TOWN OF BEDFORD
PLANNING BOARD MEETING

REVISED

425 Cherry Street
Bedford Hills, New York 10507
Tuesday
July 14, 2015
8:00 PM

Public Hearing:

8:00 PM Special Use Permit – Accessory Structure Over 20 Feet in Height – Barn
Section 62.17 Block 1 Lot 6, R-4A Zone
20-40 Black Brook Road, Bedford
Owner/Applicant: **George Bianco**
(Consider Special Use Permit.)

Conferences:

1. Special Use Permit – Tennis Court
Section 83.13 Block 1 Lot 7, R-4A Zone
326 South Bedford Road, Bedford Corners
Owner: **326 South Bedford Road, LLC**
Applicant: **Carol Kurth Architecture, P.C.**
(Review Field Trip notes. Consider Special Use Permit.)

2. Preliminary Subdivision Approval – Two Lot Subdivision
Section 94.9 Block 1 Lot 7, R-4A Zone
385 Byram Lake Road, Bedford Corners
Owners/Applicants: **Timothy and Lisa Ghriskey**
(Review Field Trip notes. Consider Waiver of Subdivision Approval.)

3. Special Use Permit – Accessory Apartment
Section 84.17 Block 1 Lot 10, R-1A Zone
17 Gordon Avenue, Bedford
Owners/Applicants: **Nicholas and Denise Delfico**
(Review Field Trip notes. Consider Special Use Permit.)

4. Waiver of Site Plan Approval –
Section 72.5 Block 1 Lots 9, 10, RB Zone
527 Bedford Road, Bedford Hills
Owner – **Shullman Family LP**
Applicant – **Russell Speeders of Bedford Hills, LLC**
(Consider SEQR action.)

5. Preliminary Site Plan Approval – Estate Motors
Section 71.12 Block 2 Lot 31 and 32, RB and LI Zones
793 Bedford Road, Bedford Corners
Owner: **John Nohilly**
Section 71.12 Block 2 Lot 36, LI Zone
799 Bedford Road, Bedford Hills
Owner: **DP 21, LLC**
Applicant: **John N. Galanin, Estate Motors**
(Consider Lead Agency designation.)

6. Waiver of Site Plan Approval – Outdoor Dining Canopy
49-15-4-52, CB Zone
175 Katonah Avenue, Katonah
Owner: **Bgig Realty, Inc.**
Applicant: **Blue Dolphin Diner**
(Consider Waiver of Site Plan Approval)

Approval of Minutes:

December 9, 2014

Supporting documentation for all items on this agenda is available at the Town of Bedford website.
(www.bedfordny.gov)
Larger documents and plans are available at the office of the Planning Board.
Agenda items subject to change.

PLANNING BOARD
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

APPLICATION FOR A SPECIAL USE PERMIT

Submit to: Bedford Planning Board, Town House, Bedford Hills, N.Y. 10507

GEO BIANCO@GMAIL.COM

1. **INDENTIFICATION OF OWNER**
   Name of owner: George Bianco
   Address: 20 Black Brook Rd Pound Ridge Phone: 914 234-9550
2. **INDENTIFICATION OF APPLICANT, IF OTHER THAN OWNER**
   Name of applicant: Same
   Address: _____ Phone: _____
3. **PROFESSIONAL PERSON PREPARING SUBDIVISION PLAT**
   Name: N/A
   Address _____ Phone _____
4. **INDENTIFICATION OF PROPERTY**
   a. Subdivision name or identifying title _____
   b. Roads which property abuts _____
   c. Bedford tax map designation: Section 62.17 Block 1 Lot(s) 6
   d. Property lies in a (circle one) 4A 2A 1A 1/2A 1/4 A TF VA NB CE PB-R PB-O LI Zoning District.
   e. Total area of property in acres 9.118
5. **REQUEST**

The applicant requests that the Planning Board approve the issuance of a Special Use Permit under the following section of the Code of the Town of Bedford

Article: _____, Section _____

The applicant proposes the following Special Permit Use:

Barn Height over 20'

3/05

(over)

6. **PUBLIC NOTICE**

Notice of the public hearing shall be published at least 10 days prior to the hearing in the Town newspaper and shall be mailed by the applicant at least 10 days prior to the hearing to all owners of property within 500 feet of the perimeter of the subject lot. The expense of publishing and mailing any notice shall be paid by the applicant, who shall file an affidavit mailing with the Board Secretary prior to the hearing.

7. **SITE PLAN**

Attach a Preliminary Site Plan Application Form, fee and eleven (11) copies of a Preliminary Site Plan complying with all requirements of Article IX, Section 125-88 of the Bedford Town Code.

8. **FEES** (make checks payable to the Town of Bedford)

Special Use Permit Application: $_____ $_____

Preliminary Site Plan:
$500 plus $25 per parking space required by the Bedford Town Code: $_____

Total: $_____

Permission is hereby given to the Town of Bedford, its agents, servants and employees to enter upon the above described property solely for the purposes incidental to the within application at reasonable times upon reasonable notice to the owner or tenant in possession.

All applications shall be signed by the owner of the property affected by this application and by the applicant, if other than the owner.

Signature of Owner — Date: 6/11/15

Signature of Applicant — Date: 6/11/15

Name of Owner (Please Print): George Bianco — Date: 6/11/15

Name of Applicant (Please Print): George Bianco — Date: 6/11/15

PLANNING BOARD
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

ENVIRONMENTAL CLEARANCE FORM

(This Side to be Completed by Applicant)

1. INDENTIFICATION OF OWNER

Name of owner: George Bianco
Address: 20 Black Brook Rd Pound Ridge NY Phone: 914 234-9550

2. INDENTIFICATION OF APPLICANT, IF OTHER THAN OWNER

Name of applicant: Same
Address: _____ Phone: _____

3. INDENTIFICATION OF SITE INVOLVED, if any

a. Name or other identification of site _____
b. Roads which site abuts Old Post Rd (121) - Black Brook Road
c. Bedford tax map designation: Section: 62.17 Block 1 Lot (s) 6
d. Total site area 7.118 Acres
e. Does the applicant have a whole or partial interest in lands adjoining this site? No

4. INDENTIFICATION OF PROPOSED ACTION

a. Description of Proposed Action Erecting Barn over 20' high.
b. Relationship to other actions:

1. List any further actions which may be undertaken, of which this proposed action is part or first step, e. g. further subdivision of a large parcel of land: No
2. List any related actions which may be undertaken, of which this proposed action, e.g. highway reconstruction to serve increased traffic: No
3. List any actions which are dependent upon this proposed action, and therefore should be reviewed as part of this action, e.g. house construction in the case of a residential subdivision: No

All such actions must be reviewed in conjunction with the action proposed.

5. CLASSIFICATION OF PROPOSED ACTION (see lists of Type I, II, Exempt, Excluded Actions)

☐ **Type I.** An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☒ **Type II or Exempt Action.** No Environmental Impact Statement is needed. Submit this form only.

☐ **Unlisted Action.** Pending Analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

04/05

Signature of Applicant

6/11/15
Date

TOWN OF BEDFORD
ENVIRONMENTAL CLEARANCE FORM
(This side only for Official Use Only)

1. **CLASSIFICATION APPROVED; FURTHER ACTION REQUIRED:**

☐ **Type I Action.** The proposed action will have a significant effect on the environment. An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☐ **Type II or Exempt or Excluded Action.** No Environmental Impact Statement is needed. No further action required.

☐ **Unlisted Action.** The proposed project may have a significant effect on the environment. Pending analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

2. **COMMENTS:**

_____

_____

_____

_____

_____

Town Agency	Agency Signature	Date

PLANNING BOARD
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

APPLICATION FOR A SPECIAL USE PERMIT

Submit to: Bedford Planning Board, Town House, Bedford Hills, N.Y. 10507

1. INDENTIFICATION OF OWNER
   Name of owner: 326 South Bedford Road LLC
   Address: 326 South Bedford RD, Bedford Corners NY Phone (212)492-5661
2. INDENTIFICATION OF APPLICANT, IF OTHER THAN OWNER
   Name of applicant: Carol Kurth Architecture, PC
   Address: 644 Old Post Rd, Bedford NY 10506 Phone (914)234-2595
3. PROFESSIONAL PERSON PREPARING SUBDIVISION PLAT
   Name: N/A
   Address _____ Phone _____
4. INDENTIFICATION OF PROPERTY
   a. Subdivision name or identifying title _____
   b. Roads which property abuts Rt 172 / South Bedford Rd
   c. Bedford tax map designation Section 83.13 Block 1 Lot(s) 7
   d. Property lies in a (circle one) 4A 2A 1A 1/2A 1/4 A TF VA NB CE PB-R PB O LI Zoning District.
   e. Total area of property in acres 10.395 AC
5. REQUEST

The applicant requests that the Planning Board approve the issuance of a Special Use Permit under the following section of the Code of the Town of Bedford

Article: V, Section: 125-50

The applicant proposes the following Special Permit Use:

NEW TENNIS COURT

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3/06

(over)

6. PUBLIC NOTICE

Notice of the public hearing shall be published at least 10 days prior to the hearing in the Town newspaper and shall be mailed by the applicant at least 10 days prior to the hearing to all owners of property within 500 feet of the perimeter of the subject lot. The expense of publishing and mailing any notice shall be paid by the applicant, who shall file an affidavit mailing with the Board Secretary prior to the hearing

7. SITE PLAN

Attach a Preliminary Site Plan Application Form, fee and eleven (11) copies of a Preliminary Site Plan complying with all requirements of Article IX, Section 125-88 of the Bedford Town Code

8. FEES (make checks payable to the Town of Bedford)

Special Use Permit Application: $_____ $_____

Preliminary Site Plan:
$500 plus $25 per parking space required by the Bedford Town Code: $_____

Total: $_____

Permission is hereby given to the Town of Bedford, its agents, servants and employees to enter upon the above described property solely for the purposes incidental to the within application at reasonable times upon reasonable notice to the owner or tenant in possession

All applications shall be signed by the owner of the property affected by this application and by the applicant, if other than the owner

Signature of Owner Date

ON BEHALF OF
322 SOUTH BEDFORD ROAD LLC

Signature of Applicant 4/30/15
Date

Name of Owner (Please Print) Date

Name of Applicant (Please Print) 4/30/15
Date

PLANNING BOARD
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

ENVIRONMENTAL CLEARANCE FORM

(This Side to be Completed by Applicant)

1. INDENTIFICATION OF OWNER

Name of owner: 326 South Bedford Road LLC
Address: 326 South Bedford Rd. Bedford Corners NY Phone: (212)492-5661

2. INDENTIFICATION OF APPLICANT, IF OTHER THAN OWNER

Name of applicant: Carol Kurth Architecture, PC
Address: 644 Old Post Rd, Bedford NY 10506 Phone: (914)234-2595

3. INDENTIFICATION OF SITE INVOLVED, if any

a. Name or other identification of site 326 South Bedford RD
b. Roads which site abuts Rt172 / South Bedford Rd
c. Bedford tax map designation: Section: 83.13 Block 1 Lot (s) 7
d. Total site area 10.395 AC
e. Does the applicant have a whole or partial interest in lands adjoining this site? No

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4. INDENTIFICATION OF PROPOSED ACTION

a. Description of Proposed Action NEW TENNIS COURT

b. Relationship to other actions:

1. List any further actions which may be undertaken, of which this proposed action is part or first step, e. g. further subdivision of a large parcel of land: N/A

2. List any related actions which may be undertaken, of which this proposed action , e.g. highway reconstruction to serve increased traffic: N/A

3. List any actions which are dependent upon this proposed action, and therefore should be reviewed as part of this action, e.g. house construction in the case of a residential subdivision: N/A

All such actions must be reviewed in conjunction with the action proposed.

5. CLASSIFICATION OF PROPOSED ACTION (see lists of Type I, II, Exempt, Excluded Actions)

☐ **Type I.** An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☒ **Type II** or **Exempt Action**. No Environmental Impact Statement is needed. Submit this form only.

☐ **Unlisted Action.** Pending Analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

04/05

Signature of Applicant

4.30.15
Date

TOWN OF BEDFORD
ENVIRONMENTAL CLEARANCE FORM
(This side only for Official Use Only)

1. CLASSIFICATION APPROVED; FURTHER ACTION REQUIRED:

☐ **Type I Action.** The proposed action will have a significant effect on the environment. An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☐ **Type II** or **Exempt** or **Excluded Action.** No Environmental Impact Statement is needed. No further action required.

☐ **Unlisted Action.** The proposed project may have a significant effect on the environment. Pending analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

2. COMMENTS:

_____

_____

_____

_____

_____

Town Agency	Agency Signature	Date

PLANNING BOARD
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

APPLICATION FOR PRELIMINARY SUBDIVISION APPROVAL

Submit to: Bedford Planning Board, Town House, Bedford Hills, N.Y. 10507

1. INDENTIFICATION OF OWNER
   Name of owner: Timothy M. and Lisa B. Ghriskey

   Address: 385 Byram Lake Road, Mount Kisco, NY Phone: (914) 241-2324

2. INDENTIFICATION OF APPLICANT, IF OTHER THAN OWNER
   Name of applicant: Same as owner

   Address: 385 Byram Lake Road, Mount Kisco, NY Phone: (914) 241-2324

3. PROFESSIONAL PERSON PREPARING SUBDIVISION PLAT
   Name: Peter J. Gregory, P.E. - Keane Coppelman Gregory Engineers, PC

   Address 113 Smith Avenue, Mount Kisco, NY 10549 Phone: (914) 241-2235

4. INDENTIFICATION OF PROPERTY
   a. Subdivision name or identifying title Ghriskey Two Lot Subdivision
   b. Roads which property abuts Byram Lake Road & Sarles Street
   c. Bedford tax map designation: Section 94.90 Block 1 Lot(s) 7
   d. Property lies in a (circle one) 4A 2A 1A 1/2A 1/4 A TC VA NB CE PB-R PB-O LI
   e. Total area of property in acres 9.347 acres

5. REQUIRED INFORMATION
   a. Items required as part of this application are shown on the checklist on the other side of the application. Indicate all items submitted and if necessary, submit a statement explaining the absence of any items.
   b. Waivers: Attach a list of any waivers of the provisions of the Subdivision of Land Chapter of the Town of Bedford requested and an explanation of the special circumstances therefor
   c. Fees: An application fee of $500 plus $150 for each new lot or dwelling unit. Lots or Units 2. Fee $ 800.00.
   d. Consideration of conservation subdivision of the property (is) (is not) requested. Date of Town Board authorization _____

Permission is hereby given to the Town of Bedford, its agents, servants and employees to enter upon the above described property solely for the purposes incidental to the within application at reasonable times upon reasonable notice to the owner or tenant in possession.

All applications shall be signed by the owner of the property affected by this application and by the applicant if other than the owner.

Signature of Owner Date 4/3/15 Signature of Applicant Date

Lisa B. Ghriskey
Name of Owner (please print) Name of Applicant (please print)

10/09 (over)

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ITEMS TO ACCOMPANY APPLICATION

(1) Eleven (11) copies each of the preliminary subdivision plat___, final construction plans___, topographic map_____, and map of contiguous holdings_____

(2) Copy of deed or deeds to the subject property as well as copies of easement agreements affecting said property_____.

(3) The engineer's or surveyor's certification of the total area of the subdivision shown on the on the plat_____, the length of all proposed roads shown on the plat, ___, and the staking of the subdivision as required under Section 107-31 of the Town Code.

(4) Proof of approval by the Wetlands Control Commission of any alterations to existing terrain conditions which are subject to the issuance of a permit by such Commission. (See Wetlands Chapter of the Town Code)

(5) Such additional information, maps or studies, including but not limited to soils studies, hydrographic studies, as the Planning Board my deem necessary to study and determine the capacity of the land in relation to the proposed subdivision and any required assessment and/or impact statements.

(6) Any required assessment and/or impact statements required pursuant to the New York State Environmental Quality Review Act (SEQRA)

CONSERVATION SUBDIVISIONS ONLY

(7) Approval by resolution of the Town Board authorizing the Planning Board to consider a conservation subdivision of the subject property.

(8) Statement requesting application of the conservation subdivision procedure stating the purpose of the plan and listing proposed Town Code modifications_____.

(9) Four copies each of a sketch layout and preliminary construction plans for a conventional subdivision, in accordance with Section 107-31 of the Town Code.

(10) Site development plan where authorization to construct attached buildings is requested___.

PLANNING BOARD
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

ENVIRONMENTAL CLEARANCE FORM

(This Side to be Completed by Applicant)

1. INDENTIFICATION OF OWNER

Name of owner: Timothy M. and Lisa B. Ghriskey
Address: 385 Byram Lake Road, Mount Kisco, NY 10549 Phone: (914) 241-2324

2. INDENTIFICATION OF APPLICANT, IF OTHER THAN OWNER

Name of applicant: Same as owner
Address: _____ Phone: _____

3. INDENTIFICATION OF SITE INVOLVED, if any

a. Name or other identification of site Ghriskey Two Lot Subdivision
b. Roads which site abuts Byram Lake Road & Sarles Street
c. Bedford tax map designation: Section: 94.9X Block 1 Lot (s) 7
d. Total site area 9.347 acres
e. Does the applicant have a whole or partial interest in lands adjoining this site? Yes

4. INDENTIFICATION OF PROPOSED ACTION

a. Description of Proposed Action A proposed two (2) lot subdivision (creation of one new lot).

b. Relationship to other actions:

1. List any further actions which may be undertaken, of which this proposed action is part or first step, e. g. further subdivision of a large parcel of land: N/A

2. List any related actions which may be undertaken, of which this proposed action , e.g. highway reconstruction to serve increased traffic: N/A

3. List any actions which are dependent upon this proposed action, and therefore should be reviewed as part of this action, e.g. house construction in the case of a residential subdivision: Construction of a single family four (4) bedroom dwelling.

All such actions must be reviewed in conjunction with the action proposed.

5. CLASSIFICATION OF PROPOSED ACTION (see lists of Type I, II, Exempt, Excluded Actions)

☐ **Type I.** An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☐ **Type II** or **Exempt Action.** No Environmental Impact Statement is needed. Submit this form only.

☐ **Unlisted Action.** Pending Analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

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04/05

Signature of Applicant

4/3/15
Date

TOWN OF BEDFORD
ENVIRONMENTAL CLEARANCE FORM
(This side only for Official Use Only)

1. **CLASSIFICATION APPROVED; FURTHER ACTION REQUIRED:**

☐ **Type I Action.** The proposed action will have a significant effect on the environment. An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☐ **Type II** or **Exempt** or **Excluded Action.** No Environmental Impact Statement is needed. No further action required.

☐ **Unlisted Action.** The proposed project may have a significant effect on the environment. Pending analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

2. **COMMENTS:**

_____

_____

_____

_____

_____

Town Agency	Agency Signature	Date

KEANE
COPPELMAN
GREGORY
ENGINEERS, P.C.
CIVIL & ENVIRONMENTAL CONSULTANTS

113 SMITH AVENUE
MOUNT KISCO, NY 10549
T:(914) 241-2235 F:(914) 241-6787

May 1, 2015

Mr. Jeffrey Osterman, Director of Planning
Town of Bedford
425 Cherry Street
Bedford Hills, New York 10507

Re: Timothy & Lisa Ghriskey
Proposed Two Lot Subdivision
385 Byram Lake Road

Dear Mr. Osterman and Members of the Town of Bedford Planning Board:

This office has prepared a Preliminary Subdivision Application for Timothy and Lisa Ghriskey of 385 Byram Lake Road, Bedford. The property, referred to as Section 94.9~~1~~, Block 1, Lot 7, is approximately 9.35 acres in size and located along the northern side of Byram Lake Road at the northeast corner of its intersection with Sarles Street. The owners are seeking Subdivision approval to subdivide their property creating an additional new lot with the intention of building a new home for their use. Lot 1, 5.35 acres, consists of the existing dwelling, in-ground swimming pool, cottage and a barn while Lot 2, 4.00 acres, will consist of a new four bedroom dwelling.

The property is located within the R4A Residential District and is in a low density residential neighborhood where residences are separated by large wooded areas and meadows. The property contains two wetland areas along the northern and western portions of the property. The wetland area located along the northern portion of the property is part of the NYSDEC jurisdictional wetland K-13. There will be no impact to wetlands or regulated wetland buffers as a result of the development of the proposed Lot 2.

Attached please find 1~~1~~ copies of a Preliminary Subdivision Application including a Preliminary Plat, Integrated Plot Plan, Wetlands Survey prepared by Paul J. Jaehnig and the required application fee. At this time, the Applicant requests that this application package be accepted and included on the May 26, 2015 Planning Board Agenda.

Should you have any questions or require any further information, feel free to contact me.

Very Truly Yours,

Peter J. Gregory, P.E.
President

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BEDFORD PLANNING BOARD

PLANNING BOARD
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

APPLICATION FOR A SPECIAL USE PERMIT

Submit to: Bedford Planning Board, Town House, Bedford Hills, N.Y. 10507

email: ndsnr@optonline.n

1. **INDENTIFICATION OF OWNER**
   Name of owner: Denice & Nicholas Delfico
   Address: 17 Gordon Ave., Bedford, NY 10506 Phone 914-552-9201
2. **INDENTIFICATION OF APPLICANT, IF OTHER THAN OWNER**
   Name of applicant: Same
   Address: _____ Phone: _____
3. **PROFESSIONAL PERSON PREPARING SUBDIVISION PLAT**
   Name: _____
   Address N/A Phone _____
4. **INDENTIFICATION OF PROPERTY**
   a. Subdivision name or identifying title _____
   b. Roads which property abuts Gordon Avenue
   c. Bedford tax map designation: Section 84.17 Block 1 Lot(s) 10
   d. Property lies in a (circle one) 4A 2A (1A) 1/2A 1/4 A TF VA NB CE PB-R PB-O LI Zoning District.
   e. Total area of property in acres 1 Acre
5. **REQUEST**

The applicant requests that the Planning Board approve the issuance of a Special Use Permit under the following section of the Code of the Town of Bedford.

Article: VIII, Section: 125-79

The applicant proposes the following Special Permit Use:

Accessory apartment in an existing structure.

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BEDFORD PLANNING BOARD

3/05

(over)

6. PUBLIC NOTICE

Notice of the public hearing shall be published at least 10 days prior to the hearing in the Town newspaper and shall be mailed by the applicant at least 10 days prior to the hearing to all owners of property within 500 feet of the perimeter of the subject lot. The expense of publishing and mailing any notice shall be paid by the applicant, who shall file an affidavit mailing with the Board Secretary prior to the hearing.

7. SITE PLAN

Attach a Preliminary Site Plan Application Form, fee and eleven (11) copies of a Preliminary Site Plan complying with all requirements of Article IX, Section 125-88 of the Bedford Town Code.

8. FEES (make checks payable to the Town of Bedford)

Special Use Permit Application: $_____ $ 200

Preliminary Site Plan:
$500 plus $25 per parking space required by the Bedford Town Code: $ 0

Total: $_____

Permission is hereby given to the Town of Bedford, its agents, servants and employees to enter upon the above described property solely for the purposes incidental to the within application at reasonable times upon reasonable notice to the owner or tenant in possession.

All applications shall be signed by the owner of the property affected by this application and by the applicant, if other than the owner.

Denice DelRico 3/31/15
Signature of Owner Date

Signature of Applicant Date

Denice DelRico 3/31/15
Name of Owner (Please Print) Date

Name of Applicant (Please Print) Date

PLANNING BOARD
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

ENVIRONMENTAL CLEARANCE FORM

(This Side to be Completed by Applicant)

1. INDENTIFICATION OF OWNER

Name of owner: Denice + Nicholas Delfico
Address: 17 Gordon Ave., Bedford, NY 10506 Phone: 914-552-9201

2. INDENTIFICATION OF APPLICANT, IF OTHER THAN OWNER

Name of applicant: N/A
Address: _____ Phone: _____

3. INDENTIFICATION OF SITE INVOLVED, if any

a. Name or other identification of site _____
b. Roads which site abuts Gordon Avenue
c. Bedford tax map designation: Section: 84.17 Block 1 Lot (s) 10
d. Total site area 1 Acre
e. Does the applicant have a whole or partial interest in lands adjoining this site? yes

4. INDENTIFICATION OF PROPOSED ACTION

a. Description of Proposed Action Accessory Apartment in an existing structure
b. Relationship to other actions:

1. List any further actions which may be undertaken, of which this proposed action is part or first step, e. g. further subdivision of a large parcel of land: none
2. List any related actions which may be undertaken, of which this proposed action, e.g. highway reconstruction to serve increased traffic: none
3. List any actions which are dependent upon this proposed action, and therefore should be reviewed as part of this action, e.g. house construction in the case of a residential subdivision: none

All such actions must be reviewed in conjunction with the action proposed.

5. CLASSIFICATION OF PROPOSED ACTION (see lists of Type I, II, Exempt, Excluded Actions)

☐ **Type I.** An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☒ **Type II** or **Exempt Action.** No Environmental Impact Statement is needed. Submit this form only.

☐ **Unlisted Action.** Pending Analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

04/05

Denice Delfico
Signature of Applicant

3/31/15
Date

TOWN OF BEDFORD
ENVIRONMENTAL CLEARANCE FORM
(This side only for Official Use Only)

1. CLASSIFICATION APPROVED; FURTHER ACTION REQUIRED:

☐ **Type I Action.** The proposed action will have a significant effect on the environment. An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☐ **Type II** or **Exempt** or **Excluded Action.** No Environmental Impact Statement is needed. No further action required.

☐ **Unlisted Action.** The proposed project may have a significant effect on the environment. Pending analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

2. COMMENTS:

_____

_____

_____

_____

_____

Town Agency	Agency Signature	Date

APPLICATION FOR DENICE AND NICHOLAS DELFICO

17 GORDON AVENUE, BEDFORD, NY.

This is a request for a Special Use Permit for an Accessory Apartment in an existing structure that will be attached to a single family residence.

The residence structure and the structure in which the accessory apartment is to be located have been in existence prior to 1984.

We are the owners of the lot and occupy one of the dwelling units on the property.

There will be no more than five persons occupying the lot.

There will be no more than one accessory apartment on this lot.

The lot meets the lot area, yard and coverage requirements for the zoning district in which it is located except for the pre-existing, non-conforming rear yard setbacks:

- The total building coverage with the attachment will be 9% where 10% is allowed.
- The total impervious coverage with the attachment will be 11.9% where 20% is allowed.
- The rear yard setback is 36.8 feet where 50 feet is required.

There is a separate entrance to the accessory apartment at the side of the structure.

There is a minimum of two off-street parking spaces suitable for year-round use.

The structure is 845 square feet and does not exceed 25% of the total floor area of the principal residence structure.

A survey of the property and dimensional floor plan of the proposed accessory apartment have been submitted to the Planning Board and Building Inspector for review.

The water supply is fed from the main house which is checked annually by the Westchester County Department of Health and there is a Construction Approval from the Westchester County Department of Health for a separate sewage disposal system for the accessory apartment.

The Building Inspector has previously inspected the accessory apartment.

We understand that the permit shall be limited to five years and may be renewed by application to the Building Inspector. We also understand that prior to the renewal of the permit; the Building Inspector shall inspect the building and determine that all of the criteria imposed upon the original special use permit continue to be met.

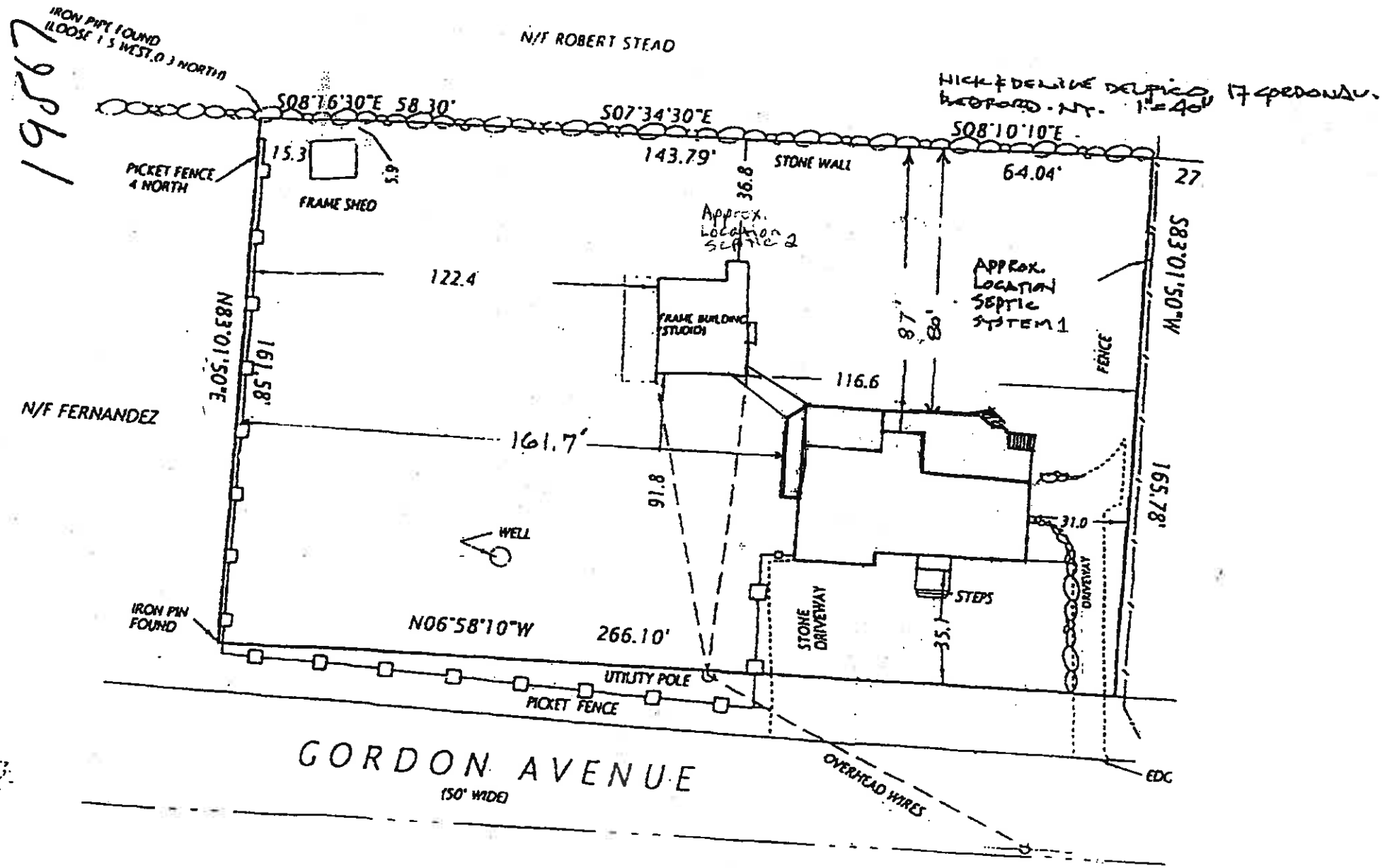
Sincerely,

Denice Delfico

Nicholas Delfico

Denice and Nicholas Delfico

19567


IRON PIPE FOUND
(LOOSE 1.5 WEST, 0.3 NORTH)
N/F ROBERT STEAD
S08°16'30"E 58.30'
S07°34'30"E
143.79'
S08°10'10"E
64.04'
STONE WALL
36.8
15.3
5.9
FRAME SHED
PICKET FENCE
4 NORTH
Approx. Location Septic 2
122.4
FRAME BUILDING (STUDIO)
116.6
87'
80'
APPROX. LOCATION SEPTIC SYSTEM 1
FENCE
S83°01'50"W
N83°01'50"E
161.58'
N/F FERNANDEZ
161.7'
91.8
165.78'
31.0
WELL
IRON PIN FOUND
N06°58'10"W
266.10'
STONE DRIVEWAY
STEPS
35.1
DRIVEWAY
UTILITY POLE
PICKET FENCE
GORDON AVENUE
(50' WIDE)
OVERHEAD WIRES
EDG

LETTER OF PERMIT DENIAL

Town of Bedford
Building Dept.
425 Cherry St.
914-666-8040

Parcel ID: **84.17-1-10**

Application #:

Date: **5/16/2014**

Owner Information

Delfico, Nicholas

Applicant Information

Delfico, Nicholas
17 Gordon Ave

Bedford Village NY 10506

Location: 17 Gordon Ave
Parcel ID: 84.17-1-10
Permit Type: Cottage/Accessory Apartment
Work Description: Legalization of accessory building currently being used as a Cottage. Its legal use is a Studio as defined by the Certificate of Compliance 2036A issued on 11/29/84.

Dear Resident,
Regarding the application for a Special Permit on the property referenced above, the following facts are noted. This property is located in R-1A Zoning District. The requirements of the Zoning Ordinance of the Town of Bedford in comparison to your proposal are listed as follows:

In accordance with Article VIII Section 125-79.1of the Town Code, a Special Use Permit of the Planning Board is required for accessory cottages. Accessory cottages are permitted in Residential 2 and 4 Acre Zoning Districts. This parcel is located in the Residential 1 Acre Zoning District where cottages are not permitted. The rear yard setback for the existing accessory building is 36.8 feet where 50 feet is required in the Residential 1Acre Zoning District.
Amended application and plans filed on 7/30/14

Because your project does not meet the requirements of the Town of Bedford Zoning Ordinance, your application for a building permit is DENIED. If you wish to proceed with your request, you may, within sixty days of this letter, apply to the of the above provisions

Very truly yours,

Steven Fraietta
Building Inspector

APPLICATION OF DENICE AND NICHOLAS DELFICO
17 GORDON AVENUE

This is a request for a Special Use Permit for a Residential Cottage in an existing accessory building. Currently existing is a structure of 873 square feet with a kitchen and bath. There is a Certificate of Occupancy for the structure as a Studio issued on November 29, 1984. Because the structure is in a R1A Zone, we are asking for a denial from the Planning Board so that we may ask the Zoning Board of Appeals for a variance.

The structure was built by the previous owner in 1984. According to the tax assessor's card, the existing cottage features have been in existence since that time. We purchased this property in 1991 and other than normal maintenance; there have been no changes, additions or alterations to the inside of the accessory structure. We have been paying taxes on the structure as it is now for 23 years.

The structure is accessory to a one family dwelling in which we reside, there is only one accessory building on our property and there is a minimum of two off-street parking spaces suitable for year-round use provided on the lot.

