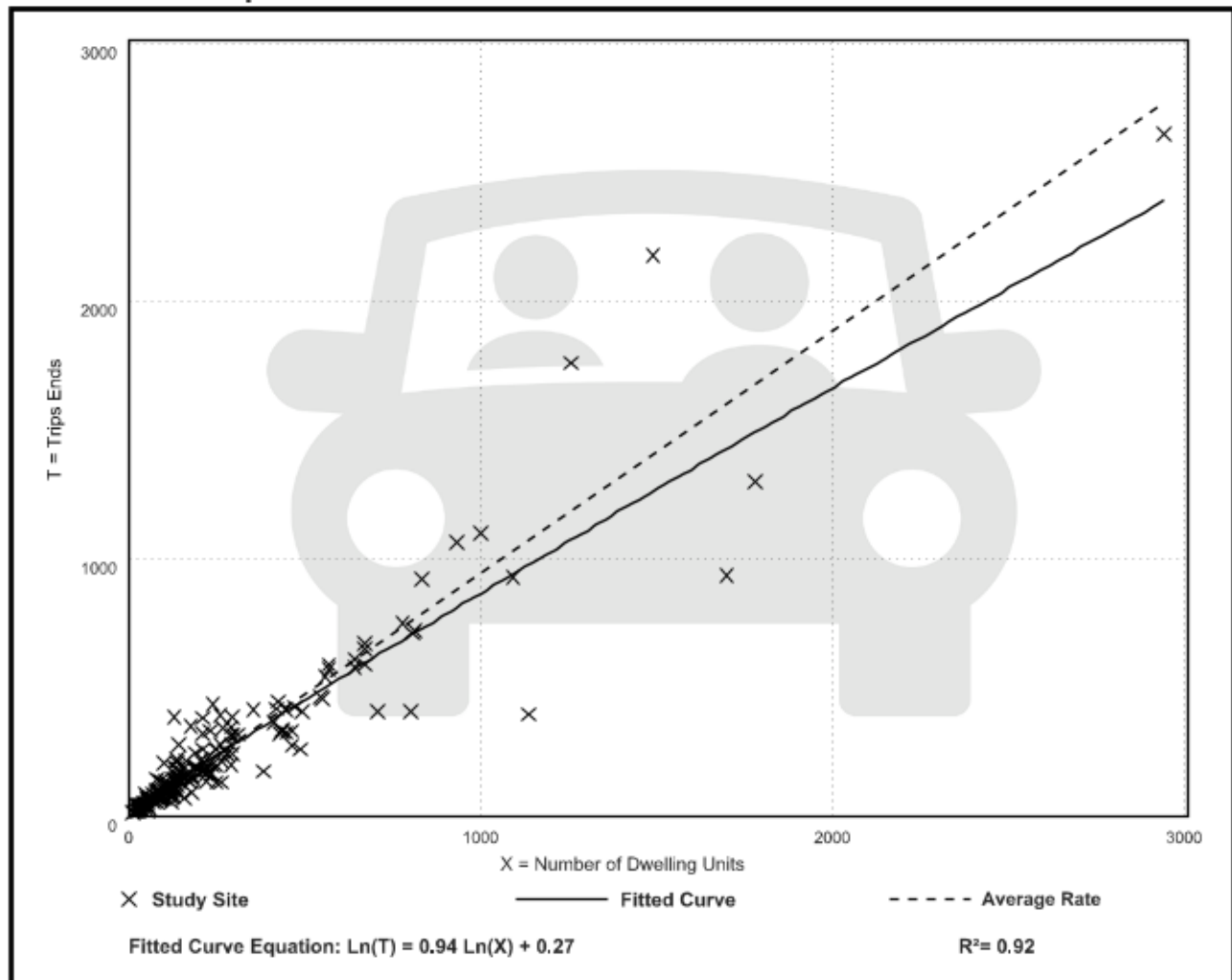
Avg. Num. of Dwelling Units: 248

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



TAB K1



Plat 13 Lot 22 200' Radius Map

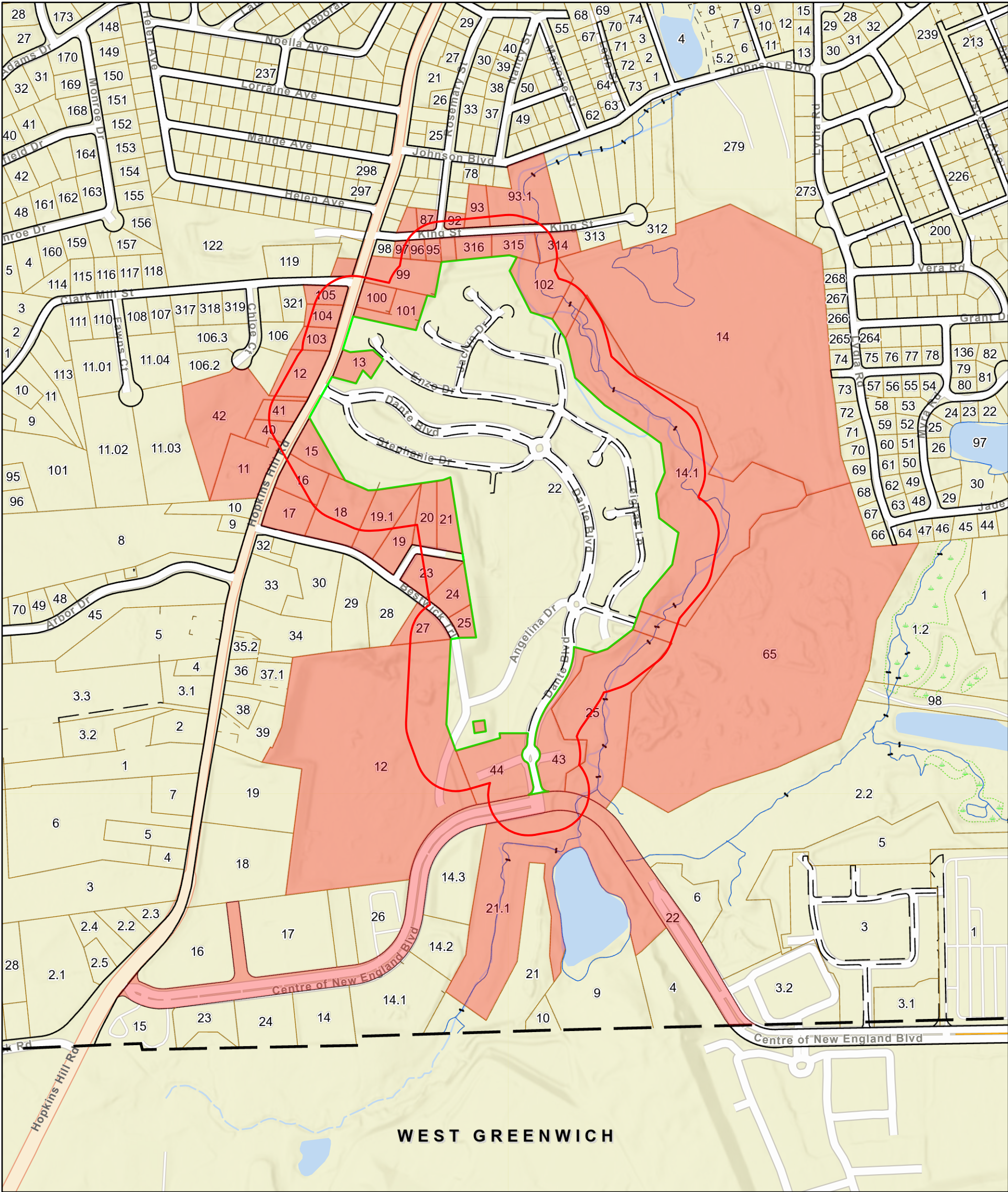
Town of Coventry, RI



February 5, 2025

1 inch = 500 Feet

www.cai-tech.com



Large Scale	Public Road	Property TIC
CAI Town Line	TownNotPar	RoadNotPar
Common Line	Right of Way	Wetland
Dashed Road	Cemetery	WaterLines
PWater	Private Road ROW	Wet Areas
Private Road	PropNotPar	
Property Line	Property Hook	

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

TAB K2

ABUTTERS' LISTING

02-07-25

Parcel Number	Owner	Co Owner	Streeet Address	City	State	Zip
0005-012.000	COMMERCE PARK PROPERTIES LLC		207 QUAKER LANE	WEST WARWICK	RI	02893
0005-021.001	COMMERCE PARK COMMONS LLC		207 QUAKER LANE, SUITE 300	WEST WARWICK	RI	02893
0005-022.000	COMMERCE PARK COMMONS LLC		207 QUAKER LANE, SUITE 300	WEST WARWICK	RI	02893
0005-025.000	COMMERCE PARK COMMONS LLC		207 QUAKER LANE, SUITE 300	WEST WARWICK	RI	02893
0013-011.000	DARIANYI A. MARTINEZ ESPINAL & MARIA ISABEL CEPEDA		315 HOPKINS HILL ROAD	COVENTRY	RI	02816
0013-012.000	BRIAN TSE + SAMARA YELLE		301 HOPKINS HILL ROAD	COVENTRY	RI	02816
0013-013.000	WTF REALTY LLC		308 HOPKINS HILL ROAD, UNIT 6	COVENTRY	RI	02816
0013-014.000	COMMERCE PARK PROPERTIES LLC		207 QUAKER LANE	WEST WARWICK	RI	02893
0013-014.001	COMMERCE PARK PROPERTIES LLC		207 QUAKER LANE	WEST WARWICK	RI	02893
0013-015.000	HOLLY M. HUFF		314 HOPKINS HILL ROAD	COVENTRY	RI	02816
0013-016.000	EDWARD DEIGHAN & EMMA R. WELLS		316 HOPKINS HILL ROAD	COVENTRY	RI	02816
0013-017.000	EDWARD M. DIORIO & JEANNE L. BREEDON		318 HOPKINS HILL ROAD	COVENTRY	RI	02816
0013-018.000	CHRISTEN A & GARY J ANDRADE		4 BESTWICK TRAIL	COVENTRY	RI	02816
0013-019.000	ELPHEGE PARE, JR.(DEHO) TTE	PARE FAMILY REVOC LIV TRUST	8 BESTWICK TRAIL	COVENTRY	RI	02816
0013-019.001	BRANDON R. & CANDICE J. BONIN		6 BESTWICK TRAIL	COVENTRY	RI	02816
0013-020.000	SAMUEL A. & ALYSSA N. GLASER		17 MINDA LANE	COVENTRY	RI	02816
0013-021.000	MARLENE HOOD, TRUSTEE	THE HOOD IRREVOCABLE TRUST OF 2016	21 MINDA LANE	COVENTRY	RI	02816
