



STATE OF NEW YORK  
DEPARTMENT OF STATE  
ONE COMMERCE PLAZA  
99 WASHINGTON AVENUE  
ALBANY, NY 12231-0001

DAVID A. PATERSON  
GOVERNOR

LORRAINE A. CORTÉS-VÁZQUEZ  
SECRETARY OF STATE

May 17, 2010

The Honorable Joseph Gross  
Mayor of the Village of Cornwall-on-Hudson  
325 Hudson Street  
Cornwall-on-Hudson NY 12520

Re: Department of Public Works Building  
Village of Cornwall-on-Hudson

Dear Mayor Gross:

At your request, the Division of Code Enforcement and Administration reviewed a report on the Village's Department of Public Works Building. The report, dated April 26, 2010, was prepared for the Village by Tectonic Engineering and Surveying Consultants, P.C. and is entitled "Department of Public Works Building, Structural Evaluation and Code Compliance Review." Tectonic also prepared drawings documenting existing conditions at the subject building.

A copy of our review is enclosed for your information. Please note that our comments are not based on direct observations of the building, but rather are founded on the observations of Tectonic. Based on the report and drawings, it is our view that there are serious violations of the State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code).

The Department of State would strongly recommend against the occupancy of the building at this time. There is no assurance that the building structure is capable of safely sustaining gravity or lateral loading conditions to which it may be subject. That the building remains standing at this time should not be taken as an indication that a structural failure would not occur with minimal warning. Photographs printed in the Tectonic report show significant deterioration of structural members.

At this time, the Department of State would also recommend that the Village of Cornwall-on-Hudson engage the services of engineers and/or architects to prepare a remediation plan to bring the building into compliance with the Uniform Code and Energy Code.

New York Department of State  
Code Enforcement and Administration

Village of Cornwell-on-Hudson  
Department of Public Works Building  
May 17, 2010

The following comments are based upon a review of as-built drawings and a structural evaluation and code compliance review performed by Tectonic Engineering and Surveying Consultants, P.C. Listed code sections, unless otherwise noted, are from the 2002 Edition of the Building Code of New York State. Other codes and laws are specifically noted. The comments below should not be considered as a complete list of all violations of the code(s) or applicable laws and regulations since other violations may arise that are currently not known.

Item No.	Code Section	Code Requirement/Observed Violation
1	406.6.2 302.3.3 706.6	<p><b>Requirement:</b> Repair garages (S-1) used for painting, body and fender work, engine overhauling or other major repair of motor vehicles, are required to be separated from business (B) occupancies by a 3-hour fire-resistance rated fire barrier.</p> <p><b>Violation:</b> There is no evidence that the walls separating the repair garage from the adjacent office/business spaces are constructed as fire barriers having a 3-hour fire-resistance rating with opening protectives having a fire-protection rating of 3 hours.</p>
2	406.6.3	<p><b>Requirement:</b> Repair garages used for painting, body and fender work, engine overhauling or other major repair of motor vehicles, are required to be mechanically ventilated in accordance with the Mechanical Code of New York State (MCNYS). Table 403.3 of the MCNYS requires repair garages to have ventilation systems that provides a minimum outdoor airflow of 1.5 cfm/ft<sup>2</sup>.</p> <p><b>Violation:</b> The mechanical ventilation system provides approximately 1.1 cfm/ft<sup>2</sup></p>
3	503.1 Table 503 505 602.1 Table 601 602.5	<p><b>Requirement:</b> Buildings of Group S-1 occupancy and type V-B construction are limited to an allowable height of not more than one story. Mezzanines do not contribute to the number of stories, provided that they comply with Section 505, including a requirement that the mezzanine be open and unobstructed to the room in which it is located except for walls not more than 42 inches high, columns and posts. Enclosed mezzanines are permitted as provided in exceptions to section 505.4.</p> <p><b>Violation:</b> The mezzanine is classified as a story because it is not open and unobstructed to the first story room and does not qualify for any of the exceptions to section 505.4. Therefore, the building is classified as a two story building, which is not permitted in this construction type.</p>
4	903.2.8	<p><b>Requirement:</b> Buildings of Group S-1 occupancy with a fire area exceeding 12,000 SF are required to be equipped with an automatic sprinkler system.</p> <p><b>Violation:</b> The building contains a fire area exceeding 12,000 SF and is not equipped with an automatic sprinkler system.</p>

