

CITY OF DOVER

PLANNING TECHNICAL REVIEW COMMITTEE –AGENDA

Meeting Type: Regular Meeting
Meeting Location: 2nd Floor Conference Room – City Hall, Dover NH
Meeting Date: **Thursday, July 26, 2018**
Meeting Time: **10:30 am**

1. 10:30 AM – 11:15 AM: Site Review for STF Development Corp, (Owner: Lee Ann Burns Revocable Trust), Assessor's Map 15, Lot 67, zoned CBD - Downtown Gateway, located at 260 Locust Street. (Proposal is to remove existing structure for construction of "Locust Street Inn" a 5,700 sq. ft. building containing 17 rooms as well as construction of "Locust Common" a 6,745 sq. ft. building containing 12 apartment units. Proposal also consists construction of a 428 ft. long private roadway. A request for two CUP's will also appear before the Planning Board. (P18-30)
2. 11:15 AM – 12:00 PM: Site Review for Dovester Holdings, LLC, Assessor's Map 20, Lot 41, zoned CBD - Residential, located at 24 Hanson Street. (Proposal is to demolish the existing garage and replace with a six (6) unit apartment building. The lot contains an existing five (5) unit building which would remain. A related CUP application will also appear before the Planning Board). (P18-02)



City of Dover, New Hampshire SITE REVIEW APPLICATION

[Revision Date: August 02, 2017]

Office Use Only	Project #:	_____	Date Received:	_____
	Amount Paid:	_____	Time Received:	_____

APPLICANT AND OWNER INFORMATION

Name of Applicant: STF Development Corp Telephone # 603-742-2121

Address of Applicant: 242 Central Ave, Dover, NH 03820

E-Mail Address: Dave@CentralFallsRealty.com

Name of Property Owner (if different from applicant): Rev Tst ^{Lee Ann Burns} Telephone # 742-3212

Address of Property Owner: 20 Governor Sawyer Ln, Dover, NH 03820

PROPERTY INFORMATION

Address of Property: 260 Locust St

Assessor's Map # 15 Lot(s) # 67

Zoning District(s) CBD Overlay District(s) Gateway

Size of Parcel: 47,512 sq. ft. 1.09 ac. Property Deed: Book 1777 Page: 508

Existing Use of Property: Residence

SITE PLAN INFORMATION

Describe Proposed Use: Proposed commercial lodging with multi-family at rear

Area of Parcel to be Developed: _____ 45,000 sq. ft.

If Multi-family Residential, Specify Number of Units & Buildings Proposed: 1 inn with 17 rooms
1 building with 12 units

Number of Parking Spaces: Existing 0 Proposed 39

Highway Access (check where applicable): ☒ City Street ☐ State Highway

Number of Employees Total: 4 In Maximum Shift: 2

Disposition of Parcel:

Building Setbacks:

Building Footprint 12,345 sq. ft.

Front Yard build-to 5 to 20 ft.

Total Building Area 12,345 sq. ft.

Rear Yard 0 ft.

Paved Area 18,455 sq. ft.

Side Yard: Right 5 ft. Left 5 ft.

City Water? ☒ Yes ☐ No How far is city water from the property? 44 feet

City Sewer? ☒ Yes ☐ No How far is city sewer from the property? 21 feet

BUILDING INFORMATION

Type of Building to be Built: Inn and multi family residential

Multi-Family = 28.33 feet Inn finished floor = 102.25

Height of Building: Inn = 35.0 feet Finished Floor Elevation: Residential finished floor = 103.15

Number of Seats (where applicable) _____

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: Landscaping within parking lots

Justification for waiver request(s) (*attach additional sheets as needed*): See attached waiver request narrative

SURVEYOR INFORMATION

Kenneth A Berry, PE, LLS
Name of Surveyor and Company (Licensed in N.H.) Berry Surveying & Engineering

Address 335 Second Crown Point Rd, Barrington, NH 03825 Telephone #: 603-332-2863

Professional License #: 805 E-mail address: K.Berry@BerrySurveying.com

ENGINEER INFORMATION

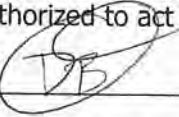
Kenneth A Berry, PE, LLS
Name of Engineer and Company (Licensed in N.H.) Berry Surveying & Engineering

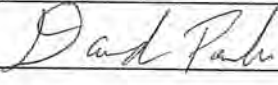
Address 335 Second Crown Point Rd, Barrington, NH 03825 Telephone #: 603-332-2863

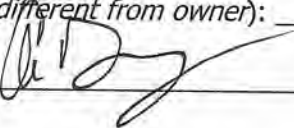
Professional License #: 1243 E-mail address: K.Berry@BerrySurveying.com

SIGNATURES

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. Furthermore, I/we submit that the existing conditions sheet of the plan represents the lot in question, and that no alteration of the site shall take place during Planning Board review up to and including the pre-construction meeting. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner:  Date: 7-2-18

Signature of Applicant (*if different from owner*):  Date: 7-2-18

Signature of Agent:  Date: 7-2-18



BERRY SURVEYING & ENGINEERING

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Barrington, NH 03825

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crberry@metrocast.net

July 2, 2018

City of Dover

Attention: Assistant City Planner Donna Benton

288 Central Ave

Dover, NH 03820

Re: Burns, Lee Ann Revocable Trust
260 Locust Street
Dover, NH
Tax Map 15, Lot 67
Applicant STF Development

Dear Mrs. Benton,

On behalf of our clients, Lee Ann Burns Revocable Trust & STF Development Corp (STF) Berry Surveying & Engineering (BS&E) is submitting to the TRC to discuss a proposed development off of Locust Street, located in the Central Business District (CBD) Downtown Gateway Sub-District.

Background and General Narrative:

Lee Ann Burns Revocable Trust owns the parcel known as 260 Locust Street in Dover, NH (Tax Map 15, Lot 67). BS&E has conducted an on-site survey of the parcel which includes a topographic analysis as well as a wetlands analysis. Please note there are no wetlands found on the parcel. The site contains a single structure which sits at the front of the parcel and over looks Locust Street. The parcel is 1.09 acres in size and has approximately 124.5 feet of frontage along Locust Street. There are two driveways which are used to access the parcel from Locust Street. The rear of the site is generally open and contains minimal elevation change. There is some topographic change as the site transitions to the more commercialized area of Central Ave.

The Proposal:

The proposal is to construct a private roadway up the northern side of the parcel and wrap around the back of the proposed building "*Locust Common*". The existing structure on the parcel will be removed for the construction of the "*Locust Street Inn*", a 5,700 Sq. Ft. building proposed to contain 17 lodging rooms. Along with the "*Locust Street Inn*", the private roadway will provide access to "*Locust Common*", a 6,745 Sq. Ft. building proposed to contain 12 apartment units.

The proposed private roadway will be approximately 428 feet long, contain a turnaround suitable for the T1 truck to maneuver in and out of the project site.

The lodging aspect of the project site is proposed to be 17 rooms, which requires an architectural review. At this time the applicants are looking to build the 17 units by removing the existing residential building and constructing a new inn.

The proposed 12 unit residential structure is proposed to have the same architecture as Sheffield Drive, but will be limited to two floors. In this CBD zone, the parcel could support 9.5 units as a matter of zoning right. The applicants will be requesting a C.U.P. to allow for the 12 units.

Due to the perceived sensitivity to the abutting neighborhood, the proposed structures were limited in size and scope. This allows for the proper amount of parking to take place on site without finding offsite parking. This also allows for the proposed structures to back up to and be in closer proximity to the abutting commercial parking lot. By orienting the buildings as designed, a softer feel and approach can be taken towards the abutting neighborhood allowing for future fencing and vegetation design. The internal parking array will have internal landscaping that faces the abutting neighborhood.

A landscaping plan is included in the plan set to show the varying landscape items this site proposes. Careful consideration was used to develop this plan, such that the abutting lots would be screened from the site not only by the addition of fences but also the addition of evergreens along the property lines. This will create visual and sound buffers between lots while still allowing the site be aesthetically pleasing. In addition to the buffer landscaping, interior landscaping is also proposed to create buffers between the buildings and proposed parking lot.

An intensive drainage analysis was done to determine the most effective and efficient way to not only treat the storm water generated from the proposed site but also all the runoff that collects from abutting sites. Two rain gardens are proposed on the northerly and easterly side of the parcel. These rain gardens will serve to capture and treat the runoff. Any runoff that does not re-infiltrate will be redirected into outlet structures via underdrains. Various downspouts and roof drains are proposed around the buildings to divert any roof runoff into the rain gardens. Both rain gardens will have additional underground stone storage to maximize runoff treatment and retention. Rip-rap berms and forebays will be added for pretreatment and protection while the rain gardens stabilize with vegetation growth.

Various erosion and sediment control measures are proposed to ensure the site is stable throughout the construction process and abutting lots do not receive any sediment laden runoff. A 24' x 75' crushed stone construction entrance will be installed at the job entrance to ensure that no tracking takes place onto Locust Street. This construction entrance will remain in place until the site is paved. Silt soxx will be placed along the perimeter of the parcel and around the rain gardens to maintain sediment and prevent it from running off onto abutting lots and into the rain gardens.



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There are conditional use permits which will be sought for this project. The first CUP is proposing a 25.98% lot coverage where a 50% lot coverage would be required. The proposed site misses this regulation by 24.2%. This would allow for the construction of the proposed roadway, parking, and stormwater management systems that would create a functional site. By doing this, it allows for the minimum parking space requirement to be met, as well as adequate space for vehicles to navigate the site. This also allows for a greater amount of stormwater treatment to be achieved, improving the quality from the developed site. The space between the two buildings is being reserved for an outside courtyard for both buildings to utilize.

The second CUP is proposing 47.7% frontage build out where 60% would be required. The proposed site misses this regulation by 12.3%. This would allow for the placement of the road way and parking spots to be functional as well as other elements such as benches and trash bins easily accessible. The applicants are trying to construct a new inn on site relative in style and size to other buildings in the area. In doing this, they are adding more build out frontage to a site which had none previously. Additionally the site is designed in an effort to keep the private drive away from the boundary line, increasing buffering and separation.

The final CUP will for the lack of brick façade on the buildings. This was done with intent, so that the inn and multifamily building would maintain a New England style of architecture. In addition, the proposed buildings will match the architecture of surrounding buildings, specifically that of Monroe Street and Locust Street, which directly abuts this project.

In addition to the CUP's, we will be requesting an internal landscape waiver. A minimum of 5% of the parking area has to be landscaped according to the site plan regulations. Given the available lot size and the required parking for the inn and multifamily building, very little interior landscaping could be accomplished. However, other areas on the site are able to be landscaped in order to offset the lack of landscaping within the parking area itself. The site layout was designed such that multiple areas surrounding the parking lot could be landscaped, to provide buffers and transitions from abutting lots and Locust Street to the proposed site.

We look forward to working with staff on this proposal and moving forward to a final submission.

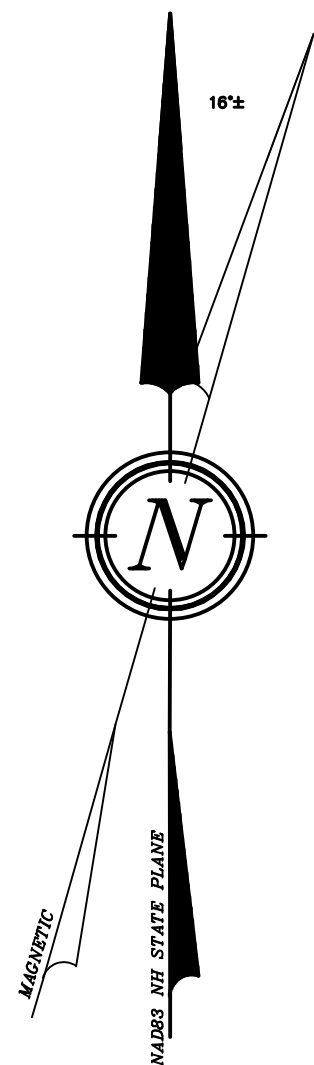
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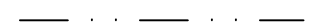
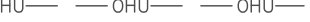
Christopher R. Berry
Principal, President



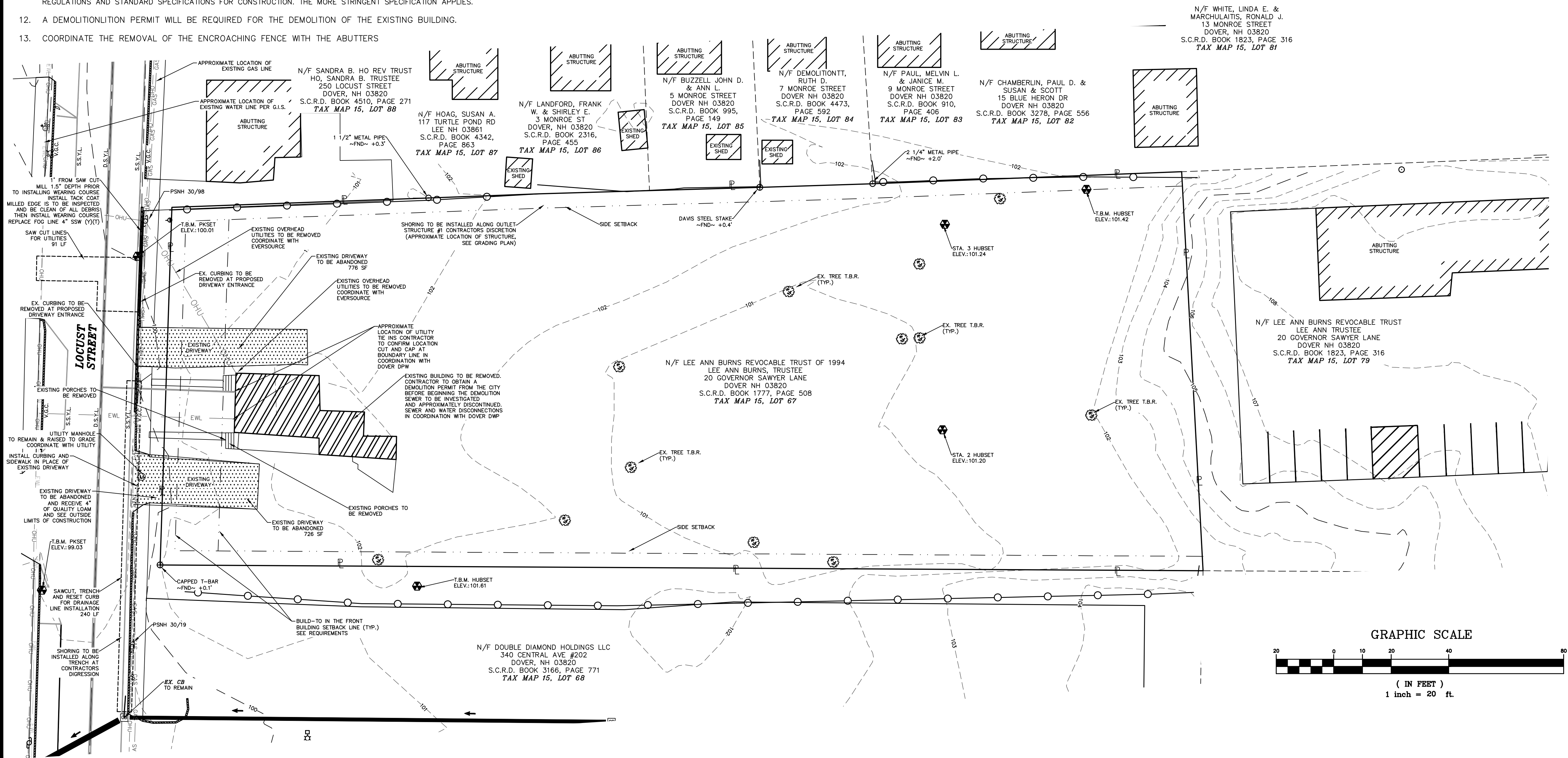
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- THE INTENT OF THIS PLAN SET IS TO DEMONSTRATE THE DEMOLITION ASPECTS OF THE SITE PLAN AT 260 LOCUST STREET.
2. APPLICANT: STF DEVELOPMENT CORP.
242 CENTRAL AVE.
DOVER, NH 03820
3. OWNER:
THE LEE ANN BURNS REVOCABLE TRUST OF 1994
BURNS, LEE ANN TRUSTEE
20 GOVERNOR SAWYER LN.
DOVER NH 03820
4. TAX MAP 15, LOT 67
5. LOT AREA: 47,512 Sq. Ft., 1.09 Ac.
6. S.C.R.D. BOOK 1777, PAGE 508
7. ZONING: CBD – DOWNTOWN GATEWAY SUB-DISTRICT
FRONTAGE ~ N/A
MIN. LOT SIZE ~ N/A
MIN. LOT COVERAGE ~ 50%
FRONTAGE BUILD-OUT ~ 60% MIN.
FRONT PRIMARY BUILD-TO LINE ~ 5.0' MIN.-20.0' MAX.
FRONT SECONDARY BUILD-TO LINE ~ 5.0' MIN.-20.0' MAX.
REAR SETBACK ~ 0'
SIDE SETBACK ~ 5.0'
WETLANDS BUFFER ~ N/A
PRINCIPAL BUILDING HEIGHT: 2 STORY MIN.-4 STORY MAX.
8. CALL DIG SAFE PRIOR TO BEGINNING WORK (1-888-344-7233).
9. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7AM-6PM AND SATURDAY 9AM-4PM. NO SUNDAY HOURS.
10. A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE CITY ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
11. ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND WITH THE CITY OF DOVER DEVELOPMENT REGULATIONS AND STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE MORE STRINGENT SPECIFICATION APPLIES.
12. A DEMOLITION PERMIT WILL BE REQUIRED FOR THE DEMOLITION OF THE EXISTING BUILDING.
13. COORDINATE THE REMOVAL OF THE ENCROACHING FENCE WITH THE ABUTTERS



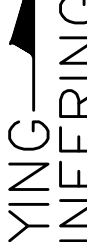
- | LEGEND: | |
|---|--|
|  | STEEL STAKE (FND) |
|  | GRANITE BOUND (FND) |
|  | IRON BOUND (FND) |
|  | UTILITY POLE/GUY WIRE |
|  | WATER GATE VALVE |
|  | HYDRANT |
|  | CATCH BASIN (CB) |
|  | SEWER MANHOLE (SMH) |
|  | BUILDING SETBACK LINE |
|  | OVERHEAD UTILITIES LINE |
|  | EXISTING WATER LINE |
|  | EXISTING GAS LINE |
| M.C.R.D. | MERRIMACK COUNTY REGISTRY OF DEEDS |
| TYP. | TYPICAL |
| FND | FOUND |
| E.O.P. | EDGE OF PAVEMENT |
| FL | PROPERTY LINE |
| T.B.M. | TEMPORARY BENCHMARK |
| SSL (Y) | SINGLE SOLID LINE (YELLOW) |
| SSB (Y) | SINGLE SOLID WITH BROKEN LINE (YELLOW) |
|  | REMOVE EXISTING PAVEMENT AND RECEIVE
4" QUALITY LOAM AND SEED |

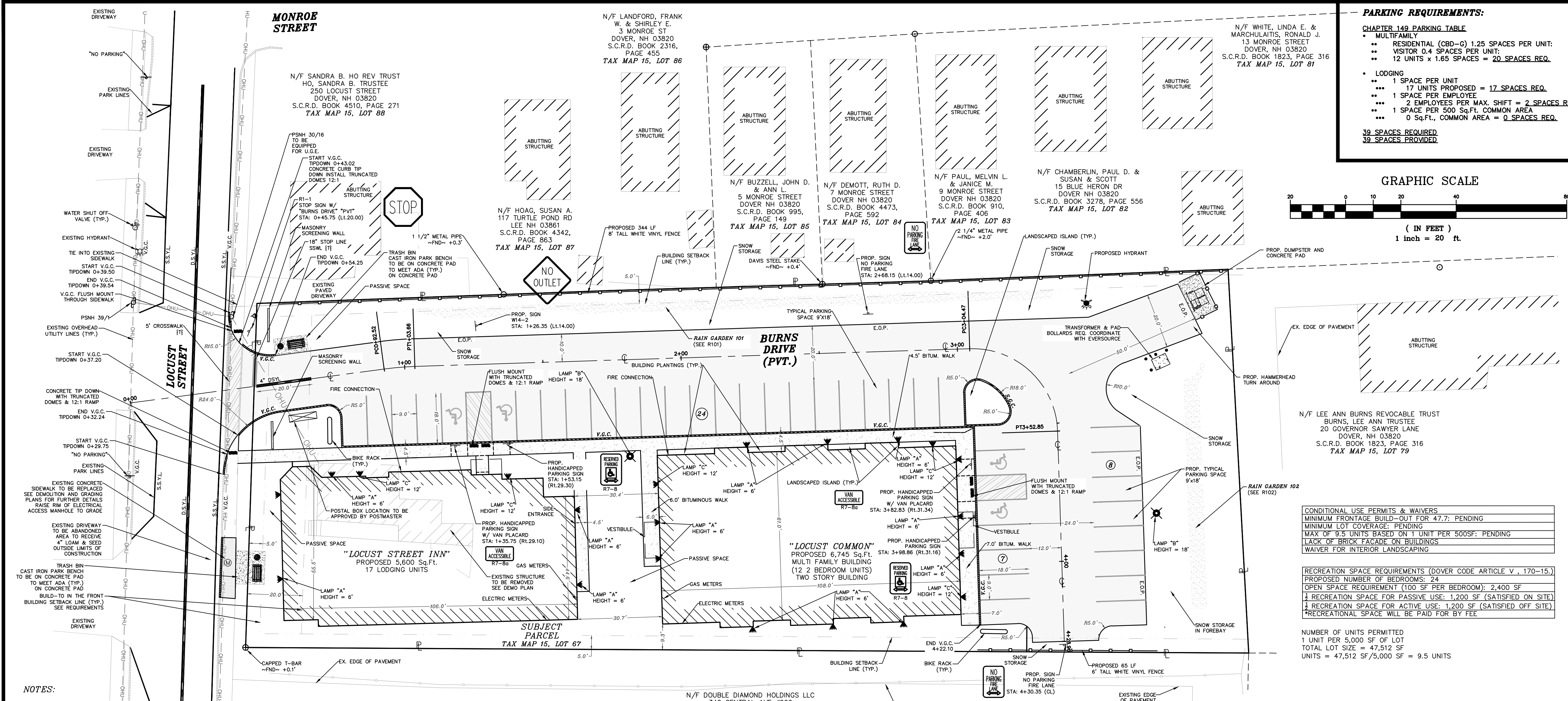
THE UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR NOR THE ENGINEER MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.



DOVER PLANNING #		
REVISION	DATE	DESCRIPTION

DEMOLITION PLAN
LAND OF
THE LEE ANN BURNS REVOCABLE TRUST OF 1994,
BURNS, LEE ANN TRUSTEE
260 LOCUST STREET
DOVER, NH 03820
TAX MAP VS LOT 67

	BERRY SURVEYING & ENGINEERING 335 SECOND CROWN POINT ROAD BARRINGTON, NH 03825 (603)332-2863	
	SCALE : 1 IN. EQUALS 20 FT.	DATE : JULY 2, 2018
FILE NO. : DB 2017 - 163		



DOVER PLANNING #

DESCRIPTION

REVISION

DATE

SITE PLAN

LAND OF
THE LEE ANN BURNS REVOCABLE TRUST OF 1994,
BURNS, LEE ANN TRUSTEE
260 LOCUST STREET
DOVER, NH 03820
TAX MAP 15 LOT 67

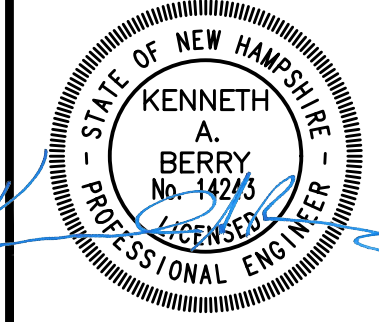
BERRY SURVEYING & ENGINEERING

335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : 1 IN. EQUALS 20 FT.

DATE : JULY 2, 2018

FILE NO. : DB 2017 - 163





July 10, 2018

STF Development
242 Central Ave
Dover NH 03820

RE: Natural Gas Availability to 260 Locust St, Dover NH

Dear Sir/Madam,

Unitil's natural gas division has reviewed the requested site for natural gas service.

Unitil hereby confirms natural gas service will be available to STF Development at 260 Locust St Dover. Installation is pending an authorized installation agreement with STF Development and street opening approval from the City of Dover DPW

Let me know if you have any questions. You can email me at oliver@unitil.com. My phone number is 603-294-5174.

Sincerely,

Janet Oliver
Business Development Representative



July 11, 2018

1700 Lafayette Road
Portsmouth, NH 03801

Michael J Busby
603-436-7708 x555-5678
michael.busby@eversource.com

Dave Paolini
STF Development Corp
242 Central Ave
Dover, NH, 03820

Dear David Paolini:

I am responding to your request to confirm the availability of electric service for the proposed 260 Locust St project being constructed for/by STF Development Corp.

The proposed project consists of a 1-2-story building with 12 residential units and 1-2 story 16 bed lodge. The proposed development will be constructed along 260 Locust Street.

The developer will be responsible for the installation of all underground facilities and infrastructure required to service the new building. The service will be as shown on attached marked up Utility Plan. The proposed building service will be fed from to be determined by Eversource Engineering as depicted on utility plan. The developer will work with Eversource to obtain all necessary easements and licenses for the proposed overhead/underground facilities listed above.

This letter serves as confirmation that Eversource has sufficient capacity in the area to provide service to this proposed development. The cost of extending service to the aforementioned location and any associated infrastructure improvements necessary to provide service will be borne by the developer unless otherwise agreed upon.

The attached drawing titled "Utility Plan Land of Strafford Farms" for STF Development Corp 58 New Rochester RD, Dover, NH/ Utility Plan hand of The Lee Ann Burns Revocable Trust pf 1994, Lee Ann Truster, 260 Locust Street, Dover NH 03820, Tax Map 15 Lot 67, Dated July 2, 2018, shows transformer locations to service your proposed project.

Eversource approves the locations shown; assuming the final installed locations meet all clearances, physical protection, and access requirements as outlined in Eversource's "Information & Requirements For Electric Supply" (<https://www.eversource.com/content/docs/default-source/pdfs/requirements-for-electric-service-connections.pdf?sfvrsn=2>).

If you require additional information or I can be of further assistance please do not hesitate to contact me at our Portsmouth Office, 603-436-7708 Ext. 555-5678

Respectfully,
Michael J. Busby, PE
NH Eastern Regional Engineering and Design Manager, Eversource

cc: (via e-mail)
Karl Douglas, Eastern Region Operations Manager, Eversource
Mary Jo Hanson, Field Supervisor, Electric Design, Eversource





Turn on comment mode to collaborate on this prototype



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City of Dover Planning Department
Attention: Assistant City Planner Donna Benton
288 Central Ave.
Dover, NH 03820

July 2, 2018

RE: Traffic Impact Analysis & Distribution
STF Development Corp.
260 Locust Street
Dover, NH

Mrs. Benton,

Pursuant to the City of Dover Site Review Regulations, Berry Surveying & Engineering, on behalf of STF Development Corp., has prepared a Standard Traffic Impact Analysis for the development of twelve residential units and seventeen lodging units at 260 Locust Street.

The following conclusions were reached as a result of the Traffic Impact Analysis:

- A total of 14 vehicle trips (4 enter/10 exit) is predicted to occur at the AM peak hour and 15 vehicle trips (9 enter/6 exit) at the PM peak hour.
- This is an increase in trip generation of 13 AM trips, 14 PM trips, and 166 total weekday trips.
- There are three public bus stops within a quarter mile that present a further opportunity for reduction of trips generated.
- The 2018 and 2028 build traffic volumes DO NOT satisfy the NCHRP 457 guidelines for the implementation of a right-turn bay.
- The 2018 and 2028 build traffic volumes DO NOT satisfy the NCHRP 457 guidelines for the implementation of a left-turn bay.
- It is recommended that the existing and surrounding infrastructure will be sufficient to handle the projected increase in vehicle trips at the peak hour and all other hours due to the minimum trips generated and low pass-by draw.

2017-163 STF Development Corp., Dover, NH
Traffic Impact Analysis, July 2nd, 2018

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2017-163 STF Development Corp., Dover, NH
Traffic Impact Analysis, July 2nd, 2018

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Proposed Development & Introduction

The proposal is to re-develop this site to contain a twelve unit residential building, known as the “Locust Common” and a seventeen unit lodging building, known as the “Locust Street Inn”. The proposed access road, known as “Burns Drive”, is a private road just under 429 linear feet in length. The purpose of this analysis is to determine the maximum number of trips coming to and leaving Burns Drive during certain peak periods of the day. This information is then used in determining the impact on safety as it relates to the existing roadway infrastructure. The following components of the analysis are typical for a project of this size pursuant to the Institute of Traffic Engineers (ITE) manual.

Existing Conditions

Existing Site Description

The existing site is Tax Map 15, Lot 67, containing 47,512 Sq. Ft. (1.09 Ac.) of land. The site is primarily open, with a duplex currently located in the front of the lot. The site is located in the CBD Downtown Gateway Sub-District, and is surrounded by other residential and commercial lots. The site contains two driveway cuts on the east side of Locust Street. There are two driveway cuts for a commercial complex adjacent to the site along with a residential driveway cut to the north and a parking lot to the south.

Locust Street Road Description

Locust Street is a major collector road, according to NHDOT MS2 Transportation Data Management System (NHDOT), that connects Central Ave to the south and the Washington Street to the north. It has an Average Daily Traffic (ADT) of 5,686 (2017) divided between north and south.

Locust Street is a paved surface, on-street parking provided on the west side of the road, and a curbed sidewalk on both sides of the road. There are both centerline delineation and fog / edge lines provided. The posted speed limit of the roadway is 30 miles per hour (MPH). The geometry of Locust Street is relatively flat and straight in the project location.

Existing Traffic Volumes

According to traffic counts recorded by the Dover Police Department for August 23rd – August 25th 2017, the Locust Street AM and PM two-way peaks were 373 trips and 511 trips, respectively. It was found that Locust Street has an ADT of 5,686.

The highest hourly traffic on this section of Locust Street north bound occurred from 7-8 AM with 190 vehicles and from 4-5 PM with 268 vehicles. South bound highest hourly traffic occurred from 7-8 AM with 189 vehicles and from 4-5 PM with 260 vehicles. Table #1 shows the traffic direction breakdown of Locust Street and Figures #1-3 are graphical representations of



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the traffic variations occurring throughout the day. The lane volume splits from Table #1 are later applied to the generations to establish turning volumes.

Peak Hour Traffic Distribution Locust Street						
Date	North Bound		South Bound		Two Way	
8/23/2017	AM Peak	190.0	AM Peak	196.0	AM Peak	386.0
	PM Peak	255.0	PM Peak	264.0	PM Peak	489.0
8/24/2017	AM Peak	194.0	AM Peak	190.0	AM Peak	384.0
	PM Peak	277.0	PM Peak	290.0	PM Peak	567.0
8/25/2017	AM Peak	187.0	AM Peak	182.0	AM Peak	350.0
	PM Peak	271.0	PM Peak	227.0	PM Peak	476.0
Average	AM Peak	190.3	AM Peak	189.3	AM Peak	373.3
	PM Peak	267.7	PM Peak	260.3	PM Peak	510.7
% Distribution	AM Peak	50.1	AM Peak	49.9		
	PM Peak	50.7	PM Peak	49.3		

Table 1: Directional breakdown of trips occurring on Locust Street

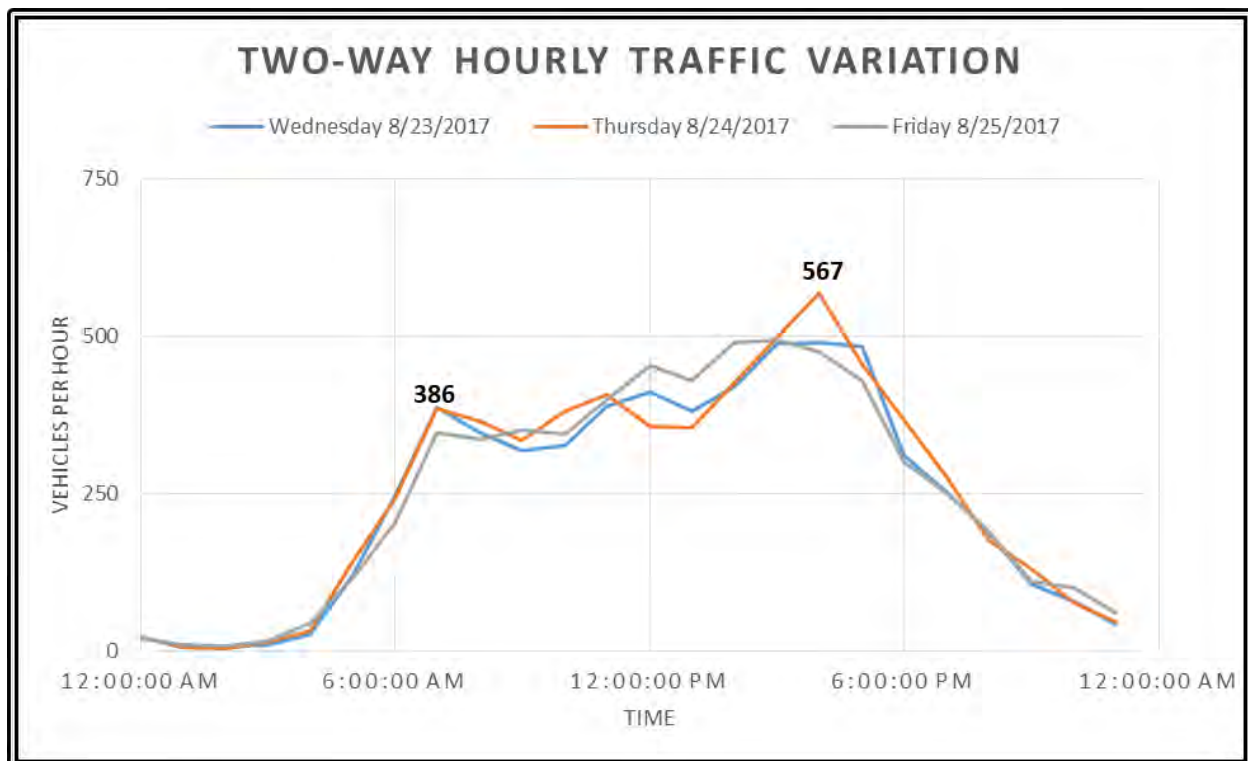


Figure 1: Graph of Locust Street two-way hourly traffic variation with peak hour values



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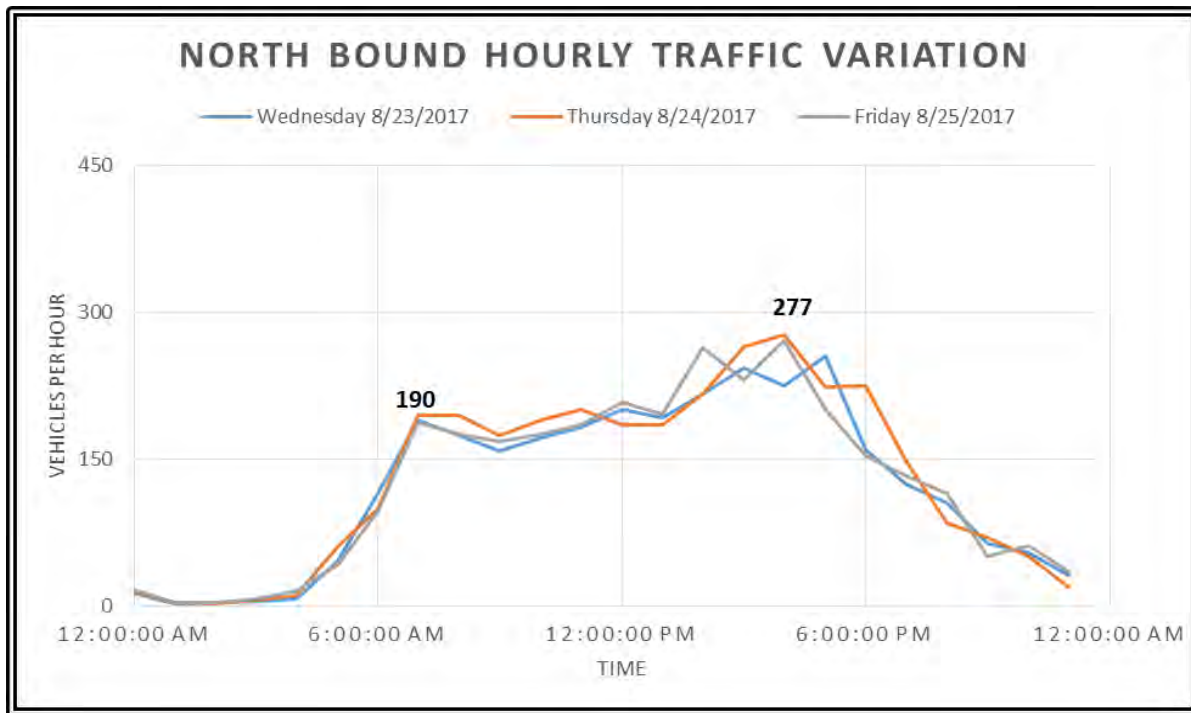


Figure 2: Graph of Locust Street north bound hourly traffic variation with peak hour values

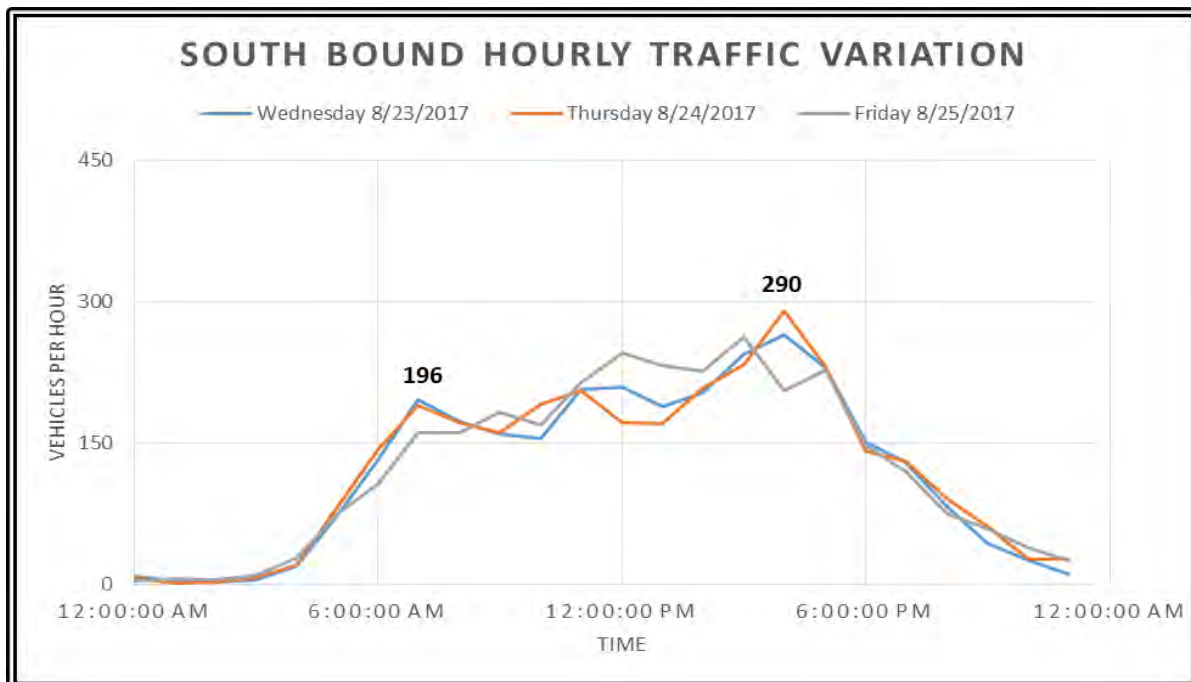


Figure 3: Graph of Locust Street south bound hourly traffic variation with peak hour values



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Existing Vehicle Speeds

As previously mentioned, the posted speed limit of Locust Street is 30 MPH. For the purposes of the safety analysis below, the 85th percentile of speed is required. This particular section of Locust Street was observed by the Dover Police Department to analyze the pass by traffic, reviewing speed. Excessive speeds were rare, and most operators obeyed the posted speed limits within a deviation of 5 MPH. This is consistent with speeds found on urban roads. The 85th percentile observed by the Dover Police Department is 34 MPH.