0013-022.000-0001	PATRICIA L. SWEET, ET ALS		2 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0002	LINDA HORNER		4 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0003	EVELYN HARRIS & JOSEPH SPADA		6 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0004	JOSEPH & JEANNE C. CIENAVA		8 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0005	FREDERICK J. & LYNNE G. ZELONIS		10 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0006	LEE A. PELLEGRINI REVOC INDENTURE TR		12 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0007	CATHERINE J. DEAN		14 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0008	ELIZABETH S. LANG TRUST		16 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0009	ROBERT & LISA A. BENNETT		20 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0010	BEVERLY S. PASLEY LE & ET ALS		22 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0011	RAYMOND L. & REBECCA DAUPLAISE		24 STEPHANIE DRIVE, UNIT 11	COVENTRY	RI	02816
0013-022.000-0012	PATRICIA LAPOINTE		26 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0013	MARIA A. DABROSCA		28 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0014	EDWARD L. & SUZANNE L. FOSS		30 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0015	GERARD H. VIENS		32 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0016	BARBARA R. MANCINI		35 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0017	OSTERMAN REVOCABLE TRUST		33 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0018	RICHARD L. & RUTH E. FOURNIER		31 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0019	FRANCIS & BARBARA MATURO		27 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0020	ANTHONY J. CARONIA, JR		25 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0021	F. ALLEN & DOROTHY A. BARR		13 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0022	PASCO L. DIPADUA &	LOUISE H. LE	11 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0023	VARINIA H. APOSTOLOU		9 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0024	LUIS REVOCABLE TRUST		7 STEPHANIE DRIVE	COVENTRY	RI	02816

