



TOWN COUNCIL WORK SESSION
TUESDAY, February 16, 2016 @ 7:00pm
Front Royal Administration Building

Town/Staff Related Issues:

1. Update on New Police Headquarters – Moseley Architects
2. Draft Code Amendment – Floodplain Zoning Updates – *Director of Planning*
3. Draft Code Amendment – Recommended I-2 District Changes – *Director of Planning*
4. Write Off for Bad Debt – *Director of Finance*
5. Discussion of Report of UFAC Evaluation and Response to Code Violation of Damaging Tree Topping on Public Property at 34 W 12th Street – *Town Attorney*
6. Continued Discussion of FY16-17 Town Tax Rate – *Town Manager*
7. *Battle of Front Royal* Event – *Town Manager*
8. Citizens Academy – *Town Manager*

Council/Mayor Related Items

9. Proclamation to support using local labor forces for construction projects – *Mayor Darr*
10. Council Retreat Overview
11. Council Discussion/Goals (*time permitting*)
12. CLOSED MEETING – Community Development Director Discussion

Motion to Go Into Closed Meeting

Pursuant to Va. Code Section 2.2-3711. A .1. of the Freedom of Information Act, I move that Town Council go into closed meeting to discuss, consider, and interview prospective candidates for appointment to the position of Community Development Director of the Town of Front Royal.

Motion to Certify Closed Meeting at its Conclusion [*At the conclusion of the Closed Meeting, immediately re-convene in open meeting and take a roll call vote on the following:*]

I move that Town Council certify that to the best of each member's knowledge, as recognized by each Council member's affirmative vote, that only such public business matters lawfully exempted from Open Meeting requirements under the Virginia Freedom of Information Act as were identified in the motion by which the Closed Meeting was convened were heard, discussed or considered in the Closed Meeting by Council, and that the vote of each individual member of Council be taken by roll call and recorded and included in the minutes of the meeting of Town Council.

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Town of Front Royal, Virginia
Work Session Agenda Form

Date: February 16, 2016

Agenda Item: Police Headquarters Update

Summary: Moseley Architects has been working with the Police Department to identify the space needs for the new Police Headquarters based upon projected staffing requirements. Moseley will present their findings based upon the 2015, 2030, and 2040 requirements with costs associated with the building requirements for each horizon.

Council Discussion: Council is requested to receive input on the associated building cost estimates and provide feedback to identify the appropriate design for Moseley to complete.

Staff Evaluation: Our Police Department has worked with Moseley Architects to identify the anticipated staffing associated with the Police Headquarters.

Budget/Funding: The Finance Director will be available to address fiscal issues.

Legal Evaluation: The Town Attorney will be available to address legal issues.

Staff Recommendations: Staff recommend Council consider the options for construction of the Police Headquarters.

Town Manager Recommendation: The Town Manager recommends Council consider the options for the construction of the Police Headquarters.

Council Recommendation:

- Additional Work Session Regular Meeting No Action
Consensus Poll on Action: ___(Aye) ___(Nay)



2

Town of Front Royal, Virginia Work Session Agenda Form

Date: February 16, 2016

Agenda Item: DRAFT Amendment to the Town Code – Floodplain Zoning Updates
Director of Planning & Zoning

Summary:

The Virginia Department of Conservation & Recreation (DCR) periodically performs compliance reviews of local floodplain regulations. The attached draft amendment to the Town Code reflects changes requested by DCR. Specifically, the changes were submitted by Charles Kline, the Floodplain Coordinator with DCR using the FEMA Region III Ordinance Review Checklist.

Although the number of proposed changes are substantial, they do not appear to make any substantial changes to the current regulations. Rather, the proposed changes include such things as the addition of definitions, and the addition of language to help clarify existing regulations and administrative rules.

The attached draft amendment was recommended for adoption by the Planning Commission at their last meeting of 2015 and a public hearing was held with no public comments.

DCR initially requested that the Town change the minimum distance that a structure must be elevated above the base flood elevation level from 12” to 18”. DCR later confirmed that this was only a recommendation because localities may choose to be more stringent than the minimum FEMA Floodplain regulations. The Planning Commission preferred that the regulations remain at the minimum level (12”) but did include language that recommends to citizens that they elevate structures higher if possible to reduce insurance premiums.

Council Discussion: This agenda item is scheduled for a work session review on 02/16/16.

Staff Evaluation: Planning & Zoning Staff will be available at the work session to discuss the draft with Town Council. If Town Council supports the changes, it would be appropriate to schedule the draft for a public hearing followed by a 2nd Reading.

Budget/Funding: N/A

Legal Evaluation: The Town Attorney will be available at the work session for questions.

Town Manager: The Town Manager will be available at the work session for questions.

Council Recommendation:

Additional Work Session Regular Meeting No Action
Consensus Poll on Action: ___(Aye) ___(Nay)

Work Session



DRAFT AMENDMENT – VERSION 4
“FLOODPLAIN ZONING”

The purpose of this ordinance is to make adjustment to the Town’s Floodplain Zoning regulations as requested by the Virginia Department of Conservation & Recreation. Revisions of Town Code Sections 175-74 through 175-81.3 are drafted below.

START -----

FLOODPLAIN ZONING

175-74 GENERAL PROVISIONS (Floodplain)

A. Statement of Intent: ~~Floodplains are a valuable resource that provide, in addition to flood passage, agricultural land, recreational land, and wildlife habitat. In addition, they provide groundwater recharge and pollution protection services. As such, the Town Plan calls for protecting currently undeveloped floodplains from incompatible development.~~ **Statutory Authority: This ordinance is adopted pursuant to the authority granted to localities by Virginia Code § 15.2 – 2280.**

B. Purpose: The purpose of these provisions is to prevent: the loss of life and property, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:

1. Regulating uses, activities, and development which, alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities, and frequencies;
2. Restricting or prohibiting certain uses, activities, and development from locating within districts subject to flooding;
3. Requiring all those uses, activities, and developments that do occur in flood-prone districts to be protected and/or flood-proofed against flooding and flood damage; and,
4. Protecting individuals from buying land and structures which are unsuited for intended purposes because of flood hazards.

C. Applicability: These provisions shall apply to all lands within the jurisdiction of the Town of Front Royal and identified as a being in the 1% annual chance of a flood (Special Flood Hazard Area), by the Federal Insurance Administration.

D. Compliance and Liability:

1. No land shall hereafter be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged, or structurally altered except in full compliance with

47 the terms and provisions of this ordinance and any other applicable ordinances and
48 regulations which apply to uses within the jurisdiction of this ordinance.

49

50 2. The degree of flood protection sought by the provisions of this ordinance is considered
51 reasonable for regulatory purposes and is based on acceptable engineering methods of
52 study. Larger floods may occur on rare occasions. Flood heights may be increased by
53 man-made or natural causes, such as ice jams and bridge openings restricted by debris.
54 This ordinance does not imply that districts outside the Floodplain District or that land
55 uses permitted within such district will be free from flooding or flood damages.

56
57 3. Records of actions associated with administering this ordinance shall be kept on file and
58 maintained by the Zoning Administrator.

59
60 4. This ordinance shall not create liability on the part of the Town of Front Royal or any
61 officer or employee thereof for any flood damages that result from reliance on this
62 ordinance or any administrative decision lawfully made there under.

63
64 E. Abrogation and Greater Restrictions: This ordinance supersedes any ordinance currently in
65 effect in flood-prone districts. However, any underlying ordinance shall remain in full force and
66 effect to the extent that its provisions are more restrictive than this ordinance.

67
68 F. Severability: If any section, subsection, paragraph, sentence, clause, or phrase of this
69 ordinance shall be declared invalid for any reason whatever, such decision shall not affect the
70 remaining portions of this ordinance. The remaining portions shall remain in full force and
71 effect; and for this purpose, the provisions of this ordinance are hereby declared to be severable.

72
73 G. Administration:

74
75 1. Designation of the Floodplain Administrator. The Floodplain Administrator is hereby
76 appointed to administer and implement these regulations and is referred to herein as the
77 Floodplain Administrator. The Zoning Administrator is hereby designated as the
78 Floodplain Administrator for the Town of Front Royal. The Floodplain Administrator
79 may:

80

81 a. Do the work themselves. In the absence of a designated Floodplain Administrator,
82 the duties are conducted by the Town of Front Royal chief executive officer.

83 b. Delegate duties and responsibilities set forth in these regulations to qualified
84 technical personnel, plan examiners, inspectors, and other employees.

85 c. Enter into a written agreement or written contract with another community or private
86 sector entity to administer specific provisions of these regulations. Administration of
87 any part of these regulations by another entity shall not relieve the community of its
88 responsibilities pursuant to the participation requirements of the National Flood
89 Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R.
90 Section 59.22.

91

92 2. Duties and Responsibilities of the Floodplain Administrator: The duties and
93 responsibilities of the Floodplain Administrator shall include but are not limited to:

94 a. Review applications for permits to determine whether proposed activities will be
95 located in the Special Flood Hazard Area (SFHA).

- 96 b. Interpret floodplain boundaries and provide available base flood elevation and flood
97 hazard information.
- 98 c. Review applications to determine whether proposed activities will be reasonably safe
99 from flooding and require new construction and substantial improvements to meet
100 the requirements of these regulations.
- 101 d. Review applications to determine whether all necessary permits have been obtained
102 from the Federal, State or local agencies from which prior or concurrent approval is
103 required; in particular, permits from state agencies for any construction,
104 reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction
105 (including bridges, culverts, structures), any alteration of a watercourse, or any
106 change of the course, current, or cross section of a stream or body of water,
107 including any change to the 100-year frequency floodplain of free-flowing non-tidal
108 waters of the State.
- 109 e. Verify that applicants proposing an alteration of a watercourse have notified adjacent
110 communities, the Department of Conservation and Recreation (Division of Dam
111 Safety and Floodplain Management), and other appropriate agencies (VADEQ,
112 USACE) and have submitted copies of such notifications to FEMA.
- 113 f. Advise applicants for new construction or substantial improvement of structures that
114 are located within an area of the Coastal Barrier Resources System established by
115 the Coastal Barrier Resources Act that Federal flood insurance is not available on
116 such structures; areas subject to this limitation are shown on Flood Insurance Rate
117 Maps as Coastal Barrier Resource System Areas (CBRS) or Otherwise Protected
118 Areas (OPA).
- 119 g. Approve applications and issue permits to develop in flood hazard areas if the
120 provisions of these regulations have been met, or disapprove applications if the
121 provisions of these regulations have not been met.
- 122 h. Inspect or cause to be inspected, buildings, structures, and other development for
123 which permits have been issued to determine compliance with these regulations or to
124 determine if non-compliance has occurred or violations have been committed.
- 125 i. Review Elevation Certificates and require incomplete or deficient certificates to be
126 corrected.
- 127 j. Submit to FEMA, or require applicants to submit to FEMA, data and information
128 necessary to maintain FIRMs, including hydrologic and hydraulic engineering
129 analyses prepared by or for the Town of Front Royal within six months after such
130 data and information becomes available if the analyses indicate changes in base
131 flood elevations.
- 132 k. Maintain and permanently keep records that are necessary for the administration of
133 these regulations, including:
- 134 (1) Flood Insurance Studies, Flood Insurance Rate Maps (including historic studies
135 and maps and current effective studies and maps) and Letters of Map Change;
136 and
- 137 (2) Documentation supporting issuance and denial of permits, Elevation
138 Certificates, documentation of the elevation (in relation to the datum on the
139 FIRM) to which structures have been floodproofed, inspection records, other
140 required design certifications, variances, and records of enforcement actions
141 taken to correct violations of these regulations.
- 142 l. Enforce the provisions of these regulations, investigate violations, issue notices of
143 violations or stop work orders, and require permit holders to take corrective action.

- 144 m. Advise the Board of Zoning Appeals regarding the intent of these regulations and,
145 for each application for a variance, prepare a staff report and recommendation.
- 146 n. Administer the requirements related to proposed work on existing buildings:
- 147 (1) Make determinations as to whether buildings and structures that are located in
148 flood hazard areas and that are damaged by any cause have been substantially
149 damaged.
- 150 (2) Make reasonable efforts to notify owners of substantially damaged structures of
151 the need to obtain a permit to repair, rehabilitate, or reconstruct. Prohibit the
152 non-compliant repair of substantially damaged buildings except for temporary
153 emergency protective measures necessary to secure a property or stabilize a
154 building or structure to prevent additional damage.
- 155 o. Undertake, as determined appropriate by the Floodplain Administrator due to the
156 circumstances, other actions which may include but are not limited to: issuing press
157 releases, public service announcements, and other public information materials
158 related to permit requests and repair of damaged structures; coordinating with other
159 Federal, State, and local agencies to assist with substantial damage determinations;
160 providing owners of damaged structures information related to the proper repair of
161 damaged structures in special flood hazard areas; and assisting property owners with
162 documentation necessary to file claims for Increased Cost of Compliance coverage
163 under NFIP flood insurance policies.
- 164 p. Notify the Federal Emergency Management Agency when the corporate boundaries
165 of the Town of Front Royal have been modified and:
- 166 (1) Provide a map that clearly delineates the new corporate boundaries or the new
167 area for which the authority to regulate pursuant to these regulations has either
168 been assumed or relinquished through annexation; and
- 169 (2) If the FIRM for any annexed area includes special flood hazard areas that have
170 flood zones that have regulatory requirements that are not set forth in these
171 regulations, prepare amendments to these regulations to adopt the FIRM and
172 appropriate requirements, and submit the amendments to the governing body for
173 adoption; such adoption shall take place at the same time as or prior to the date
174 of annexation and a copy of the amended regulations shall be provided to
175 Department of Conservation and Recreation (Division of Dam Safety and
176 Floodplain Management) and FEMA.
- 177 q. Upon the request of FEMA, complete and submit a report concerning participation
178 in the NFIP which may request information regarding the number of buildings in the
179 SFHA, number of permits issued for development in the SFHA, and number of
180 variances issued for development in the SFHA.
- 181 r. It is the duty of the Community Floodplain Administrator to take into account flood,
182 mudslide and flood-related erosion hazards, to the extent that they are known, in all
183 official actions relating to land management and use throughout the entire
184 jurisdictional area of the Community, whether or not those hazards have been
185 specifically delineated geographically (e.g. via mapping or surveying).
- 186
- 187 3. *Use and Interpretation of FIRMs.* The Floodplain Administrator shall make
188 interpretations, where needed, as to the exact location of special flood hazard areas,
189 floodplain boundaries, and floodway boundaries. The following shall apply to the use
190 and interpretation of FIRMs and data:
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- 192 a. Where field surveyed topography indicates that adjacent ground elevations:

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- (1) Are below the base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as special flood hazard area and subject to the requirements of these regulations;
 - (2) Are above the base flood elevation, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the SFHA.
- b. In FEMA-identified special flood hazard areas where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified SFHAs, any other flood hazard data available from a Federal, State, or other source shall be reviewed and reasonably used.
 - c. Base flood elevations and designated floodway boundaries on FIRMs and in FISs shall take precedence over base flood elevations and floodway boundaries by any other sources if such sources show reduced floodway widths and/or lower base flood elevations.
 - d. Other sources of data shall be reasonably used if such sources show increased base flood elevations and/or larger floodway areas than are shown on FIRMs and in FISs.
 - e. If a Preliminary Flood Insurance Rate Map and/or a Preliminary Flood Insurance Study has been provided by FEMA:
 - (1) Upon the issuance of a Letter of Final Determination by FEMA, the preliminary flood hazard data shall be used and shall replace the flood hazard data previously provided from FEMA for the purposes of administering these regulations.
 - (2) Prior to the issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data shall be deemed the best available data pursuant to Section 3.1.A.3. and used where no base flood elevations and/or floodway areas are provided on the effective FIRM.
 - (3) Prior to issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data is permitted where the preliminary base flood elevations or floodway areas exceed the base flood elevations and/or designated floodway widths in existing flood hazard data provided by FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.
4. *Jurisdictional Boundary Changes.* In accordance with the Code of Federal Regulations, Title 44 Subpart (B) Section 59.22 (a) (9) (v), the Town will notify the Federal Insurance Administration and optionally the State Coordinating Office in writing whenever the boundaries of the Town have been modified by annexation or the Town has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area. A copy of a map of the Town, suitable for reproduction, and clearly delineating the new corporate limits or new area for which the Town has assumed or relinquished floodplain management regulatory authority must be included with the notification.

- 239 5. *District Boundary Changes.* The delineation of any of the Floodplain Districts may be
240 revised by the Town where natural or man-made changes have occurred and/or where
241 more detailed studies have been conducted or undertaken by the U. S. Army Corps of
242 Engineers or other qualified agency, or an individual documents the need for such
243 change. However, prior to any such change, approval must be obtained from the Federal
244 Emergency Management Agency. A completed Letter of Map Revision (LOMR) is a
245 record of this approval.
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- 247 6. *Interpretation of District Boundaries.* Initial interpretations of the boundaries of the
248 Floodplain Districts shall be made by the Zoning Officer. Should a dispute arise
249 concerning the boundaries of any of the Districts, the Board of Zoning Appeals shall
250 make the necessary determination. The person questioning or contesting the location of
251 the District boundary shall be given a reasonable opportunity to present his case to the
252 Board and to submit his own technical evidence if he so desires.
253
- 254 7. *Submitting Model Backed Technical Data.* A community's base flood elevations may
255 increase or decrease resulting from physical changes affecting flooding conditions. As
256 soon as practicable, but not later than six months after the date such information becomes
257 available, a community shall notify the Federal Emergency Management Agency of the
258 changes by submitting technical or scientific data. The community may submit data via a
259 LOMR. Such a submission is necessary so that upon confirmation of those physical
260 changes affecting flooding conditions, risk premium rates and flood plain management
261 requirements will be based upon current data.
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- 263 8. *Letters of Map Revision.* When development in the floodplain will cause or causes a
264 change in the base flood elevation, the Town shall require the applicant of the
265 development to notify FEMA by applying for a Conditional Letter of Map Revision and
266 then a Letter of Map Revision.
267
- 268 9. *Penalty for Violations.* Any person who fails to comply with any of the requirements or
269 provisions of this article or directions of the director of planning or any authorized employee
270 of the Town shall be guilty of the appropriate violation and subject to the penalties thereof.
271 Violations and associated penalties related to the floodplain provisions are found under
272 Section 175-145 of this Chapter. In addition to the above penalties, all other actions are
273 hereby reserved, including an action in equity for the proper enforcement of Sections 175-
274 74 through 175-81.3. The imposition of a fine or penalty for any violation of, or
275 noncompliance with, the provisions of Sections 175-74 through 175-81.3, shall not
276 excuse the violation or noncompliance or permit it to continue; and all such persons shall
277 be required to correct or remedy such violations within a reasonable time. Any structure
278 constructed, reconstructed, enlarged, altered or relocated in noncompliance with this article
279 may be declared by the Town to be a public nuisance and abatable as such. Flood insurance
280 may be withheld from structures constructed in violation of this article.
281

282 175-75 DEFINITIONS (Floodplain)

283 The following definitions apply to the floodplain regulations found within this chapter,
284 specifically Sections 175-74 through 175-81.3:

285 **A. ACCESSORY STRUCTURE or APPURTENANT STRUCTURE** - For purposes of the
286 floodplain regulations of this chapter, shall mean an accessory building not in excess of 200
287 square feet.