We previously made an application for a variance, and then withdrew because the structure exceeded 25% of the total floor area of the principal residence. Since that time, we have renovated the main residence so that the structure would meet the square footage requirements. The structure is 873 square feet and does not exceed 25% of the total floor area of the principal residence structure which is 4, 200 square feet.

The water supply is fed from the main house which is checked annually by the Westchester County Department of Health and the approval of the Westchester County Department of Health for the septic is pending.

The structure is set back on the property and far from any neighbors. Behind the property is a wooded, unbuildable hill. In the past, we have considered attaching the main residence with the accessory structure, in which case the accessory structure would appear to satisfy the requirements for an accessory apartment in a one family dwelling. However, we would like to ask if the structure could remain unattached as a Cottage. Besides the expense of building the attachment, we believe that attaching the accessory structure to the main residence would not only present an appearance that is not in character with the neighborhood, but would also not be in character with the Town of Bedford which is known for its cottages.

Thank you very much,

Denice and Nicholas Delfico

WILSON ELSER

June 18, 2015

Robert A. Spolzino
914.872.7497 (direct)
914.924.2350 (mobile)
Robert.Spolzino@wilsonelser.com

Chairperson Deirdre Courtney-Batson and the
Members of the Planning Board of the Town of Bedford
425 Cherry Street
Bedford Hills, NY 10507

Re: ***Application of Shullman Family Limited Partnership***
Russell Speeder's Car Wash
527 North Bedford Road

Dear Chairperson Courtney-Batson and Members of the Planning Board:

On behalf of the Shullman Family Limited Partnership and the Russell Speeder's of Bedford Hills LLC, I am pleased to enclose herewith a supplemental report by our sound consultant, Maria L. Castellucci, with respect to most recent sound testing she has done.

Basically, in order to satisfy the Town's noise standards for nights and Sundays, Russell Speeder's has installed a variable frequency drive, or VFD, which can reduce the speed of the blower in order to reduce the noise it generates. Ms. Castellucci reports that she took sound readings at the property line at 7:30 p.m. on Thursday, May 28, 2015, with the blower on and the VFD set at 50 percent, and was unable to detect any sound from the blower due to the ambient noise.

We submit that Ms. Castellucci's report establishes that Russell Speeder's can satisfy the Town's lower noise standards for nights and Sundays by operating the blower with the VFD set at 50 percent. We respectfully request that our application be placed before the Planning Board at its next available meeting and that the Planning Board grant Russell Speeder's application for site plan approval. In the furtherance of that request, also enclosed are copies of the Environmental Clearance Form and the revised EAF.

Thank you for your continuing courtesy in this matter.

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Respectfully yours,

Wilson Elser Moskowitz Edelman & Dicker LLP

Robert A. Spolzino

To: P.B. 6/24/15

Maria L. Castellucci, Consultant
PO Box 449
Pound Ridge, NY 10576
914-763-6852 (voice and fax)
MLCConsultant@yahoo.com

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BEDFORD PLANNING BOARD

June 11, 2015

Mr. Michael Shullman
Russell Speeders Car Wash
527 Bedford Road
Bedford Hills, NY 10507

Re: Sound Measurements of Blower with VFD

Dear Michael,

As noted in our previous reports, the new blower system installed at the Russell Speeders Car Wash meets the Town of Bedford noise ordinance maximum daytime allowable sound level of 65 dBA at the north property line and is slightly over this maximum level at the east and south property lines, although drastically reduced from the sound level of the previous fan system. In order to further reduce the sound levels at the east and south property lines, a variable frequency drive was added to the car wash blower fan, so that the frequency can be adjusted to a lower level when there may be lower ambient sound after 6pm on weekdays and Sundays.

As requested, we took sound readings of the blower on May 28, 2015 and have the following findings. Readings were attempted around 7:30pm on Thursday, May 28, 2015. This is one of the timeframes where the noise code requires that the sound level be reduced to 45 dBA at all property lines. The goal was to measure sound at the east and south property lines at each of the VFD settings 50%, 45%, 40%, 35%, and 30% fan speed. We began at the 50% setting. The fan was not even audible at the east property line due to the ambient sound caused by traffic on Route 117. Measurements would have to be taken when there was absolutely no traffic on Route 117. However, since this does not occur, there was not a single moment in which the sound could be measured without interference from traffic noise. In fact, since the traffic was somewhat lighter at 7:30pm than it is during earlier hours in the day, the ambient noise level each vehicle produced was actually louder because they were moving faster than they could during the regular business hours.

We found that we could obtain no meaningful readings that were unaffected by the ambient traffic noise. There was simply never a time where there was no traffic interfering with the readings. Even when there were no vehicles directly passing by, traffic noise in the distance was still louder than the fan. It is our conclusion, therefore, that if sound from the blower is not audible at the property lines due to the ambient sound level from traffic noise even at this late hour, that the blower frequency can be reduced to 50% for the after 6pm and Sunday timeframes, and not cause any increase in the ambient sound level that already exists.

The above summarizes our conclusions regarding the blower and variable frequency drive provision. Please feel free to contact me if you have any questions or require further clarifications.

Very truly yours,

Maria L Castellucci

Maria L. Castellucci,
Consultant in AV and Acoustics

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PLANNING BOARD
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

ENVIRONMENTAL CLEARANCE FORM

(This Side to be Completed by Applicant)

1. INDENTIFICATION OF OWNER

Name of owner: SHULLMAN FAMILY LTD PARTNERSHIP
Address: C/O BOB SHULLMAN, 17 ALFRED LANE, GREENWICH CT Phone: 203 581 5604

2. INDENTIFICATION OF APPLICANT, IF OTHER THAN OWNER

Name of applicant: RUSSELL SPEEDWAY CAR WASH
Address: C/O MIKE SHULLMAN, 627 NORTH BEDFORD RD Phone: 203 249 2694

3. INDENTIFICATION OF SITE INVOLVED, If any

a. Name or other identification of site 627 NORTH BEDFORD ROAD
b. Roads which site abuts
c. Bedford tax map designation: Section: 72.05 Block 1 Lot (s) 9 & 10
d. Total site area 0.51 ACRES
e. Does the applicant have a whole or partial interest in lands adjoining this site? NO

4. INDENTIFICATION OF PROPOSED ACTION

a. Description of Proposed Action RENOVATE EXISTING CAR WASH

b. Relationship to other actions:

1. List any further actions which may be undertaken, of which this proposed action is part or first step, e. g. further subdivision of a large parcel of land: NONE

2. List any related actions which may be undertaken, of which this proposed action , e.g. highway reconstruction to serve increased traffic: NONE

3. List any actions which are dependent upon this proposed action, and therefore should be reviewed as part of this action, e.g. house construction in the case of a residential subdivision: NONE

All such actions must be reviewed in conjunction with the action proposed.

5. CLASSIFICATION OF PROPOSED ACTION (see lists of Type I, II, Exempt, Excluded Actions)

☐ **Type I.** An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☐ **Type II or Exempt Action.** No Environmental Impact Statement is needed. Submit this form only.

☑ **Unlisted Action.** Pending Analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

04/05

Signature of Applicant — Date

ATTORNEY FOR APPLICANT

TO: T.D. & P.B. 2/10/15

TOWN OF BEDFORD
ENVIRONMENTAL CLEARANCE FORM
(This side only for Official Use Only)

1. CLASSIFICATION APPROVED; FURTHER ACTION REQUIRED:

☐ **Type I Action.** The proposed action will have a significant effect on the environment. An Environmental Impact Statement is required unless the applicant demonstrates conclusively that one is not needed. Proceed to Environmental Assessment Form.

☐ **Type II or Exempt or Excluded Action.** No Environmental Impact Statement is needed. No further action required.

☑ **Unlisted Action.** The proposed project may have a significant effect on the environment. Pending analysis of further information, an Environmental Impact Statement may be required. Proceed to Environmental Assessment Form.

2. COMMENTS:

_____

_____

_____

_____

_____

Town Agency	Agency Signature	Date
	Deirdre Courtney-Batson	5/12/15

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1is accurate and complete.

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A. Project and Sponsor Information.

Name of Action or Project: Russell Speeder's Car Wash		
Project Location (describe, and attach a general location map): 527 North Bedford Road, Bedford Hills, NY 10507		
Brief Description of Proposed Action (include purpose or need): Renovation to the existing car wash building and site features to enhance both the visual character and functionality of the campus. Improvements include work to the exterior facade, infrastructure, site , and landscaping to transform the car wash into a first class retail experience for the customers and community.		
Name of Applicant/Sponsor: Russell Speeder's Car Wash	Telephone:	
	E-Mail:	
Address: 527 North Bedford Road		
City/PO: Bedford Hills	State: NY	Zip Code: 10507
Project Contact (if not same as sponsor; give name and title/role): Mike Shullman	Telephone: 914-241-1402	
	E-Mail: mshullman@rscw.net	
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor): Shullman Family Trust, LLP - same as above.	Telephone:	
	E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	**If Yes: Identify Agency and Approval(s) Required**	**Application Date (Actual or projected)**
a. City Council, Town Board, or Village Board of Trustees ☐Yes ☑No		
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Town of Bedford - Planning Board - Site Plan Approval	04/2015
c. City Council, Town or Village Zoning Board of Appeals ☑Yes ☐No	Town of Bedford - Zoning Board of Appeals - Special Permit	04/2015
d. Other local agencies ☐Yes ☑No		
e. County agencies ☐Yes ☑No		
f. Regional agencies ☐Yes ☑No		
g. State agencies ☐Yes ☑No		
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes ☑No

If Yes, identify the plan(s):

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Central Business- Light Industrial

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Bedford Central School District

b. What police or other public protection forces serve the project site?
Town of Bedford Police Department

c. Which fire protection and emergency medical services serve the project site?
Bedford Fire Department

d. What parks serve the project site?
Bedford Hills Memorial Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Car Wash

b. a. Total acreage of the site of the proposed action? 1.01 acres
b. Total acreage to be physically disturbed? .55 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 1.01 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 4 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐Yes ☑No
If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? ☐Yes ☑No
If Yes,
i. Total number of structures _____
ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length
iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☑No
If Yes,
i. Purpose of the impoundment: _____
ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify:
_____
iii. If other than water, identify the type of impounded/contained liquids and their source.
_____
iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres
v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length
vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):
_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐Yes ☑No
If Yes:
i. What is the purpose of the excavation or dredging? _____
ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.
_____
_____
iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☑No
If yes, describe. _____
_____
v. What is the total area to be dredged or excavated? _____acres
vi. What is the maximum area to be worked at any one time? _____ acres
vii. What would be the maximum depth of excavation or dredging? _____ feet
viii. Will the excavation require blasting? ☐Yes ☑No
ix. Summarize site reclamation goals and plan: _____
_____
_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☑No
If Yes:
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____
_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres: _____

iii. Will proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☐ No
If Yes, describe: _____

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐ No
If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? ☐ Yes ☑ No
If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐ Yes ☐ No
If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐ No
If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑ Yes ☐ No
If Yes:

i. Total anticipated liquid waste generation per day: 1200 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____
The new car wash system reduces waste water significantly from approximately 3,600 gallons/day to 1,200 gallons/day.

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐ Yes ☑ No
If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will line extension within an existing district be necessary to serve the project? ☐Yes ☐No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☑No

If Yes:
- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

The renovated facility will continue to utilize the existing septic field. A future expansion field has been defined if necessary.

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐Yes ☑No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐Yes ☐No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐Yes ☑No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade to, an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7-5
- Saturday: 8-5
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: 8-8
- Saturday: 8-8
- Sunday: 9-5
- Holidays: _____

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

During construction, standard construction noise levels will occasionally be elevated above ambient noise levels. All noise will occur during Town construction times. Per separate report submitted by applicant, and concurred in by Town's consultant, there will be no significant impact from no

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: _____

n.. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Shielded cut off 12-15' pole fixtures are proposed. Light levels will be at 0.0 foot candles at property lines as required by Town ordinance.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally describe proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☑ Yes ☐ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: 2-3 tons per month (unit of time)
- Operation : 2-3 tons per year (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: Construction waste will be seperated by type of material for recycling.
- Operation: Paper, plastic and glass will be recycled

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: Private carting service
- Operation: Private carting service

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☑ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe: _____

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.51	0.51	
• Forested	0.35	0.35	
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.15	0.15	
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? ☐Yes ☑No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☐Yes ☑No

If Yes,

i. Identify Facilities:

_____

_____

e. Does the project site contain an existing dam? ☐Yes ☑No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐Yes ☑No

If Yes:

i. Has the facility been formally closed? ☐Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐Yes ☑No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐Yes ☐No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

_____

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐Yes ☐No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

_____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- **If yes, DEC site ID number:** _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? >10 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site: Not defined _____ %
_____ %
_____ %

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils:
☑ Well Drained: 90 % of site
☑ Moderately Well Drained: 10 % of site
☐ Poorly Drained ____ % of site

f. Approximate proportion of proposed action site with slopes:
☐ 0-10%: 80 % of site
☐ 10-15%: 18 % of site
☐ 15% or greater: 2 % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name NYS Regulated Approximate Size > 25 acres
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☐ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100 year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500 year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: _____

n. Does the project site contain a designated significant natural community? ☐Yes ☑No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): _____

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐Yes ☑No

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐Yes ☑No

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐Yes ☑No

If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐Yes ☑No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐Yes ☑No

i. If Yes: acreage(s) on project site? _____

ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐Yes ☑No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐Yes ☑No

If Yes:

i. CEA name: _____

ii. Basis for designation: _____

iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based: _____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☐ Yes ☑ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Erik A. Kaeyer, AIA LEED AP Date June 9, 2015

Signature _____ Title Principal, Vice President

PRINT FORM

Maria L. Castellucci, Consultant
PO Box 449
Pound Ridge, NY 10576
914-763-6852 (voice and fax)
MLCConsultant@yahoo.com

June 11, 2015

RECEIVED
JUL 9 2015
BEDFORD PLANNING BOARD

Mr. Michael Shullman
Russell Speeders Car Wash
527 Bedford Road
Bedford Hills, NY 10507

Re: Sound Measurements of Blower with VFD

Dear Michael,

As noted in our previous reports, the new blower system installed at the Russell Speeders Car Wash meets the Town of Bedford noise ordinance maximum daytime allowable sound level of 65 dBA at the north property line and is slightly over this maximum level at the east and south property lines, although drastically reduced from the sound level of the previous fan system. In order to further reduce the sound levels at the east and south property lines, a variable frequency drive was added to the car wash blower fan, so that the frequency can be adjusted to a lower level when there may be lower ambient sound after 6pm on weekdays and Sundays.

As requested, we took sound readings of the blower on May 28, 2015 and have the following findings. Readings were attempted around 7:30pm on Thursday, May 28, 2015. This is one of the timeframes where the noise code requires that the sound level be reduced to 45 dBA at all property lines. The goal was to measure sound at the east and south property lines at each of the VFD settings 50%, 45%, 40%, 35%, and 30% fan speed. We began at the 50% setting. The fan was not even audible at the east property line due to the ambient sound caused by traffic on Route 117. Measurements would have to be taken when there was absolutely no traffic on Route 117. However, since this does not occur, there was not a single moment in which the sound could be measured without interference from traffic noise. In fact, since the traffic was somewhat lighter at 7:30pm than it is during earlier hours in the day, the ambient noise level each vehicle produced was actually louder because they were moving faster than they could during the regular business hours.

We found that we could obtain no meaningful readings that were unaffected by the ambient traffic noise. There was simply never a time where there was no traffic interfering with the readings. Even when there were no vehicles directly passing by, traffic noise in the distance was still louder than the fan. It is our conclusion, therefore, that if sound from the blower is not audible at the property lines due to the ambient sound level from traffic noise even at this late hour, that the blower frequency can be reduced to 50% for the after 6pm and Sunday timeframes, and not cause any increase in the ambient sound level that already exists.

The above summarizes our conclusions regarding the blower and variable frequency drive provision. Please feel free to contact me if you have any questions or require further clarifications.

Very truly yours,

Maria L. Castellucci

Maria L. Castellucci,
Consultant in AV and Acoustics

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RECEIVED
JUL 9 2014
BEDFORD PLANNING BOARD

October 17, 2014

Mr. Michael Shullman
Russell Speeders Car Wash
527 Bedford Road
Bedford Hills, NY 10507

Re: Hard Look Acoustical Report of Sound Levels
Russell Speeders Car Wash – 527 Bedford Road, Bedford Hills, NY

Dear Michael,

The following is a comprehensive acoustical report of findings and recommendations for the Russell Speeders Car Wash at 527 Bedford Road in Bedford Hills, NY. The purpose of this report is to present an analysis of the existing sound levels at the Russell Speeders lot line due to each individual sound source at Russell Speeders individually and combined as well as the ambient noise at this location due to sources beyond the control of Russell Speeders. Where there are sound sources that exceed the Town of Bedford noise ordinances, these are identified and recommendations are given to attenuate the sound sources at the property lines in order to meet the current noise ordinances. As indicated below, sound readings have been taken on various days and at various times to provide as complete a study as is practical.

As requested during the meeting of April 10, 2014, with Jeffery Osterman, Senior Planner for the Town of Bedford and Michael Bontje, President of B. Laing Associates, we have taken multiple sound readings and extended our acoustical analysis of the Russell Speeders Car Wash facility to ensure the "hard look" requirement for the acoustical review has been satisfied in every practical way. The main blowers and all of the known peripheral noise sources have been analyzed. All references have been footnoted and all formulae included in the Appendix for verification. All intended and recommended modifications to the existing conditions have been noted and analyzed in this process as relates to all known noise ordinances for this location. The following report summarizes our requested "hard look" at the acoustical impact of the Russell Speeders Car Wash at 527 North Bedford Road, Bedford Hills, NY.

Introduction

We begin with a brief summary of definitions and fundamental concepts required to be understood in order for laypersons to easily understand this report and to make it as transparent as possible.

Definitions:
The following are definitions taken from Noise Control by Charles E. Wilson, Harper & Row Publishers, New York, c. 1989 (unless otherwise noted) that will assist the reader in understanding the formulae, statements, and conclusions contained herein:

Acoustics – (1) The science of sound, including the generation, transmission, and effects of sound waves, both audible and inaudible. (2) The physical qualities of a room or other enclosure (such as size, shape, amount of noise) that determine the audibility and perception of speech and music.

Sound – In the case of this report, sound is defined as audible pressure fluctuations in air. When a body moves through a medium or vibrates, some energy is transferred to that surrounding medium in the form of sound waves. Sound is also produced by turbulence in air and other fluids,

and by fluids moving past stationary bodies. Intentionally generated acoustic signals including speech and music are usually referred to as sound.

Noise – A term used to identify unwanted sound, including random sound, and sound generated as a byproduct of other activities, including transportation and industrial operations. Intrusive sound, including speech and music unwelcome to the hearer, are also considered noise.

Frequency – The frequency of a periodic phenomenon such as a sound wave is the number of times in one second (i.e., the number of cycles per second) that this phenomenon repeats itself. Frequency usually is designated by a number, followed by the unit hertz (unit symbol: Hz). For example, in the case of a vibrating tuning fork, the tynes of the tuning fork undergo 440 complete oscillations in one second. Therefore its frequency of vibration is 440 Hz.[1] In layperson's terms, it is the pitch of a sound. For instance, using musical instruments as a reference, a sound high in frequency would be a piccolo, while a sound low in frequency would be the tuba. A normal young adult human can hear from 20 Hz to 20,000 Hz.

Hertz – Unit of measurement of frequency, numerically equal to cycles per second.

Decibel - The decibel (abbreviated "dB") is a measure, on a logarithmic scale, of the magnitude of a particular quantity (such as sound pressure level or sound power level) with respect to a standard reference value.

Sound Power – The total amount of energy radiated into the atmospheric air per unit time by a source of sound. The higher the sound power level, the louder the sound.

Sound Power Level - The level of sound power expressed in terms of dB re: 10^{-12} W. The way the human ear hears is a logarithmic function of sound power. If the power level increases by a factor of 10, the ear perceives it to be doubled in loudness, and if it decreases by a factor of 10, the ear perceives the loudness to be halved. In the logarithmic scale, the power level may have increased 10 times, but the human ear perceives it to only have doubled in loudness.

Sound Pressure – (1) The minute fluctuations in atmospheric pressure that accompany the passage of a sound wave; the pressure fluctuations on the tympanic membrane are transmitted to the inner ear and give rise to the sensation of audible sound. (2) For a steady sound, the value of the sound pressure averaged over a period of time. Sound pressure is usually measured in Newtons per square meter (N/m^2) where 1 N/m^2 = 1 Pa.

Sound Pressure Level –(SPL or L_p) The root-mean-square value of the pressure fluctuations above and below atmospheric pressure due to a sound wave; expressed in decibels re: a reference pressure ($2x10^{-5}$ Pa). The sound pressure level changes by approximately -6 dB per doubling of distance as long as the receiver is greater than one or two wavelengths away, is outside one characteristic source dimension, is away from reflective surfaces, and is not in a significantly high background noise environment.

Octave – An octave is the interval between two sounds having a basic frequency ratio of two. For example, 707 Hz to 1414 Hz is one octave.

Octave Band – All of the components, in a sound spectrum, whose frequencies are between two sine wave components separated by an octave.

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[1] Handbook of Acoustical Measurements and Noise Control, Third Edition. Cyril M. Harris, Ph.D, Editor in Chief, Acoustical Society of America, Woodbury, NY, c. 1998, p. 1.3.

Band Center Frequency – The designated (geometric) mean frequency of a band of noise or other signal. For example, 1000 Hz is the band center frequency for the octave band that extends from 707 Hz to 1414 Hz.

Octave Band Sound Pressure Level - The integrated sound pressure level of only those sine wave components in a specified octave band, for a noise or sound having a wide spectrum.

Directivity Index – In a given direction from a sound source, the difference in decibels between (a) the sound pressure level produced by the source in that direction, and (b) the space-average sound pressure level of that source, measured at the same distance.

A-weighted sound level – The human ear does not respond equally to all frequencies, but is less sensitive at low and high frequencies than it is at medium or speech range frequencies. Thus, to obtain a single number representing the sound level of a noise containing a wide range of frequencies in a manner representative of the ear's response, it is necessary to reduce the effects of the low and high frequencies with respect to the medium frequencies. The resultant sound level is said to be A-weighted, and the units are dBA. The A-weighted sound level is also called the noise level.

Equivalent Sound Level (Leq) - The energy average sound level over a period of time.

Ambient Noise – The all-encompassing noise associated with a given environment at a specified time, being usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant. [2]

Room Constant – The room constant is equal to (a) the product of the average absorption coefficient of the room and the total internal area of the room, divided by (b) the quantity 1 minus the average absorption coefficient.[3]

Town of Bedford, NY Noise Code Requirements

The following summarizes the two noise codes in effect for the Town of Bedford, the town in which the Russell Speeders Car Wash facility is located and operating. It is our understanding that Russell Speeders Car Wash needs to be in compliance with both of these codes, although they are different and somewhat conflicting. The code requirements are as follows:

Chapter 83 of the Bedford Town Code Article I. *Noise Control section 83-5 Specific limits; responsibility of owner or lessee* Part A states that "Noise produced by any act or activities, including the use of off-road motor vehicles, on properties within any residential or nonresidential zoning district shall not exceed sixty-five (65) dB(A) during the hours of 8:00 a.m. to 6:00 p.m. or forty-five (45) dB(A) during the hours of 6:00 p.m. to 8:00 a.m. and all day Sunday on any such property within any zoning district." The adoption of this article took place by the Town Board of the Town of Bedford on June 5, 1990. This code requirement does not indicate octave band maximum sound levels, but only overall dBA level maximum requirements.

The earlier noise regulations documented in Chapter 125-32 Noise were adopted on January 18, 1983 and state maximum permitted sound pressure levels in octave bands as shown in Table 1. The levels shown in each separate octave band in the first row of Table 1 are dB levels as indicated in the noise code without the dBA weighting, and the bottom row of Table 1 shows the calculated A-weighted sound levels in each octave band as well as the overall dBA level for all

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[2] Handbook of Acoustical Measurements and Noise Control, Third Edition, Cyril M. Harris, Ph.D, Editor in Chief, Acoustical Society of America, Woodbury, NY, c. 1998, p. 2.2.

[3] Noise Control – Measurement, Analysis, and Control of Sound and Vibration, Charles E. Wilson, New Jersey Institute of Technology, Harper & Row, Publishers, New York, c.1989, p.546.

bands combined. Most of the car wash equipment manufacturers only supply data in overall dBA levels, so converting the noise code to an overall dBA number assists in the comparison of manufacturers' sound data to the noise ordinance requirements. The overall dBA level also allows the disparate code requirements to be compared using the same units of dBA. Using an overall dBA level substitution for the code octave band maximum levels does not, however, ensure compliance with the octave band portion of the code (Chapter 125-32).

Table 1 Bedford Town Code Chapter 83 Applicable Noise Limits			
	Daytime Limit (8:00am – 6:00pm)	**Nighttime Limit (6:00pm – 8:00am)**	**Sunday Limit (All Hours)**
Maximum permitted SPL (dBA) at the lot line for residential and commercial zones	65 dBA	45 dBA	45 dBA

Table 2 Chapter 125-32 Noise										
	31.5 Hz	**63 Hz**	**125 Hz**	**250 Hz**	**500 Hz**	**1 kHz**	**2 kHz**	**4 kHz**	**8 kHz**	**dBA**
Maximum permitted SPL (dB re: 20μPa) at the lot line for lots within 200 feet of a Residential district and for sound emitted between 9:00pm and 7:00am and on Sundays	59	61	60	53	46	40	31	20	11	
A-weighting[4]	-39.4	-26.2	-16.1	-8.6	-3.2	-0.0	+1.2	+1.0	-1.1	
Sound Pressure Levels (dBA)	19.6	34.8	43.9	44.4	42.8	40.0	32.2	21.0	9.9	**49 dBA**
Maximum permitted SPL (dB re: 20μPa) at the lot line for Commercial Receptors	65	67	66	59	52	46	37	26	17	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	-0.0	+1.2	+1.0	-1.1	
Sound Pressure Levels (dBA)	25.6	40.8	49.9	50.4	48.8	46.0	38.2	27.0	15.9	**55 dBA**

[4] Many sources can verify the A-weighting frequency response calculation, one of which is the Handbook of Acoustical Measurements and Noise Control, Third Edition, Cyril M. Harris, Ph.D, Editor in Chief, Acoustical Society of America, Woodbury, NY, c. 1998, p. 1.17 Table 1.2.

Our understanding is that the Chapter 83 Code is a regulatory code which must be met and the Chapter 125-32 Noise section is a zoning law which is not regulatory and we could apply for a variance with respect to this law. However, during the meeting mentioned above with Jeffery Osterman and Michael Bontje, we were informed that both code requirements need to be met. All recommendations are given with the goal of satisfying both requirements at the Russell Speeders facility.

The hours of operation for Russell Speeders Car Wash are Monday through Saturday 8am – 8pm and Sunday 9am-5pm and the facility is located within 200 feet of a residential district. In order to meet both noise ordinances, it is necessary for the car wash to be at or below 45 dBA at the lot line for the 6:00pm – 8:00 pm timeframe Monday through Saturday and all day Sunday **and** be at or below the octave band maximum sound levels in Table 2 at all times. We say this, because it is theoretically possible to achieve the 45 dBA requirement and be above the Table 2 requirements in certain single frequency bands. Therefore, we have prepared our analysis for each noise source with respect to both code requirements and applicable time frames described therein.

New York State Department of Environmental Conservation (NYSDEC)

The NYSDEC has issued a document entitled "Assessing and Mitigating Noise Impacts" (DEP-00-1 Rev.2/2/01). Page 14 of this document establishes that "in non-industrial settings, the SPL" (sound pressure level) "should probably not exceed ambient noise by more than 6 dB(A) at the receptor." Also, "the addition of any noise source, in a non-industrial setting, should not raise the ambient noise level above a maximum of 65 dBA. This would be considered the 'upper end' limit since 65 dB(A) allows for undisturbed speech at a distance of approximately three feet." The next paragraph states that "Ambient noise SPLs in industrial or commercial areas may exceed 65 dB(A) with a high end of approximately 79 dB(A) (EPA 550/9-79-100, November 1979)." "The goal in an industrial/commercial area, where ambient SPLs are already at a high level, should be not to exceed the ambient SPL."

Russell Speeders is located in a commercial zone, but is within 200 feet of a residence only when one measures from the northernmost lot line. The building itself is greater than 200 feet from the nearest residential property line. The ambient noise is controlled by the traffic noise along Route 117 which is normally much higher than even the 65 dBA proposed by the NYSDEC. A discussion of the sound levels at the closest residential property line is given later on in this report as it relates to these NYSDEC recommendations. However, the most stringent noise restrictions placed upon Russell Speeders are the Town of Bedford noise ordinances. By implementing noise control measures to meet these codes, the NYSDEC maximum levels will automatically be met since they are much less stringent. We are therefore providing recommendations to achieve the goal of meeting code sound requirements which are so much lower than the ambient sound at the Russell Speeders site that they could not be measured apart from the ambient noise during the hours of operation.

Summary of Existing Conditions and Acoustical Measurements

The Russell Speeders Car Wash facility is located adjacent to Adzam Auto Sales, Inc. to the north and an empty lot to the immediate south which is the site of another commercial property to be constructed. The west property line borders on the Metro North train track right-of-way area and the east property line abuts Route 117, which is a heavily traveled two lane road with a center turning lane and is traversed by heavy commercial vehicles, trucks, and passenger cars. Attached to this report is Drawing D-1, a satellite view of the Russell Speeders Car Wash facility as well as the surrounding properties to show the measurement receptor locations and existing sound source locations.

An acoustical survey was conducted on Friday, January 17, 2014 from approximately 11:44am to 12:40pm and was confirmed and augmented during subsequent surveys on Thursday, March 20, 2014 from approximately 9:43 to 10:36am, Sunday, April 6, 2014 at various times from 8:14am to 7:31pm and Tuesday, April 8, 2014 from 11:16 to 12:57pm. The dryer noise, ambient noise, and peripheral equipment noise was measured to determine sound levels at each property line for the existing equipment and to provide analyses of sound attenuation measures where required.

Summary of Ambient Noise Levels

During all of the surveys, traffic was the major contributor to the ambient sound levels measured. During the January sound survey, there was constant vehicular traffic measuring an average L_{EQ} of 73 dBA at the east property line (receptor R-1) with no car wash equipment running. Ambient sound levels were also measured on Sunday morning April 6, 2014 to simulate the quietest time of operation. At each test location and time of day, the measured ambient sound levels without any equipment running at the car wash facility far exceeded the Town of Bedford Noise Code requirement of 45 dBA for properties within 200 feet of a residential district. The following table shows a summary of the ambient L_{EQ} sound levels measured at various receptor locations which are shown on Drawing D-1.

Table 3 – Ambient Sound Levels L_{eq} at Russell Speeders Lot Lines
No Equipment at Russell Speeders Running

Description of Measurement	L_{eq} Duration of Run	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Receptor R-1 Fri 1/17/14 12:35pm	30 sec	78.5	73	71.2	70.7	68.6	67	65.2	64.4	63.7	73
Receptor R-1 Fri 1/17/14 11:46 am	40 sec	75.2	77.9	72.4	73.2	68.4	68.3	65.1	64.1	60.9	73.4
Receptor R-7 Thur 3/20/14 10:36 am	17 sec	66.3	66.9	62.4	58.8	57	57.8	51.5	43	35	60.8
Receptor R-1 Sun 4/6/14 8:02 am	8min 15 sec	62	65	65	63	63	66	61	51	43	68
Receptor R-9 Sun 4/6/14 8:11am	2 min 34 sec	60	63	62	62	63	67	62	51	42	69
Receptor R-7 Sun 4/6/14 8:15am	2 min 33 sec	59	64	58	53	55	55	48	48	42	58
Receptor R-6 Sun 4/6/14 8:23am	3 min 44 sec	69	62	59	54	52	52	48	42	34	56
Receptor R-3 Sun 4/6/14 8:36am	1 min 51 sec	60	64	65	55	53	52	48	48	36	57

Receptor R-9 Sun 4/6/14 8:48am	2 min 33 sec	63	64	64	63	65	69	63	53	43	**71**
Receptor R-9 Sun 4/6/14 7:28pm	2 min 33 sec	64	65	63	64	64	67	62	51	42	**69**
Receptor R-1 Sun 4/6/14 7:31pm	2 min 33 sec	65	68	63	64	65	68	63	52	42	**70**
Receptor R-9 Tues 4/8/14 12:31pm	34 sec	68	67	66	65	64	67	62	52	43	**69**
Receptor R-10 Tues 4/8/14 12:49pm	14 sec	65	63	60	56	54	56	52	47	43	**59**
Receptor R-7 Tues 4/8/14 12:52pm	16 sec	79	72	67	64	65	62	57	51	43	**66**
Receptor R-10 Tues 4/8/14 12:54pm	25 sec	67	63	57	53	53	54	49	42	36	**57**
Receptor R-4 Tues 4/8/14 12:55pm	37 sec	65	61	55	51	50	53	50	52	52	**58**
Receptor R-5 Tues 4/8/14 12:57pm	29 sec	66	64	58	54	52	54	50	53	35	**59**

It is apparent from the above ambient readings, that even for those readings which were taken during the absolute quietest time on Sunday morning, the ambient sound levels are more than 10 dBA above the noise code of 45 dBA at the lot line without any Russell Speeders equipment running. We must make the observation that bringing the Russell Speeders equipment to a level of 45 dBA at each lot line is a bit of an overkill given the ambient noise levels experienced at this location. In order to meet the code maximum sound level requirements, all equipment sound levels must be calculated to the property lines, since sound levels cannot be measured for most of the equipment independent of the ambient noise if they are creating levels below or near ambient sound levels at the property lines. This report will discuss the analysis for the blowers, which are the highest sound level producer at Russell Speeders, and the rest of the peripheral equipment which has to be measured very close to the equipment to obtain the sound level reading and is then calculated over distance to obtain the sound levels this equipment theoretically produces at the lot lines.

Existing Dryer Measurements

Measurements of the existing dryers were taken at the property lines as well as at a distance of 5' from the tunnel exit where the dryers are most audible. This is at a location approximately 20' from the location of the dryers currently within the tunnel.