ABUTTERS' LISTING

02-07-25

Parcel Number	Owner	Co Owner	Streeet Address	City	State	Zip
0013-022.000-0025	DENNIS A. & CAROL A. CHRISTY		5 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0026	DOROTHY J. PASCON E IRR TRUST		3 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0027	SUSAN J. CROSSMAN		1 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0028	JANICE F. CLARK REVOC LIV TR		24 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0029	PATRICIA J. KEENAN		26 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0030	ARTHUR A. MONIZ TRUST		28 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0031	R & R REVOCABLE FAMILY TRUST - 2021		30 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0032	JAMES & DOROTHY B. DOWLING TRUST		32 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0033	DEIRDRE-JEAN MITCHELL		34 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0034	JENNA NOELLE ST. LAWRENCE		40 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0035	CHERYL HIGGINS		42 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0036	DEBORAH LOUISE SPENCER		39 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0037	SANDRA L. CLUNAN		37 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0038	DANIEL T. SHEA		35 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0039	NANCY J. MCCARTHY		33 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0040	JENNIE GERVELIS		31 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0041	MICHAEL T. ROBINSON, JR		29 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0042	RONALD & CHRISTINE BOCCANFUSO		25 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0043	ROCCO & ARLENE PARENTE		23 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0044	WILLIAM L & CONNIE L. COOK IRREVOCABLE TRUST		21 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0045	KAREN MORROW		2 KRISTIN COURT	COVENTRY	RI	02816
0013-022.000-0046	JOHN O. HOXSIE & LINDA L. HOXSIE L/E		4 KRISTIN COURT	COVENTRY	RI	02816
0013-022.000-0047	GARY ASTON		6 KRISTIN COURT	COVENTRY	RI	02816
0013-022.000-0048	FRANCIS E.AUGER, JR.		12 TERRA MARR DRIVE	WEST WARWICK	RI	02893
0013-022.000-0049	MARYANN B. CASALE		12 KRISTIN COURT	COVENTRY	RI	02816
0013-022.000-0050	JENNIFER M. CREIGHTON & MARY CREIGHTON		7 KRISTIN COURT	COVENTRY	RI	02816
0013-022.000-0051	RICHARD J. CECERI, SR		5 KRISTIN COURT	COVENTRY	RI	02816
0013-022.000-0052	PATRICK GLITHERO		3 KRISTIN COURT	COVENTRY	RI	02816
0013-022.000-0053	DONALD P. & MARGARET M. WOLFE		1 KRISTIN COURT	COVENTRY	RI	02816
0013-022.000-0054	DAVID A. & MARGARET J. SWANN TRUST		2 LUCIA COURT, UNIT 54	COVENTRY	RI	02816
0013-022.000-0055	CAROL M. & GEORGE L. GAUTHIER L/E	GAUTHIER IRREVOCABLE FAMILY TRUST	4 LUCIA COURT	COVENTRY	RI	02816
0013-022.000-0056	CHERYL LYNNE KEMP REVOCABLE LIVING TRUST AGREEMENT		6 LUCIA COURT	COVENTRY	RI	02816
0013-022.000-0057	LINDA E. COLUCCI REVOC TR - TTE		8 LUCIA COURT	COVENTRY	RI	02816
0013-022.000-0058	JANE R. CAPUANO LE	MATTHEW R. CAPUANO	3 LUCIA COURT	COVENTRY	RI	02816
0013-022.000-0059	FLOR PENA		1 LUCIA COURT	COVENTRY	RI	02816
0013-022.000-0060	KERRI ANN FINNEGAN & CIN SMITH		6 FINN LANE	COVENTRY	RI	02816
0013-022.000-0061	GEORGE L. GLOVER, III L/E	JANINE RUBANO	15 JACLYN DRIVE	COVENTRY	RI	02816
0013-022.000-0062	WAYNE S. & IRENE M. ANDERSON FAMILY TRUST		13 JACLYN DR	COVENTRY	RI	02816
0013-022.000-0063	CHARETTE FAMILY REVOC LIV TR		11 JACLYN DRIVE	COVENTRY	RI	02816
0013-022.000-0064	DENISE L. DRISCOLL IRREVOCABLE TRUST		9 JACLYN DRIVE	COVENTRY	RI	02816
0013-022.000-0065	11 DAISY LANE LLC		200 CENTERVILLE RD	WARWICK	RI	02886
0013-022.000-0066	JEAN T. DEFUSCO		9 DAISY LANE	COVENTRY	RI	02816
0013-022.000-0067	ALVITI-LANNI FAMILY REVOCABLE LIV TRUST		7 DAISY LANE	COVENTRY	RI	02816