288
289 **AB. BASE FLOOD** - The flood having a one percent chance of being equaled or exceeded in
290 any given year.

291
292 **BC. BASE FLOOD ELEVATION** - ~~The Federal Emergency Management Agency designated~~
293 ~~as the Special Flood Hazard Area.~~ The water surface elevations of the base flood, that is, the
294 flood level that has a one percent or greater chance of occurrence in any given year. The water
295 surface elevation of the base flood in relation to the datum specified on the community's Flood
296 Insurance Rate Map. For the purposes of this ordinance, the base flood is the 1% annual chance
297 flood.

298
299 **CD. BASEMENT** - Any area of the building having its floor sub-grade (below ground level) on
300 all sides.

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302 **DE. BOARD OF ZONING APPEALS** - The Board appointed to review appeals made by
303 individuals with regard to decisions of the Zoning Administrator in the interpretation of this
304 ordinance.

305
306 **EF. BREAKAWAY WALL** - A wall that is not part of the structural support of the building and
307 is intended through its design and construction to collapse under specific lateral loading forces,
308 without causing damage to the elevated portion of the building or supporting foundation system.

309
310 **FG. DEVELOPMENT**- Any man-made change to improved or unimproved real estate,
311 including, but not limited to, buildings or other structures, mining, dredging, filling, grading,
312 paving, excavation or drilling operations or storage of equipment or materials.

313
314 **GH. ELEVATED BUILDING** - A non-basement building built to have the lowest floor
315 elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, or
316 columns (posts and piers).

317
318 **HI. ENCROACHMENT** - The advance or infringement of uses, plant growth, fills, excavation,
319 buildings, permanent structures or development into a floodplain, which may impede or alter the
320 flow capacity of a floodplain.

321
322 **J. EXISTING CONSTRUCTION** – structures for which the “start of construction”
323 commenced before the effective date of the FIRM or before January 1, 1975 for FIRMs effective
324 before that date. “Existing construction” may also be referred to as “existing structures.”

325
326 **IK. FLOOD OR FLOODING** -

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328 1. A general or temporary condition of partial or complete inundation of normally dry land
329 areas from:

- 330
331 a. The overflow of inland or tidal waters; or,
332 b. The unusual and rapid accumulation or run-off of surface waters from any source.

333 c. Mudflows which are proximately caused by flooding as defined in paragraph (1)(b) of
334 this definition and are akin to a river of liquid and flowing mud on the surfaces of normally
335 dry land areas, as when earth is carried by a current of water and deposited along the path
336 of the current.

337
338 2. The collapse or subsistence of land along the shore of a lake or other body of water as a
339 result of erosion or undermining caused by waves or currents of water exceeding
340 anticipated cyclical levels or suddenly caused by an unusually high water level in a natural
341 body of water, accompanied by a severe storm, or by an unanticipated force of nature such
342 as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable
343 event which results in flooding as defined in paragraph (1) (a) of this definition.
344

345 **L. FLOOD INSURANCE RATE MAP (FIRM)** - an official map of a community, on which
346 the Federal Emergency Management Agency has delineated both the special hazard areas and the
347 risk premium zones applicable to the community. A FIRM that has been made available
348 digitally is called a Digital Flood Insurance Rate Map (DFIRM).
349

350 **M. FLOOD INSURANCE STUDY (FIS)** – a report by FEMA that examines, evaluates and
351 determines flood hazards and, if appropriate, corresponding water surface elevations, or an
352 examination, evaluation and determination of mudflow and/or flood-related erosion hazards.
353

354 **~~J~~N. FLOODPLAIN OR FLOOD-PRONE AREA** - Any land area susceptible to being
355 inundated by water from any source.
356

357 **~~K~~O. FLOODWAY** - The channel of a river or other watercourse and the adjacent land areas that
358 must be reserved in order to discharge the base flood without cumulatively increasing the water
359 surface elevation more than a designated height.
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361 **~~L~~P. FREEBOARD** - A factor of safety usually expressed in feet above a flood level for
362 purposes of floodplain management. “Freeboard” tends to compensate for the many unknown
363 factors that could contribute to flood heights greater than the height calculated for a selected size
364 flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect
365 of urbanization in the watershed.
366

367 **~~M~~Q. FLOOD-PROOFING** - any combination of structural and non-structural additions,
368 changes, or adjustments to structures which reduce or eliminate flood damage to real estate or
369 improved real property, water and sanitary facilities, structures and their contents.
370

371 **R. HIGHEST ADJACENT GRADE** - the highest natural elevation of the ground surface prior
372 to construction next to the proposed walls of a structure.
373

374 **S. HISTORIC STRUCTURE** - Any structure that is

- 375 1. listed individually in the National Register of Historic Places (a listing maintained by
376 the Department of Interior) or preliminarily determined by the Secretary of the
377 Interior as meeting the requirements for individual listing on the National Register;
- 378 2. certified or preliminarily determined by the Secretary of the Interior as contributing to
379 the historical significance of a registered historic district or a district preliminarily
380 determined by the Secretary to qualify as a registered historic district;
- 381 3. individually listed on a state inventory of historic places in states with historic

- 382 preservation programs which have been approved by the Secretary of the Interior; or,
383 4. individually listed on a local inventory of historic places in communities with historic
384 preservation programs that have been certified either
385 a. by an approved state program as determined by the Secretary of the Interior; or,
386 b. directly by the Secretary of the Interior in states without approved programs.
387

388 **T. HYDROLIC AND HYDRAULIC ENGINEERING ANALYSIS** – Analyses performed by
389 a *licensed* professional engineer, in accordance with standard engineering practices that are
390 accepted by the Virginia Department of Conservation and Recreation and FEMA, used to
391 determine the *base flood*, other frequency floods, *flood elevations*, *floodway* information and
392 boundaries, and *flood profiles*.
393

394 **U. LETTERS OF MAP CHANGE (LOMC)** - A Letter of Map Change is an official FEMA
395 determination, by letter, that amends or revises an effective *Flood Insurance Rate Map* or *Flood*
396 *Insurance Study*. Letters of Map Change include:
397

398 1. **LETTER OF MAP AMENDMENT (LOMA)** - An amendment based on technical
399 data showing that a property was incorrectly included in a designated *special flood*
400 *hazard area*. A LOMA amends the current effective *Flood Insurance Rate Map* and
401 establishes that a Land as defined by meets and bounds or *structure* is not located in a
402 *special flood hazard area*.
403

404 2. **LETTER OF MAP REVISION (LOMR)** - A revision based on technical data that
405 may show changes to *flood zones*, *flood elevations*, *floodplain* and *floodway*
406 delineations, and planimetric features. A Letter of Map Revision Based on Fill
407 (LOMR-F), is a determination that a *structure* or parcel of land has been elevated by
408 fill above the *base flood elevation* and is, therefore, no longer exposed to *flooding*
409 associated with the *base flood*. In order to qualify for this determination, the fill must
410 have been permitted and placed in accordance with the *community's* floodplain
411 management regulations.
412

413 3. **LETTER OF MAP REVISION, CONDITIONAL (CLOMR)** - A formal review
414 and comment as to whether a proposed *flood* protection project or other project
415 complies with the minimum NFIP requirements for such projects with respect to
416 delineation of *special flood hazard areas*. A CLOMR does not revise the effective
417 *Flood Insurance Rate Map* or *Flood Insurance Study*.
418

419 **V. LOWEST ADJACENT GRADE** - the lowest natural elevation of the ground surface
420 next to the walls of a structure.
421

422 **NW. LOWEST FLOOR** – The lowest floor of the lowest enclosed area (including basement).
423 An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access
424 or storage in an area other than a basement area is not considered a building's lowest floor
425 provided, that such enclosure is not built so as to render the structure in violation of the
426 applicable non-elevation design requirements of Federal Code 44CFR §60.3.
427

428 **X. MANUFACTURED HOME** - A structure, transportable in one or more sections, which is
429 built on a permanent chassis and is designed for use with or without a permanent foundation
430 when connected to the required utilities. For floodplain management purposes the term
431 "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed
432 on a site for greater than 180 consecutive days.

431
432 **Y. MANUFACTURED HOME PARK OR SUBDIVISION**- a parcel (or contiguous parcels)
433 of land divided into two or more manufactured home lots for rent or sale.

434
435 **Z. MEAN SEA LEVEL** - is an elevation point that represents the average height of the ocean's
436 surface (such as the halfway point between the mean high tide and the mean low tide) which is
437 used as a standard in reckoning land elevation.

438
439 **Øaa. NEW CONSTRUCTION** - For the purposes of determining insurance rates, structures for
440 which the “start of construction” commenced on or after the effective date of the initial Flood
441 Insurance Rate Map July 15, 1988, whichever is later, and includes any subsequent
442 improvements to such structures. For floodplain management purposes, *new construction*
443 means structures for which *start of construction* commenced on or after the effective date of
444 a floodplain management regulation adopted by a community and includes any subsequent
445 improvements to such structures.

446
447 **bb. POST-FIRM STRUCTURES**- A structure for which construction or substantial
448 improvement occurred after July 15, 1988.

449
450 **cc. PRE-FIRM STRUCTURES** - A structure for which construction or substantial
451 improvement occurred on or before July 15, 1988.

452
453 **Pdd. RECREATIONAL VEHICLE** - A vehicle which is:

- 454
455 1. Built on a single chassis;
456 2. 400 square feet or less when measured at the largest horizontal projection;
457 3. Designed to be self-propelled or permanently towable by a light-duty truck; and,
458 4. Designed primarily not for use as a permanent dwelling but as temporary living quarters
459 for recreational camping, travel, or seasonal use.

460
461 **ee. REPETITIVE LOSS STRUCTURE** - A building covered by a contract for flood insurance
462 that has incurred flood-related damages on two occasions, in which the cost of the repair, on the
463 average, equaled or exceeded 25 percent of the market value of the structure at the time of each
464 such flood event; and at the time of the second incidence of flood-related damage, the contract
465 for flood insurance contains increased cost of compliance coverage.

466
467 **ff. SEVERE REPETITIVE LOSS STRUCTURE** - a structure that: (a) Is covered under a
468 contract for flood insurance made available under the NFIP; and (b) Has incurred flood related
469 damage – (i) For which 4 or more separate claims payments have been made under flood
470 insurance coverage with the amount of each such claim exceeding \$5,000, and with the
471 cumulative amount of such claims payments exceeding \$20,000; or (ii) For which at least 2
472 separate claims payments have been made under such coverage, with the cumulative amount of
473 such claims exceeding the market value of the insured structure.

474 **Øgg. SPECIAL FLOOD HAZARD AREA** - The land in the floodplain subject to a one (1%)
475 percent or greater chance of being flooded in any given year, commonly known as the one-
476 hundred (100) year floodplain.

477

478 **Rhh. START OF CONSTRUCTION** - The date the building permit was issued, provided the
479 actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial
480 improvement or other improvement was within 180 days of the permit date. The actual start
481 means either the first placement of permanent construction of a structure on a site, such as the
482 pouring of slab or footings, the installation of piles, the construction of columns, or any work
483 beyond the stage of excavation. Permanent construction does not include land preparation, such
484 as clearing, grading and filling; nor does it include the installation on the property of accessory
485 buildings, such as garages or sheds not occupied as dwelling units or not part of the main
486 structure. For a substantial improvement, the actual start of the construction means the first
487 alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that
488 alteration affects the external dimensions of the building.

489
490 **ii. STRUCTURE** - for floodplain management purposes, a walled and roofed building,
491 including a gas or liquid storage tank, that is principally above ground, as well as a manufactured
492 home.

493
494 **Sjj. SUBSTANTIAL DAMAGE** - Damage of any origin sustained by a structure whereby the
495 cost of restoring the structure to it's before damaged condition would equal or exceed 50 percent
496 of the market value of the structure before the damage occurred.

497
498 **Tkk. SUBSTANTIAL IMPROVEMENT** - Any reconstruction, rehabilitation, addition, or
499 other improvement of a structure, the cost of which equals or exceeds 50 percent of the market
500 value of the structure before the *start of construction* of the improvement. This term includes
501 structures which have incurred *repetitive loss* or substantial *damage* regardless of the actual
502 repair work performed. ~~The term does not, however, include any project for improvement of a~~
503 ~~structure to correct existing violations of state or local health, sanitary, or safety code~~
504 ~~specifications which have been identified by the local code enforcement official and which are~~
505 ~~the minimum necessary to assure safe living conditions.~~ **The term does not, however, include**
506 **either:**

507
508 **(i)** Any project for improvement of a structure to correct existing violations of state or
509 local health, sanitary, or safety code specifications which have been identified by the
510 local code enforcement official and which are the minimum necessary to assure safe
511 living conditions, or

512 **(ii)** Any alteration of a *historic structure*, provided that the alteration will not preclude the
513 structure's continued designation as a *historic structure*, or

514 **(iii)** Historic structures undergoing repair or rehabilitation that would constitute a
515 substantial improvement as defined above, must comply with all ordinance
516 requirements that do not preclude the structure's continued designation as a historic
517 structure. Documentation that a specific ordinance requirement will cause removal of
518 the structure from the National Register of Historic Places or the State Inventory of
519 Historic places must be obtained from the Secretary of the Interior or the State Historic
520 Preservation Officer. Any exemption from ordinance requirements will be the
521 minimum necessary to preserve the historic character and design of the structure.

522
523 **ll. VIOLATION** - the failure of a structure or other development to be fully compliant with the
524 community's floodplain management regulations. A structure or other development without the
525 elevation certificate, other certifications, or other evidence of compliance required in Sections
526 175-74 through 175-81.3 of this Chapter is presumed to be in violation until such time as that

527 documentation is provided.

528

529 **Umm. WATERCOURSE** - A lake, river, creek, stream, wash, channel or other topographic
530 feature on or over which waters flow at least periodically. Watercourse includes specifically
531 designated areas in which substantial flood damage may occur.

532

533 175-76 ESTABLISHMENT OF FLOODPLAIN DISTRICTS

534 A. Basis of Districts - The various floodplain districts shall include special flood hazard areas.
535 The basis for the delineation of these districts shall be the Flood Insurance Study (FIS) and the
536 Flood Insurance Rate Map (FIRM) for the Town of Front Royal prepared by the Federal
537 Emergency Management Agency, Federal Insurance Administration, dated June 3, 2008, as
538 amended.

539

540 B. The Floodway District, also referred to as the **AE zone**, is delineated, for purposes of this
541 ordinance, using the criterion that certain areas within the floodplain must be capable of carrying
542 the waters of the Special Flood Hazard Area without increasing the water surface elevation of
543 that flood more than one (1) foot at any point. The areas included in this District are specifically
544 defined in Table 4 of the above-referenced Flood Insurance Study and shown on the
545 accompanying Flood Boundary and Floodway Map or Flood Insurance Rate Map. **The following**
546 **provisions shall apply within the Floodway District of an AE zone:**

547

548 1. Within any floodway area, no encroachments, including fill, new construction, substantial
549 improvements, or other development shall be permitted unless it has been demonstrated
550 through hydrologic and hydraulic analysis performed in accordance with standard
551 engineering practice that the proposed encroachment will not result in any increase in flood
552 levels within the community during the occurrence of the base flood discharge. Hydrologic
553 and hydraulic analyses shall be undertaken only by professional engineers or others of
554 demonstrated qualifications, who shall certify that the technical methods used correctly
555 reflect currently-accepted technical concepts. Studies, analyses, computations, etc., shall be
556 submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.
557 Development activities which increase the water surface elevation of the base flood may be
558 allowed, provided that the applicant first applies – with the Town’s endorsement – for a
559 Conditional Letter of Map Revision (CLOMR), and receives the approval of the Federal
560 Emergency Management Agency. If the requirements of this section are satisfied, all new
561 construction and substantial improvements shall comply with all applicable flood hazard
562 reduction standards.

563

564 2. The placement of manufactured homes (mobile homes) is prohibited, except when
565 replacing an existing manufactured home in an existing manufactured home park or
566 subdivision. A replacement manufactured home may be placed on a lot in an existing
567 manufactured home park or subdivision provided the anchoring, elevation, and
568 encroachment standards are met.

569

570 C. The Flood-Fringe District shall be that area of the Special Flood Hazard Area not included in
571 the Floodway District. The basis for the outermost boundary of the District shall be the Special
572 Flood Hazard Area elevations contained in the flood profiles of the above-referenced Flood

573 Insurance Study and as shown on the accompanying Flood Boundary and Floodway Map or
574 Flood Insurance Rate Map.

575

576 D. The Approximated Floodplain District shall be those areas identified as an A Zone on the
577 maps accompanying the Flood Insurance Study. In these zones, no detailed flood profiles or
578 elevations are provided, but the Special Flood Hazard Area boundary has been approximated,
579 also referred to as the A Zone, as illustrated on the FIRM accompanying the Flood Insurance
580 Study (FIS) shall be those areas for which no detailed flood profiles or elevations are provided,
581 but the one percent annual chance floodplain boundary has been approximated. For these areas,
582 the following provisions shall apply:

583

584 1. The Approximated Floodplain District shall be that floodplain area for which no detailed
585 flood profiles or elevations are provided, but where a one percent annual chance floodplain
586 boundary has been approximated. Such areas are shown as Zone A on the maps
587 accompanying the FIS. For these areas, the base flood elevations and floodway information
588 from federal, state, and other acceptable sources shall be used, when available. Where the
589 specific one percent annual chance flood elevation cannot be determined for this area using
590 other sources of data, such as the U. S. Army Corps of Engineers Floodplain Information
591 Reports, U. S. Geological Survey Flood-Prone Quadrangles, etc., then the applicant for the
592 proposed use, development and/or activity shall determine this base flood elevation. For
593 development proposed in the approximate floodplain the applicant must use technical
594 methods that correctly reflect currently accepted practices, such as point on boundary, high
595 water marks, or detailed methodologies hydrologic and hydraulic analyses. Studies,
596 analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough
597 review by the Floodplain Administrator.