Intersection of Locust Street and Central Avenue

Approximately 0.2 miles to the south, Locust Street connects to Central Avenue at an angle less than 90 degrees, where a signalized intersection is used to control traffic movements. Central Avenue has a posted speed limit of 30 MPH and is considered a minor arterial road according to the NHDOT. Central Avenue consists of a north bound and south bound lane with a dedicated left turn lane in the area of the intersection of Locust Street and Central Avenue, with an Average Annual Daily Traffic (AADT) of 15,199 (2017) divided between north and south. The directional volume split is nearly 50/50, with a north bound AADT of 7,364 (2017) and south bound AADT of 7,835 (2017) and shows an increase in the PM peak hour traffic volumes proportional to what Locust Street experiences. This corridor also contains the interchange for NH Route 16, where traffic enters and exits to the north or south. The exit ramps from north bound traffic and south bound traffic have AADT's of 2,263 (2017) and 3,864 (2017), respectively. The entrance ramps for north bound and south bound have AADT's of 3,903 (2017) and 2,201 (2017), respectively. This equates to a combined exit ramp AADT of 6,127 and combined entrance ramp AADT of 6,104, a near 50/50 volume split. In addition, the PM peak hour volume increase that the ramps experience is proportional to the PM volume increase that Locust Street experiences.

The proximity of Locust Street to this interchange is assumed to be the cause of the nearly 50/50 volume directional split and volume increases that occur during the peak hours of the day. This indicates that the primary traffic flow of Locust Street is controlled by the NH Route 16 interchange. Though Locust Street is not the primary recipient of the volumes of traffic entering or existing NH Route 16, as the daily volume of traffic of Central Avenue is nearly three times greater. Figure 4 shows the configuration of the intersection of Locust Street and Central Avenue with surrounding roadways, including AADT values (NHDOT).



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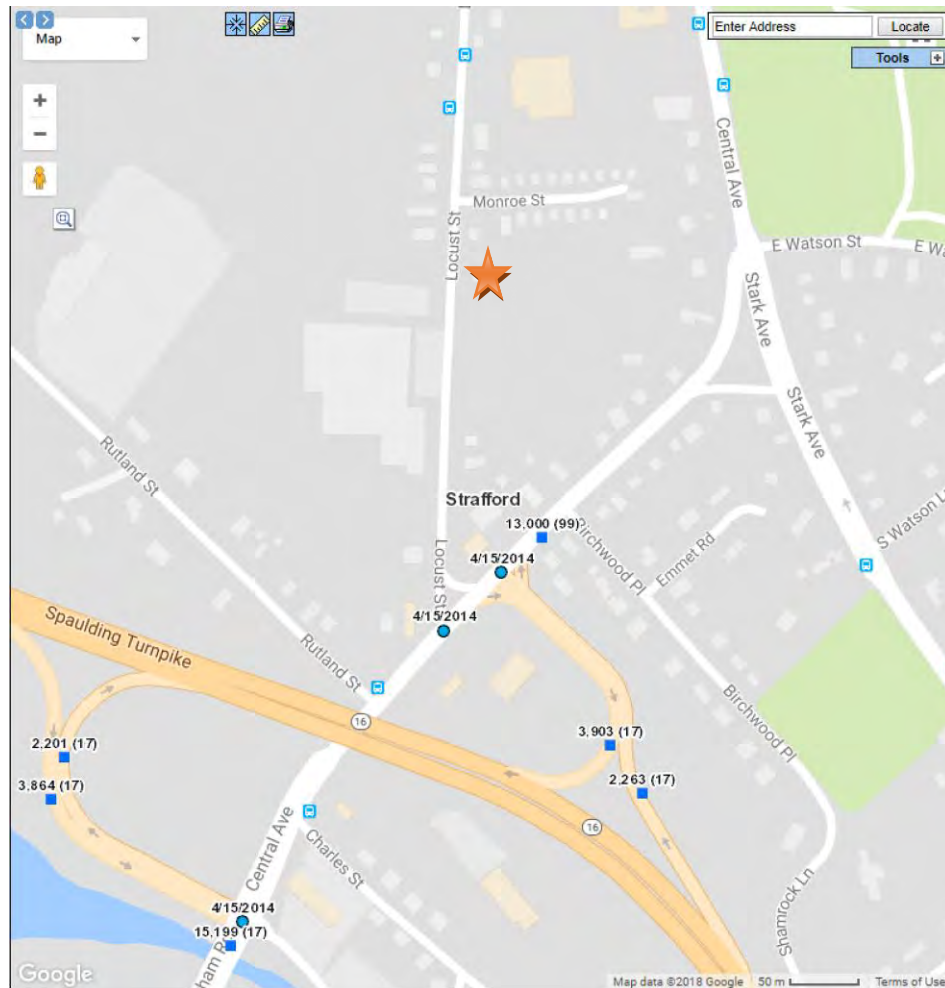


Figure 4: Figure of the intersection of Locust Street and Central Avenue showing NH Route 16 (NHDOT)

Proximity to Public Transportation

The proposed build out presents an excellent opportunity for the utilization of public transportation for residents and guests alike. There are three public bus stops less than a quarter mile away. Approximately 0.2 miles away on Central Avenue is a Coast Bus Stop, Route 2, Central Ave. at CVS Pharmacy. Pedestrian amenities including sidewalks and crosswalks are present along the entire walk. In addition, less than a quarter mile away, there are bus stops serviced by the University of New Hampshire Route 3 on Locust Street, Locust Street at CVS Pharmacy, and on Central Avenue, Central Ave. at Rutland Ave. Both of these bus stops have pedestrian amenities including sidewalks and crosswalks along the entire walk. University of New Hampshire public transportation service is seasonal, but is open to the general public. Utilization of these routes also presents an opportunity for a reduction of trips generated by the site. Suggestions for encouragement of the use of these bus stops could include improvement in



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streetscapes with plantings and other amenities. Figure 4, above, shows the locations of bus stops surrounding the site.

Existing Trip Generation

The 9th Edition ITE Trip Generation Manual was used to determine the existing volume of trips, as well as the percentage of entrance-to-exit traffic experienced during the AM & PM peak hours between 7 and 9 AM and 4 and 6 PM. Land Use Code Single Family Detached Housing (210) was used in deriving the trip generation for the existing site. Table 2 provides average trip rate, total trips generated, enter to exit ratio, and the enter to exit distribution.

Single Family Detached Housing Existing Trip Generation:

Time Method	AM Peak Adj. Street Traffic Dwelling Units			Time Method	PM Peak Adj. Street Traffic Dwelling Units		
Total Trips	0.8	Distribution		Total Trips	1.0	Distribution	
% Enter	25.0	Enter	0.2	% Enter	63.0	Enter	0.6
% Exit	75.0	Exit	0.6	% Exit	37.0	Exit	0.4

Table 2: (Single Family Detached Housing) Peak hour of adjacent street traffic AM & PM

Proposed Trip Generation Increase

The 9th Edition ITE Trip Generation Manual was used to determine the proposed volume of trips, as well as the percentage of entrance-to-exit traffic experienced at the AM & PM peak hours between 7 and 9 AM and 4 and 6 PM. Land Use Codes Apartment (220) and Motel (320) was used in deriving the trip generation for the proposed bank. Tables 5-7 provide average trip rate, total trips generated, enter to exit ratio, and the enter to exit distribution.

Apartment Proposed Trip Generation:

Time Method	AM Peak Adj. Street (Page 334) Dwelling Units			Time Method	PM Peak Adj. Street (Page 335) Dwelling Units		
# Units	12			# Units	12		
Avg. Rate	0.51			Avg. Rate	0.62		
Total Trips	6.1	Distribution		Total Trips	7.4	Distribution	
% Enter	20.0	Enter	1.2	% Enter	65.0	Enter	4.8
% Exit	80.0	Exit	4.9	% Exit	35.0	Exit	2.6

Table 3: (Apartment) Peak hour of adjacent street traffic weekdays AM & PM



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Motel Proposed Trip Generation:

Time Method	AM Peak Adj. Street (Page 664) Rooms			Time Method	PM Peak Adj. Street (Page 665) Rooms		
# Rooms	17			# Rooms	17		
Avg. Rate	0.45			Avg. Rate	0.47		
Total Trips	7.7	Distribution		Total Trips	8.0	Distribution	
% Enter	36.0	Enter	2.8	% Enter	54.0	Enter	4.3
% Exit	64.0	Exit	4.9	% Exit	46.0	Exit	3.7

Table 4: (Motel) Peak hour of adjacent street traffic weekdays AM & PM

Proposed Trip Generation:

Time	AM Peak Adj. Street Traffic Total			Time	PM Peak Adj. Street Traffic Total		
Total Trips	13.8	Distribution		Total Trips	15.4	Distribution	
% Enter	31.1	Enter	4.3	% Enter	59.8	Enter	9.2
% Exit	68.9	Exit	9.5	% Exit	40.2	Exit	6.2

Table 5: Total Peak hour of adjacent street traffic weekdays AM & PM generation

Build Traffic Projections and Turning Analysis

Traffic data obtained from the Dover Police Department has been projected to 2018 and ten years further to 2028. This has been done using a peak seasonal adjustment factor of 1.03 (AM & PM) and using an annual growth rate of 1%, compounded annually. The derivation of the peak seasonal adjustment factor comes from an average series of values from other urban highways from across New Hampshire, which can be found as Table 12 in the attachment portion of the report. The Figures 5 and 6 show the build turning movements to and from the site. These figures also show the traffic of volume north bound and south bound on Locust Street in 2018 and the projected 2028 volumes.



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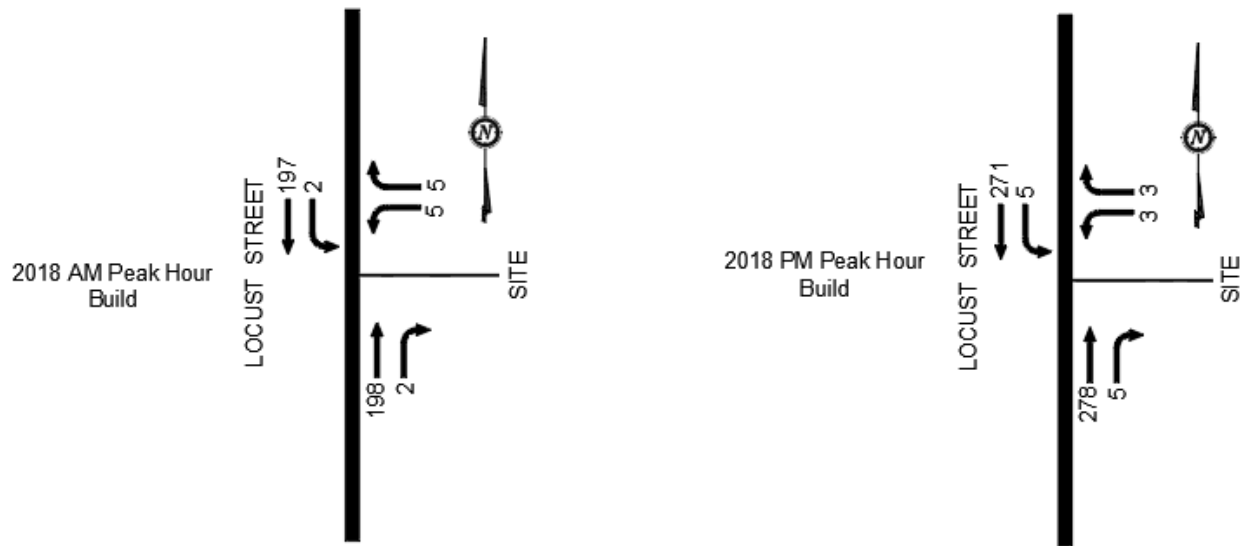


Figure 5: 2018 build traffic volumes and turning movements

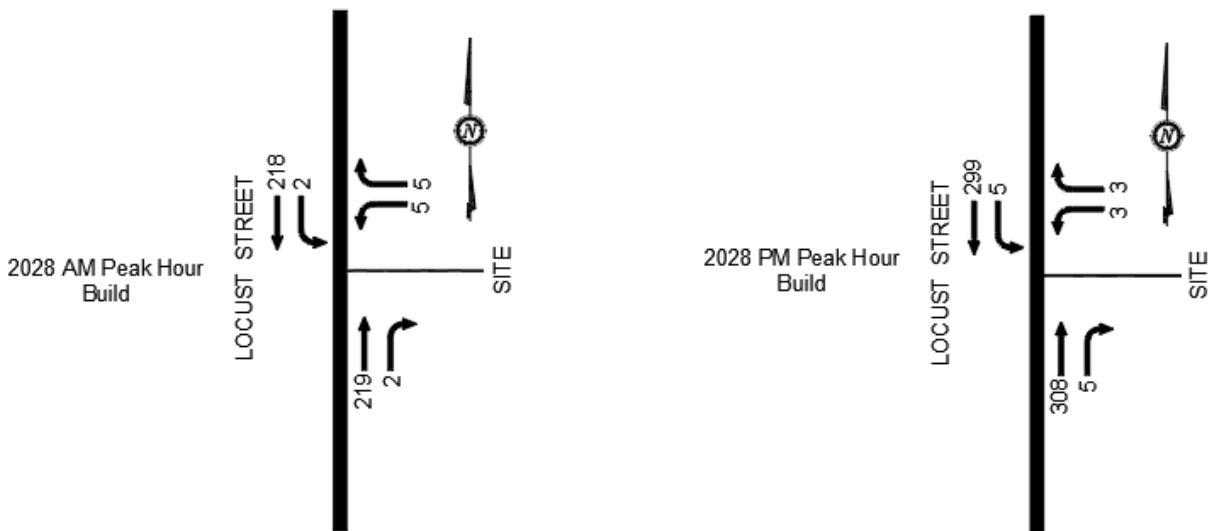


Figure 6: 2028 projected traffic volumes and turning movements

In Tables 6 and 7, the total trips that are calculated to occur from Locust Street are shown at AM and PM weekday peak hours. These are further broken down to entrance and exit into the site as well as percentage of left and right turns.



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Time	AM Peak Adj. Street Traffic	# Trips	Turn Type	% Distribution
Total Trips	13.8			
Trips Enter from Locust Street North Bound		2.1	Right	15.6
Trips Enter from Locust Street South Bound		2.1	Left	15.5
Trips Exit to Locust Street North Bound		4.8	Right	34.9
Trips Exit to Locust Street South Bound		4.7	Left	34.4

Table 6: Summary of AM turning movements to and from the site

Time	PM Peak Adj. Street Traffic	# Trips	Turn Type	% Distribution
Total Trips	15.4			
Trips Enter from Locust Street North Bound		4.6	Right	30.0
Trips Enter from Locust Street South Bound		4.6	Left	29.8
Trips Exit to Locust Street North Bound		3.1	Right	20.4
Trips Exit to Locust Street South Bound		3.1	Left	19.8

Table 7: Summary of PM turning movements to and from the site

Turn Bay Warrants Analysis Assumptions

When evaluating potential turning movements to and from the site, it was decided to not include potential left or right turn movements entering or exiting from the commercial complex adjacent to the site. The commercial complex has several means of egress to Locust Street and information required to accurately determine the trips that would impact the access to the proposed site is unavailable. The proposed site has a minimal pass-by draw and trips projected to enter and exit the site are only a fraction of the existing Locust Street lane volumes. As shown in the following warrant analyses, the limiting advancing volumes are an order of magnitude greater than the projected advancing volumes of Locust Street. Due to these factors, it was determined that these additional movements would not change the conclusions of both turn bay analyses.

Left-Turn Bay Warrants Analysis

Depending on vehicle speed, advancing vehicular volumes, opposing vehicular volumes, and the percent of left turns that vehicles are predicted to make, certain roadways may require special treatment for vehicles making left turning maneuvers. The determination of this special treatment is determined by the NCHRP 457 left turn bay guidelines. Calibration constants of 3.0 seconds are used for average left turn time, 5.0 seconds for critical headway, and 1.9 seconds for vehicles to clear the advancing lane. If warranted, the left turn bay would allow for deceleration of vehicles and storage in the queue to wait safely for advancing traffic to pass.



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The AM and PM peak traffic volumes from 2017 projected to 2018 and 2028 were used to determine if a left-turn bay is warranted to safely enter the site. It has been calculated that approximately 2 trips are to occur turning left into the site during the AM peak hour and 5 during the PM peak hour. For 2018, the projected AM advancing and opposing volumes are 199 and 198, respectively. It was projected for 2028 that advancing and opposing volumes would be 220 and 219, respectively. For 2018, the projected PM advancing and opposing volumes are 275 and 278, respectively. It was projected for 2028 that advancing and opposing volumes would be 304 and 308, respectively. Using the 85th percentile speed of 34 MPH, it was determined that a left turn lane will not be warranted to safely enter the site. The projection of the traffic volumes for AM and PM peak hours is included as Figures 16 & 17. The full analysis can be found in the attachments portion of the report as Figures 18-21. Tables 8 and 9 show a summary of the left turn-bay warrant analysis.

Left-Turn Lane Warrants Analysis Locust Street		
Factors	2018 AM Build Volume	2028 AM Build Volume
Left-Turn Volume (SB)	2	2
Advancing Volume (SB) (L+TR+R)	199	220
Opposing Volume (NB) (TR+R)	198	219
Percent Lefts	1%	1%
85th Percentile Speed (MPH)	34	34
Limiting Adv. Volume (veh/hr)	1433	1470
Left Turn Bay Warranted	NO	NO

Table 8: Summary of AM NCHRP 457 left-turn bay analysis

Left-Turn Lane Warrants Analysis Locust Street		
Factors	2018 PM Build Volume	2028 PM Build Volume
Left-Turn Volume (SB)	5	5
Advancing Volume (SB) (L+TR+R)	275	304
Opposing Volume (NB) (TR+R)	278	308
Percent Lefts	1%	1%
85th Percentile Speed (MPH)	34	34
Limiting Adv. Volume (veh/hr)	1047	1070
Left Turn Bay Warranted	NO	NO

Table 9: Summary of PM NCHRP 457 left-turn bay analysis

Right-Turn Bay Warrants Analysis

Depending on vehicle speed, advancing vehicular volumes, and the percent of right turns that vehicles are predicted to make, certain roadways may require special treatment for vehicles making right turning maneuvers. The determination of this special treatment is determined by the



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NCHRP 457 right turn bay guidelines. If warranted, the right turn bay would allow for deceleration of vehicles and storage in the queue to wait safely for right turning traffic to clear. The AM and PM peak traffic volumes from 2017 projected to 2018 and 2028 were used to determine if a right-turn bay is warranted to safely enter the site. It has been calculated that approximately 2 trips are to occur turning right into the site during the AM peak hour and 5 for the PM peak hour. For 2018, the projected AM advancing volume is 200 and PM advancing volume is 283. It was projected for 2028 that the AM advancing volume is 221 and the PM advancing volume is 313. Using the 85th percentile speed of 34 MPH, it was determined that a right turn lane will not be warranted to safely enter the site. The projection of the traffic volumes for AM and PM peak hours is included as Figures 22 & 23. The full analysis can be found in in the attachments portion of the report as Figures 24-27. Tables 10 and 11 show a summary of the right turn-bay warrant analysis.

Right-Turn Lane Warrants Analysis Locust Street		
Factors	2018 AM Build Volume	2028 AM Build Volume
Right-Turn Volume (NB)	2	2
Advancing Volume (NB) (L+TR+R)	200	221
85th Percentile Speed (MPH)	34	34
Limiting Adv. Volume (veh/hr)	8467	5791
Right-Turn Bay Warranted	NO	NO

Table 10: Summary of AM NCHRP 457 right-turn bay analysis

Right-Turn Lane Warrants Analysis Locust Street		
Factors	2018 PM Build Volume	2028 PM Build Volume
Right-Turn Volume (NB)	5	5
Advancing Volume (NB) (L+TR+R)	283	313
85th Percentile Speed (MPH)	34	34
Limiting Adv. Volume (veh/hr)	2212	1516
Right-Turn Bay Warranted	NO	NO

Table 11: Summary of PM NCHRP 457 right-turn bay analysis

Sight Distance and Safety Analysis

The proposed driveway is located seventeen feet from the northern side boundary line at its closest, satisfying Dover Chapter 92-6-C minimum side boundary line separation, to maximize sight distance. Sight distance to the north and south, as well as driveway alignment are the two determining factors of safety. Sight distance to the north is un-obstructed for well over 400 feet (measured) while sight distance to the south is un-obstructed for well over 400 feet (measured.) Using Exhibit 3-1 (Stopping Sight Distance) (Figure 34) in the Geometric Design Manual, and a 35 mph 85th percentile speed to be more conservative, requires a stopping sight distance of 250 feet from the both directions. The standard sight distance required by NHDOT is 400 feet in



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cases where the Geometric Design Manual would not require more. In this instance both the northerly and southerly sight distances meet the design required warrant as well as the standard practice of NHDOT of 400 feet. There are no improvements required to maintain this site distance.

With respect to general safety of Locust Street in relation to the peak hour trip generation and AADT, it is our assessment that the cross section of pavement and shoulder widths are appropriate.

*AASHTO Geometric Design of Highways and Streets (2011)



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Conclusions and Recommendations

- 1.) A total of 14 vehicle trips (4 enter/10 exit) is predicted to occur at the AM peak hour and 15 vehicle trips (9 enter/6 exit) at the PM peak hour.
- 2.) This is an increase in trip generation of 13 AM trips, 14 PM trips, and 166 total weekday trips.
- 3.) There are three public bus stops within a quarter mile that present a further opportunity for reduction of trips generated
- 4.) The 2018 and 2028 build traffic volumes DO NOT satisfy the NCHRP 457 guidelines for the implementation of a right-turn bay.
- 5.) The 2018 and 2028 build traffic volumes DO NOT satisfy the NCHRP 457 guidelines for the implementation of a left-turn bay.
- 6.) It is recommended that the existing and surrounding infrastructure will be sufficient to handle the projected increase in vehicle trips and peak hour at the all other hours due to the minimum trips generated and low pass-by draw.

Respectfully Submitted,

BERRY SURVEYING & ENGINEERING



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CPSWQ, CPESC, CESSWI
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Appendix A

Locust Street Traffic Counts

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Dover Police Department Traffic Bureau
46 Locust Street
Dover, New Hampshire 03820
(603) 742-4646

LOCUST STREET
near #216 (between Trakey and Monroe)

Date Start: 22-Aug-17
Date End: 30-Aug-17

Northbound

Start	0	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	9999	Total
08/23/17	0	0	1	5	7	0	0	0	0	0	0	0	0	0	13
01:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
03:00	0	0	1	2	2	0	0	0	0	0	0	0	0	0	5
04:00	0	0	3	1	3	0	0	0	0	0	0	0	0	0	7
05:00	0	0	2	18	21	5	0	0	0	0	0	0	0	0	46
06:00	0	2	3	40	53	14	2	1	0	0	0	0	0	0	115
07:00	7	0	5	62	87	24	3	1	1	0	0	0	0	0	190
08:00	1	2	15	61	72	22	0	0	0	1	0	0	0	0	174
09:00	1	1	13	51	74	16	2	0	0	0	0	0	0	0	158
10:00	0	4	8	66	75	19	0	0	0	0	0	0	0	0	172
11:00	3	0	13	58	80	21	4	1	1	1	0	0	0	0	182
12 PM	3	4	15	69	86	21	2	0	0	1	0	0	0	0	201
13:00	4	0	15	73	82	18	0	0	0	0	0	0	0	0	192
14:00	2	3	14	80	85	28	3	1	0	0	0	0	0	0	216
15:00	7	5	21	77	104	23	2	3	1	0	0	0	0	0	243
16:00	5	2	29	82	84	17	3	3	0	0	0	0	0	0	225
17:00	3	2	16	104	112	17	1	0	0	0	0	0	0	0	255
18:00	5	4	8	47	80	15	0	0	0	0	0	0	0	0	159
19:00	2	2	14	62	37	7	0	0	0	0	0	0	0	0	124
20:00	0	2	18	44	30	11	0	0	0	0	0	0	0	0	105
21:00	0	0	7	22	30	5	0	0	0	0	0	0	0	0	64
22:00	0	2	5	25	20	1	0	0	1	0	0	0	0	0	54
23:00	0	0	0	16	12	3	0	0	0	0	0	0	0	0	31
Total	43	35	226	1066	1239	288	22	10	4	3	0	0	0	0	2936

Daily

15th Percentile : 25 MPH
50th Percentile : 30 MPH
85th Percentile : 34 MPH
95th Percentile : 38 MPH

Mean Speed(Average) : 31 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 2307
Percent in Pace : 78.6%
Number of Vehicles > 30 MPH : 1566
Percent of Vehicles > 30 MPH : 53.3%

Figure 7: Wednesday, August 23rd, 2017 north bound hourly traffic count with speeds



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46 Locust Street
Dover, New Hampshire 03820
(603) 742-4646

LOCUST STREET
near #216 (between Trakey and Monroe)

Date Start: 22-Aug-17
Date End: 30-Aug-17

Southbound

Start	0	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	9999	Total
08/23/17	0	0	1	4	3	0	0	0	0	0	0	0	0	0	8
01:00	0	0	1	2	0	1	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	2	2	1	0	0	0	0	0	0	0	0	5
04:00	0	0	0	7	10	1	1	0	0	0	0	0	0	0	19
05:00	1	0	2	28	33	9	1	0	0	0	0	0	0	0	74
06:00	0	0	5	40	63	19	3	1	0	0	0	0	0	0	131
07:00	1	3	1	72	100	18	1	0	0	0	0	0	0	0	196
08:00	5	2	11	70	64	21	0	0	0	0	0	0	0	0	173
09:00	2	5	16	53	66	14	2	0	1	0	0	0	0	0	159
10:00	2	4	21	74	41	11	1	0	0	0	0	0	0	0	154
11:00	0	2	28	95	72	8	0	0	1	0	0	0	0	0	206
12 PM	2	3	10	101	81	12	0	0	0	0	0	0	0	0	209
13:00	5	5	13	94	57	11	2	1	0	0	0	0	0	0	188
14:00	5	0	23	89	75	10	1	0	0	0	0	0	0	0	203
15:00	9	7	28	121	64	14	1	0	0	0	0	0	0	0	244
16:00	4	3	49	119	79	10	0	0	0	0	0	0	0	0	264
17:00	4	8	30	113	63	6	2	2	0	1	0	0	0	0	229
18:00	5	3	9	65	57	9	2	1	0	0	0	0	0	0	151
19:00	2	1	13	66	42	5	0	0	0	0	0	0	0	0	129
20:00	1	1	11	38	26	5	0	0	0	0	0	0	0	0	82
21:00	1	0	3	20	16	3	0	0	0	0	0	0	0	0	43
22:00	0	0	2	9	12	2	0	0	0	0	0	0	0	0	25
23:00	1	0	0	5	4	1	0	0	0	0	0	0	0	0	11
Total	50	47	277	1287	1032	191	17	5	2	1	0	0	0	0	2909

Daily

15th Percentile : 25 MPH
50th Percentile : 29 MPH
85th Percentile : 33 MPH
95th Percentile : 36 MPH

Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 2321
Percent in Pace : 79.8%
Number of Vehicles > 30 MPH : 1248
Percent of Vehicles > 30 MPH : 42.9%

Figure 8: Wednesday, August 23rd, 2017 south bound hourly traffic count with speeds



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Dover Police Department Traffic Bureau
46 Locust Street
Dover, New Hampshire 03820
(603) 742-4646

LOCUST STREET
near #216 (between Trakey and Monroe)

Date Start: 22-Aug-17
Date End: 30-Aug-17

Northbound, Southbound

Start	0	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	9999	Total
08/23/17	0	0	2	9	10	0	0	0	0	0	0	0	0	0	21
01:00	0	0	1	3	1	1	0	0	0	0	0	0	0	0	6
02:00	0	0	0	0	4	1	0	0	0	0	0	0	0	0	5
03:00	0	0	1	4	4	1	0	0	0	0	0	0	0	0	10
04:00	0	0	3	8	13	1	1	0	0	0	0	0	0	0	26
05:00	1	0	4	46	54	14	1	0	0	0	0	0	0	0	120
06:00	0	2	8	80	116	33	5	2	0	0	0	0	0	0	246
07:00	8	3	6	134	187	42	4	1	1	0	0	0	0	0	386
08:00	6	4	26	131	136	43	0	0	0	1	0	0	0	0	347
09:00	3	6	29	104	140	30	4	0	1	0	0	0	0	0	317
10:00	2	8	29	140	116	30	1	0	0	0	0	0	0	0	326
11:00	3	2	41	153	152	29	4	1	2	1	0	0	0	0	388
12 PM	5	7	25	170	167	33	2	0	0	1	0	0	0	0	410
13:00	9	5	28	167	139	29	2	1	0	0	0	0	0	0	380
14:00	7	3	37	169	160	38	4	1	0	0	0	0	0	0	419
15:00	16	12	49	198	168	37	3	3	1	0	0	0	0	0	487
16:00	9	5	78	201	163	27	3	3	0	0	0	0	0	0	489
17:00	7	10	46	217	175	23	3	2	0	1	0	0	0	0	484
18:00	10	7	17	112	137	24	2	1	0	0	0	0	0	0	310
19:00	4	3	27	128	79	12	0	0	0	0	0	0	0	0	253
20:00	1	3	29	82	56	16	0	0	0	0	0	0	0	0	187
21:00	1	0	10	42	46	8	0	0	0	0	0	0	0	0	107
22:00	0	2	7	34	32	3	0	0	1	0	0	0	0	0	79
23:00	1	0	0	21	16	4	0	0	0	0	0	0	0	0	42
Total	93	82	503	2353	2271	479	39	15	6	4	0	0	0	0	5845

Daily

15th Percentile :	25 MPH
50th Percentile :	29 MPH
85th Percentile :	34 MPH
95th Percentile :	37 MPH
Mean Speed(Average) :	30 MPH
10 MPH Pace Speed :	26-35 MPH
Number in Pace :	4629
Percent in Pace :	79.2%
Number of Vehicles > 30 MPH :	2814
Percent of Vehicles > 30 MPH :	48.1%

Figure 9: Wednesday, August 23rd, 2017 two-way hourly traffic count with speeds



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Dover Police Department Traffic Bureau
46 Locust Street
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(603) 742-4646

LOCUST STREET
near #216 (between Trakey and Monroe)

