ARTICLE 10. PRECAUTIONS DURING BUILDING OPERATIONS

Sub-Article 1. Storage of Materials

(9.1.1). §C26-551.0 Loading of Structures During Construction or Demolition.-It shall be unlawful to load or cause to be loaded any structure, or any temporary support or scaffolding or any sidewalk or sidewalk shed or bridge or any device or equipment, during construction or demolition, in excess of its safe carrying capacity.

Sub-Article 2. Protection of the Public and Workmen

(9.2.1). §C26-552.0 Enforcement of Measures for Protection of the Public and Workmen.-

a. The superintendent shall notify the owner of the structure affected of any failure to comply with any provisions of sections C26-551.0 through C26-560.0. Unless the owner so notified proceeds within twenty-four hours to comply with the orders of the superintendent, the superintendent shall have full power to correct the violation. All expenses incurred therefor shall become a lien on the property which may be enforced as provided in section C26-204.0. b. The superintendent shall also notify the owner of the structure affected of any failure to comply with any provisions of the labor law and industrial code which affect the safety of persons during the construction or demolition of structures as defined in this title. Unless the owner so notified proceeds within twenty-four hours to comply with the orders of the superintendent, the superintendent shall have full power to correct the violation. All expenses incurred therefor shall become a lien on the property which may be enforced as provided in section C26-204.0. This power of the superintendent to enforce shall be; in addition to the powers conferred upon him by other provisions of law.

(9.2.2). §C26-553.0 Responsibility of Employees and Other Persons for Protection of the Public and Workmen.-

- a. It shall be unlawful to remove or render inoperative any safeguard or sanitary convenience now provided, except where necessary during the actual installation of work or for the purpose of immediately repairing or adjusting such safeguards or conveniences, in which case they shall be immediately replaced. Every person shall be responsible for carrying out all rules which immediately concern or affect his conduct and shall use safety devices furnished for his protection.
- b. When a structure which has connections with a sewer is demolished, all sewer connections shall be sealed off in a manner satisfactory to the borough president.
- **(9.2.3). §C26-554.0 Guarding Machinery.-**All dangerous moving parts of machines shall, where practicable, be adequately guarded.
- (9.2.4). §C26-555.0 Construction and Maintenance of Equipment and Safeguards.-All devices or equipment which are used in connection with the performance of work and regulated by this article, shall be constructed, installed and maintained in a substantial manner and so operated as to give proper protection to persons and shall not be removed, altered, weakened, or rendered inoperative so long as they are needed or in use, except as provided in section C26-553.0, unless so ordered by a person in responsible charge of the operation.
- **§C26-555.1 Protection of Floor Openings.-**All floor openings within a building in the course of construction shall be enclosed or fenced in on all sides by a barrier of suitable height, except on those sides which may be used for the handling of materials hoisted through such openings, or at which stairs or ladders land; provided, that such sides, other than landings, shall be guarded by

an adjustable barrier not less than three nor more than four feet from the floor and not less than two feet from the edge of such opening.

§C26-555.2 Escape Hatches Required.-

- a. Where salamanders or other heating equipment are used to provide temporary heating during the placing of concrete for a floor, an escape hatch shall be provided from the floor where the concrete is being placed, which shall extend through at least one story immediately below such floor. The escape hatch shall be located as near to the center of the building as practical.
- b. The escape hatch shall be constructed with at least two ladders enclosed in a metal shield. The ladders shall extend from a distance of 3 feet above the floor under construction to at least two stories below unless such floor is less than two stories above the lowest floor. The metal shield shall enclose the ladders on all sides from the top of the floor where the concrete is being placed to at least the top of the floor next below.
- c. The inside dimensions between faces of the shield shall be not less than 3 feet 8 inches.
- d. The space between the shield and the perimeter of the opening in the floor under construction and also between the shield and the perimeter of the opening in the floor next below, shall be decked over with two-inch or heavier planking covered with plywood or sheet metal so as to make the decking smoke tight. At the termination of the ladders two floors below the floor under construction, the opening in the floor shall be covered completely with two-inch planking or other material of equivalent strength.
- e. At least one fire extinguisher of a two gallon capacity shall be provided at the floor where salamanders or other heating equipment are used. The extinguishers shall be readily accessible.