ABUTTERS' LISTING

02-07-25

Parcel Number	Owner	Co Owner	Streeet Address	City	State	Zip
0013-022.000-0068	CYNTHIA R. COSTA TRUST		5 DAISY LANE	COVENTRY	RI	02816
0013-022.000-0069	ELIZABETH J. JALBERT REVOC TRUST		2 DAISY LANE	COVENTRY	RI	02816
0013-022.000-0070	BRENDA QUIGLEY		4 DAISY LANE	COVENTRY	RI	02816
0013-022.000-0071	RONALD G. & URSULA B. CIANFARANI		6 DAISY LANE	COVENTRY	RI	02816
0013-022.000-0072	STEVEN & KIMBERLY ARRUDA		8 DAISY LANE	COVENTRY	RI	02816
0013-022.000-0073	GEORGE J. LANG, JR & LORI ANNE LANG		10 DAISY LANE, UNIT 73	COVENTRY	RI	02816
0013-022.000-0074	DEBORAH J. PAULL		12 DAISY LANE	COVENTRY	RI	02816
0013-022.000-0075	ROBERTA & MICHAEL SALISBURY IRREVOC TRUST		7 JACLYN DRIVE	COVENTRY	RI	02816
0013-022.000-0076	JAMES F. COTTER		5 JACLYN DRIVE	COVENTRY	RI	02816
0013-022.000-0077	BOUTELLE FAMILY TRUST		3 JACLYN DRIVE	COVENTRY	RI	02816
0013-022.000-0078	ELIZABETH POLIDORO		1 JACLYN DRIVE	COVENTRY	RI	02816
0013-022.000-0079	JANE M. OLNEY-BATTEY & MATTHEW R. OLNEY		15 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0080	PETER GREGORY JACKSON		13 ENZO LANE	COVENTRY	RI	02816
0013-022.000-0081	FERRARI ROBERT F. +	GAYLE A. SEPE	11 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0082	CHRISTIN M. MARKARIAN		9 ENZO DRIVE, UNIT 82	COVENTRY	RI	02816
0013-022.000-0083	GERARD W. & BARBARA A. RATTE LE	SANDRA A. PERRY, ET ALS	5 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0084	ROBERT J. & DEBORAH S. BALDWIN		3 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0085	KENNETH T. & H. MARIE MCLEOD		1 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0086	BEATRICE & JOSEPH D ALFONSO		2 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0087	LOMBARDI FAMILY REVOCABLE TRUST		4 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0088	MONIKA POULIN		6 ENZO DRIVE, UNIT 88	COVENTRY	RI	02816
0013-022.000-0089	GEORGEANN F. MUNSLOW		8 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-008A	KATHLEEN F. CROWLEY 2010 REVOC TRUST		18 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-0090	RAYMOND A. & DENISE L. GERVELIS		10 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0091	ALFRED A. & MARIA L. JACOBS		12 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0092	PATRICIA FRAGEORGIA		14 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0093	ROBERT J. & NANCY B. LEMOI REV TR		16 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0094	DINO G. SOSCIA & JOSHUA CASWELL, ESQ TRUSTEES		18 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0095	SHEILA A. SULLIVAN REVOC TR AGRMT		20 ENZO DRIVE,UNIT 95E	COVENTRY	RI	02816
0013-022.000-0096	MICHAEL J. & LORAINA A. BRAGA TRUST		22 ENZO DRIVE	COVENTRY	RI	02816
0013-022.000-0097	SULLIVAN-BEAULIEU FAMILY REVO LIV TR		2 LEIGHAS LANE, UNIT 197	COVENTRY	RI	02816
0013-022.000-0098	TAGLIAFERRI IRREVOCABLE TRUST		4 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0099	RALPH LAWRENCE		6 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0100	LEIGHAS LANE LLC		47 INDIAN TRAIL	COVENTRY	RI	02816
0013-022.000-0101	TIMOTHY J. PIMENTAL &	MICHELLE M. SHEEHAN-PIMENTAL	10 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0102	LEIGHAS LANE LLC		47 INDIAN TRAIL	COVENTRY	RI	02816
0013-022.000-0103	ARTHUR J. BROWN REVOC TR		14 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0104	MARY JANE FRIGON		16 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0105	STEVEN J. & DARLENE M. ARTHURS		18 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0106	DALLAS H. PATTERSON		20 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0107	PATRICIA A. PARKS		22 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0108	DAVID & BONNIE BRIEN		32 MACKADY COURT	WESTPORT	MA	02790
0013-022.000-0109	MCLINDEN FAMILY TRUST		26 LEIGHAS LANE, UNIT 109	COVENTRY	RI	02816