Date Start: 22-Aug-17
Date End: 30-Aug-17

Northbound

Start	0	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	9999	Total
08/24/17	0	0	0	7	7	0	0	0	0	0	0	0	0	0	14
01:00	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
03:00	0	0	0	4	1	1	0	0	0	0	0	0	0	0	6
04:00	0	0	1	5	4	1	0	0	0	0	0	0	0	0	11
05:00	0	3	3	8	35	10	1	0	0	0	0	0	0	0	60
06:00	2	6	4	28	43	13	2	0	0	1	0	0	0	0	99
07:00	1	1	9	71	82	29	0	0	0	1	0	0	0	0	194
08:00	0	0	5	70	100	18	1	0	0	0	0	0	0	0	194
09:00	2	2	15	71	62	19	3	0	0	0	0	0	0	0	174
10:00	4	1	7	49	97	28	3	1	0	0	0	0	0	0	190
11:00	1	4	19	74	78	20	4	0	0	1	0	0	0	0	201
12 PM	3	2	20	63	75	17	2	1	1	1	0	0	0	0	185
13:00	2	4	11	75	69	21	1	1	0	1	0	0	0	0	185
14:00	3	3	13	78	103	14	1	1	0	0	0	0	0	0	216
15:00	3	3	24	81	119	33	1	0	0	1	0	0	0	0	265
16:00	10	1	11	90	126	35	3	1	0	0	0	0	0	0	277
17:00	2	1	12	69	101	35	2	1	0	0	0	0	0	0	223
18:00	6	0	20	94	90	12	3	0	0	0	0	0	0	0	225
19:00	2	1	21	71	43	8	0	0	1	1	0	0	0	0	148
20:00	0	0	4	49	24	6	2	0	0	0	0	0	0	0	85
21:00	1	0	6	27	27	8	1	0	0	0	0	0	0	0	70
22:00	0	3	3	20	23	1	0	1	0	0	0	0	0	0	51
23:00	0	0	1	6	11	1	0	0	0	0	0	0	0	0	19
Total	42	35	209	1111	1324	331	30	7	2	7	0	0	0	0	3098

Daily

15th Percentile :	25 MPH
50th Percentile :	30 MPH
85th Percentile :	34 MPH
95th Percentile :	38 MPH
Mean Speed(Average) :	31 MPH
10 MPH Pace Speed :	26-35 MPH
Number in Pace :	2437
Percent in Pace :	78.7%
Number of Vehicles > 30 MPH :	1701
Percent of Vehicles > 30 MPH :	54.9%

Figure 10: Thursday, August 24th, 2017 north bound hourly traffic count with speeds



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Dover Police Department Traffic Bureau
46 Locust Street
Dover, New Hampshire 03820
(603) 742-4646

LOCUST STREET
near #216 (between Trakey and Monroe)

Date Start: 22-Aug-17
Date End: 30-Aug-17

Southbound

Start Time	015	1620	2125	2630	3135	3640	4145	4650	5155	5660	6165	6670	7175	769999	Total
08/24/17	0	1	1	2	3	0	0	0	0	0	0	0	0	0	7
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	2	4	1	0	0	0	0	0	0	0	0	7
04:00	0	1	1	1	13	3	0	1	0	0	0	0	0	0	20
05:00	0	0	4	25	35	15	3	0	0	0	0	0	0	0	82
06:00	0	0	5	34	78	24	1	0	0	0	0	0	0	0	142
07:00	1	0	5	51	106	26	1	0	0	0	0	0	0	0	190
08:00	1	2	12	58	82	16	0	0	0	0	0	0	0	0	171
09:00	1	5	13	58	68	13	1	1	0	0	0	0	0	0	160
10:00	3	2	22	76	67	19	1	0	0	1	0	0	0	0	191
11:00	3	3	20	91	73	10	3	0	0	2	0	0	0	0	205
12 PM	1	3	22	77	53	14	1	0	0	0	0	0	0	0	171
13:00	1	2	18	81	57	10	0	0	1	0	0	0	0	0	170
14:00	3	5	26	81	71	17	4	0	0	1	0	0	0	0	208
15:00	1	3	16	107	89	10	4	3	0	0	0	0	0	0	233
16:00	12	0	11	114	139	12	1	1	0	0	0	0	0	0	290
17:00	8	1	17	80	101	21	2	1	0	0	0	0	0	0	231
18:00	1	0	15	58	57	10	0	0	0	0	0	0	0	0	141
19:00	3	1	19	56	44	7	0	0	0	0	0	0	0	0	130
20:00	1	0	15	30	34	7	2	0	0	1	0	0	0	0	90
21:00	0	1	2	23	26	7	2	0	0	0	0	0	0	0	61
22:00	0	0	4	8	10	3	1	0	0	0	0	0	0	0	26
23:00	0	1	2	11	7	4	1	0	0	0	0	0	0	0	26
Total	40	31	251	1125	1218	249	28	7	1	5	0	0	0	0	2955

Daily
15th Percentile : 25 MPH
50th Percentile : 30 MPH
85th Percentile : 34 MPH
95th Percentile : 37 MPH

Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 2345
Percent in Pace : 79.4%
Number of Vehicles > 30 MPH : 1508
Percent of Vehicles > 30 MPH : 51.0%

Figure 11: Thursday, August 24th, 2017 south bound hourly traffic count with speeds



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Dover Police Department Traffic Bureau
46 Locust Street
Dover, New Hampshire 03820
(603) 742-4646

LOCUST STREET
near #216 (between Trakey and Monroe)

Date Start: 22-Aug-17
Date End: 30-Aug-17

Northbound, Southbound

Start	0	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	9999	Total
08/24/17	0	1	1	9	10	0	0	0	0	0	0	0	0	0	21
01:00	0	0	1	1	3	0	0	0	0	0	0	0	0	0	5
02:00	0	0	0	1	2	1	0	0	0	0	0	0	0	0	4
03:00	0	0	0	6	5	2	0	0	0	0	0	0	0	0	13
04:00	0	1	2	6	17	4	0	1	0	0	0	0	0	0	31
05:00	0	3	7	33	70	25	4	0	0	0	0	0	0	0	142
06:00	2	6	9	62	121	37	3	0	0	1	0	0	0	0	241
07:00	2	1	14	122	188	55	1	0	0	1	0	0	0	0	384
08:00	1	2	17	128	182	34	1	0	0	0	0	0	0	0	365
09:00	3	7	28	129	130	32	4	1	0	0	0	0	0	0	334
10:00	7	3	29	125	164	47	4	1	0	1	0	0	0	0	381
11:00	4	7	39	165	151	30	7	0	0	3	0	0	0	0	406
12 PM	4	5	42	140	128	31	3	1	1	1	0	0	0	0	356
13:00	3	6	29	156	126	31	1	1	1	1	0	0	0	0	355
14:00	6	8	39	159	174	31	5	1	0	1	0	0	0	0	424
15:00	4	6	40	188	208	43	5	3	0	1	0	0	0	0	498
16:00	22	1	22	204	265	47	4	2	0	0	0	0	0	0	567
17:00	10	2	29	149	202	56	4	2	0	0	0	0	0	0	454
18:00	7	0	35	152	147	22	3	0	0	0	0	0	0	0	366
19:00	5	2	40	127	87	15	0	0	1	1	0	0	0	0	278
20:00	1	0	19	79	58	13	4	0	0	1	0	0	0	0	175
21:00	1	1	8	50	53	15	3	0	0	0	0	0	0	0	131
22:00	0	3	7	28	33	4	1	1	0	0	0	0	0	0	77
23:00	0	1	3	17	18	5	1	0	0	0	0	0	0	0	45
Total	82	66	460	2236	2542	580	58	14	3	12	0	0	0	0	6053

Daily

15th Percentile : 25 MPH
50th Percentile : 30 MPH
85th Percentile : 34 MPH
95th Percentile : 38 MPH

Mean Speed(Average) : 31 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 4782
Percent in Pace : 79.0%
Number of Vehicles > 30 MPH : 3209
Percent of Vehicles > 30 MPH : 53.0%

Figure 12: Thursday, August 24th, 2017 two-way hourly traffic count with speeds



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LOCUST STREET
near #216 (between Trakey and Monroe)

Date Start: 22-Aug-17
Date End: 30-Aug-17

Northbound

Start Time	015	016	021	026	031	036	041	046	051	056	061	066	071	076	Total
08/25/17	0	0	0	7	8	2	0	0	0	0	0	0	0	0	17
01:00	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4
02:00	0	0	0	1	1	0	1	0	0	0	0	0	0	0	3
03:00	0	0	0	1	3	3	0	0	0	0	0	0	0	0	7
04:00	0	1	0	6	4	4	0	0	1	0	0	0	0	0	16
05:00	1	1	1	13	19	6	0	0	1	0	0	0	0	0	42
06:00	2	0	4	28	43	16	4	0	0	0	0	0	0	0	97
07:00	2	0	16	63	88	15	2	0	1	0	0	0	0	0	187
08:00	1	3	18	63	76	13	0	0	1	0	0	0	0	0	175
09:00	2	2	11	59	72	20	1	1	0	0	0	0	0	0	168
10:00	1	1	15	67	72	18	0	1	0	0	0	0	0	0	175
11:00	1	1	8	69	74	26	6	0	0	0	0	0	0	0	185
12 PM	3	4	22	79	78	20	1	0	0	1	0	0	0	0	208
13:00	3	1	8	62	88	30	2	1	0	1	0	0	0	0	196
14:00	7	2	16	91	118	25	4	0	0	0	0	0	0	0	263
15:00	5	3	8	71	106	33	3	2	0	0	0	0	0	0	231
16:00	3	1	23	87	129	21	4	2	0	1	0	0	0	0	271
17:00	3	0	13	83	73	27	2	0	0	0	0	0	0	0	201
18:00	3	1	11	55	65	15	3	0	0	0	0	0	0	0	153
19:00	1	0	7	65	45	11	2	2	0	0	0	0	0	0	133
20:00	0	0	12	46	54	3	0	0	0	0	0	0	0	0	115
21:00	1	0	3	26	17	3	1	0	0	0	0	0	0	0	51
22:00	0	2	5	20	28	7	0	0	0	0	0	0	0	0	62
23:00	1	1	2	11	14	6	0	0	0	0	0	0	0	0	35
Total	40	24	203	1074	1278	324	36	9	4	3	0	0	0	0	2995

Daily
15th Percentile : 25 MPH
50th Percentile : 30 MPH
85th Percentile : 34 MPH
95th Percentile : 38 MPH

Mean Speed(Average) : 31 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 2354
Percent in Pace : 78.6%
Number of Vehicles > 30 MPH : 1654
Percent of Vehicles > 30 MPH : 55.2%

Figure 13: Friday, August 24th, 2017 north bound hourly traffic count with speeds



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46 Locust Street
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(603) 742-4646

LOCUST STREET
near #216 (between Trakey and Monroe)

Date Start: 22-Aug-17
Date End: 30-Aug-17

Southbound

Start	0	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	9999	Total
08/25/17	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
01:00	0	1	1	0	1	2	1	0	0	0	0	0	0	0	6
02:00	0	0	0	2	3	0	0	0	0	0	0	0	0	0	5
03:00	0	0	0	1	6	1	1	0	0	0	0	0	0	0	9
04:00	0	1	0	4	18	4	1	0	0	0	0	0	0	0	28
05:00	1	0	2	25	30	16	1	0	0	0	0	0	0	0	75
06:00	2	0	6	24	52	21	1	0	0	0	0	0	0	0	106
07:00	2	2	5	61	73	14	1	2	0	0	0	0	0	0	160
08:00	2	0	3	46	84	22	3	0	0	1	0	0	0	0	161
09:00	4	3	22	75	62	15	1	0	0	0	0	0	0	0	182
10:00	2	11	18	60	68	8	1	0	0	1	0	0	0	0	169
11:00	8	3	19	87	82	13	2	0	0	0	0	0	0	0	214
12 PM	1	5	20	109	94	14	0	1	1	0	0	0	0	0	245
13:00	4	1	11	105	86	22	1	1	0	1	0	0	0	0	232
14:00	4	5	17	81	99	16	3	0	1	0	0	0	0	0	226
15:00	6	6	21	89	126	13	1	0	0	0	0	0	0	0	262
16:00	5	8	17	77	83	13	1	0	0	1	0	0	0	0	205
17:00	4	2	15	82	113	9	0	2	0	0	0	0	0	0	227
18:00	4	3	2	45	70	21	1	1	0	0	0	0	0	0	147
19:00	3	0	13	44	51	7	1	0	0	0	0	0	0	0	119
20:00	2	1	4	26	38	4	0	0	0	0	0	0	0	0	75
21:00	0	0	1	30	24	4	0	0	0	0	0	0	0	0	59
22:00	1	0	6	18	9	4	0	0	0	0	0	0	0	0	38
23:00	0	0	2	9	11	3	0	0	0	0	0	0	0	0	25
Total	55	52	205	1101	1285	246	21	7	2	4	0	0	0	0	2978

Daily

15th Percentile : 25 MPH
50th Percentile : 30 MPH
85th Percentile : 34 MPH
95th Percentile : 37 MPH

Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 2389
Percent in Pace : 80.2%
Number of Vehicles > 30 MPH : 1565
Percent of Vehicles > 30 MPH : 52.6%

Figure 14: Friday, August 24th, 2017 south bound hourly traffic count with speeds



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Page 22

Dover Police Department Traffic Bureau
46 Locust Street
Dover, New Hampshire 03820
(603) 742-4646

LOCUST STREET
near #216 (between Trakey and Monroe)

Date Start: 22-Aug-17
Date End: 30-Aug-17

Northbound, Southbound

Start	0	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	9999	Total
08/25/17	0	0	0	8	10	2	0	0	0	0	0	0	0	0	20
01:00	0	1	1	1	4	2	1	0	0	0	0	0	0	0	10
02:00	0	0	0	3	4	0	1	0	0	0	0	0	0	0	8
03:00	0	0	0	2	9	4	1	0	0	0	0	0	0	0	16
04:00	0	2	0	10	22	8	1	0	1	0	0	0	0	0	44
05:00	2	1	3	38	49	22	1	0	1	0	0	0	0	0	117
06:00	4	0	10	52	95	37	5	0	0	0	0	0	0	0	203
07:00	4	2	21	124	161	29	3	2	1	0	0	0	0	0	347
08:00	3	3	21	109	160	35	3	0	1	1	0	0	0	0	336
09:00	6	5	33	134	134	35	2	1	0	0	0	0	0	0	350
10:00	3	12	33	127	140	26	1	1	0	1	0	0	0	0	344
11:00	9	4	27	156	156	39	8	0	0	0	0	0	0	0	399
12 PM	4	9	42	188	172	34	1	1	1	1	0	0	0	0	453
13:00	7	2	19	167	174	52	3	2	0	2	0	0	0	0	428
14:00	11	7	33	172	217	41	7	0	1	0	0	0	0	0	489
15:00	11	9	29	160	232	46	4	2	0	0	0	0	0	0	493
16:00	8	9	40	164	212	34	5	2	0	2	0	0	0	0	476
17:00	7	2	28	165	186	36	2	2	0	0	0	0	0	0	428
18:00	7	4	13	100	135	36	4	1	0	0	0	0	0	0	300
19:00	4	0	20	109	96	18	3	2	0	0	0	0	0	0	252
20:00	2	1	16	72	92	7	0	0	0	0	0	0	0	0	190
21:00	1	0	4	56	41	7	1	0	0	0	0	0	0	0	110
22:00	1	2	11	38	37	11	0	0	0	0	0	0	0	0	100
23:00	1	1	4	20	25	9	0	0	0	0	0	0	0	0	60
Total	95	76	408	2175	2563	570	57	16	6	7	0	0	0	0	5973

Daily
15th Percentile : 25 MPH
50th Percentile : 30 MPH
85th Percentile : 34 MPH
95th Percentile : 38 MPH

Mean Speed(Average) : 31 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 4743
Percent in Pace : 79.4%
Number of Vehicles > 30 MPH : 3219
Percent of Vehicles > 30 MPH : 53.9%

Figure 15: Friday, August 24th, 2017 two-way hourly traffic count with speeds



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Appendix B

Turn Bay Warrants Analysis

Year	Advancing Volume	Advancing Peak	Opposing Volume	Opposing Peak	Left Turns	Right Turns	Total Advancing Volume (L+TR+R)	Total Opposing Volume (TR+R)
2017	189	195	190	196	2.1	0.0	197	196
2018	191	197	192	198	2.1	0.0	199	198
2019	193	199	194	200	2.1	0.0	201	200
2020	195	201	196	202	2.1	0.0	203	202
2021	197	203	198	204	2.1	0.0	205	204
2022	199	205	200	206	2.1	0.0	207	206
2023	201	207	202	208	2.1	0.0	209	208
2024	203	209	204	210	2.1	0.0	211	210
2025	205	211	206	212	2.1	0.0	213	212
2026	207	213	208	214	2.1	0.0	215	214
2027	209	215	210	217	2.1	0.0	218	217
2028	211	218	212	219	2.1	0.0	220	219
August Peak Factor		1.03						

Figure 16: Data used for AM Peak hour left-turn warrant analysis

Year	Advancing Volume	Advancing Peak	Opposing Volume	Opposing Peak	Left Turns	Right Turns	Total Advancing Volume (L+TR+R)	Total Opposing Volume (TR+R)
2017	260	268	268	276	4.6	0.0	272	276
2018	263	271	270	278	4.6	0.0	275	278
2019	266	274	273	281	4.6	0.0	278	281
2020	268	276	276	284	4.6	0.0	281	284
2021	271	279	279	287	4.6	0.0	284	287
2022	274	282	281	290	4.6	0.0	286	290
2023	276	285	284	293	4.6	0.0	289	293
2024	279	287	287	296	4.6	0.0	292	296
2025	282	290	290	299	4.6	0.0	295	299
2026	285	293	293	302	4.6	0.0	298	302
2027	288	296	296	305	4.6	0.0	301	305
2028	290	299	299	308	4.6	0.0	304	308
August Peak Factor		1.03						

Figure 17: Data used for PM Peak hour left-turn warrant analysis



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Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

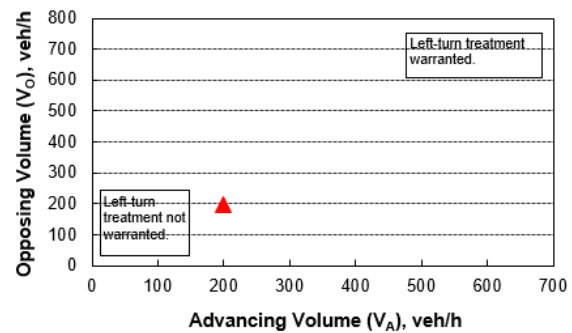
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	34
Percent of left-turns in advancing volume (V_A), %:	1%
Advancing volume (V_A), veh/h:	199
Opposing volume (V_O), veh/h:	198

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1433
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 18: 2018 AM NCHRP 457 left-turn bay analysis

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

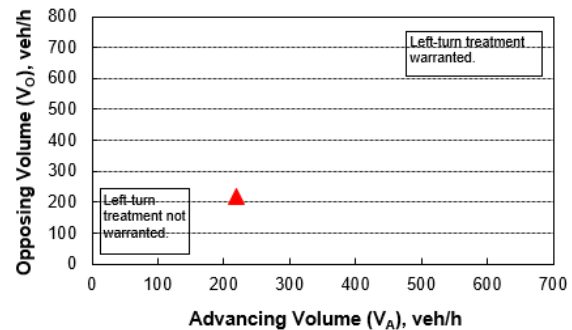
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	34
Percent of left-turns in advancing volume (V_A), %:	1%
Advancing volume (V_A), veh/h:	220
Opposing volume (V_O), veh/h:	219

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1470
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 19: 2028 AM NCHRP 457 left-turn bay analysis



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Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

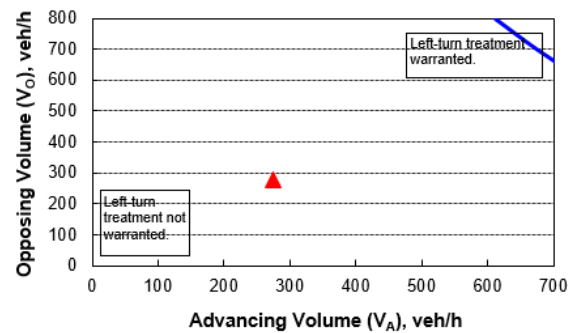
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	34
Percent of left-turns in advancing volume (V_A), %:	2%
Advancing volume (V_A), veh/h:	275
Opposing volume (V_O), veh/h:	278

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1047
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 20: 2018 PM NCHRP 457 left-turn bay analysis

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

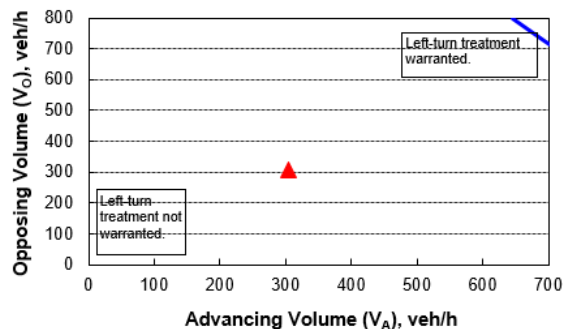
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	34
Percent of left-turns in advancing volume (V_A), %:	2%
Advancing volume (V_A), veh/h:	304
Opposing volume (V_O), veh/h:	308

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	1070
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 21: 2028 PM NCHRP 457 left-turn bay analysis



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Year	Advancing Volume	Peak	Left Turns	Right Turns	Total Advancing Volume (L+TR+R)
2017	268	276	0.0	2.1	278
2018	271	279	0.0	2.1	281
2019	273	282	0.0	2.1	284
2020	276	284	0.0	2.1	287
2021	279	287	0.0	2.1	289
2022	282	290	0.0	2.1	292
2023	284	293	0.0	2.1	295
2024	287	296	0.0	2.1	298
2025	290	299	0.0	2.1	301
2026	293	302	0.0	2.1	304
2027	296	305	0.0	2.1	307
2028	299	308	0.0	2.1	310
August Peak Factor		1.03			

Figure 22: Data used for AM Peak hour right-turn warrant analysis

Year	Advancing Volume	Peak	Left Turns	Right Turns	Total Advancing Volume (L+TR+R)
2017	268	276	0.0	4.6	281
2018	271	279	0.0	4.6	283
2019	273	282	0.0	4.6	286
2020	276	284	0.0	4.6	289
2021	279	287	0.0	4.6	292
2022	282	290	0.0	4.6	295
2023	284	293	0.0	4.6	298
2024	287	296	0.0	4.6	301
2025	290	299	0.0	4.6	304
2026	293	302	0.0	4.6	307
2027	296	305	0.0	4.6	310
2028	299	308	0.0	4.6	313
August Peak Factor		1.03			

Figure 23: Data used for PM Peak hour right-turn warrant analysis



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Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

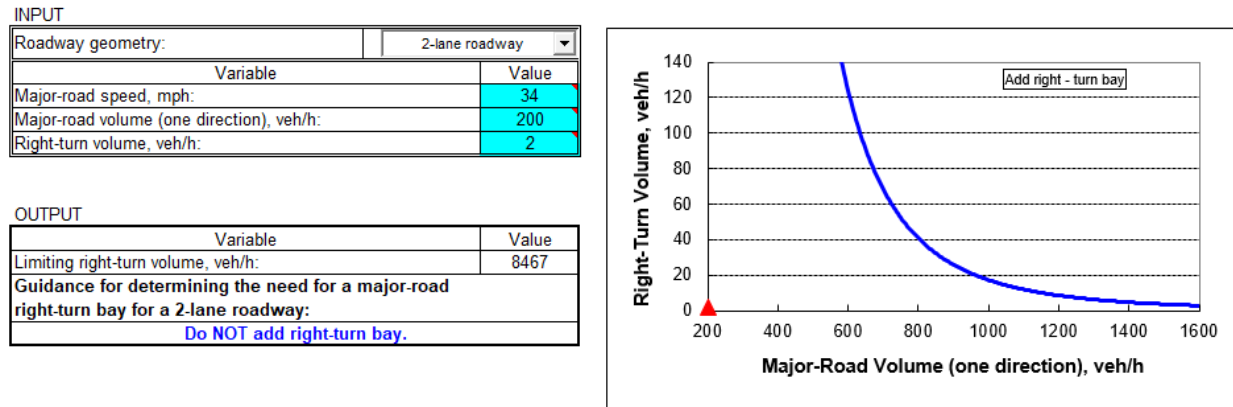


Figure 24: 2018 AM NCHRP 457 right-turn bay analysis

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

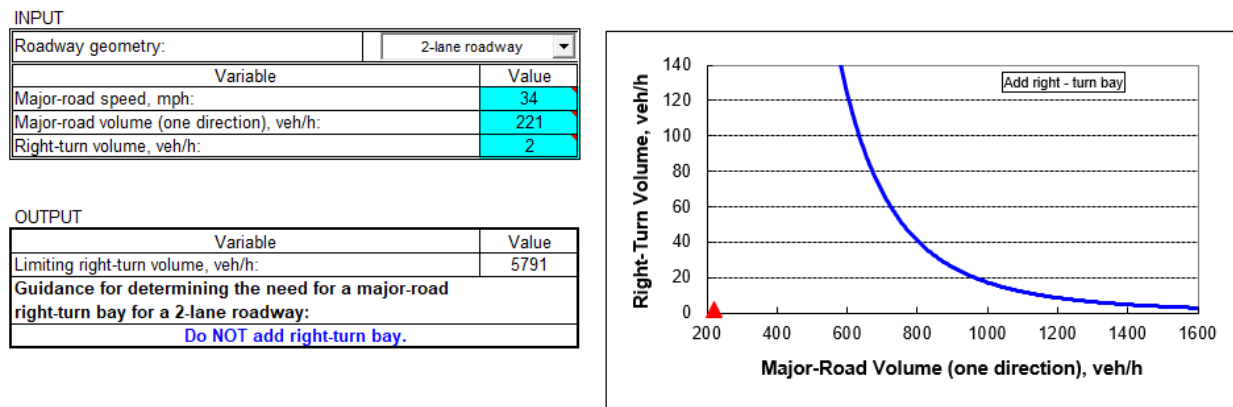


Figure 25: 2028 AM NCHRP 457 right-turn bay analysis



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Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

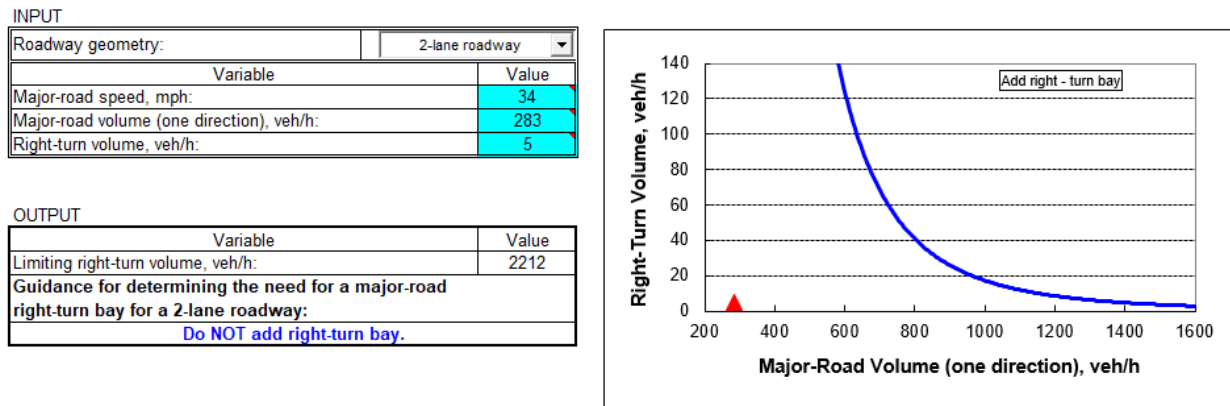


Figure 26: 2018 PM NCHRP 457 right-turn bay analysis

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

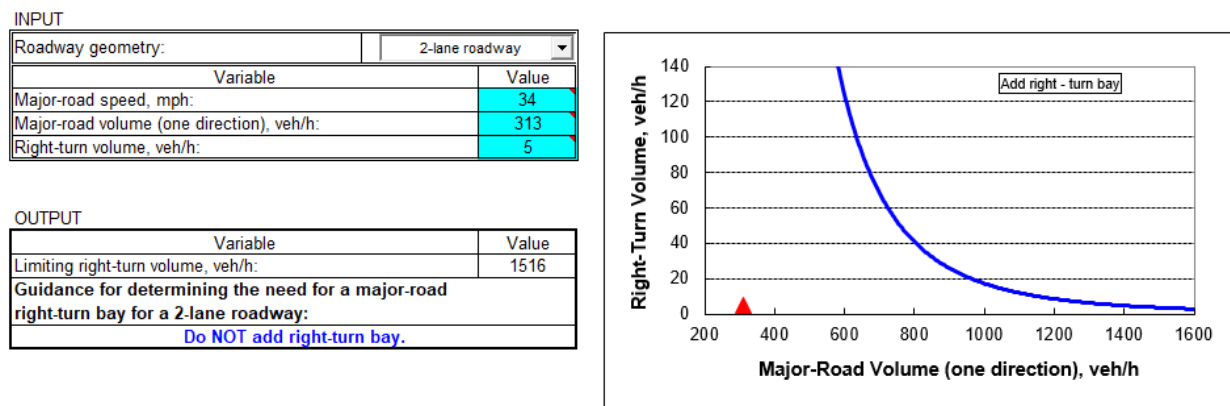


Figure 27: 2028 PM NCHRP 457 right-turn bay analysis



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Appendix C

Trip Generation Derivation

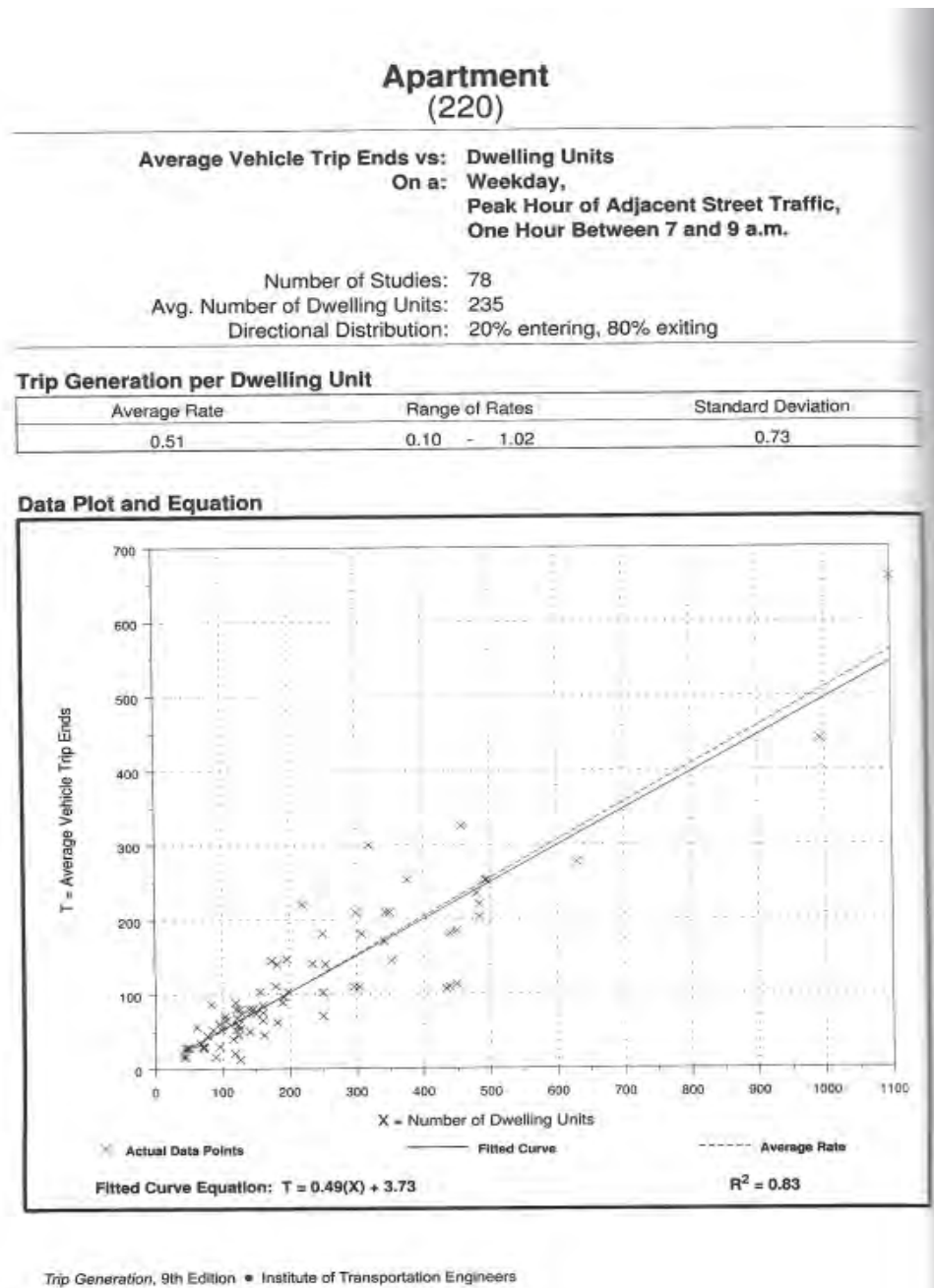


Figure 28: ITE Trip Generation, 9th Edition

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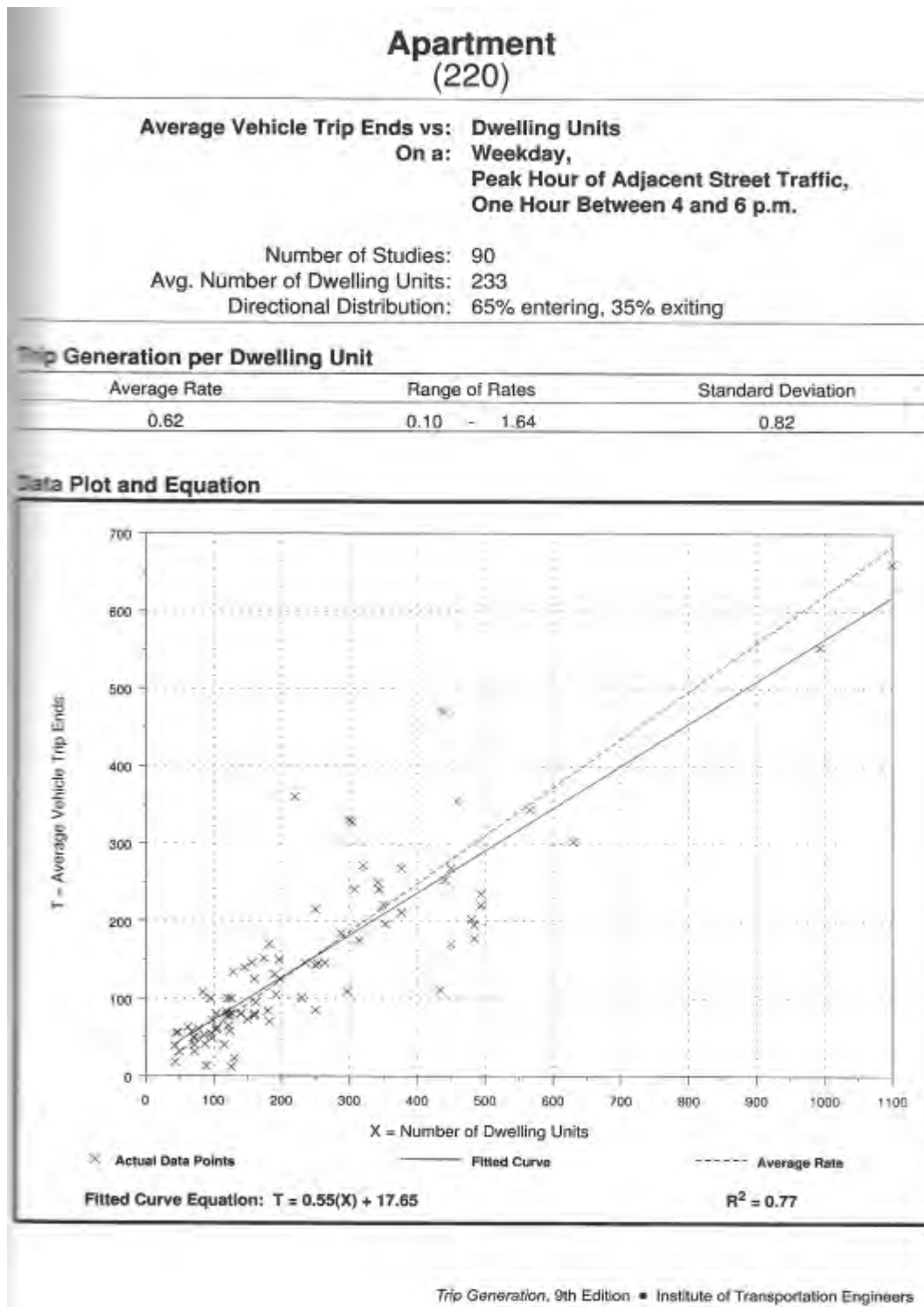