Several different dryer conditions were tested as listed below to determine the change in sound level with varying motor frequency. The intent is to replace the existing dryers with newer more efficient dryers that also comply with the applicable noise ordinances. There are three older dryers and two newer dryers for a total of five dryers currently at the facility. Of the two newer dryers, one had a sound attenuation duct applied to the intake side of the fan and the other did

not. The fan without the attenuator had its intake facing away from the street and the fan with the attenuator had its intake facing the street. Measurements were taken of the three existing dryers alone, of the newer dryer with the sound attenuation duct, and of the newer dryer without the duct measured with the variable speed fan running at various frequencies to document the resulting reduction in sound. Results are listed in Table 4 below:

Table 4 New Existing Blower Measured at Various Fan Speeds and Old Blowers Alone	
Description of Dryer	***A-weighted Leq measured 5' from dryer tunnel opening (approx. 20' from dryer)***
New Existing Blower at 60 Hz (100%)	78 dBA
New Existing Blower at 50 Hz (80%)	76 dBA
New Existing Blower at 40 Hz (50%)	76 dBA
New Existing Blower at 30 Hz (13%)	63 dBA
New Existing Blower with sound attenuating duct attached full speed 60 Hz	74 dBA
Three existing old Blowers alone	84 dBA
Ambient Sound – all blowers off	73 dBA

Appreciable reductions in sound were not observed until the fans were reduced in frequency to 30Hz, which would put them at only 13% operation.

Please note that due to the high level of traffic noise, the measurements do not effectively differentiate between the noise from the dryers and the noise from the traffic even when standing 5 feet from the tunnel opening since the traffic noise was constant. However, from the above readings, one can calculate the resulting sound levels that would occur using the levels measured if the three old blowers were replaced with six new blowers like the new type measured. These calculations are itemized below for the north, south and east property lines. Sound levels due to the blowers at the west Metro North property line are considered to be negligible. The property line to the east is the worst case scenario since it is in direct line of sight to the blower fan noise. However, the south property line is the closest to the dryer tunnel exit opening. Please see Appendix B and Appendix C for all calculation formulae.

Table 5 – Existing AVW Blowers at South Property Line at 90° from Tunnel Exit Opening

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
New Blower without attenuation duct Sound Pressure Level at 20' measured on-axis (0°) 1/17/14	72	78	75	75	77	73	70	67	66	78 dBA
Addition for 6 blowers[5]	+8	+8	+8	+8	+8	+8	+8	+8	+8	
Attenuation over 10' distance to property line on south side (20log20'/30')[6]	-4	-4	-4	-4	-4	-4	-4	-4	-4	
Off-axis 90 degree attenuation for 10' x 12' opening[7]	-6	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Calculated Due to new blowers at PL on south side 90° off-axis	70	72	65	64	65	60	56	52	51	
Measured Average Ambient Noise Level (Leq) at south property line at location R-1	65	68	63	64	65	68	63	52	42	
Overall Combined Level (dB)	71	74	67	67	68	69	64	55	52	
A-weighting[8]	-39	-26	-16	-9	-3	0	+1	+1	-1	
Combined Sound Pressure Level off-axis 90 degree from tunnel exit	32	48	51	58	65	69	65	56	51	72 dBA

Table 6 - Existing Blowers at South Property Line at 90° from Tunnel Exit Opening

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Existing 5 Blowers Sound Pressure Level Leq measured on 4/8/14 at 90° off-axis at south property line	74	78	73	69	69	65	60	53	47	
Addition of one more blower to make a total of 6.[9]	+1	+1	+1	+1	+1	+1	+1	+1	+1	
A-weighting	-39	-26	-16	-9	-3	0	+1	+1	-1	
Total A-weighted SPL measured due to existing blowers at south PL 90° off-axis	36	53	58	61	67	66	62	55	47	71[10] dBA

[5] See Appendix for formula for adding multiple source sound levels
[6] See Appendix for formula for attenuation of sound pressure level over distance
[7] Koppers Aircoustat Directivity Attenuation Table, 1975 interpolated for opening size at Russell Speeders.
[8] See Appendix for A-weighting calculation
[9] See Appendix for formula for adding multiple source sound levels
[10] Difference between measured and calculated levels is due to the effect of ambient noise on the sound measured on site as shown in table 5.

Table 7 - New Existing Blowers at South Property Line at 45° from Tunnel Exit Opening

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
New Existing Blower without attenuation duct Sound Pressure Level at 20' measured on-axis 1/17/14	72	78	75	75	77	73	70	67	66	78 dBA
Addition for 6 blowers[11]	+8	+8	+8	+8	+8	+8	+8	+8	+8	
Attenuation over 16' distance to property line on south side (20 log20'/36')[12]	-5	-5	-5	-5	-5	-5	-5	-5	-5	
Off-axis 45 degree attenuation for 10' x 12' opening[13]	-2	-3	-4	-3	-1	0	0	0	0	
Total Sound Pressure Level Calculated Due to new blowers at PL on south side	73	78	74	75	79	76	73	70	69	
Measured Average Ambient Noise Level (Leq) at south property line at location R-1	65	68	63	64	65	68	63	52	42	
Overall Combined Level (dB)	74	78	74	75	79	77	73	70	69	
A-weighting[14]	-39	-26	-16	-9	-3	0	+1	+1	-1	
Combined Sound Pressure Level Calculated off-axis 45 degree from tunnel exit due to new blowers at PL on south side	35	52	58	66	76	77	74	71	68	81[15] dBA

Table 8 - Existing Blowers at South Property Line at 45° from Tunnel Exit Opening

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Existing Blowers Leq measured on 4/8/14 at 45° off-axis at south property line	74	81	77	75	75	73	67	63	58	
Addition of one more blower to make a total of 6.[16]	+1	+1	+1	+1	+1	+1	+1	+1	+1	
A-weighting	-39	-26	-16	-9	-3	0	+1	+1	-1	
Total A-weighted Sound Pressure Level Due to existing blowers and traffic noise at PL on south side 45° off-axis	36	56	62	67	73	74	69	65	58	78 dBA

[11] See Appendix for formula for adding multiple source sound levels
[12] See Appendix for formula for attenuation of sound pressure level over distance
[13] Koppers Aircoustat Directivity Attenuation Table, 1975 interpolated for opening size at Russell Speeders.
[14] See Appendix for A-weighting calculation
[15] See Appendix for A-weighting calculation
[16] See Appendix for formula for adding multiple source sound levels

Table 9 - New Existing Blowers Calculated at North Property Line at 45° From Tunnel Opening

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
New Existing Blower without attenuation duct Sound Pressure Level measured at 20' on-axis 0°	72	78	75	75	77	73	70	67	66	78 dBA
6 blowers	+8	+8	+8	+8	+8	+8	+8	+8	+8	
Attenuation over 100 foot distance to property line on north side (20log20'/120')	-16	-16	-16	-16	-16	-16	-16	-16	-16	
Off-axis 45 degree attenuation for 10'x12' opening	-2	-3	-4	-4	-2	0	0	0	0	
Total Sound Pressure Level Due to new blowers at PL on north side	62	67	63	63	67	65	62	59	58	
Measured Average Ambient Noise Level (Leq) at north property line at location R-9	68	67	66	65	64	67	62	52	43	69
Overall Combined Level (dB)	69	70	68	67	69	69	65	60	58	
A-weighting	-39	-26	-16	-9	-3	0	+1	+1	-1	
Total A-weighted Sound Pressure Level Calculated Due to new blowers at PL on north side	30	44	52	58	66	69	66	61	57	72 dBA

Table 10 - Existing Blowers at North Property Line at 45° from Tunnel Exit Opening

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Existing Blowers Sound Pressure Level Leq measured on 4/8/14 at 45° off-axis at north property line with ambient traffic noise	72	77	71	69	69	70	65	56	48	
Addition of one more blower to make a total of 6.[17]	+1	+1	+1	+1	+1	+1	+1	+1	+1	
A-weighting	-39	-26	-16	-9	-3	0	+1	+1	-1	
Total A-weighted Sound Pressure Level Due to existing blowers and traffic noise at PL on north side 45° off-axis near road	64	52	56	61	67	71	67	58	48	74 dBA

[17] See Appendix for formula for adding multiple source sound levels

Table 11 – New Existing Blowers Calculated On-axis to East Property Line

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
New Existing Blower without attenuation duct Sound Pressure Level at 20' on axis (0°)	72	78	75	75	77	73	70	67	66	78 dBA
6 blowers	+8	+8	+8	+8	+8	+8	+8	+8	+8	
Attenuation over distance to property line at sidewalk lot line 34' from initial measurement location (20log20'/54')	-9	-9	-9	-9	-9	-9	-9	-9	-9	
On-axis attenuation	0	0	0	0	0	0	0	0	0	
Total Sound Pressure Level Due to new blowers at East sidewalk PL	71	77	74	74	76	72	69	66	65	
Measured Average Ambient Noise Level (Leq) at east property line at location R-1	65	68	63	64	65	68	63	52	42	
Overall Combined Level (dB)	72	78	74	74	76	74	70	66	65	
A-weighting	-39	-26	-16	-9	-3	0	+1	+1	-1	
Total A-weighted Sound Pressure Level Calculated Due to new blowers at east sidewalk PL	33	52	58	65	73	74	71	67	64	78 dBA

Table 12 New Existing Blowers at East Property Line with Only Inlet Attenuation Ducts	
Description	***A-weighted Sound Level Calculated at East Property Line***
New Existing Blower with inlet attenuation duct at 60 Hz (100%) 20 feet from blower and 5' from tunnel exit opening	74 dBA
Increase due to quantity of six blowers	+8 dBA
Reduction due to distance from measurement location to East sidewalk PL (20 log 20'/54')	-9 dBA
Total Sound Level due to 6 new blowers at East PL	73 dBA
Total Sound Level at East PL	73 dBA
Ambient sound Level at East PL location R-1	68 – 73.4 dBA

The above study indicates that the new blowers even with the inlet attenuation ducts, which were measured at Russell Speeders to test their suitability to replace the existing older blowers, will not meet the Town of Bedford Noise Code requirements as stated above (49 dBA during the hours of 8:00 a.m. to 6:00 p.m. or 45 dBA during the hours of 6:00 p.m. to 8:00 a.m. and all day Sunday).

We have therefore done extensive research to locate car wash blowers that are quieter and have performed an analysis of their expected sound levels at the property lines. It should be noted that there is no octave band test data from the manufacturer for the proposed blowers. The data provided is a single overall 71 dBA level at a distance of 20 feet. The 71 dBA level is projected

by the manufacturer if the blower is supplied with the manufacturer's sound attenuation package. Since the manufacturer does not have any spectral data for the blowers, an estimated octave band noise spectrum has been calculated to use in the following analysis. The following describes this analysis and shows calculations for the analysis.

Recommended New Blowers and Sound Attenuation Measures for Blowers

This section of our report shows estimated sound levels in octave bands to represent the Proto-Vest Windshear blower system with the attenuator package to allow a comparison of resulting octave bands levels to the older noise code from 1983 which is given in octave bands. The newer code can be easily compared using the overall dBA level which is shown at the far right side of the chart in all the calculation tables provided with this report.

Proto-Vest Inc. Model Windshear

Proto-Vest Inc. manufactures a complete dryer system, model Windshear, which can be obtained with a silencer package that further reduces the dryer sound level. The manufacturer has provided sound levels of 70.9 dBA at 20 feet for the dryer system when outfitted with the silencer package. This is the quietest system we found that meets with the drying capacity requirements for Russell Speeders Car Wash at Bedford Hills. Although this dryer system has a lower sound level output with the attenuation package, this unit will still not meet the noise ordinances without additional sound attenuation measures. It should be noted that this sound level given by the manufacturer is a calculated level based upon a measurement of 83 dBA at a distance of 5 feet from the blower with the sound attenuation package (91 dBA at a distance of 5 feet without the attenuation package.) Cut sheets are attached showing the blower configuration and sound data. We suggest locating the blower at least 20 feet inside the tunnel exit to give the exiting car space to wait for the overhead door to open after the blower is finished and this will also add to the sound attenuation capability of the tunnel itself.

The calculations shown in Appendix C include levels for the blowers projected to each of the affected property lines including varying conditions such as noise levels with the blower on and the bay door open with and without the recommended sound barrier walls, levels projected with the blowers off and the bay door open, and for the bay door closed when the blower is on. Since the older noise ordinance lists the maximum sound requirements in octave bands, we have created an estimated octave band sound spectrum for the fans based upon the readings measured for the existing fans and the expected attenuation using the Proto-Vest **Windshear** dryer system with the sound attenuator package. These calculations are shown in Appendix C for your reference.

Overhead Door Construction

We recommend all the bay doors including the detailing bays be constructed using the 6mm Macrolux C solid polycarbonate system having a minimum weight of 7.2 kg/m^2 and full perimeter seals as provided by Airlift Doors, Inc. This will be required to meet the strictest code requirements. Cut sheets are attached in Appendix A. The overhead doors will need to be used at the tunnel exit for Sundays and after 6pm on all other days whenever the blower is in operation. A bay door protocol will be implemented that includes automated bay doors which will be electronically signaled to lift when the blower is finished with the car and has shut down. The overhead door would then close before the blower dries the next car in the tunnel.

In addition, the bay doors will always be down when there is detailing work in the detail bays. If only the vacuums are being used, they can be left open, but whenever the louder equipment is being used, the doors will be closed.

All calculations have been based upon a maximum overhead door height of 84". This is recommended so that the sound barriers can provide essential line-of-sight blocking which will not happen if the bay and tunnel doors are too high. Refer to the barrier wall calculations for further reference.

Tunnel and Detail Bay Ceiling Treatment

We also recommend that the ceiling of the tunnel and the detailing bays be treated with acoustically absorptive material that can withstand water and humidity, such as a water resistant acoustical ceiling tile suspended from a grid such as MBI San Pan PVF Panels series 600P-2060-E in the 1" thickness having a 1.5 mil PVC encapsulated water resistant surface finish with a 1" thick 6-7# fiberglass core. This material has a manufacturer's acoustical performance rating of NRC 0.80. Cut sheets are included in Appendix A. The inside walls will have white vinyl ribbed exterior siding on furring strips to provide some diffusion of sound within the tunnel.

Sound Barrier Walls

The easiest way to reduce the sound level at the property lines is to construct solid barrier walls to block sound from getting to the property lines. We have calculated the barrier wall attenuation that would result from several barrier wall heights. Scale drawings are included in Appendix C including the calculations to achieve the sound attenuation values shown in the tables. The Town of Bedford requires that all barrier walls be 6 feet high or lower, so we first tried this height to see whether it satisfied the code requirements and found that it did not. Additional attenuation is necessary, and we have therefore performed calculations using higher barrier heights and have lowered the tunnel opening heights to the lowest possible opening of 84" which has been used for the opening height in the barrier calculations. In addition, the receptor is 5 feet tall and has been placed two feet on the other side of the barrier wall.

Sound barrier walls will be required in several locations as shown on the attached drawing D-2. The barriers need to be 8 feet in height with the exception of the north property line which needs to be 10 feet in height due to the raised elevation of the neighboring property which diminishes the barrier effect until it blocks the line of sight to the receptors. The barriers shall consist of a continuous double faced stockade fence construction that extends to the ground with no gaps or openings of any type that could allow sound to pass through. The barriers are required due to the fact that there is still noise emitting from the tunnel and detail bays when the doors are opened even if the blowers are turned off and this noise will exceed the code requirements if left unattenuated due to the close proximity of the property lines as shown in the attached calculations.

Summary of Blower Noise Attenuation

Our conclusion is that the current dryers need to be replaced with the Proto-Vest **Windshear** blower system with the silencer package and that the overhead door system should be provided for all bays as described above in conjunction with the ceiling acoustical treatment and barrier walls which will all work together so that the car wash facility is in compliance with the Town of Bedford Noise Ordinances at all times of use.

Peripheral Noise Sources

Measurements were taken of the vacuum systems, rooftop unit, and tunnel entrance at the north and south property lines. However, since the ambient noise level in the area was much higher than these sources, sound readings had to be taken quite near to the sources (3 to 5 feet) and the sound levels had to be calculated from these near-field readings to the property lines to get a true reading on their contribution to the sound level at the property lines. There were simply too many ambient noise sources to get an accurate reading on the contribution of the Russell Speeders equipment to the overall sound level at the property lines.

Please note that there is an existing building at the north property line with little potential for people to be directly impacted at the property line by the sound from Russell Speeders detailing area. In fact, this building has a very loud air release hose that cycles on every few minutes that makes conversation in the Russell Speeders property impossible while it is active. In addition, there is currently a deep hole in the ground at the south property line, so no one will be standing within earshot of the vacuums at that property line either. Additionally, the ambient sound level at both of these locations is affected by traffic noise on Route 117, the nearly constant equipment backup beepers from across the road at the equipment rental store, an air release valve from the building next door, sirens, trains and train horns, all of which are very frequent and subjectively more disturbing to the human ear than the noise coming from the vacuum system located at Russell Speeders. With all this in mind, we present the following findings and recommendations for the peripheral equipment at Russell Speeders.

Vacuum and Compressor at Rear of Property

Measurements were taken on April 8, 2014 of the vacuum noise from the rear property detailing area at the nearest north and south property lines. The existing temporary outdoor air compressor will be located inside the building when the approval is obtained to upgrade the property, and will therefore not be contributing to the noise level. In the updated facility, the vacuums will be used in the detailing bays and will not exceed the noise code at the nearest property lines. The overhead doors will be down to prevent noise from being excessive at the nearest north property line. In addition to the vacuums, there are air hoses and floor mat cleaning tools that make significant sound levels. These will also be located in the detail bays and will only be used when the bay doors are down.

Vacuum System at Free Vacuum Area on North Side of Building

The sound level was measured at the north property line directly in line with the vacuum unit at the north side of the Russell Speeders building and it was the same with and without the vacuum system running, 60.8 dBA, meaning that it does not increase the ambient level at all. In addition, readings were taken 3 feet from the vacuum unit at the north side of the building and it measured 64.9 dBA. When calculated to the property line the level would be 39 dBA if it were possible to hear it above the ambient sound level, which it was not at the time of our readings. Please note that the free vacuum area will not exist in the altered facility.

Rooftop Heating Unit

Measurements were taken at the north and south property lines with the rooftop heating unit on and off. There was no change in the ambient sound level at any property line when the unit was turned on and off, and it was completely inaudible. There are therefore no sound attenuation measures required for this unit. A calculation is shown in Appendix C for this unit to the closest property line.

Residential Properties

There are two residences within 200 feet of the Russell Speeders property. These are both to the north and are shown on the attached detail D-1. In both cases, there are building structures that block the direct line of sight to the residential buildings from the car wash exit tunnel. The only equipment that would be in direct line of sight to the residences would be the north detailing areas. Since these will be enclosed in the alterations, there will be no appreciable effect on these properties, since the sound level will be inaudible as shown in the calculations in Appendix C. Also shown are calculations to the residences of blower noise since it is not currently audible above the ambient noise of the traffic at these residences.

With the planned enclosures for the detail bays to be located at the north side of the building, there will be Big Ass Fans mounted in the ceilings to provide air circulation for workers inside these buildings. These fans do not have sound level data, but according to Travis Simpson, the Vertical Market Specialist for Big Ass Fans, there are several of these fans in all sizes in his office within 30 feet of his desk and they are "inaudible". They do not produce noise even loud enough to measure inside his office. We therefore, conclude that these will not produce measurable noise at the property line which will be 50' away from the one story high detailing bay ceiling, let alone a residence that is 245' away in the case of the closest residence on the north side of the Adzam property. There will be no other heating, ventilating or cooling mechanical equipment added to the site to our knowledge.

Amplified Music

At the existing facility, there are two exterior speakers mounted on the northeast corner of the building facing the car owner waiting area. Measurements were taken of these speakers at 3 feet and then calculated to the nearest north property line. They will not exceed code as currently adjusted.

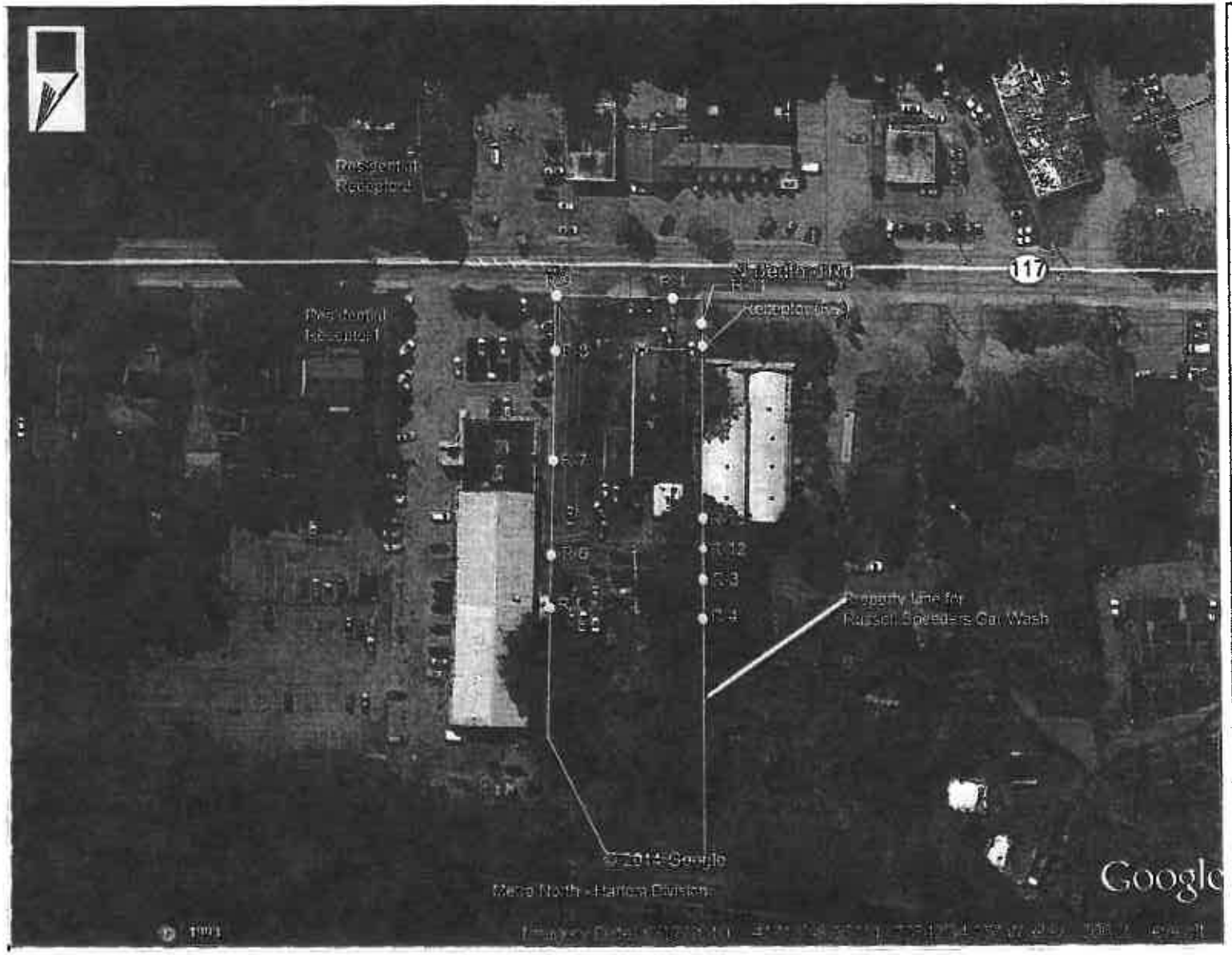
In addition, on all four sound level measurement days, there were no instances of car speakers being played for the workers. There are no "boomboxes" or music players in the facility for the workers and this policy will continue in the altered facility.

The above summarizes our findings and recommendations regarding the equipment at Russell Speeders. Please feel free to contact me if you have any questions or comments.

Very truly yours,

Maria L. Castellucci,
Consultant in AV and Acoustics

Appendix A



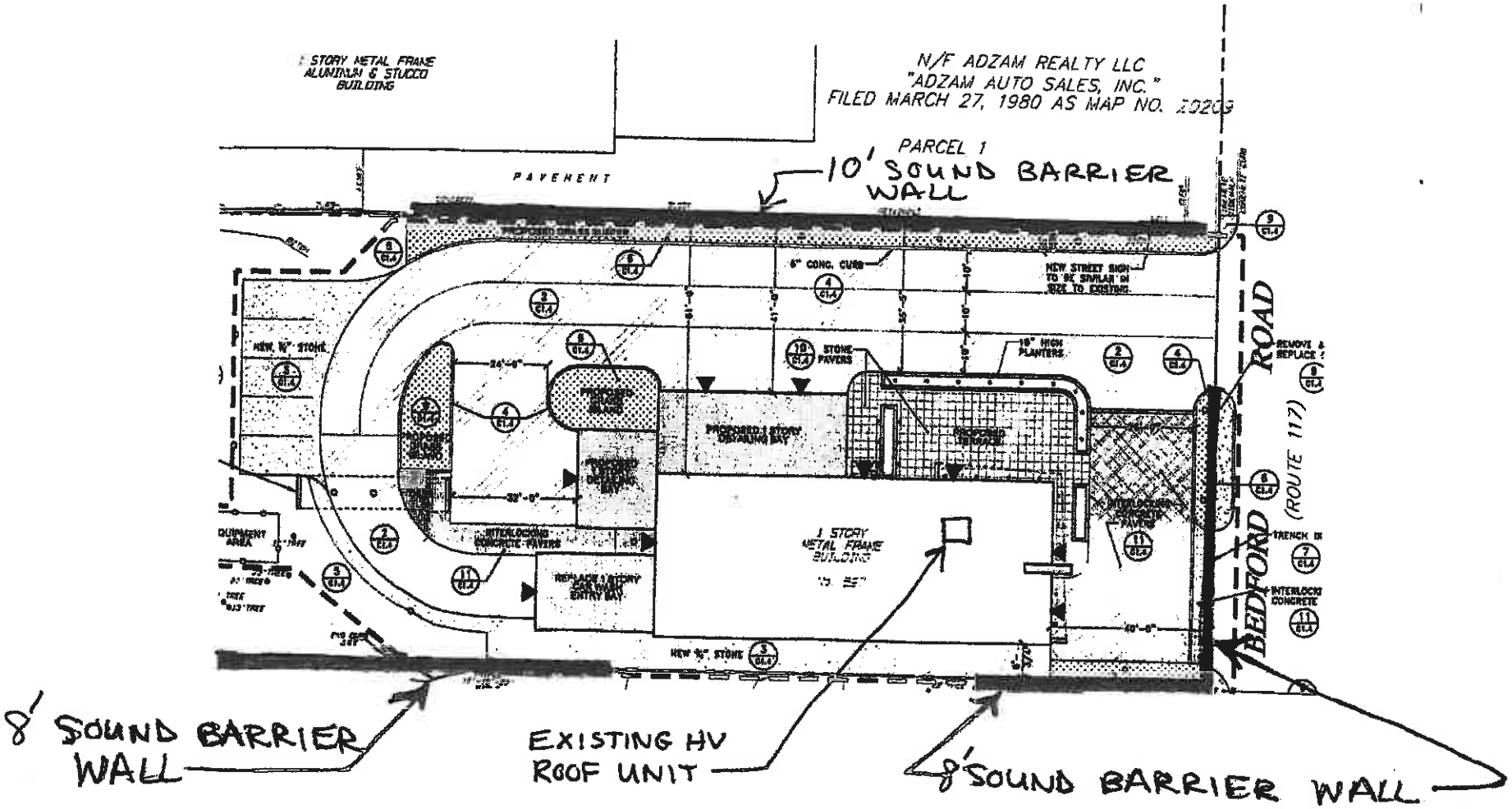
Record Notes

No.	Revision/Issue	Date

Site Name and Address

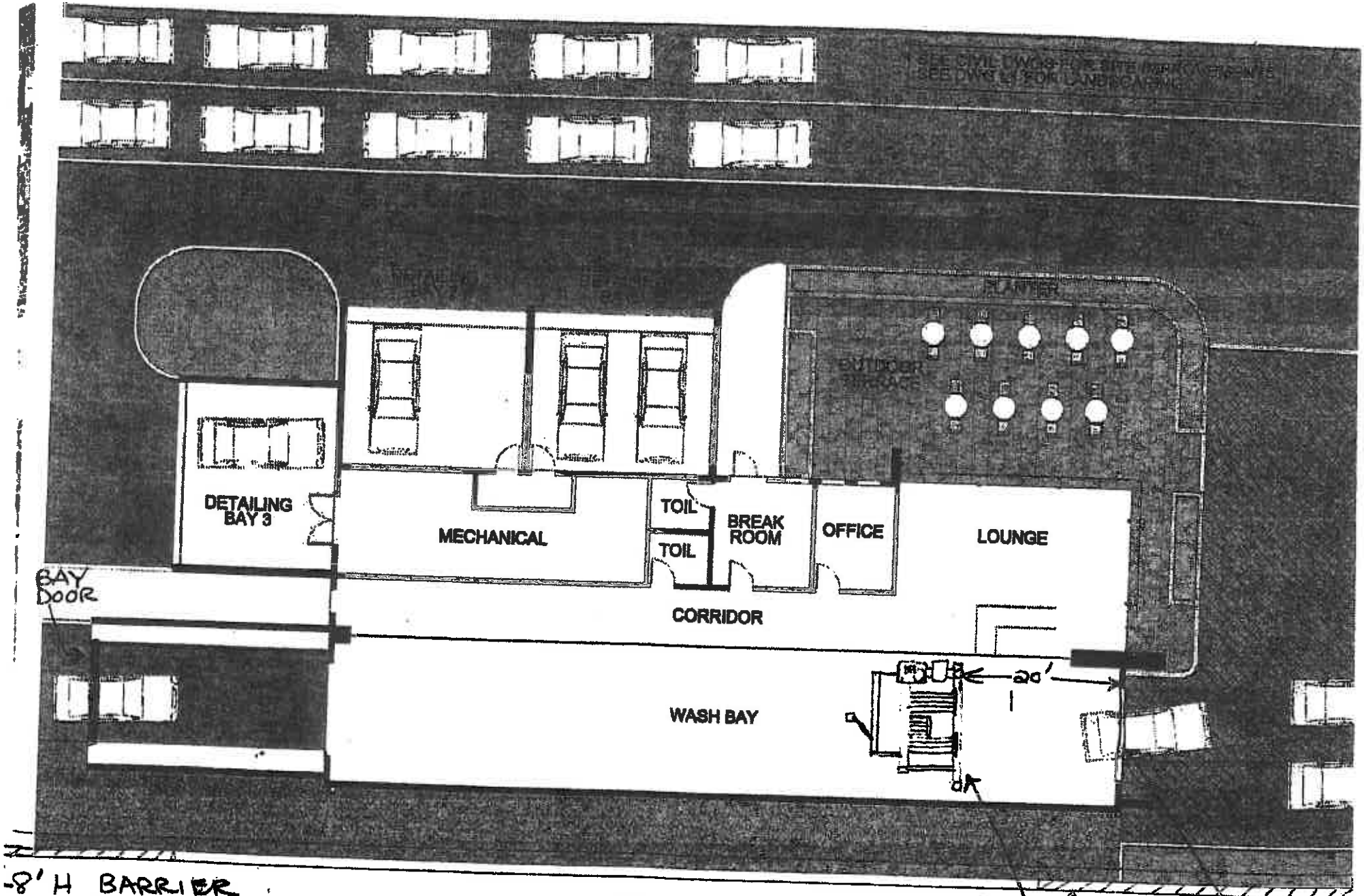
Russell Speeders Car Wash
Site Plan of Receptors and Measurement Locations

Project RSCW-1
Date 10-14-14
Scale 1:20
Sheet D-1



D-2

SOUND BARRIER WALL LOCATIONS

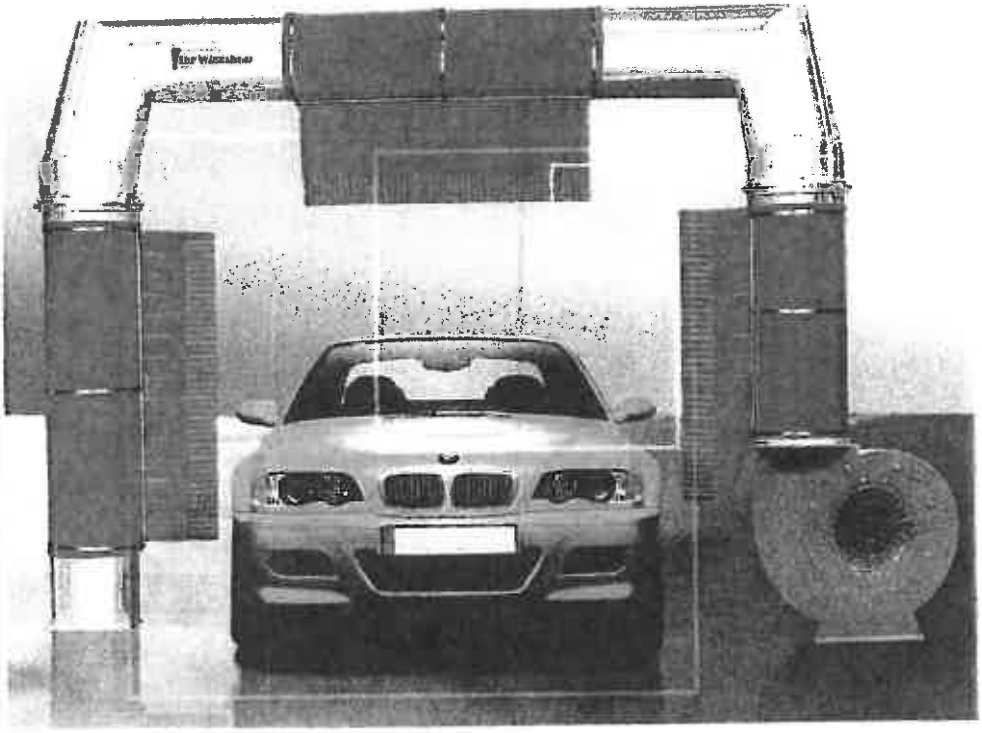


3 **FLOOR PLAN**

SCALE: 1/16" = 1'-0"

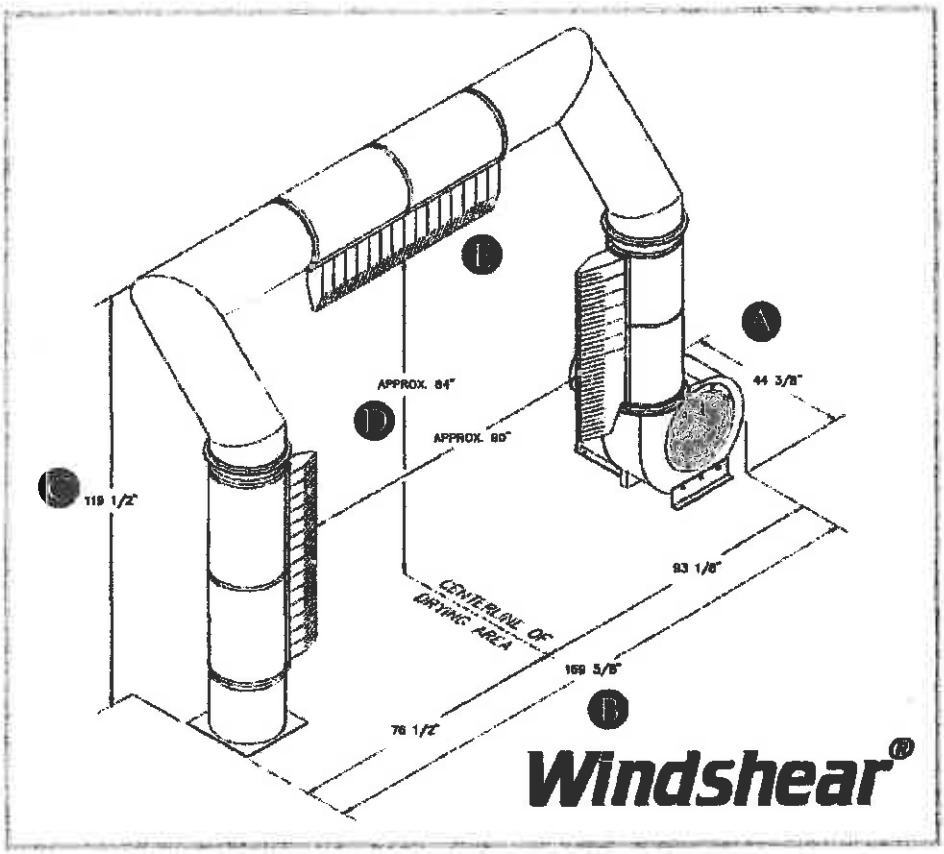
D-3 FLOOR PLAN

The Wind



- Lightweight
- Easy Transportation
- Modular or Stand Along Design
- Compact Design
- Noise Barrier

Proto-Vest Inc.