ABUTTERS' LISTING

02-07-25

Parcel Number	Owner	Co Owner	Street Address	City	State	Zip
0013-022.000-0110	MARILYN VADEBONCOEUR L/E	KEVIN VADEBONCOEUR & JULIE DOWHAN	28 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0111	MARIO PETROCELLI REVOCABLE TRUST		30 LEIGHAS LANE, UNIT 111	COVENTRY	RI	02816
0013-022.000-0112	ROBERT PETROCELLI REVOC TRUST		32 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0113	GUASTELLA FAM REVOC LIV TRUST		34 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0114	PAUL C. KECK & EMILYBURNS		36 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0115	TURNER FAMILY REVOC TR		38 LEIGHAS LANE, UNIT 115	COVENTRY	RI	02816
0013-022.000-0116	MICHAEL & SANDRA MONTIGNY		40 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0117	BRIAN D. LUSSIER LIVING TRUST		42 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0118	LILLIANE H. BOUCHER REVOCABLE TRUST 2022		44 LEIGHAS LANE, UNIT 118	COVENTRY	RI	02816
0013-022.000-0119	KATHERINE J. & WAYNE KATAISTO		46 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0120	MARGARET E. + MARY L. KELLIHER		50 LEIGHAS LANE, UNIT 120	COVENTRY	RI	02816
0013-022.000-0121	ROBERT H. & VIRGINIA M. MCLAUGHLIN L/E	LISA A. GODKIN & LORRAINE M. TORTOLANNI	52 LEIGHAS LANE, UNIT 121	COVENTRY	RI	02816
0013-022.000-0122	GEORGE C. GOLINI &	ALAN G. WHITMARSH	55 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0123	DENNIS & DONNA FALSO		53 LEIGHAS LANE, UNIT 123	COVENTRY	RI	02816
0013-022.000-0124	DAWN M. FALCO REVOC TR AGMT		10 WARREN AVE	TUCKAHOE	NY	10707
0013-022.000-0125	JEAN M. GREEN TRUSTEE		49 LEIGHAS, LANE	COVENTRY	RI	02816
0013-022.000-0126	ALVIN R. & LILLIAN O. MARTIN		47 LEIGHAS LANE, UNIT 126	COVENTRY	RI	02816
0013-022.000-0127	JOHN V. & SUSAN DELENA		45 LEIGHAS LANE, UNIT 127	COVENTRY	RI	02816
0013-022.000-0128	SHARYN B. ROWLES LIV TR		43 LEIGHAS LANE, UNIT 128	COVENTRY	RI	02816
0013-022.000-0129	ROBERT & PATRICIA PIMENTAL LIV TR		39 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0130	MARY L. ABBENANTE IRR TRUST		33 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0131	MARY LOU SANGSTER REVOCABLE LIVING TRUST AGREE		31 LEIGHAS LANE, UNIT 131	COVENTRY	RI	02816
0013-022.000-0132	GEORGE W. & SUSAN B. TASHJIAN		29 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0133	STEPHEN R. + PHYLLIS J, BECKMAN ET ALS	KURT A. DEION	2 JAROD COURT	COVENTRY	RI	02816
0013-022.000-0134	RICHARD & NANCY ROUSSEAU		4 JAROD COURT	COVENTRY	RI	02816
0013-022.000-0135	DIANE JEAN STADELBAUER +	COURTNEY L. SAUCEDA	3 JAROD COURT	COVENTRY	RI	02816
0013-022.000-0136	ELIZABETH ANNE COLEMAN & JEFFREY CLARKE		1 JAROD COURT	COVENTRY	RI	02816
0013-022.000-0137	JUDITH & RICHARD D. ELLIOTT		23 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0138	CONRAD & SUE ANN FUESZ		21 LEIGHAS LANE, UNIT 138	COVENTRY	RI	02816
0013-022.000-0139	MARGARET M. DENTON		PO BOX 211809	ROYAL PALM BEACH	FL	33421
0013-022.000-0140	VITO & DENISE SCOTTI		17 LEIGHAS LANE UNIT 140	COVENTRY	RI	02816
0013-022.000-0141	JANICE E. DZIALO		15 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0142	EDMUND E. & SERIFE HATHAWAY		2 TALIA COURT	COVENTRY	RI	02816
0013-022.000-0143	CAROL & DOUGLAS LEITH		4 TALIA COURT	COVENTRY	RI	02816
0013-022.000-0144	CHERYL ANDREOZZI		3 TALIA COURT	COVENTRY	RI	02816
0013-022.000-0145	TED P. & DEBORAH L. BROWN		1 TALIA COURT	COVENTRY	RI	02816
0013-022.000-0146	VALERIA M. MOLINELLI		7 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0147	MICHAEL A. BOCCANFUSO		1264 CENTRAL AVE	JOHNSTON	RI	02919
0013-022.000-0148	EDWARD J. & JOAN M. GREEN		3 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-0149	BARNETT JANICE L L/E +	MICHAEL CHARLES ST. JEAN, ET ALS	1 LEIGHAS LANE	COVENTRY	RI	02816
0013-022.000-020A	GERALDINE RITAROSSİ L/E	STEPHEN M. RITAROSSİ, ET ALS	15 STEPHANIE DRIVE	COVENTRY	RI	02816
0013-022.000-047A	TRAVIS D. ROBERTS & ERICA CATALDI ROBERTS		8 KRISTIN COURT	COVENTRY	RI	02816
0013-023.000	PATRICIA L. PARE TTE	PATRICIA L. PARE REVOC TRUST	10 BESTWICK TRAIL	COVENTRY	RI	02816