Figure 29: ITE Trip Generation, 9th Edition



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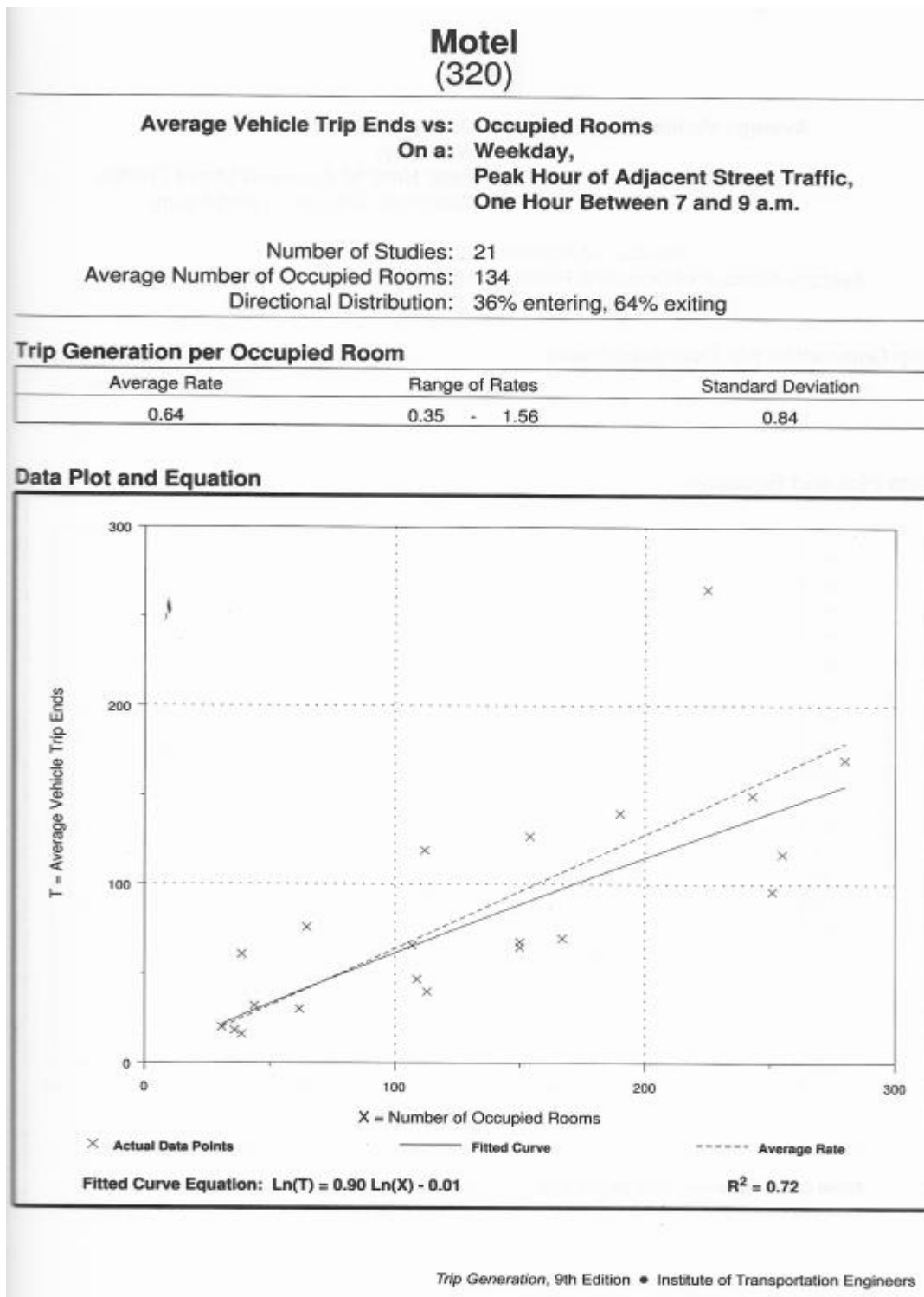


Figure 30: ITE Trip Generation, 9th Edition



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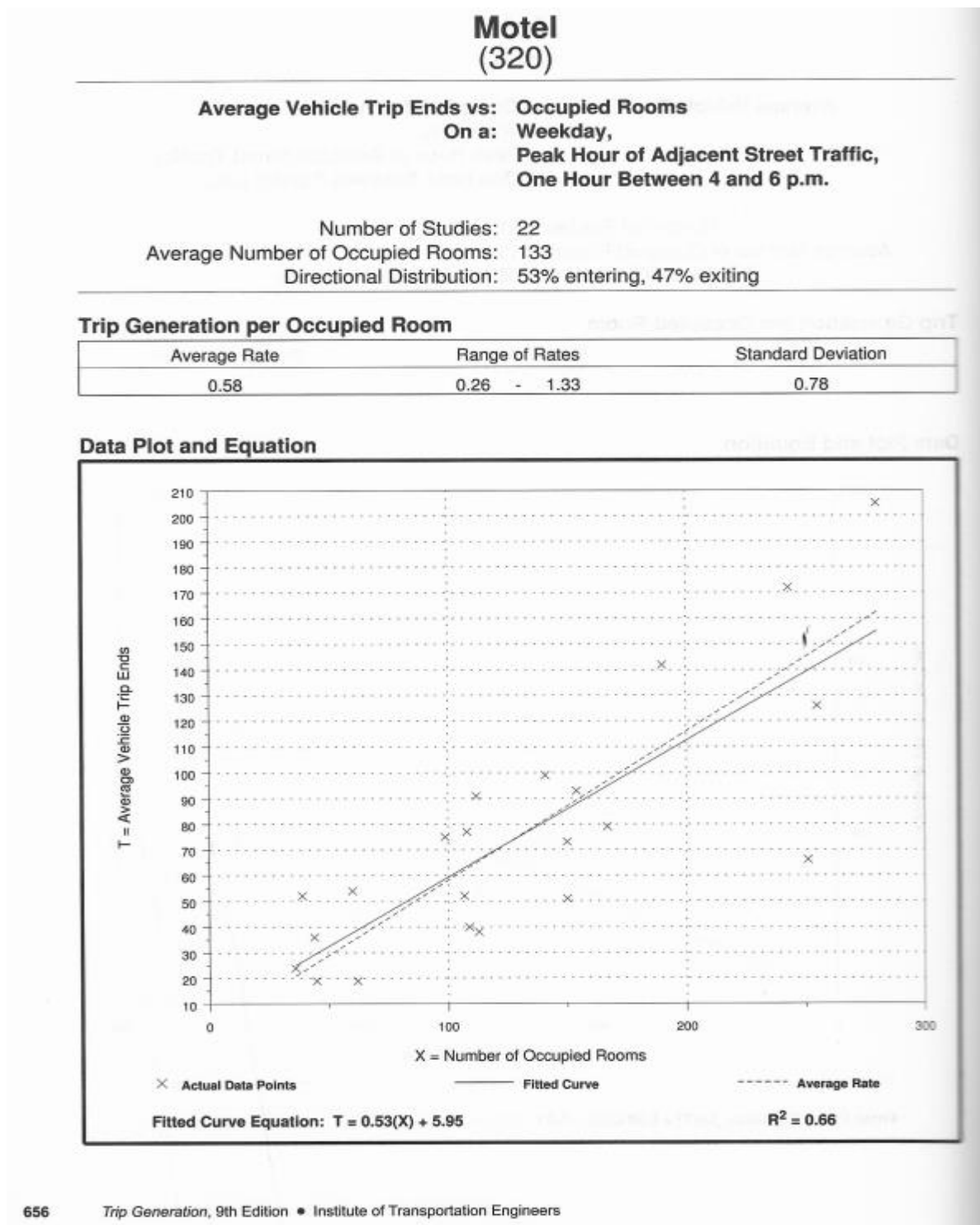


Figure 31: ITE Trip Generation, 9th Edition

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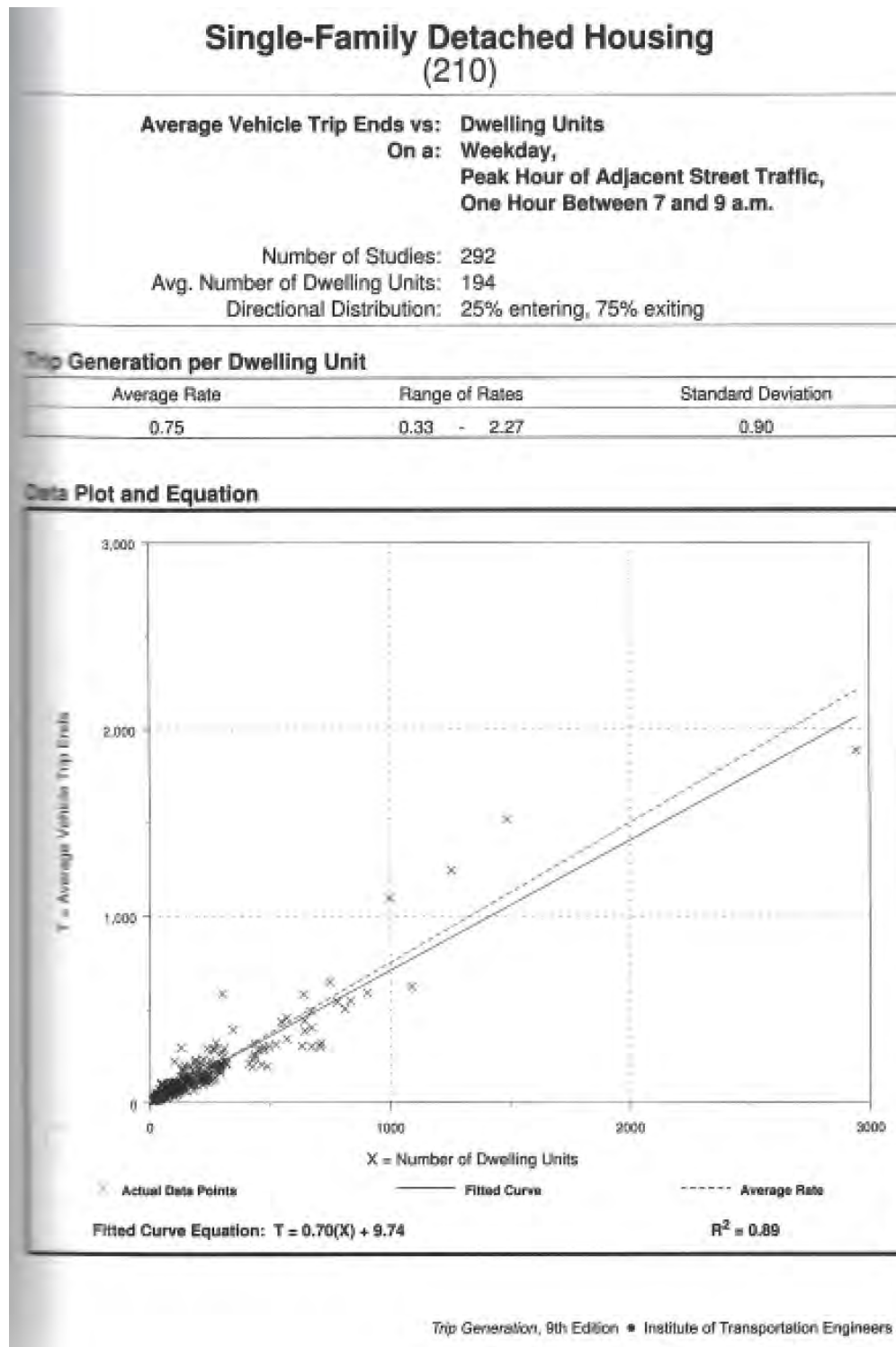


Figure 32: ITE Trip Generation, 9th Edition



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Single-Family Detached Housing (210)

Average Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.

Number of Studies: 321

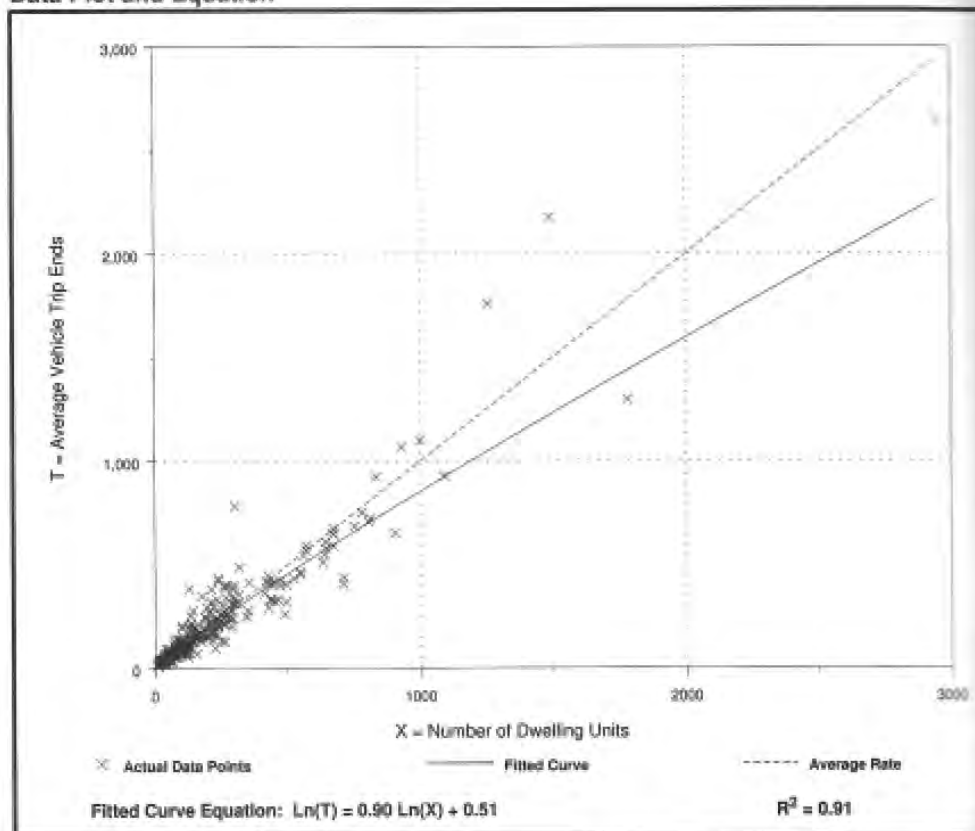
Avg. Number of Dwelling Units: 207

Directional Distribution: 63% entering, 37% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.00	0.42 - 2.98	1.05

Data Plot and Equation



298 Trip Generation, 9th Edition • Institute of Transportation Engineers

Figure 33: ITE Trip Generation, 9th Edition



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Appendix D

Miscellaneous

Year 2016 Monthly Data			
Group 4 Averages:		Urban Highways	
		Adjustment to	
Month	ADT	Average	Peak
January	13,573	1.16	1.25
February	14,038	1.12	1.21
March	15,731	1.00	1.08
April	16,139	0.97	1.05
May	15,705	1.00	1.08
June	16,766	0.94	1.01
July	15,752	1.00	1.08
August	16,529	0.95	1.03
September	17,007	0.92	1.00
October	16,598	0.94	1.02
November	15,649	1.00	1.09
December	14,638	1.07	1.16
Average ADT:	15,677		
Peak ADT:	17,007		

Table 12: Derivation of the seasonal peaking factor



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Traffic Impact Analysis, July 2nd, 2018

AASHTO—Geometric Design of Highways and Streets

Metric				US Customary					
Design speed (km/h)	Brake reaction distance (m)	Braking distance on level (m)	Stopping sight distance		Design speed (mph)	Brake reaction distance (ft)	Braking distance on level (ft)	Stopping sight distance	
			Calculated (m)	Design (m)				Calculated (ft)	Design (ft)
20	13.9	4.6	18.5	20	15	55.1	21.6	76.7	80
30	20.9	10.3	31.2	35	20	73.5	38.4	111.9	115
40	27.8	18.4	46.2	50	25	91.9	60.0	151.9	155
50	34.8	28.7	63.5	65	30	110.3	86.4	196.7	200
60	41.7	41.3	83.0	85	35	128.6	117.6	246.2	250
70	48.7	56.2	104.9	105	40	147.0	153.6	300.6	305
80	55.6	73.4	129.0	130	45	165.4	194.4	359.8	360
90	62.6	92.9	155.5	160	50	183.8	240.0	423.8	425
100	69.5	114.7	184.2	185	55	202.1	290.3	492.4	495
110	76.5	138.8	215.3	220	60	220.5	345.5	566.0	570
120	83.4	165.2	248.6	250	65	238.9	405.5	644.4	645
130	90.4	193.8	284.2	285	70	257.3	470.3	727.6	730
					75	275.6	539.9	815.5	820
					80	294.0	614.3	908.3	910

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 3.4 m/s^2 [11.2 ft/s^2] used to determine calculated sight distance.

Exhibit 3-1. Stopping Sight Distance

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Figure 34: Derivation of stopping sight distance requirements



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City of Dover, New Hampshire

CONDITIONAL USE PERMIT APPLICATION

[Revision Date: May 18, 2017]

RECEIVED
Planning Office

Office Use Only

Project #:

P18-31

Date Received:

JUL 02 2018

Amount Paid:

Time Received:

Dover, New Hampshire

APPLICANT AND OWNER INFORMATION

Name of Applicant: STF Development Corp

Telephone # 603-742-2121

Address of Applicant: 242 Central Ave, Dover, NH 03820

E-Mail Address: Dave@CentralFallsRealty.com

Lee Ann Burns

Name of Property Owner (if different from applicant): Rev Tst

Telephone # 742-3212

Address of Property Owner: 20 Governor Sawyer Ln, Dover, NH 03820

PROPERTY INFORMATION

Assessor's Map # 15 Lot(s) # 67

Address of Property: 260 Locust St

Zoning District(s) CBD Overlay District(s) Gateway

Existing Use of Property: Residence

CONDITIONAL USE PERMIT INFORMATION

Type of Conditional Use Permit (Check All That Apply):

☐ Conservation District

☐ RCM Use Overlay District

☐ I-1 District Uses

☐ Groundwater Protection

☐ Off-Street Parking and Loading

☐ Alternative Treatment Center

☐ Wetland Protection District

☒ Central Business District

☐ Heritage Residential District

Describe Proposed Use or Activity That Requires Conditional Use Permit and Describe Any Impacts:

Proposed commercial lodging with multi-family at rear.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: Sewer Discharge Permit: Pending EPA Notice of Intent (NOI): Pending

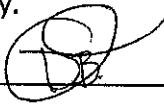
Name of Professional That Prepared Plans: Kenneth A Berry, PE, LLS

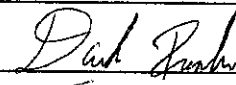
Address 335 Second Crown Point Rd, Barrington, NH 03825 Telephone #: 603-332-2863

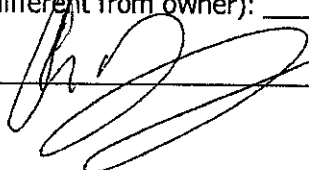
Professional License #: 14243 E-mail address: K.Berry@BerrySurveying.com

SIGNATURES

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

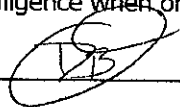
Signature of Property Owner:  Date: 7-2-18

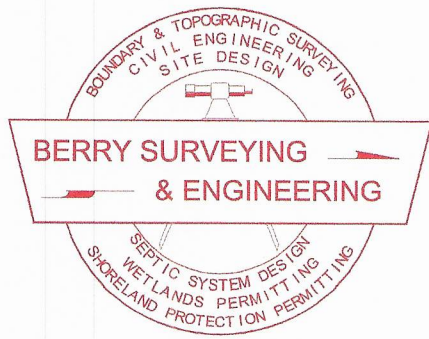
Signature of Applicant (if different from owner):  Date: 7-2-18

Signature of Agent:  Date: 7-2-18

AUTHORIZATION TO ENTER SUBJECT PROPERTY

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner:  Date: 7-2-18



BERRY SURVEYING & ENGINEERING

335 Second Crown Point Road
Barrington, NH 03825

Phone: (603) 332-2863

Fax: (603) 335-4623

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July 2, 2018

City of Dover Planning Board
288 Central Ave
Dover, NH 03820

RE: Proposed Site Plan
STF Development Corp
260 Locust Street
Conditional Use Permit

Mr. Chairman and Members of the Dover Planning Board,

Pursuant to Zoning Regulations (Chapter 170-20 B,) Berry Surveying & Engineering (BS&E,) on behalf of STF Development, respectfully requests the City of Dover Planning Board to approve the following Conditional Use Permits:

- Minimum Lot Coverage less than 50%
- Minimum Frontage Build-out less than 60%
- Maximum of 9.5 units based on 1 unit per 5,000 SF of lot size
- Lack of brick facades on buildings

Minimum lot coverage of 50%

As it stands currently, the exiting lot coverage is 2.00%, which is significantly lower than the minimum 50%. The proposed lot coverage will be 25.98%. Although this does not meet the required 50% minimum, it is a 1200% increase in lot coverage, making the lot more conforming to the regulations.

Minimum frontage build-out of 60%

The existing building located on the parcel, has 20 feet of build-out along Locust street, 16.1 %, which is well below the minimum of 60%. By removing the existing building and placing the Inn over the footprint, the build-out will increase to 124.5 feet, 44.17%. Although this still does not meet the 60% of build-out, it is still an increase in build-out and makes the site more compliant with the regulation.

Maximum of 9.5 units based on 1 unit per 5,000 SF of lot size

The intent of this regulation is to control and limit the density based on lot size. Although the proposed multifamily building is over the maximum allowed by 1.5 units, it still follows the spirit of intent of this regulation. This section of Locust Street is in close proximity to urbanized areas with a trend towards higher density.

Increasing the number of units from 9.5 to 12 allows for an efficient building footprint. The proposed building is two stories, with 6 units on the first floor and 6 units on the second floor. By proposing 12 units, it allows for the building to be used fully, without changing the overall footprint, or greatly increasing the burden on the lot. Furthermore, the drainage and parking designed is sufficient enough to maintain the 12 units.

Proposing buildings with no brick facades

The two buildings that are being proposed will have no brick facades. This was done with intent, so that the inn and multifamily building would maintain a New England style of architecture. In addition, the proposed buildings will match the architecture of surrounding buildings, specifically that of Monroe Street and Locust which directly abuts this project.

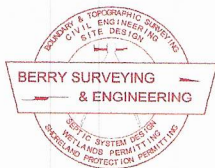
1. Identification of Conditional Use Permits

Dimensional regulations in the Gateway sub-district of the Central Business District (CBD) state that the minimum lot coverage must be 50%, frontage build-out must be a minimum of 60%, maximum of 9.5 units based on one unit per 5,000 SF of lot size and brick facades on buildings. We formally request the above mentioned CUP's for the proposed project.

Below we show the project's compliance with the standards required to grant a Conditional Use Permit, and we provide justification for its approval.

2. Compliance with the following standards

- a) That both public and private buildings and landscaping shall contribute to the physical definition of rights of way as civic spaces.
 - **The proposed Inn will be constructed such that the front will face Monroe Street and the proposed parking lot, to provide the best streetscape as you enter in the project. A sidewalk network will connect the existing sidewalk on Locust Street to the proposed development. This will**



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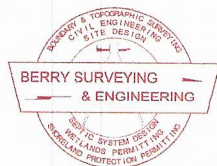
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provide safe pedestrian traffic to enter the site as a right of way for civic spaces.

- b) That development shall adequately accommodate automobiles, while respecting the pedestrian and the spatial form of public areas.
 - **The shape of the proposed building allows safe and ample pedestrian access, while also accommodating vehicles with parking in the front and side of the buildings.**
- c) That the design of streets and buildings shall reinforce safe environments.
 - **The design proposes vertical granite curb along the proposed roadway to ensure that the pedestrian traffic using the sidewalk is safe. In addition this will also protect the proposed landscaping throughout the site.**
- d) That architecture and landscape design shall grow from local climate, topography, history, and building practice.
 - **The architecture of the buildings was chosen such that it would be like other New England style buildings. The vegetation chosen in the landscaping plan will grow with the local the climate.**
- e) That buildings shall provide their inhabitants with a clear sense of geography and climate through energy efficient methods.
 - **The proposed buildings will be constructed with updated energy and lighting practices, such that the inhabitants have a clear sense of geography and climate.**
- f) That civic buildings and public gathering places shall be provided as locations that reinforce community identity and activity.
 - **Several passive recreation locations are proposed throughout the site to encourage and nurture community between residents and patrons of the inn. A common area will also be made in between the inn and multifamily building as a central gathering location.**
- g) That civic buildings shall be distinctive and appropriate to a role more important than the other buildings that constitute the fabric of the city.
 - **The inn and multifamily building will be clearly distinctive, and cement their places as prominent civic buildings.**
- h) That the preservation and renewal of historic buildings shall be facilitated.
 - **Although the site does not have any historical buildings, the proposed buildings will maintain the classic New England style architecture.**
- i) That the harmonious and orderly evolution of urban areas shall be secured through the adoption of these regulations.
 - **The harmonious and orderly evolution of the urban area is secured in a profound way through the creation of the inn**



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and multifamily building by giving it the look and feel of a premium downtown civic space.

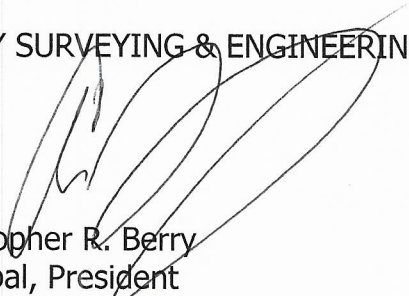
3. Justification for approval of Conditional Use Permits

Given the underutilization of the lot, we feel that the proposed design is the best use of space in this area. The site layout was designed such that all the necessary parking requirements could be met, while still maintaining enough area for storm water treatment. The topography of the site was the limiting factor in the overall design, as it is the low point for surrounding lots. Increasing the lot coverage to 50% and the build-out to 60%, would not allow for proper treatment of the storm water, create a sense of overcrowding.

Thank you for your time and attention to this matter, and we hope you look favorably upon the request.

Respectfully Submitted,

BERRY SURVEYING & ENGINEERING


Christopher R. Berry
Principal, President

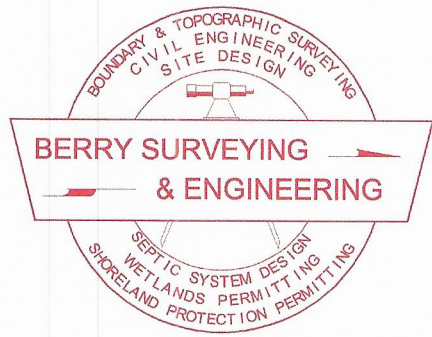


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Barrington, NH 03825

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July 2, 2018

City of Dover Planning Board

Attn: Christopher Parker Assistant City Manager

288 Central Ave

Dover, NH 03820

RE: Proposed Site Plan
STF Development Corp
260 Locust Street
Conditional Use Permit
Waiver Request(s)

Mr. Chairperson & Members of the Dover Planning Board:

In accordance with to the subdivision standards Article 155-51 following waivers are hereby requested:

1. Identification of Waiver Request:

- Propose less than 5% of interior landscaping within a parking area, 1.4% proposed

2. Explanation:

The proposal is to build a new drive at the northerly part of the lot to create access to a proposed inn and residential building. In addition to access, this driveway will provide necessary parking for the proposed buildings. A sidewalk network will also be created to allow for safe and efficient pedestrian traffic throughout the site.

Interior landscaping within the parking arrays could not be achieved due to the limiting topography of the lot. The parking lot was designed such that it would meet the minimum parking space requirement for the inn and multifamily building. However, a more robust landscaping approach was taken around the parking lot to provide streetscapes and buffers.

3. Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The purpose and intent of the 5% interior landscaping is to provide visual buffers within the parking lot, in order to break up large pavement areas. Given the lack of interior landscaping within the parking lot, a more robust landscaping approach was taken around the lot in order to provide streetscapes and a buffer between the proposed building and the parking arrays. By using perimeter landscaping around the parking lot, it will allow for more areas to be landscaped, instead of having one or two small interior islands. Doing this will allow for a larger variety of

street trees and shrubs to be used over a larger area. When someone enters the site, they will be met with street trees and shrubs on either side, creating a landscaped corridor as you travel through the site. Not only will this increase the overall landscaped area of the project, it will also make the site more aesthetically pleasing.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity would require the applicant to reduce the parking levels below the minimum required by four spaces. Given the size of the lot, and the excess runoff from abutting lots, the site has a limited amount of room to develop.

Thank you for your time and attention to this matter and we hope you look favorably upon the requests.

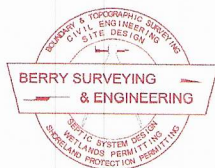
BERRY SURVEYING & ENGINEERING



James F. Hayden
Project Engineer



Christopher R. Berry
Principal, President



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City of Dover, New Hampshire SITE REVIEW APPLICATION

[Revision Date: August 02, 2017]

RECEIVED
Planning Office

Office Use Only

Project #:

P18-02

Date Received:

JUL 17 2018

Amount Paid:

Time Received:

Dover, New Hampshire

APPLICANT AND OWNER INFORMATION

Name of Applicant: DOVESTER HOLDINGS, LLC Telephone # 603-770-5630

Address of Applicant: 79 EXETER RD. NORTH HAMPTON, NH 03862

E-Mail Address: jwhite912@comcast.net

Name of Property Owner (if different from applicant): _____ Telephone # _____

Address of Property Owner: _____

PROPERTY INFORMATION

Address of Property: 24 Hanson Street

Assessor's Map # 20 Lot(s) # 41

Zoning District(s) CBD Overlay District(s) wetlands / steep slope

Size of Parcel: _____ sq. ft. 5 ac. Property Deed: Book 4339 Page: 804

Existing Use of Property: Apartment rental property

SITE PLAN INFORMATION

The request for the conditional use permit is to construct a 6 unit apartment building in the
Describe Proposed Use: location of the existing garage. We are asking for a conditional use permit for 100s.f. of impact within the wetlands buffer, and 680s.f. of impact within the steep slope.

Area of Parcel to be Developed: .25 acre sq. ft.

If Multi-family Residential, Specify Number of Units & Buildings Proposed: 2 buildings (1 existing) 11 units (5 existing)

Number of Parking Spaces: Existing 6/7 Proposed 18

Highway Access (check where applicable): X City Street _____ State Highway

Number of Employees Total: N/A In Maximum Shift: N/A

Disposition of Parcel:

Building Setbacks:

Building Footprint 2,232 sq. ft.

Front Yard 8.5 ft.

Total Building Area 5,080 sq. ft.

Rear Yard 66.5 ft.

Paved Area 933 sq. ft.

Side Yard: Right 2.12 ft. Left 106.6 ft.

City Water? ☒ Yes ☐ No How far is city water from the property? Existing Service
City Sewer? ☒ Yes ☐ No How far is city sewer from the property? Existing Service

BUILDING INFORMATION

Type of Building to be Built: 6 Unit Multi-family
Height of Building: 33.25' (Front) Finished Floor Elevation: 61.0'
41.58' (rear max)
Number of Seats (where applicable) N/A

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: _____

Justification for waiver request(s) (*attach additional sheets as needed*): _____

SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) _____

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) Beals Associates, PLLC. (Christian Smith)

Address 70 Portsmouth Ave. 3rd Floor Stratham, NH 03885 Telephone #: 603-583-4860

Professional License #: NH-9900 E-mail address: csmith@bealsassociates.com

SIGNATURES

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. Furthermore, I/we submit that the existing conditions sheet of the plan represents the lot in question, and that no alteration of the site shall take place during Planning Board review up to and including the pre-construction meeting. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner: _____ Date: 1/8/18

Signature of Applicant (*if different from owner*): _____ Date: _____

Signature of Agent: Christian Smith Date: 12-27-17

MEMORANDUM

Ref: 1820A

To: Christian Smith, P.E.
Beals Associates, PLLC

From: Stephen G. Pernaw, P.E., PTOE

Subject: Proposed Residential Apartments
Dover, New Hampshire

Date: February 7, 2018

This analysis has been prepared on your behalf in order to assess the traffic impacts associated with the proposed residential apartment building located at 24 Hanson Street in Dover, New Hampshire. This analysis has been prepared in accordance with City of Dover "*Traffic Impact Assessment and Analysis Standards*" regarding the "STANDARD" traffic impact analysis as the trip generation estimates contained herein fall well below the requirements for an "Advanced" analysis.

PROPOSAL

According to the plan entitled "*Parking and Pavement Plan*," Sheet 2 of 4, dated December 2017, prepared by Beals Associates, PLLC for Dovester Holdings, LLC the applicant proposes to construct a new 6-unit apartment building beside the existing 5-unit apartment building on the subject site (see Attachment 1). The site currently has two driveways that intersect the west side of Hanson Street. This development proposal involves razing the existing garage, installing a new off-street parking lot with 18 parking stalls, and constructing one new common driveway for both apartment buildings.

EXISTING CONDITIONS

Hanson Street functions as a small collector street which extends between Henry Law Avenue and Central Avenue and is approximately 1000-feet long. Hanson Street provides access to many residences along the street and several businesses at the western end. Hanson Street provides one travel lane in each direction with a sidewalk on the west side of the street separated by gravel and grass panels. The horizontal alignment has a large radius curve to the right in the southbound direction in the vicinity of the relocated site driveway and the vertical profile is in an ascending manner from the Henry Law Avenue intersection. There are "No Parking" signs on both sides of the street from Henry Law Avenue to Central Avenue. There are no posted speed limit signs on Hanson Street.

TRIP GENERATION

To estimate the quantity of vehicle-trips that will be produced by the proposed apartment building, as well as the existing apartment building, Pernaw & Company, Inc. considered standard trip generation rates published by the Institute of Transportation Engineers (ITE)¹. Land Use Code 220 (Multifamily Housing – Low-Rise) is the most applicable category and the number of dwelling units was used as the independent variable.

The analysis is summarized on Table 1 and it indicates that the proposed apartment building will generate approximately 3 vehicle-trips during the AM and PM peak hour periods, and 44 trips on an average weekday. When combined with the existing apartment building, the relocated site driveway is expected to accommodate approximately 6 vehicle-trips during the peak hour periods.