EQUIPMENT

- **A** OVERALL LENGTH 44 3/8 in.
- **B** OVERALL WIDTH 169 5/8 in.
- **C** OVERALL HEIGHT 119 1/2 in.
- **D** BAG HEIGHT 84 in.
- **E** VERTICAL OPENING 60 in.

Machine Operating Requirements*

- 30 hp, 3600 RPM
- 208-230/460 volts
- 1.15 service factor
- Frame: 286TS
- 3 Phase
- Totally enclosed, fan cooled (TEFC)

NOTE: Wiring and controls to be provided by the purchaser: Additional motor specifications available upon request. Additional voltages available on special order.

EQUIPMENT OPTIONS

- Green, Red, Blue, Black or Custom Bag Colors
- The Silencer Package
- Vehicle Recognition System (VRS)

Weight: 1250 lbs. (approximate)

MATERIAL INFORMATION

The Proto-Vest "Windshear®" is designed as a stand alone drying system that is ideal for tunnels with a variety of line speeds. This patented system utilizes one (1) 30 hp Magnum blower, plenum and three (3) Proto-Duck™ air delivery bags designed to direct air around the vehicle as it passes under the equipment arch. Proto-Vest's blower/motor assemblies are engineered for both maximum efficiency and cost effectiveness allowing the system to operate with only one 30hp Magnum blower. With the improved performance of the Magnum blower assembly the Windshear®'s drying quality far surpasses any comparable horsepower dryer in its class.

Proto-Vest's stringent standards in material selection for dryers result in extended equipment life and reduced maintenance. The blower assembly is manufactured from steel that is powder coated while the impeller is electroplated. The blower is AMCA Class IV certified. The plenum is made from 5052-H32 aluminum, while the bags are produced from Proto-Duck™ materials. These materials resist corrosion and tearing.

KEY BENEFITS

Patented Touchless Design: Pressurized air flows through three (3) patented bags which direct the air to the vehicle's horizontal and vertical surfaces. It dries the hood, roof, deck, windows, and sides of the vehicle without touching.

Low Maintenance: Other than the blower / impeller assemblies, there are no moving parts to wear-out or break down. (Please note that Proto-Vest recommends routine maintenance in order to maximize product life.)

Line Speed Efficiency: As a stand alone unit the "Windshear" will provide an effectively dried car at a wide variety of line speeds.

Compact / Modular design: Designed to fit into limited space as a stand alone or supplemental dryer.

SOUND READINGS

With Silencer / Without Silencer

	(WS)	(WOS)
Windshear® - (1) 30hp dryer:		
	WS: 10 ft=76.9 dBa;	WOS: 10 ft=91 dBa
	WS: 20 ft=70.9 dBa;	WOS: 20 ft=84.9 dBa
	WS: 30 ft=67.4 dBa;	WOS: 30 ft=81.4 dBa
	WS: 40 ft=64.9 dBa;	WOS: 40 ft=78.9 dBa
	WS: 50 ft=63 dBa;	WOS: 50 ft=77 dBa

(The above decibel readings are interpolated.)

SERVICE AGREEMENT

Proto-Vest recognizes that support after the sale of equipment is critical to the success of our customers. Our company offers its customers access to a wide range of services including: field service technicians, factory direct aftermarket parts, and an engineering staff for custom designed applications.

Proto-Vest Patents:
U.S.: 3,942,430; 4,161,801; 4,409,085; 4,418,442; 4,433,450; 4,445,251; 4,446,592; 4,589,160; 4,700,426; 5,027,714; 5,184,369; 5,187,881; 5,195,207; 5,280,665; 5,421,102; 5,553,346; 5,886,648; 5,901,461; 5,950,326; 5,960,564; 6,038,781; 6,176,024; 6,519,872; others pending.
Canada: 1,021,996; 1,111,928; 1,190,453; 1,201,040; 1,197,439; 1,219,195; 1,219,192; 1,219,194; 1,258,026; 1,219,193; 2,013,749; 2,071,568; 2,071,239; 2,071,388; others pending.

*Specifications subject to change without notice.
***If starting motor over 10-12 times an hour it may be more efficient to leave blower on.

Proto-Vest, Inc., • 7400 N. Glen Harbor Blvd., Glendale, AZ 85307 • 800-521-8218 • 623-872-8300 • Fax 623-872-6150
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Silencer Package

GENERAL DESCRIPTION

The Proto-Vest "Silencer Package" was developed to enable our dryers to meet OSHA, federal, state and local noise reduction standards. The OSHA permissible noise exposure is 85 dB for an 8-hour shift. By reducing noise levels into the 70 dB to 80 dB range, you can be assured of a pleasant environment for both your employees and customers. The Silencing Package is a standard feature on all Untouchable dryers, while the Stripper and Windshear drying systems can be equipped with the Silencing Package as an option. Using state-of-the-art materials, which require virtually no maintenance, Proto-Vest has designed three components to comprise the Silencer Package.

- **Blower Inlet:** reduces the noise generated by rapidly moving air being drawn into the blower assembly.
- **Blower-motor Cover:** houses the blower and motor completely to absorb noise emitted from the motor and impeller while providing the assembly additional protection.
- **Riser Can:** absorbs the noise created by the blower, impeller and the movement of the air as it leaves the blower by advancing through the dryer's plenum.

The Silencer Package reduces decibel levels on Proto-Vest dryers on an average of 10 decibels making them approximately 10 times quieter than the un-silenced models!

DECIBEL LEVEL READINGS

With Silencer (WS)	Without Silencer (WOS)
Windshear InBay - (2) 25hp Dryer:	
WS: 10 ft=88 dBa;	WOS: 10 ft=94 dBa
WS: 20 ft=82 dBa;	WOS: 20 ft=88 dBa
WS: 30 ft=78.4 dBa;	WOS: 30 ft=84.5 dBa
WS: 40 ft=76 dBa;	WOS: 40 ft=82 dBa
WS: 50 ft=74 dBa;	WOS: 50 ft=80 dBa
WS: 60 ft=72.4 dBa;	WOS: 60 ft=78.4 dBa
Windshear - 30hp Dryer:	
WS: 10 ft=76.9 dBa;	WOS: 10 ft=91 dBa
WS: 20 ft=70.9 dBa;	WOS: 20 ft=84.9 dBa
WS: 30 ft=67.4 dBa;	WOS: 30 ft=81.4 dBa
WS: 40 ft=64.9 dBa;	WOS: 40 ft=78.9 dBa
WS: 50 ft=63 dBa;	WOS: 50 ft=77 dBa
Windshear II - (2) 30hp Dryer:	
WS: 10 ft=88 dBa;	WOS: 10 ft=99 dBa
WS: 20 ft=81.9 dBa;	WOS: 20 ft=92.9 dBa
WS: 30 ft=78.4 dBa;	WOS: 30 ft=89.4 dBa
WS: 40 ft=75.4 dBa;	WOS: 40 ft=86.9 dBa
WS: 50 ft=74 dBa;	WOS: 50 ft=85 dBa
TopShot - 30hp Dryer:	
WS: 10 ft=76.9 dBa;	WOS: 10 ft=91 dBa
WS: 20 ft=70.9 dBa;	WOS: 20 ft=84.9 dBa
WS: 30 ft=67.4 dBa;	WOS: 30 ft=81.4 dBa
WS: 40 ft=64.9 dBa;	WOS: 40 ft=78.9 dBa
WS: 50 ft=63 dBa;	WOS: 50 ft=77 dBa
TopShot II - (2) 30hp Dryer:	
WS: 10 ft=88 dBa;	WOS: 10 ft=99 dBa
WS: 20 ft=81.9 dBa;	WOS: 20 ft=92.9 dBa
WS: 30 ft=78.4 dBa;	WOS: 30 ft=89.4 dBa
WS: 40 ft=75.9 dBa;	WOS: 40 ft=86.9 dBa
WS: 50 ft=74 dBa;	WOS: 50 ft=85 dBa
TailWind - (1) 25hp Dryer:	
WS: 10 ft=85 dBa;	WOS: 10 ft=91 dBa
WS: 20 ft=79 dBa;	WOS: 20 ft=85 dBa
WS: 30 ft=75.5 dBa;	WOS: 30 ft=83.5 dBa
WS: 40 ft=73 dBa;	WOS: 40 ft=79 dBa
WS: 50 ft=71 dBa;	WOS: 50 ft=77 dBa
SideShot - 15hp Dryer:	
WS: 10 ft=74.5 dBa;	WOS: 10 ft=82.9 dBa
WS: 20 ft=68.5 dBa;	WOS: 20 ft=76.9 dBa
WS: 30 ft=64.9 dBa;	WOS: 30 ft=73.4 dBa
WS: 40 ft=62.4 dBa;	WOS: 40 ft=70.9 dBa
WS: 50 ft=60.5 dBa;	WOS: 50 ft=69 dBa
SideShot II - 30hp Dryer:	
WS: 10 ft=76.9 dBa;	WOS: 10 ft=91 dBa
WS: 20 ft=70.9 dBa;	WOS: 20 ft=84.9 dBa
WS: 30 ft=67.4 dBa;	WOS: 30 ft=81.4 dBa
WS: 40 ft=64.9 dBa;	WOS: 40 ft=78.9 dBa
WS: 50 ft=63 dBa;	WOS: 50 ft=77 dBa
90N/90XS - 15hp Dryers:	
WS: 10 ft=74.5 dBa;	WOS: 10 ft=82.9 dBa
WS: 20 ft=68.5 dBa;	WOS: 20 ft=76.9 dBa
WS: 30 ft=64.9 dBa;	WOS: 30 ft=73.4 dBa
WS: 40 ft=62.4 dBa;	WOS: 40 ft=70.9 dBa
WS: 50 ft=60.5 dBa;	WOS: 50 ft=69 dBa
IP330 - 30hp Dryers:	
WS: 10 ft=76.9 dBa;	WOS: 10 ft=91 dBa
WS: 20 ft=70.9 dBa;	WOS: 20 ft=84.9 dBa
WS: 30 ft=67.4 dBa;	WOS: 30 ft=81.4 dBa
WS: 40 ft=64.9 dBa;	WOS: 40 ft=78.9 dBa
WS: 50 ft=63 dBa;	WOS: 50 ft=77 dBa
(Proto-Vest's Silencing Package is standard on all of the Untouchable series.)	
IP345 - 45hp Dryers:	
WS: 10 ft=76.9 dBa;	WOS: 10 ft=91 dBa
WS: 20 ft=70.9 dBa;	WOS: 20 ft=84.9 dBa
WS: 30 ft=67.4 dBa;	WOS: 30 ft=81.4 dBa
WS: 40 ft=64.9 dBa;	WOS: 40 ft=78.9 dBa
WS: 50 ft=63 dBa;	WOS: 50 ft=77 dBa
(Proto-Vest's Silencing Package is standard on all of the Untouchable series.)	

*Specifications subject to change without notice.
NOTE: Proto-Vest dryer's dimensions will vary with the Silencer Package.

Proto-Vest, Inc., 7400 N. Glen Harbor Blvd., Glendale, AZ 85307
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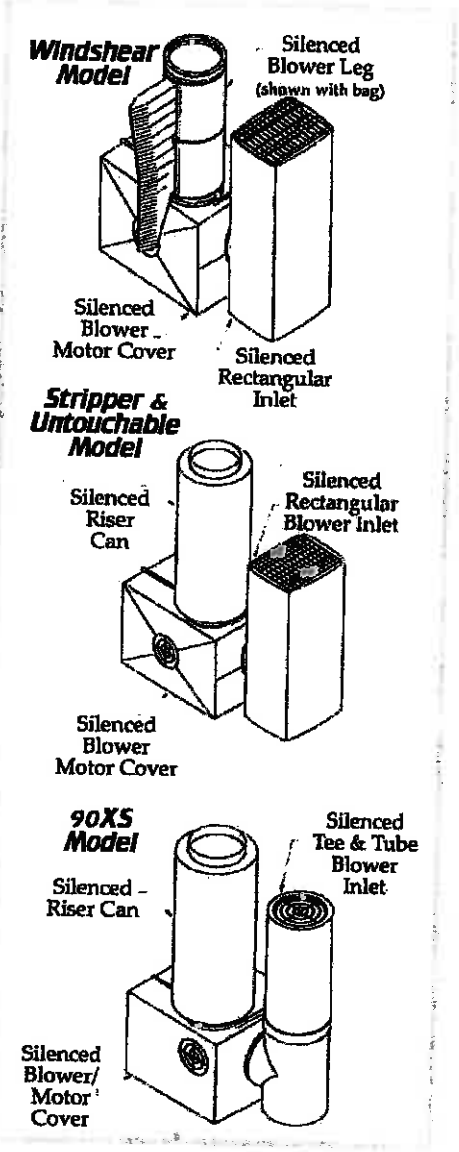
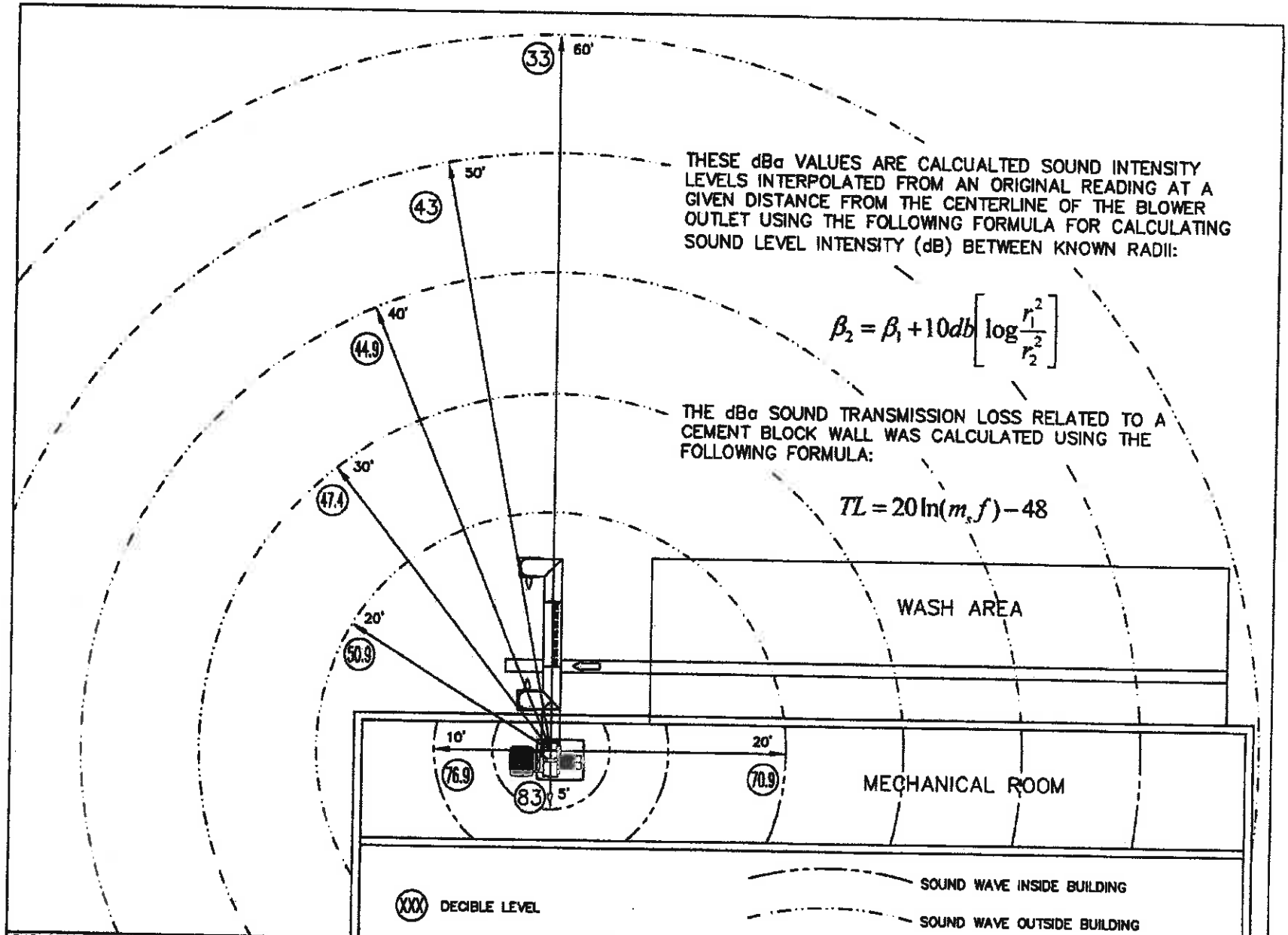




THESE dBa VALUES ARE CALCUALTED SOUND INTENSITY LEVELS INTERPOLATED FROM AN ORIGINAL READING AT A GIVEN DISTANCE FROM THE CENTERLINE OF THE BLOWER OUTLET USING THE FOLLOWING FORMULA FOR CALCULATING SOUND LEVEL INTENSITY (dB) BETWEEN KNOWN RADII:

$$\beta_2 = \beta_1 + 10db\left[\log\frac{r_1^2}{r_2^2}\right]$$

THE dBa SOUND TRANSMISSION LOSS RELATED TO A CEMENT BLOCK WALL WAS CALCULATED USING THE FOLLOWING FORMULA:

$$TL = 20\ln(m_s f) - 48$$

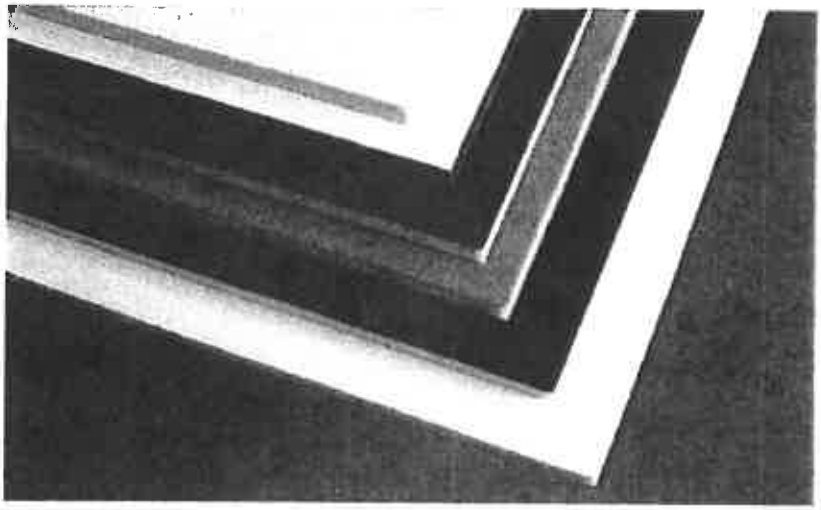
CAD DRAWING NAME: DCBLCW02.DWG	TITLE: CUSTOM WINDSHEAR AT PLAN VIEW dBa FROM ENCLOSED SILENCED BLOWER	Proto-Vest Inc.
LAST DATE EDITED: 9/5/07 BY: SM		
DRAWN BY: K. KNORP SCALE: NONE		
DATE CREATED: 3/8/02 SHEET: 1 OF 1		

CEILING | TILES

Custom High Performance Ceiling Tiles

The entire line of MBI ceiling tile products is dimensionally stable, market friendly, and designed to last a lifetime. They offer excellent acoustics at economical prices.

PRODUCT DESCRIPTION



MBI Nubby Ceiling Tiles are a traditional classic, used for decades in the ceiling industry. Offered in small-run quantities and custom sizes.

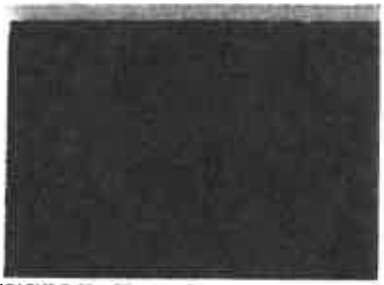
MBI PVC Ceiling Tiles are a cost-effective solution when color is essential to your project. The PVC facing comes in 10 colors to suit your design needs.

MBI PVC Encapsulated Ceiling Tiles are ideal for all of your clean and high humidity environments. Also see our San Pan® line.

MBI Blackout Tiles are ideal for any ceiling where you need maximum sound absorption at a cost-effective price. The matte black finish has very little sheen, making the ceiling disappear. Perfect for home theaters and cinemas.

MBI Whiteout Tiles are an eco-friendly, pure white ceiling tile offering good acoustics with an environmentally sustainable design. Get your green points here.

MBI Fabric Ceiling Tiles offer a full palette of patterns and colors with an Ecose friendly core. The fabric finish is 100% recycled polyester, further enhancing its green qualities.



MBI PVC Ceiling Tile, 6000P

ACOUSTICAL PERFORMANCE

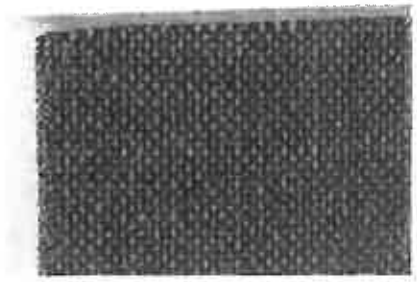
Product Model	Absorption Coefficient						
	125	250	500	1000	2000	4000	NRC
6000B-1060-N (1" x 6-7# Core, Blackout Faced)	0.78	1.07	0.87	1.04	1.12	1.15	1.05
6000G-1060-N (GreenLine) (1" x 6-7# Core, Whiteout Faced)	0.74	0.63	0.60	0.75	0.82	0.77	0.70
6000N-1060-N (1" x 6-7# Core, Nubby Faced)	0.75	0.91	0.70	0.93	0.98	1.03	0.90
600P-1060-N (San-Pan) (1" x 6-7# Core, PVC Encapsulated)	0.75	0.76	0.72	1.03	0.76	0.38	0.80

CODES & CERTIFICATES

★ Class A per ASTM E84 25/0/50

FOR MORE INFORMATION ON THESE PRODUCTS GO TO WWW.MBIPRODUCTS.COM

MBI Ceiling Tiles



MBI Fabric Ceiling Tile, 6000F

MBI Blackout Ceiling Tile, 6000B

MBI Nubby Ceiling Tile, 6000N

TECHNICAL SUPPORT

- **Weight:** 0.7# - 1.5# per square foot
- **Density:** 6-7#
- **Shape:** Square, Rectangular
- **Fire Rating:** MBI Ceiling Tiles meet Class A per ASTM E84 25/0/50
- **Dimensional Stability:** Ceiling Tiles are dimensionally stable
- **Maintenance:** Materials selected to provide easy maintenance, durability and abuse resistance.

SIZES AVAILABLE

- Thickness of 1"-2"
- Custom Thicknesses available
- 16 square foot maximum
- Custom sizes available upon request

FINISHES AVAILABLE

- Black Matte Scrim
- Polyester Fabric. Other fabrics, subject to approval
- Sustainable Eco-Fabric
- Nubby Fabric
- 2.5 mil PVC Film

SUSPENSION PROVISIONS

- Grid by others
- Custom suspension available upon request

GENERAL NOTES

- Store products in a cool, dry, and temperature controlled interior location not less than 40°F prior to, during, and after installation.
- Store products out of direct UV sunlight.
- Store and protect products from the elements and from damage.
- Suspension hardware is not to be pre-installed.
- Do not subject acoustical products to critical edge lighting without first consulting manufacturer.
- MBI Ceiling Tiles are custom made. Sizes and quantities need to be determined by field verifying existing job-site conditions. Installer/Contractor is responsible for verifying and providing accurate field dimensions.
- MBI Ceiling Tiles must be kept in temperature-controlled environments.
- High humidity could cause panel fabric to wrinkle and/or de-laminate from fiberglass board.

MBI Penetration Panels are available to make field cuts around existing elements such as sprinkler heads, duct work, vents, lighting, etc.

SOUND | experience

PIONEERS IN THE DESIGN AND MANUFACTURING OF ACOUSTICAL PRODUCTS FOR OVER 45 YEARS

In commercial spaces where proper sound management is of critical importance, MBI has been at the forefront of acoustical innovation for over 45 years. In fact, we've designed and manufactured many of the products used today, from Classic Acoustical Baffles to Legendary Panels.

MBI acoustical products provide a distinctive, decorative solution to noise control for all types of buildings, including such large facilities as Arenas and Convention Centers, to smaller facilities such as Libraries, Churches, Audio/Visual Studios, and Restaurants.

MBI

Since 1963

INNOVATION FOR THE SOUND EXPERIENCE

WWW.MBIPRODUCTS.COM

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[illegible], Ohio [illegible]
T: [illegible]
F: [illegible]

Experience Matters:

Airlift Doors, Inc. has been a leader in the commercial door business for over 30 years.

We have been manufacturing air powered openers since 1979 and polycarbonate doors since 1991. We are proud to offer a wide variety of products to meet our customer's needs.

We specialize in car care applications such as car washes, service bays, car dealerships, oil change bays, salt storage sheds, and vehicle showrooms.

We have a strong distributor network set up across the United States and Canada with a presence worldwide.

Call one of our experienced sales staff today and see how Airlift Doors, Inc. can help you find the right products and services today!

AIRLIFT DOORS, INC.

Our Mission:

We take pride in the quality of our products and guarantee that no other manufacturer stands behind their products and warranties like we do. With the most options available in the industry, we are sure to help you find the right door and opener for your wash or bay.

Our Promise:

All standard size doors and openers are guaranteed in stock with the shortest lead times in the industry.

Our customers are important to us and we are there to assist them in every way with technical support available 24 hours a day, 7 days a week.

1-888-368-4403

www.AirliftDoors.com

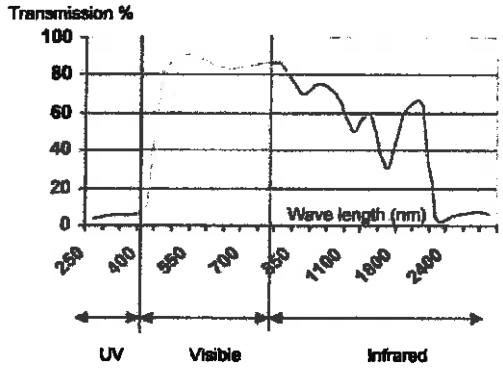
4.4 Sound insulation

MACROLUX® C and MACROLUX® C XL sheets sound-insulation values (reduction of noise) are the following:

Thickness	Weight (kg/m^2)	Reduction Rw
4	4.8	27 dB
5	6.0	28 dB
6	7.2	29 dB
8	9.6	31 dB
10	12.0	32 dB
12	14.4	34 dB

4.5 MACROLUX® C XL (EXTRA LIFE) U.V. protection

In order to prevent a premature aging due to the ultraviolet sun radiation, MACROLUX® C XL sheets are protected on both sides by means of a UV Absorber layer.
The co-extrusion method allows to realize an homogenous layer that strain and stop the ultraviolet component of sun beams.



The response to the solar radiation spectrum evidences how a UV-protected polycarbonate sheet can screen almost completely the ultraviolet component (on average only 4% of the radiation included in the range between 250-380 nanometres can pass through the sheet), while it remains totally transparent as regards to the visible component.
The outstanding characteristics of polycarbonate sheets remains unchanged in the time.
All MACROLUX® C XL sheets are constantly controlled with simulated aging tests (test made with QUV/SE Q-Panel) assuring the UV protection and granting MACROLUX® C XL sheets against loss of brightness, yellowing and breakage due to hail.
Verification test: ASTM D 1925
We ask you to contact our offices to have a copy of our warranty and of its extension.

Appendix B

Please note that all equations used in the calculations in Appendix C are in parentheses to reference the following equation numbers.

1. Attenuation of sound pressure level over distance in a free field[18]:

$$L_{p2} = L_{p1} + 20 \log_{10} (r_2/r_1)$$

L_{p1}= sound pressure level from source at location 1, dB
L_{p2}= sound pressure level from source at location 2, dB
r_1 = distance from source to location 1, ft or m
r_2= distance from source to location 2, ft or m

2. Calculation for adding multiple identical sound sources[19]:

$$L_p(\text{total}) = L_p(\text{single source}) + 10 \log_{10} N$$

L_p(single source) = the sound pressure level for one of the identical sound sources
L_p(total) = the total sum sound pressure level for all identical sources
N = the number of sources

3. Calculation for adding multiple sound sources which may not be identical[20]:

Addition of Sound Levels	
Difference between the two levels, dB	Add to the higher level, dB
0	3
1	2.5
2	2
3	2
4	1.5
5	1
6	1
7	1
8	0.5
9	0.5
10	0

[18] Handbook of HVAC Design, Editors Nils R. Grimm, PE and Robert C. Rosaler, PE, McGraw-Hill Publishing Company, c. 1990, p. 49.14.
[19] Ibid, p. 49.11.
[20] Ibid, p. 49.12, Table 49.5 *Addition of Sound Levels.*

4. A-weighting calculation for octave band spectrum[21]

Octave-Band Relative Frequency Response of a Sound Level Meter with A-Weighting to Sounds Arriving at Random Incidence

Octave Band Center Frequency, Hz	31.5	63	125	250	500	1000	2000	4000	8000
A-weighting, dB	-39.4	-26.2	-16.1	-8.6	-3.2	0.0	+1.2	+1.0	-1.1

5. Estimating Sound Power Level from sound pressure level at given distance from source:

$L_w = L_p - 10 \log_{10} (D/ (4\pi r^2)) - 10.5$

Where:

D = Directivity of 2
R = distance from source
L_w = Sound Power Level
L_p = Sound Pressure Level

6. Room Constant: Assumes tunnel dimensions of 17'W x 99'L x 23'H for main tunnel and 17'W x 30'L x 13'H for entrance tunnel attached to main tunnel:

$RC = A/ (1-\alpha_{avg})$

Where:

A = Total Room Absorption in ft^2 Sabin = $\Sigma S_i \alpha_i$ where S_i is the individual surface area in the room (ft^2) and α_i is the absorption coefficient for the individual surface in the room (Sabin)

α_{avg} = Average Absorption Coefficient = A/S where A is the absorption of the room (ft^2 Sabin) and S is the total surface area in the room (ft^2)

7. Propagation of Sound Indoors in Reverberant Space (within tunnel)[22]

For a continuing sound source in a room, the sound level is the sum of the direct and reverberant sound. The sound pressure for a receiver at a specific distance from the source in a room is expressed as follows:

$L_p = L_w + 10 \log_{10} (D/ (4\pi r^2) + 4 / RC) + 10.5$

Where:

L_p = received sound pressure level at location specified distance from source
L_w = Sound power level from the source
D = directivity coefficient = 2

[21] Handbook of Acoustical Measurements and Noise Control, Third Edition, Cyril M. Harris, Ph.D, Editor in Chief, Acoustical Society of America, Woodbury, NY, c. 1998, p. 1.17 Table 1.2 and p. 1.22 Table 1.4 (derived from the American National Specification for Sound Level Meters, ANSI SI.4-1985, Acoustical Society of America, New York, NY 10017-3483, c.1985.)
[22] 2003 ASHRAE Applications Handbook, Chapter 47 *Sound and Vibration Control*, p. 47.26.