ABUTTERS' LISTING

02-07-25

Parcel Number	Owner	Co Owner	Streeet Address	City	State	Zip
0013-024.000	MICHELLE M. LANCIAUX		14 BESTWICK TRAIL	COVENTRY	RI	02816
0013-025.000	PAUL N. & KRISTIN A. MATTIAS		16 BESTWICK TRAIL	COVENTRY	RI	02816
0013-026.000	STEPHEN WHIPPLE LOT	COVENTRY HISTORICAL CEMETERY #79	221 HARKNEY HILL ROAD	COVENTRY	RI	02816
0013-027.000	CAROLYN W. + CELIA A. WINSOR		21 BESTWICK TRAIL	COVENTRY	RI	02816
0013-040.000	GEORGE R. & PATRICIA L. CANFIELD		313 HOPKINS HILL ROAD	COVENTRY	RI	02816
0013-041.000	JOSEPH J. & GAIL A. OZEL		34 CIRCLE DR	COVENTRY	RI	02816
0013-042.000	JOHN FURTADO, III		6 CHLOE CT	COVENTRY	RI	02816
0013-043.000-215A	PATRICIA PAPA		2 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-215B	KYLE D. OCONNOR		4 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-216A	STEPHANIE ALLARD		6 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-216B	TED G. & JULIE ELIZABETH TRACY		25 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-217A	RICHARD THOMAS STANLEY	RACHEL MELANIE VOELLINGS	1 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-217B	BREANNE L. MURPHY		3 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-217C	LISA PERKINS	MICHAEL PERKINS	5 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-217D	MICHAEL J. BREEN		7 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-218A	AMY M. RUMANOWSKI		9 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-218B	THOMAS J. BYRNE		11 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-218C	LOIS E. BOUDREAU & SUSAN JONES		13 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-218D	JESSICA A & BENJAMIN C. TURNER		15 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-219A	CHRISTION SHILOH BATTEY		17 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-219B	PATRICIA SCHNELL		19 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-219C	MICHAEL R. EVANGELISTA		21 SONYA DRIVE	COVENTRY	RI	02816
0013-043.000-219D	ROLAND ALLYN & CHRISTINE ANN DENOMME		23 SONYA DRIVE	COVENTRY	RI	02816
0013-044.000-0221	WILLIAM P. & JEANNE C. VANASSE		2 GREIG COURT	COVENTRY	RI	02816
0013-044.000-221A	MICHAEL & RITA THIBAULT		6 GREIG COURT	COVENTRY	RI	02816
0013-044.000-221B	PATRICIA A. DELPADRE MYERS		4 GREIG COURT	COVENTRY	RI	02816
0013-044.000-223A	PETER & JOANNE MCGREGOR		10 GREIG COURT	COVENTRY	RI	02816
0013-044.000-223B	GAIL ANTONACCIO		8 GREIG COURT	COVENTRY	RI	02816
0013-044.000-224B	NOLA R TREACY L/E	TODD E. TREACY, ET ALS	12 GREIG COURT	COVENTRY	RI	02816
0013-044.000-225A	MADELEINE GERVAIS		14 GREIG COURT	COVENTRY	RI	02816
0013-044.000-226A	JOHN & NORA BOWNE		15 GREIG COURT	COVENTRY	RI	02816
0013-044.000-226B	AVIZINIS FAMILY TRUST		13 GREIG COURT	COVENTRY	RI	02816
0013-044.000-227A	RITA GENERALI & LYNN TRAUPMAN		11 GREIG COURT	COVENTRY	RI	02816
0013-044.000-227B	STEVEN P. MAJOR LIVING TRUST		9 GREIG COURT	COVENTRY	RI	02816
0013-044.000-228A	SHIRLEY L. STRAVATO IRREVOC TRUST		7 GREIG COURT	COVENTRY	RI	02816
0013-044.000-228B	KATHLEEN A. MCMULLEN TRUST		5 GREIG COURT	COVENTRY	RI	02816
0013-044.000-230A	MICHAEL S. KEENAN REVOC TRUST		3 GREIG COURT	COVENTRY	RI	02816
0013-044.000-230B	PETER F. & DONNALEE T. GAROFALO IRREV TRUST		1 GREIG COURT	COVENTRY	RI	02816
0014-065.000	CATAPULT REALTY LLC		207 QUAKER LANE, SUITE 300	WEST WARWICK	RI	02893
0021-086.000	JOYEL M. & HENRY R. CIESYNSKI, II		10 KING STREET	COVENTRY	RI	02816
0021-087.000	JOSE DEFARIA & SHELBY PERIERA		2 ROSEMARY STREET	COVENTRY	RI	02816