Table 1

Trip Generation Summary

		Existing Apartments ¹ (5 Units)	Proposed Apartments ¹ (6 Units)	Total
AM Peak Hour	Entering	0 veh	1 veh	1 veh
	Exiting	<u>2 veh</u>	<u>2 veh</u>	<u>4 veh</u>
	Total	2 trips	3 trips	5 trips
PM Peak Hour	Entering	2 veh	2 veh	4 veh
	Exiting	<u>1 veh</u>	<u>1 veh</u>	<u>2 veh</u>
	Total	3 trips	3 trips	6 trips
Weekday Total	Entering	19 veh	22 veh	41 veh
	Exiting	<u>19 veh</u>	<u>22 veh</u>	<u>41 veh</u>
	Total	38 trips	44 trips	82 trips

¹ITE Land Use Code 220 - Multifamily Housing (Low-Rise)

In cases where the trip generation exceeds 1,000 average weekday trips or 100 peak hour trips, then an “Advanced” analysis must be completed. In this case, the trips generated by both the existing and proposed apartment buildings are well below these threshold values. The computations pertaining to these analyses are attached (see Attachments 2 through 7).

¹ Institute of Transportation Engineers, *Trip Generation*, Tenth edition (Washington, D.C., 2017).

TRIP DISTRIBUTION

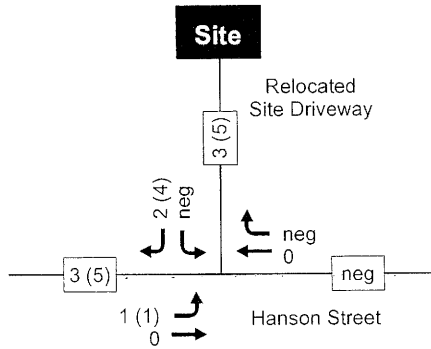
To determine in which direction the residents will travel on Hanson Street, “journey to work” data from the latest census was utilized, as well as our familiarity of the study area. The majority of site traffic is expected to travel to and from the site via Central Street, which is south of the subject site.

- To/From Points South via Hanson Street 95%
- To/From Points North via Hanson Street 5%

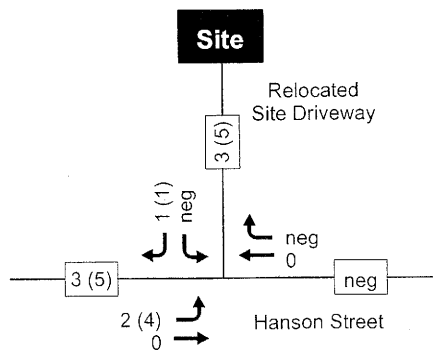
100%

The distribution of the site-generated traffic is summarized schematically on Figure 1 for the weekday AM and weekday PM peak hour periods. These diagrams show that the net increases in traffic volume on Hanson Street due to the proposed apartment building as well as both apartment buildings combined (existing plus proposed).

These diagrams show that the net increases in traffic volume on Hanson Street due to the proposed apartment building are relatively minor from a traffic engineering standpoint. Attachment 8 contains the derivation of the anticipated trip distribution patterns for this site.



AM PEAK HOUR



PM PEAK HOUR

Figure 1

Site Generated Traffic Volumes

Traffic Evaluation, Proposed Residential Apartments, Dover, New Hampshire

SIGHT DISTANCE

Sight distance at an intersection is an important safety consideration. The operator of a vehicle exiting from the relocated site driveway should have an unobstructed view of approaching vehicles on Hanson Street in order to safely enter the traffic flow on this street. The sight distance looking left from the relocated site driveway is approximately 140-feet and looking right is approximately 200-feet. For comparison purposes, 155 feet and 200 feet of stopping distance is recommended for design speeds of 25 and 30 mph, respectively.

Attachment 9 shows the view looking left and right for site vehicles exiting from the relocated site driveway location. As shown in these photographs, the available sight distances are currently restricted by roadside vegetation along the site frontage. To a certain extent this can be mitigated in conjunction with the construction project. It should be noted that the existing site driveway has been successfully utilized by the current apartment building at this site.

PUBLIC TRANSIT

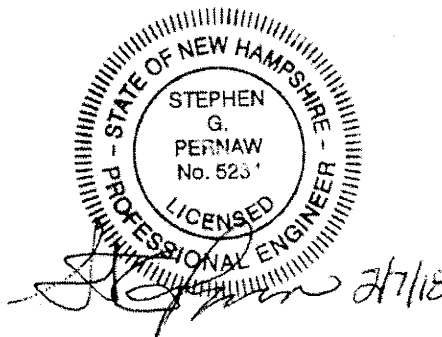
The Dover Transportation Center on Chestnut Street is located approximately 0.8 miles from the subject site. From this location rail service is available via Amtrak (Downeaster) and bus service is provided by the COAST regional bus system and Wildcat Transit.

The closest bus stops are located approximately 0.3 miles from the proposed apartment building on both Central Avenue (Central Towers stop) and Locust Street (City Hall stop). Bus Routes 2, 3 & 101 serve this area. C&J Bus Lines also provides bus service at the Exit 9 Park and Ride facility on Indian Brook Road and it is located approximately 2.8 miles from the subject site.

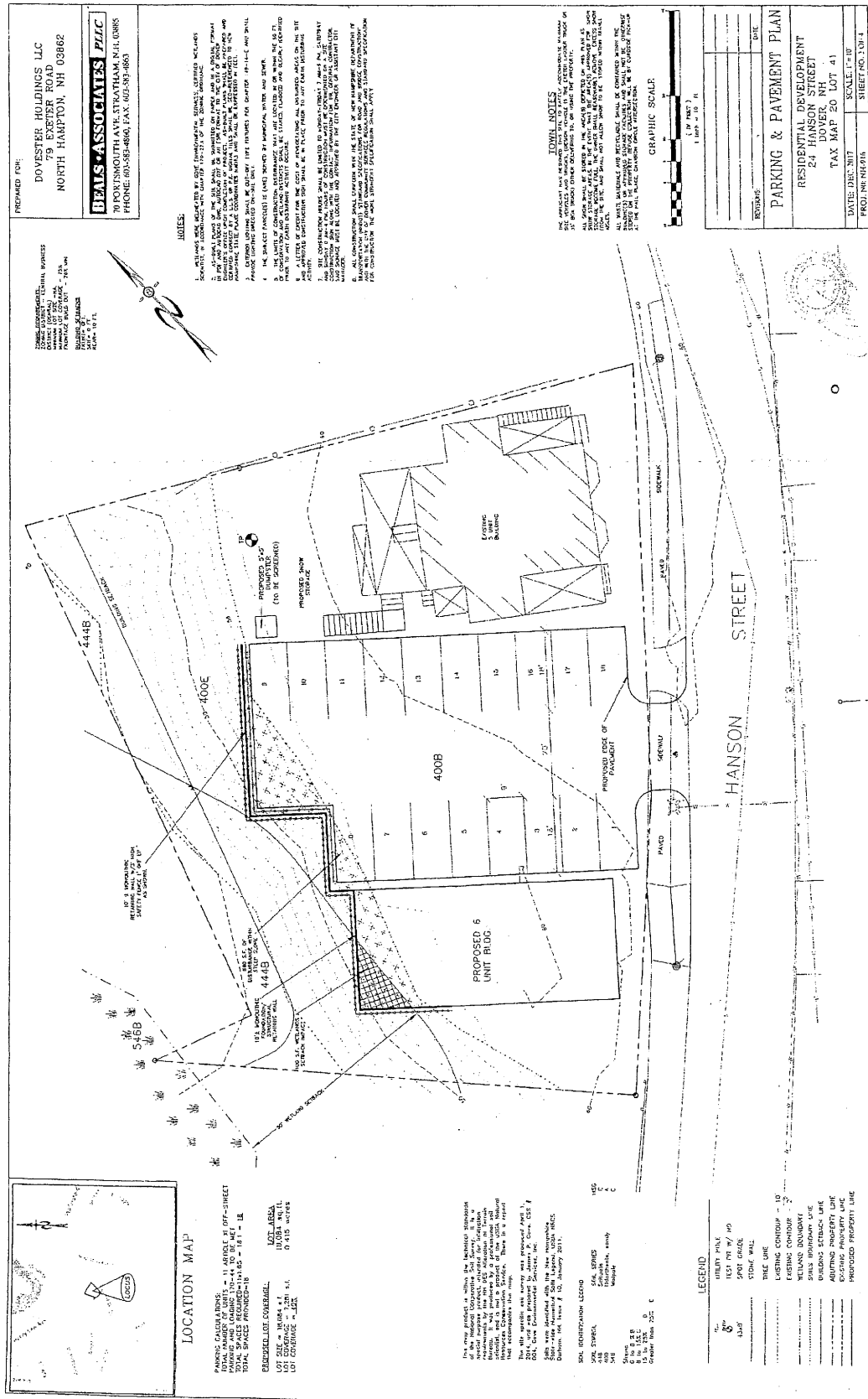
CONCLUSIONS

From a traffic engineering standpoint, the hourly rate of traffic flow is of most importance. With peak period traffic flow increases that are single-digit in magnitude, the prevailing traffic conditions, roadway capacity, or Level of Service (traffic operations) at nearby intersections will not change significantly as a result of the proposed six additional dwelling units on Hanson Street.

Attachments



ATTACHMENTS



Graph Look Up

DATA SOURCE:

SEARCH BY LAND USE CODE:

LAND USE CATEGORY:

LAND USE:

INDEPENDENT VARIABLE (IV):

TIME PERIOD:

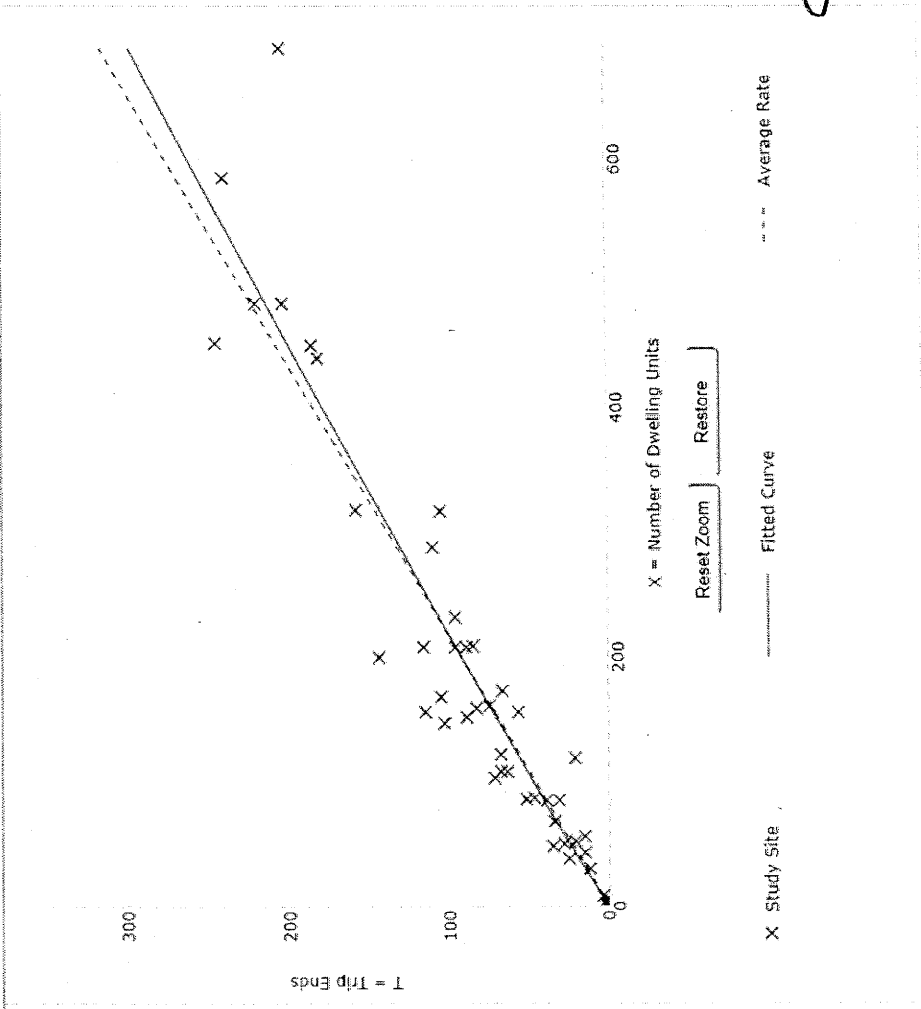
SETTING/LOCATION:

TRIP TYPE:

ENTER IV VALUE TO CALCULATE TRIPS:

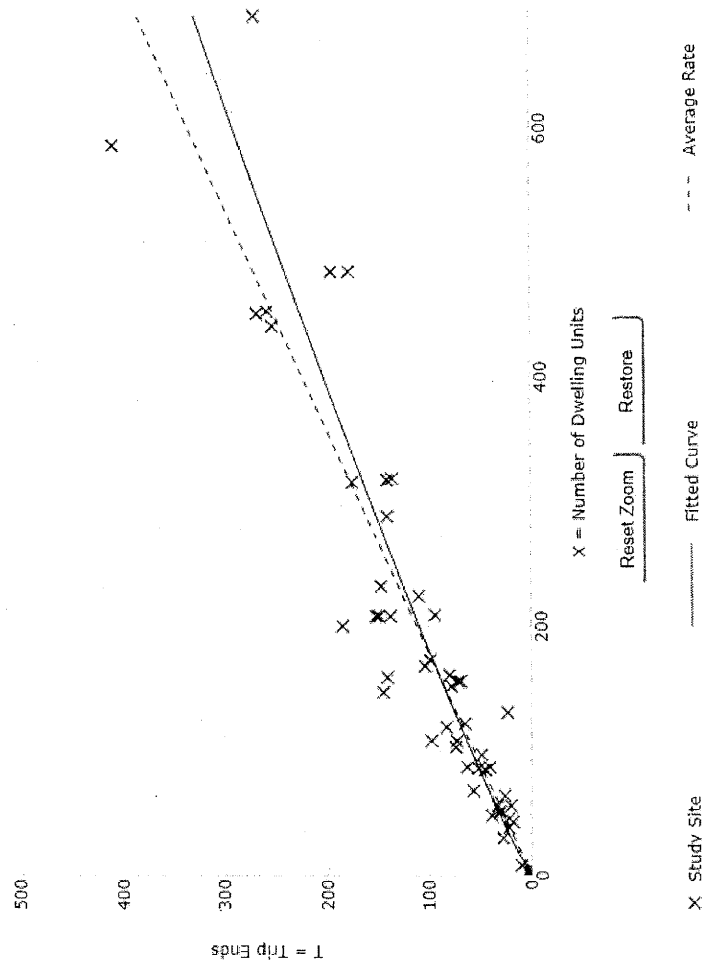
DATA STATISTICS

Dwelling Units
Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.
Setting/Location:
General Urban/Suburban
Trip Type:
Vehicle
Number of Studies:
42
Avg. Num. of Dwelling Units:
199
Average Rate:
0.48
Range of Rates:
0.18 - 0.74
Standard Deviation:
0.12
Fitted Curve Equation:
 $Ln(T) = 0.95 Ln(X) - 0.51$
 $R^2 = 0.90$
Directional Distribution:
23% entering, 77% exiting
Calculated Trip Ends:
Average Rate: 2 (Total)
Fitted Curve: 3 (Total)



DATA STATISTICS

Dwelling Units
 Time Period:
 Weekday
 Peak Hour of Adjacent Street Traffic
 One Hour Between 4 and 5 p.m.
 Setting/Location:
 General Urban/Suburban
 Trip Type:
 Vehicle
 Number of Studies:
 50
 Avg. Num. of Dwelling Units:
 187
 Average Rate:
 0.56
 Range of Rates:
 0.18 - 1.25
 Standard Deviation:
 0.16
 Fitted Curve Equation:
 $\ln(T) = 0.89 \ln(X) - 0.02$
 $R^2:$
 0.86
 Directional Distribution:
 63% entering, 37% exiting
 Calculated Trip Ends:
 Average Rate: 3 (Total)
 Fitted Curve: 4 (Total)



DATA SOURCE:

ITE-TGM 10th Edition

SEARCH BY LAND USE CODE:

220

LAND USE CATEGORY:

(200-299) Residential

LAND USE:

220 - Multifamily Housing (Low-Rise)

INDEPENDENT VARIABLE (IV):

Dwelling Units

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

SETTING/LOCATION:

General Urban/Suburban

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

5

Calculate

DATA STATISTICS

More Details

Independent Variable:

Dwelling Units

Time Period:

Weekday

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

29

Avg. Num. of Dwelling Units:

163

Average Rate:

7.32

Range of Rates:

4.45 - 10.97

Standard Deviation:

1.31

Fitted Curve Equation:

 $T = 7.55(X) - 40.86$ R^2 :

0.96

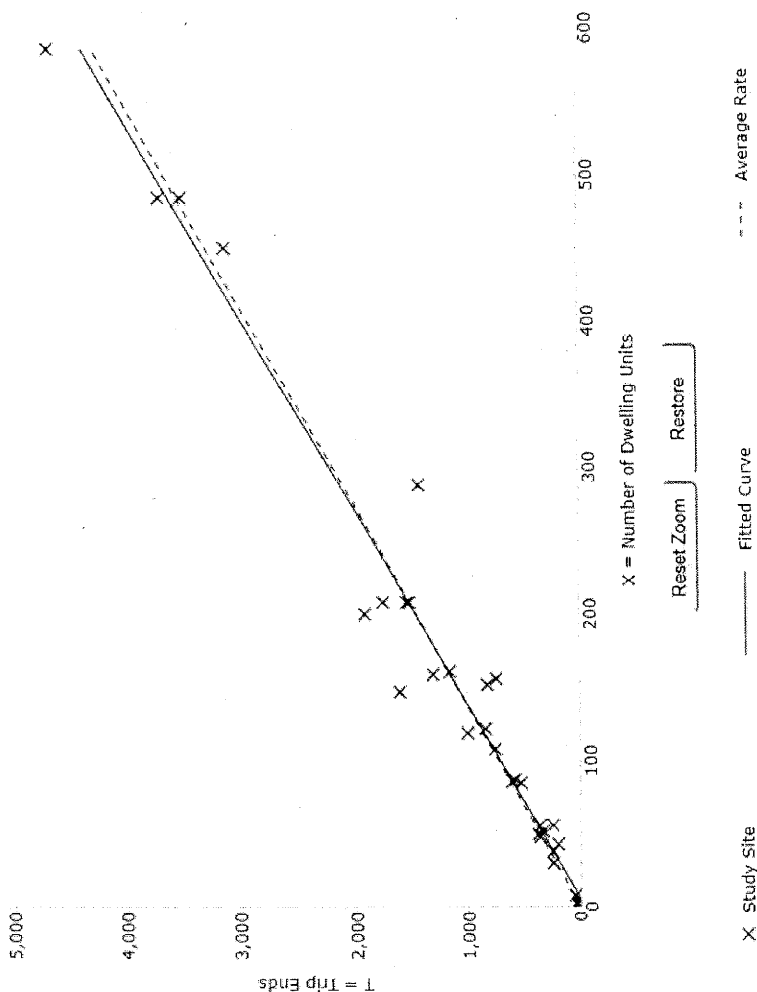
Directional Distribution:

50% entering, 50% exiting

Calculated Trip Ends:

Average Rate: 37 (Total)

Fitted Curve: Not Available



DATA SOURCE:

ITE-TGM 10th Edition

SEARCH BY LAND USE CODE:

220

LAND USE CATEGORY:

(200-299) Residential

LAND USE:

220 - Multifamily Housing (Low-Rise)

INDEPENDENT VARIABLE (IV):

Dwelling Units

TIME PERIOD:

Weekday

SETTING/LOCATION:

General Urban/Suburban

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

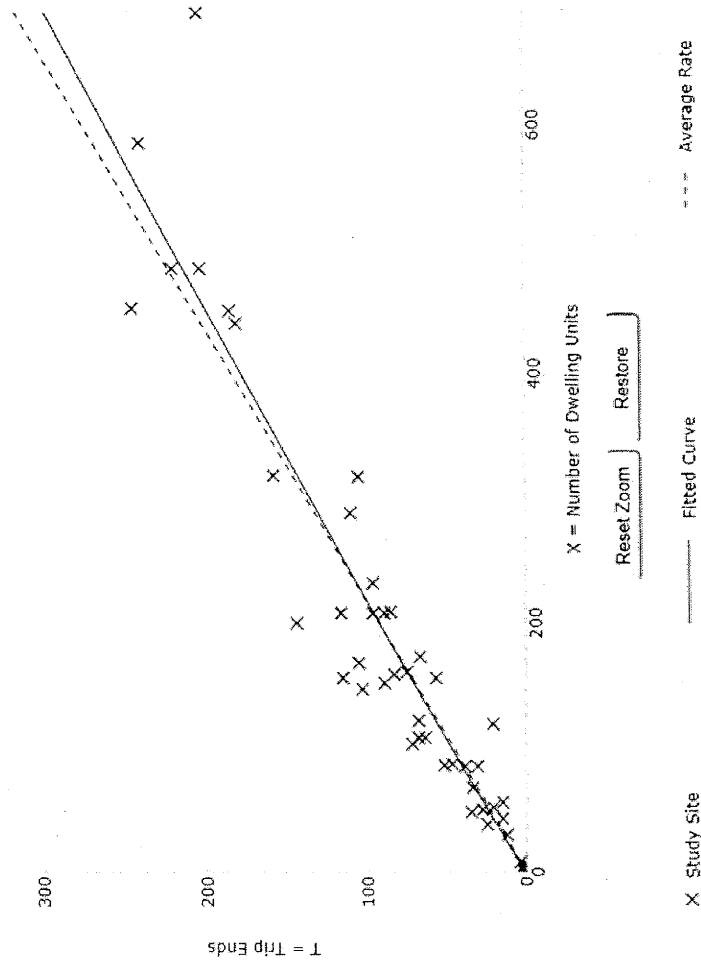
5

Calculate

Trip ends are not estimated for some methods as it yields negative values

DATA STATISTICS

Dwelling Units
 Time Period:
 Weekday
 Peak Hour of Adjacent Street Traffic
 One Hour Between 7 and 9 a.m.
 Setting/Location:
 General Urban/Suburban
 Trip Type:
 Vehicle
 Number of Studies:
 42
 Avg. Num. of Dwelling Units:
 199
 Average Rate:
 0.46
 Range of Rates:
 0.18 - 0.74
 Standard Deviation:
 0.12
 Fitted Curve Equation:
 $\ln(T) = 0.95 \ln(X) - 0.51$
 R^2 :
 0.90
 Directional Distribution:
 23% entering, 77% exiting
 Calculated Trip Ends:
 Average Rate: 3 (Total)
 Fitted Curve: 3 (Total)



DATA SOURCE:

ITE-TGM 10th Edition

SEARCH BY LAND USE CODE:

220

LAND USE CATEGORY:

(200-299) Residential

LAND USE:

220 - Multifamily Housing (Low-Rise)

INDEPENDENT VARIABLE (IV):

Dwelling Units

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

SETTING/LOCATION:

General Urban/Suburban

TRIP TYPE:

Vehicle

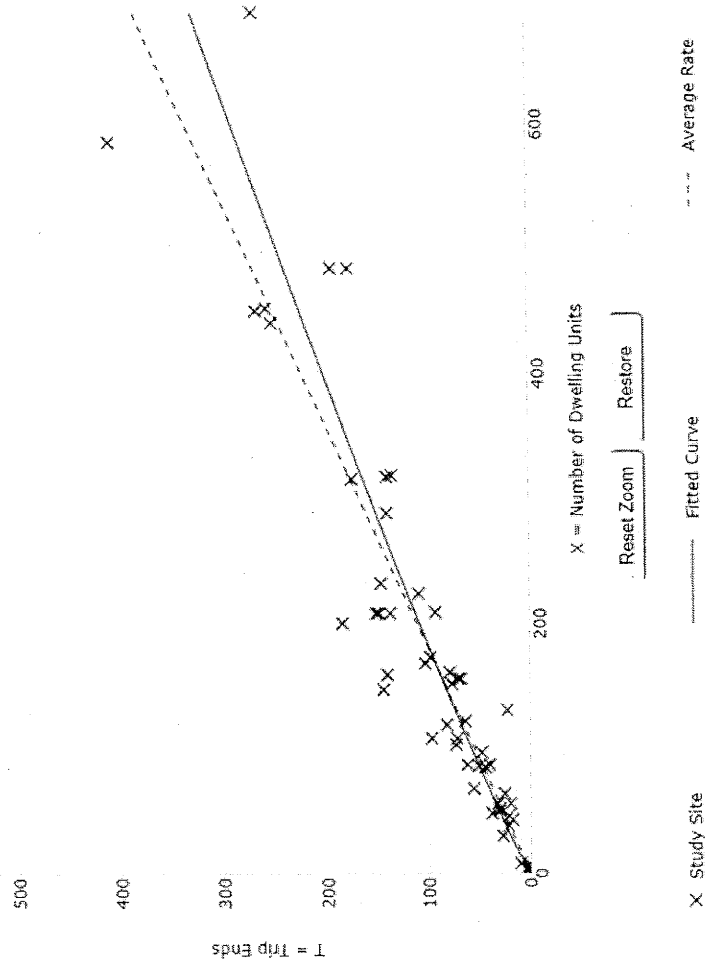
ENTER IV VALUE TO CALCULATE TRIPS:

6

Calculate

DATA STATISTICS

Dwelling Units
 Time Period:
 Weekday
 Peak Hour of Adjacent Street Traffic
 One Hour Between 4 and 5 p.m.
 Setting/Location:
 General Urban/Suburban
 Trip Type:
 Vehicle
 Number of Studies:
 50
 Avg. Num. of Dwelling Units:
 187
 Average Rate:
 0.56
 Range of Rates:
 0.18 - 1.25
 Standard Deviation:
 0.16
 Fitted Curve Equation:
 $\ln(T) = 0.89 \ln(X) + 0.02$
 $R^2:$
 0.88
 Directional Distribution:
 63% entering, 37% exiting
 Calculated Trip Ends:
 Average Rate: 3 (Total)
 Fitted Curve: 3 (Total)



DATA SOURCE:

ITE-TGM 10th Edition

SEARCH BY LAND USE CODE:

220

LAND USE CATEGORY:

(200-299) Residential

LAND USE:

220 - Multifamily Housing (Low-Rise)

INDEPENDENT VARIABLE (IV):

Dwelling Units

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

SETTING/LOCATION:

General Urban/Suburban

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

6

Calculate

DATA STATISTICS

ITE-TGM 10th Edition

Independent Variable:

Dwelling Units

Time Period:

Weekday

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

29

Avg. Num. of Dwelling Units:

168

Average Rate:

7.32

Range of Rates:

4.45 - 10.97

Standard Deviation:

1.31

Fitted Curve Equation:

 $T = 7.58(X) - 40.86$ R^2

0.96

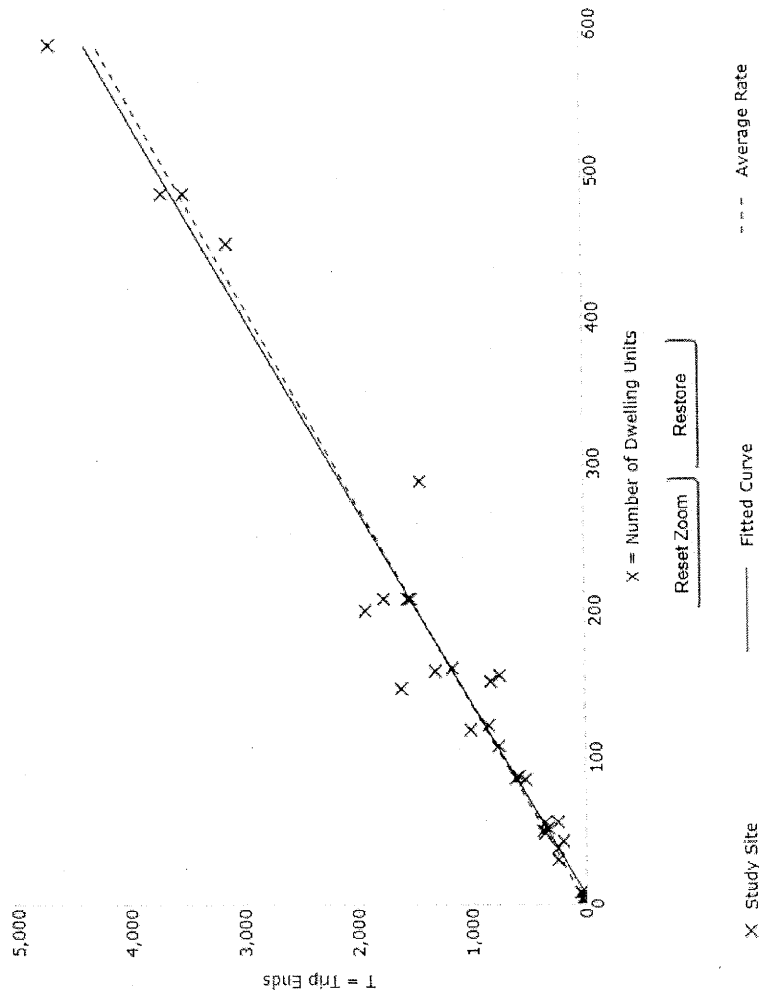
Directional Distribution:

50% entering, 50% exiting

Calculated Trip Ends:

Average Rate: 44 (Total)

Fitted Curve: 5 (Total)



DATA SOURCE:

ITE-TGM 10th Edition

SEARCH BY LAND USE CODE:

220

LAND USE CATEGORY:

(200-299) Residential

LAND USE:

220 - Multifamily Housing (Low-Rise)

INDEPENDENT VARIABLE (IV):

Dwelling Units

TIME PERIOD:

Weekday

SETTING/LOCATION:

General Urban/Suburban

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

6

Calculate

TRIP DISTRIBUTION ANALYSIS

Work Destination Report - Where Workers are Employed Who Live in the Selection Area - by Places (Cities, CDPs, etc.)

Total All Jobs

2015

Count	Share
16,094	100.0%

Total All Jobs

Jobs Counts by Places (Cities, CDPs, etc.) Where Workers are Employed - All Jobs

	2015			Gateway Percentage		Gateway Allocation	
	Count	Share		North	South	North	South
Dover city, NH	3,653	22.7%	3,653	0.15	0.85	548	3105
Portsmouth city, NH	3,007	18.7%	3,007		1.00	0	3007
Rochester city, NH	736	4.6%	736		1.00	0	736
Durham CDP, NH	658	4.1%	658		1.00	0	658
Somersworth city, NH	630	3.9%	630		1.00	0	630
Manchester city, NH	412	2.6%	412		1.00	0	412
Concord city, NH	379	2.4%	379		1.00	0	379
Nashua city, NH	311	1.9%	311		1.00	0	311
Exeter CDP, NH	220	1.4%	220		1.00	0	220
Hampton CDP, NH	147	0.9%	147		1.00	0	147
All Other Locations	5,941	36.9%	0			0	0
			10,153			548	9605
							10153

Percentage:	5%	95%	100%
-------------	----	-----	------

Source: US Census

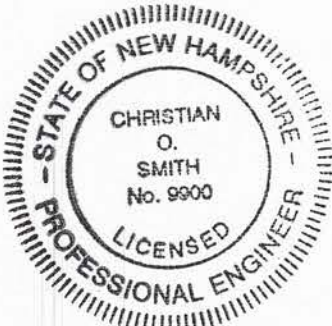
PROPOSED SITE PLAN
24 HANSON STREET
DOVER, NH

NOT FOR CONSTRUCTION

CIVIL ENGINEERS:

BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE,
STRATHAM, NEW HAMPSHIRE
PHN. 603-583-4860, FAX. 603-583-4863



LAND SURVEYORS:

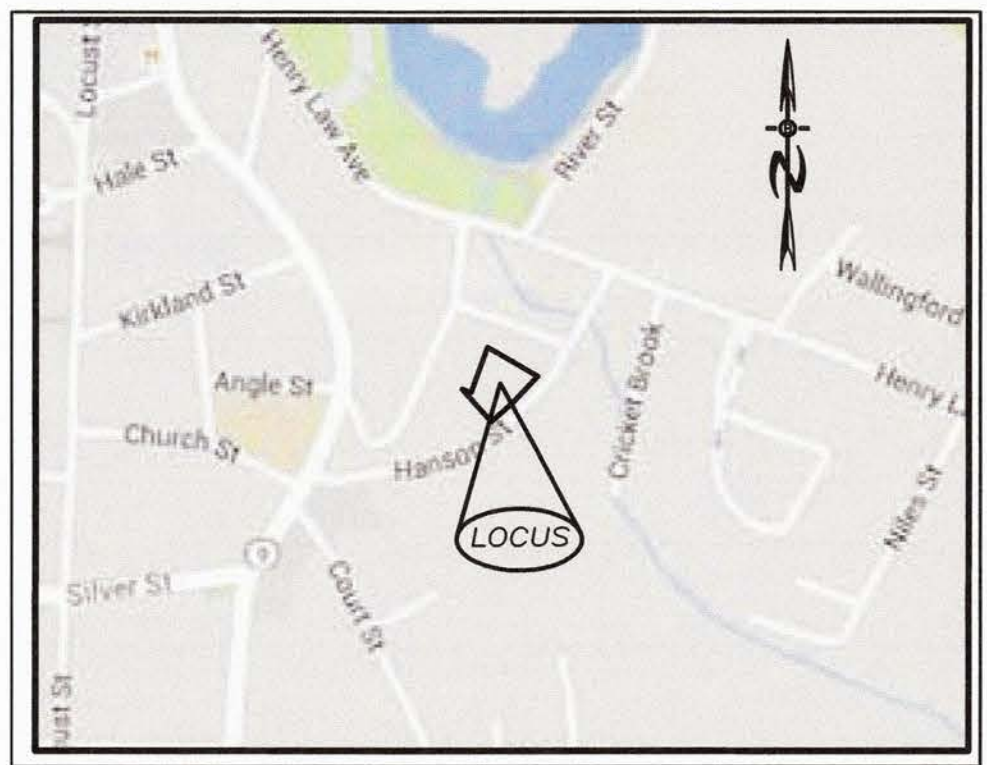
**DOUCET
SURVEY**

Serving Your Professional Surveying & Mapping Needs
102 Kent Place, Newmarket, NH 03857-0163
Voice (603) 659-6560, Data (603) 659-4118

WETLAND / SOIL
CONSULTANT:

GOVE ENVIRONMENTAL SERVICES INC.
8 CONTINENTAL DRIVE,
BLDG 2 UNIT H
EXETER, NH 03833
1-603-778-0644

LOCATION MAP



INDEX

- TITLE SHEET
- 1 DEMOLITION / EROSION CONTROL PLAN
 - 2 PARKING & PAVEMENT PLAN
 - 3 GRADING, DRAINAGE & UTILITY PLAN
 - 4 CONSTRUCTION/EROSION CONTROL DETAILS

RECORD OWNER/APPLICANT

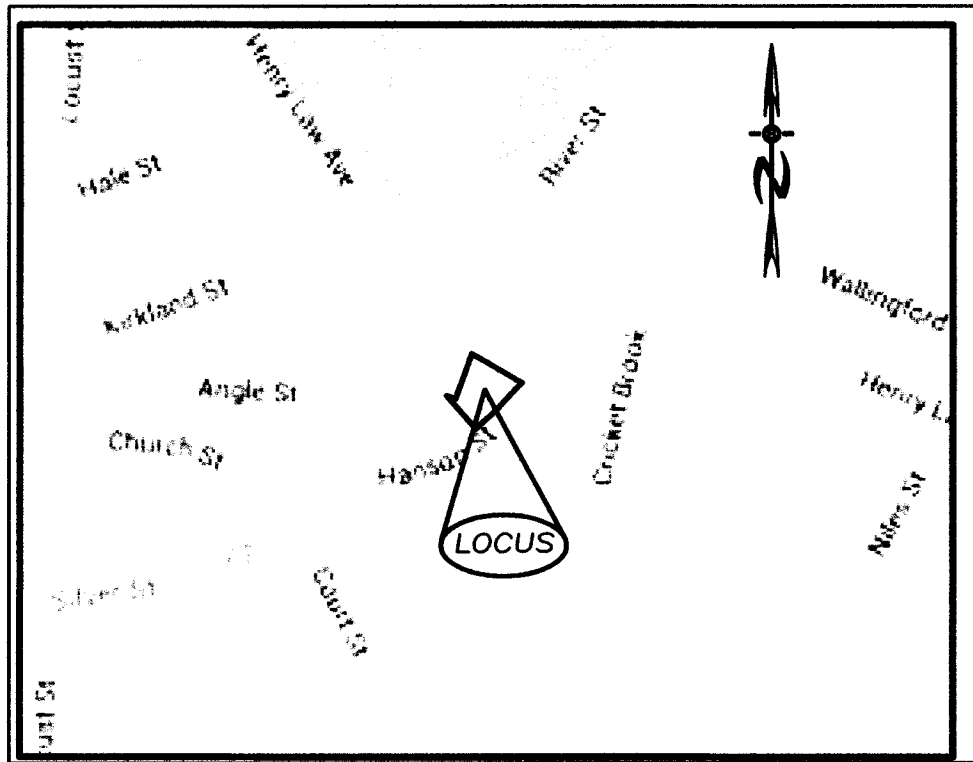
WHITE DOVE PROPERTIES, LLC
PO BOX 2044
DOVER, NH 03821

PLAN SET LEGEND

5/8" REBAR	●	PROPOSED LIGHT POLE	⦿
DRILL HOLE	○	PROPOSED WALL LIGHT	⦿
CONC. BOUND	□	PROPOSED PARKING COUNT	③
UTILITY POLE	⦿	OVERHEAD ELEC. LINE	—OW—
DRAIN MANHOLE	⦿	FENCING	—X—
SEWER MANHOLE	⦿	DRAINAGE LINE	—D—D—
EXISTING LIGHT POLE	⦿	SEWER LINE	—S—
EXISTING CATCH BASIN	⦿	GAS LINE	—G—
PROPOSED CATCH BASIN	⦿	WATER LINE	—W—
WATER GATE	⦿	STONE WALL	—X—X—X—
WATER SHUT OFF	⦿	TREE LINE	—W—W—W—
HYDRANT	⦿	ABUT. PROPERTY LINES	—D—D—D—
PINES, ETC.	⦿	EXIST. PROPERTY LINES	—D—D—D—
MAPLES, ETC.	⦿	BUILDING SETBACK LINES	—D—D—D—
EXIST. SPOT GRADE	⦿	EXIST. CONTOUR	—100—
PROP. SPOT GRADE	⦿	PROP. CONTOUR	—100—
DOUBLE POST SIGN	⦿	SOIL LINES	—100—
SINGLE POST SIGN	⦿		

	REVISIONS:	DATE:
1		
2		
3		
4		
5		

NH-916 PROPOSED SITE PLAN ISSUED JULY, 2018



LOCATION MAP

LEGEND

	UTILITY POLE
	TEST PIT W/ NO.
	SPOT GRADE
	STONE WALL
	TREE LINE
	EXISTING CONTOUR - 10'
	EXISTING CONTOUR - 2'
	WETLAND BOUNDARY
	SOILS BOUNDARY LINE
	BUILDING SETBACK LINE
	ABUTTING PROPERTY LINE
	EXISTING PROPERTY LINE
	PROPOSED PROPERTY LINE

WETLAND COMPLIANCE NOTE

The landowner is responsible for complying with all applicable local, state, and federal wetlands regulations, including any permitting and setback requirements required under these regulations.