RC = room constant (ft^2 Sabin)
π = 3.14
r = distance from source

8. Transmission Loss Calculation

$L_{p2} = L_{p1} - TL$

Where:
TL = transmission loss of specific material
L_{p1} = sound pressure level on source side of material
L_{p2} = sound pressure level on receiver side of material through which sound is traveling

9. Sound Power Level Calculation for Radiating Surface

$L_w = L_{p2} + 10 \log_{10} (A_{wall}) - 10.5$

Where:
L_w = sound power level
L_{p2} = sound pressure level
A_{wall} = Radiating Surface Area

10. Sound Pressure Calculation Outside the Tunnel Door

$L_p = L_w + 10 \log_{10} (D/ (4\pi r^2)) + 10.5$

Where:
L_p = received sound pressure level at location specified distance from source
L_w = Sound power level
D = directivity coefficient = 2
π = 3.14
r = distance from source

11. Off-Axis Attenuation for a Long Tunnel or Duct with a 12'W x 7'H opening in free space were estimated as follows with 0° as the reference point directly on axis to the tunnel opening and 90° representing the angle perpendicular to the tunnel opening[23]:

Off-Axis Angle	Octave Band Center Frequency (Hz)								
	31.5	.63	125	250	500	1k	2k	4k	8k
0°	0	0	0	0	0	0	0	0	0
45°	3	3	4	3	1	0	0	0	0
60°	3	5	8	10	10	10	10	10	10
90°	7	10	14	15	16	17	18	19	19
135°-180°	7	10	15	18	20	22	24	25	25

[23] Koppers Aircoustat Directivity Attenuation Table, 1975 interpolated for opening size at Russell Speeders.

12. Sound Barrier Wall Calculation for Thin Barriers[24]

$IL_{barrier} = 10 \log [3 + 10/NK] - A_{ground}$ dB

Where:

K is a correction factor for atmospheric effects. For distances between the source and receiver less than 100m, K=1, signifying that atmospheric effects may be neglected.

Negative values of insertion loss from this equation are set to zero.

A_{ground} is the attenuation provided by the ground before the barrier is installed. The first term is the attenuation provided by the barrier plus any attenuation still effective in the propagation path resulting from the ground and atmospheric effects after the installation of the barrier.

$N = (2/\lambda) [d_1 + d_2 - d]$

λ = wavelength
N = the Fresnel number (dimensionless)
d_1, d_2, and d = the distances shown in the figure below.
When the tip of the barrier just touches the line of sight between the source and receiver, or is below it, the value of N is zero.

[24] Ibid, pp. 3.18-3.19

Appendix C

Table 1 - Estimated Octave Band Noise Levels with Blower On and Bay Door Open – No Barrier Walls

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Location R-1	62	64	60	59	60	55	51	44	37	60
Location R-2	61	60	52	50	50	44	39	31	24	50
Location R-6	49	46	36	34	34	27	23	18	11	34
Location R-8	50	49	41	39	39	33	28	20	13	39
Location R-9	53	53	46	43	44	39	35	28	21	44
Location R-10	65	62	52	50	50	43	39	34	27	50
Octave Band Noise Code Limit (Residential)	59	61	60	53	46	40	31	20	11	49 dBA
Octave Band Noise Code Limit (Commercial)	65	67	66	59	52	46	37	26	17	55 dBA

Table 2 - Estimated Octave Band Noise Levels with Blower On and Bay Door Open – With Barrier Walls

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Location R-1 (8' high barrier)	56.1	57.2	51.9	49.0	47.7	40.1	33.3	23.4	13.4	47
Location R-2 (6' high barrier)	56.1	55.1	46.9	44.6	44.0	37.1	30.6	20.7	11.3	43
Location R-10 (6' high barrier)	60	57	47	44	44	36	30	23	13	43
Location R-10 (8' high barrier)	59	55	44	40	38	28	21	14	4	38
Location R-11 (6' high barrier)	59.1	61	55.8	55.3	57.6	52.4	46.7	37.5	28	57
Location R-11 (8' high barrier)	58	59	53	51	52	46	36	23	10	51
Location R-12 (8' high barrier)	58	57	49	47	48	41	32	22	9	48
Octave Band Noise Code Limit (Residential)	59	61	60	53	46	40	31	20	11	49 dBA
Octave Band Noise Code Limit (Commercial)	65	67	66	59	52	46	37	26	17	55 dBA

Table 3 - Estimated Octave Band Noise Levels with Blower Off and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Location R-1	44	51	51	49	44	43	39	32	23	47
Location R-2	49	53	49	46	40	38	33	25	16	43
Location R-6	33	37	33	30	24	22	17	9	-	27
Location R-8	32	36	32	29	23	21	16	8	-	26
Location R-9	41	46	43	39	34	33	29	22	11	37
Location R-10	46	50	46	43	37	35	30	22	13	40
Location R-11 (6' high barrier)	41.1	48	46.8	45.3	41.6	40.4	34.7	25.5	14	44
Location R-12 (8' high barrier)	43	49	47	44	39	37	27	14	-	41
Octave Band Noise Code Limit (Residential)	59	61	60	53	46	40	31	20	11	49 dBA
Octave Band Noise Code Limit (Commercial)	65	67	66	59	52	46	37	26	17	55 dBA

Table 4 - Estimated Octave Band Noise Levels with Blower On and Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Location R-1	58	52	41	37	31	24	18	14	10	33
Location R-2	63	54	39	34	27	19	12	7	3	32
Location R-6	45	36	20	15	8	-	-	-	-	14
Location R-8	44	35	20	15	8	0	-	-	-	14
Location R-9	48	40	26	20	14	7	1	-	-	19
Location R-10	61	52	36	31	24	16	9	5	0	30
Location R-11 (6' barrier wall)	58.1	52	39.8	36.3	31.6	24.4	16.7	10.5	4	33
Location R-12 (8' barrier wall)	54	57	33	28	23	14	2	-	-	31
Octave Band Noise Code Limit (Residential)	59	61	60	53	46	40	31	20	11	49 dBA
Octave Band Noise Code Limit (Commercial)	65	67	66	59	52	46	37	26	17	55 dBA

Table 5 - New Proto-Vest Blower System at Location R-1 with Blower On and Bay Door Open – No Barrier Wall

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to R-1 at 64 feet from source 20 log 20'/64'	-10	-10	-10	-10	-10	-10	-10	-10	-10	
On-axis attenuation (12' x 7' opening)	0	0	0	0	0	0	0	0	0	
Total Sound Pressure Level Due to new blower at R-1	62	64	60	59	60	55	51	44	37	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-1	22.6	37.8	43.9	50.4	57	55	52	45	36	60 dBA

Table 6 - New Proto-Vest Blower System at Location R-1 with Blower On and Bay Door Open – With 6' High Barrier Wall

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to R-1 at 64 feet from source 20 log 20'/64'	-10	-10	-10	-10	-10	-10	-10	-10	-10	
On-axis attenuation (12' x 7' opening)	0	0	0	0	0	0	0	0	0	
Insertion Loss of 6' High Barrier Wall (12)	-4.9	-5.1	-5.4	-5.9	-6.8	-8.2	-10.1	-12.4	-15.0	
Total Sound Pressure Level Due to new blower at R-1	57.1	58.9	54.6	53.1	53.2	46.8	40.9	31.6	22	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL	17.7	32.7	38.5	44.5	50.0	46.8	39.7	32.6	20.9	53 dBA

Table 7 - New Proto-Vest Blower System at Location R-1 with Blower On and Bay Door Open – With 8' High Barrier Wall

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to R-1 at 64 feet from source 20 log 20'/64'	-10	-10	-10	-10	-10	-10	-10	-10	-10	
On-axis attenuation (12' x 7' opening)	0	0	0	0	0	0	0	0	0	
Insertion Loss of 8' High Barrier Wall (12)	-5.9	-6.8	-8.1	-10.0	-12.3	-14.9	-17.7	-20.6	-23.6	
Total Sound Pressure Level Due to new blower at R-1	56.1	57.2	51.9	49.0	47.7	40.1	33.3	23.4	13.4	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-1	16.7	31.0	35.8	40.4	44.5	40.1	32.1	22.4	12.3	47 dBA

Table 8 - New Proto-Vest Blower System at Location R-1 with Blower Off and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound levels in tunnel with blower off	60	67	67	65	60	59	55	48	39	64 dBA
Attenuation over distance to R-1 at 64 feet from source 20 log 10'/64'	-16	-16	-16	-16	-16	-16	-16	-16	-16	
On-axis attenuation (12' x 7' opening)	0	0	0	0	0	0	0	0	0	
Total Sound Pressure Level with new blower off at R-1	44	51	51	49	44	43	39	32	23	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-1	5.6	24.8	34.9	40.4	40.8	43	40.2	33.0	21.9	47 dBA

Table 9 - New Proto-Vest Blower System at Location R-1 with Blower On and Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 20' (7)	83	83	78	77	78	72	69	64	58	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	79	73	62	58	52	45	39	35	31	
PWL Radiated by Door (9)	88	82	71	67	61	54	48	44	40	
SPL at 40' from door to location R-1 (10)	58	52	41	37	31	24	18	14	10	
On-axis attenuation due to tunnel @ 0° (12' x 7' opening)(11)	0	0	0	0	0	0	0	0	0	
Total Sound Pressure Level Due to new blower at R-1	58	52	41	37	31	24	18	14	10	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-1	18.6	25.8	24.9	28.4	27.8	24	19.2	15	8.9	33 dBA

Table 10 - New Proto-Vest Blower System at Location R-2 with Blower On and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to R-2 at 31 feet from source 20 log 20'/31' (1)	-4	-4	-4	-4	-4	-4	-4	-4	-4	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Due to new blower at R-2	61	60	52	50	50	44	39	31	24	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-2	21.6	33.8	37.9	41.4	46.8	44	40.2	32	22.9	50 dBA

Table 11 - New Proto-Vest Blower System at Location R-2 with Blower On and Bay Door Open – With 6' High Barrier Wall

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to R-2 at 31 feet from source 20 log 20'/31' (1)	-4	-4	-4	-4	-4	-4	-4	-4	-4	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Insertion Loss of 6' High Barrier Wall (12)	-4.9	-4.9	-5.1	-5.4	-6.0	-6.9	-8.4	-10.3	-12.7	
Total Sound Pressure Level Due to new blower at R-2	56.1	55.1	46.9	44.6	44.0	37.1	30.6	20.7	11.3	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-1	16.7	28.9	30.8	36.0	40.8	37.1	31.8	21.7	10.2	43 dBA

Table 12 - New Proto-Vest Blower System at Location R-2 with Blower Off and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound levels in tunnel with blower off	60	67	67	65	60	59	55	48	39	64 dBA
Attenuation over distance to R-2 at 31 feet from source 20 log 10'/31'	-4	-4	-4	-4	-4	-4	-4	-4	-4	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level with new blower off at R-2	49	53	49	46	40	38	33	25	16	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-2	9.6	26.8	32.9	37.4	36.8	38	34.2	26	14.9	43 dBA

Table 13 - New Proto-Vest Blower System at Location R-2 with Blower On and Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 20' (7)	83	83	78	77	78	72	69	64	58	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	79	73	62	58	52	45	39	35	31	
PWL Radiated by Door (9)	88	82	71	67	61	54	48	44	40	
SPL at 11' from door to location R-2 (10)	70	64	53	49	43	36	30	26	22	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Due to new blower at R-2	63	54	39	34	27	19	12	7	3	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-2	23.6	27.8	22.9	25.4	23.8	19	13.2	8	1.9	32 dBA

Table 14 - New Proto-Vest Blower System at Location R-6 with Blower On and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 110' (7)	83	83	77	76	77	71	68	64	57	
SPL outside door (8)	83	83	77	76	77	71	68	64	57	
PWL Radiated by Opening (9)	92	92	86	85	86	80	77	73	66	
SPL at 89' from door to location R-6 (10)	56	56	50	49	50	44	41	37	30	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Due to new blower at R-6	49	46	36	34	34	27	23	18	11	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-8	9.6	19.8	19.9	25.4	30.8	27	24.2	19	9.9	34 dBA

Table 15 - New Proto-Vest Blower System at Location R-6 with Blower Off and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound levels in tunnel with blower off	60	67	67	65	60	59	55	48	39	64 dBA
Attenuation over distance to R-6 at feet from source 20 log 10'/99' (1)	-20	-20	-20	-20	-20	-20	-20	-20	-20	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level with new blower off at R-6	33	37	33	30	24	22	17	9	-	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-8	-	10.8	16.9	21.4	20.8	22	18.2	10	-	27 dBA

Table 16 - New Proto-Vest Blower System at Location R-6 with Blower On and Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 110' (7)	83	83	77	76	77	71	68	64	57	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	79	73	61	57	51	44	38	35	30	
PWL Radiated by Door (9)	88	82	70	66	60	53	47	44	39	
SPL at 89' from door to location R-6 (10)	52	46	34	30	24	17	11	8	3	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Due to new blower at R-6	45	36	20	15	8	-	-	-	-	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-8	5.6	9.8	3.9	6.4	4.8	-	-	-	-	14 dBA

Table 17 - New Proto-Vest Blower System at Location R-8 with Blower On and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to R-8 at 110 feet from source 20 log 20'/110' (1)	-15	-15	-15	-15	-15	-15	-15	-15	-15	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Due to new blower at R-8	50	49	41	39	39	33	28	20	13	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-8	10.6	22.8	24.9	30.4	35.8	33	29.2	21.0	11.9	39 dBA

Table 18 - New Proto-Vest Blower System at Location R-8 with Blower Off and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound levels in tunnel with blower off	60	67	67	65	60	59	55	48	39	64 dBA
Attenuation over distance to R-8 at 110 feet from source 20 log 20'/110' (1)	-15	-15	-15	-15	-15	-15	-15	-15	-15	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level with new blower off at R-8	38	42	38	35	29	27	22	14	5	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-8	-	15.8	21.9	26.4	25.8	27	23.2	15.0	3.9	32 dBA

Table 19 - New Proto-Vest Blower System at Location R-8 with Blower On and Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 20' (7)	83	83	78	77	78	72	69	64	58	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	79	73	62	58	52	45	39	35	31	
PWL Radiated by Door (9)	88	82	71	67	61	54	48	44	40	
SPL at 90' from door to location R-8 (10)	51	45	34	30	24	17	11	7	3	
Off-axis attenuation (12' x 7' opening) 90' from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Due to new blower at R-8	44	35	20	15	8	0	-	-	-	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-8	4.6	8.8	3.9	6.4	4.8	0	-	-	-	14 dBA

Table 20 - New Proto-Vest Blower System at Location R-9 with Blower On and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to R-9 at 120 feet from source 20 log 20'/120' (1)	-16	-16	-16	-16	-16	-16	-16	-16	-16	
Off-axis attenuation (12' x 7' opening) 60' from tunnel opening (11)	-3	-5	-8	-10	-10	-10	-10	-10	-10	
Total Sound Pressure Level Due to new blower at R-9	53	53	46	43	44	39	35	28	21	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-11	13.6	26.8	29.9	34.7	40.8	39	36.2	29	19.9	44 dBA

Table 21 - New Proto-Vest Blower System at Location R-9 with Blower Off and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound levels in tunnel with blower off	60	67	67	65	60	59	55	48	39	64 dBA
Attenuation over distance to R-9 at 120 feet from source 20 log 10'/120'	-16	-16	-16	-16	-16	-16	-16	-16	-16	
Off-axis attenuation (12' x 7' opening) 60° from tunnel opening (11)	-3	-5	-8	-10	-10	-10	-10	-10	-10	
Total Sound Pressure Level with new blower off at R-9	41	46	43	39	34	33	29	22	11	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-9	1.6	19.8	26.9	30.4	30.8	33	30.2	23	9.9	37 dBA

Table 22 - New Proto-Vest Blower System at Location R-9 with Blower On and Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 20' (7)	83	83	78	77	78	72	69	64	58	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	79	73	62	58	52	45	39	35	31	
PWL Radiated by Door (9)	88	82	71	67	61	54	48	44	40	
SPL at 100' from door to location R-9 (10)	51	45	34	30	24	17	11	7	3	
Off-axis attenuation (12' x 7' opening) 60° from tunnel opening (11)	-3	-5	-8	-10	-10	-10	-10	-10	-10	
Total Sound Pressure Level Due to new blower at R-9	48	40	26	20	14	7	1	-	-	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-9	8.6	13.8	9.9	11.4	10.8	7	2.2	-	-	19 dBA

Table 23 - New Proto-Vest Blower System at Location R-10 with Blower On and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 110' (7)	83	83	77	76	77	71	68	64	57	
SPL outside door (8)	83	83	77	76	77	71	68	64	57	
PWL Radiated by Opening (9)	92	92	86	85	86	80	77	73	66	
SPL at 13' from door to location R-10 (10)	72	72	66	65	66	60	57	53	46	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Due to new blower at R-10	65	62	52	50	50	43	39	34	27	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-8	25.6	35.8	35.9	41.4	46.8	43	40.2	35	25.9	50 dBA

Table 24 - New Proto-Vest Blower System at Location R-10 with Blower On and Bay Door Open with 6' Barrier Wall

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 110' (7)	83	83	77	76	77	71	68	64	57	
SPL outside door (8)	83	83	77	76	77	71	68	64	57	
PWL Radiated by Opening (9)	92	92	86	85	86	80	77	73	66	
SPL at 13' from door to location R-10 (10)	72	72	66	65	66	60	57	53	46	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Insertion Loss of 6' barrier	-5	-5	-5	-6	-6	-7	-9	-11	-14	
Total Sound Pressure Level Due to new blower at R-10	60	57	47	44	44	36	30	23	13	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-8	20.6	30.8	30.9	35.4	40.8	36	31.2	24	11.9	43 dBA

Table 25 - New Proto-Vest Blower System at Location R-10 with Blower On and Bay Door Open with 8' Barrier Wall

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 110' (7)	83	83	77	76	77	71	68	64	57	
SPL outside door (8)	83	83	77	76	77	71	68	64	57	
PWL Radiated by Opening (9)	92	92	86	85	86	80	77	73	66	
SPL at 13' from door to location R-10 (10)	72	72	66	65	66	60	57	53	46	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Insertion Loss of 8' barrier	-6	-7	-8	-10	-12	-15	-18	-20	-23	
Total Sound Pressure Level Due to new blower at R-10	59	55	44	40	38	28	21	14	4	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-8	19.6	28.8	27.9	31.4	34.8	28	22.2	15	2.9	38 dBA

Table 26 - New Proto-Vest Blower System at Location R-10 with Blower Off and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound levels in tunnel with blower off	60	67	67	65	60	59	55	48	39	64 dBA
Attenuation over distance to R-10 at 13 feet from source 20 log 10'/23' (1)	-7	-7	-7	-7	-7	-7	-7	-7	-7	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level with new blower off at R-10	46	50	46	43	37	35	30	22	13	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-8	6.6	23.8	29.9	34.4	33.8	35	31.2	23	11.9	40 dBA

Table 27 - New Proto-Vest Blower System at Location R-10 with Blower On and Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 110' (7)	83	83	77	76	77	71	68	64	57	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	79	73	61	57	51	44	38	35	30	
PWL Radiated by Door (9)	88	82	70	66	60	53	47	44	39	
SPL at 13' from door to location R-10 (10)	68	62	50	46	40	33	27	24	19	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Due to new blower at R-8	61	52	36	31	24	16	9	5	0	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-8	21.6	25.8	19.9	22.4	20.8	16	7.8	6.0	-	30 dBA

Table 28 - New Proto-Vest Blower System at Location R-11 with Blower On and Bay Door Open – With 6' High Barrier Wall

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to R-11 at 36 feet from source 20 log 20'/36' (1)	-5	-5	-5	-5	-5	-5	-5	-5	-5	
Off-axis attenuation (12' x 7' opening) 45° from tunnel opening (11)	-3	-3	-4	-3	-1	0	0	0	0	
Insertion Loss of 6' High Barrier Wall (12)	-4.9	-5.0	-5.2	-5.7	-6.4	-7.6	-9.3	-11.5	-14.0	
Total Sound Pressure Level Due to new blower at R-11	59.1	61	55.8	55.3	57.6	52.4	46.7	37.5	28	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-11	19.7	34.8	39.7	46.7	54.4	52.4	47.9	38.5	26.9	57 dBA

Table 29 - New Proto-Vest Blower System at Location R-11 with Blower On and Bay Door Open – With 8' High Barrier Wall

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to R-11 at 36 feet from source 20 log 20'/36' (1)	-5	-5	-5	-5	-5	-5	-5	-5	-5	
Off-axis attenuation (12' x 7' opening) 45° from tunnel opening (11)	-3	-3	-4	-3	-1	0	0	0	0	
Insertion Loss of 8' High Barrier Wall (12)	-6	-7	-8	-10	-12	-14	-20	-26	-32	
Total Sound Pressure Level Due to new blower at R-11	58	59	53	51	52	46	36	23	10	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-11	18.6	32.8	36.9	42.4	48.8	46	37.2	24	8.9	51 dBA

Table 30 - New Proto-Vest Blower System at Location R-11 with Blower Off and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound levels in tunnel with blower off	60	67	67	65	60	59	55	48	39	64 dBA
Attenuation over distance to R-11 at 36 feet from source 20 log 10'/36'	-11	-11	-11	-11	-11	-11	-11	-11	-11	
Off-axis attenuation (12' x 7' opening) 45° from tunnel opening (11)	-3	-3	-4	-3	-1	0	0	0	0	
Insertion Loss for 6' barrier wall (12)	-4.9	-5.0	-5.2	-5.7	-6.4	-7.6	-9.3	-11.5	-14.0	
Total Sound Pressure Level with new blower off at R-11	41.1	48	46.8	45.3	41.6	40.4	34.7	25.5	14	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-2	1.7	21.8	30.7	36.7	38.4	40.4	35.9	26.5	12.9	44 dBA

Table 31 - New Proto-Vest Blower System at Location R-11 with Blower On and Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 20' (7)	83	83	78	77	78	72	69	64	58	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	79	73	62	58	52	45	39	35	31	
PWL Radiated by Door (9)	88	82	71	67	61	54	48	44	40	
SPL at 16' from door to location R-11 (10)	66	60	49	45	39	32	26	22	18	
Off-axis attenuation (12' x 7' opening) 45° from tunnel opening (11)	-3	-3	-4	-3	-1	0	0	0	0	
Insertion Loss for 6' Barrier Wall	-4.9	-5.0	-5.2	-5.7	-6.4	-7.6	-9.3	-11.5	-14.0	
Total Sound Pressure Level Due to new blower at R-11	58.1	52	39.8	36.3	31.6	24.4	16.7	10.5	4	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-11	18.7	25.8	23.7	27.7	28.4	24.4	17.9	11.5	2.9	33 dBA

Table 32 - New Proto-Vest Blower System at Location R-12 with Blower On and Bay Door Open with 8' Barrier Wall

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 110' (7)	83	83	77	76	77	71	68	64	57	
SPL outside door (8)	83	83	77	76	77	71	68	64	57	
PWL Radiated by Opening (9)	92	92	86	85	86	80	77	73	66	
SPL at 25' from door to location R-12 (10)	67	67	61	60	61	55	52	48	41	
Off-axis attenuation (12' x 7' opening) 45° from tunnel opening (11)	-3	-3	-4	-3	-1	0	0	0	0	
Insertion Loss of 8' barrier	-6	-7	-8	-10	-12	-14	-20	-26	-32	
Total Sound Pressure Level Due to new blower at R-12	58	57	49	47	48	41	32	22	9	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-12	18.6	30.8	32.9	38.4	44.8	42	33.2	23.0	8.9	48 dBA

Table 33 - New Proto-Vest Blower System at Location R-12 with Blower Off and Bay Door Open

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound levels in tunnel with blower off	60	67	67	65	60	59	55	48	39	64 dBA
Attenuation over distance to R-3 at 25 feet from source 20 log 10'/25' (1)	-8	-8	-8	-8	-8	-8	-8	-8	-8	
Off-axis attenuation (12' x 7' opening) 45' from tunnel opening (11)	-3	-3	-4	-3	-1	0	0	0	0	
Insertion Loss of 8' barrier	-6	-7	-8	-10	-12	-14	-20	-26	-32	
Total Sound Pressure Level with new blower off at R-12	43	49	47	44	39	37	27	14	-	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-12	3.6	22.8	30.9	35.4	35.8	37	28.2	15	-	41 dBA

Table 34 - New Proto-Vest Blower System at Location R-12 with Blower On and Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in tunnel with blower on (5)	96	98	94	93	94	89	85	78	71	
Room Constant (6)	986	1580	2187	2278	2153	3124	2302	1217	1028	
SPL inside door at 110' (7)	83	83	77	76	77	71	68	64	57	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	79	73	61	57	51	44	38	35	30	
PWL Radiated by Door (9)	88	82	70	66	60	53	47	44	39	
SPL at 25' from door to location R-12 (10)	63	67	45	41	35	28	22	19	14	
Off-axis attenuation (12' x 7' opening) 45' from tunnel opening (11)	-3	-3	-4	-3	-1	0	0	0	0	
Insertion Loss of 8' barrier	-6	-7	-8	-10	-12	-14	-20	-26	-32	
Total Sound Pressure Level Due to new blower at R-12	54	57	33	28	23	14	2	-	-	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-12	14.6	30.8	16.9	19.4	19.8	14	3.2	-	-	31 dBA

Peripheral Sound Sources Measured on Property:

Table 35 - Existing HV Rooftop Unit Calculated to Location R-8 with Other Equipment Off

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Sound level measured on roof at 3 feet from unit	62	66	63	55	56	55	52	47	40	60 dBA
Attenuation over distance to R-8 at 75 feet from source 20 log 3'/75' (1)	-28	-28	-28	-28	-28	-28	-28	-28	-28	
Parapet 3' high barrier effect	-4.9	-4.9	-5.1	-5.4	-6.0	-7.0	-8.5	-10.4	-12.8	
Total Sound Pressure Level for Rooftop HV unit at R-8 with new blower off	29.1	33.1	29.9	21.6	22	20	15.5	8.6	-	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-8	-	6.9	13.8	13	18.8	20	16.7	9.6	-	24 dBA

Table 36 - Existing Audio Speakers on Building Calculated to Location R-8 with Other Equipment Off

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Sound level measured near audio speakers mounted on building at 3 feet from unit	68	88	71	65	62	65	63	59	50	69 dBA
Attenuation over distance to R-8 at 62 feet from source 20 log 3'/62' (1)	-26	-26	-26	-26	-26	-26	-26	-26	-26	
Total Sound Pressure Level for audio speakers at R-8 with new blower off	42	42	45	39	36	39	37	33	24	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated with new blower off at R-8	2.6	15.8	28.9	30.4	32.8	39	38.2	34.0	22.9	43 dBA

Table 37 - Detailing Bay Calculated to Location R-7 with Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in detailing bay with air hose and floor mat cleaner on (5)	101	100	95	92	91	97	107	102	102	
Room Constant (6)	361	678	974	993	927	1499	1014	461	365	
SPL inside door at 10' (7)	92.5	89.2	83.5	80	79.2	73.3	94.9	92.6	93.5	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	88.5	79.2	67.5	61	53.2	46.3	64.9	63.6	66.5	
PWL Radiated by Door (9)	102.5	93.2	81.5	75	67.2	60.3	78.9	77.6	80.5	
SPL at 45' from door to location R-7 (10)	72	62.7	51	44.5	36.7	29.8	48.4	47.1	50	
Insertion Loss of 10' barrier	-6	-6	-7	-9	-11	-13	-16	-18	-21	
Total Sound Pressure Level Due to detail bay at R-7	66	56.7	44	35.5	25.7	16.8	32.4	29.1	29	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated	26.6	30.5	27.9	26.9	22.5	16.8	33.6	30.1	27.9	37 dBA

Table 38 - Detailing Bay Calculated to Residential Receptor R-1 with Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in detailing bay with air hose and floor mat cleaner on (5)	101	100	95	92	91	97	107	102	102	
Room Constant (6)	361	678	974	993	927	1499	1014	461	365	
SPL inside door at 10' (7)	92.5	89.2	83.5	80	79.2	73.3	94.9	92.6	93.5	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	88.5	79.2	67.5	61	53.2	46.3	64.9	63.6	66.5	
PWL Radiated by Door (9)	102.5	93.2	81.5	75	67.2	60.3	78.9	77.6	80.5	
SPL at 245' from door to Residential receptor 1 (10)	57.5	48.2	36.5	30	22.2	15.3	33.9	32.6	35.5	
Insertion Loss of 10' barrier	-6	-6	-7	-9	-11	-13	-16	-18	-21	
Total Sound Pressure Level Due to detail bay at Residential receptor 1	51.5	42.2	29.5	21	11.2	2.3	17.9	14.6	14.5	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL	12.1	16	13.4	12.4	8	2.3	19.1	15.6	13.4	23 dBA

Table 39 - Detailing Bay Calculated to Residential Receptor R-2 with Bay Door Closed

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Estimated sound power levels in detailing bay with air hose and floor mat cleaner on (5)	101	100	95	92	91	97	107	102	102	
Room Constant (6)	361	678	974	993	927	1499	1014	461	365	
SPL inside door at 10' (7)	92.5	89.2	83.5	80	79.2	73.3	94.9	92.6	93.5	
Estimated Transmission Loss of 6mm Macrolux C Polycarbonate Overhead Door	-4	-10	-16	-19	-26	-27	-30	-29	-27	
SPL outside door (8)	88.5	79.2	67.5	61	53.2	46.3	64.9	63.6	66.5	
PWL Radiated by Door (9)	102.5	93.2	81.5	75	67.2	60.3	78.9	77.6	80.5	
SPL at 245' from door to Residential receptor 2 (10)	57.5	48.2	36.5	30	22.2	15.3	33.9	32.6	35.5	
Off-axis attenuation (12' x 7' opening) 45° from detail bay opening (11)	-3	-3	-4	-3	-1	0	0	0	0	
Insertion Loss of 10' barrier	-6	-6	-7	-9	-11	-13	-16	-18	-21	
Total Sound Pressure Level Due to detail bay at Residential receptor 1	48.5	39.2	25.5	18	10.2	2.3	17.9	14.6	14.5	
A-weighting (4)	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL	9.1	13	9.4	9.4	7	2.3	19.1	15.6	13.4	23 dBA

Table 40 - New Proto-Vest Blower System Calculated to Residential Receptor 1 with Blower On and Bay Door Open (worst case)

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to Residential Receptor 1 at 245 feet from source 20 log 20'/265' (1)	-22	-22	-22	-22	-22	-22	-22	-22	-22	
Off-axis attenuation (12' x 7' opening) 90° from tunnel opening (11)	-7	-10	-14	-15	-16	-17	-18	-19	-19	
Total Sound Pressure Level Due to new blower at Residential receptor 1	43	42	34	32	32	26	21	13	6	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-8	3.6	15.8	17.9	23.4	28.8	26	22.2	14	4.9	32 dBA

Table 41 - New Proto-Vest Blower System Calculated to Residential Receptor 2 with Blower On and Bay Door Open (worst case)

	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dBA
Windshear estimated sound levels with attenuator package - Sound Pressure Level at 20'	72	74	70	69	70	65	61	54	47	71 dBA
Attenuation over distance to Residential Receptor 2 at 245 feet from source 20 log 20'/265' (1)	-22	-22	-22	-22	-22	-22	-22	-22	-22	
Off-axis attenuation (12' x 7' opening) 60° from tunnel opening (11)	-3	-5	-8	-10	-10	-10	-10	-10	-10	
Total Sound Pressure Level Due to new blower at Residential Receptor 2	47	47	40	37	38	33	29	22	15	
A-weighting	-39.4	-26.2	-16.1	-8.6	-3.2	0	+1.2	+1.0	-1.1	
Total A-weighted SPL estimated Due to new blower system at R-11	7.6	20.8	23.9	28.4	34.8	33	30.2	23.0	13.9	38 dBA