ABUTTERS' LISTING
02-07-25

Parcel Number	Owner	Co Owner	Streeet Address	City	State	Zip
0021-092.000	JOSHUA T. & ANGELA M. AUDETTE		1 ROSEMARY STREET	COVENTRY	RI	02816
0021-093.000	BOSWORTH IRREVOCABLE TRUST	MICALE F. BOSWORTH & DONNA M. BOSWORTH G LE	24 KING STREET	COVENTRY	RI	02816
0021-093.001	JAMES & LINDA M. HUDSON		26 KING STREET	COVENTRY	RI	02816
0021-093.002	JAMES DOUGLAS EARL & LISA M		28 KING ST	COVENTRY	RI	02816
0021-093.003	JONATHAN F. & LISA G. LEVINE		30 KING ST	COVENTRY	RI	02816
0021-093.004	ROBERT D. BROWN, JR.	DEBRA & MARI PARRILLO	32 KING ST	COVENTRY	RI	02816
0021-093.005	JEREMY & BRITTANY COUTU		34 KING ST	COVENTRY	RI	02816
0021-094.000	MARIA T. FURTADO LE	GARY F. FURTADO + ERIC S. FURTADO	21 KING STREET	COVENTRY	RI	02816
0021-095.000	ANNA B. CRUTE, TTE	ANNA B. CRUTE LIVING TR	17 KING STREET	COVENTRY	RI	02816
0021-096.000	JAKE WILLIAM BROWN		15 KING STREET	COVENTRY	RI	02816
0021-097.000	JUNE H. MACDONALD		11 KING STREET	COVENTRY	RI	02816
0021-098.000	CYNTHIA L & JAMES H. MCLAUGHLIN, JR		1 KING ST	COVENTRY	RI	02816
0021-099.000	RAYMOND R. DAGUANNO		240 HOPKINS HILL ROAD	COVENTRY	RI	02816
0021-100.000	STEVEN R. ROSSI		6 DOE PLACE	WEST GREENWICH	RI	02817
0021-101.000	KELLIE & ROY BLAIR		270 HOPKINS HILL ROAD	COVENTRY	RI	02816
0021-102.000	COMMERCE PARK COMMONS LLC		207 QUAKER LANE	W WARWICK	RI	02893
0021-103.000	CLINTON & COLLEEN PERRY		235 HOPKINS HILL ROAD	COVENTRY	RI	02816
0021-104.000	RAYMOND & EVELYN BERLINSKY		233 HOPKINS HILL ROAD	COVENTRY	RI	02816
0021-105.000	STEPHEN E. & ROSITA HUNTER		2 CLARK MILL STREET	COVENTRY	RI	02816
0021-120.001	SERGIO CHAVEZ URIZAR		229 HOPKINS HILL ROAD	COVENTRY	RI	02816
0021-120.002	BERTRAND R. BEAUSOLEIL		5 CLARK MILL ST	COVENTRY	RI	02816
0021-314.000	ROBERT T. & DEBORAH L. WILCOX		27 KING STREET	COVENTRY	RI	02816
0021-315.000	JAMES J. MCNULTY, JR		25 KING STREET	COVENTRY	RI	02816
0021-316.000	ANTHONY J. & KAREN M. CAMPAGNONE		23 KING STREET	COVENTRY	RI	02816

TAB L1

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April 8, 2020

Steven Cabral
Crossman Engineering
151 Centerville Rd
Warwick, RI 02886

Re: Proposed Water Expansion for the Highlands at Hopkins Hill
Hopkins Hill Rd, Coventry

Dear: Mr. Cabral,

We have reviewed your revised submission received in our office on March 30, 2020. Based on your professional engineer certification that the design complies with the Kent County Water Authority Regulations and will properly support future water service to this development, the technical review portion of the infrastructure design is acceptable to the staff and we, herewith, provide our approval for the installation. Any change in the design or property ownership made after this date requires a complete revised submission and review process prior to commencing construction on the water infrastructure.

All requirements of the Kent County Water Authority Regulations must be adhered to during construction. A copy of the plans and the Kent County Water Authority Regulations must be kept onsite while work is in progress. A letter from the property owner's attorney identifying the legal entity and/or property owner including point of contact and billing address must be provided to the Kent County Water Authority billing department prior to water service activation.

A complete set of as-built drawings must be received and approved by this office prior to final water service activation to the site. The owner and/or the developer is responsible to maintain all installation information and tie measurements necessary to produce finalized as-built drawings meeting the requirements of the Kent County Water Authority Regulations. Kent County Water Authority Regulations require that as-built drawings be prepared under the direct supervision of a professional engineer or professional land surveyor registered in the State of Rhode Island. As-built drawings will not be accepted with any disclaimers regarding measurements or location of appurtenances.

We require your construction contractor to notify us five days prior to construction commencement so that a field representative may be made available to observe work in progress. A \$5.00 per linear foot inspection fee must be paid in full prior to construction commencement. Measurements from the drawing show approximately 4,050 feet of infrastructure subject to the inspection fee resulting in a total fee of \$20,250. We must emphasize that the owner is solely responsible to control their contractor in the progression of work to ensure the water infrastructure installation is accomplished in accordance with the requirements contained in the Kent County Water Authority Regulations and the accepted design.

P O B o x 1 9 2
West Warwick, RI 02893-0192
401-821-9300
www.kentcountywater.org

A one-year warranty on all water lines and appurtenances is required upon completion acceptance by the Kent County Water Authority. All problems during the warranty period must be corrected at the developer's cost to the satisfaction of the Kent County Water Authority.

Compliance with the State Plumbing Code in reference to backflow prevention and service line disinfection must be verified by the plumbing inspector prior to water service activation to the building. Kent County Water Authority requires reduced pressure zone style backflow preventers for commercial installations of this nature. A copy of the bacteria sample test results and inspection confirmation letter from the plumbing inspector must be provided upon request for water service activation. Please be advised it is solely the responsibility of the owner or owner's representative to obtain the proper permits and coordinate with the plumbing inspector to complete all inspection requirements of the Rhode Island Plumbing Code.