598

599 2. The Floodplain Administrator reserves the right to require a hydrologic and hydraulic
600 analysis for any development. When such base flood elevation data is utilized, the lowest
601 floor shall be elevated to or above the base flood plus twelve (12) inches. Additional
602 elevation above 12 inches over the base flood is recommended if possible because it may
603 reduce the cost of flood insurance.

604

605 3. During the permitting process, the Floodplain Administrator shall obtain:

606

607 a. The elevation of the lowest floor (in relation to mean sea level), including the
608 basement, of all new and substantially improved structures; and,

609 b. If the structure has been flood-proofed in accordance with the requirements of this
610 article, the elevation (in relation to mean sea level) to which the structure has been
611 flood-proofed.

612

613 4. Base flood elevation data shall be obtained from other sources or developed using detailed
614 methodologies comparable to those contained in a FIS for subdivision proposals and other
615 proposed development proposals (including manufactured home parks and subdivisions)
616 that exceed fifty lots or five acres, whichever is the lesser.

617

619 A. The Floodplain Districts described above shall be overlays to the existing underlying districts
620 as shown on the Official Zoning Ordinance Map, and as such, the provisions for the floodplain
621 districts shall serve as a supplement to the underlying district provisions.

622
623 B. If there is any conflict between the provisions or requirements of the Floodplain Districts and
624 those of any underlying district, the more restrictive provisions and/or those pertaining to the
625 floodplain districts shall apply.

626
627 C. In the event any provision concerning a Floodplain District is declared inapplicable as a result
628 of any legislative or administrative actions or judicial decision, the basic underlying provisions
629 shall remain applicable.

630

631 **175-78 FLOODPLAIN DISTRICT BOUNDARIES**

632 A. The boundaries of the Special Flood Hazard Area and Floodplain Districts are established as
633 shown on the Flood Boundary and Floodway Map and/or Flood Insurance Rate Map which is
634 declared to be a part of this ordinance and which shall be kept on file at the Town of Front Royal
635 Planning offices.

636

637 B. District Boundary Changes: The delineation of any of the Floodplain Districts may be revised
638 by the Town of Front Royal where natural or man-made changes have occurred and/or where
639 more detailed studies have been conducted or undertaken by the U. S. Army Corps of Engineers
640 or other qualified agency, or an individual documents the need for such change. However, prior
641 to any such change, approval must be obtained from the Federal Insurance Administration.

642

643 C. Interpretation of District Boundaries: Interpretations of the boundaries of the Floodplain
644 Districts shall be made by the Zoning Administrator. Should a dispute arise concerning the
645 boundaries of any of the Districts, the Board of Zoning Appeals shall make the necessary
646 determination. The person questioning or contesting the location of the District boundary shall be
647 given a reasonable opportunity to present his case to the Board and to submit his own technical
648 evidence if he so desires.

649

650 **175-79 DISTRICT PROVISIONS (Floodplain)**

651 A. Permit Requirement: All uses, activities, and development occurring within any floodplain
652 district shall be undertaken only upon the issuance of a Zoning Permit. Such development shall
653 be undertaken only in strict compliance with the provisions of the Ordinance and with all other
654 applicable codes and ordinances, as amended, and the Town of Front Royal Subdivision
655 Regulations. Prior to the issuance of any such permit, the Zoning Administrator shall require all
656 applications to include compliance with all applicable state and federal laws.

657

658 B. Site Plans and Permit Applications: All applications for development within any floodplain
659 district and all building permits issued for the floodplain shall incorporate the following
660 information:

661

662 1. For structures to be elevated, the elevation of the lowest floor (including basement).

- 663 2. For structures to be flood-proofed (non-residential only), the elevation to which the
664 structure will be flood-proofed.
665 3. The elevation of the Base Flood at the site.
666 4. Topographic information showing existing and proposed ground elevations.

667

668 **175-80 GENERAL STANDARDS (Floodplain)**

669 In all special flood hazard areas the property owner is ultimately responsible for insuring the
670 following provisions have been considered:

671

672 A. New construction and substantial improvements shall be anchored to prevent floatation,
673 collapse or lateral movement of the structure.

674

675 B. New construction and substantial improvements shall be constructed with materials and
676 utility equipment resistant to flood damage.

677

678 C. New construction or substantial improvements shall be constructed by methods and
679 practices that minimize flood damage.

680

681 D. Electrical, heating, ventilation, plumbing, air conditioning equipment and other service
682 facilities, including duct work, shall be designed and/or located so as to prevent water
683 from entering or accumulating within the components during conditions of flooding.

684

685 E. New and replacement water supply systems shall be designed to minimize or eliminate
686 infiltration of flood waters into the system.

687

688 F. New and replacement sanitary sewage systems shall be designed to minimize or eliminate
689 infiltration of flood waters into the systems and discharges from the systems into flood
690 waters.

691

692 G. On-site waste disposal systems shall be located and constructed to avoid impairment to
693 them or contamination from them during flooding.

694

695 H. Any alteration, repair, reconstruction or improvements to a building that is in compliance
696 with the provisions of this ordinance shall meet the requirements of "new construction"
697 as contained in this ordinance.

698

699 I. Any alteration, repair, reconstruction or improvements to a building that is not in
700 compliance with the provisions of this ordinance, shall be undertaken only if said non-
701 conformity is not furthered, extended, or replaced and does not constitute a substantial
702 improvement.

703

704 J. Prior to any proposed alteration or relocation of any channels or of any watercourse,
705 stream, etc., within this jurisdiction a permit shall be obtained from the U. S. Corps of
706 Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine
707 Resources Commission (a joint permit application is available from any of these
708 organizations). Furthermore, notification of the proposal shall be given by the applicant

709 to all affected adjacent jurisdictions, the Department of Conservation and Recreation
710 (Division of Dam Safety and Floodplain Management) and the Federal Insurance
711 Administration.

712
713 K. The flood carrying capacity within an altered or relocated portion of any watercourse
714 shall be maintained.

715
716 L. Manufactured homes shall be anchored to prevent flotation, collapse, or lateral
717 movement. Methods of anchoring may include, but are not limited to, use of over-the-top
718 or frame ties to ground anchors. This standard shall be in addition to and consistent with
719 applicable state anchoring requirements for resisting wind forces.

720

721 **175-81 SPECIFIC STANDARDS (Floodplain)**

722 In all special flood hazard areas where base flood elevations have been provided in the Flood
723 Insurance Study or generated according to Section 175-81.1(A), the following provisions shall
724 apply:

725

726 A. Residential Construction: New construction or substantial improvement of any residential
727 structure in any flood zone shall have the lowest floor, including basement, elevated no lower
728 than one (1) foot above the base flood elevation.

729

730 B. Non-Residential Construction: New construction or substantial improvement of any
731 commercial, industrial, or non-residential building shall have the lowest floor, including
732 basement, elevated to no lower than one (1) foot above the base flood elevation. Buildings
733 located in all AE and AH zones may be flood-proofed in lieu of being elevated provided that all
734 areas of the building components below the elevation corresponding to the Base Flood Elevation
735 (BFE) plus one foot are water tight with walls substantially impermeable to the passage of water,
736 and use structural components having the capability of resisting hydrostatic and hydrodynamic
737 loads and the effect of buoyancy. A registered professional engineer or architect shall certify
738 that the standards of this subsection are satisfied. Such certification, including the specific
739 elevation (in relation to mean sea level) to which such structures are floodproofed, shall be
740 maintained by the Floodplain Administrator.

741
742 C. The space below the lowest floor ~~Elevated Buildings~~: Enclosed areas, of new construction or
743 substantially improved structures, which are below the regulatory flood protection
744 elevation shall:

745

746 1. Not be designed or used for human habitation, but shall only be used for parking of
747 vehicles, building access, or limited storage of maintenance equipment used in connection
748 with the premises. Access to the enclosed area shall be the minimum necessary to allow
749 for parking of vehicles (garage door) or limited storage of maintenance equipment
750 (standard exterior door), or entry to the living area (stairway or elevator). The interior
751 portion of such enclosed area shall not be partitioned or finished into separate rooms,
752 except to enclose storage areas;

753
754 2. Be constructed entirely of flood resistant materials below the regulatory flood protection
755 elevation;

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3. Include, in Zones A and AE measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet the following minimum design criteria:
 - a. Provide a minimum of two openings on different sides of each enclosed area subject to flooding.
 - b. The total net area of all openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding.
 - c. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.
 - d. The bottom of all required openings shall be no higher than one (1) foot above the adjacent grade.
 - e. Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.
 - f. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.

781
782 D. Standards for Manufactured Homes and Recreational Vehicles: All recreational vehicles
783 placed on sites must be ~~fully licensed and ready for highway use (a recreational vehicle is ready~~
784 ~~for highway use if it is on its wheels or jacking system, is attached to the site only by quick~~
785 ~~disconnect type utilities and security devices and has no permanently attached additions).~~ **either**

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1. In all designated Special Flood Hazard Areas, all manufactured homes placed, or substantially improved, on individual lots or parcels, must meet all the requirements for the zone in which they are located for new construction, including the elevation and anchoring requirements in this ordinance; or,
 2. All recreational vehicles placed on sites must either
 - a. Be on the site for fewer than 180 consecutive days, be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions); or
 - b. Where allowed under the general zoning regulations of this Chapter, may be kept on the site for 180 days or more when all applicable floodplain standards for manufactured homes are complied with.

800 **175-81.1 STANDARDS FOR APPROXIMATED FLOODPLAIN**

- 801 A. When base flood elevation data or floodway data have not been provided, the Zoning
802 Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway

803 data available from a federal, state, or any other source, in order to administer the provisions of
804 Section. When such base flood elevation data is utilized, the Zoning Administrator shall obtain:

- 805
- 806 1. The elevation (in relation to the mean sea level) of the lowest floor (including the
807 basement) of all new and substantially improved structures; and,
 - 808 2. If the structure has been flood-proofed in accordance with the requirements of Section
809 175-81(B) of this ordinance, the elevation in relation to the mean sea level to which the
810 structure has been flood-proofed.

811

812 B. When the data is not available from any source as in Section 175-81.1(A), the lowest floor of
813 the structure shall be elevated to no lower than one (1) foot above the highest adjacent grade.

814

815 C. Base flood elevation data shall be provided for subdivision proposals and other proposed
816 development proposals that exceed fifty lots or five acres, whichever is the lesser.

817

818 **D. Standards for Subdivision Proposals.**

- 819 1. All subdivision proposals shall be consistent with the need to minimize flood damage;
- 820 2. All subdivision proposals shall have public utilities and facilities such as sewer, gas,
821 electrical and water systems located and constructed to minimize flood damage;
- 822 3. All subdivision proposals shall have adequate drainage provided to reduce exposure to
823 flood hazards, and
- 824 4. Base flood elevation data shall be obtained from other sources or developed using
825 detailed methodologies, hydraulic and hydrologic analysis, comparable to those
826 contained in a Flood Insurance Study for all major subdivision proposals and major site
827 development plans, as defined under Chapter 148 of the Town Code.

828

829 **E. Existing Structures in the Floodplain Areas.** Any structure or use of a structure or premises
830 must be brought into conformity with these provisions when it is changed, repaired, or improved,
831 unless one of the following exceptions is established before the change is made:

- 832 1. The floodplain manager has determined that
 - 833 a. change is not a substantial repair or substantial improvement; and,
 - 834 b. no new square footage is being built in the floodplain that is not complaint; and,
 - 835 c. no new square footage is being built in the floodway; and,
 - 836 d. the change complies with this ordinance and the VA USBC; and,
 - 837 e. the change, when added to all the changes made during a rolling 5 year period
838 does not constitute 50% of the structure's value.
- 839 2. The changes are required to comply with a citation for a health or safety violation.
- 840 3. The structure is a historic structure and the change required would impair the historic
841 nature of the structure.
- 842
- 843
- 844

845 **175-81.2 STANDARDS FOR THE FLOODWAY DISTRICT**

846 The following provisions shall apply within the Floodway District:

847

848 Encroachments, including fill, new construction, substantial improvements and other
849 developments are prohibited unless certification (with supporting technical data) by a registered

850 professional engineer is provided demonstrating that encroachments shall not result in any
851 increase in flood levels during occurrence of the base flood discharge. The preceding uses,
852 activities and development occurring within any floodway district shall be undertaken only upon
853 the issuance of a Special Use Permit. Development activities in which an increase in the water
854 surface elevation of the base flood may be allowed, provided that the applicant first applies –
855 with the Town of Front Royal endorsement – for a conditional Flood Insurance Rate Map
856 and floodway revision, and receives the approval of the Federal Emergency Management
857 Agency. However, other activities such as demolition in which there is not an increase in the
858 water surface elevation, will require a zoning permit in lieu of a special use permit.
859

860 175-81.3 FLOODPLAIN VARIANCES: FACTORS TO BE CONSIDERED

861 ~~In passing upon applications for Floodplain Variances, the Board of Zoning Appeals shall satisfy~~
862 ~~all relevant factors and procedures specified in other sections of the Zoning Ordinance and~~
863 ~~consider the following additional factors:~~ A. Variances shall be issued only upon (i) a showing of
864 good and sufficient cause, (ii) after the Board of Zoning Appeals has determined that failure to
865 grant the variance would result in exceptional hardship to the applicant, and (iii) after the Board
866 of Zoning Appeals has determined that the granting of such variance will not result in (a)
867 unacceptable or prohibited increases in flood heights, (b) additional threats to public safety, (c)
868 extraordinary public expense; and will not (d) create nuisances, (e) cause fraud or victimization
869 of the public, or (f) conflict with local laws or ordinances.

870
871 B. While the granting of variances generally is limited to a lot size less than one-half acre,
872 deviations from that limitation may occur. However, as the lot size increases beyond one-
873 half acre, the technical justification required for issuing a variance increases. Variances
874 may be issued by the Board of Zoning Appeals for new construction and substantial
875 improvements to be erected on a lot of one-half acre or less in size contiguous to and
876 surrounded by lots with existing structures constructed below the base flood level, in
877 conformance with the provisions of this section.

878
879 C. Variances may be issued for new construction and substantial improvements and for
880 other development necessary for the conduct of a functionally dependent use provided
881 that the criteria of this section are met, and the structure or other development is protected
882 by methods that minimize flood damages during the base flood and create no additional
883 threats to public safety.

884
885 D. In passing upon applications for variances, the Board of Zoning Appeals shall satisfy all
886 relevant factors and procedures specified in other sections of the zoning ordinance and
887 consider the following additional factors:

888
889
890 A1. The showing of good and sufficient cause.

891
892 B2. The danger to life and property due to increased flood heights or velocities caused by
893 encroachments. No variance shall be granted for any proposed use, development, or activity
894 within any Floodway District that will cause any increase in the Special Flood Hazard Area
895 elevation.
896

897 C3. The danger that materials may be swept on to other lands or downstream to the injury of
898 others.

899
900 D4. The proposed water supply and sanitation systems and the ability of these systems to prevent
901 disease, contamination, and unsanitary conditions.

902
903 E5. The susceptibility of the proposed facility and its contents to flood damage and the effect of
904 such damage on the individual owners.

905
906 F6. The importance of the services provided by the proposed facility to the community.

907
908 G7. The requirements of the facility for a waterfront location.

909
910 H8. The availability of alternative locations not subject to flooding for the proposed use.

911
912 I9. The compatibility of the proposed use with existing development and development
913 anticipated in the foreseeable future.

914
915 J10. The relationship of the proposed use to the comprehensive plan and floodplain management
916 program for the area.

917
918 K11. The safety of access by ordinary and emergency vehicles to the property in time of flood.

919
920 L12. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood
921 waters expected at the site.

922
923 13. The historic nature of a structure. Variances for repair or rehabilitation of historic structures
924 may be granted upon a determination that the proposed repair or rehabilitation will not preclude
925 the structure's continued designation as a historic structure and the variance is the minimum
926 necessary to preserve the historic character and design of the structure.

927
928 M14. Such other factors which are relevant to the purposes of this ordinance.

929
930 E. The Board of Zoning Appeals may refer any application and accompanying
931 documentation pertaining to any request for a variance to any engineer or other qualified
932 person or agency for technical assistance in evaluating the proposed project in relation to
933 flood heights and velocities, and the adequacy of the plans for flood protection and other
934 related matters.

935
936 ~~Variances shall be issued only after the Board of Zoning Appeals has determined that the~~
937 ~~granting of such will not result in (a) unacceptable or prohibited increases in flood heights, (b)~~
938 ~~additional threats to public safety, (c) extraordinary public expense; and will not (d) create~~
939 ~~nuisances, (e) cause fraud or victimization of the public, or (f) conflict with local laws or~~
940 ~~ordinances.~~

941 F. Variances shall be issued only after the Board of Zoning Appeals has determined that the
942 variance will be the minimum required to provide relief from exceptional hardship to the
943 applicant.

944 **G.** The Board of Zoning Appeals shall notify the applicant for a variance, in writing, that the
 945 issuance of a variance to construct a structure below the Special Flood Hazard Area
 946 elevation (a) increases the risks to life and property and (b) will result in increased
 947 premium rates for flood insurance.

948 **H.** A record shall be maintained of the above notification as well as all variance actions,
 949 including justification for the issuance of the variances. Any variances that are issued
 950 shall be noted in the annual or biennial report submitted to the Federal Insurance
 951 Administrator.

952 *[include an editorial note at the end referencing the date of adoption and signatures.]*

953 -----END

954 **Editorial Notes:** All language shown in **yellow highlight** and *italics* is proposed new text. Text shown in *[brackets]* is a note to
 955 the editor. All language shown in ~~striketrough~~ is existing language that is proposed to be removed. Regular text shown is
 956 existing language with no changes proposed. Editorial notes removed in this draft amendment only for the purpose of reducing
 957 the size of the document.