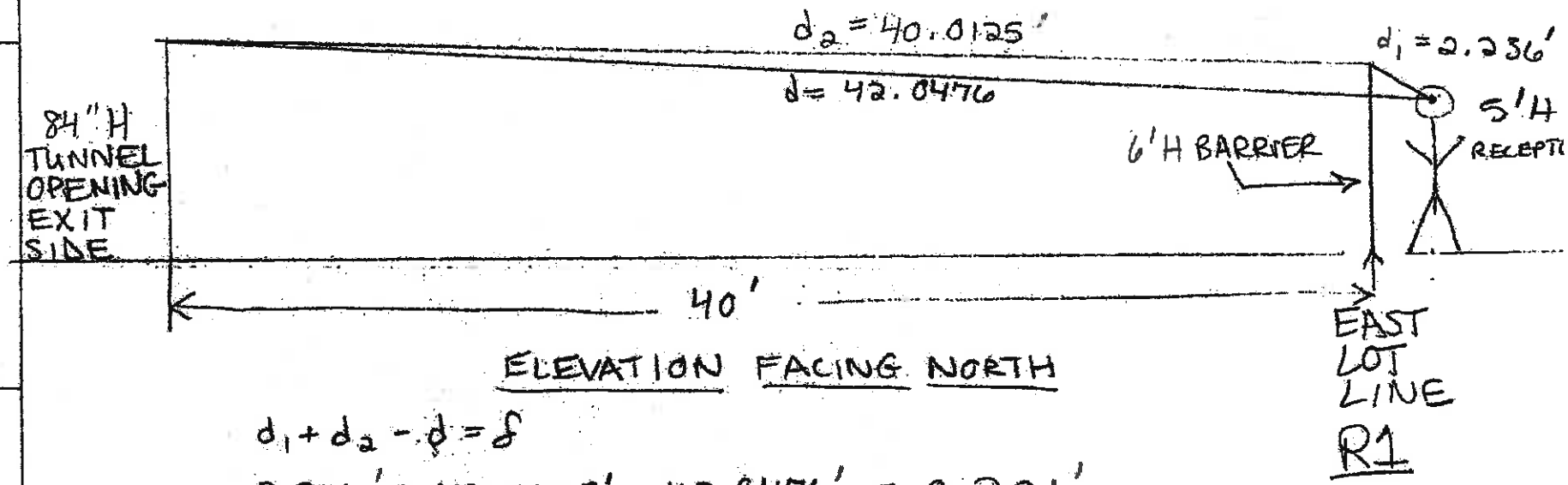
R-1

$$IL_{Barrier} = 10 \log [3 + 10 NK] - A_{Ground}$$

$A_{Ground} = 0$

$K = 1$

$N = \left(\frac{2}{\lambda}\right)\delta$



ELEVATION FACING NORTH

$d_1 + d_2 - d = \delta$

$2.236' + 40.0125' - 42.0476' = 0.201'$

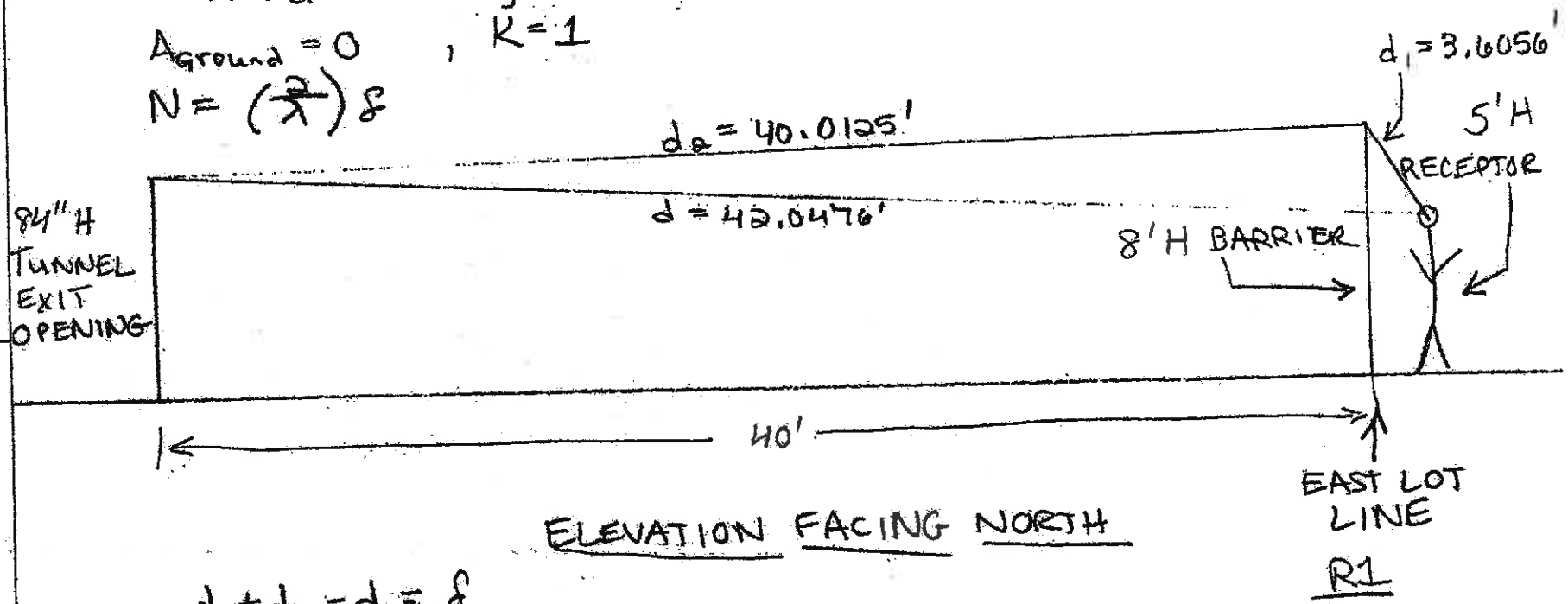
Hz	31.5	63	125	250	500	1K	2K	4K	8K
λ	35.77'	17.89'	9.02'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	0.0112	0.0225	0.0445	0.0891	0.1787	0.3558	0.7179	1.4357	2.8714
$IL_{barrier}$ (dB)	4.9	5.1	5.4	5.9	6.8	8.2	10.1	12.4	15.0

R-1

$IL_{barrier} = 10 \log[3 + 10 NK] - A_{Ground}$

$A_{Ground} = 0$, $K = 1$

$N = \left(\frac{2}{\lambda}\right)\delta$



ELEVATION FACING NORTH

R1

$d_1 + d_2 - d = \delta$

$3.6056' + 40.0125' - 42.0476' = 1.5705'$

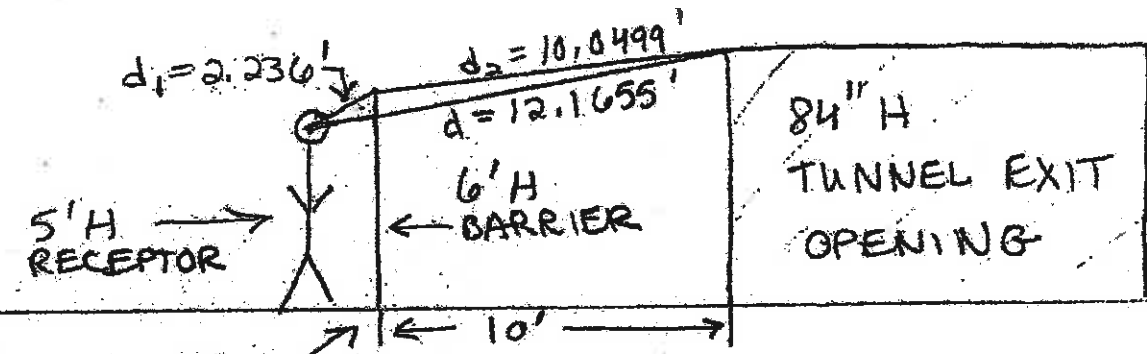
Hz	31.5	63	125	250	500	1K	2K	4K	8K
λ	35.77'	17.89'	9.05'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	0.0878	0.1756	0.3482	0.6965	1.396	2.7796	5.6089	11.2179	22.4357
$IL_{barrier}$ (dB)	5.9	6.8	8.1	10.0	12.3	14.9	17.7	20.6	23.6

$IL_{Barrier} = 10 \log[3 + 10 NK] - A_{Ground}$

$A_{Ground} = 0$

$K = 1$

$N = \left(\frac{2}{\lambda}\right)\delta$



R2 SOUTH LOT LINE

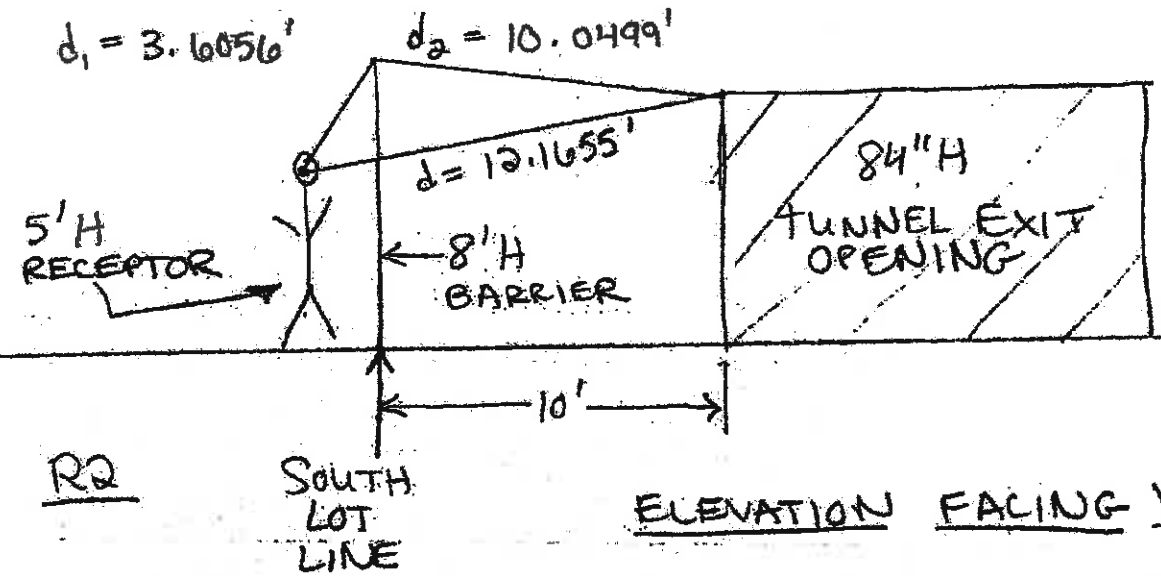
ELEVATION FACING WEST

$d_1 + d_2 - d = \delta$

$2.236' + 10.0499' - 12.1655' = 0.1204' = \delta$

Hz	31.5	63	125	250	500	1k	2k	4k	8k
λ	35.77'	17.89'	9.02'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	.00673	0.0135	0.0267	0.0534	0.1070	0.2131	0.4300	0.8600	1.72
$IL_{Barrier}$ (dB)	4.9	5.0	5.1	5.5	6.1	7.1	8.6	10.6	13.1

R2



ELEVATION FACING WEST

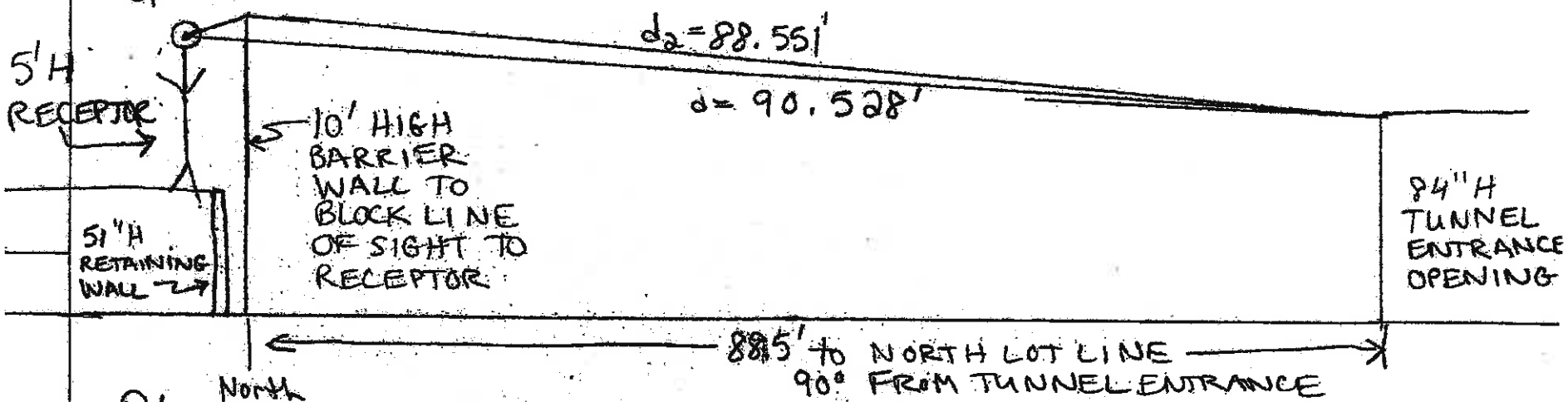
$$d_1 + d_2 - d = \delta = 3.6056' + 10.0499' - 12.1655' = 1.49' = \delta$$

Hz	31.5	63	125	250	500	1k	2k	4k	8k
λ	35.77'	17.89'	9.02'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	0.08331	0.1666	0.3304	0.6608	1.324	2.637	5.321	10.64	21.29
$IL_{Barrier}$ (dB)	5.8	6.7	8.0	9.8	12.1	14.7	17.5	20.39	23.3

R6

$IL_{Barrier} = 10 \log [3 + 10NK] - A_{Ground}$ $\quad A_{Ground} = 0$

$N = \left(\frac{2}{\lambda}\right)\delta$ $\quad 0.318$ $\quad K = 1$

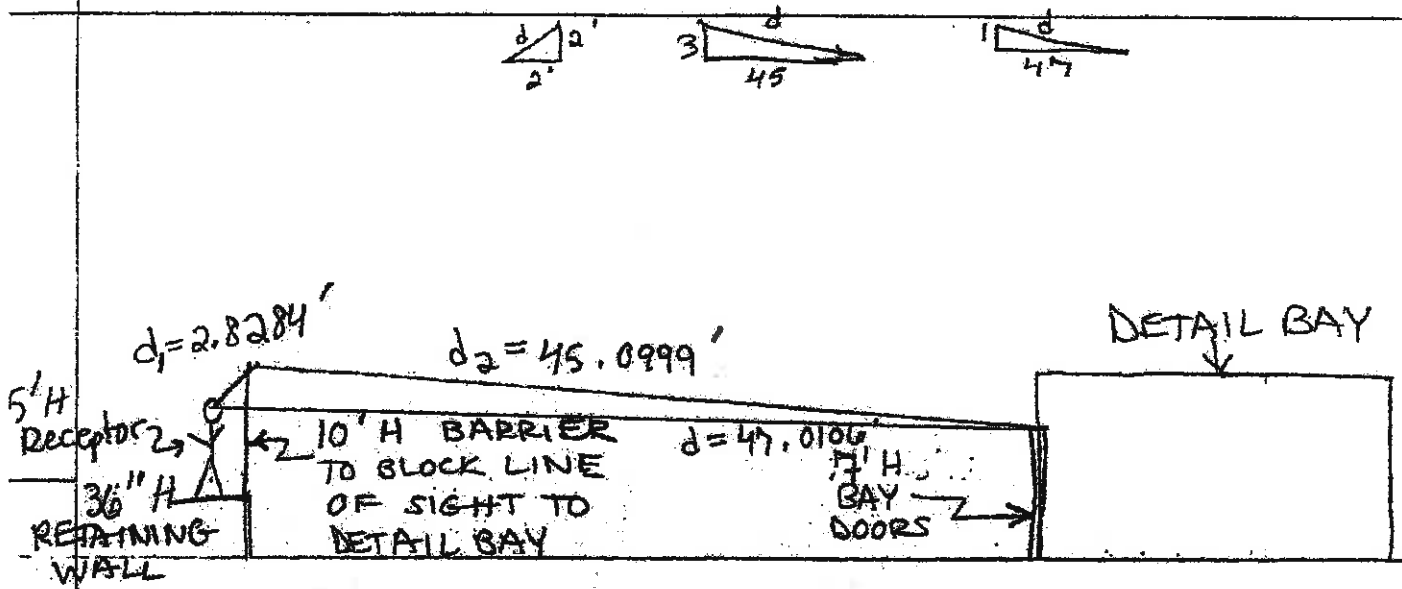


ELEVATION FACING EAST

$d_1 + d_2 - d = \delta = 2.136' + 88.551' - 90.528' = 0.159'$

Hz	31.5	63	125	250	500	1k	2k	4k	8k
λ	35.77'	17.89'	9.02'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	0.008881	0.01778	0.03525	0.07051	0.1413	0.2814	0.5679	1.136	2.271
$IL_{Barrier}$ (dB)	4.9	5.0	5.3	5.7	6.4	7.6	9.4	11.6	14.1

R7

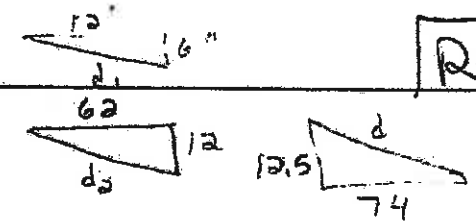


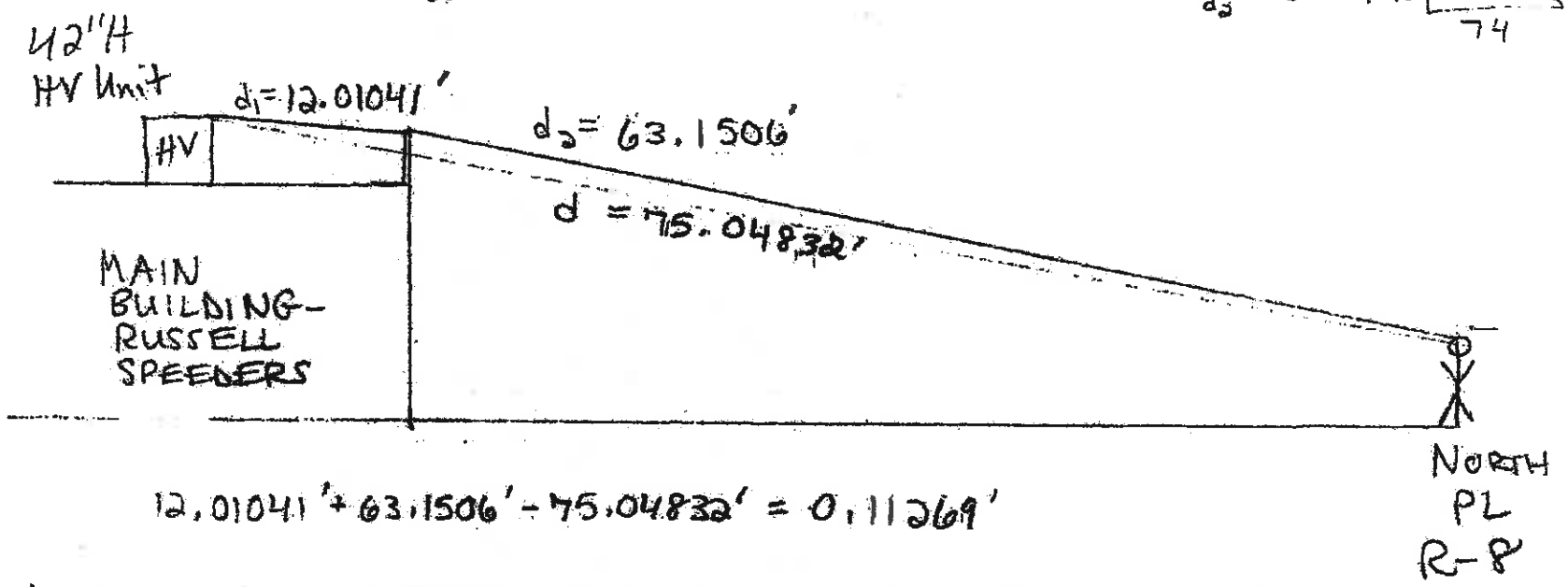
R-7 ELEVATION FACING EAST

$d_1 + d_2 - d = \delta = 2.8284' + 45.0999' - 47.0106' = 0.9177'$

Hz	31.5	63	125	250	500	1k	2k	4k	8k
λ	35.77'	17.89'	9.02'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	0.05131	0.1026	0.2035	0.4070	0.8157	1.6242	3.278	6.555	13.11
$IL_{Barrier}$ (dB)	-5.5	-6.0	-7.0	-8.5	-10.5	-12.8	-15.5	-18.4	-21.3

R-8





12.01041' + 63.1506' - 75.04832' = 0.11269'

Hz	31.5	63	125	250	500	1k	2k	4k	8k
λ	35.77'	17.89'	9.00'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	.006301	0.01260	.02499	.04997	0.1002	0.1995	0.4025	0.8049	1.6099
IL barrier (dB)	-4.9	-4.9	-5.1	-5.4	-6.0	-7.0	-8.5	-10.4	-12.8

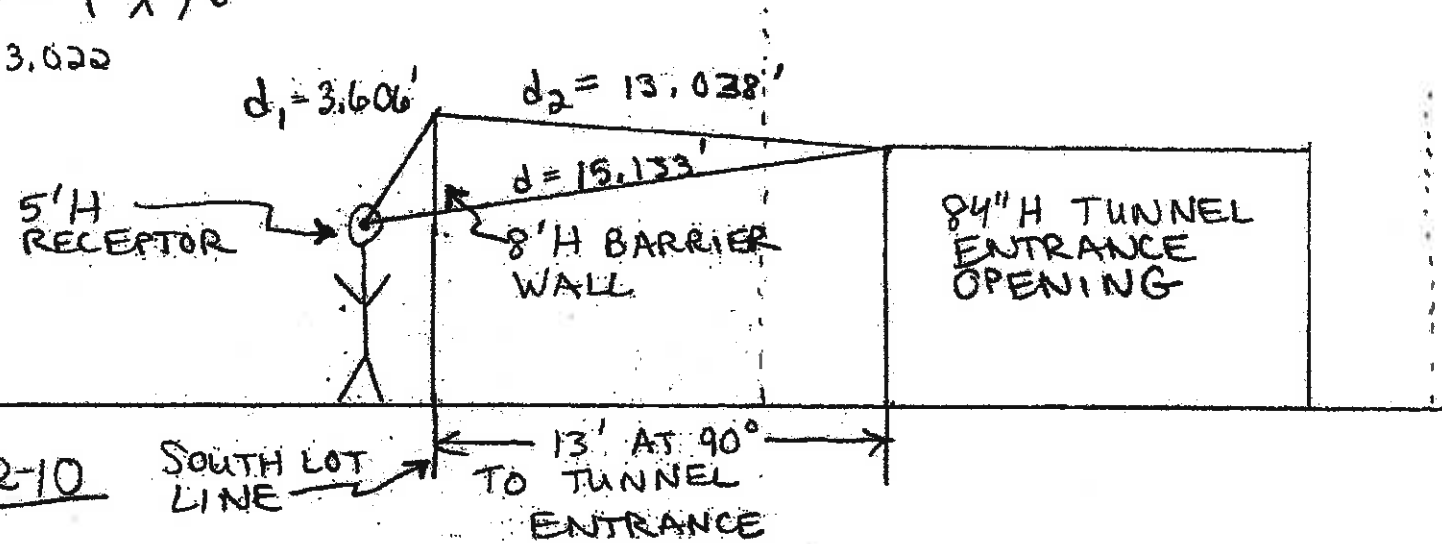
EXISTING ROOFTOP HV UNIT

$IL_{Barrier} = 10 \log [3 + 10 NK] - A_{Ground}$ $\quad A_{Ground} = 0$

$K = 1$

$N = \left(\frac{2}{\lambda}\right)\delta$

3.022



SECTION FACING WEST

$d_1 + d_2 - d = \delta = 3.606' + 13.038' - 15.133' = \delta = 1.511'$

Hz	31.5	63	125	250	500	1k	2k	4k	8k
λ	35.77'	17.89'	9.02'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	0.08448	0.1689	0.3350	0.6701	1.343	2.674	5.396	10.79	21.59
$IL_{Barrier}$ (dB)	5.8	6.7	8.0	9.9	12.2	14.7	17.6	20.4	23.4

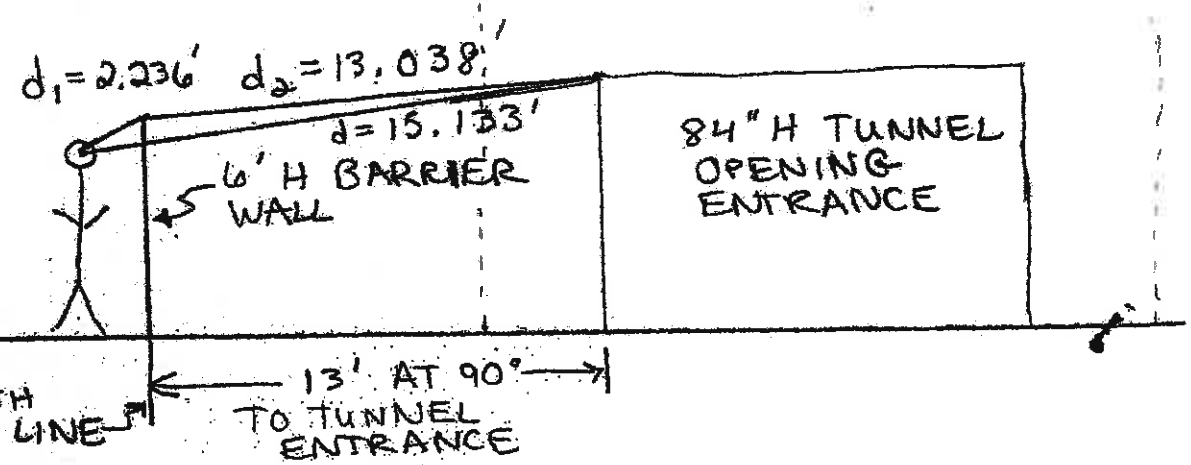
$IL_{BARRIER} = 10 \log [3 + 10 NK] - A_{Ground}$

$A_{Ground} = 0$

$K = 1$

$N = \left(\frac{2}{\lambda}\right) \delta$

0.282



R-10

SECTION FACING WEST

$d_1 + d_2 - d = \delta = 2.236' + 13.038' - 15.133' = 0.141' = \delta$

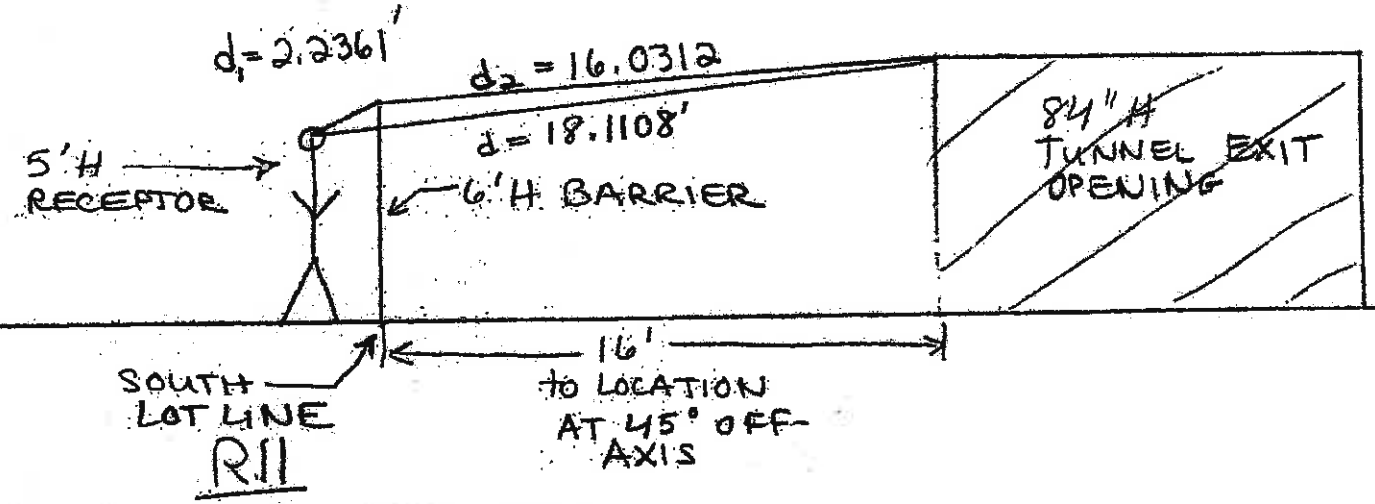
Hz	31.5	63	125	250	500	1k	2k	4k	8k
λ	35.77'	17.89'	9.02'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	0.007884	0.01576	0.03126	0.06253	0.1253	0.2496	0.5036	1.007	2.014
$IL_{Barrier}$ (dB)	4.9	5.0	5.2	5.6	6.3	7.4	9.1	11.2	13.6

$IL_{Barrier} = 10 \log[3 + 10\,NK] - A_{Ground}$

$A_{Ground} = 0$

$K = 1$

$N = \left(\frac{2}{\lambda}\right)\delta$



$d_1 + d_2 - d = \delta = 2.2361' + 16.0312' - 18.1108' = 0.1565'$

Hz	31.5	63	125	250	500	1K	2K	4K	8K
λ	35.77'	17.89'	9.02'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	.008750	0.01750	0.03470	0.06940	0.1391	0.2770	0.5589	1.118	2.236
$IL_{Barrier}$ (dB)	4.9	5.0	5.2	5.7	6.4	7.6	9.3	11.5	14.0

R11

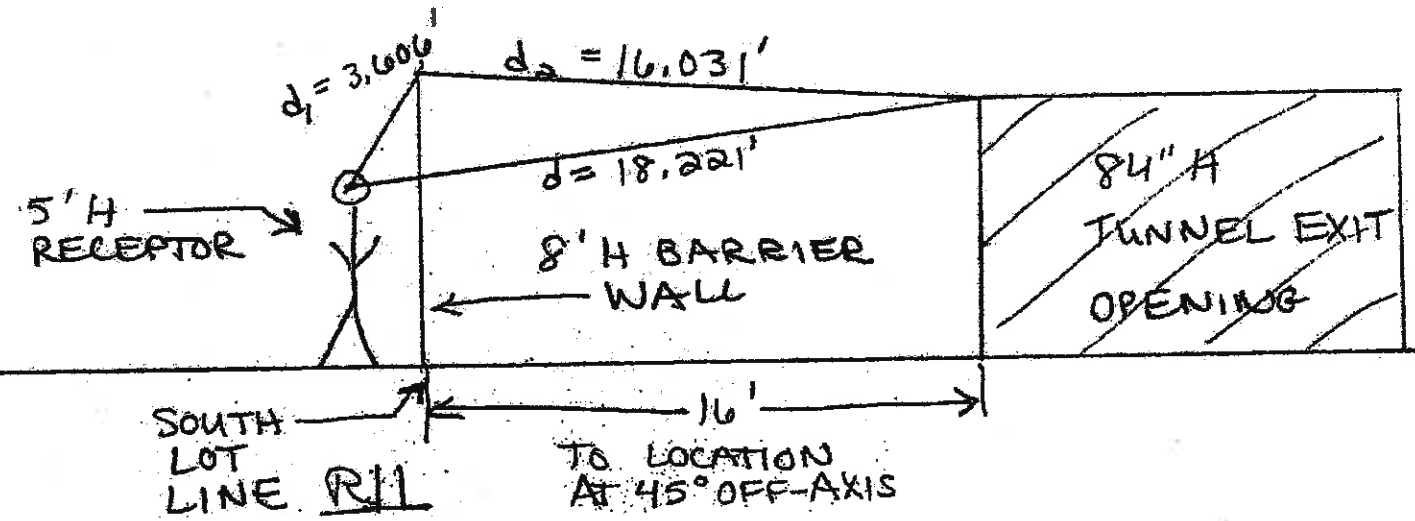
$IL_{Barrier} = 10 \log [3 + 16 NK] - A_{Ground}$

$A_{Ground} = 0$

$K = 1$

$N = \left(\frac{2}{\lambda}\right) \delta$

2832



$d_1 + d_2 - d = \delta = 3.606' + 16.031' - 18.221' = 1.416 = \delta$

Hz	31.5	63	125	250	500	1k	2k	4k	8k
λ	35.77'	17.89'	9.02'	4.51'	2.25'	1.13'	0.56'	0.28'	0.14'
N	0.07917	0.1583	0.3140	0.6279	1.259	2.506	9.031	36.12	144.5
$IL_{Barrier}$ (dB)	6	7	8	10	12	14	20	26	32

Strategic Partnership Questions and Answers

The Northern Westchester Hospital Board of Trustees has unanimously approved our joining the North Shore-LIJ Health System. We are extremely pleased to report that this agreement meets all of the objectives set out by our Board, acting on behalf of our community.

North Shore-LIJ is taking a patient-centered approach to expanding its health system to this region so that our patients can continue to receive the same high-quality healthcare that they have grown to expect from Northern Westchester Hospital. This focus on local care will be supported by a commitment to maintain and enhance the key services that serve our community today

As a member of the NS-LIJ Health System, Northern Westchester Hospital and its leadership team will have an important role in developing expansion plans for the North Shore-LIJ Health System in the greater Hudson Valley.

About Joining the North Shore-LIJ Health System

Q: What does joining the North Shore-LIJ Health System mean?
A: By joining the North Shore-LIJ Health System (North Shore-LIJ), we are becoming an important part of one of the most successful hospital systems in the U.S. North Shore-LIJ has 17 hospitals in their system, employs 48,000 people, and in 2013 saw revenues of $7 billion and a net income of $285 million. The system also includes a rapidly emerging medical school and the Feinstein Institute for Medical Research.

North Shore-LIJ is well ahead of other area health systems in Population Health Management, which will benefit our community by coordinating care across providers and reducing healthcare costs. They have launched a care management company and a health insurance product called CareConnect that are the foundations of a regional health plan. North Shore-LIJ already has agreements with Montefiore, Yale-New Haven, Saint Barnabas (NJ) and Maimonides to be included in the CareConnect network. Area medical groups also have agreements with CareConnect, guaranteeing that our patients can continue seeing their current physicians and receiving high-quality care at NWH.

Q: Who will be in charge of NWH when we become part of the NS-LIJ system?
A: One of the key partnership criteria used by the NWH Board of Trustees was a commitment to our leadership team and local oversight. This will enable our staff to continue providing our community with high-quality medical care at a local level. The North Shore-LIJ team recognizes that NWH is a high quality and financially strong hospital .

An important part of this agreement enables the NWH Board of Trustees to continue having a crucial role in the governance of NWH. The NWH Board will eventually include members appointed by North Shore-LIJ, who will be knowledgeable about the healthcare needs of our community.

Members of the NWH Board will join the North Shore-LIJ Board and its committees, which will enable us to provide a Westchester voice on all health system initiatives. In addition, one member of the NWH Board will be appointed to the North Shore-LIJ Executive Committee.

Q: Is this a permanent decision?
A: The selection of North Shore-LIJ is the result of a comprehensive evaluation that included all of the major health systems in our region, as well as some located outside of the area. This decision truly represents a commitment by both parties, and while there are details in our agreement that make it possible to change, the NWH Board of Trustees and Senior Management team are confident that North Shore-LIJ is the right long-term partner for our community.

Q: How will NWH maintain its identity as part of a larger system?
A: North Shore-LIJ recognizes the successes achieved by the staff of Northern Westchester Hospital and plans to build upon these, including our culture of patient safety, our Magnet and Planetree Designations, and our numerous processes for providing high-quality care. As with other North Shore-LIJ hospitals, we will also maintain our name.

Q: What are the benefits to joining a larger system?
A: Joining a well-developed regional system will provide us with greater access to highly-specialized clinical expertise, and additional resources to advance our sophisticated clinical programs and technologies. Importantly, joining this system will also enable us to achieve the scale necessary to participate in population health management on a regional basis.

North Shore-LIJ will also be making a financial investment in NWH, and in health care services for our community. This investment will help to accelerate our facility modernization plans, while supporting greater ambulatory care (out-of-hospital) capabilities, and advancing our surgical and technological sophistication.

Q: Will the NWH name change?
A: The Northern Westchester Hospital name will remain with an added reference to North Shore-LIJ. In addition, North Shore-LIJ is currently investigating a new "brand identity" to better represent its role as a leading national healthcare system.

Q: Will NWH remain as a Planetree hospital as part of a new system? Will NWH still be a Magnet Designated hospital?
A: Yes. There is a strong commitment from the NWH Board and from North Shore-LIJ to maintaining our Planetree and Magnet designations.

Q: Phelps has also joined North Shore-LIJ—Will there be consolidation?
A: Phelps serves a large community and North Shore-LIJ will support their efforts to meet the healthcare needs of that community. However, over time, we would expect to create efficiencies across our two hospitals, and with the larger system as well. Interestingly, the two hospitals have many strengths that are complementary. For instance, Phelps has strong programs in behavioral health services and inpatient rehabilitation, while NWH has strengths in robot-assisted surgery, stereotactic radiosurgery, and advanced breast cancer care. We expect the two hospitals will work closely together to find efficiencies and improve access to care.