MAP 20
LOT 40
VINCENT DUFFY
P.O. BOX 301
DOVER, N.H.
SCRD 1885-443

MAP 20
LOT 42
ROBERT & KELLY CALLAN
308 HANSON STREET
DOVER, N.H.
SCRD 1787-446

MAP 20
LOT 37
THE #1 GEORGE TRUST
1076 WASHINGTON ROAD
RYE, N.H.
SCRD 3385-24

UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER BEALS ASSOCIATES, NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION.

WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233).



MAP 20
LOT 44

MAP 20
LOT 43

PREPARED FOR:

DOVESTER HOLDINGS LLC
79 EXETER ROAD
NORTH HAMPTON, NH 03862

BEALS ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885
PHONE: 603-583-4860, FAX: 603-583-4863

NOTES

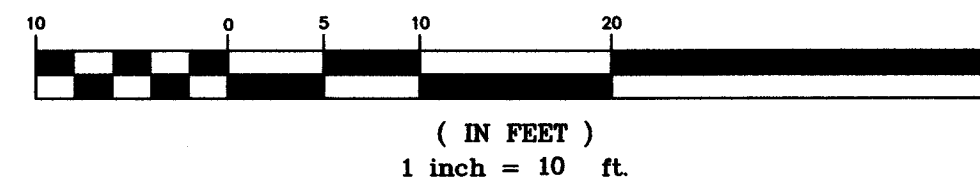
- THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR SITE DEMOLITION. IT SHOULD BE NOTED THAT ALL MANMADE FEATURES SHALL BE REMOVED AS NECESSARY TO FACILITATE CONSTRUCTION UNLESS OTHERWISE NOTED. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCIES COMPARED TO DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE FOR REVIEW AND RESOLUTION. ANY CONTRADICTION BETWEEN ITEMS ON THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
- ALL EXISTING STRUCTURES IN THE CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS, UNLESS NOTED TO REMAIN ON THE SITE PLANS. ANY BURNING ON-SITE SHALL BE SUBJECT TO LOCAL ORDINANCES.
- ALL EXISTING UTILITIES SHALL BE TERMINATED AT THE PROPERTY LINE, OR AS SHOWN ON THE DESIGN PLANS. IN CONFORMANCE WITH LOCAL, STATE AND UTILITY COMPANY STANDARDS, SPECIFICATIONS AND DETAILS, THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES PRIOR TO THE START OF WORK.
- EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED PRIOR TO ANY EARTH MOVING ACTIVITIES.
- A TREE CLEARING PERMIT FROM LOCAL AND STATE AUTHORITIES MAY BE REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL STUMPS AND DEBRIS ARE TO BE REMOVED FROM SITE.
- THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ADJUTING PROPERTIES.
- EXISTING SEWER SERVICE AND APPURTENANCES TO BE REMOVED AND DISPOSED OF PER TOWN AND STATE REQUIREMENTS. NEW SERVICES FOR EACH UNIT TO BE INSTALLED & CONNECTED PER TOWN SPECIFICATIONS.1. SEQUENCING AND SCHEDULING: (SEE DETAIL SHEETS FOR COMPLETE CONSTRUCTION SEQUENCE AND EROSION CONTROL SPECIFICATION.)
- DEMOLITION REQUIREMENTS: CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH THE ADJACENT AND OCCUPIED BUILDING AREAS, IN COMPLIANCE WITH THE GOVERNING LAWS. PRIME CONSIDERATION SHALL BE GIVEN TO THE SAFETY, PROTECTION AND CONVENIENCE OF THE PUBLIC AND OWNER'S PERSONNEL.
2.1: EMPLOY TARPULINS ON TRUCKS CARRYING DEBRIS TO PREVENT SPREADING DUST OR DEBRIS. CLEAN UP LOOSE DEBRIS DAILY TO PREVENT THE WIND SPREADING DEBRIS.
- LEAVE SITE IN CLEAN CONDITION.
- STUMP DISPOSAL TO BE OUTSIDE LIMITS OF PAVEMENT, DRAINAGE STRUCTURES, ETC.
- TEMPORARY EARTH MATERIAL STOCKPILES TO BE IN UPLAND AREAS AND COMPLETELY IMPOUNDED BY SILT FENCE/HAYBALE EROSION CONTROLS.
- THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.

TOWN NOTES

IN ACCORDANCE WITH SITE PLAN REVIEW & SUBDIVISION REGULATIONS SECTIONS 7.15.10 AND 9.3.4 THE APPLICANT SHALL PROVIDE THE TOWN WITH THREE COPIES OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND ALSO ENSURE THAT ONE COPY REMAINS ON SITE.

THE CONSTRUCTION SITE OPERATOR AND OWNER SHALL SUBMIT A NOTICE OF INTENT (NOI) TO USEPA, WASHINGTON, DC, STORMWATER NOTICE PROCESSING CENTER AT LEAST SEVEN DAYS PRIOR TO COMMENCEMENT OF WORK ON SITE. EPA WILL POST THE NOI AT <http://cfpub.epa.gov/npsdes/stormwater/nol/noisearch.cfm>. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE STATUS".

GRAPHIC SCALE



REVISIONS:

DATE:

DEMOLITION PLAN

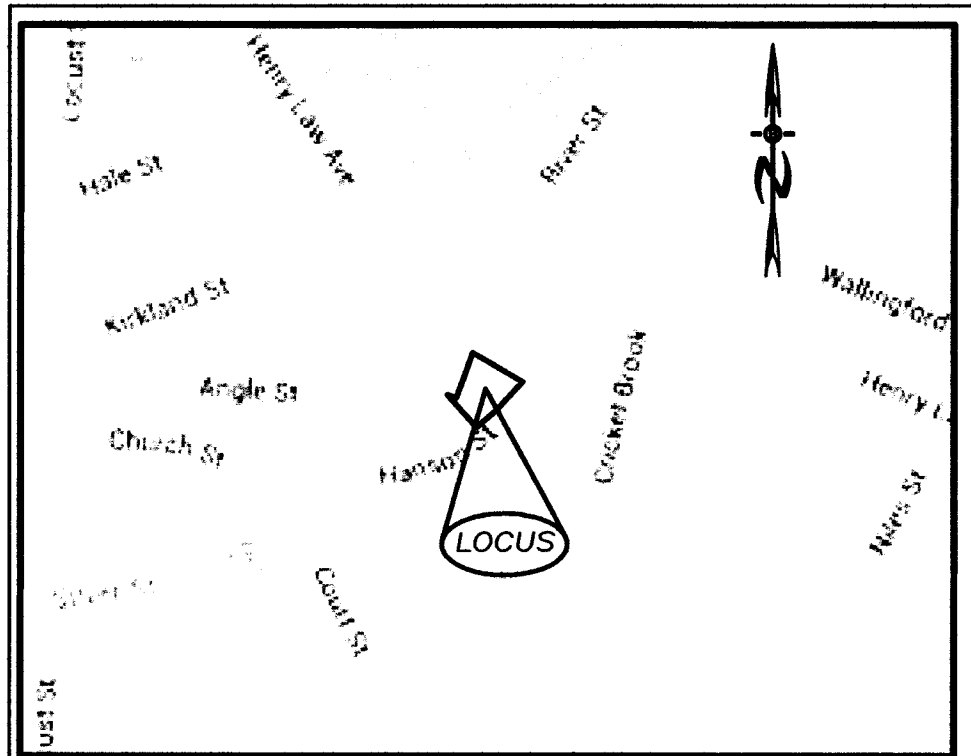
RESIDENTIAL DEVELOPMENT
24 HANSON STREET
DOVER, NH
TAX MAP 20 LOT 41

DATE: JULY, 2018

SCALE: 1"=20'

PROJ. NO: NH-916

SHEET NO. 1 OF 4



LOCATION MAP

PARKING CALCULATIONS:
TOTAL NUMBER OF UNITS = 11 ARTICLE XI OFF-STREET
PARKING AND LOADING 170-44 TO BE MET
TOTAL SPACES EXISTING FOR 5-UNITS = 6
REQUIRED $= ((6 \text{ NEW UNITS}) \times 2) + 6 = 18$
TOTAL SPACES PROVIDED = 17

PROPOSED LOT COVERAGE:
LOT SIZE = 18,084 s.f.
LOT COVERAGE = 7,281 s.f.
LOT COVERAGE = 40%
LOT AREA
18,084 sq.ft.
0.415 acres

This map product is within the technical standards of the National Cooperative Soil Survey. It is a special purpose product, intended for infiltration requirements by the NH DES Alteration of Terrain Bureau. It was produced by a professional soil scientist, and is not a product of the USDA Natural Resources Conservation Service. There is a report that accompanies this map.

The site specific soil survey was produced April 1, 2014, and was prepared by James P. Gove, CSS # 004, Gove Environmental Services, Inc.

Soils were identified with the New Hampshire State-wide Numerical Soils Legend, USDA NRCS, Durham, NH. Issue # 10, January 2011.

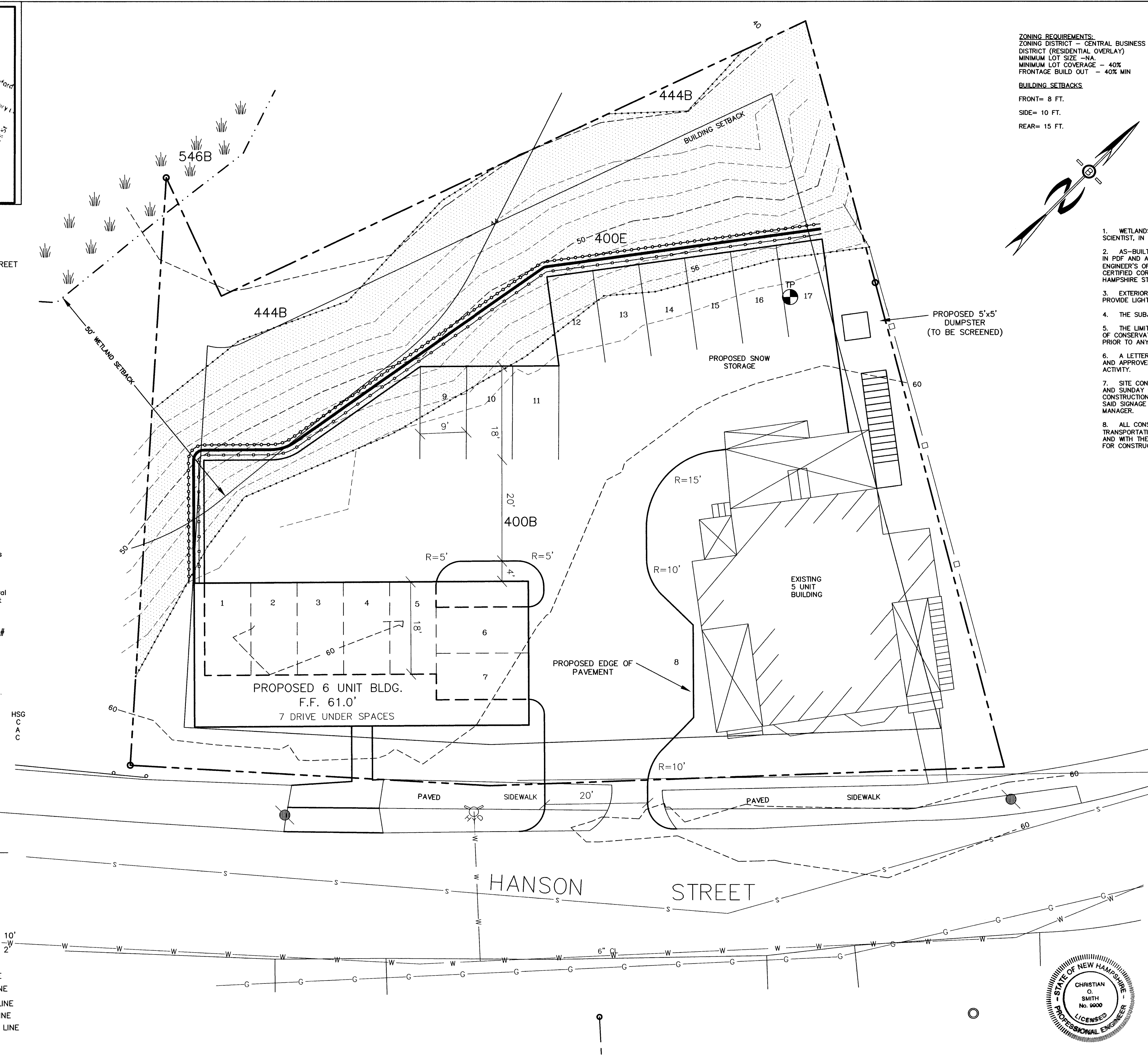
SOIL IDENTIFICATION LEGEND

SOIL SYMBOL	SOIL SERIES
448	Scituate
400	Udorthents, sandy
546	Walpole

Slopes
0 to 8 % B
8 to 15% C
15 to 25% D
Greater than 25% E

LEGEND

UTILITY POLE	TEST PIT W/ NO.
SPOT GRADE	STONE WALL
TREE LINE	EXISTING CONTOUR - 10'
EXISTING CONTOUR - 2'	WETLAND BOUNDARY
SOILS BOUNDARY LINE	BUILDING SETBACK LINE
ABUTTING PROPERTY LINE	EXISTING PROPERTY LINE
PROPOSED PROPERTY LINE	



ZONING REQUIREMENTS:
ZONING DISTRICT - CENTRAL BUSINESS
DISTRICT (RESIDENTIAL OVERLAY)
MINIMUM LOT SIZE - NA
MINIMUM LOT COVERAGE - 40%
FRONTAGE BUILD OUT - 40% MIN
BUILDING SETBACKS
FRONT= 8 FT.
SIDE= 10 FT.
REAR= 15 FT.

NOTES:

1. WETLANDS WERE DELINEATED BY GOVE ENVIRONMENTAL SERVICES, CERTIFIED WETLANDS SCIENTIST, IN ACCORDANCE WITH CHAPTER 170-27.1 OF THE ZONING ORDINANCE.
2. AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED ON PAPER AND IN A DIGITAL FORMAT IN PDF AND AUTOCAD DWG, AUTOCAD DXF OR AN ESRI FORMAT TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF PROJECT. AS-BUILT PLANS SHALL BE PREPARED AND CERTIFIED CORRECT BY A L.L.S. OR P.E. DIGITAL FILES SHALL BE GEO-REFERENCED TO NEW HAMPSHIRE STATE PLANE COORDINATES NAD83 AND SHALL BE EXPRESSED IN FEET.
3. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 149-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.
4. THE SUBJECT PARCEL(S) IS (ARE) SERVED BY MUNICIPAL WATER AND SEWER.
5. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED IN OR WITHIN THE 50 FT. OF CONSERVATION AND WETLAND DISTRICTS SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY EARTH DISTURBING ACTIVITY.
6. A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE AND APPROVED CONSTRUCTION SIGN SHALL BE IN PLACE PRIOR TO ANY EARTH DISTURBING ACTIVITY.
7. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM-6 PM, SATURDAY AND SUNDAY 9 AM-4 PM. HOURS OF CONSTRUCTION MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR THE GENERAL CONTRACTOR. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR ASSISTANT CITY MANAGER.
8. ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (HDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND WITH THE CITY OF DOVER COMMUNITY SERVICES REGULATIONS AND STANDARD SPECIFICATION FOR CONSTRUCTION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.

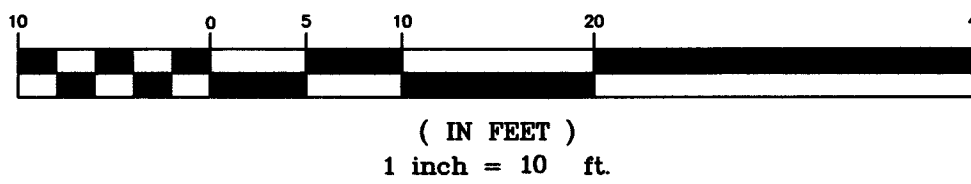
TOWN NOTES

THE APPLICANT HAS DESIGNED THIS SITE TO SAFELY ACCOMMODATE MAXIMUM SIZE VEHICLES AND TRUCKS, (DESIGN VEHICLE IS THE EXETER LADDER TRUCK OR 35' BOX TRUCK) EITHER DELIVERING TO, OR USING THE PROPERTY.

ALL SNOW SHALL BE STORED IN THE AREA(S) DEPICTED ON THIS PLAN AS SNOW STORAGE AREAS. IN THE EVENT THAT THE AREA(S) APPROVED FOR SNOW STORAGE BECOME FULL, THE OWNER SHALL REASONABLY REMOVE EXCESS SNOW FROM THE SITE, AND SHALL NOT ALLOW SNOW TO BE STORED WITHIN TRAVEL AISLES.

ALL WASTE MATERIALS AND RECYCLABLE SHALL BE CONTAINED WITHIN THE BUILDING(S) OR APPROVED STORAGE FACILITIES AND SHALL NOT BE OTHERWISE STORED ON THE PROPERTY. REFUSE COLLECTION WILL BE BY CURBSIDE PICK-UP AT THE HALL PLACE, CHARRON CIRCLE INTERSECTION.

GRAPHIC SCALE



REVISIONS:

DATE:

PARKING & PAVEMENT PLAN

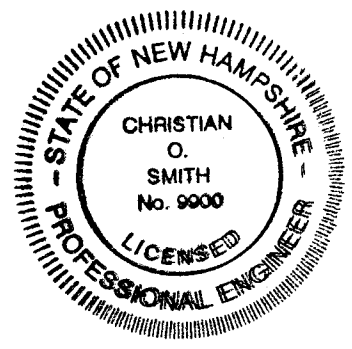
RESIDENTIAL DEVELOPMENT
24 HANSON STREET
DOVER, NH
TAX MAP 20 LOT 41

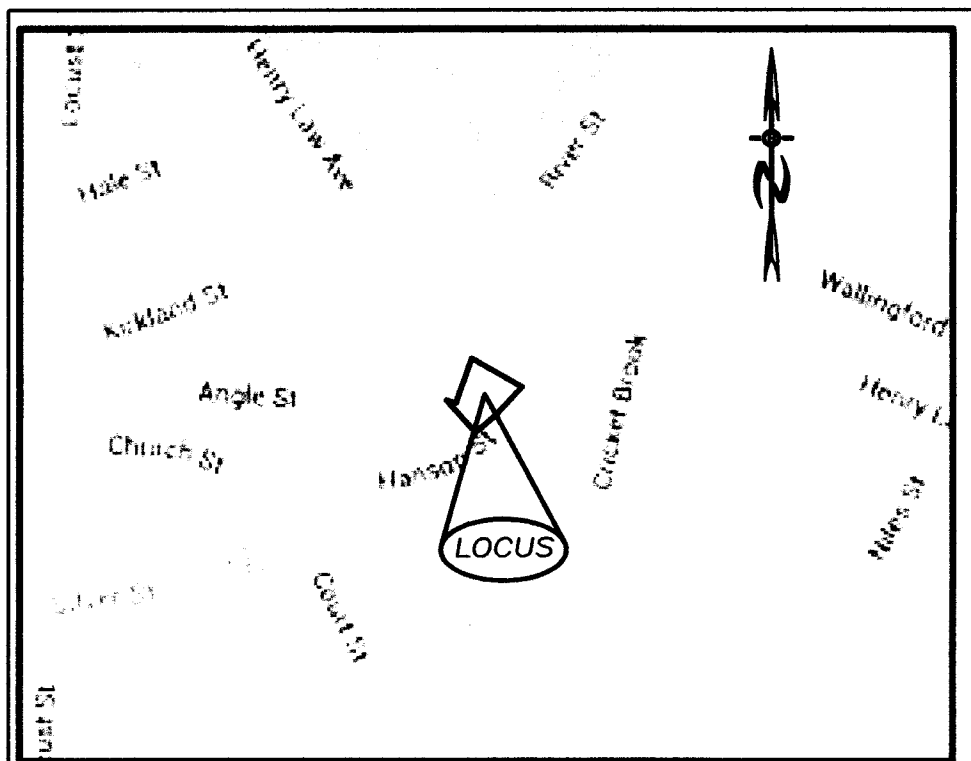
DATE: JULY, 2018

SCALE: 1"=10'

PROJ. NO: NH-916

SHEET NO. 2 OF 4

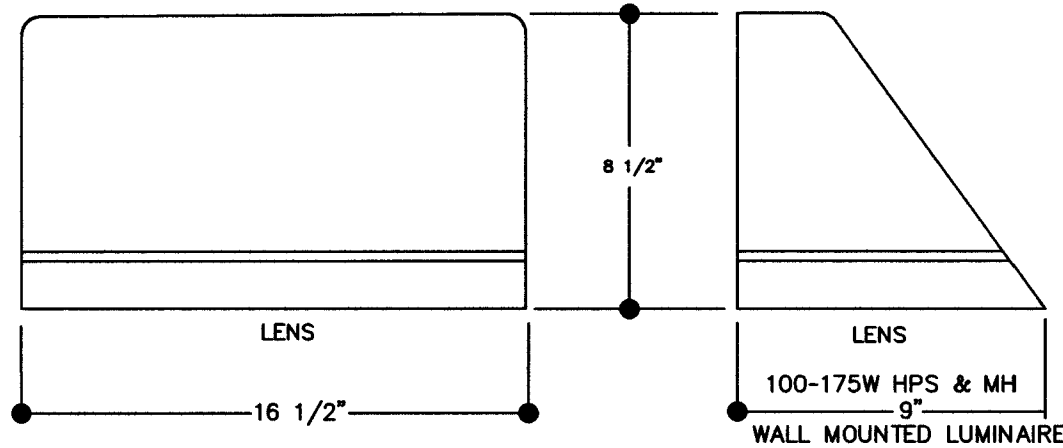




LOCATION MAP

LIGHTING NOTES:

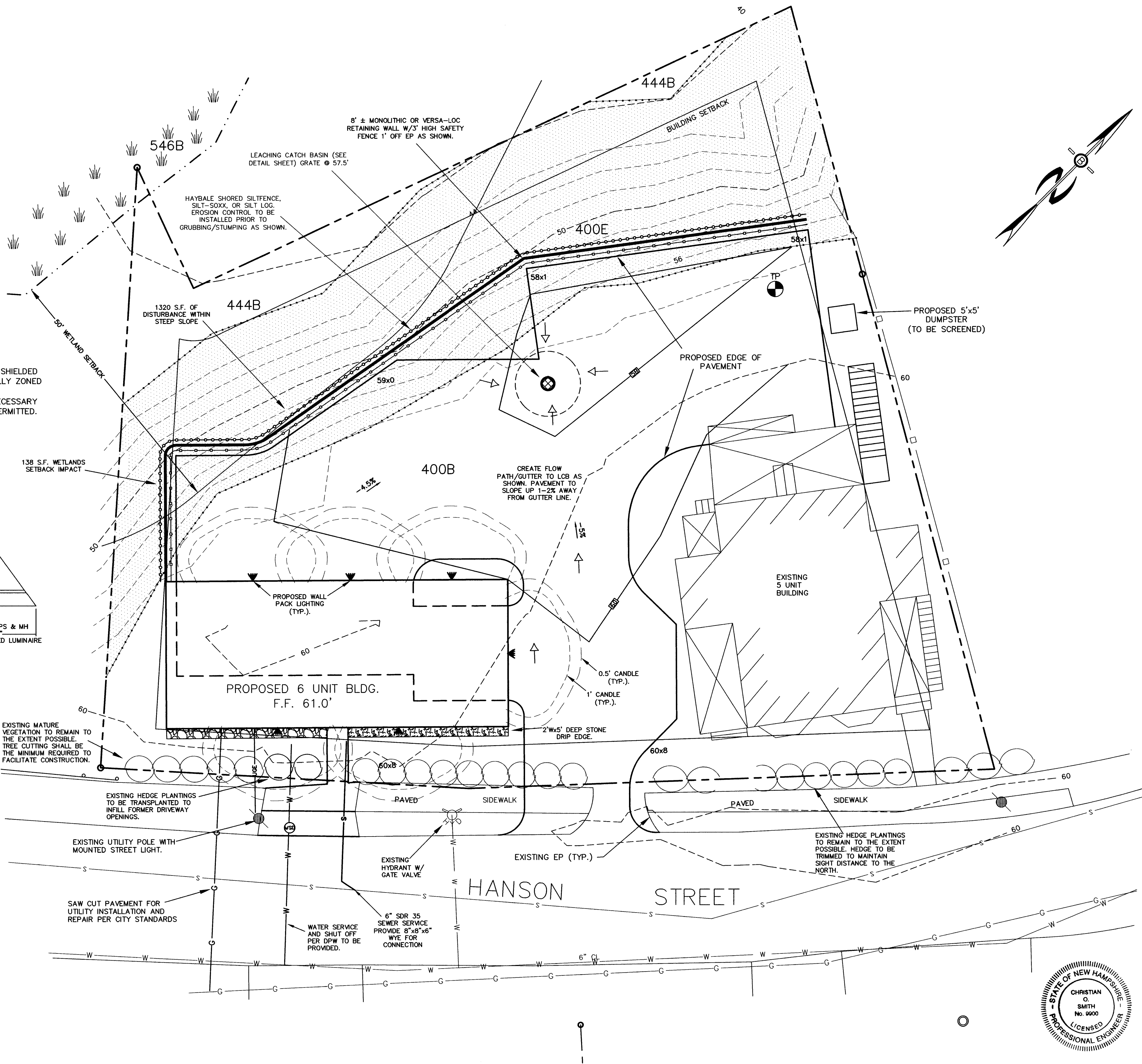
- 1. ALL OUTDOOR LIGHTING SHALL BE SO DIRECTED & SHIELDED THAT NO GLARE WILL SPILL OUT ONTO RESIDENTIALLY ZONED PROPERTIES.
- 2. AFTER 10:00 PM ONLY THAT AMOUNT OF LIGHT NECESSARY FOR THE SECURITY OF THE PREMISES SHALL BE PERMITTED.



WALLPACK DETAIL

LEGEND

- UTILITY POLE
- TEST PIT W/ NO.
- SPOT GRADE
- STONE WALL
- TREE LINE
- EXISTING CONTOUR - 10'
- EXISTING CONTOUR - 2'
- WETLAND BOUNDARY
- SOILS BOUNDARY LINE
- BUILDING SETBACK LINE
- ABUTTING PROPERTY LINE
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE



PREPARED FOR:

DOVESTER HOLDINGS LLC
79 EXETER ROAD
NORTH HAMPTON, NH 03862

BEALS ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885
PHONE: 603-583-4860, FAX: 603-583-4863

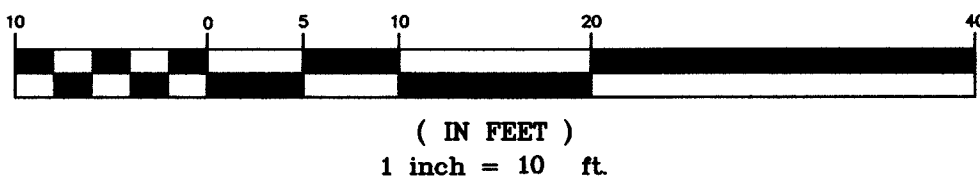
UTILITY NOTES

- 1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
- 2. THE CONTRACTOR SHALL PROVIDE NOTICE TO ALL COMPANIES AND LOCAL AUTHORITIES OWNING OR HAVING A JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- 3. THE SPECIFICATIONS FOR PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND REQUIREMENTS OF THE RESPECTIVE UTILITY CO. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES FOR PROPER UTILITY CROSSING REQUIREMENTS
- 4. ALL CONSTRUCTION SHALL CONFORM TO CITY OF DOVER STANDARDS AND REGULATIONS, UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR (OSHA) RULES AND REGULATIONS.
- 5. THE CONTRACTOR IS TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THEIR RESPECTIVE MAINS (IF REQUIRED) IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT OF ALL CONNECTION FEES.
- 7. APPROVED BACKFLOW PREVENTORS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
- 8. THE (EXISTING OR PROPOSED) STRUCTURE SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED UNDER CHAPTER 109- 30 OF THE CODE OF THE CITY OF DOVER AND THE 2015 STATE BUILDING CODES.
- 9. SPRINKLER CONNECTIONS MUST BE FLUSHED IN ACCORDANCE WITH NFPA 24 AND A CONTRACTOR'S MATERIAL AND
- 10. TEST CERTIFICATE FOR UNDERGROUND PIPING FORM MUST BE COMPLETED.
- 11. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13.
- 12. BUILDING ADDRESSES SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
- 13. THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED STRUCTURE WILL BE ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS.
- 14.

DRAINAGE NOTES

- 1. ALL DRAINAGE STRUCTURE AND SWALES WILL BE BUILT AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
- 2. SEE DETAIL SHEETS FOR STANDARD CONSTRUCTION NOTES AND DETAILS.