958
 959 Drafted 10/2/15 (JFC) based on review comments by Charles Cline, Certified Floodplain Manager, with VDCR. 11/24/15 Revised
 960 based on additional comments by Charles Cline, Certified Floodplain Manager, with VDCR, and comments by the Planning
 961 Commission at their 11/18/15 work session. Formatted for PC Public Hearing. Revised 2/5/16 per PC review comments at the
 962 public hearing.

3

Town of Front Royal, Virginia Work Session Agenda Form

Date: February 16, 2016

Agenda Item: DRAFT Amendment to the Town Code – I-2 District Uses
Director of Planning & Zoning

Summary:

The proposed Draft Amendment to the Town Code, proposes that *Business Offices, Professional Offices, Technology Businesses,* and *Schools* be allowed by-right in the I-2 District.

These changes would apply to the Happy Creek Industrial Park, the land around the Old Virginia Industrial Park, and the narrow strip of land on Kendrick Lane across from the EDA Offices.

The Planning Commission recommended adoption of these changes during their meeting held on January 20, 2016. No citizens spoke at the public hearing.

Council Discussion: This agenda item is scheduled for a work session review on 02/16/16.

Staff Evaluation: Planning & Zoning Staff will be available at the work session to discuss the draft with Town Council. If Town Council supports the changes, it would be appropriate to schedule the draft for a public hearing followed by a 2nd Reading.

Budget/Funding: N/A

Legal Evaluation: The Town Attorney will be available at the work session for questions.

Town Manager: The Town Manager will be available at the work session for questions.

Council Recommendation:

Additional Work Session Regular Meeting No Action
Consensus Poll on Action: ___(Aye) ___(Nay)

Work Session



DRAFT AMENDMENT – VERSION 1
“I-2 District Uses”

This draft proposes changes to Town Code 175-65.A&B to allow business offices, professional offices, technology businesses, and schools by-right in the I-2 District.

START -----

INDUSTRIAL EMPLOYMENT DISTRICT (I-2)

175-65.A.

[Add the following uses to the list of by-right uses in the I-2 District]

Commercial:

Business Offices

Professional Offices

Technology Business

Organizational:

Schools

175-65.B.

[Remove the following uses from requiring a special use permit]

~~Business Offices.~~

~~Professional Offices.~~

~~Technology Business~~

-----END

Editorial Notes: All language shown in yellow highlight and italics is proposed new text. All language shown in strikethrough is existing language that is proposed to be removed. Regular text shown is existing language with no changes proposed. No changes are proposed to other portions of the section not shown. Editorial notes are shown in brackets ([...]) for reference purposes only.

Drafted 12/15/15 (JFC). Recommended by PC 1/20/16 with no changes.

4



Town of Front Royal, Virginia Work Session Agenda Form

Date: January 29, 2016

Work Session

Agenda Item: Write off for bad debt

Summary: The Department of Finance presented a policy in October 2012 for adoption that will accommodate the request of the Towns' auditors to remove outstanding accounts to reduce the accounts receivable on the Towns' balance sheet. This is an annual process that formally removes this total from the Towns' ledgers.

Council Discussion:

Staff Evaluation: The Finance department has compiled the attached report that provides detailed information to remove bad debt 7 years or older. The total dollar value is \$225,318.29 [to be removed from enterprise and general fund] liability accounts. This value includes 6 miscellaneous billings and 419 utility accounts. All recourses of trying to collect these amounts has been completed.

Budget/Funding: No funding is needed, a journal entry will effect balance sheet only.

Legal Evaluation:

Staff Recommendations: The Finance Department requests Council to approve the removal of this bad debt and continue the process in the future.

Town Manager Recommendation:

Council Recommendation:

Additional Work Session Regular Meeting No Action

Consensus Poll on Action: ___(Aye) ___(Nay)

<Type here to customize title>

Date: 1/12/2016

Balance	Service Address	Status	Final Bill Due Date
42.15	613 N. ROYAL AVE. #4	F	7/8/2001
58.72	709 W. 13TH ST	T	11/15/2002
205.30	909 PARK LN.	T	4/16/2004
175.11	215 WASHINGTON AVE.	T	11/15/2005
743.09	562 MANASSAS ST.	T	5/8/2007
812.29	1201 N. SHENANDOAH AVE.	T	8/24/2007
499.74	106 FAIRVIEW AVE	T	10/31/2007
189.64	131 CHESTER ST. #3	T	10/31/2007
1,136.28	1029 OAKMONT DR.	T	10/31/2007
64.52	613 N. ROYAL AVE. #3	T	10/31/2007
362.99	75 ROYAL LN. #10	T	10/31/2007
307.89	113 E. MAIN ST. #6	T	10/31/2007
77.51	421 E. CRISER RD. #102	T	10/31/2007
265.92	343 CHERRYDALE AVE. #9	T	10/31/2007
1,387.25	1217 N. ROYAL AVE.	T	10/31/2007
530.32	603 W. 11TH ST.	T	10/31/2007
169.27	13 SHENANDOAH COMMONS WAY #202	T	10/31/2007
298.66	30 COLONIAL DR.	T	10/31/2007
114.07	1474 JOHN MARSHALL HWY.	T	10/31/2007
86.71	1472 JOHN MARSHALL HWY.	T	11/1/2007
284.49	67 ROYAL LN. #3	T	10/31/2007
537.88	132 W. 12TH ST.	T	10/31/2007
481.05	24-A W. STONEWALL DR.	T	11/9/2007
265.36	1717 COMMONWEALTH DR.	T	10/31/2007
107.95	1347 ROBIN HOOD LN. #4	T	11/9/2007
208.49	1208 MASSANUTTEN AVE	T	10/31/2007
171.49	334 RITENOUR ST.	T	10/31/2007
199.43	615-B VISCOSE AVE.	T	10/31/2007
376.30	717 WARREN AVE.	T	10/31/2007
328.71	713 WARREN AVE.	T	10/31/2007
112.39	1122 N. SHENANDOAH AVE. #2	T	10/31/2007
154.56	523 BEL AIR AVE.	T	11/9/2007
484.69	1128 SUMMIT ST.	T	11/9/2007
453.67	416 VISCOSE AVE.	T	11/9/2007
81.41	19 S. ROYAL AVE. #6	T	11/16/2007
231.62	130 E. MAIN ST. #3	T	11/9/2007
58.19	19 SHENANDOAH COMMONS WAY #301	T	11/9/2007
68.61	403 E. CRISER RD. #204	T	11/9/2007
423.69	15 N. MARSHALL ST.	T	11/28/2007
846.63	605 W DUCK ST	T	11/9/2007
207.17	1095 N. ROYAL AVE. #5	T	11/9/2007
241.36	413 E. CRISER RD. #102	T	11/9/2007
150.64	405 E. CRISER RD. #303	T	11/9/2007
445.19	606 RANDOLPH AVE	T	11/28/2007
358.73	253 ORCHARD ST.	T	11/28/2007
160.95	219 E. 7TH ST.	T	11/28/2007
317.01	502 REMOUNT RD.	T	11/28/2007
219.12	15 SHENANDOAH COMMONS WAY #204	T	11/28/2007
517.16	35 ROYAL LN. #2	T	11/28/2007
276.47	1515 MALLARD PL	T	11/28/2007
129.10	720 VIRGINIA AVE.	T	11/28/2007
3,806.70	227 S. ROYAL AVE.	T	11/28/2007

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Date: 1/12/2016

Balance	Service Address	Status	Final Bill Due Date
1,357.50	821 E. STONEWALL DR.	T	11/28/2007
3,744.38	20 E. 4TH ST.	T	11/28/2007
1,001.32	963 STUART DR.	T	11/28/2007
561.97	25 SHEN COMMONS WAY #203	T	11/28/2007
204.05	335 DUNCAN AVE.	T	11/28/2007
136.32	302 RITENOUR ST.	T	11/28/2007
74.55	436 ACTON ST.	T	11/28/2007
216.66	1210 MASSANUTTEN AVE.	T	11/28/2007
1,214.50	407 W. 12TH ST.	T	11/28/2007
442.65	330 W 10TH ST	T	11/28/2007
64.95	7 SOUTH ST	T	12/10/2007
370.72	210 VIRGINIA AVE. #7	T	12/10/2007
606.22	17-A S ROYAL AVE	T	12/10/2007
147.00	413 CHERRYDALE AVE.	T	12/10/2007
828.51	319 KERFOOT AVE.	T	12/10/2007
269.54	1010 N. SHENANDOAH AVE. #2	T	12/10/2007
320.66	11 W. 5TH ST.	T	12/10/2007
71.14	708 W. 11TH ST. #6	T	12/28/2007
88.83	1202-D N. ROYAL AVE.	T	12/28/2007
154.18	415 E. CRISER RD. #302	T	12/28/2007
247.28	1207 N ROYAL AVE #1	T	12/28/2007
336.04	124 E. 4TH ST.	T	12/28/2007
191.56	343 CHERRYDALE AVE. #1	T	12/31/2007
426.18	615 W. 12TH ST.	T	12/31/2007
546.24	1620 N. ROYAL AVE.	T	12/31/2007
188.82	1336 BARON PL.	T	12/31/2007
945.75	1463 LAKEVIEW DR.	T	12/28/2007
432.40	1095 N. ROYAL AVE. #21	T	12/31/2007
1,477.08	235 RANDOLPH AVE.	T	12/31/2007
618.82	237 SHORT ST.	T	12/31/2007
88.74	640 BEL AIR AVE.	T	12/31/2007
31.44	716 WARREN AVE. #3	F	12/31/2007
147.47	334 CHERRYDALE AVE	T	12/31/2007
1,258.41	240 SHORT ST	T	12/31/2007
148.58	1095 N. ROYAL AVE. #15	T	12/31/2007
155.97	5 SHENANDOAH COMMONS WAY #304	T	12/31/2007
269.04	382 W. 11TH ST.	T	12/31/2007
281.47	460 HILL ST.	T	12/31/2007
234.08	1424 JOHN MARSHALL HWY.	T	12/31/2007
449.74	341 CLOUD ST. #4	T	12/31/2007
258.80	403 E. CRISER RD. #304	T	1/31/2008
150.58	514 GRAND AVE.	T	1/31/2008
50.79	738 W. 11TH ST.	T	1/31/2008
308.87	609 STONEWALL DR.	T	1/31/2008
379.52	327 SKYLINE PL.	T	1/31/2008
191.95	20 W. STONEWALL DR. #3	T	1/31/2008
179.94	1090 N. ROYAL AVE. #3	T	1/31/2008
512.53	708 W. 11TH ST. #4	T	1/31/2008
98.32	120-A S ROYAL AVE	T	1/31/2008
219.18	120-C S. ROYAL AVE.	T	1/31/2008
609.71	737 STAYMAN ST.	T	1/31/2008
102.27	617 W. 11TH ST.	T	1/31/2008

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Date: 1/12/2016

Balance	Service Address	Status	Final Bill Due Date
388.14	117 E. 2ND ST.	T	1/31/2008
543.61	140 W. DUCK ST.	T	1/31/2008
882.96	425 CHERRYDALE AVE.	T	1/31/2008
566.81	517 W. 14TH ST.	T	2/29/2008
92.17	58 E. CRISER RD.	T	2/29/2008
1,080.94	127 W. 8TH ST. #2	T	2/29/2008
216.75	112 E. 8TH ST	T	2/29/2008
1,294.23	707 STONEWALL DR.	T	2/29/2008
241.90	1095 N ROYAL AVE #3	T	2/29/2008
475.12	515-A CARTER ST.	T	2/29/2008
179.36	110 MANASSAS AVE.	T	2/29/2008
122.03	343 KENDRICK LN. #2	T	2/29/2008
260.16	915-B N. ROYAL AVE.	T	2/29/2008
479.72	331 KERFOOT AVE.	T	2/29/2008
580.91	519 E. MAIN ST.	T	2/29/2008
220.10	525 E. MAIN ST. #2	T	2/29/2008
56.01	209 E 6TH ST	T	2/29/2008
522.45	209 E 6TH ST	T	2/29/2008
1,080.77	1118 EWELL ST. LOT #50	T	2/29/2008
324.55	421 S. SHENANDOAH AVE.	T	2/29/2008
204.94	1099 N. ROYAL AVE. #2	T	2/29/2008
188.12	203 E. 6TH ST.	T	2/29/2008
41.39	217 E. MAIN ST.	F	2/29/2008
1,209.38	125 JAMESTOWN RD.	T	2/29/2008
560.60	505 POW MORR DR	T	2/29/2008
182.55	312 FRAZIER PL.	T	3/20/2008
171.89	1208 N. SHENANDOAH AVE. #4	T	2/29/2008
588.21	1419 MARKHAM ST.	T	3/20/2008
1,501.74	413 SALEM AVE.	T	2/29/2008
193.05	130 W. STRASBURG RD.	T	3/20/2008
1,310.82	609 BROWN AVE	T	3/20/2008
85.75	1095 N. ROYAL AVE. #19	T	3/20/2008
405.71	19 S. ROYAL AVE. #3	T	3/20/2008
97.84	15 SHENANDOAH COMMONS WAY #304	T	3/20/2008
62.27	415 E. CRISER RD. #201	T	4/4/2008
410.21	406 N. ROYAL AVE. #4	T	3/20/2008
499.00	909 W. 13TH ST.	T	3/20/2008
86.47	306 S. ROYAL AVE. #1	T	3/20/2008
153.46	403 E. CRISER RD. #204	T	4/4/2008
313.93	910 W 13TH ST	T	4/4/2008
961.17	116 E. 15TH ST.	T	4/4/2008
2,721.69	712 N ROYAL AVE	T	4/4/2008
327.68	514 BRAXTON RD. LOT.#16	T	4/4/2008
118.98	112 W. CRISER RD	T	4/4/2008
272.23	10 BLUE RIDGE AVE. #1	T	4/4/2008
503.48	30 NORTH ST.	T	4/30/2008
478.78	1240 FOX DR.	T	4/30/2008
211.26	402 CHERRYDALE AVE.	T	4/30/2008
969.26	116-B S ROYAL AVE	T	4/30/2008
1,302.43	420 MANASSAS AVE.	T	4/30/2008
1,214.53	44 CHURCH ST.	T	4/30/2008
1,373.87	313 PINE ST	T	4/30/2008

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Date: 1/12/2016

Balance	Service Address	Status	Final Bill Due Date
786.13	126 E. MAIN ST. #5	T	4/30/2008
1,187.85	633 W 11TH ST	T	4/30/2008
512.51	122 VIRGINIA AVE. #5	T	4/30/2008
200.00	17 CHURCH ST. #1	T	4/30/2008
563.55	29 CHESTER ST. #5	T	4/30/2008
533.88	359 W. 9TH ST.	T	4/30/2008
511.06	307 SKYLINE PL	T	4/30/2008
132.08	1099 N. ROYAL AVE. #2	T	4/30/2008
180.92	116-C S. ROYAL AVE.	T	4/30/2008
196.14	705 NEW AVE	T	4/30/2008
214.08	21 W. 6TH ST. #E	T	4/30/2008
902.76	1 E. 17TH ST.	T	4/30/2008
179.66	427 DUNCAN AVE.	T	5/30/2008
104.51	400 E JACKSON ST	T	5/9/2008
614.01	27 CRESCENT ST.	T	5/9/2008
693.80	237 ORCHARD ST.	T	5/9/2008
109.85	54 MICHELLE RD.	T	5/9/2008
688.73	468 CHERRYDALE AVE.	T	5/9/2008
1,509.82	1108 FOX DR.	T	5/9/2008
773.98	503 WARREN AVE.	T	5/9/2008
762.24	562 MANASSAS ST.	T	5/9/2008
253.00	520 VIRGINIA AVE. #11	T	5/16/2008
739.59	345 CHERRYDALE AVE.	T	5/16/2008
272.98	352 BLUE RIDGE AVE. #1 (DOWNSTAIRS)	F	5/16/2008
397.60	707 NEW AVE	T	5/16/2008
1,541.53	706 W. 14TH ST.	T	5/16/2008
106.96	13 SHENANDOAH COMMONS WAY #302	T	5/16/2008
160.52	35 ROYAL LN. #10	T	5/16/2008
1,328.87	1731 N. ROYAL AVE.	T	5/16/2008
221.80	312 SOUTH ST.	T	5/16/2008
1,359.85	315 PINE ST	T	5/16/2008
276.14	523 LILLARD DR	T	5/16/2008
402.50	106 STEELE AVE.	T	5/16/2008
423.05	122 ELSIA DR.	T	5/30/2008
761.09	730 WARREN AVE.	T	5/30/2008
183.65	518-A LOOP RD.	T	5/30/2008
2,755.01	711 RIVER DR.	T	5/30/2008
1,703.05	1352 JOHN MARSHALL HWY (GARAGE)	F	5/30/2008
347.98	419 E. CRISER RD. #302	T	5/30/2008
484.80	112 W. 12TH ST.	T	5/30/2008
33.04	10-A CLOUD ST.	F	5/30/2008
171.88	235 CHESTER ST. #1	T	5/30/2008
418.31	111-B S.SHENANDOAH AVE.	T	5/30/2008
609.00	1216 MASSANUTTEN AVE.	T	5/30/2008
895.21	1410 JOHN MARSHALL HWY. UPSTAIRS	F	5/30/2008
287.01	120 W. 16TH ST.	T	6/13/2008
1,945.25	711 WARREN AVE.	T	5/30/2008
568.92	126 E. MAIN ST. #3	T	5/30/2008
146.50	201 E. MAIN ST. SUITE #2E	T	5/30/2008
755.96	130 W. 13TH ST.	T	5/30/2008
966.32	930 VIRGINIA AVE	T	6/13/2008
511.16	411 COMMERCE AVE.	T	6/13/2008