Q: How will fundraising work? Will my donations go directly to NWH?
A: The financial investment from North Shore-LIJ will be extremely helpful, but insufficient to carry out the modernization of NWH without the ongoing support of our community. The NWH Foundation will continue overseeing all fundraising activities at NWH, and all funds raised through the NWH Foundation will remain in our community and continue to support NWH.

Q: When will NWH officially become part of North Shore-LIJ?
A: Our agreement with North Shore-LIJ must be reviewed and approved by State and Federal agencies. We expect to receive their final approval and be able to finalize our agreement during the first quarter of 2015.

Access to my physician

Q: How does this impact our relationship with area medical groups?
A: NWH employs very few physicians and instead partners with our area physicians and medical groups. We will always have strong relationships with area physicians to ensure our patients have access to high-quality medical care.

As necessary, agreements will be established across healthcare networks to enable patients to access seamless care among their providers. We see this already happening. By remaining a high-quality, lower-cost provider, NWH will continue to be sought out as a facility of choice by our medical groups and by all health plans.

f/qa-joining

CATIZONE
ENGINEERING, P.C.

CIVIL ENGINEERING CONSULTANTS

June 1, 2015

RECEIVED
JUN 2 2015
BEDFORD PLANNING BOARD

Chairman Joseph Cosentino and Planning Board Members
Planning Board
Village/ Town of Mount Kisco
104 Main Street
Mount Kisco, NY 10549

Re: Estate Motors
Mercedes Benz of Mount Kisco
New Automobile Sales and Service
Sec. 69.50 Bl. 2 Lot 1

Dear Chairperson Cosentino and Planning Board Members;

On behalf of our Client, Estate Motors, Catizone Engineering, P.C. is pleased to transmit the following:

No. Copies	Title		Date
15	C-1.0	Overall Site Plan	6/1/2015
15	PFP-2	Sales and Service Facility –Facility Analysis Plan (Reduced Scale)	2/5/2015
15	Exhibit-Parking Space Availability Survey (Diamond Properties)		
15	Exhibit-Parking Space Required Per Zoning		
15	Exhibit-Percent of Required Spaces Provided		
15	Memorandum from John Collins, PH.D, P.E.; Maser Consulting DRAFT SCOPE		5/20/2015
15	Memorandum from John Collins, PH.D, P.E.; Maser Consulting		5/28/2015

Our previous submittal to the Village of Mount Kisco Planning Board was made on February 17, 2015. Although we have not had an opportunity to present the February submittal to your Board we have had the opportunity to meet jointly with your Planning Consultant and Assistant Building Inspector on March 18, 2015 and separately with the Assistant Building Inspector on April 14, 2015 to discuss the parking for the 333 North Bedford Road site. Parking issues discussed were specific to the 333 site as the proposed (leased) parking spaces associated with the 793/795 site are specific to the CPO building and are not considered towards the overall required parking for the 333 site. Additionally, the discussions focused mainly on how the spaces interior to the building were to be addressed. Revisions and included information as follows:

1. The Parking Table on C-1.0 has been updated to reflect:
    a. The approved total required spaces for "Physical Training Studio" of 87 spaces (per Rock n' Jump approval).
    b. To include the total area of the parts mezzanine and access hallway as "warehouse storage" at 1 space per 1,000 sf.
    c. To include the entire area of the interior parking spaces as "storage/Inventory" at 1 space per 500sf (actual area not gross area) regardless of if the space is to be used for customer space (service related) or for inventory.
    d. To include the entire showroom area as "storage/Inventory" at 1 space per 500sf.
    e. To include the entire New Car Delivery area as "storage/Inventory" at 1 space per 500sf.
    f. To include the carwash bay as a work station at 3 spaces per work station.
    g. To include only workspaces towards required parking calculation.
    h. To include all office, restroom, employee areas, conference rooms, etc. as "office area" at 1 space per 300sf.

i. Spaces within the service drop off area are not included as these spaces are transitional spaces and not intended as a permanent parking space. Additionally, operations require that at least one inbound and 1 outbound lane be kept free.

2. PFP-2 has been revised to depict and summarize areas, as described above.

3. "Exhibit-Parking Space Required per Zoning" shows that the site is currently under parked by 142 spaces. Under the proposed conditions, the site would be under parked by 149 spaces, an increase of only 7 spaces from existing conditions. A major difference deviation from the 2/17/2015 submittal and current is that the 2/17 submittal did not count the interior service related spaces towards the parking requirements. While we do not disagree with the interpretation of interior spaces, the significance is that the 2/17 submittal shows that that service related customer parking can be accommodated within the building, maximizing the number of available exterior spaces for the 333 site.

4. "Exhibit- Percent of Required Spaces Provided" shows that the spaces provided, as a percentage of total required spaces increases from 84.9% under existing conditions to 85.4% under the proposed conditions. The site proposes 34 additional exterior spaces and 40 interior spaces (only work stations counted towards required parking). The increase in the required number of parking spaces is 81 spaces.

5. "Exhibit-Parking Space Availability Survey" represents a parking survey conducted by Diamond Properties from Friday May 8, 2015 through Monday May 11, 2015. The survey evaluates available parking spaces for the entire lot and also for the north and south parking lots, respectively. The survey shows that the minimum number of spaces available during the survey period was 332 or 41.6% of the total parking spaces.

6. With respect to traffic, we have attached a memorandum from John Collins, PH.D, P.E.; Maser Consulting to Mr. Seth Wright of Philip Habib and Associates outlining the proposed scope of the traffic study.

The submitted information demonstrates that the impacts to parking associated with the Estate Motors application are minimal, considering that the no credit has been taken for service related vehicles which will be largely parked indoors, new car delivery area, which will contain licensed/registered customer vehicles or transitional service drop off area. If these factors are considered, the impacts to parking will more closely resemble the 2/17 submittal. Additionally, the parking survey conducted by Diamond Properties shows that no less than 41.6% of the parking spaces were available during the survey period.

The traffic scope continues to be coordinate with your traffic consultant and our traffic engineer has already collected and compiled preliminary traffic data.

Our team looks forward to providing a brief presentation of the Project for your Board on June 9, 2015 and hope that we can address any questions, comments or concerns.

Sincerely,

Pietro A. Catizone, P.E.
Principal

cc: Mr. Jeff Osterman; Town of Bedford Planning
Mr. Jim Diamond; Diamond Properties
Mr. Anthony Monteleone, Esq.; Monteleone and Monteleone
Mr. Chris Buonanno; Estate Motors
Mr. Jonathan J. Penny, AIA; Penney Design Group.

PAC
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(BY APPOINTMENT ONLY)

RECEIVED
JUN 1 5 2015
BEDFORD PLANNING BOARD

MEMO

TO: Planning Board, Village/Town of Mount Kisco

FROM: Anthony J. Monteleone, Esq.
Monteleone & Monteleone, Esqs., Attorneys for Estate Motors

Re: Application for Site Plan approval for Mercedes Benz of Mount Kisco (M.B.) to be located at 333 North Bedford Road, Mt Kisco, New York

1. This applicant has been before your Board on a prior occasion for both conceptual review and initial site plan review.

This applicant also has a related application pending before the Bedford Planning Board

2. February, we submitted a revised site plan which is the site plan under review this evening. There have been no meetings with your Board since that February submission pending a determination as to the designations of a Lead Agency by your Board.

3. It has now been agreed with the Town of Bedford and Mount Kisco Planning Boards that Mt. Kisco will be the Lead Agency and Mt. Kisco is appointing itself as Lead Agency tonight. We look forward to working with you in that regard as we move forward towards finalizing application and final determination by your Board.

We have three (3) Board renderings;

(i) Entire project
(ii) M.B facility in Mt. Kisco including new car showroom and service

facility.

(iii) Certified pre-owned M.B. facility in Town of Bedford

4. Since February, our engineers, architects and consultants have met with Village staff and consultants. Those meetings have raised a number of issues which we will address tonight and hopefully reach consensus as to further development of the site plan for further review and consideration.

5. At the present time, the major issues are traffic and parking and we have here this evening;

6. (a) Our first presenter will be Mr. James Diamond, the principal and Chief Operating Officer of the entire property known as "The Park" located at 333 N. Bedford Road.

(b) Your Board has previously approved the initial conversion of what was known as "The Grand Union Warehouse" to a multi-use facility containing various commercial uses all utilizing a huge parking lot extending the entire length of the building about three (3) football fields.

(c) Your Board has also required and approved special resolutions and amendments regarding parking and traffic counts at the site as different uses were approved .

(d) The experience of your Board and Mr. Diamond has shown that the site usage is dynamic and that site review shows that the northerly half of the 800 plus car parking lot is greatly underutilized. People don't like to walk, even people who work out at the gym.

(e) Jim Diamond will discuss same and take your Board through a series of renderings, charts and graphs some of which are attached hereto and submitted herewith as part of the record. Jim will show that there will be a major reduction in 18 wheeler truck traffic and truck traffic in general. We all know that trucks are a major source of traffic congestion on Route 117 and the entire Village. MB mitigates truck traffic. Most important, he will point out why additional consideration should be given in evaluating parking spaces. The key issue is how will M.B. impact the site and traffic.

7. (a) Our second presenter will be Peter Catizone, the architect. Mr. Catizone will also take you through certain renderings, charts and graphs some of which are also attached hereto and submitted herewith as part of the record.

(b) Mr. Catizone will point out the somewhat unique characteristics of the interior of the building and the fact that almost all customer cars will be serviced and parked within the building from the time the customer drives into the Reception Area in the building. This includes cars parked inside waiting for service, cars being serviced and cars waiting for pick up by the customers or delivery by staff to the customer's work, home or train station at various times of the day.

(c) The service customers come and go during the entire day with more arrivals in the morning and more departures in the afternoon.

(d) Peter Catizone will also address why additional consideration should be given in evaluating the number of parking spaces which your Board should require in the parking lot since MB is providing over 100 customer service interior parking spaces for which we are not being given credit. Those customer cars in the interior at the building mean that those customers have no need to park outside in the lot, leaving many empty outside parking spaces in the vicinity of our building.

8. (a) John Collins, traffic consultant with Maser Consulting will be our third presenter. John has done prior traffic studies of not only 333 N. Bedford Road but also Route 117 in its vicinity and in other areas of Mt. Kisco.

(b) Mr. Collins completed a recent traffic study and scoping document. Attached hereto is his May 20, 2015 report with traffic counts and charts which we ask be made part of the record.

9. Mr. Chris Buonanno, the owner of Mercedes Benz will be happy to discuss the day to day operations and explain that the cars being serviced arrive and leave at various times of the day, most not at peak traffic times.

10. Additional comments:

In addition, if the outside parking is truly common then the fact that the mostly vacant outdoor parking immediately adjacent to our leased parking area must be considered when applying the parking required by the Code since the Code envisions a self contained parking area on a specific lot.

In this case, the parking area covers multiple tenants and most of the northerly parking area in the vicinity of Mercedes Benz is underutilized as the graphs and charts will show. This property is unique.

Our approach is reasonable and the only logical way to establish anticipated parking needs.

The experience of Mercedes Benz is that very little outdoor customer parking is required at its present location and little will be needed at this location.

Finally, the scope of traffic studies proposed will help us better understand the unique character of this site and the traffic issues at 333 N. Bedford Road.

Dated: May 26, 2015
Mount Kisco, New York

Respectfully submitted,

Anthony J. Monteleone

L:\ZONING\EstateMotors\Mt. Kisco Planning Board Memo-5-26-15.wpd

PENNEY DESIGN GROUP
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Estate Motors
333 North Bedford Road
Mount Kisco, NY 10549

Sales & Service Facility - Proposed Exterior Rendering

February 17, 2015

Mercedes-Benz of Mt. Kisco
333 North Bedford Road
Mount Kisco, NY 10549
EST002a

PE-2
No Scale
24" x 36"

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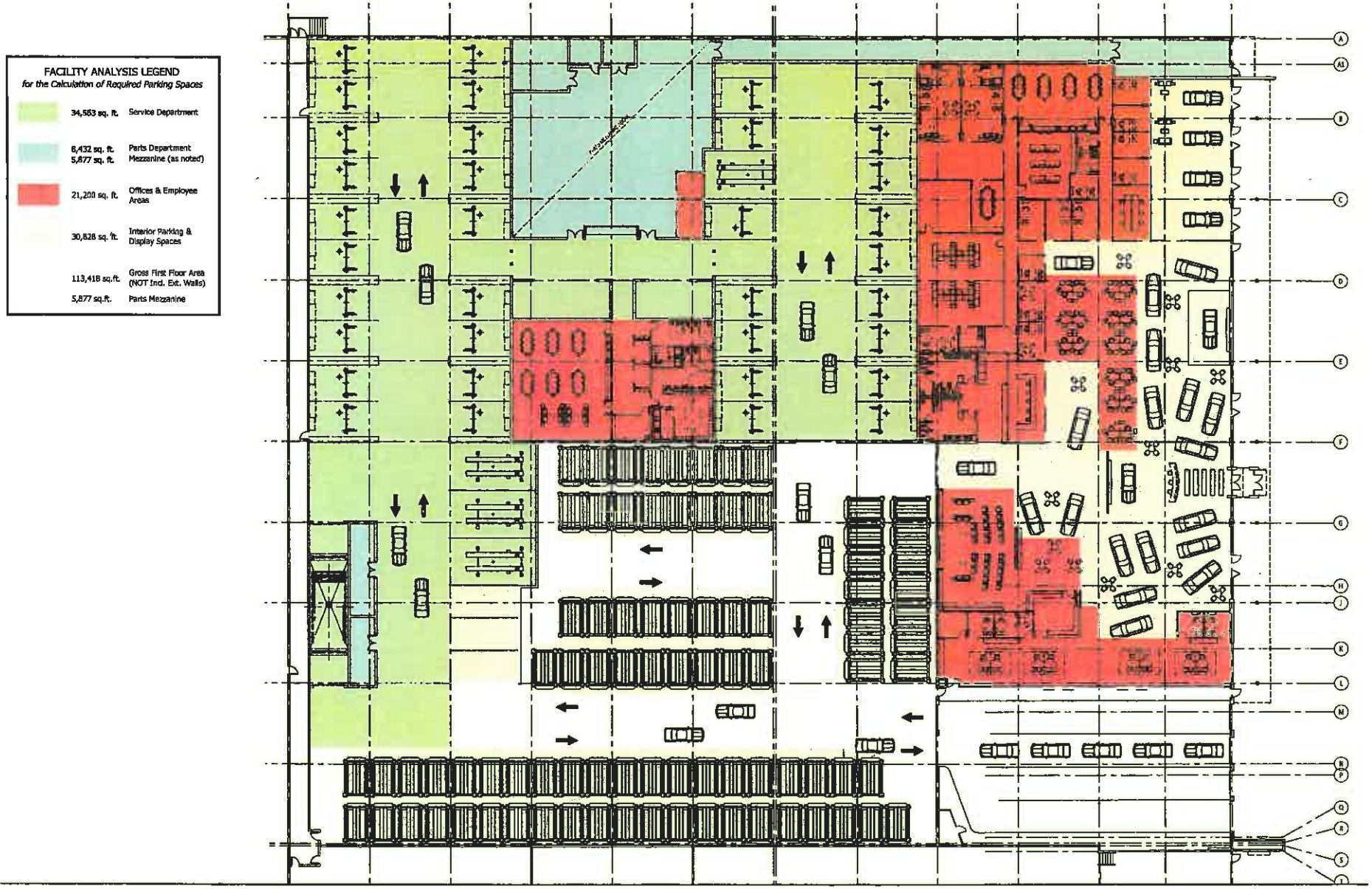
Estate Motors
333 Noth Bedford Road
Mount Kisco, NY 10549

Sales & Service Facility - Proposed Elevation Rendering

February 17, 2015

Mercedes-Benz of Mt. Kisco
333 North Bedford Road
Mount Kisco, NY 10549
EST002a

PE-3
No Scale
24" x 36"



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Estate Motors

333 North Bedford Road
Mount Kisco, NY 10549

Sales & Service Facility - Facility Analysis Plan

for the Calculation of Required Parking Spaces

March 25, 2015 - Updated May 5, 2015

Mercedes-Benz of Mt. Kisco

333 North Bedford Road
Mount Kisco, NY 10549
EST002a

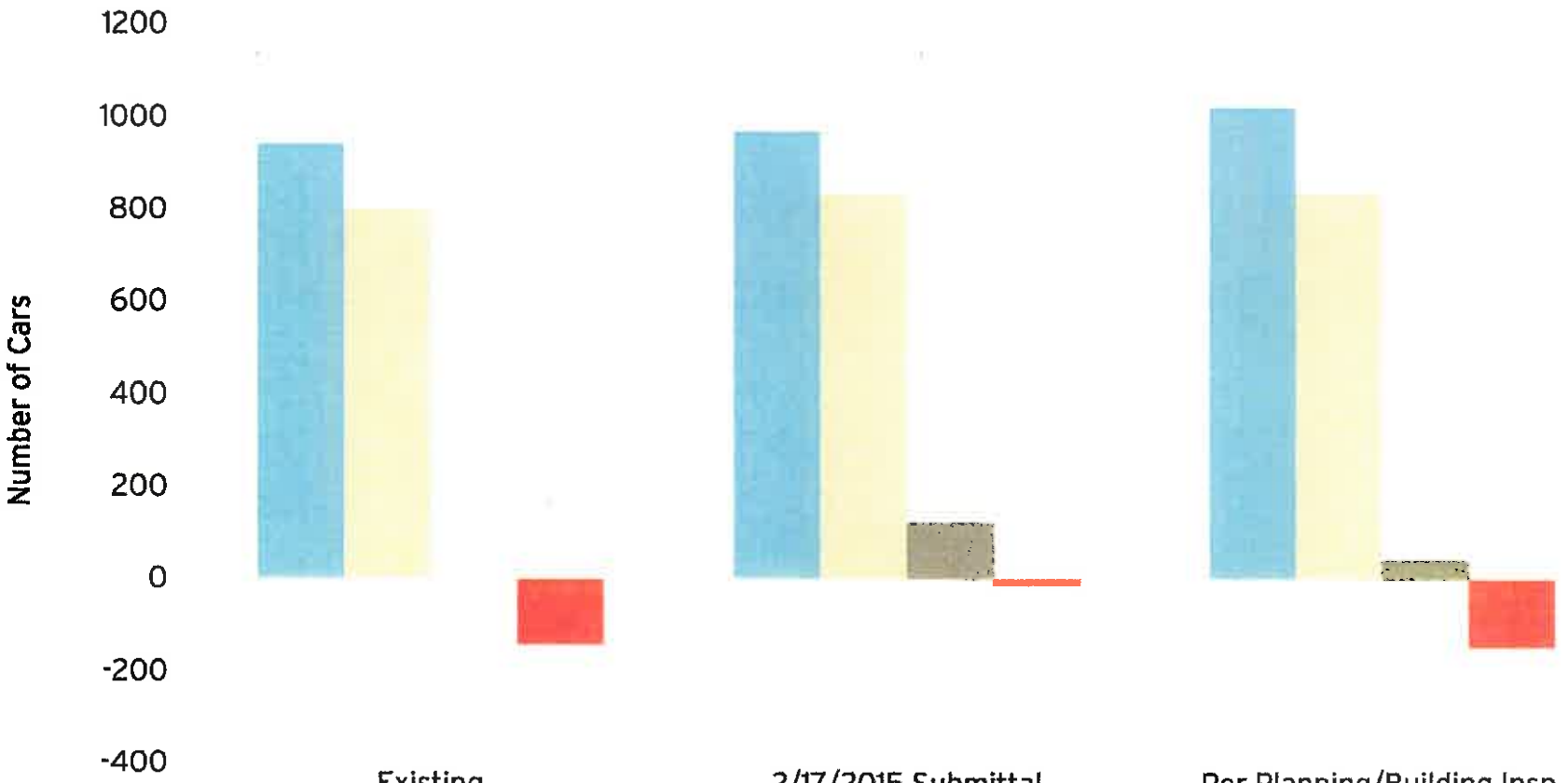
PFP-2

1/16" = 1'-0"

24" x 36"

333 North Bedford Road, Mount Kisco

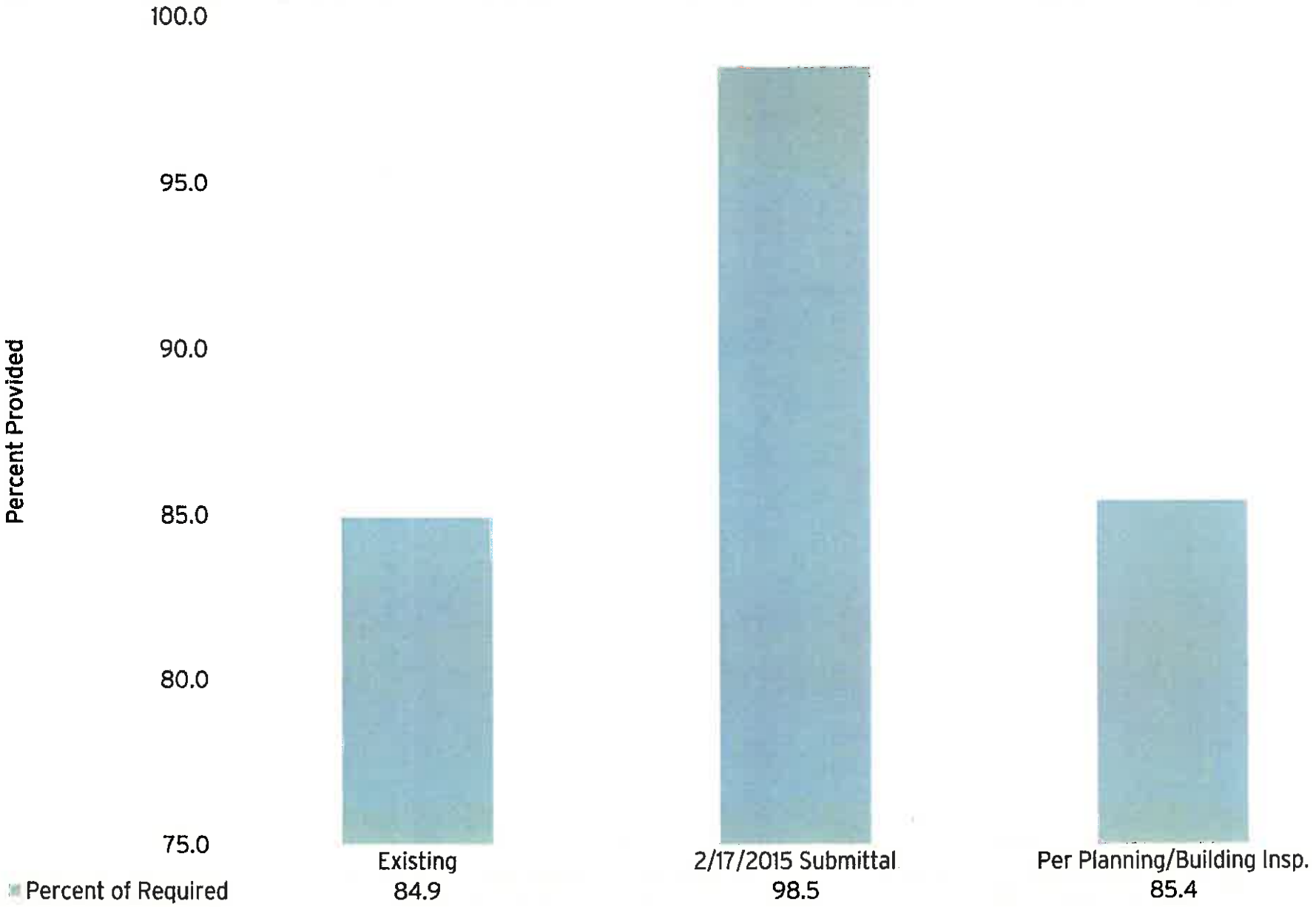
Parking Required Per Zoning



	Existing	2/17/2015 Submittal	Per Planning/Building Insp.
Demand	941	969	1022
Provided- Exterior	799	833	833
Provided- Interior	0	121	40
Underparked	-142	-15	-149

333 North Bedford Road, Mount Kisco

% of Provided Parking Vs Required Parking Per Zoning



333 North Bedford Road, Mount Kisco

Additional Considerations In Evaluating Parking Spaces

- 833 exterior and 40 interior parking spaces provided does not include an additional 175 interior parking spaces available (89 spaces on the ground plus 86 spaces on lifts above). No credit is given for these parking spaces.

- The square footage used for these 175 interior spaces is generating demand for an additional 62 exterior parking spaces, based on an interpretation that this is warehouse space requiring parking at the rate of 1 space per 500 square feet.

- In summary, no credit is given for 175 interior spaces but those spaces generate demand for 62 exterior spaces.

- No credit is given for an interior service drop off area that includes room for 20 vehicles.

- No credit is given for an interior new car pick up area that includes room for 4 vehicles.

333 North Bedford Road, Mount Kisco

Parking Space Availability Survey, May 8, 2015 Thru May 11, 2015

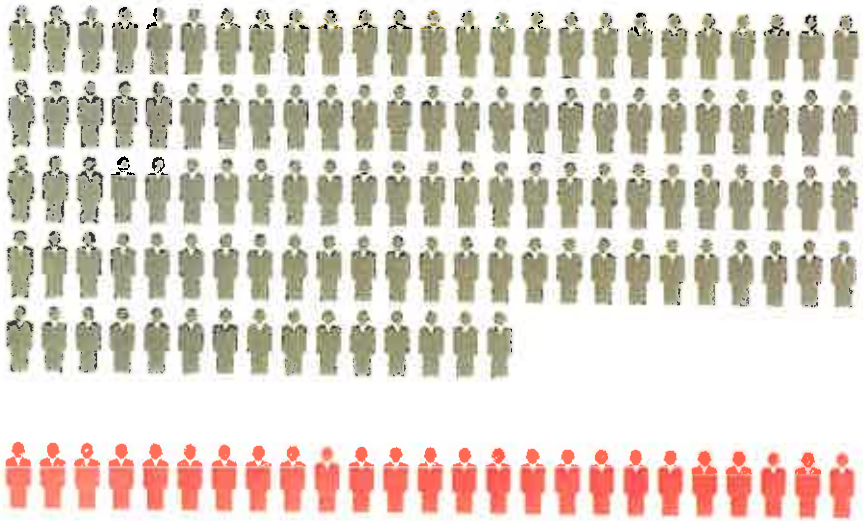
ENTIRE LOT Parking Spaces

NORTH LOT Parking Spaces

SOUTH LOT Parking Spaces

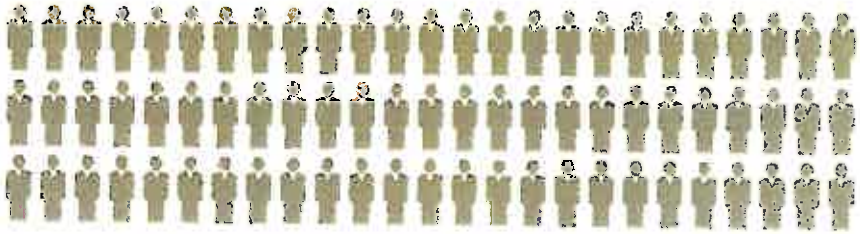
Employees

WINE ENTHUSIAST



Off Peak: 1/1 - 10/31 | 115 Empoyees
Peak: 11/1 - 12/31 | 140 Employees

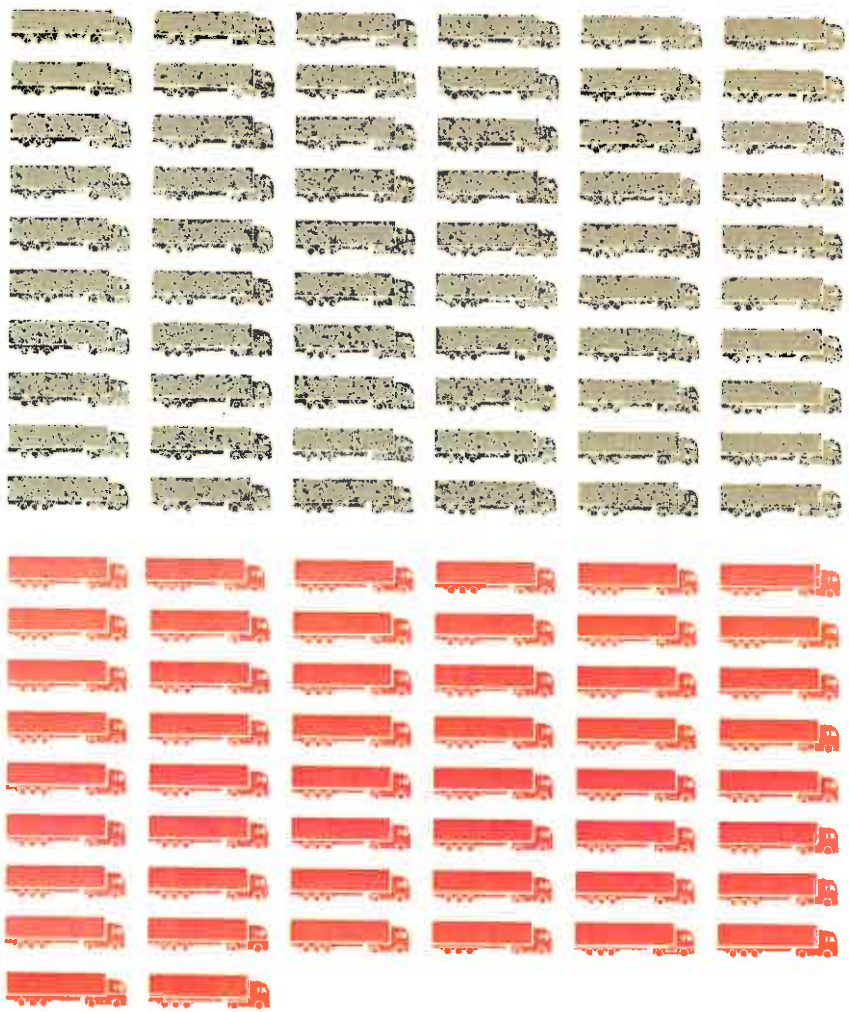
Mercedes-Benz



75 Employees

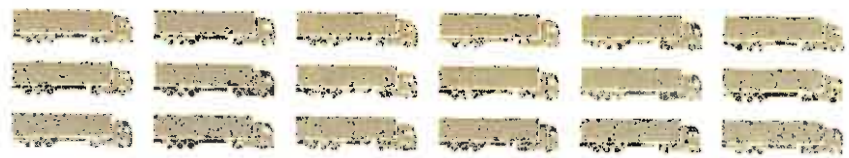
Weekly Truck Trip Generation

WINE ENTHUSIAST



Off Peak: 1/1 - 10/31 | 60 truck trips per week
Peak: 11/1 - 12/31 | 110 truck trips per week

Mercedes-Benz



4 - 8 car carrier trips per week, plus 10 parts truck trips per week. Parts truck deliveries are at 2am

MASER CONSULTING P.A.

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MEMORANDUM

To: **Seth Wright, Phillip Habib and Associates**

Copy: **Gerry Faiella, Interim Village Manager**
Joeseph Cosentino, Planning Board Chairman
Michelle K. Lailer, Planning & Zoning Secretary

From: **John T. Collins, Ph. D., P.E.**

Date: **May 20, 2015**

Re: **Proposed Traffic Impact Study Scope**
The Park - 333 N. Bedford Road
Mt Kisco, New York
MC Project No. 14002035A

The owner of the property at 333 N. Bedford Road is proposing to replace the Wine Enthusiast showroom currently located on the property with a Mercedes dealership and 35 bay service center. At this time we have collected employee and traffic related information for the existing Wine Enthusiast and proposed Mercedes dealership and 35 bay service center. The Wine Enthusiast currently have 115 employees during the off peak season (1/1 -10/31) with 140 employees during the peak season (11/1 - 12/31). The proposed Mercedes will have some 75 employees.

Traffic counts were conducted at both the Wine Enthusiast and at the existing Mercedes dealership and 16 bay service center; Estate Motors located at 321 Route 22, Goldens Bridge, NY.

Estate Motors

Traffic counts were conducted at the existing Mercedes dealership and 16 bay service center which includes trips for both employees and customers during the Weekday AM and PM Peak Hours. Based on the results of the traffic counts, the existing Mercedes dealership is generating at a 2.13 trip rate during the 8:00 AM – 9:00 AM time period and at a 2.88 trip rate during the 9:00 AM to 10:00 AM time period with a 2.00 trip rate during the 4:00 PM – 5:00 PM time period and at a 1.75 trip rate during the 5:00 PM to 6:00 PM time period. This would result in 75 – 101 total trips (entering and exiting) during the Weekday Peak AM Hours and 61 – 70 total trips (entering and exiting) during the Weekday Peak PM Hours for the proposed Mercedes dealership. The dealership has limited service on Saturday and the dealership is closed on Sunday.

Wine Enthusiast

Traffic Counts were also conducted at the existing Wine Enthusiast during the Weekday AM and PM Peak Hours. Based on the results of these traffic counts, the Wine Enthusiast is generating 51 total trips during the 8:00 AM to 9:00 AM time period and 50 total trips during the 9:00 AM to 10:00 AM time period with 18 total trips during the 4:00 PM – 5:00 PM time period and 69 total trips during the 5:00 PM to 6:00 PM time period. There are a limited number of employees on Saturday's and is closed on Sunday.

Anticipated Traffic Generation

Based on the above, the Mercedes dealership and service center is projected to add an additional 24 total trips during the 8:00 AM to 9:00 AM time period, an additional 51 trips during the 9:00 AM to 10:00 AM time period, 43 total trips during the 4:00 PM to 5:00 PM time period and an additional 1 trip during the 5:00 PM to 6:00 PM time period.

Proposed Scope

Based on expected traffic generation, we recommended the following Scope.