Compliance with National Fire Protection Agency (NFPA) testing requirements for fire service is solely the responsibility of the owner or owner's representative to coordinate with the municipal fire authority or state fire marshal's office. NFPA pressure test may be accomplished in coordination with KCWA required testing, but KCWA shall not be responsible for conducting, verifying or documenting NFPA testing requirements.

If work has not begun construction on the water line within the six (6) months from the date of this letter a complete resubmission and/or request for an extension of this technical review consideration will be necessary prior to construction commencement. The owner and/or developer must request an extension prior to the six months expiration date of this letter.

Nothing in this letter relieves the responsible party from compliance with all applicable local, state and federal regulations in association with this water infrastructure installation. Any deficiency or requirement that may have been inadvertently overlooked in the course of this review is also subject to correction under the provision of the applicable code, regulation or law.

To continue to keep this file active we require written confirmation of receipt of this technical review letter along with tentative dates for construction commencement within ten (10) working days of receipt of this letter.

Please feel free to call us if you have any questions regarding this matter.

Very truly yours,
Kent County Water Authority


John Duchesneau
Director of Administration

John Duchesneau

From: Brian King <brian.king@crossmaneng.com>
Sent: Thursday, April 9, 2020 2:25 PM
To: John Duchesneau
Subject: RE: Highlands at Hopkins Hill

John,

In reference to our telephone conversation today, I realized I gave you the water service lengths from the water main to the dwelling, not from the water main to the curb stop. I have recalculated the lengths, and below is the current numbers for your use;

Phase 1B-Revised

- proposed water main = 525 lf
- existing water main (recently tested) = 6,440 lf
- existing water service lines to curb stop (152 dwellings) = 3,320 lf

Phase 2-Revised

- proposed water main = 2,265 lf
- proposed water service lines to curb stop (66 dwellings) = 1,260 lf

These lengths should modify the inspection fee.

Thank you
Brian

Brian R.King PE

CROSSMAN ENGINEERING
Consulting Engineers & Surveyors

Rhode Island Office
151 Centerville Road
Warwick, Rhode Island 02886

Massachusetts Office
103 Commonwealth Avenue
North Attleboro, MA 02763

Phone: 401-738-5660
Fax: 401-738-8157

Phone: 508-695-1700
Cell: 401-573-3973

From: Brian King <brian.king@crossmaneng.com>
Sent: Wednesday, April 08, 2020 8:59 AM
To: 'John Duchesneau' <jduchesneau@kentcountywater.org>
Subject: RE: Highlands at Hopkins Hill

John,

I sent the plans to David because I did not believe you were in the office this week.

For your use the below lengths can be used:

Phase 1B

- proposed water main = 525 lf
- existing water main (recently tested) = 6,440 lf
- existing water service lines to 152 dwellings = 6,100 lf

Phase 2

- proposed water main = 2,265 lf
- proposed water service lines to 66 dwellings = 2,265 lf

please email me if you need anything else, and if all is okay please email any letters to me. I am mostly working from home so email is appreciated.

Thank you
Brian

Brian R.King PE

CROSSMAN ENGINEERING **Consulting Engineers & Surveyors**

Rhode Island Office
151 Centerville Road
Warwick, Rhode Island 02886

Massachusetts Office
103 Commonwealth Avenue
North Attleboro, MA 02763

Phone: 401-738-5660
Fax: 401-738-8157

Phone: 508-695-1700
Cell: 401-573-3973

From: John Duchesneau <jduchesneau@kentcountywater.org>

Sent: Tuesday, April 07, 2020 3:24 PM

To: Brian King <brian.king@crossmaneng.com>

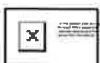
Subject: Highlands at Hopkins Hill

Brian, I haven't looked at the plan submission yet but did you include the length of mains and length of service pipe from the main to the curb stop for each unit. We need this information.

John Duchesneau

Director of Administration
Kent County Water Authority
(401) 821-9300

www.kentcountywater.org



Virus-free. www.avast.com

TAB L2



DiPrete Engineering

January 17, 2025

Kent County Water Authority
35 Technology Way
West Greenwich, RI 02817

**RE: Highlands at Hopkins Hill, Phases 1G, 1H, 1L, 1J, 1M, & 1N
Coventry, RI
Project #: 1193-003-D01**

Dear Mr. Duchesneau,

DiPrete Engineering is submitting updated drawings for the Highland at Hopkins Hill Phases 1G, 1H, 1L, 1J, 1M, and 1N project, located at Stephanie Drive and Dante Boulevard, Plat 13 Lot 22. As this project has already received prior approvals, the current proposal maintains the same number of units, utilizes the previously designed and built ponds, and largely retains the original utility design. However, some minor adjustments to the utility design have been made to address site constraints. Additionally, the updated design incorporates water quality measures.

The submitted water utility design is consistent with the approved plan from Crossman Engineering, titled "Proposed Water Expansion for the Highlands at Hopkins Hill," dated 4/8/2020. Please refer to the approved plan for all necessary calculations and supporting documentation that were previously submitted as part of the KCWA plan review application.

The modifications in this submittal to the water utilities are minor adjustments that were made to address site constraints and are consistent with the overall approved design from Crossman Engineering. Therefore, no new calculations were provided with this submittal. For your reference, the KCWA application and checklist are provided with this letter.

Please do not hesitate to contact me should you have any questions or need further information. I look forward to your response.

Sincerely,
DiPrete Engineering Associates, Inc.



Faith Mingus
Civil Engineer
fmingus@diprete-eng.com



Brian Giroux, PE
Principal
bgiroux@diprete-eng.com

TAB M