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Date: 1/12/2016

Balance	Service Address	Status	Final Bill Due Date
363.16	716 WARREN AVE. #3	T	6/13/2008
655.29	718 WARREN AVE. #2	T	6/13/2008
391.27	1010 N SHENANDOAH AVE #1	T	6/13/2008
85.01	214 BLUE RIDGE AVE. #7	T	6/13/2008
422.41	648-A W. 11TH ST.	T	6/13/2008
50.03	404 CHERRYDALE AVE.	T	6/13/2008
198.69	352 CLOUD ST.	T	6/13/2008
600.75	404-E KENDRICK LN.	T	6/13/2008
732.66	404-B KENDRICK LN	T	6/13/2008
306.48	404 KENDRICK LN.	T	6/13/2008
186.40	11 SHENANDOAH COMMONS WAY #303	T	6/13/2008
211.54	892 CANNON ST	T	6/13/2008
1,492.02	977 GOODVIEW DR	T	6/13/2008
477.00	515 VISCOSE AVE.	T	6/13/2008
203.97	718 WARREN AVE. #6	T	6/13/2008
60.17	19 SHENANDOAH COMMONS WAY #303	T	6/13/2008
47.20	341 CLOUD ST. #2	F	6/30/2008
7,873.40	307 FRONT ST.	F	6/13/2008
1,059.45	505 WARREN AVE.	T	6/30/2008
472.65	413 COMMERCE AVE	T	6/30/2008
536.77	518 SHORT ST.	T	6/30/2008
150.46	125 BIGGS DR. #1	F	6/30/2008
33.00	183 ELSIA DR	F	7/31/2008
3,099.37	116 POLK AVE.	F	6/30/2008
177.60	421 E. PROSPECT ST.	T	6/30/2008
581.03	441 SOUTH ST	F	6/30/2008
1,178.71	124 W. CRISER RD	T	6/30/2008
410.86	17 E PROSPECT ST.	T	6/30/2008
1,870.41	315 SKYLINE PL.	T	6/30/2008
1,314.32	640 MILLS LN.	T	6/30/2008
3,273.80	515 RANDOLPH AVE.	T	6/30/2008
221.39	512 GRAND AVE.	T	6/30/2008
1,813.81	13 E. PROSPECT ST.	T	6/30/2008
106.47	650-F W. 11TH ST.	T	6/30/2008
87.67	221 FLETCHER ST. #2	T	6/30/2008
427.01	113 E. MAIN ST. #1	T	6/30/2008
142.54	204 VIRGINIA AVE. #10	T	6/30/2008
122.54	407 E. CRISER RD. #301	T	7/8/2008
513.77	323-B W. 11TH ST.	T	7/8/2008
2,756.56	634 BEL AIR AVE.	T	7/8/2008
475.12	312 RITENOUR ST.	T	7/8/2008
408.61	530-A E MAIN ST	T	7/8/2008
157.41	103 STEELE AVE.	T	7/8/2008
1,470.47	107 POLK AVE.	F	7/8/2008
48.58	631 N. ROYAL AVE. #6	F	7/10/2008
843.75	862 W. 11TH ST.	T	7/10/2008
1,056.29	239 LEE ST.	T	7/10/2008
193.51	210 VIRGINIA AVE. #4	T	7/10/2008
443.92	241 ORCHARD ST.	T	7/10/2008
178.12	713 W. 14TH ST.	T	7/10/2008
277.06	316 CYPRESS ST.	T	7/10/2008
32.32	713 W. 14TH ST.	F	7/10/2008

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Date: 1/12/2016

Balance	Service Address	Status	Final Bill Due Date
803.83	718 W. 15TH ST	T	7/10/2008
81.51	711 VIRGINIA AVE.	T	7/31/2008
137.41	600 W. 11TH ST.	T	7/31/2008
310.33	209-A E 6TH ST	T	7/31/2008
559.75	140 RUGBY RD	T	7/31/2008
843.88	1020 N. SHENANDOAH AVE. #1	T	7/31/2008
144.37	915-B N. ROYAL AVE.	T	7/31/2008
561.32	1468 JOHN MARSHALL HWY.	F	7/31/2008
93.55	15 MT VERNON CT.	F	7/31/2008
202.06	112 E. MAIN ST. #10	T	8/8/2008
52.62	21-B W. 6TH ST.	T	7/31/2008
707.24	27 CRESCENT ST.	T	8/8/2008
88.87	61 ROYAL LN. #5	T	8/8/2008
344.17	738 STAYMAN ST.	F	8/28/2008
261.24	322 HENRICO RD.	T	8/20/2008
543.47	14 E. STONEWALL DR. #B	T	8/8/2008
202.66	1124 HAPPY RIDGE DR.	T	8/8/2008
1,112.75	460-E S COMMERCE AVE	F	8/8/2008
2,733.88	460-E S COMMERCE AVE	F	8/8/2008
760.52	426 RANDOLPH AVE	T	8/8/2008
2,046.76	844 SHENANDOAH SHORES RD.	T	8/8/2008
1,142.06	705 NEW AVE	F	8/8/2008
262.67	313 PINE ST	F	8/8/2008
141.30	510 N. ROYAL AVE.	F	8/20/2008
741.03	510-B N ROYAL AVE	F	8/20/2008
1,427.10	510-A N. ROYAL AVE.	F	8/8/2008
946.82	703 W 13TH ST	T	8/8/2008
2,677.94	403 KERFOOT AVE	T	8/20/2008
183.93	121 LOCUST DALE RD	F	8/20/2008
128.64	1208 N. SHENANDOAH AVE. #8	T	8/15/2008
1,069.33	32 W. 17TH ST.	T	8/20/2008
466.49	506 MANASSAS AVE.	T	8/15/2008
88.37	112 E. 4TH ST.	T	8/15/2008
1,710.20	17 E. DUCK ST.	T	8/15/2008
345.73	11 CLOUD ST #5	T	8/15/2008
189.57	21-B W. 6TH ST.	T	8/28/2008
456.18	24 LEE ST	F	8/28/2008
367.98	11 SHENANDOAH COMMONS WAY #203	T	8/28/2008
546.06	1020 N. SHENANDOAH AVE. #2	T	8/28/2008
47.02	631 N. ROYAL AVE. #8	F	8/28/2008
138.30	1321 WARREN AVE.	T	8/28/2008
624.61	246 E. 6TH ST. #7	T	8/28/2008
436.92	537 LEWIS ST. LOT 48	T	8/28/2008
761.88	17 W. 5TH ST.	T	8/28/2008
1,106.71	915 N. ROYAL AVE.	T	8/28/2008
131.24	915-A N ROYAL AVE	T	8/28/2008
563.49	1212 MASSANUTTEN AVE.	T	9/12/2008
62.37	346 W. 9TH ST.	T	9/19/2008
277.96	114 E. 4TH ST.	T	9/19/2008
138.60	614-A W. 11TH ST.	T	9/19/2008
173.00	516 SHORT ST.	T	9/12/2008
60.46	517-B N. ROYAL AVE	T	9/12/2008

<Type here to customize title>

Date: 1/12/2016

Balance	Service Address	Status	Final Bill Due Date
505.73	233 ORCHARD ST.	T	9/12/2008
229.43	421 S. SHENANDOAH AVE.	T	9/12/2008
980.76	1463 LAKEVIEW DR.	F	9/12/2008
401.85	5 SHENANDOAH COMMONS WAY #101	T	9/12/2008
1,098.78	423 HILL ST.	T	9/12/2008
330.43	168 W STRASBURG RD	T	9/12/2008
1,110.39	639 BEL AIR AVE.	T	9/12/2008
187.66	101 PINECREST ST.	T	9/30/2008
590.01	320 VIRGINIA AVE.	T	9/12/2008
244.56	229 CLOUD ST #2	F	9/12/2008
892.50	503 W. 13TH ST.	T	9/12/2008
188.90	343 CHERRYDALE AVE. #9	T	9/12/2008
358.74	408 KERFOOT AVE.	T	9/26/2008
111.47	1488 MARKHAM ST.	F	9/19/2008
469.97	1101 N ROYAL AVE	T	9/19/2008
244.82	307 W. DUCK ST.	T	9/19/2008
176.55	422 CHERRYDALE AVE.	T	9/19/2008
299.70	1433 HAPPY CREEK RD	T	9/19/2008
89.06	1449 CANTERBURY RD.	F	9/30/2008
383.08	462 CHERRYDALE AVE.	T	9/19/2008
74.42	113 E. MAIN ST. #2	T	9/30/2008
168.86	407 W. 15TH ST.	T	9/30/2008
159.48	646 CARTER ST.	T	9/30/2008
353.00	1308-A MADISON AVE.	T	9/30/2008
437.37	702 BRAXTON RD.	F	9/30/2008
674.93	116 E. 15TH ST.	T	9/30/2008
388.94	1 E. 17TH ST.	T	9/30/2008
163.37	22 MASSIE ST	T	9/30/2008
993.46	733 W. 14TH ST.	T	9/30/2008
198.06	518 W. MAIN ST. #3	T	9/30/2008
120.60	204 E. CRISER RD.	T	9/30/2008
1,059.36	239-E SOUTH ST.	F	9/30/2008
435.41	402 KERFOOT AVE.	T	9/30/2008
135.42	302 SALEM AVE	T	9/30/2008
238.34	110 JAMESTOWN RD.	T	10/6/2008
1,033.77	305 SKYLINE PL.	T	10/6/2008
308.78	206 E. CRISER RD.	T	10/6/2008
84.04	304 W. MAIN ST. #1	T	10/6/2008
258.78	1419 MARKHAM ST.	F	10/6/2008
548.35	343 CHERRYDALE AVE. #10	T	10/6/2008
2,152.00	528 LILLARD DR.	T	10/6/2008
376.61	112 E. MAIN ST. #1	T	10/17/2008
494.15	17 CHURCH ST. #2	T	10/17/2008
172.13	17 CHURCH ST. #1	T	10/17/2008
133.22	21-D W. 6TH ST.	T	10/17/2008
263.12	852 SHENANDOAH SHORES RD.	T	10/17/2008
2,161.08	203 JAMESTOWN RD.	T	10/17/2008
71.54	217-A LAUREL ST.	T	10/17/2008
519.58	212 POLK AVE.	F	10/17/2008
160.14	120 W. 6TH ST. #6	T	10/17/2008
392.53	422 VISCOSE AVE. #2	T	10/17/2008
776.84	630 BEL AIR AVE.	T	10/31/2008

<Type here to customize title>

Date: 1/12/2016

Balance	Service Address	Status	Final Bill Due Date
294.50	207 CLOUD ST. #1	T	10/31/2008
2,413.11	10 CRESTVIEW DR.	T	10/31/2008
814.35	712 STOCKTON RD.	F	10/31/2008
160.47	602 E. 6TH ST.	T	10/31/2008
248.04	115-B S. SHENANDOAH AVE.	T	10/31/2008
89.22	9 SHENANDOAH COMMONS WAY #201	T	10/31/2008
80.42	14 E. STONEWALL DR. #B	F	10/31/2008
262.14	306 S. ROYAL AVE. #2	T	10/31/2008
525.61	603 W. 11TH ST.	T	10/31/2008
126.92	525 E. MAIN ST. #1	T	10/31/2008
266.43	627 WARREN AVE.	T	10/31/2008
380.49	34 NORTH ST.	T	10/31/2008
218.65	718 WARREN AVE. #5	T	10/31/2008
98.56	341 CLOUD ST. #4	F	10/31/2008
101.32	421 E. CRISER RD. #104	T	10/31/2008
721.18	527 BEL AIR AVE.	F	11/21/2008
315.28	9 CHARLES ST	F	11/21/2008
1,324.85	733 STOCKTON RD.	F	11/21/2008
422.62	208 FLETCHER ST.	F	11/21/2008
64.63	116 W. 4TH ST.	F	11/21/2008
1,742.15	1424 ANDERSON ST.	F	11/21/2008
373.13	125 BIGGS DR. #1	F	11/21/2008
1,029.09	351 W 10TH ST	F	11/21/2008
54.96	1436 MARKHAM ST.	F	11/21/2008
519.55	334 RITENOUR ST.	F	11/21/2008
844.73	704 VIRGINIA AVE.	F	11/21/2008
533.85	412 W. 15TH ST	F	11/21/2008
710.65	60 E. CRISER RD.	F	11/21/2008
37.75	1442 JOHN MARSHALL HWY.	F	11/21/2008
94.85	400 E JACKSON ST	F	12/12/2008
117.07	19 S. ROYAL AVE. #9	F	11/21/2008
270.83	650-E W. 11TH ST.	F	11/21/2008
40.83	560 SYCAMORE LN.	F	12/12/2008
99.04	411 E. CRISER RD. #202	F	11/21/2008
445.02	600 W. 11TH ST.	F	11/21/2008
115.90	505 FREDERICK AVE	F	11/21/2008
522.90	327 SKYLINE PLACE	F	12/12/2008
200.56	216 CLOUD ST	F	12/12/2008
223.97	508 GRAND AVE	F	12/21/2008
1,054.42	339 SKYLINE PL	F	12/12/2008
538.63	203 SHORT ST	F	12/12/2008
287.62	409 E. CRISER RD. #102	F	12/12/2008
287.45	404 SALEM AVE	F	12/12/2008
660.42	618 W 11TH ST	F	12/12/2008
687.37	1121 ELM ST	F	12/12/2008
284.05	1309 MONROE AVE	F	12/12/2008
276.28	1474 JOHN MARSHALL HWY.	F	12/12/2008
314.93	1409 PICKETT CT	F	12/12/2008
118.50	202 S ROYAL AVE #2	F	12/12/2008
64.11	23 SHENANDOAH COMMONS WAY #303	F	12/12/2008
474.44	724 W 13TH ST	F	12/19/2008
701.80	1146 HAPPY RIDGE DR.	F	12/19/2008

<Type here to customize title>

Date: 1/12/2016

Balance	Service Address	Status	Final Bill Due Date
331.59	915-B N. ROYAL AVE.	F	12/19/2008
61.17	112 S ROYAL AVE	F	12/19/2008
968.39	709 W 13TH ST	F	12/19/2008
\$ 223,080.16			

419 Accounts

Writeoff Misc Accts Receivable

Date: 1/26/2016

Customer Type	Total Amount Due	Last Billed Date
MISC	13.30	3/18/2008
ACC1	1852.65	8/15/2008
ACC1	66.20	10/23/2008
BPOL	231.11	7/29/2008
BPOL	67.39	10/27/2008
BPOL	7.48	2/29/2008
	2,238.13	
<i>6 accts</i>		

5



Town of Front Royal, Virginia Work Session Agenda Form

Date: February 16, 2016

Agenda Item: DISCUSSION OF REPORT OF URBAN FORESTRY ADVISORY COMMITTEE'S EVALUATION AND RESPONSE TO CODE VIOLATION OF DAMAGING TREE TOPPING ON PUBLIC PROPERTY AT 34 12TH STREET

Summary: On December 8, 2015, the Town of Front Royal's Horticulturalist, Anne Rose, called David B. Means, professional Consulting Arborist with the Town's Urban Forestry Advisory Committee, to evaluate severe tree topping of Norway Maple trees located on the Town's public right of way at 34 12th Street. The Town had received a Work Order from the resident who had topped the trees and requested the Town remove the pile of cut branches staged on the public right of way along Virginia Avenue at the West edge of his property. Mr. Mean's evaluation of the topped trees indicated that, in his professional opinion, the trees were so improperly cut, and so severely damaged, that the trees represent a future hazard and must be removed. It appears that the topping and damage to the trees, which are Town-owned public property, are a violation of Town Code Section 156-4. A copy of the full report of the "Urban Forestry Advisory Committee's Evaluation and Response to Code Violation to Code Violation Chapter 156-Urban Forestry, Section 156-4, Planting, Maintenance, and Protection of Trees on Public Property", prepared by Mr. Means for the Town, dated 1/13/2016, is attached, including a copy of Town Code Section 156-5. Also attached is a copy of an aerial mapping of 34 West 12th, the site in question. A letter, attached, was sent by the Town Attorney to the resident at 34 West 12 Street, copying the resident of all this information and informing the resident that this matter will be on the Town Council's Work Session Agenda, for discussion by Town Council.

Council Discussion: Council is requested to consider the above report and consider what action, if any, it wishes to pursue, including following any of the recommendations contained in the report of the Urban Forestry Advisory Committee and/or any legal remedies, if appropriate.

Staff Evaluation: Staff requests that Council consider the recommendations of the Urban Forestry Advisory Committee and whether or not any legal remedies ought to be considered.

Budget/Funding: Council is requested to direct staff to determine the cost of removal of the pruned branches, removal of the four damaged trees, grinding the stumps and removal of the grindings, restore the stump holes with topsoil and grass cover, and when the time is appropriate, plant new trees. Council is also requested to bring this matter back before Council when staff has done so.

Legal Evaluation: The Town Attorney concurs with all of the above

Staff Recommendations: Staff concurs with all of the above.

Town Manager Recommendation: The Town Manager concurs with all of the above.

Council Recommendation:

Additional Work Session Regular Meeting No Action
Consensus Poll on Action: ___ (Aye) ___ (Nay)

Work Session

TOWN OF FRONT ROYAL
OFFICE OF THE TOWN ATTORNEY

102 EAST MAIN STREET
P.O. BOX 1560
FRONT ROYAL, VIRGINIA 22630
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February 10, 2016

Harry D. Deavers, Jr.
34 W. 12th Street
Front Royal, VA 22630

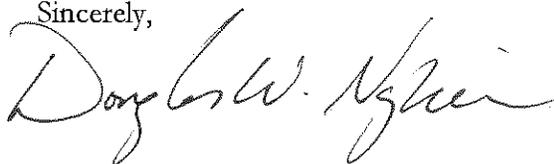
Re: Town Council Consideration of Tree Topping on Public Right of Way
Town Council Work Session on February 16, 2016, beginning at 7 P.M.
Town Council Chambers, Second Floor, Town Administration Building
102 East Main Street, Front Royal, VA 22620

Dear Mr. Deavers,

Town Council will consider the matter of your causing the topping of four Town-owned Norway Maple trees on the Town's public right of way at 34 West 12 Street, near its intersection with Virginia Avenue. The trees were topped improperly and so severely, and so permanently damaged, that in the opinion of the Town's professional consultant, David B. Means, with the Town-appointed Urban Forestry Advisory Committee, that they should be removed at public expense, and consideration given to restoration of the area including replanting of new trees, again at public expense. A copy of the full report of the "Urban Forestry Advisory Committee's Evaluation and Response to Code Violation to Code Violation Chapter 156-Urban Forestry, Section 156-4, Planting, Maintenance, and Protection of Trees on Public Property", prepared by Mr. Means for the Town, dated 1/13/2016, is attached, including a copy of Town Code Section 156-5. Also attached is a copy of an aerial mapping of 34 West 12th, the site in question. Also included in the report is a copy of Town Code Section 156-4, found on page 18 of the report. I direct your attention in particular to paragraphs B.4. and C. of that Town Code Section.