Item No.	Code Section	Code Requirement/Observed Violation
5	1003.2.12 1003.2.12.1	<b>Requirement:</b> Guards are required to be located along open sides of stairs and form a protective barrier not less than 42 inches high.
		<b>Violation:</b> The stairs leading to the office mezzanine are not equipped with guards at least 42 inches high.
6	1003.3.1.1	<b>Requirement:</b> Doors are required to have a height of not less than 80 inches.
		<b>Violation:</b> The two exterior exit doors on the north end of the east wall are reported to have a height of 78 inches.
7	1003.3.3.3	<b>Requirement:</b> Stair riser heights are required to be 7 inches maximum.
		<b>Violation:</b> The stair risers leading to the storage mezzanine exceed 7 inches in height.
8	1003.3.3.11.1	<b>Requirement:</b> Stairs are required to have handrails on each side at a height of not less than 34 inches and not more than 38 inches.
		<b>Violation:</b> The stair handrails do not comply.
9	1003.3.3.11.5	<b>Requirement:</b> Stairs are required to have handrails that return to a wall, guard or walking surface.
		<b>Violation:</b> The stairs do not comply.
10	1005.3.2	<b>Requirement:</b> At least 50% of interior exit stairs serving one adjacent floor and an occupant load of 10 or more are required to be enclosed with fire barriers have a 1-hour fire-resistance rating.
		<b>Violation:</b> None of the stairs leading from the office mezzanine are enclosed with 1-hour fire-resistant fire barriers.
11	1101.2 1105.1	<b>Requirement:</b> At least 50% of public entrances are required to be accessible in accordance with ANSI A117.1. ANSI A117.1 does not permit vertical changes of elevation of more than ¼-inch (A 117.1, 303.2) and swinging doors must have a minimum clear opening width of 32 inches measured between the face of door and stop (A117.1, 404.2.2).
		<b>Violation:</b> Vertical changes in elevation at entrance doors exceed ¼-inch caused by a concrete sidewalk. The clear opening at entrance doors is less than 32 inches.
12	1202.2	<b>Requirement:</b> Enclosed attics are required to have a minimum of 50% of required ventilating area located at the ridge or upper portion of the attic.
		<b>Violation:</b> There is no ridge ventilation for the attic.
13	1604.2 1603.1.1 1603.1.3 1603.1.4 1603.1.5	<b>Requirement:</b> Buildings are required to be designed and constructed to safely support design live, snow, wind and seismic loads without exceeding specified allowable stresses.  <b>Violation:</b> Perimeter 2x8 wall studs spaced 24 inches on center are not designed to safely support the design loads.

Item No.	Code Section	Code Requirement/Observed Violation
14	Same as Item 13	<p><b>Requirement:</b> Same as Item 13</p> <p><b>Violation:</b> Double 2x12 LVL headers supporting the load over the 12' and 14' wide doors are not designed to safely support the design loads.</p>
15	Same as Item 13	<p><b>Requirement:</b> Same as Item 13</p> <p><b>Violation:</b> Connections of the double 2x12 LVL header to the studs around the building perimeter are not designed to safely support the design loads.</p>
16	Same as Item 13	<p><b>Requirement:</b> Same as Item 13</p> <p><b>Violation:</b> The 6x8 Glulam jamb posts and connections to the posts supporting the loads at the garage door openings are not designed to safely support the design loads.</p>
17	Same as Item 13	<p><b>Requirement:</b> Same as Item 13</p> <p><b>Violation:</b> Means of lateral load transfer from the roof diaphragm or shear walls are not designed to safely support the design loads.</p>
18	Same as Item 13	<p><b>Requirement:</b> Same as Item 13</p> <p><b>Violation:</b> Portions of the west mezzanine framing, including the double 2x12 headers and stud wall supporting the cantilevered section, are not designed to safely support the design loads.</p>
19	Same as Item 13	<p><b>Requirement:</b> Same as Item 13</p> <p><b>Violation:</b> Double 2"x10" header framing between the lally columns is not designed to safely support the design loads.</p>
20	Same as Item 13	<p><b>Requirement:</b> Same as Item 13</p> <p><b>Violation:</b> The concrete floor slab supporting lally columns is not designed to safely support the design loads.</p>
21	Same as Item 13	<p><b>Requirement:</b> Same as Item 13</p> <p><b>Violation:</b> One line of 2x4 bracing for the prefabricated roof trusses is not continuous, as required by the truss manufacturer's specification.</p>
22	Same as Item 13	<p><b>Requirement:</b> Same as Item 13</p> <p><b>Violation:</b> Four braced lines of the prefabricated roof trusses do not address wind uplift conditions.</p>
23	1805.4.1	<p><b>Requirement:</b> Footings are required to be designed so that the allowable bearing capacity of the soil is not exceeded and differential settlement is minimized.</p> <p><b>Violation:</b> Strip footings that support concentrated loads at garage door posts have not been designed to minimize long term differential settlement.</p>