(9.2.5). §C26-556.0 Sizes and Stresses of Materials Used for Protection of the Public and Workmen.-

- a. The sizes mentioned in this article are minimum requirements, except that lumber sizes are nominal or commercial sizes before dressing. Where wood is specified in this article, members of iron, steel or other material of equivalent strength, rigidity and suitability may be substituted.
- b. Where sizes are not specifically mentioned in this article, the equipment and safeguards when of a temporary nature and not subjected to serious shock may be designed using such stresses as may be approved by the superintendent, but at most thirty-three percent above the stresses provided in this title for similar material when used in permanent structures.
- c. Sizes governing ladders and scaffolding shall be as specified in the industrial code rules relating to the erection, repair or demolition of buildings.
- (9.2.6). §C26-557.0 Protections for Sidewalks.-Whenever a structure is to be constructed to exceed forty feet in height above the curb or whenever a structure more than twenty-five feet in height above the lowest point of the curb, is to be demolished, unless the street is officially closed during the construction or demolition, the owner shall erect and maintain safeguards during the period, as defined below, of such work as follows:

(9.2.6.1). 1. Sidewalk Sheds Required.-

(a) If the structure is to be erected to a height exceeding forty feet above the curb, or if the structure to be demolished is more than twenty-five feet in height above the curb, then if the horizontal distance from the structure to the inside edge of the sidewalk, or to the inside edge of a temporary sidewalk erected by permission of the local authority having jurisdiction, is equal to one-half or less of the height of the structure, a substantial

sidewalk shed shall be constructed over the sidewalk or temporary sidewalk in front of the structure.

(b) Regardless of the horizontal distance from the structure to sidewalk or temporary sidewalk, sidewalk sheds of adequate dimensions shall be erected when building materials are being moved over the sidewalk by means of derrick, hoist or chute. The extent of such sidewalk sheds shall be as required by the superintendent.

(9.2.6.1.1). 2. Design of Sidewalk Sheds.-

- (a) Sidewalk sheds, where required, shall extend the entire length of the sidewalk in front of the structure, except that where construction work or demolition work on a structure erected before January first, nineteen hundred thirty-eight, involves only a portion of the structure, the superintendent shall prescribe the extent of sidewalk shed protection required.
- (b) Such sidewalk shed shall be capable of sustaining safely a minimum live load of one hundred fifty pounds per square foot, but if such sidewalk shed is used for overhead storage of material, it shall be capable of sustaining safely a minimum live load of three hundred pounds per square foot. The members of the sidewalk shed shall be so connected, and such adequate bracing, shall be provided as may be necessary to resist the displacement of members or the distortion of the framework. The deck of the shed shall be built tight and of ample width, and where deemed necessary by the superintendent, shall extend over the entire width of the sidewalk, except for clearances of two feet from the building line and one foot from the curb. Such shed may extend beyond the curb to such extent as may, on the recommendation of the superintendent, be approved by the local authority having jurisdiction. If posts supporting the deck of the shed are placed beyond the curb, such posts shall be protected from displacement.

(9.2.6.1.2). 3. Protection of Ends and Sides of Sidewalk Sheds.-

- (a) The outer side and ends of the deck of the shed shall be provided with substantial railings and toe boards, except that, in connection with the demolition of a structure originally more than twenty-five feet in height, or in connection with the erection of a structure which is to exceed seventy-five feet in height, the outer side and ends of the deck of the shed shall be provided with a substantial vertical enclosure, at least forty-two inches high, of boards, laid close, or of galvanized wire screen at least No. 16 steel wire gage, and of a mesh which will reject a ball five-eighths of an inch in diameter. Temporary openings shall be permitted in the railing or enclosure for handling material.
- (b) With the consent of the owners of the adjoining property, the deck and protective guards of the sidewalk shed shall be extended parallel with the curb at least five feet beyond the ends of the face of the structure, or a protection the full width of the shed extending upward at an angle of forty-five degrees from the ends of the deck and outward a horizontal distance of at least five feet beyond the ends of the face of the structure. Such sloping protection shall be constructed with substantial outriggers, bearing on and securely attached to the deck of the shed. The decking of this latter protection shall be of closely laid boards or galvanized wire screen of at least No. 16 steel wire gage and with a mesh which will reject a five-eighths-inch ball. When such sloping end protection is installed, it shall take the place of the railing or enclosure required at the ends of the shed deck.
- (9.2.6.1.3). 4. Pedestrian Passageways under Sidewalk Sheds.-Adequate passageways on the sidewalk shall be provided for pedestrians. Unless the top deck of the sidewalk shed is built

solidly against the face of the structure in such a manner that no material can fall on the sidewalk, the side of the sidewalk shed toward the structure shall be sealed in a substantial manner with wood or other suitable material to a minimum height of eight feet above the sidewalk, except for such sliding gates, or gates swinging inward, as may be necessary for the proper prosecution of the work.