Town Council will discuss this matter at its Work session on February 16, 2016, at the above-stated location and time. You are invited to appear to hear Town Council's discussion. Typically, Town Council's Work Sessions are a time for discussion between Members of Town Council and Town staff and consultants. It is entirely up to Town Council whether or not Town Council will invite participation from the public, including you, on any matter. However, because of the possibility of future action by Town Council on this matter, you are invited to attend.

Sincerely,



Town of Front Royal Urban Forestry Advisory Committee

Town of Front Royal Evaluation and Response to Code Violation Chapter 156 – Urban Forestry Section 156 – 4 PLANTING, MAINTENANCE, AND PROTECTION OF TREES ON PUBLIC PROPERTY B. Maintenance. C. Protection.

Prepared For:

**The Town of Front Royal
Director of Planning & Zoning
&
Town Horticulturist**

**102 E. Main St
Town Administration Building
P.O. Box 1560
Front Royal, VA 22630**

Site Address:

**34 12th Street
Front Royal, VA 22630**

Prepared By:

**David B. Means
Town of Front Royal
Urban Forestry Advisory Committee
Member:**

**American Society of Consulting Arborists
International Society of Arboriculture – ISA Certified Arborist- IL-0110A**

**Copper Forest, L.L.C.
210 W. 1st Street
Front Royal, VA 22630**

January 13, 2016

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Summary

Concern raised about the condition and health of four (Norway Maple/*Acer platanoides*) trees, located on the public Right-of-Way, at 34 12th Street, Front Royal, Virginia. The Town Horticulturist contacted me to evaluate the condition of the trees and provide a report. I conducted a thorough visual crown, trunk and ground evaluation of the trees. The obvious condition was severe damage to the crown of all four trees, as the result of recent topping, which violates Front Royal Town Code Chapter 156 – Urban Forestry.

The Section and Sub-Sections of the Town Code, that apply to this violation are as follows:

156-4 PLANTING, MAINTENANCE AND PROTECTION OF TREES ON PUBLIC PROPERTY

B. Maintenance.

C. Protection.

My report has documented my observations and opinions regarding the four trees and provide recommendations for management, and fines.

Based on my visual examination, I believe the four trees to be in poor condition and pose a future hazard. I recommend the removal of these four trees. The cost of tree removal, stump removal to below grade and restoration of the depressions following stump removal is to become a percentage of the fine for violation. The re-planting of trees at this location will be evaluated; however the cost of purchase, pickup, and delivery of four trees will remain part of the fine, and deposited into the "Tree Banking Account" for future use.

Introduction

Background and History

On December 8, 2015, I received a call from Anne Rose, Town of Front Royal, Horticulturist. Ms. Rose had received a "Work Request" from Town of Front Royal resident, at 34 12th Street. The resident had cut back the crown of the tree and requested the removal of piles of cut tree branches staged along Virginia Avenue, the west edge of his property. Ms. Rose assigned the branch removal task to crew members of her section. When the Town Environmental Services crew arrived at the property they observed the piles of branches, underneath the trees that had been topped. The condition of the trees and quantity of branches initiated a communication to Ms. Rose, who is a Certified Arborist, as well as the Town's Horticulturist. Ms. Rose responded to the situation with a making a site visit to 34 12th Street, to ascertain the true condition of the trees and the related piles of branches. Due to the observed condition of the Town's trees, I was called by Ms. Rose to assess the trees and make a recommendation.

(Appendix B – Tree Location Map.)

(Appendix C : Norway Maple Trees (12-10-2015))

Assignment

As part of my position as Chairman of the Urban Forestry Advisory Commission for the Town of Front Royal, I often assist Ms. Rose with tree assessments of public trees on Town Property.

I was asked to perform a visual inspection of the trees from the ground and provide a report concerning the health and condition of four Norway maple trees located at 34 12th Street. Copies of the report were to be sent to Town Manager, Steve Burke; Town Horticulturist, Anne Rose; Town Planning Director,

Jeremy Camp, and Christopher Brock, Deputy Code Enforcement Officer, and members of Town Council.

My involvement stems from my position as a Certified Arborist, and Chairman of the Urban Forestry Advisory Commission. Based on my observations I noted the trees to be damaged with all branches in the upper canopy removed. I also noted the trees are located on the public Right of Way, and belong to the Town of Front Royal.

Limits of the Assignment

Assess the current health and condition of the four Norway maple trees at 34 12th Street. Describe conditions to be addressed. Make recommendations to the Town of Front Royal for response based on observations.

Purpose and Use of the Report

The report is intended to be used by the Town of Front Royal to plan for mitigating the likelihood of future risk. It may also be reviewed by concerned citizen, Town of Front Royal staff, and any tree care professionals involved in tree maintenance or removal.

Observations

Site Description

Based on my observations I noted four Norway maple trees to be missing their upper canopy (topped). The stacks of branches had been removed by the Town of Front Royal public works crews before my arrival. I also noted the four trees are located on public Right of Way belonging to the Town of Front Royal, between the asphalt road surface of Virginia Avenue and the property line of the residence located at 34 12th Street.

Virginia Avenue is a north/south connector road between 1st Street and 16th Street. The neighborhood is comprised of single family homes located on both sides of the street. The intersecting east/west, 12th Street is connected to N. Royal Avenue, and Commonwealth Avenue. This portion of the street is a two-lane asphalt surface without a restrictive curb or sidewalk. Parking is not restricted on either side of the street. The public easement allowed for the planting of the trees does exist due to this area not being used for parking, and sidewalk. Overhead utility wires run the length of 12th Street along the south side of the road. (Appendix B -- Tree Location Map.)

Tree Species Assessed

The focus trees of this report are four Norway maple/*Acer platanoides*.
(See Appendix A -- Norway Maple Species Description.)

Condition

The four Norway maple trees, were in a damaged condition, having recently been topped and missing the upper crowns. The remaining scaffold branches had been stub cut between the internodes, with trunks, and roots apparently untouched. (Appendix D -- Tree Condition Guide)

Assessment

The initial procedure was to identify the location of the four Norway Maple trees.

(Appendix B – Tree Location Map.)

(Appendix C: Norway Maple Trees (12-10-2015))

The trees were checked for general health and for adequate growing conditions.

(Appendix D – Tree Condition Guide)

Discussion

Since the four Norway maple trees were damaged by the action of topping, these trees represent a future hazard. (definition)

Tree topping – The practice of removing whole tops of trees or large branches and/or trunks from the tops of trees, leaving stubs or lateral branches that are too small to assume the role of a terminal leader.

Other common names for the practice include hat-racking, heading, rounding over, and tipping.

1) **Topping reduces food-making capacity.** Trees require a large leaf surface area to provide food for maintenance and growth. Topping cuts off a major portion of the tree's foodmaking potential and depletes the tree's stored reserves.

2) **Topping stimulates undesirable "water sprout" growth.** While removing most of the buds that would form a normal branch system, topping often stimulates the regrowth of dense, unattractive, upright branches (water sprouts) just below the pruning cut. Water sprout regrowth is vigorous. A topped tree will rapidly return to its original height, but will lack its original form.

3) **Topping leaves large wounds.** The branch wounds left from topping are slow to close, therefore more vulnerable to insect attacks and fungal decay. An invasion by either pest can spread into the trunk, killing the tree.

4) **Topping creates a hazard.** Weakened stubs are more prone to wind and storm breakage because they generally begin to die back or decay.

5) **Topping injures bark.** Increased sun exposure on trunk and branches can lead to severe bark damage.

6) **Topping disfigures trees.** Ugly branch stubs, conspicuous pruning cuts, and a broom-like branch growth replace natural beauty and form. Topping reduces the real estate value of trees by 20 - 100 percent. A correctly trimmed tree increases in value at each pruning.

(See Appendix E – Stop Topping Trees)

There are two components involved when assessing whether or not a tree is a hazard. The tree must be structurally unsound and there must be a target that would be damaged or injured if the tree were to fail.

When a tree is topped, epicormic watersprouts will emerge just below the pruning cut, and quickly grow to their original height of the trees before topping. These branch attachments are weak and more prone to wind and storm damage. Since the trees border the residence and street, it is possible property damage could occur if the tree branches failed. The infrequent citizen walking within the drop zone is not likely, especially during storm events when the tree is most susceptible to loss of branches.

To determine whether or not a tree is sound you must consider a number of factors. Norway maple's are not native to Virginia, however if given proper care should do well. The most recent season's twig and branch growth was missing, which indicates the tree's health is jeopardized. This also means the tree's ability to utilize its natural defenses against decay organisms is reduced. A tree's growth habit can provide clues to whether or not it is structurally sound. When a tree's scaffold limbs possess good taper, it is an indication of mechanical strength in the tree's crown. In this case the entire crown had been removed cutting between the internodes, leaving the wounded scaffold branches open to insect and decay organisms, creating an unhealthful condition.

Conclusion

The four Norway maple trees are mature in midlife. Due to the topping their condition is poor. I have several recommendations based on the Town of Front Royal Code, Chapter 156 – Urban Forestry. The Sub-Sections of this Code, that apply to this violation are as follows:
(Appendix F – Town of Front Royal Code, Chapter 156, Violations)

The improper pruning of the four Norway maple is also against recommended tree care as outlined in the ANSI A300 Standards, Part 1, Tree, Shrub, and Other Woody Plant Management, adopted by the Town of Front Royal as a guideline for contractors and staff, when pruning trees. A number of poor judgment issues have occurred, all related to topping.
(Appendix G – Town of Front Royal Code, ANSI A300, Part 1, Pruning)

Recommendations

Management

- Remove the four damaged trees.
- Grind the tree stumps 8" below grade of surrounding soil, remove woodchip grindings (do not use as backfill), and backfill with clean topsoil.
- Restore area with grass. Apply 5-10-10 fertilizer (1lb N per 1000 sq ft), spread seed that includes both starter annual cereal grain grasses (rye, winter wheat, oats, millet), and a mix of permanent grasses (perennial rye, tall fescue, Kentucky bluegrass). Spread loose clean bright straw (not hay) over the surface of the repair area 4" to 6" deep, to prevent bird predation, prevent erosion, and prevent loss of soil moisture.
- Maintain soil moisture during the first three weeks after seed installation, is critical for good grass establishment. Depending on weather temperature, wind, and rain events, this could mean lightly misting the new seeded area with water, up to 4 to 6 times per day for the first two weeks and then twice a day for the following two weeks. Follow weather patterns and water appropriately for the duration of the growing season. Winter installations, when soil temperatures are below 50 degrees F, rarely need water due to cold related naturally reduced germination rates.
- If tree replanting is part of this violation, then use a selected columnar tree that maintains a reduced crown width, due to proximity of street and house.

Violation Fines

The fine is to equal the cost of the listed tasks, time and material. Cost to be determined

- Removal of pruned branches
- Remove the four damaged trees.
- Grind Stumps, remove grindings
- Restore stump holes with topsoil and grass cover
- Tree installation (future)

GLOSSARY OF TERMS

Abiotic agents – Abiotic diseases are caused by factors both natural and human-induced. Natural events include heat, storms, wind, snow, and drought. Human induced include breaking of branches, topping, bark removal, chemical release, and soil compaction

Arboriculture – Practice and study of the care of trees and other woody plants in the landscape.

Arborist – An individual engaged in the profession of arboriculture who, through experience, education and related training provides for, or supervises the management of, trees and other woody plants. (See “ISA Certified Arborist”).

Bark – Bark is the protective outer covering of branches and stems that arises from the cork cambium or cambium. Basal bark is bark around the base of the tree.

Branch Bark Ridge – A raised strip of bark at the top of a branch union where the growth and expansion of the trunk or parent stem and adjoining branch push the bark into a ridge.

Canopy - Collective branches and foliage of a tree or group of trees' crowns. Aggregate or collective tree crowns. A canopy can be closed or partially closed as in a forest or woodland stand, or composed of both individual trees and closed canopy groups as in an urban forest canopy.

Condition – The tree condition is made up of a variety of components including, but not limited to; species, diameter breast height, total height, course height, lean of trunk (direction, degree), slope of land, pests observed, overall quality of the tree, location, taper, co-dominant stems, included bark, cracks/splits, hangars, wounds, decay, cavities, stubs, cankers.

Consulting arborist - An arborist who provides information or an opinion that helps a client solve a problem, accomplish a goal, or make a decision. A level of detail beyond the practitioner in the attention to procedures used to collect, process, document, and store information; the responsibilities owed to those who hire the consultant (the client); and the methods used to report information or opinion to the client.

Controlling authority – An agency, land owner, government entity, organization, or corporate entity with the legal authority and/or obligation to manage individual trees or tree populations, i.e., The Town of Front Royal

Crown area – Upper part of a tree, measured from the lowest branch, including all the branches and foliage.

Crown density – The amount, compactness, or depth of foliage of a tree crown.

Decay - Wood decay is a deterioration of wood by primarily enzymatic activities of microorganisms. For practical purposes, fungi are the only agents of wood decay.

Defect – An imperfection, weakness, or lack of something necessary. In trees, defects are injuries, growth patterns, decay, or other conditions that reduce the tree's structural strength.

Diagnosis - Process of identifying a disorder by analyzing signs, symptoms, site conditions, patterns, climate, cultural history, and other factors to determine the causative agent(s).

Disease - Many tree problems are caused by the action of one or more living organisms. Organisms which cause disease are called pathogens. The most common tree pathogens are fungi, a large and diverse group of plants lacking chlorophyll which derive their nourishment by parasitizing green plants, thereby causing disease. Most fungi are microscopic, but a few, especially the wood-rotting fungi, produce large, often colorful, fruiting bodies as mushrooms or conks. Some tree diseases are also caused by bacteria and viruses.

Dripline - The dripline is the area directly located under the outer circumference of the tree branches. This is where the tiny rootlets are located that take up water for the tree. Trees should be watered from dripline and 50% beyond dripline, not by the base of the trunk, or the tree may develop root rot.

Environment - The air, water, minerals, organisms, and all other external factors surrounding and affecting a given organism at any time.

Environmental stress - Pressure on the environment caused by human activities (such as generation of pollution) or by natural events (such as occurrence of a drought).

Fertilizer (n)/fertilization (n) - Substance added to a plant or the surrounding soil to supplement the supply of essential elements. Fertilization is the act of adding fertilizer.

Foliage - Leaves of a plant.

Fungus (pl. fungi) - Group of organisms from the kingdom Fungi, including yeasts, molds, mushrooms and smuts. Typically multicellular, saprophytic, or parasitic and lacking vascular tissue and chlorophyll. Reproduces by spores borne in fruiting bodies.

Habitat - An ecological or environmental area that is inhabited by a particular species of animal, plant, or other type of organism.

Harm - Personal injury or death, property damage, or disruption of activities.

Health - The level of functional or metabolic efficiency of a living being.

Impact - Striking a target or causing a disruption that affects activities.

ISA Certified Arborist (Certified Arborist) - The credential that identifies professional arborists who have a minimum of three years' full-time experience working in the professional tree care industry and who have passed an extensive examination created and administered by the International Society of Arboriculture, covering all facets of arboriculture.

Lean - Angle of the trunk.

Live crown ratio - Live crown height relative to overall plant height.

Mitigation - The process of diminishing risk.

Mulch - Material that is spread or sometimes sprayed on the soil surface to reduce weed growth to retain soil moisture and moderate temperature extremes, or to prevent damage from lawn-maintenance equipment, to reduce erosion or soil spattering onto adjacent surfaces, to improve soil quality through its eventual decomposition, and/or to improve aesthetic appearance of the landscape. Mulch can be composed of chipped ground, or shredded organic material such as bark, wood, or recycled paper;

unmodified organic material such as seed hulls; organic fiber blankets or mats. Note: inorganic material such as plastic sheeting is not recommended for use over tree roots.

Owner/manager – The person or entity responsible for tree management, or controlling authority that regulates tree management.

Pathogen - Organisms which cause disease are called pathogens. The most common tree pathogens are fungi, a large and diverse group of plants lacking chlorophyll which derive their nourishment by parasitizing green plants, thereby causing disease. Most fungi are microscopic, but a few, especially the wood-rotting fungi, produce large, often colorful, fruiting bodies as mushrooms or conks.

Pest management – The principles of Plant Health Care is the basis for managing pests of trees. This is the process you can use to solve pest problems while minimizing cost of cure, and risks to people and the environment. Monitoring is the pro-active approach to pest management. Monitoring means checking your field, landscape, forest, or building—or other site—to identify which pests are present, how many there are, or what damage they've caused. Correctly identifying the pest is important to knowing whether a pest is likely to become a problem and determining the best management strategy.

Pruning - The removal of branches (or occasionally roots) from a tree or other plant using approved practices, to achieve a specified objective.

Reduction Pruning Cut – Pruning cut that reduces the length of a branch or stem back to a lateral branch large enough to assume apical dominance. Aka *drop crotch pruning*.

Removal Cut – Cut that removes a branch at its point of origin. Aka *Collar Cut*.

Residual risk – Risk remaining after mitigation.

Risk – The combination of the likelihood of an event and the severity of the potential consequences. In the context of trees, risk is the likelihood of a conflict or tree failure occurring and affecting a target, and the severity of the associated consequences – personal injury, property damage, or disruption of activities.

Root system - the area of the tree below the vertical stem or trunk that absorbs water and minerals from the soil, and transports these elements to trunk which are drawn up into the canopy of the tree to be used in the process known as photosynthesis. Physical components start at tree base where the trunk flare expands into the main buttress root. This region is the root crown/root collar. The expansion of these roots are known as primary support roots leading to smaller secondary roots, and transitioning to feeder roots with absorbing fine hair roots to complete the circuit.

Roots - Tree roots develop and survive where there is adequate oxygen and moisture. Most active tree roots are in the top 3 feet of soil; the majority of roots are in the top 12 inches. The more compacted or poorly drained the soil the closer the roots are to the soil surface. Roots grow most of the year, stopping only when soil temperatures are cold. They occur as perennial woody roots and as annual absorbing roots. Woody roots become thicker each year; absorbing roots die but are replaced by new absorbing roots. Annual absorbing roots form shallow, horizontal fans that take-up water and nutrients. A few woody support roots grow downward and outward to anchor the tree in place. Most trees do not have a deep tap root.