A. Traffic

1. Existing Conditions

a) Provide a brief description of the NYS Route 117 (N. Bedford Road) within the study area.

b) Conduct manual traffic counts between the Peak Hour of 8:00 AM to 10:00 AM and 4:00 PM to 6:00 PM to determine the Existing Weekday Peak AM and PM Traffic Volumes for the two site driveways:

- NYS Route 117 and The Park North Access / Foxwood Circle
- NYS Route 117 and The Park South Access (Ice House Road) / Park Drive

c) Graphically show the Existing Traffic Volumes for the above locations for each of the peak hours.

d) Capacity analysis will be conducted at each of the above locations for each of the peak hours utilizing the procedures outlined in the 2010 Highway Capacity Manual utilizing SYNCHRO 8.

e) Summarize the results of the capacity analysis in a Table showing the resulting Levels of Service, delays and volume-to-capacity (v/c) ratios.

2. Future Conditions

a) Project the Existing Traffic Volumes to a future Build Year of 2018 based on a background growth of 0.5% per year (based on NYSDOT historical data). In addition, traffic from other pending or approved projects in the area, identified by the Village, will be estimated and added to the roadway network and combined with the Projected Traffic Volumes to obtain the Year 2018 No-Build Traffic Volumes.

b) Graphically show the Year 2018 No-Build Traffic Volumes for the above locations for each of the peak hours.

c) Conduct capacity analysis utilizing the Year 2018 No-Build Traffic Volumes and summarize the results of the capacity analysis.

d) Develop an Arrival and Departure Distribution to assign the Site Generated Traffic Volumes to the roadway network based upon a review of existing traffic volumes and expected travel patterns.

e) Estimates of site generated traffic will be based on existing survey information conducted at the existing Mercedes dealership and service center; Estate Motors located at 321 Route 22, Goldens Bridge, NY. The Site Generated Traffic Volumes will be assigned to the roadway network based on the anticipated arrival and departure distributions.

f) The Site Generated Traffic Volumes will be combined with the Year 2018 No-Build Traffic Volumes to obtain the Year 2018 Build Traffic Volumes for each of the peak hours.

g) Graphically show the Site Generated Traffic Volumes and Year 2018 Build Traffic Volumes for the above locations for each of the peak hours.

h) Conduct capacity analysis utilizing the Year 2018 Build Traffic Volumes and summarize the results of the capacity analysis.

i) Based on the results of the analyses, recommendations for improvements will be made where necessary.

If you have any questions on the above Scope, please do not hesitate to contact us.

TABLE NO. 1

WINE ENTHUSIAST
(333 N. BEDFORD ROAD, BEDFORD, NY)

TRAFFIC COUNTS 4/15/15 - 4/17/15

TIME PERIOD	AVERAGE ENTRY VOLUME
8:00 AM - 8:15 AM	11
8:15 AM - 8:30 AM	12
8:30 AM - 8:45 AM	11
8:45 AM - 9:00 AM	17
9:00 AM - 9:15 AM	13
9:15 AM - 9:30 AM	15
9:30 AM - 9:45 AM	13
9:45 AM - 10:00 AM	9

8:00 AM - 9:00 AM	51
9:00 AM - 10:00 AM	50

TRAFFIC COUNTS 5/18/15 - 5/18/15

TIME PERIOD	AVERAGE EXIT VOLUME
4:00 PM - 4:15 PM	5
4:15 PM - 4:30 PM	4
4:30 PM - 4:45 PM	7
4:45 PM - 5:00 PM	2
5:00 PM - 5:15 PM	19
5:15 PM - 5:30 PM	12
5:30 PM - 5:45 PM	25
5:45 PM - 6:00 PM	13

4:00 PM - 5:00 PM	18
5:00 PM - 6:00 PM	69

TABLE NO. 2

ESTATE MOTORS
(321 ROUTE 22, GOLDENS BRIDGE NY)

TRAFFIC COUNT - APRIL 16, 2015

TIME PERIOD	ENTRY VOLUME	EXIT VOLUME	TOTAL VOLUME
7:00 AM - 7:15 AM	5	0	5
7:15 AM - 7:30 AM	3	0	3
7:30 AM - 7:45 AM	6	1	7
7:45 AM - 8:00 AM	10	2	12
8:00 AM - 8:15 AM	8	5	13
8:15 AM - 8:30 AM	3	1	4
8:30 AM - 8:45 AM	6	4	10
8:45 AM - 9:00 AM	5	2	7
9:00 AM - 9:15 AM	12	6	18
9:15 AM - 9:30 AM	3	7	10
9:30 AM - 9:45 AM	9	1	10
9:45 AM - 10:00 AM	3	5	8

7:00 AM - 8:00 AM	24	3	27
8:00 AM - 9:00 AM	22	12	34
9:00 AM - 10:00 AM	27	19	46

TRIP RATE

7:00 AM - 8:00 AM	1.50	0.19	1.69
8:00 AM - 9:00 AM	1.38	0.75	2.13
9:00 AM - 10:00 AM	1.69	1.19	2.88

TABLE NO. 3

ESTATE MOTORS
(321 ROUTE 22, GOLDENS BRIDGE NY)

TRAFFIC COUNT - APRIL 16, 2015

TIME PERIOD	ENTRY VOLUME	EXIT VOLUME	TOTAL VOLUME
4:00 PM - 4:15 PM	1	8	9
4:15 PM - 4:30 PM	5	6	11
4:30 PM - 4:45 PM	1	2	3
4:45 PM - 5:00 PM	3	6	9
5:00 PM - 5:15 PM	0	8	8
5:15 PM - 5:30 PM	2	3	5
5:30 PM - 5:45 PM	4	3	7
5:45 PM - 6:00 PM	3	5	8

4:00 PM - 5:00 PM	10	22	32
5:00 PM - 6:00 PM	9	19	28

TRIP RATE

4:00 PM - 5:00 PM	0.63	1.38	2.00
5:00 PM - 6:00 PM	0.56	1.19	1.75

RECEIVED
JUN 03 2015
MOUNT KISCO
OFFICE OF THE VILLAGE
MANAGER

PLANNING BOARD
VILLAGE OF MOUNT KISCO

INTENT TO BE LEAD AGENCY

ESTATE MOTORS - MERCEDES BENZ
333, 793 AND 795 NORTH BEDFORD ROAD

Section 69.50, Block 2, Lot 1 (Mount Kisco)
Section 71.12-2-31, 32 and 36 (Bedford)
Application No: PB2014-285

May 29, 2015

WHEREAS, the subject property consists of ±38 acres of land, ±7 acres of which is located within the Town of Bedford; and

WHEREAS, the subject property is comprised of the following parcels, hereafter collectively referred to as "the subject property"; and

Tax Parcel	Address	Acreage	Zoning District	Municipality
69.50-2-1	333 North Bedford Road	30.9 acres	ML/CL	Mount Kisco
71.12-2-36	333 North Bedford Road	6.5 acres	LI	Bedford
71.12-2-31	793 North Bedford Road	0.90 acres	RB	Bedford
71.1-2-32	795 North Bedford Road		LI	Bedford

WHEREAS, 333 North Bedford Road is developed with existing buildings, a ±611,000 s.f. multi-use commercial building, recreational fields, a parking lot which accommodates ±799 parking spaces and two (2) access driveways which provide egress and ingress to and from North Bedford Road; and

WHEREAS, the existing building referenced above is located entirely within the Village of Mount Kisco and the Village of Mount Kisco/Town of Bedford municipal boundary line is located just north of the northern extent of the building; and

WHEREAS, the parking spaces located to the north of the existing building and the northern driveway which provides access to North Bedford Road is located within the Town of Bedford; and

WHEREAS, 793 and 795 North Bedford Road, located within the Town of Bedford, is developed with service garage and parking area and has historically been used for the sale and service of commercial vehicles; and

WHEREAS, 333 North Bedford Road is owned by DP21, LLC and 793 and 795 North Bedford Road is owned, now or formerly, by John Nohilly; and

WHEREAS, Estate Motors ("the applicant") is proposing the following, which shall hereafter be collectively referred to as "the proposed action"; and

a) A change of use and the redevelopment of the northern portion of the existing building (113,280 s.f.) located at 333 North Bedford Road with a Mercedes Benz automobile dealership and 39-bay service center. The portion of the existing building in question is currently occupied by The Wine Enthusiast, which consists primarily of warehouse and office space; and

b) Reconfiguration of the northern portion of the existing parking lot located at 333 North Bedford Road; and

c) Construction of a 7,000 s.f. certified pre-owned sales dealership and associated parking to be located at 793 and 795 North Bedford Road. Access to the pre-owned sales dealership will be via the existing internal driveway with no direct access to North Bedford Road; and

d) The applicant is proposing to lease ±0.94 acres of land from DP21,LLC for parking, display and access to the 333 North Bedford Road site; and

e) Tax parcels 71.12-2-31 and 71.12-2-32, located within the Town of Bedford, are proposed to be merged; and

WHEREAS, "Left turn in" and "left turn out" restrictions currently exist at the northern access driveway and, as proposed, all traffic heading northbound to the site via North Bedford Road (including truck traffic and patrons of the pre-owned dealership to be located in Bedford) must enter the site from the southerly access driveway known as Ice House Road. Similarly, as proposed, anyone wishing to travel northbound on North Bedford Road from either the primary or certified pre-owned dealership must travel though the site and exit on Ice House Road; and

WHEREAS, the Planning Board has persistently expressed its concern over the adequacy of the existing and proposed traffic and parking arrangement, which shall be further studied during the Planning Board review process; and

WHEREAS, the Planning Board has preliminarily identified the proposed action as an Unlisted Action pursuant to the State Environmental Quality Review Act (SEQRA); and

WHEREAS, for purposes of initiating the SEQRA process and establishing lead agency, the applicant has submitted Part 1 of the Short Environmental Assessment Form (EAF), dated May 8, 2015; and

WHEREAS, the Planning Board has identified other potential Involved and Interested Agencies and wishes to conduct a coordinated environmental review under SEQRA.

NOW, THEREFORE, BE IT RESOLVED THAT, pursuant to the applicable standards of SEQRA 6 NYCRR Part 617, the Planning Board of the Village of Mount Kisco concludes that it is the appropriate agency to serve as Lead Agency for the coordinated environmental review of the proposed action described above; and

BE IT FURTHER RESOLVED THAT, the Planning Board hereby declares its intent to be Lead Agency for the coordinated SEQRA evaluation of the proposed action described above; and

BE IT FURTHER RESOLVED THAT, the Planning Board hereby authorizes the circulation of the following documents to the Involved and Interested Agencies:

a) Notice to Involved Agencies and Lead Agency Agreement Form; and

b) Planning Board Application Forms; and

c) Part 1 of the Short EAF; and

d) The submitted site plans.

ADOPTION OF RESOLUTION

WHEREUPON, the Resolution herein was declared adopted by the Planning Board of the Village of Mount Kisco as follows:

The motion was moved by: ANTHONY STURNIOLO

The motion was seconded by: SOL GIBBONS

The vote was as follows:

JOSEPH COSENTINO	**AYE**
ANTHONY STURNIOLO	**AYE**
STANLEY BERNSTEIN	**ABSENT**
DOUGLAS HERTZ	**ABSENT**
SOL GIBBONS	**AYE**
ENRICO MARESCHI	**ABSENT**
RALPH VIGLIOTTI	**AYE**

Joseph Cosentino, Chairman **May 29, 2015**

PLANNING BOARD
VILLAGE OF MOUNT KISCO, WESTCHESTER COUNTY, NY

COORDINATED ENVIRONMENTAL REVIEW

NOTICE TO INVOLVED AGENCIES
DECLARATION OF INTENT TO BE LEAD AGENCY

ESTATE MOTORS - MERCEDES BENZ
333, 793 AND 795 NORTH BEDFORD ROAD

Date Mailed: 6-5-2015

PLEASE TAKE NOTICE, that at its meeting held on May 29, 2015, the Village of Mount Kisco Planning Board declared its intent to serve as Lead Agency for the coordinated environmental review of the proposed Unlisted Action described below; agreement among Involved Agencies is requested pursuant to the applicable requirements set forth in SEQRA, 6 NYCRR Part 617.

PROPOSED ACTION

The subject property consists of ±38 acres of land, ±7 acres of which is located within the Town of Bedford. The subject property is comprised of the following parcels:

Tax Parcel	Address	Acreage	Zoning District	Municipality
69.50-2-1	333 North Bedford Road	30.9 acres	ML/CL	Mount Kisco
71.12-2-36	333 North Bedford Road	6.5 acres	LI	Bedford
71.12-2-31	793 North Bedford Road	0.90 acres	RB	Bedford
71.1-2-32	795 North Bedford Road		LI	Bedford

333 North Bedford Road is developed with a ±611,000 s.f. multi-use commercial building, recreational fields, a parking lot which accommodates ±799 parking spaces and two (2) access driveways which provide egress and ingress to and from North Bedford Road. The existing building referenced above is located entirely within the Village of Mount Kisco and the Village of Mount Kisco/Town of Bedford municipal boundary line is located just north of the northern extent of the building. 793 and 795 North Bedford Road, located within the Town of Bedford, is developed with service garage and parking area and has historically been used for the sale and service of commercial vehicles.

Estate Motors ("the applicant") is proposing the following:

a) A change of use and the redevelopment of the northern portion of the existing building (113,280 s.f.) located at 333 North Bedford Road with a Mercedes Benz automobile dealership and 39-bay service center. The portion of the existing building in question is currently occupied by The Wine Enthusiast, which consists primarily of warehouse and office space.

b) Reconfiguration of the northern portion of the existing parking lot located at 333 North Bedford Road; and

c) Construction of a 7,000 s.f. certified pre-owned sales dealership and associated parking to be located at 793 and 795 North Bedford Road. Access to the pre-owned sales dealership will be via the existing internal driveway with no direct access to North Bedford Road; and

d) The applicant is proposing to lease ±0.94 acres of land from DP21,LLC for parking, display and access to the 333 North Bedford Road site; and

e) Tax parcels 71.12-2-31 and 71.12-2-32, located within the Town of Bedford, are proposed to be merged.

SITE LOCATION

333, 793 and 795 North Bedford Road, Village of Mount Kisco and Town of Bedford, Westchester County, New York

SEQRA CLASSIFICATION AND IDENTIFIED INVOLVED AND INTERESTED AGENCIES

The proposed action has been preliminarily classified as an Unlisted Action, pursuant to 6 NYCRR Part 617. The following potential Involved and Interested Agencies have been identified:

INVOLVED AGENCIES:

Village of Mount Kisco Planning Board
104 Main Street
Mount Kisco, NY 10549

Village of Mount Kisco Zoning Board of Appeals
104 Main Street
Mount Kisco, NY 10549

Village of Mount Kisco Architectural Review Board
104 Main Street
Mount Kisco, NY 10549

Town of Bedford Planning Board
425 Cherry Street
Bedford Hills, NY 10507

Town of Bedford Zoning Board of Appeals
425 Cherry Street
Bedford Hills, NY 10507

Town of Bedford Wetland Control Commission
425 Cherry Street
Bedford Hills, NY 10507

Westchester County Department of Health (WCDH)
25 Moore Avenue
Mount Kisco, NY 10549

New York City Department of Environmental Protection (NYCDEP)
Bureau of Water Supply
Suite 350
465 Columbus Avenue
Valhalla, NY 10595

New York State Department of Environmental Conservation (NYSDEC)
21 South Putt Corners Road
New Paltz, NY 12561

New York State Department of Transportation (NYSDOT)
Eleanor Roosevelt State Office Building
4 Burnett Boulevard
Poughkeepsie, NY 12603

INTERESTED AGENCIES

Village of Mount Kisco Building Department
104 Main Street
Mount Kisco, NY 10549

Town of Bedford Building Department
425 Cherry Street
Bedford Hills, NY 10507

Westchester County Department of Planning
148 Martine Avenue, Room 432
White Plains, NY 10601

COORDINATED ENVIRONMENTAL REVIEW PROCEDURES

Under the applicable standards of SEQRA, 6 NYCRR Part 617, the Village of Mount Kisco Planning Board has concluded that it is the appropriate agency to serve as Lead Agency for the coordinated environmental review of the proposed action discussed above. At its meeting held on May 29, 2015, the Planning Board declared its intent to serve as Lead Agency and authorized the circulation of this Notice to the Involved and Interested Agencies.

This Notice, along with a copy of the Planning Board Application Forms, Part 1 of the Short Environmental Assessment Form (EAF), and the submitted site plans, is being sent to all Involved and Interested Agencies. Each Involved Agency is hereby requested to fill out the attached Lead Agency Agreement. If any Involved Agency does not agree that the Village Mount Kisco Planning Board should be designated as the Lead Agency, it may follow the procedures set forth in SEQRA 6 NYCRR Part 617. If you have any questions or comments, you may contact:

Michelle Lailer, Planning Board Secretary
104 Main Street
Mount Kisco, NY 10549
Phone: (914) 864-0022
Fax: (914) 864-1085
Email: planning@mountkisco.org

Please return the completed Lead Agency Agreement, and any comments you may have on the application, to the above address within 30 days of mailing. If you do not respond within 30 days, it will be interpreted as your consent that the Village of Mount Kisco Planning Board serve as Lead Agency.

VILLAGE OF MOUNT KISCO PLANNING BOARD
COORDINATED ENVIRONMENTAL REVIEW

LEAD AGENCY AGREEMENT

ESTATE MOTORS - MERCEDES BENZ
333, 793 AND 795 NORTH BEDFORD ROAD

On behalf of _____,
(INSERT NAME OF AGENCY)

I acknowledge receipt of the Lead Agency Notice on the above referenced matter, which was mailed on _____.

The above named Involved Agency hereby:

(Please Check One)

( ) **AGREES** that the Mount Kisco Planning Board serve as Lead Agency for the coordinated environmental review of the proposed action and requests that the undersigned continue to be notified of all filings and hearings on this matter.

( ) **DOES NOT AGREE** to the Mount Kisco Planning Board serving as Lead Agency and wishes that _____ serve as Lead Agency. To contest Lead Agency designation, the undersigned intends to follow the procedures in accordance with SEQRA 6 NYCRR Part 617.6.

Please return within 30 days of the mailing of this correspondence. In addition, please specify the jurisdiction that your agency has over this project and what issues you believe are relevant in connection with this project.

Michelle Lailer, Planning Board Secretary
104 Main Street
Mount Kisco, NY 10549
Phone: (914) 864-0022
Fax: (914) 864-1085
Email: planning@mountkisco.org

Print Name	Title
Signature	Date

Application Number_____

Application for Site Plan/Subdivision/Special Use Permit Approval

Submission Date 11.18.2014

(Due 21 Days in advance of Planning Board Meeting)

Application Fee $500 previously submited

Escrow Fee $10,000 previously submitted

Type of Application: (Please Check All that Apply)

(Amended) Site Plan Approval x Land Subdivision Approval ____ Special Use Permit ____ Change of Use x

New Construction____ Addition ____

Applicant Information:

Applicant Name: Estate Motors

Address: 321 NYS Route 22, Goldens Bridge, NY 10526

Phone Number: (914) 232-8132 Fax: (914) 232-8123 Email: buonanno@estatemotors.com

Applicant's relationship to property: Leasee

Name of Property Owner: (if different from above) DP-21 (Diamond Properties)

Address: 333 North Bedford Road, Ste 145, Mount Kisco, NY10549-1164

Phone Number: (914) 773-6220 Fax: (914)773-6259 Email: jdiamond@dpmgt.com

Has property owner been notified of proposed action? Yes x No____

Application Information:

Project Name: Mercedes Benz of Mount Kisco

Project Address/Location: 333 North Bedford Road, Ste 105, Mount Kisco, NY 10549-1160

Property Tax #: 69.50-2-1 (also impacting 71.12-2-36 Town of Bedford)

Proposed Use (be specific): Change of use of 113,280 sf office/warehouse (former Wine Enthusiast) to automotive sales, service and related activities

Proposed New Floor Area(s) (square feet): 0 new sf (113,280 change of use)

Number of newly created parking spaces: 44 spaces, 12 display/inventory (also 65 spaces for 793 project)

Number of newly created building lots: 0

Number of newly created curb cuts: 0

Number of newly created water connections: 0

Number of newly created sewer connections: 0

Conformance with Lot and Bulk Requirements:

What is the Zoning Classification of the site? ML and CL

	Required	Proposed
Minimum Gross Site Area	10,000 (sf)	1,634,305 (sf)
Minimum Lot Area		
Maximum Building Coverage	45%	34.3%
Maximum Site Development Coverage	70%	65.9%
Minimum Lot Depth	75 (ft)	1,122.7
Maximum Lot Width	75 (ft)	1,965 (ft)
Yard Setbacks:		
Front	10 (ft)	258 (ft)
Rear	10 (ft)	39.6 (ft)
Side	10 (ft)	374.25 / 244.17
Buffer:		
Front	10 (ft)	N/A
Rear	10 (ft)	N/A
Side	10 (ft)	N/A
Maximum Building Height	2 1/2 (stories)	2 (stories)
Required Parking Spaces	970	843 (plus 121 interior)
Other		

Do any easement agreements, property covenants or deed restrictions apply to this property? **Yes** x **No** ____.
If yes, please list these documents and attach copies.
As submitted with the original site plan application and on file with Village.

Will action require approval from the New York State Department of Transportation? **Yes** ____ **No** x

Will action require approval from the New York City Department of Environmental Protection? **Yes** x **No** ____

Will action require approval from the New York State Department of Environmental Conservation? **Yes** x **No** ____

Will action disturb any wetlands or wetland buffer? **Yes** x **No** ____

If yes, please fill out a permit to disturb sensitive natural areas.

Will action disturb any steep slopes greater than 20 percent? **Yes** ____ **No** x

If yes, please fill out a permit to disturb sensitive natural areas.

Note: APPLICATION WILL ONLY BE PROCESSED WHEN:
1. **APPLICATION FEE / ESCROW FEE IS PAID**
2. **COMPLETED APPLICATION FORM IS SIGNED AND SUBMITTED**
3. **FOLDED COPIES OF REQUIRED NUMBER OF DRAWINGS ARE SUBMITTED**

The above information is complete and factually correct to the best of my knowledge:

Applicant's Signature _____ **date** 2/11/15
Owner's Signature _____ **date** 2/11/15

Application reviewed by: _____ Date: _____

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information

Estate Motors (MB Mount Kisco)

Name of Action or Project:

Amended Site Plan Approval and Change of Use 333 North Bedford Road "The Park"

Project Location (describe, and attach a location map):

333 North Bedford Road also impacting 793/795 Bedford Road.

Brief Description of Proposed Action:

The Applicant is requesting an amendment to a previously approved site plan for 333 North Bedford Road. The Project proposes the change in use of 113,280 SF of existing office/warehouse space (previously Wine Enthusiast) to automotive sales, service and related activities within the Village of Mount Kisco. The Project also proposes improvements and expansion to an existing parking/ loading area to the north of the building, which is largely in the Town of Bedford. Additionally, the Applicant will develop two abutting parcels on the northeast portion of the site (793/795 Bedford Road) where a 7,000 Sf certified pre-owned sales (CPO) building will be located. The CPO site is 0.90 acres in size. The CPO building and related site improvements are located entirely within the Town of Bedford. Approximately 40,866 SF of the 333 North Bedford Road site will be developed to support. The 333 North Bedford Road site is 37.5 acres in size.

Name of Applicant or Sponsor:	Telephone: (914) 232-8132
Estate Motors	E-Mail:

Address:

321 NYS Route 22

City/PO:	State:	Zip Code:
Goldens Bridge	NY	10526

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: See attached list of permitting agencies and status	☐	☑

3.a. Total acreage of the site of the proposed action? 38.4 acres

b. Total acreage to be physically disturbed? 2.7 acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 38.4 acres

4. Check all land uses that occur on, adjoining and near the proposed action.

☐ Urban ☐ Rural (non-agriculture) ☑ Industrial ☑ Commercial ☐ Residential (suburban)

☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Wholesale, warehouse and recreation

☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify:	☑	☐
8. a. Will the proposed action result in a substantial increase in traffic above present levels? TBD Traffic Study In Progress	☐	☐
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☑
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☐	☑
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies:	☐	☑
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water:	☐	☑
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: 7,000 sf building located in the Town of Bedford and will be serviced by OWTS	☐	☑
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	☑	☐
b. Is the proposed action located in an archeological sensitive area?	☑	☐
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: Impact to weland buffer only. 1,650 sf Mt Kisco and 5,900 sf Bedford	☑	☐

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:
☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional
☑ Wetland ☑ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☑	☐
16. Is the project site located in the 100 year flood plain?	☐	☑
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? ☐ NO ☑ YES	☐	☑
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☑ YES Stormwater management discharging to existing storm systems or conveyance channels located within the Town of Bedford		

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: subsurface detention/ retention	☐	☑
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: Gasoline station north of site on Bedford Road (Adjoining site) Spill Number 9209731 date 11/20/1992 status NOT CLOSED two additional small spills 8905363 and 1011856 both closed	☐	☑

I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: _____ Date: 5/8/15

Signature: _____

PRINT FORM

CATIZONE ENGINEERING, P.C

CIVIL ENGINEERING CONSULTANTS
9 OVERLOOK TERRACE, LARCHMONT, NY 10538

Project: Estate Motors
Mercedes Benz Mount Kisco

Date: May 7, 2015

Project No.

Prepared By: PAC

Required Approvals and Status

Reviewed By: MAD

Approval Agency	Type	Submittal Date	Anticipated Approval Date	Status
Village of Mount Kisco Planning	Site Plan/ Change in Use	2/17/2015	6/23/2015	Active
Building		2/17/2015		Active
Planning		2/17/2015		Active
Engineering		2/17/2015		Active
Traffic				Traffic Consultant Coordination
Village of Mount Kisco	Wetlands Permit			Waiting for Delineation
Village of Mount Kisco	Flood Hazard Zone			Concept Sizing and Layout
Town of Bedford Planning Board	Site Plan	10/2/2014	6/23/2015	Active
				Anticipate 3/2/2015 submital
Town of Bedford Zoning Board of Appeals				Requires referral from PB
	Rear Yard Setback			
	Side Yard Setback			
	Site Coverage			
	Required Parking Spaces			
Town of Bedford	Wetlands Control Commission			Waiting for Delineation
WCDOH	OWTS Approval	1/20/2015		
		2/27/2015		
		3/16/2015		**Approved 3/26/2015**
NYSDEC	SWPPP			
	OWTS Joint Review with WCDOH	1/20/2015		
		2/27/2015		
		3/16/2015		**Approved 3/26/2015**
NYCDEP	SWPPP DMSA		7/30/2015	
NYSDOT	Highway Work Permit		7/30/2015	793.795 curb and utilities

BLUE DOLPHIN DINER - OUTDOOR DINING CANOPY

Town of Bedford Planning Board

2nd Floor Conference Room
425 Cherry Street
Bedford Hills, New York 10507

Tuesday, December 9, 2014

Minutes

A meeting of the Planning Board was held on December 9, 2014, starting at 8:00 P.M., at 425 Cherry Street, Bedford Hills, New York. Present were Chairman Deirdre Courtney-Batson, Vice Chairman John Sullivan, Board Members: William Colavito, and Diane Lewis, Planning Director Jeff Osterman and Secretary Anne Paglia. Absent was Board Member Felix Cacciato. *[All Planning Board meetings are recorded. A CD copy of this recording may be obtained from the Planning Board Office.]*

Conference:
Special Use Permit – Tennis Court
Section 94.5 Block 1 Lot 1.1, R-4A Zone
221 Sarles Street, Bedford Corners
Owner: **Bedford Real Estate Associates, LLC**
Applicant: **Steve Kantor**
(Review revised plan.)

Present:
Steve Kantor, Owner
Barry G. Naderman, P.E., Naderman Land Planning & Engineering, P.C.

Mr. Naderman explained the modifications made to the plan since the last meeting with the Planning Board.

Mr. Colavito asked if there was anything else that needed to be complied with that was in the Town Engineer's memo of September 29, 2014. Mr. Naderman said that at this point it was just the Stormwater Pollution Prevention Plan.

Mr. Osterman asked about the 28 plants shown on the plan. Mr. Naderman said that there would be 13 Hollies plus 3 Dogwood trees and the relocated trees.

Mrs. Courtney-Batson listed the following conditions for approval:

1. The fencing shall be black and the posts shall be either cedar or vinyl-coated galvanized steel.
2. The applicant shall comply with the Town Engineer's memo dated September 29, 2014.

3. The final placement of the trees may be adjusted in the field.

Motion: A motion was made by Mr. Colavito to approve this application for a special use permit subject with the conditions stated.
Motion seconded by Mrs. Lewis.

The Board reviewed the Environmental Clearance Form and unanimously determined that this proposal is a "Type II or Exempt Action" under SEQR. Mr. Colavito endorsed the Board's determination on the ECF. Mr. Sullivan seconded.

Vote: Ayes: Courtney-Batson, Sullivan, Colavito, Lewis
Nays: None

Vote: Ayes: Courtney-Batson, Sullivan, Colavito, Lewis
Nays: None

Conference:
Site Plan Approval
Alterations and Improvements to the Upper School Campus
Section 73.13 Block 2 Lot 5, R-2A Zone
425 Cantitoe Street, Bedford
Owner/Applicant: **Rippowam Cisqua**
(Prepare report to Zoning Board of Appeals.)

Present:
Erik A. Kaeyer, AIA, Vice President, KG&D Architects

Mr. Kaeyer described some of the details of the application.

Mrs. Courtney-Batson stated that the object of tonight's meeting is for the Planning Board to prepare a recommendation to the Zoning Board of Appeals (the "ZBA"). She stated that this would include a recommendation that the applicant return to the Planning Board for final site plan approval which will include revisions to landscaping, lighting and drainage.

Mrs. Courtney-Batson suggested that the Planning Board recommend to the Zoning Board of Appeals that they approve the Special Use Permit. Mrs. Courtney-Batson stated that the Zoning Board of Appeals was aware that the Planning Board is Lead Agency under SEQRA and they have performed a Coordinated Review. She also stated that the memorandum should advise the ZBA that the Planning Board has determined that this proposal is an Unlisted Action under the New York State Environmental Quality Review Act (SEQRA).

Motion: A motion was made by Mr. Sullivan to send the memorandum to the ZBA with the conditions and recommendations stated.
Motion seconded by Mrs. Lewis.
Vote: Ayes: Courtney-Batson, Sullivan, Colavito, Lewis
Nays: None

Conference:
Proposed Conservation Development
Section 84.18 Block 1 Lot 14, R-2A Zone
325-361 Old Post Road, Bedford
Owner: **Old Post Holdings, LLC**
Applicant: **Wilder Balter Partners, Inc.**
(Review results of field trip.)

Present:
William G. Balter, President, Wilder Balter Partners, Inc.
Scott Blakely, R.L.A., Insite Engineering, Surveying & Landscape Architecture, P.C.

Mrs. Courtney-Batson asked Mr. Colavito to read the notes from last week's field trip to the property. Mr. Colavito read the following:

1. We need calculations on the cut and fill to occur on the site.
2. The location of houses near the vernal pool should be studied.
3. The vernal pool should be restudied and, in part, use the previous Clemens study as the base of the review.
4. Consider softening of the mine slope location on the site.
5. Review the removal of invasive species throughout the site and prepare a plan.
6. A new functional evaluation of the wetlands within the disturbed area should be done.
7. Evaluate and list trees to be preserved.

Mr. Balter described revisions made to the plan since the last meeting. He stated that the plan, which now includes the Ruti property and a lot on Vinton Avenue, is now 79 units – it was 74. He discussed the entrances and exits from the property. The Planning Board discussed the traffic issues and concerns with Mr. Balter.

At Mr. Osterman's request, Mrs. Courtney-Batson described the procedure to the audience. Mr. Osterman stated that there will be full public hearings on the preparation of the Environmental Impact Statement and on the statement itself. He stated that the Town Board and the Bedford Wetlands Control Commission would also need to grant approval for this application. Mrs. Courtney-Batson stated that the first public hearing will take place on the Scoping Session which is when the Planning Board tells the applicant what issues need to be covered in the environmental review.

Mr. Blakely presented a lot count plan to the Planning Board showing a standard subdivision according to zoning requirements. He stated that the total property is about 118 acres – this includes the Ruti and the Vinton Avenue properties. These properties are located in three zoning districts: there are residential quarter-acre, residential one-acre and residential two-acre zones. Based on this zoning, the applicant has created 58 lots under the standard subdivision requirements.

Mr. Blakely described the plan for the land around the vernal pool. Mrs. Courtney-Batson said that she would like the Bedford Wetlands Control Commission and the Town Environmental Consultant to review the standard subdivision plan. Mr. Blakely then discussed the roads and the slopes in the development.

Mr. Colavito asked about the existing wells on the property which would be used for the development. Mr. Balter stated that they were on high and dry land, and were not located in wetland or wetland buffer. He also mentioned the possibility of connecting to the town water system.

Mr. Sullivan asked how the standard subdivision count of 58 lots becomes 79 lots under the conservation development plan. Mr. Balter described the additional lots as a result of the factors in the Town Code. It also includes nine affordable housing homes, which are mixed into the entire development. Mr. Balter stated that his would not be a gated community. At Mr. Osterman's request, Mr. Balter described what "affordable housing" is according to Westchester County. He invited anyone who was interested to visit his website at www.wbhomes.com.

Mrs. Courtney-Batson said she would like the Town Engineer and the Town Environmental Consultant to review the plan. She would like to have the applicant back for the first meeting in January, which would be January 13, 2015. The purpose of the meeting would be for the Planning Board to declare itself as Lead Agency. It would also be the goal to have had the Town Engineer and the Town Environmental Consultant review the plan by then.

[Members of the audience were then given a chance to ask some questions.]

Discussion:
2015 Planning Board Schedule
The Planning Board agreed to the following meetings:
Wednesday, January 14, 2015
Tuesday, January 27, 2015
Tuesday, February 10, 2015
The remainder of the schedule to be discussed at a later meeting.

Approval of Minutes:
Mr. Colavito made a motion to approve the following minutes, as amended:
June 10, 2014
June 24, 2014
The motion was seconded by Mr. Sullivan.
Vote: Ayes: Courtney Batson, Sullivan, Colavito, Lewis
Nays: None

The next meeting will be on Wednesday, January 14, 2015.

Mr. Colavito moved to close the meeting; Mr. Sullivan seconded the motion.

Vote: Ayes: Courtney-Batson, Sullivan, Colavito, Cacciato, Lewis Nays: None
The meeting was adjourned at 9:40 PM.

Date these minutes were approved by the Planning Board: _____

Respectfully submitted,

_____ _____
Anne Paglia, Secretary Date
Town of Bedford Planning Board