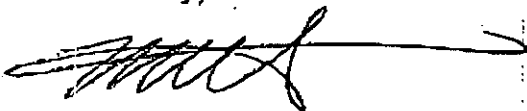
Item No.	Code Section	Code Requirement/Observed Violation
24	2304.11.1 2304.11.2 2304.11.2.6	<p><b>Requirement:</b> Wood posts or columns supporting permanent structures and supported by a concrete slab or footings in direct contact with the earth are required to be protected from decay by either naturally durable material or preservative-treatment.</p> <p><b>Violation:</b> Glulam Posts (6x8) spaced approximately 8 feet on center along the perimeter of the building are supported by a concrete footings and are in direct contact with the earth. This wood is not naturally durable nor treated with a preservative. These posts also show signs of decay.</p>
25	2304.11.1 2304.11.2 2304.11.2.2	<p><b>Requirement:</b> Wood framing members less than 8 inches from exposed earth are required to be protected from decay. Such wood shall be either naturally durable or preservative-treated.</p> <p><b>Violation:</b> Exterior framing studs (2x8) spaced 24-inches on center along the perimeter of the building is within 8 inches of exposed earth. This wood does not appear to be naturally durable nor treated with a preservative.</p>
26	ECCCNYS 101.3	<p><b>Requirement:</b> Energy Conservation Construction Code of New York State (ECCCNYS). New Buildings are required to comply with the building envelope, mechanical systems, and light and power systems provisions of the ECCCNYS unless otherwise exempted.</p> <p><b>Violation:</b> Based on the assumption that the building is heated, there is no evidence that the building envelope complies with the ECCCNYS. There is no evidence that mechanical systems or light and power systems comply with the ECCCNYS.</p>
27	FCNYS 2210.4.3	<p><b>Requirement:</b> Fire Code of New York State (FCNYS). Where Class 1 liquids or LP-gas are stored or used within a building having a basement or pit wherein flammable vapors could accumulate, the basement or pit is required to be provided with mechanical ventilation at a rate of 1.5 cubic feet per minute per square-foot to prevent the accumulation of flammable vapors.</p> <p><b>Violation:</b> The building should be evaluated to determine whether Class 1 liquids or LP-gas will be stored or used and whether the required mechanical ventilation is provided.</p>
28	Education Law 7209 7307	<p><b>Requirement:</b> No official of the state, or of any city, county, town, or village charged with the enforcement of laws, ordinances or regulations shall accept or approve any plans or specifications that are not stamped with the seal of an engineer or architect.</p> <p><b>Violation:</b> It appears that there are no plans or specifications of the subject building that have been stamped with the seal of an engineer or architect.</p>

The Honorable Joseph Gross  
Page 2  
May 17, 2010

As you may be aware, Department of State regulations (19 NYCRR Part 1205) include procedures under which provisions or requirements of the Uniform Code can be varied or modified under certain circumstances. However, the applicable statute (Executive Law section 381) provides that a variance cannot be granted if doing so would "substantially affect adversely" the Uniform Code's provisions for health, safety, and security. Many of the violations identified in the enclosed review are of such a nature that it is extremely unlikely that a variance or modification of the underlying code provisions could be granted under any circumstances. However, if the Village believes that certain of the other violations identified in the enclosed review are of such a nature that the underlying code provisions could be varied and modified without a substantial adverse effect on the code's provisions for health, safety, and security, the Village could consider applying for a variance with respect to such code provisions. Please note, however, that until and unless a variance is granted, compliance with all applicable code provisions is required, and all code violations (including but not necessarily limited to those identified in the enclosed review) must be corrected.

If you have questions regarding this matter, please contact Mr. Mark Blanke, Assistant Director for Technical Services, at 518-474-4073.

Sincerely,



Ronald E. Piester, AIA, Director  
Division of Code Enforcement and Administration

REP/jj

Enc.

cc: Robert Smith, DCEA Kingston