Roots normally grow outward to about three times the branch spread. Only 50 percent of the trees root system occurs between the trunk and the dripline. Roots on one side of the tree normally supply the foliage on the same side of the tree. When the roots on one side of the tree are injured the branches on that side of the tree may die back or drop.

6) **Topping disfigures trees.** Ugly branch stubs, conspicuous pruning cuts, and a broom-like branch growth replace natural beauty and form. Topping reduces the real estate value of trees by 20 - 100 percent. A correctly trimmed tree increases in value at each pruning.

Topsoil – Surface layer of soil that may be rich in nutrients from decaying plants and bacterial material.

Transpiration– Water vapor loss through the stomata of leaves.

Tree assessment – A systematic process used to identify, analyze and evaluate health and condition.

Trunk - The main wooden axis that supports the branches, and is attached and supported by the roots where the trunk expands into the buttress or structural roots. Root flare, trunk flare. Trees are varied and some have multiple trunks supporting branches with attachments to the same trunk flare. These are known as multi-stem trees.

Trunk flare - Interchangeable terms for the area of transition between the vertical stem and structural roots at the base of the tree's stem or trunk. A point at tree base where a main buttress root and the trunk merge. The "collar" develops over time as the tree grows and may not be evident on young trees. Root flare, root collar, root crown.

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<http://dendro.cnrc.vt.edu/dendrology/factsheets.cfm>

Appendix A – Norway maple/ *Acer platanoides* Species Description



VirginiaTech
Invent the Future

Department of
Forest Resources and Environmental Conservation

Norway maple *Aceraceae* *Acer platanoides* L.  symbol: ACPI. vTree

Leaf: Dorsal: simple, palmately 3-5-lobed with long pointed teeth, dark green above, paler below; exudes milky white sap from the petiole when detached. A purple-cedar-like variety known as Crimson King is widely planted.

Flowers: Spikes in clusters, petals yellow-green in color and somewhat sticky, appearing in the spring before the leaves.

Fruits: Widely divergent 2-lobed samaras, 1.12 to 2 inches long in clusters, relatively flat seed cavity, mature in late summer and persist into the winter.

Twig: Stout, brown with a large, lobed-shaped lenticel that are usually green, maturing to purple.

Bark: Gray-brown, a bit corky on older trees, shallowly furrowed with long narrow, somewhat intersecting ridges.

From: Medium sized tree to 40 feet tall, usually with a dense rounded crown.

Looks like: sugar maple - black maple - Florida maple - Shantung maple










Additional Range Information:
Acer platanoides is planted in the USDA hardiness zones shown above and may seed into the landscape. See states reporting Norway maple.
More: Fall Color

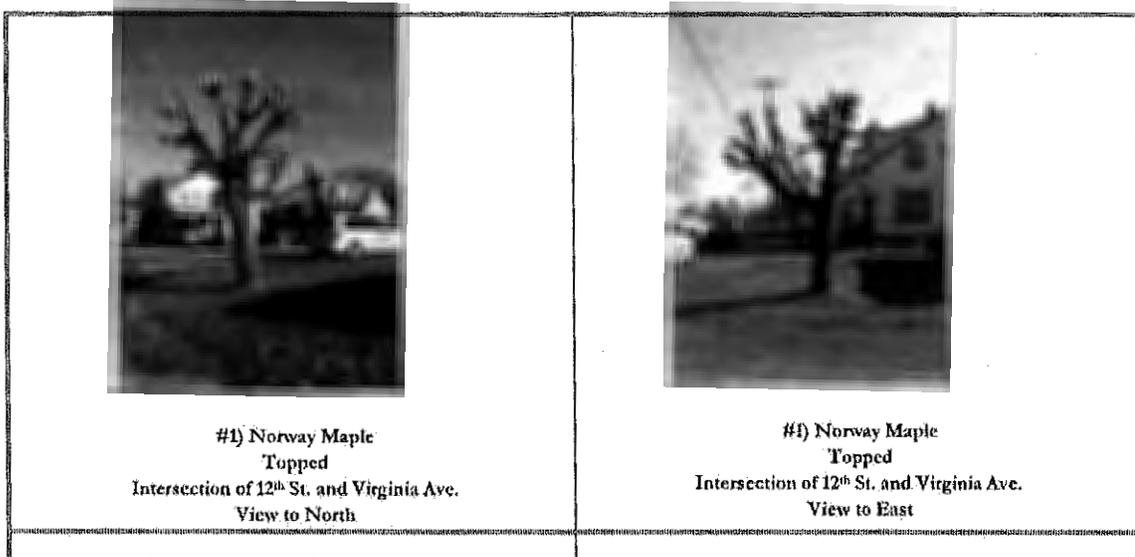
External Links:
[USDAFS Additional Silvics](#)
[USDA Plants Database](#)
[Horticulture](#)

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Photos and text by: John Sailer,
Ed and Joyce, Alex Niemelä,
and John Peterson

Appendix B: Tree Location Map

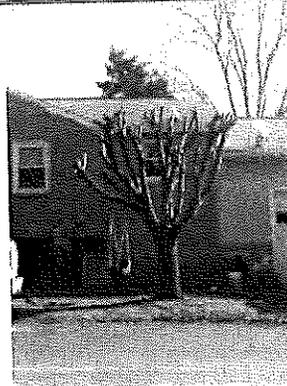


Appendix C : Norway Maple Trees (12-10-2015)





#2) Norway Maple
Topped
2nd tree south of intersection
12th St. and Virginia Ave.
View to Northeast



#2) Norway Maple
Topped
2nd tree south of intersection
12th St. and Virginia Ave.
View to East



#3) Norway Maple
Topped
3rd tree south of intersection
12th St. and Virginia Ave.
View to Northeast



#3) Norway Maple
Topped
3rd tree south of intersection
12th St. and Virginia Ave.
View East



Topped
4th tree south of intersection
12th St. and Virginia Ave.
View to Northeast



Topped
4th tree south of intersection
12th St. and Virginia Ave.
View to East

Site history – An account of management practices, changes, events, or disturbances that have occurred at a site.

Soil - Surface layers of sand, clay, silt, and organic material on the surface of the earth that support plants.

Soil analysis - Analysis of soil to determine pH, mineral composition, structure, salinity, and other characteristics.

Specifications – A detailed measurable plan or proposal for performing a work activity or providing a product, usually a written document.

Standard - Document that establishes work or performance specifications, criteria, methods, processes, or practices.

Stress - (1) In plant health care, a factor that negatively affects the health of a plant; a factor that simulates a response, (2) In mechanics, a force per unit area.

Structural defect – A feature, condition, or deformity of a tree or tree parts that indicates a weak structure and contributes to the likelihood of failure.

Structural roots - Large, woody, tree roots that anchor and support the trunk and crown, Roots characterized by secondary thickening and relatively large diameter, giving form to the root system and functioning in anchorage and support.

Target - (1) people, property, or activities that could be injured, damaged, or disrupted by a tree failure. (2) location of a cut in target pruning.

Town Code - Legal document adopted by the Council of the Town of Front Royal, Virginia, that certain Code entitled the "Code of the Town of Front Royal, Virginia," containing certain ordinances of a general and permanent nature as revised, compiled, consolidated and codified in the chapters therein, as follows: Chapters 1 through 180, inclusive.

Tree ordinance - tree-specific legal document that defines a public agency's authority, describes required conditions or actions, establishes penalties for nonconformance, and identifies who is responsible for enforcement and oversight.

Tree topping – The practice of removing whole tops of trees or large branches and/or trunks from the tops of trees, leaving stubs or lateral branches that are too small to assume the role of a terminal leader. Other common names for the practice include hat-racking, heading, rounding over, and tipping.

- 1) **Topping reduces food-making capacity.** Trees require a large leaf surface area to provide food for maintenance and growth. Topping cuts off a major portion of the tree's food making potential and depletes the tree's stored reserves.
- 2) **Topping stimulates undesirable "water sprout" growth.** While removing most of the buds that would form a normal branch system, topping often stimulates the re-growth of dense, unattractive, upright branches (water sprouts) just below the pruning cut. Water sprout re-growth is vigorous. A topped tree will rapidly return to its original height, but will lack its original form.
- 3) **Topping leaves large wounds.** The branch wounds left from topping are slow to close, therefore more vulnerable to insect attacks and fungal decay. An invasion by either pest can spread into the trunk, killing the tree.
- 4) **Topping creates a hazard.** Weakened stubs are more prone to wind and storm breakage because they generally begin to die back or decay.
- 5) **Topping injures bark.** Increased sun exposure on trunk and branches can lead to severe bark damage.

6) **Topping disfigures trees.** Ugly branch stubs, conspicuous pruning cuts, and a broom-like branch growth replace natural beauty and form. Topping reduces the real estate value of trees by 20 - 100 percent. A correctly trimmed tree increases in value at each pruning.

Topsoil – Surface layer of soil that may be rich in nutrients from decaying plants and bacterial material.

Transpiration– Water vapor loss through the stomata of leaves.

Tree assessment – A systematic process used to identify, analyze and evaluate health and condition.

Trunk - The main wooden axis that supports the branches, and is attached and supported by the roots where the trunk expands into the buttress or structural roots. Root flare, trunk flare. Trees are varied and some have multiple trunks supporting branches with attachments to the same trunk flare. These are known as multi-stem trees.

Trunk flare - Interchangeable terms for the area of transition between the vertical stem and structural roots at the base of the tree's stem or trunk. A point at tree base where a main buttress root and the trunk merge. The "collar" develops over time as the tree grows and may not be evident on young trees. Root flare, root collar, root crown.

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Appendix A – Norway maple/ *Acer platanoides* Species Description

 **VirginiaTech**
Invent the Future
Department of
Forest Resources and Environmental Conservation

Norway maple *Aceraceae* *Acer platanoides* L.  symbol: ACPL vTree

Leaf: Opposite, simple, palmately-veined, 1 to 7 lobed with fine pointed teeth; dark green above, paler below; exudes milky white sap from the petiole when crushed. A purple to nearly black leaf surface known as Crimson King is widely planted.

Flowers: Spike, 1 to 2 inches, yellow-green to coral and somewhat showy, appearing in the spring before the leaves.

Fruit: Widely divergent, winged samaras, 1 1/2 to 2 inches long in clusters, relatively flat seed cavity, mature in late summer and persists into the winter.

Twig: Weak, brittle, with a large, tubular-shaped bud that is initially green maturing to purple.

Bark: Gray-brown, a bit glossy, on older trees shallowly furrowed with long narrow, irregular intersecting ridges.

Forest: Medium sized tree to 40 feet tall, usually with a dome rounded crown.

Looks like: sugar maple - black maple - Florida maple - Shantung maple





A native of Europe, widely planted in zones 3-7 and known to escape cultivation.

Additional Range Information:
Acer platanoides is planted in the USDA hardiness zones shown above and may seed into the landscape. See states reporting Norway maple.
More: Fall Color

External Links:
[USDAFS Additional Silvics](#)
[USDA Plants Database](#)
[Horticulture](#)

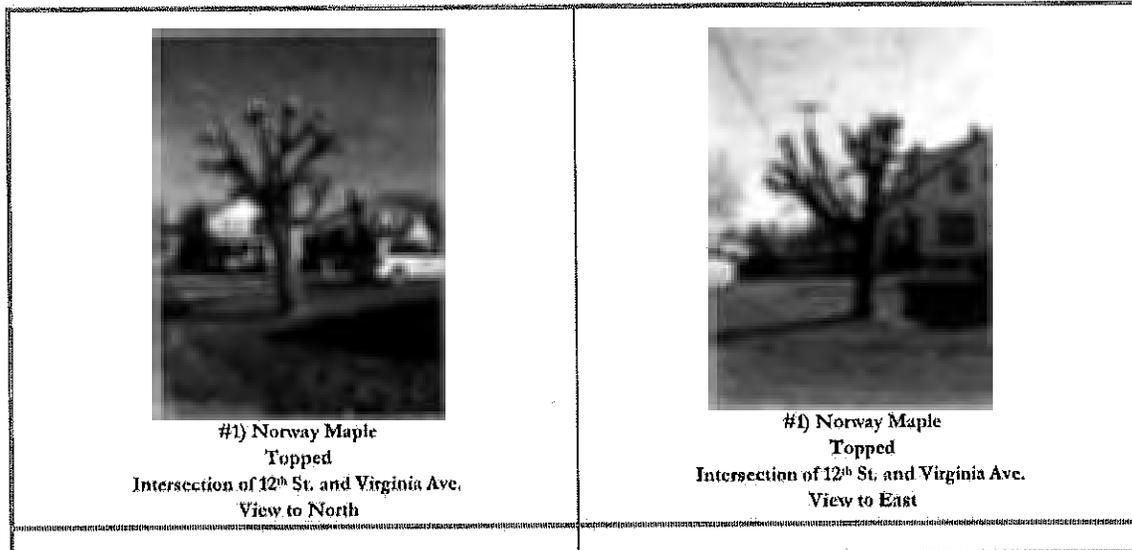
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Appendix B: Tree Location Map

Front Royal, Virginia – 34 12th Street



Appendix C : Norway Maple Trees (12-10-2015)





#2) Norway Maple
Topped
2nd tree south of intersection
12th St. and Virginia Ave.
View to Northeast



#2) Norway Maple
Topped
2nd tree south of intersection
12th St. and Virginia Ave.
View to East



#3) Norway Maple
Topped
3rd tree south of intersection
12th St. and Virginia Ave.
View to Northeast



#3) Norway Maple
Topped
3rd tree south of intersection
12th St. and Virginia Ave.
View East



#4) Norway Maple
Topped
4th tree south of intersection
12th St. and Virginia Ave.
View to Northeast



#4) Norway Maple
Topped
4th tree south of intersection
12th St. and Virginia Ave.
View to East

Appendix E – Stop Topping Trees

Virginia Cooperative Extension, Virginia Tech, and Virginia State University

A Guide to Successful Pruning: Stop Topping Trees! ID

430-458

Authors as Published

Susan C. French, Extension Technician and Bonnie Loe Appleton, Extension Horticulturist, Virginia Tech

What is "topping"?

Topping occurs when the vertical stem (**leader**) and upper primary limbs (**scaffold branches**) on mature trees are cut back to stubs at uniform height. Topping is also referred to as heading, stubbing, or dehorning.

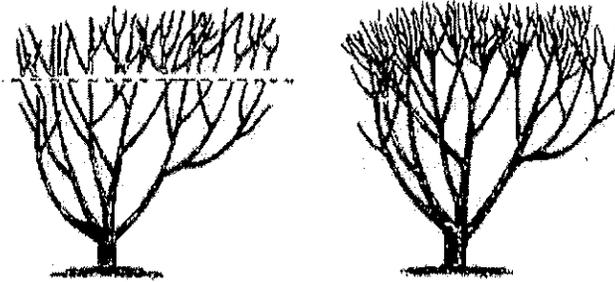
How does topping damage trees?

- 1) **Topping reduces food-making capacity.** Trees require a large leaf surface area to provide food for maintenance and growth. Topping cuts off a major portion of the tree's foodmaking potential and depletes the tree's stored reserves.
- 2) **Topping stimulates undesirable "water sprout" growth.** While removing most of the buds that would form a normal branch system, topping often stimulates the regrowth of dense, unattractive, upright branches (water sprouts) just below the pruning cut. Water sprout regrowth is vigorous. A topped tree will rapidly return to its original height, but will lack its original form.



- 3) **Topping leaves large wounds.** The branch wounds left from topping are slow to close, therefore more vulnerable to insect attacks and fungal decay. An invasion by either pest can spread into the trunk, killing the tree.
- 4) **Topping creates a hazard.** Weakened stubs are more prone to wind and storm breakage because they generally begin to die back or decay.
- 5) **Topping injures bark.** Increased sun exposure on trunk and branches can lead to severe bark damage.

6) **Topping disfigures trees.** Ugly branch stubs, conspicuous pruning cuts, and a broom-like branch growth replace natural beauty and form. Topping reduces the real estate value of trees by 20 - 100 percent. A correctly trimmed tree increases in value at each pruning.



Before tree-topping (left) and after (right).

Why are trees topped?

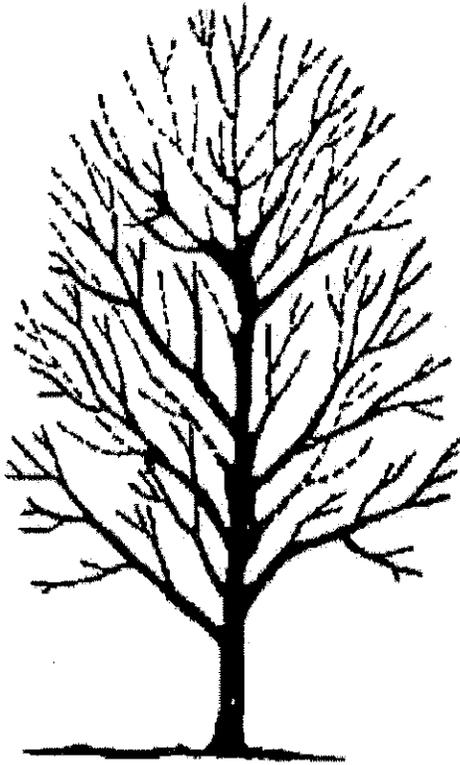
Some homeowners and unprofessional tree pruners practice topping whenever trees reach an undesirable height. They mistakenly believe that topping will reduce the storm hazard of falling branches, when in fact, topping has the opposite effect. People also top trees when they interfere with utility wires, buildings, solar collectors, or sunny garden areas.

Selection of trees that only reach desired maximum heights eliminates severe pruning later. If you must prune a tree heavily every five to seven years, the tree is too large for the site. Replace it with a smaller species. The National Arborist Association considers topping an unacceptable practice and advises against it. Unfortunately, even some legitimate tree service companies indiscriminately top trees. Before selecting a tree service, find out which companies advocate topping and avoid patronizing them.

What are the alternatives?