GRAPHIC SCALE



REVISIONS:

DATE:

GRADING, DRAINAGE
& UTILITY PLAN

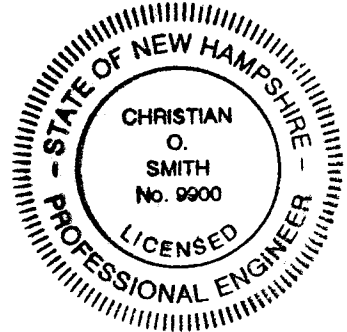
RESIDENTIAL DEVELOPMENT
24 HANSON STREET
DOVER, NH
TAX MAP 20 LOT 41

DATE: JULY, 2018

SCALE: 1"=20'

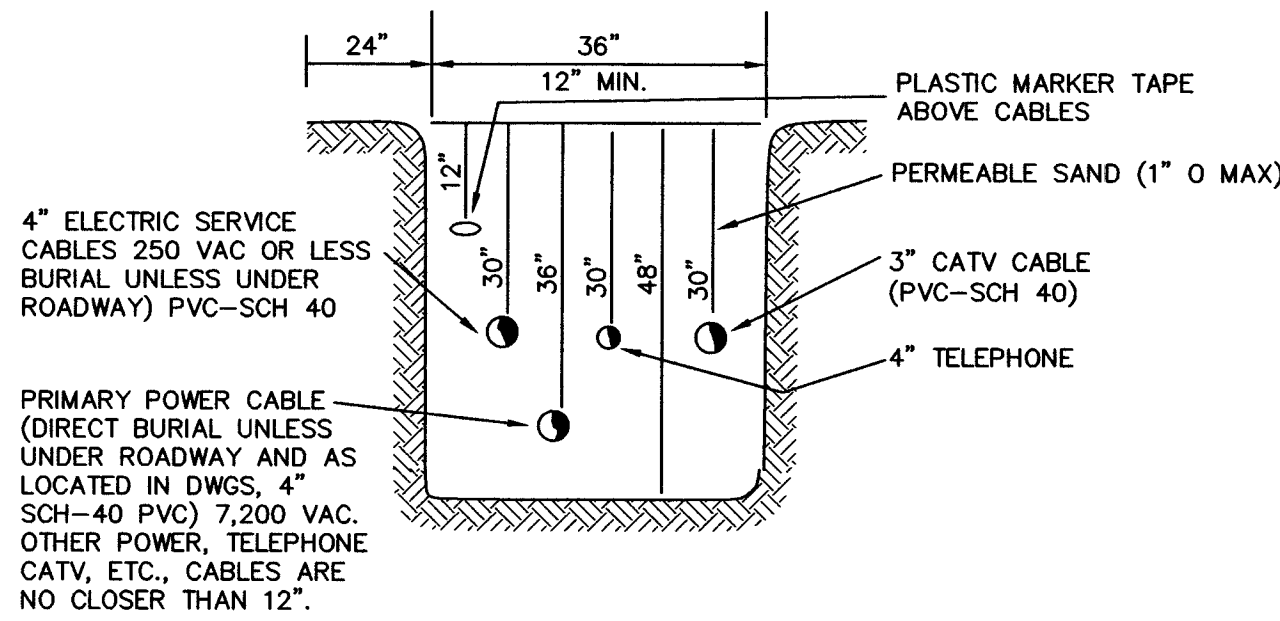
PROJ. NO: NH-916

SHEET NO. 3 OF 4

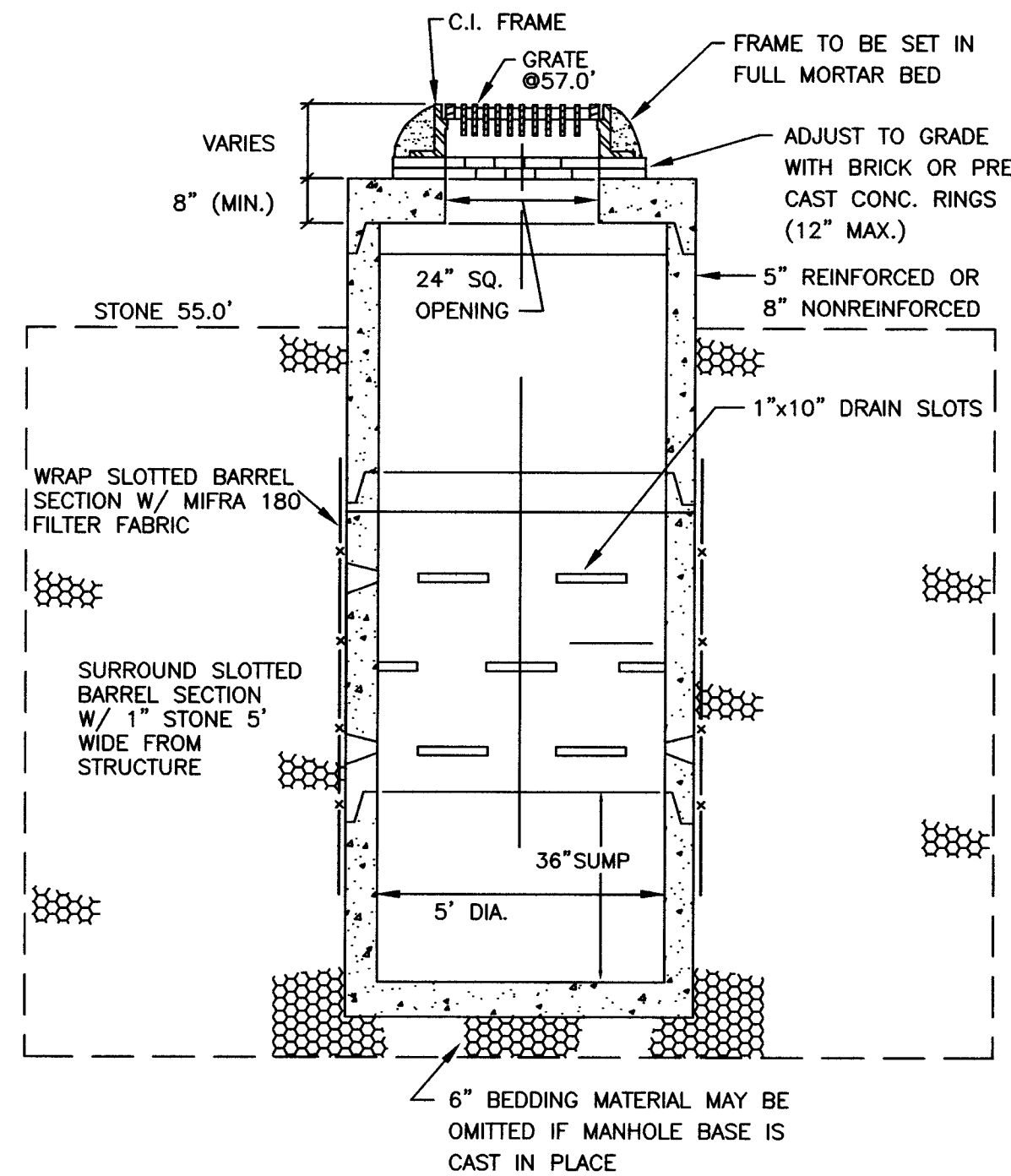


NOTE: ALL UTILITIES SHALL BE REVIEWED AND APPROVED BY APPROPRIATE UTILITY COMPANY.

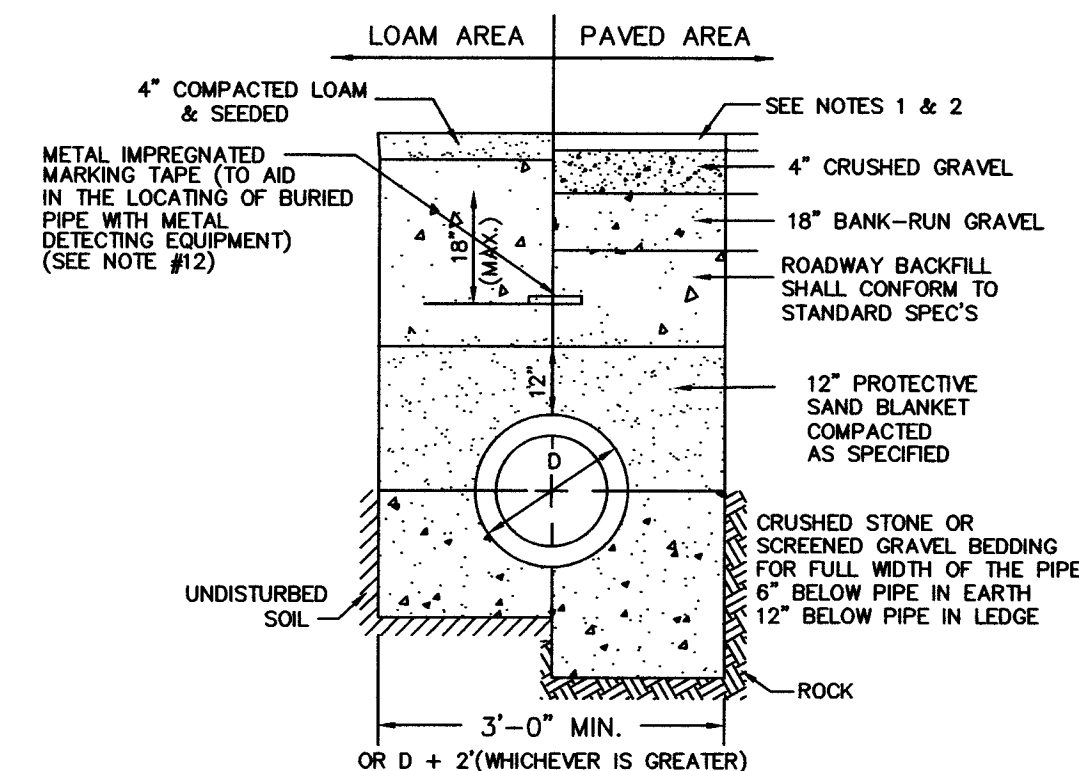
SERVICE BOX CONNECTIONS SHALL BE "FLUSH MOUNT" TO GREATEST EXTENT POSSIBLE AND LOCATED AT PROPERTY LINE CORNERS.



UTILITY TRENCH DETAIL

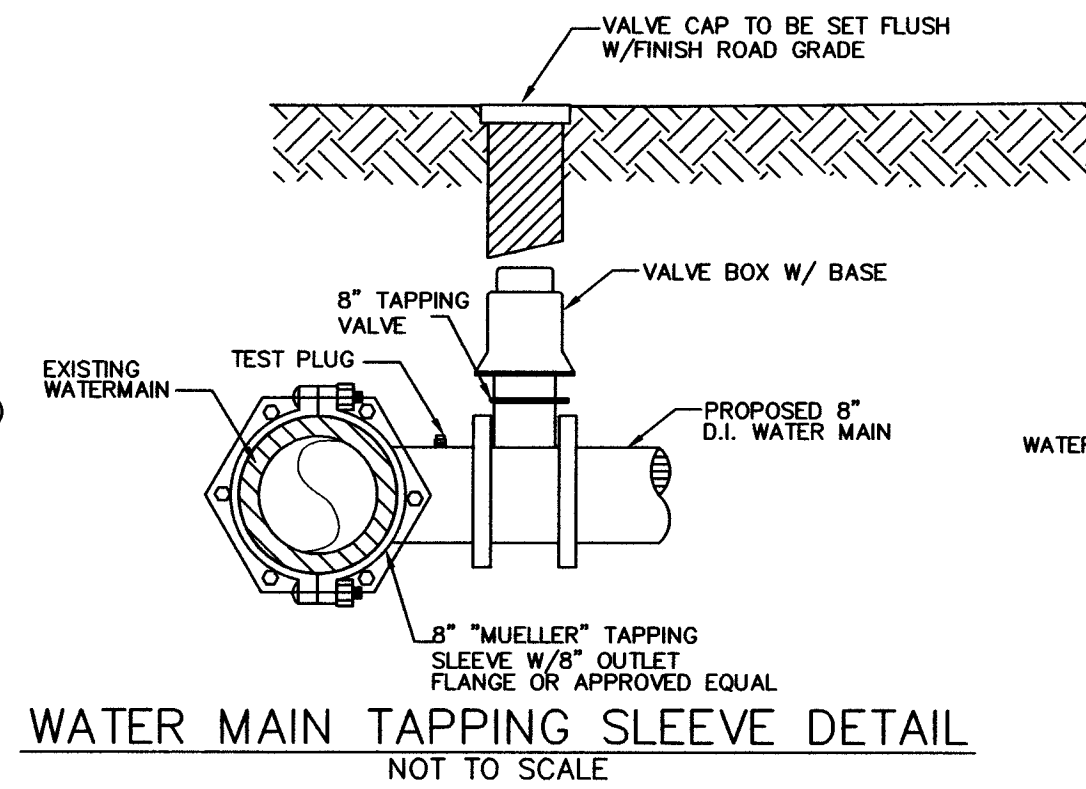


LEACHING CATCH BASIN
NOT TO SCALE

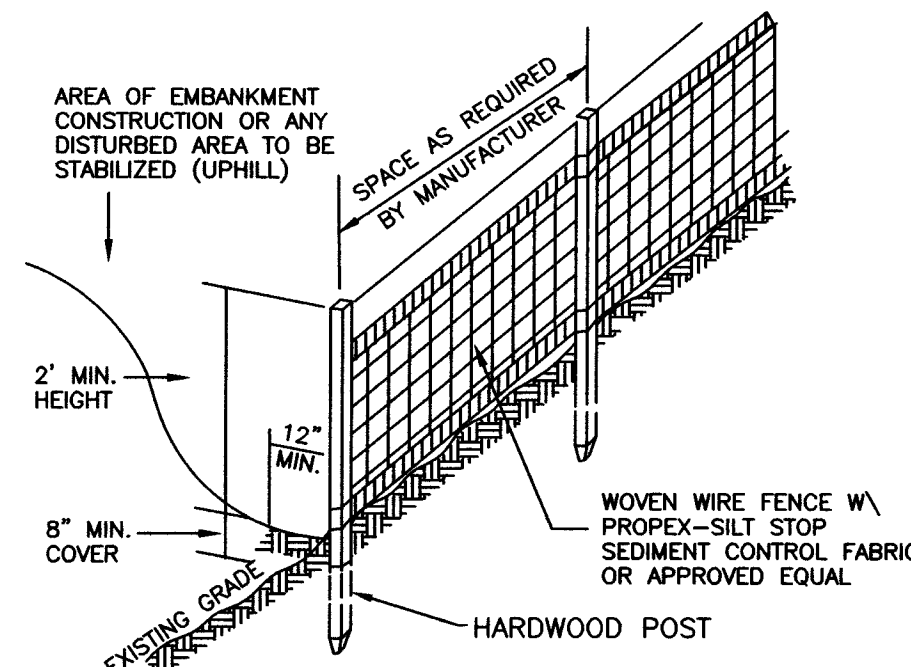


- NOTE:
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
 2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECS.

TYPICAL SEWER TRENCH DETAIL
NOT TO SCALE



WATER MAIN TAPPING SLEEVE DETAIL
NOT TO SCALE



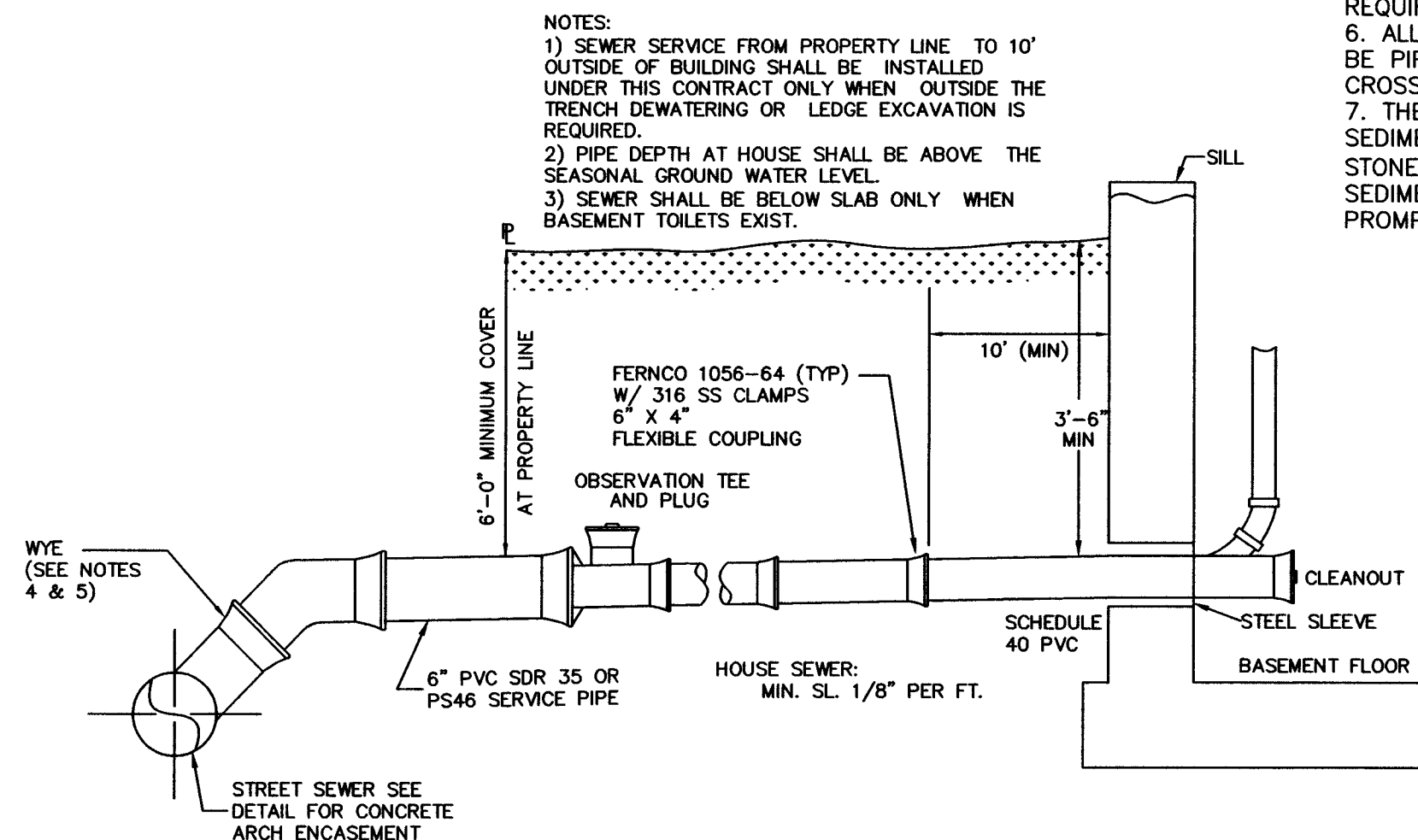
CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES AND FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP MID AND BOTTOM SECTIONS AND BE EMBEDDED INTO GROUND A MINIMUM OF 8". 2. THE FENCE POSTS SHALL BE A MINIMUM 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND PROPERLY DISPOSED OF.
5. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.
6. SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND RE-VEGETATED.

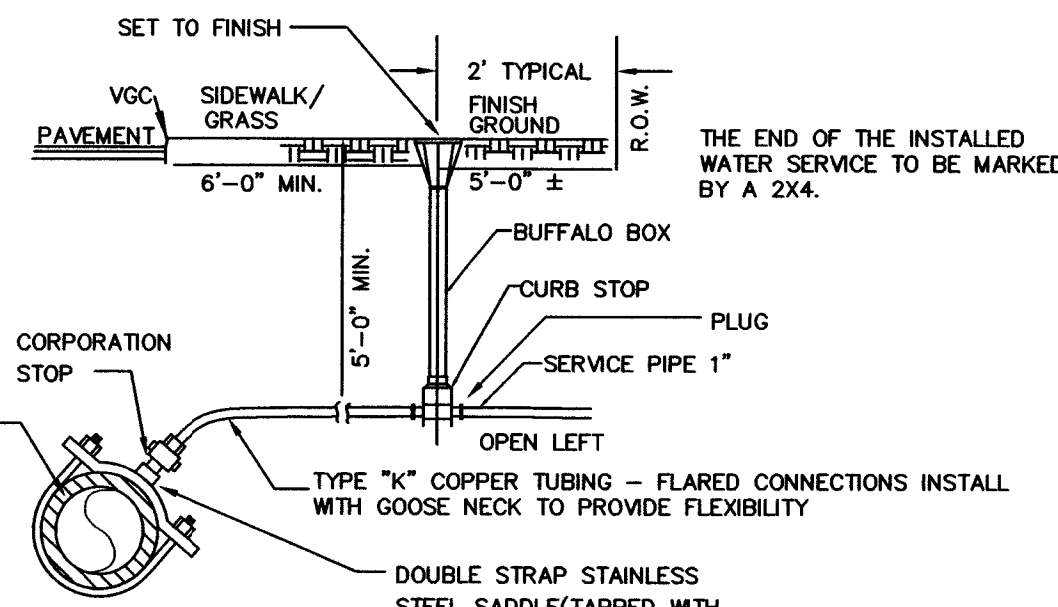
MAINTENANCE

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

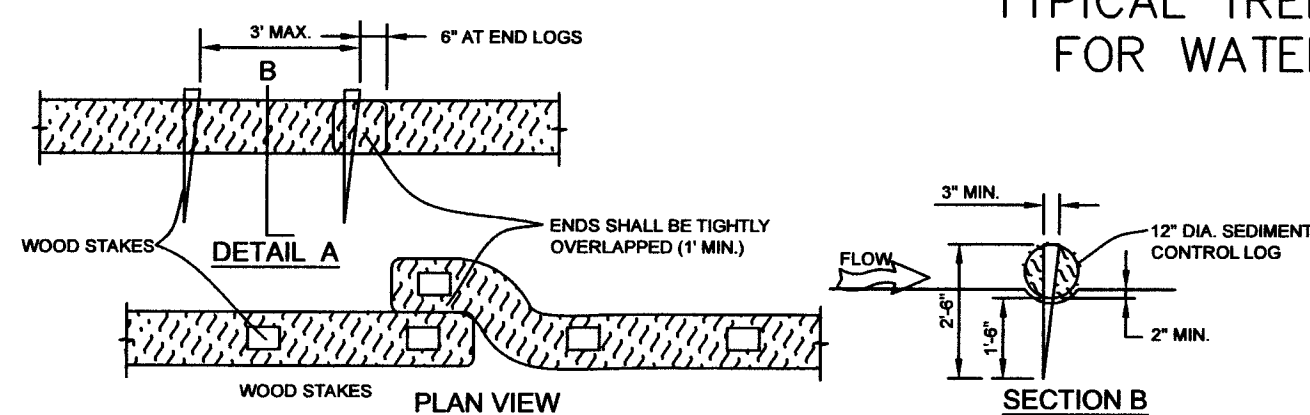
SILT FENCE



DETAIL OF HOUSE SEWER SERVICE

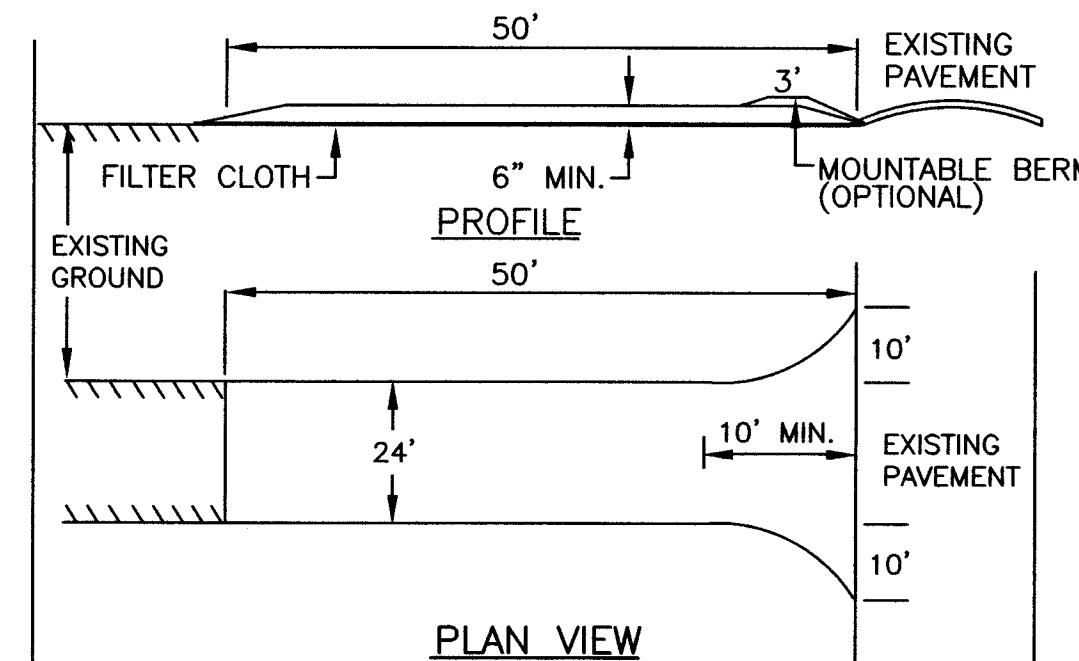


TYPICAL WATER SERVICE CONNECTION



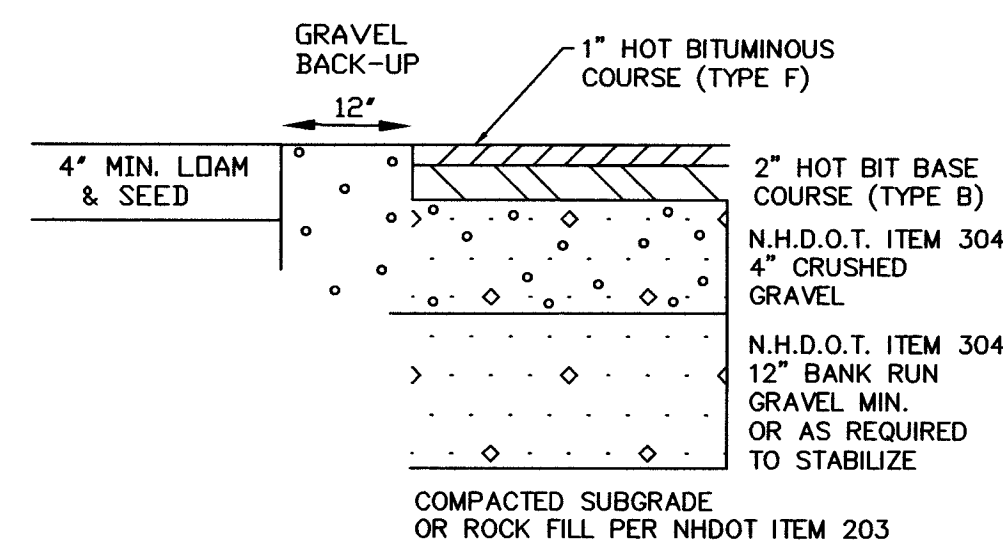
- SEDIMENT CONTROL LOG INSTALLATION NOTES
1. SEE PLAN VIEW FOR THE LOCATION AND LENGTH OF SEDIMENT CONTROL LOG.
 2. SEDIMENT CONTROL LOGS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.
 3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR, OR COCONUT FIBER.
 4. NOT FOR USE IN CONCENTRATED FLOW AREAS.
 5. THE SEDIMENT CONTROL LOG SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1/2 OF THE DIAMETER OF THE LOG.
- SEDIMENT CONTROL LOG MAINTENANCE NOTES
1. THE GEC OPERATOR SHALL INSPECT SEDIMENT CONTROL LOGS DAILY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
 2. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOGS SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT DEPTH IS WITHIN 1/2 THE HEIGHT OF THE CREST OF LOG.
 3. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

SEDIMENT CONTROL LOG



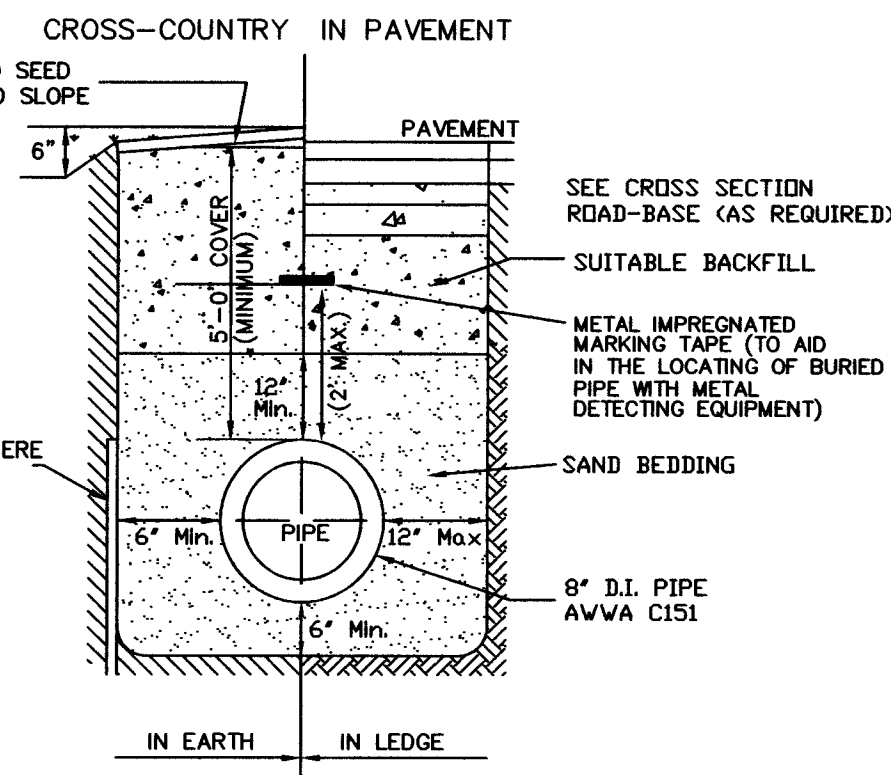
1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

STABILIZED CONSTRUCTION ENTRANCE



NOTE: IN AREAS OF ROCK EXCAVATION, MINIMUM 9" BANK RUN GRAVEL SHALL BE PLACED

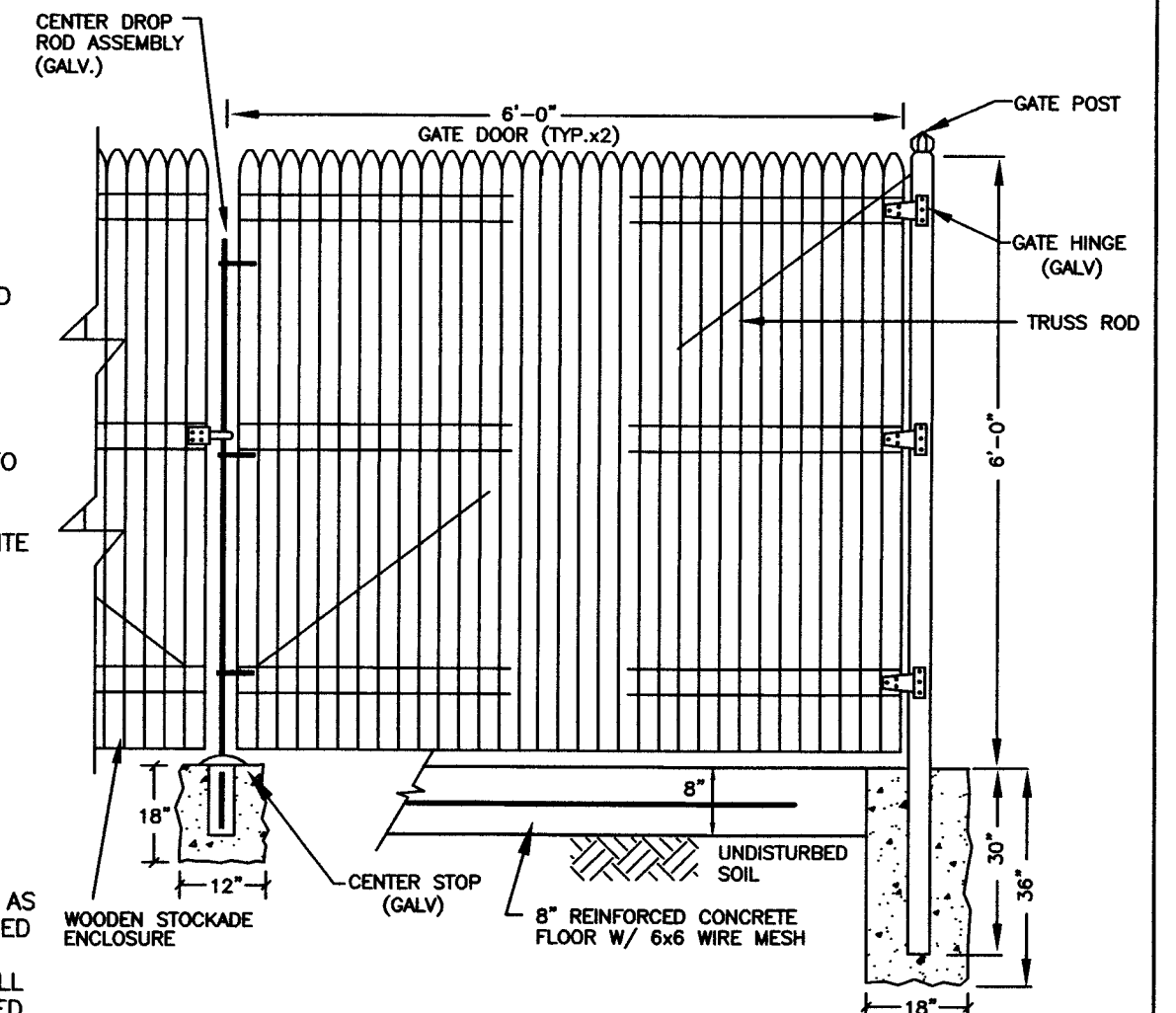
TYPICAL PAVEMENT SECTION
NEW ASPHALT - NTS



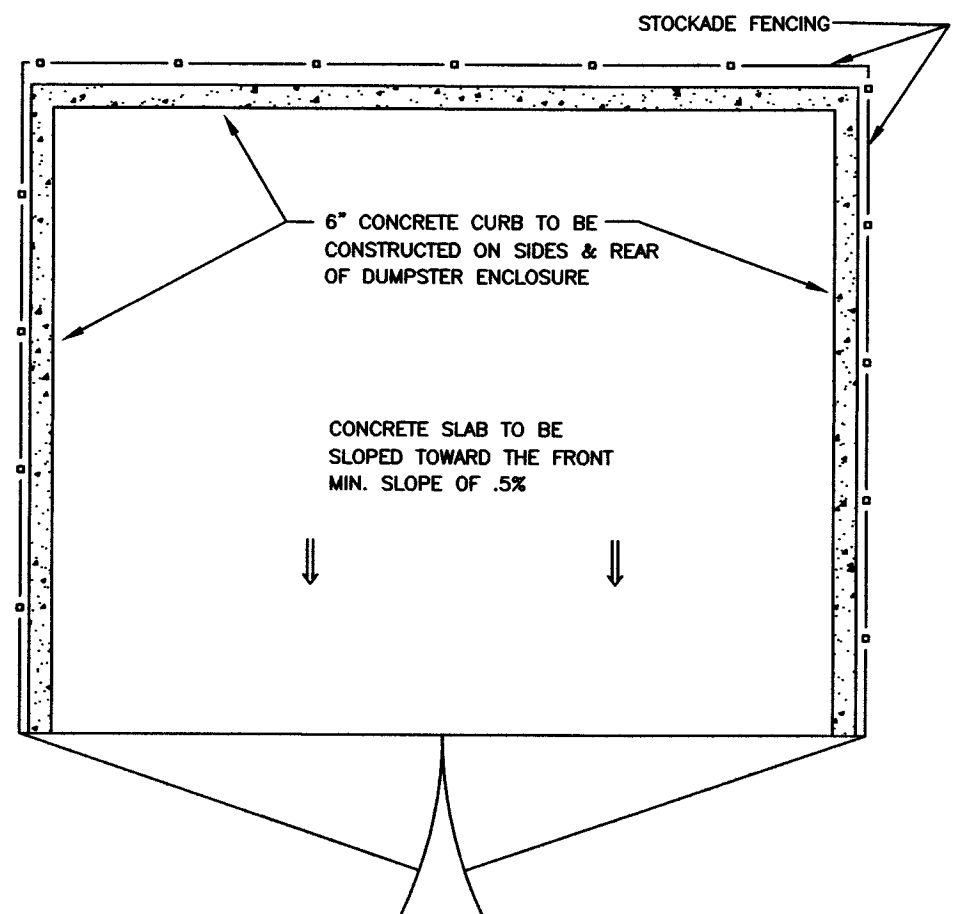
TYPICAL TRENCH DETAIL
FOR WATER SYSTEM

CONSTRUCTION SEQUENCE

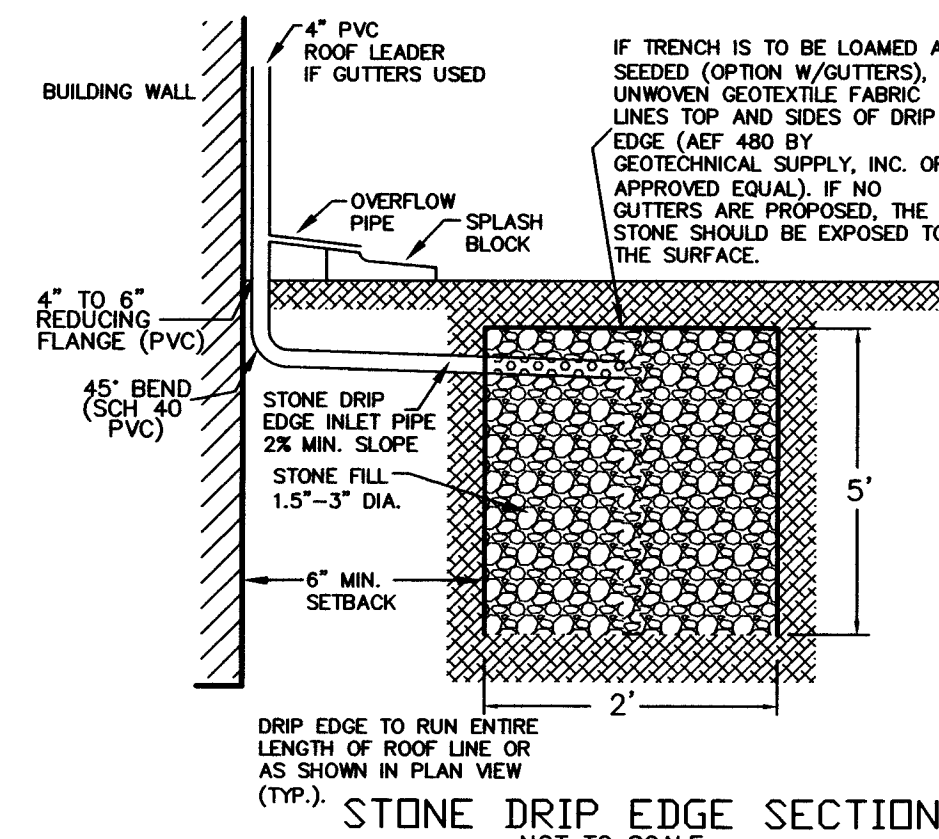
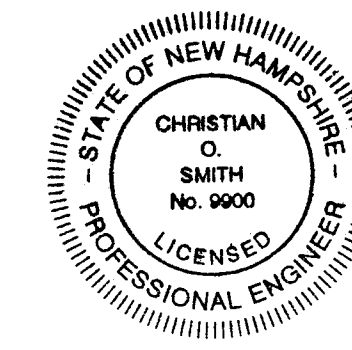
1. CUT AND REMOVE TREES IN CONSTRUCTION AREAS AS REQUIRED OR DIRECTED.
2. CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES AS REQUIRED. EROSION, SEDIMENT AND DETENTION CONTROL FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO ANY EARTH MOVING OPERATION AND PRIOR TO DIRECTING RUNOFF TO THEM.
3. CLEAR, CUT, CRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. STUMPS AND DEBRIS ARE TO BE REMOVED FROM SITE AND DISPOSED OF PER STATE AND LOCAL REGULATIONS IN PHASES AS DIRECTED.
4. EXCAVATE AND STOCKPILE TOPSOIL /LOAM. STOCKPILING SHALL NOT TAKE PLACE ON SLOPES GREATER THAN 10%. ALL AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
5. CONSTRUCT TEMPORARY DRAINAGE FEATURES AS REQUIRED OR DIRECTED.
6. CONSTRUCT THE ROADWAY/DRIVEWAYS AND ITS ASSOCIATED DRAINAGE STRUCTURES. ALL ROADWAYS, PARKING AREAS, AND CUT/FILL SLOPES SHALL BE STABILIZED AND/OR LOAMED AND SEEDED WITHIN 72-HOURS OF ACHIEVING FINISH GRADE AS APPLICABLE.
7. INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. ALL DISTURBED AREAS SHALL STABILIZED IMMEDIATELY AFTER GRADING.
8. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEED OR MULCHED AS REQUIRED, OR DIRECTED.
9. DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE CHECK DAMS, DITCHES, SEDIMENT TRAPS, ETC. TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS OR PROPERTY.
10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
12. REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER THE AREAS ARE STABILIZED AND ESTABLISHED THEMSELVES TO NO LESS THEN 85%, AS DETERMINED BY THE CITY OF LACONIA PLANNING DEPARTMENT IN CONJUNCTION WITH THE SITE ENGINEER. NO EROSION CONTROL DEVICES CAN BE REMOVED UNLESS INSPECTED BY THE ENGINEER AND PLANNING DEPARTMENT.
13. ALL SWALES AND DRAINAGE STRUCTURES WILL BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUNOFF DIRECTED TO THEM.
14. FINISH PAVING ALL ROADWAYS/DRIVEWAYS.
15. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.