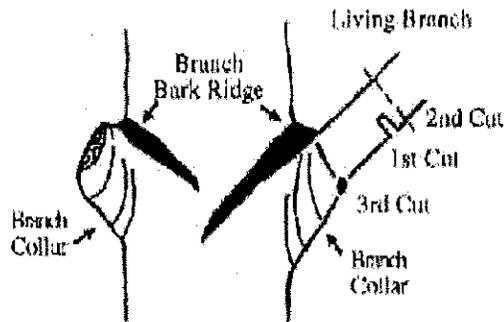
In order to avoid topping, newly planted trees should be properly pruned to develop a good branch structure as they grow. When a mature tree's height must be reduced, an alternative to topping is **drop-crotching**.

Drop-crotching is a type of thinning cut that reduces a tree's size while preserving its natural shape. To drop-crotch, select and cut higher branches back to laterals at least one-third the diameter of the limbs being removed. Cut outside the branch collar at a 45 to 60 degree angle to the branch bark ridge. Leave the branch collar intact to help prevent decay from entering the trunk. This type of thinning cut will stimulate growth throughout the tree and discourage water sprout development.



Drop-crochng. Lateral limbs are pruned where they join large diameter side branches. The center leader is cut back to a large diameter secondary branch so that a modified leader remains. This does not change the direction of growth. It encourages stimulation of the apical growth point.

Whenever removing limbs greater than 1 inch in diameter, use the three-cut method to avoid tearing bark. First, about 12 inches from the trunk, cut halfway through the limb from the underside. Second, about 1 inch past the first cut, cut through the limb from the top side. The limb's weight will cause it to break between the two cuts. Make the third cut outside the branch collar, as described earlier. Use a handsaw to provide greater control.



Branch bark ridge and branch collar

Don't coat pruning cuts with tree paint or wound dressing, except for control of certain disease-carrying insects. These materials won't prevent decay or promote wound closure.

Can topping be corrected?

A professional arborist can improve the condition of a tree, even after it's been severely topped and shows heavy water sprout regrowth. As the water sprouts begin to gain caliper, they can be selectively "thinned out" using properly placed branch collar cuts. New growth can be directed outward to expand and round out the crown. This process will need repeating for a few years. The scars, both physical and visual, will never completely disappear.

A wiser alternative to topping is careful selection and training of your young trees. Avoid topping altogether. Allow your trees to realize their full potential for health and beauty in the landscape.

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Publisher

Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Interim Administrator, 1090 Extension Program, Virginia State University, Petersburg.

Date

May 1, 2009



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Appendix F – Town of Front Royal Code, Chapter 156, Violations

Town Code Chapter 156 – Urban Forestry. The Sub-Sections of the Town of Front Royal Code, that apply to this violation are as follows:

156-4 PLANTING, MAINTENANCE AND PROTECTION OF TREES ON PUBLIC PROPERTY

B. Maintenance.

1. All outside contractors hired for pruning and/or maintenance of Town owned trees shall meet the following minimum requirements:
 - a. Have current Town Business License.
 - b. Provide proof of liability and Workmen's Compensation Insurance in amount established by the Town Council.
 - c. Have employed at least one certified arborist to generally oversee all work.
 2. All Town-owned trees shall be maintained in accordance with the most recent version of the "American National Standards Institute's ANSI A300 (Part 1): Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (Pruning)" and the "American National Standards Institute's ANSI Z-133.1: Safety Requirements." No town-owned tree shall be "topped" nor shall any climbing spurs be used when working on live trees.
- and
4. No private citizen shall cut, prune, or elevate any Town-owned tree in conflict with guidelines adopted by the Urban Forestry Advisory Commission, without prior approval by the Town Manager after review and recommendation by the UFAC.

also

C. Protection.

9. Unless specifically authorized by the Town Manager, after review and recommendation by the UFAC, it shall be unlawful for any person to intentionally damage, cut, carve, transplant or remove any tree on public property, nor attach any rope, wire, nails, advertising posters or other contrivance to any public tree, nor allow any gaseous liquid or solid substance which is harmful to such trees to come in contact with them, nor set fire or permit any fire to burn when such fire or the heat thereof will injure any portion of any public tree. Any person found to violate the provisions of this section shall be responsible for the cost of repair, or removal and replacement, of any public tree so damaged. The owner of any vehicle that accidentally damages any tree on public property shall be responsible for the cost of repair, or removal, and replacement, of any public tree damaged.

Appendix G – Town of Front Royal Code, Chapter 156 – Urban Forestry ANSI A300, Part 1, Pruning

Town Code Chapter 156 – Urban Forestry. The Sub-Sections of the Town of Front Royal Code, that apply to this violation are as follows:

156-4 PLANTING, MAINTENANCE AND PROTECTION OF TREES ON PUBLIC PROPERTY

B. Maintenance.

All Town-owned trees shall be maintained in accordance with the most recent version of the "American National Standards Institute's ANSI A300 (Part 1): Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (Pruning)" and the "American National Standards Institute's ANSI Z-133.1: Safety Requirements." No town-owned tree shall be "topped" nor shall any climbing spurs be used when working on live trees.

ANSI A300 (Part 1) – 2008, *Pruning (Synopsis)*

This part of the A300 standards applies to pruning and trimming operations. Part 1 *Pruning* addresses:

Pruning practices

- Pruning objectives (includes vista/view enhancement and structural enhancement)
- Pruning methods (types)
- Palm pruning
- Utility pruning

A300 Pruning standards recognize four basic pruning methods for pruning:

- *Clean*: Selective pruning to remove one or more of the following parts: dead, diseased, and/or broken branches.
- *Thin*: Selective pruning to reduce density of live branches
- *Raise*: Selective pruning to provide vertical clearance.
- *Reduce*: Selective pruning to decrease height and/or spread (consideration must be given to the ability of a species to tolerate reduction pruning).

Advisory Notice:

Certain pruning practices are not acceptable and can injure trees:

- *Topping*: The reduction of a tree's size using heading cuts that shorten limbs or branches back to a predetermined crown limit
- *Lion's Tailing*: The removal of an excessive number of inner, lateral branches from parent branches
- *Rooster-Tailing*: The over-thinning of palms.

Appendix H – Assumptions and Limiting Conditions

1. Any legal description provided to the consultant is assumed to be correct.
2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
3. The consultant shall not be required to give testimony or to attend court by reason of the report unless subsequent contractual arrangements have been made.
4. Loss or alteration of any part of this report invalidates the entire report.
5. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person(s) or authorities, to whom it is addressed, without the prior expressed written or verbal consent of the consultant.
6. This report represents the opinion of the consultant, and the consultant's release of fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
7. Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
8. Unless expressed otherwise:
 - 1) Information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and
 - 2) The inspection is limited to visual examination of the four Norway Maple trees. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

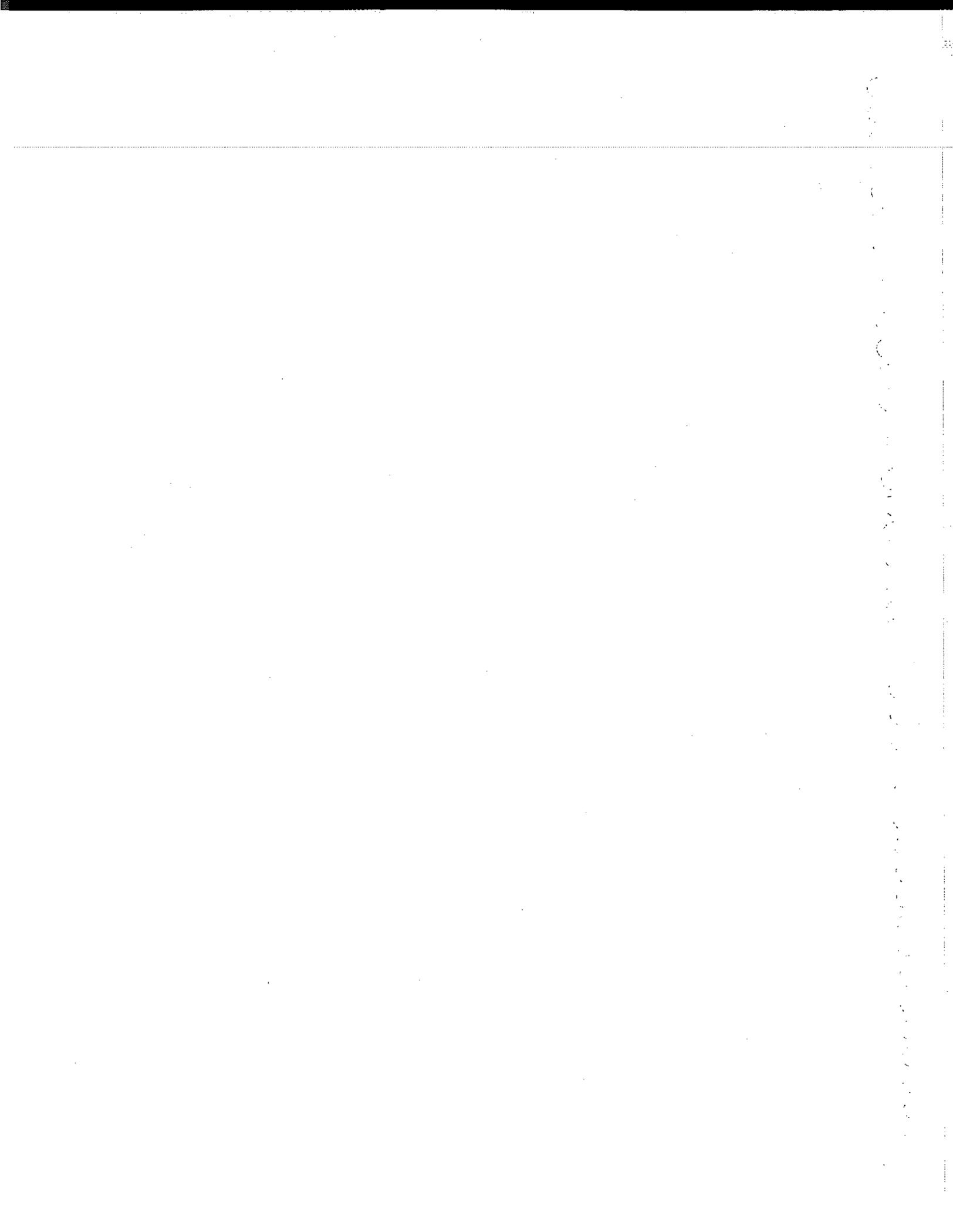
Appendix I – Certificate of Performance

I, David B. Means, certify that:

1. I have personally inspected the trees and property referred to in this report and have stated my findings accurately.
2. I have current and prospective interest in the trees on the property owned by the Town of Front Royal, that is the subject of this report and have no personal interest or bias with respect to the parties involved.
3. The analysis, opinions and conclusions stated herein are my own and are based on current scientific procedures and facts.
4. My analysis, opinions and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices.
5. No one provided significant professional assistance to me, except as indicated within this report.
6. I am not compensated for the reporting of a predetermined conclusion that favors the cause of the Town of Front Royal, or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing of the American Society of Consulting Arborists and the International Society of Arboriculture. I have been involved in the field of Arboriculture in a full time capacity for a period of twenty-seven years.

<p>Signed: </p> <p>Date: 1/13/2016</p> <p>David B. Means, ISA, Certified Arborist Copper Forest, L.L.C. Front Royal, Virginia 22630</p>	<p>DAVID B. MEANS</p>  <p>IL-0110A</p>
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W 12TH ST

VIRGINIA AVE

1104

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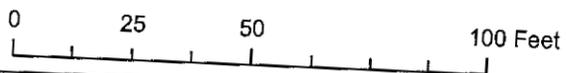
DECEMBER 2015

AERIAL MAPPING

34 WEST 12TH STREET
TOWN OF FRONT ROYAL, VIRGINIA



D.G.Merchant, Cartographer



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Town of Front Royal, Virginia Work Session Agenda Form

Date: February 16, 2016

Agenda Item: FY16-17 Town Tax Rates

Summary: The Town Property Tax Rates are currently as follows:

Real Estate Property Tax	\$0.13 per \$100 Assessed Value
Personal Property Tax	\$0.64 per \$100 Assessed Value
Machinery & Tools Tax	\$0.64 per \$100 Assessed Value
Emergency Services Property Tax	\$0.32 per \$100 Assessed Value
Mobile Home Property Tax	\$0.13 per \$100 Assessed Value
Leach Run Parkway Dedicated Funding -	\$ 0.0167 of RE Tax (\$187,500)
Police Department Headquarter -	\$ 0.0167 of RE Tax (\$187,500)
Main Street Extension -	\$ 0.0067 of RE Tax (\$75,000)

Council Discussion: Council discussed the FY16-17 tax rates at the February 1st Work Session. Council is requested to continue discussion so that the FY16-17 tax rates can be advertised.

Staff Evaluation: The following Major CIP General Fund projects with estimated construction costs and annual debt service are provided for consideration:

<u>Project</u>	<u>Estimate (Town Share)</u>	<u>Estimated Annual Debt Service</u>	<u>Estimated Date of Debt</u>
Police Headquarters	\$5,550,000	\$500,000	2018
Leach Run Parkway	\$17,000,000 (\$3,400,000)	\$400,000	2016
Happy Creek Road Phase II	\$4,000,000 (\$2,683,406)	\$225,000	2018
Sidewalk/Trail Program	\$750,000	\$100,000	2016
Main Street Extension	\$1,750,000 (\$250,000)	n/a	2016

Budget/Funding: The Finance Director will be available to address fiscal issues.

Legal Evaluation: The Town Attorney will be available to address legal issues.

Staff Recommendations: Staff are pursuing additional funding opportunities for the these capital projects.

Town Manager Recommendation: The Town Manager recommends advertisement of FY16-17 tax rates at the current levels. Council can authorized advertisement at an increased level, and reduce the rate following the Public Hearing.

Council Recommendation:

- Additional Work Session
 Regular Meeting
 No Action
 Consensus Poll on Action: ___(Aye) ___(Nay)



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Town of Front Royal, Virginia
Work Session Agenda Form

Date: February 16, 2016

Agenda Item: Battle of Front Royal

Summary: The Town is working with the Warren Heritage Society to conduct the first Battle of Front Royal day on Saturday, May 7th. The event will include encampments at the Warren County Courthouse by Confederate re-enactors and the Heritage Society by Union re-enactors. The re-enactors will engage in the battle through Main Street and Chester Street. We estimate that approximately 100 re-enactors will participate in the event. In addition, the Heritage Society is planning to have additional participants in period dress that will describe the Civil War from perspective of women, slaves, and farmers. Staff is also coordinating with Randolph Macon Academy to have their cannon provide back ground realism.

Council Discussion: Council is requested to discuss the event and consider providing funding that was not budgeted.

Staff Evaluation: Staff would propose to offer a \$20 token to be redeemed by Town restaurants so that the re-enactors can eat during the event. Staff estimates that \$2,500 should be sufficient for this recognition for their participation. Our current budget will provide for advertisement.

Budget/Funding: The Finance Director will be available to address fiscal issues.

Legal Evaluation: The Town Attorney will be available to address legal issues.

Staff Recommendations: Staff recommend Council consider providing funding to recognize the participants in the Battle of Front Royal event.

Town Manager Recommendation: The Town Manager recommends Council consider providing funding to recognize the participants in the Battle of Front Royal event.

Council Recommendation:

- Additional Work Session
 - Regular Meeting
 - No Action
- Consensus Poll on Action: ___(Aye) ___(Nay)



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Town of Front Royal, Virginia
Work Session Agenda Form

Date: February 16, 2016

Agenda Item: Citizens Academy

Summary: The Town is developing a Citizens Academy to be conducted in early Summer that will offer 25 to 30 citizens an opportunity to learn about the services provided but the Town. The Academy would be two hours in duration and be conducted one evening each week for about six weeks. Each Department would participate and provide a summary of the services that they provide. In addition, we would seek input from the participants about their ideas on how we can further improve service delivery. If successful, staff anticipate the Academy being an annual event.

Council Discussion: Council is requested to consider establishing a Citizens Academy for our residents. Council is also requested to determine if Council would like to participate in one evening's presentation.

Staff Evaluation: Staff anticipate expense for the event would be limited to \$500, which would be funded through the existing FY15-16 budget items.

Budget/Funding: The Finance Director will be available to address fiscal issues.

Legal Evaluation: The Town Attorney will be available to address legal issues.

Staff Recommendations: Staff recommend Council consider establishing a Citizens Academy for Town residents.

Town Manager Recommendation: The Town Manager recommends Council consider establishing a Citizens Academy for Town residents.

Council Recommendation:

Additional Work Session Regular Meeting No Action

Consensus Poll on Action: ___(Aye) ___(Nay)



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Town of Front Royal, Virginia



**RESOLUTION
SUPPORTING USE OF LOCAL LABOR
ON MAJOR CONSTRUCTION PROJECTS**

WHEREAS, the several large construction projects have been started or completed in and around the Town of Front Royal that include construction of the Dominion Power Plant, the RSW Regional Jail, the South Fork Bridge replacement, the Leach Run Parkway, and the new middle school; and,

WHEREAS, the Town anticipates several more large projects to begin in the near future including development of the Avtex property and developments around the Leach Run Parkway corridor; and,

WHEREAS, the Town Council desires to encourage the use of local workers such as electricians, pipe fitters, and heavy equipment operators on these jobs so that the majority of the benefit from these projects helps our local residents;

NOW, THEREFORE BE IT RESOLVED by the Mayor and Council of the Town of Front Royal, Virginia hereby requests that those responsible for construction of major projects in and around the Town of Front Royal employ local workers whenever possible for construction of these local projects; and,

BE IT FURTHER RESOLVED that the Mayor and Council of the Town of Front Royal, Virginia hereby request that Town staff identify any and all opportunities to encourage and utilize local workers on Town funded projects available to the Town through the procurement regulations.

Adopted this 22nd day of February 2016

APPROVED:

Timothy W. Darr, Mayor

Attest:

Jennifer E. Berry, CMC, Clerk of Council

THIS RESOLUTION was approved at the Regular Meeting of the Town of Front Royal, Virginia Town Council on _____ 2016, upon the following recorded vote:

Hollis L. Tharpe	Yes/No	Bret W. Hrbek	Yes/No
Eugene R. Tewalt	Yes/No	Bébhinn C. Egger	Yes/No
John P. Connolly	Yes/No	Jacob L. Meza	Yes/No

Approved as to Form and Legality:

Douglas W. Napier, Esq., Town Attorney

Date: _____

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