STOCKADE DUMPSTER ENCLOSURE DETAIL
N.T.S.



DUMPSTER SLAB DETAILS
N.T.S.



STONE DRIP EDGE SECTION
NOT TO SCALE

PREPARED FOR:

DOVESTER HOLDINGS LLC
79 EXETER ROAD
NORTH HAMPTON, NH 03862

BEALS ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885
PHONE: 603-583-4860, FAX: 603-583-4863

REVISIONS:		DATE:
CONSTRUCTION/EROSION CONTROL DETAIL PLAN		
RESIDENTIAL DEVELOPMENT 24 HANSON STREET DOVER, NH TAX MAP 20 LOT 41		
DATE: JULY, 2018		SCALE: NTS
PROJ. NO: NH-916		SHEET NO. 4 OF 4



Michelle Shields
Design
Smart Creative Architecture
www.MichelleShieldsDesign.com

6 Rudolph Avenue
Kittery, Maine 03904
207-438-9829
Cell: 207-752-7623

PROJECT:
Dovester Holdings LLC
6 Unit Apartment

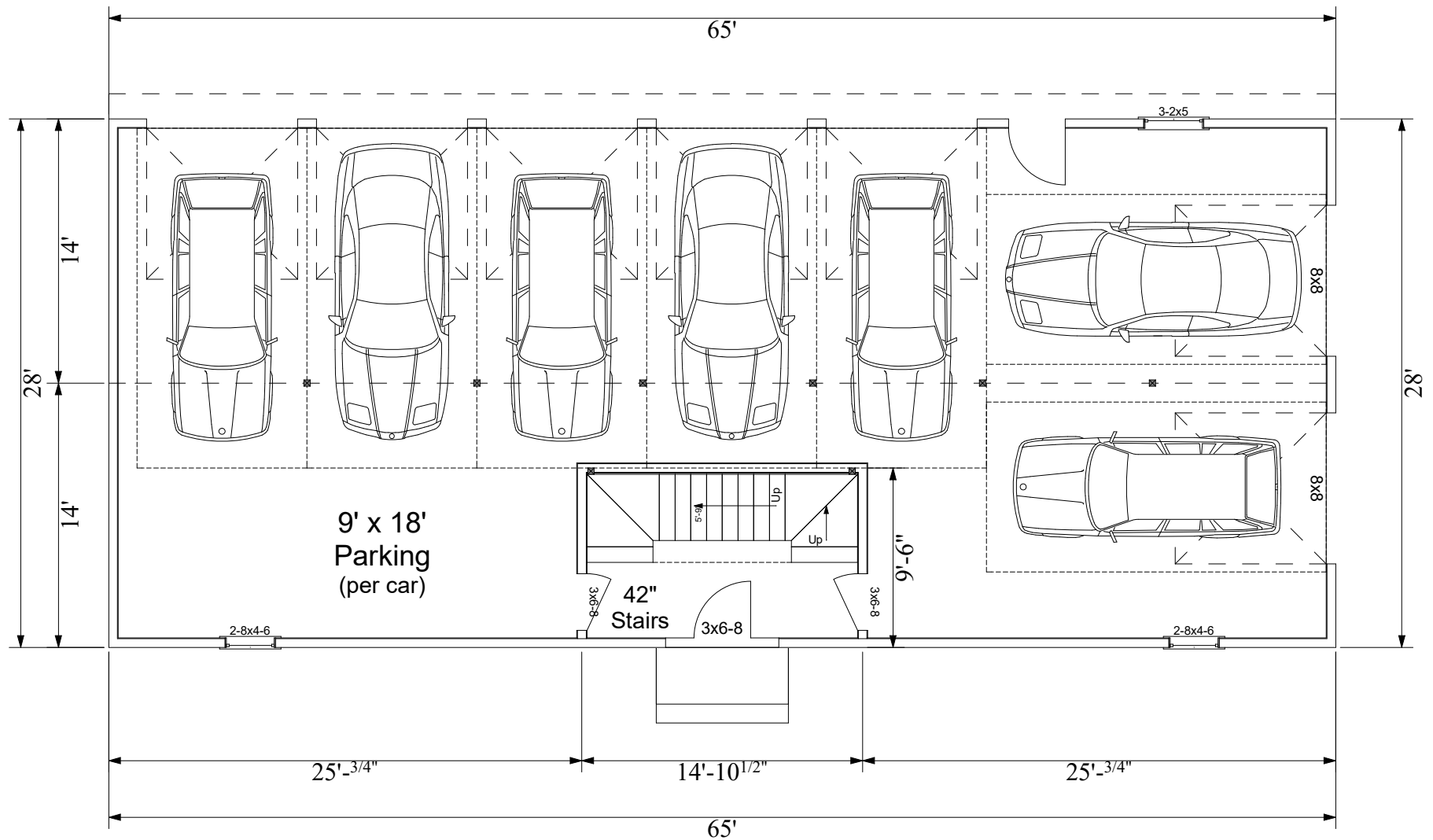
SITE:
24 Hanson Street
Dover, NH

ISSUED FOR:
Review
DATE:
June 27, 2018

SCALE:
None
(Letter)

TITLE:
Proposed
Renderings

SHEET:
3D



**Michelle Shields
Design**
Smart Creative Architecture
www.MichelleShieldsDesign.com

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Kittery, Maine 03904
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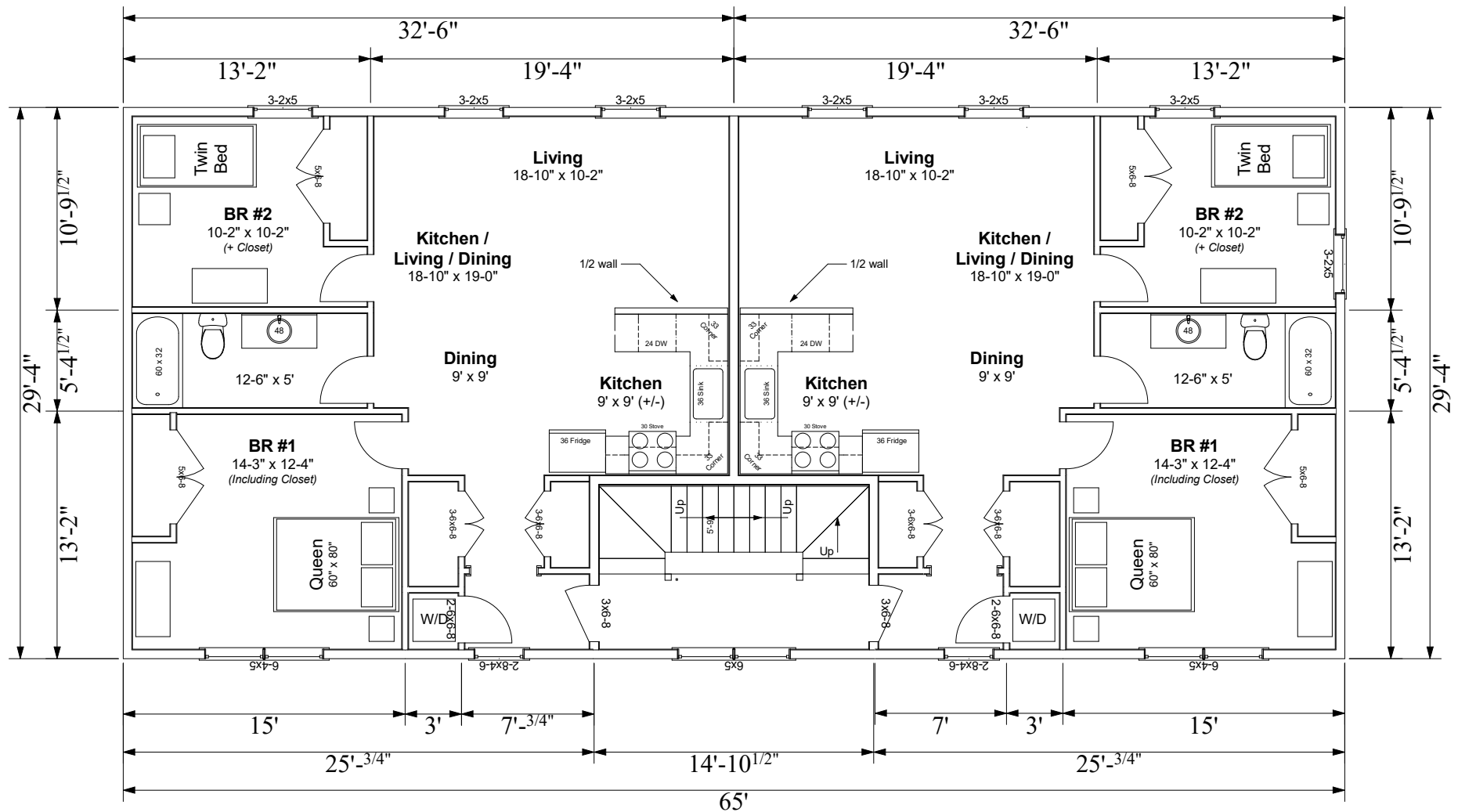
SITE:
24 Hanson Street
Dover, NH

ISSUED FOR:
Review
DATE:
June 27, 2018

SCALE:
1/8" = 1'-0"
(Letter)

TITLE:
Proposed 8'
First Floor

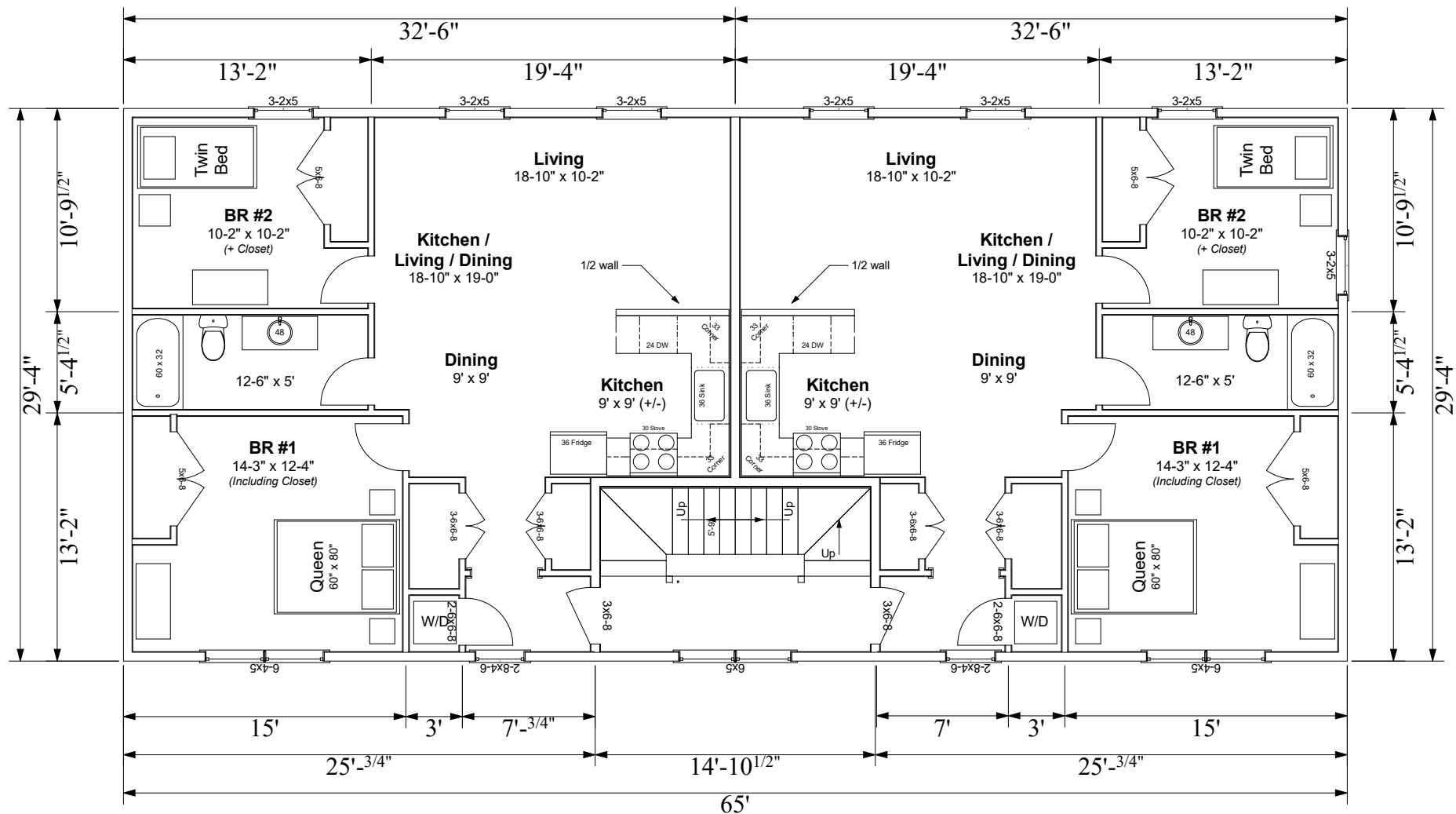
SHEET:
P1



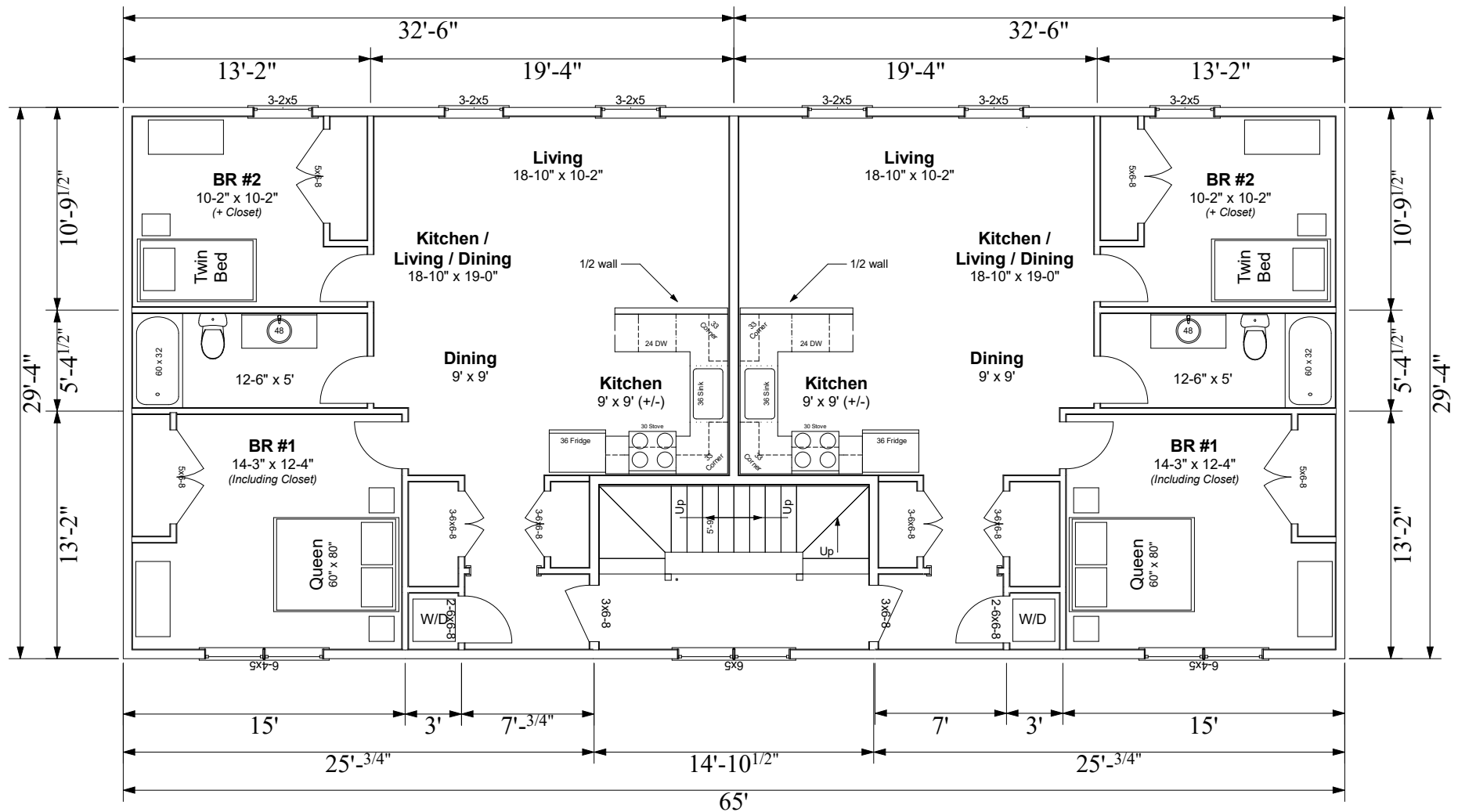
Unit #1

Unit #2

Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	PROJECT: Dovester Holdings LLC 6 Unit Apartment	SITE: 24 Hanson Street Dover, NH	ISSUED FOR: Review DATE: June 27, 2018	SCALE: 1/8" = 1'-0" (Letter)	TITLE: Proposed 8' Second Floor (883 s.f. per unit)	SHEET: P2
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Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	PROJECT: Dovester Holdings LLC 6 Unit Apartment	SITE: 24 Hanson Street Dover, NH	ISSUED FOR: Review	SCALE: 1/8" = 1'-0" (Letter)	TITLE: Proposed 8' Third Floor (883 s.f. per unit)	SHEET: P3
				DATE: June 27, 2018			



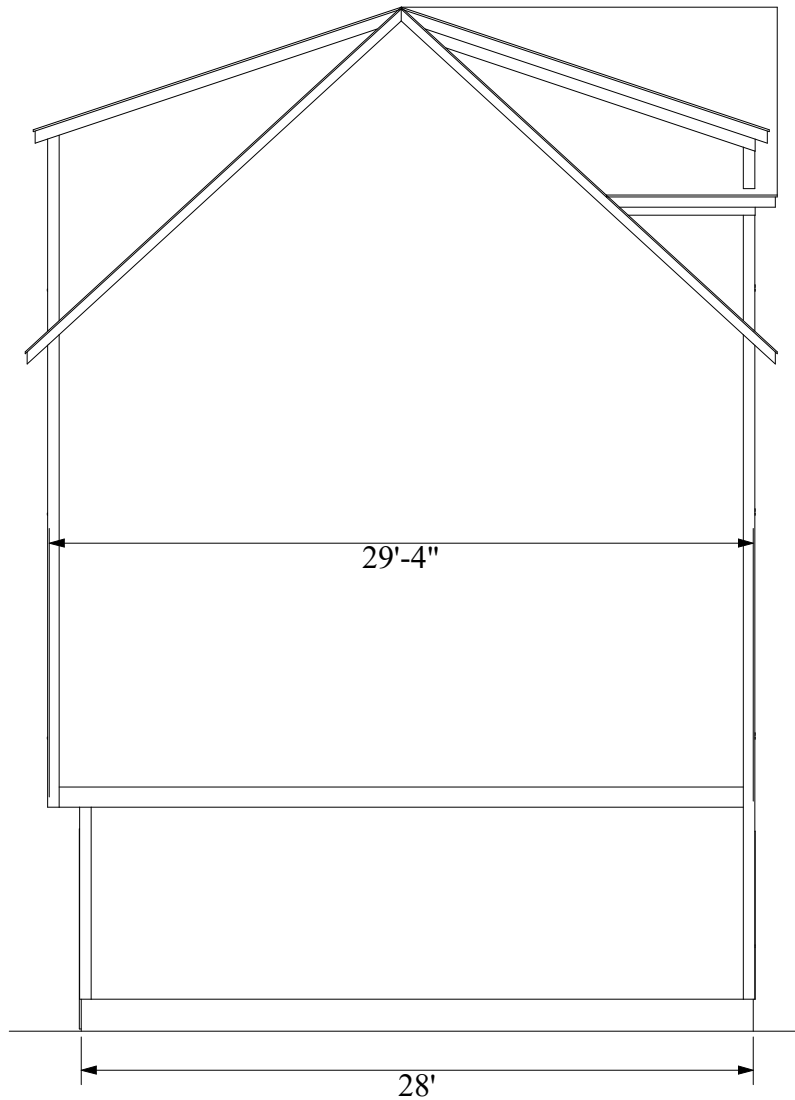
Unit #5

Unit #6

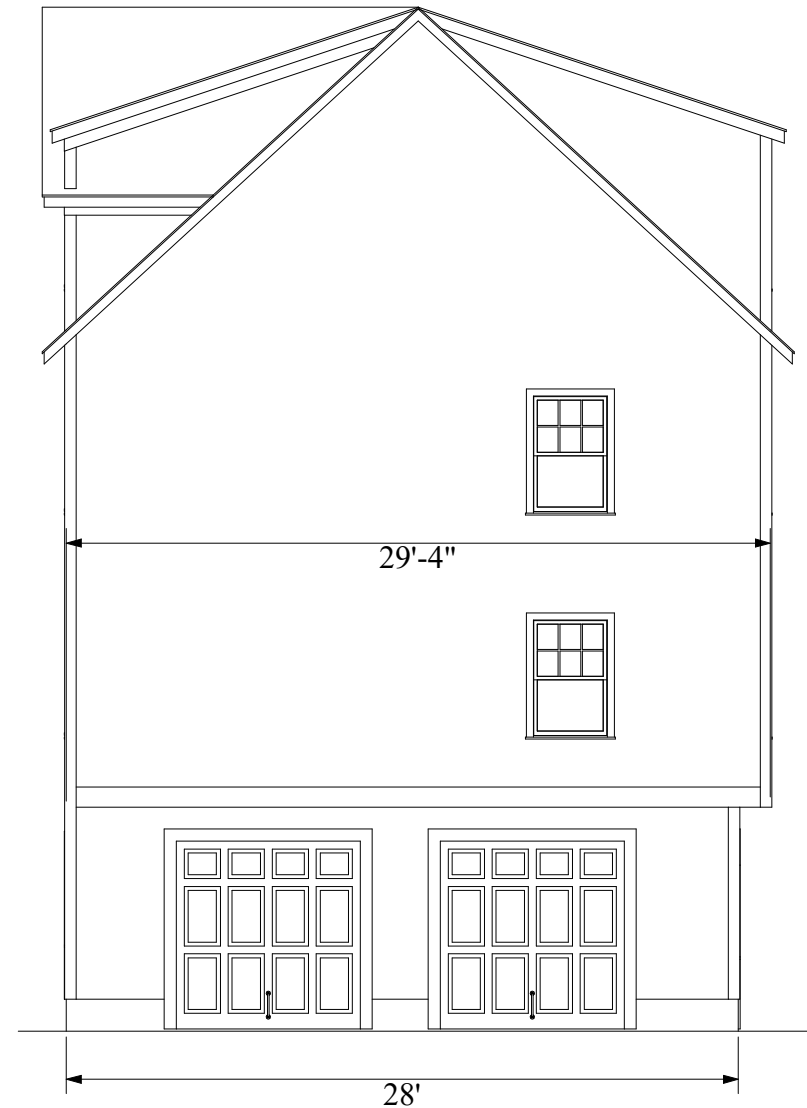
Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	PROJECT: Dovester Holdings LLC 6 Unit Apartment	SITE: 24 Hanson Street Dover, NH	ISSUED FOR: Review	SCALE: 1/8" = 1'-0" (Letter)	TITLE: Proposed 8' Fourth Floor (883 s.f. per unit)	SHEET: P4
				DATE: June 27, 2018			



Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	<u>PROJECT:</u> Dovester Holdings LLC 6 Unit Apartment	<u>SITE:</u> 24 Hanson Street Dover, NH	<u>ISSUED FOR:</u> Review	<u>SCALE:</u> 1/8" = 1'-0" (Letter)	<u>TITLE:</u> Proposed Front Elevation	<u>SHEET:</u> P5
				<u>DATE:</u> June 27, 2018			

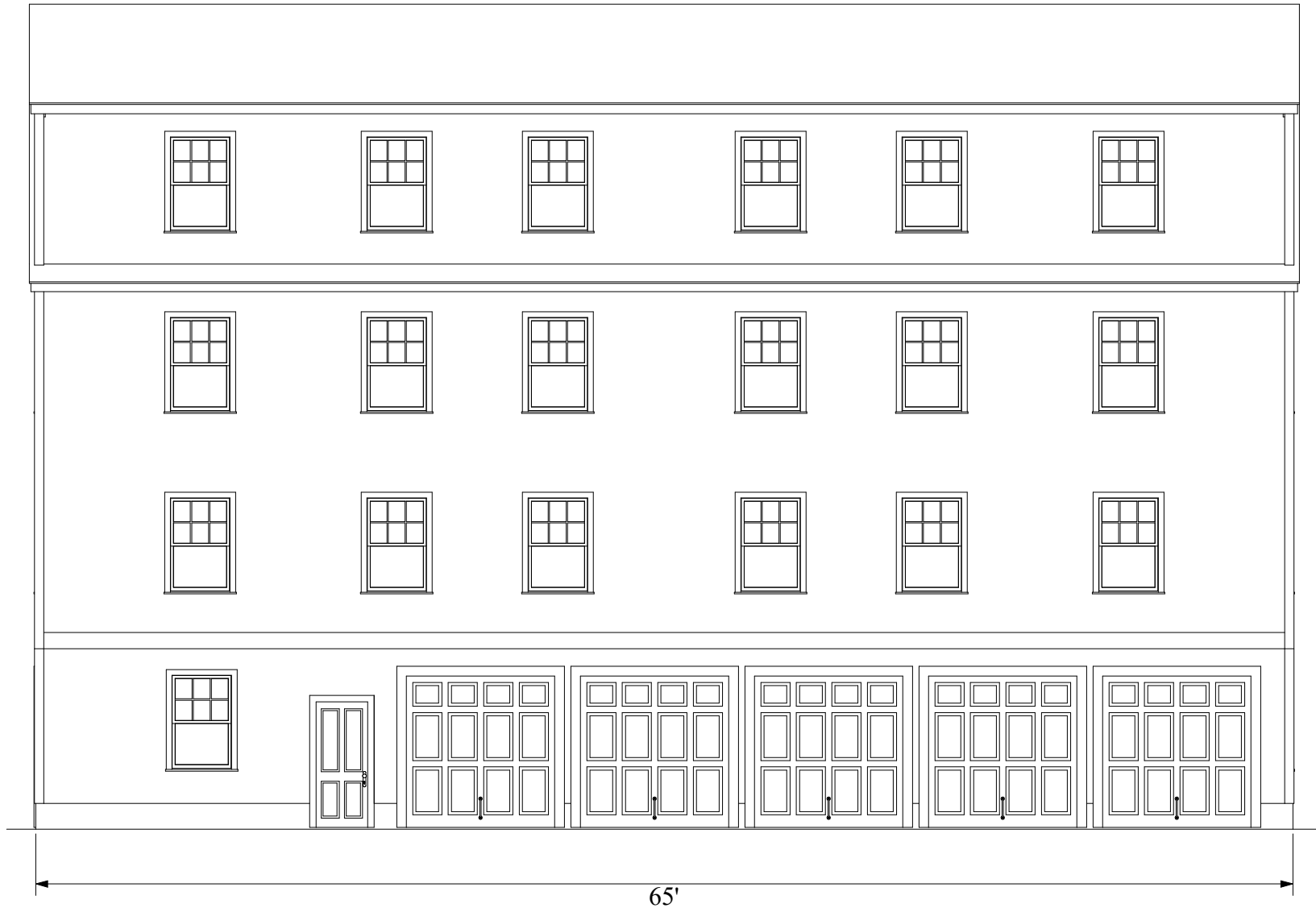


Left



Right

Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	<u>PROJECT:</u> Dovester Holdings LLC 6 Unit Apartment	<u>SITE:</u> 24 Hanson Street Dover, NH	<u>ISSUED FOR:</u> Review	<u>SCALE:</u> 1/8" = 1'-0" (Letter)	<u>TITLE:</u> Proposed Side Elevations	<u>SHEET:</u> P6
				<u>DATE:</u> June 27, 2018			



Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	<u>PROJECT:</u> Dovester Holdings LLC 6 Unit Apartment	<u>SITE:</u> 24 Hanson Street Dover, NH	<u>ISSUED FOR:</u> Review	<u>SCALE:</u> 1/8" = 1'-0" (Letter)	<u>TITLE:</u> Proposed Rear Elevation	<u>SHEET:</u> P7
				<u>DATE:</u> June 27, 2018			

Snow Maintenance Plan 24 Hanson Street, Dover, NH

The following is General Procedure for: Sidewalks, Drives and Parking Lots:

The general policy of the Facilities Management is to provide safe travel for residents using the drive aisles and parking lots.

- The application of a sand and/or salt mixture will commence when the paved drives and parking lots become a safety hazard (slick) to cars and pedestrians.
- Facilities Management will monitor the conditions either by help from residents or an on-site inspection of conditions by personnel.
- Sanding will be done from the onset of hazardous conditions to a point where snowplowing is inevitable.

Criteria for this is: from a **“trace up to 3 inches of accumulations”**.

If snow continues past the 3-inch amount, the drive aisles and parking lots will be plowed. Sanding will follow until pavement is safe.

Sidewalks and Building Entrances: The application of a chemical deicer will commence when sidewalks become a safety hazard (slick) to pedestrian traffic. Sidewalk plowing/sweeping will commence when 1” or more has accumulated. Main and ADA entrances are first priority.

- The goal is to have all primary and main entrance sidewalks cleared by 7:30 a.m.
- Chemical deicer will be applied to primary sidewalks and north side/shaded areas if it is deemed necessary.
- Building entrances and ramps will be cleared by hand to a point away from the entry where mechanical equipment can remove the snow.
- Plowing will continue until all sidewalks have been cleaned.

Long Term Maintenance: Snow is to be stored in areas depicted on the approved Parking and Pavement site plan. Snow shall not be stored in drive aisles, parking stalls nor in front of trash receptacles.

- Extreme care is to be used to prevent any impact on the downslope residence on George Street.
- At any point if the plow berm exceeds 3’ in height along parking stalls, the berm shall be removed by bucket loader, Bobcat or similar and trucked off site and legally disposed of.



City of Dover, New Hampshire CONDITIONAL USE PERMIT APPLICATION

[Revision Date: May 18, 2017]

Office Use Only

Project #:

Date Received:

Amount Paid:

Time Received:

APPLICANT AND OWNER INFORMATION

Name of Applicant: Dovester Holdings, LLC Telephone # 603-770-5630

Address of Applicant: 79 Exeter Road, North Hampton, NH 03862

E-Mail Address: jwhite912@comcast.net

Name of Property Owner (if different from applicant): Jason White Telephone # 603-770-5630

Address of Property Owner: _____

PROPERTY INFORMATION

Assessor's Map # 20 Lot(s) # 41

Address of Property: 24 Hanson Street

Zoning District(s) CBD Overlay District(s) Wetlands/Steep Slope

Existing Use of Property: Apartment Rental Property

CONDITIONAL USE PERMIT INFORMATION

Type of Conditional Use Permit (Check All That Apply):

- | | | |
|---|---|--|
| ☒ Conservation District | ☐ RCM Use Overlay District | ☐ I-1 District Uses |
| ☐ Groundwater Protection | ☐ Off-Street Parking and Loading | ☐ Alternative Treatment Center |
| ☒ Wetland Protection District | ☐ Central Business District | ☐ Heritage Residential District |

Describe Proposed Use or Activity That Requires Conditional Use Permit and Describe Any Impacts:

The request for the conditional use permit is to construct a 6 unit apartment building in the location of the existing garage. We are asking for a Conditional Use Permit for 100s.f. of impact within the wetland buffer, and 680 s.f. of impact within the steep slope.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: There are no state or federal permits required for this project.

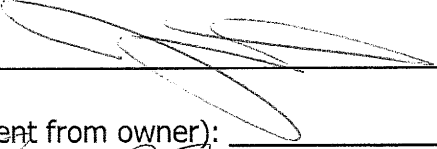
Name of Professional That Prepared Plans: Christian O smith, P.E.

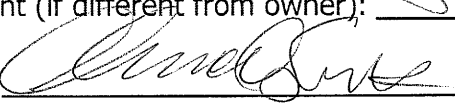
Address 70 Portsmouth Ave. 3rd Floor Stratham, NH 03885 Telephone #: 603-583-4860

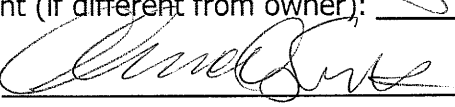
Professional License #: NH-9900 E-mail address: csmith@bealsassociates.com

SIGNATURES

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

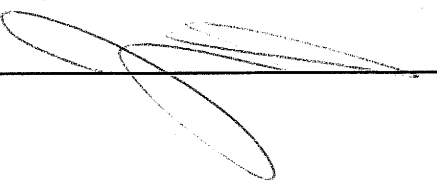
Signature of Property Owner:  Date: 12/27/17

Signature of Applicant (if different from owner):  Date:

Signature of Agent:  Date: 12-27-17

AUTHORIZATION TO ENTER SUBJECT PROPERTY

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner:  Date: 12/27/17