- (9.2.6.1.4). 5. When Sidewalk Sheds Are to be Erected.-
 - (a) When a sidewalk shed is required in connection with the erection of a structure the construction of the structure shall stop at forty feet above the curb, unless and until such sidewalk shed has been completed. Such shed shall remain in place until the structure is enclosed, sash is glazed above the second story, masonry is cleaned down and all outside handling of material above the second story is completed.
 - (b) When a sidewalk shed is required in connection with the demolition of a structure, such sidewalk shed shall be completed before performing any work of demolition.
- (9.2.6.1.5). 6. Lighting of Sidewalk Sheds.-The under side of the sidewalk shed shall have sufficient natural or artificial light to insure safety, which light shall be maintained at all times.
- (9.2.6.2). 7. Fences Permitted in Lieu of Sidewalk Sheds.-If the structure to be demolished is more than twenty-five feet high above the curb, or if the structure is to be erected to a height exceeding forty feet above the curb, and if the horizontal distance from the structure to the inside edge of the sidewalk or relocated temporary sidewalk is between one-half and three-quarters of the height of the structure, a shed shall be constructed over the sidewalk as described above, or, in place of such shed, a substantial fence shall be constructed along the inside edge of such sidewalk or relocated temporary sidewalk or along the inside edge of the roadway, if permission to close the sidewalk has been granted by the superintendent. Such fence may be constructed outside of the curb to such extent as may on the recommendation of the superintendent, be approved by the borough president, but in any event, such fence at its ends shall be returned to within two feet of the building line. Such fence shall be at least six feet high of wood or other suitable material and shall be built solid for its entire length, except for such openings provided with sliding gates, or gates swinging inward, as may be necessary for the proper prosecution of the work.
- (9.2.6.3). 8. Railings Permitted in Lieu of Sidewalk Sheds or Fences.-
 - (a) If the structure to be demolished is more than twenty-five feet high above the curb, or if the structure is to be erected to a height exceeding forty feet above the curb, and if the horizontal distance from the structure to the inside edge of the sidewalk or relocated temporary sidewalk is three-quarters of the height of the structure or more, a shed or fence shall be constructed as described above, or in place of such shed or fence, a substantial railing shall be constructed along the inside edge of such sidewalk or relocated temporary sidewalk, or along the inside edge of the roadway, if permission has been granted to close the sidewalk. Such railing at its ends shall be returned to within two feet of the building line and shall be continuous for its entire length, except for such openings, provided with movable bars as may be necessary for the proper prosecution of the work.
 - (b) At the discretion of the superintendent, thrustout platforms or other suitable protections may be substituted for sidewalk sheds, fences and railings during alterations or under other conditions which in his judgment permit of such substitution. It shall be unlawful to use such thrustout platforms or other protections for the storage of material.

(9.2.7). §C26-558.0 Foot Bridges.-When a foot bridge is used to support the temporary sidewalk in front of a structure during construction or demolition, it shall be substantially built to sustain safely a minimum live load of one hundred fifty pounds per square foot. Such foot bridge shall be provided with hand-rails on both sides and shall be provided at both ends with substantial steps with hand-rails or with inclined ramps with hand-rails and with cleats to prevent slipping.

(9.2.8). §C26-559.0 Catch Platforms.-

- a. During the demolition of the exterior walls of a structure, originally more than seventy feet in height, catch platforms shall be erected along the street fronts and over public passageways. Such catch platforms shall be erected and maintained not more than three stories below the story from which the exterior walls are being removed until such demolition has progressed to within three stories of the ground level. They shall be constructed of planking laid close without openings between the planks or between the plank and the wall. The outside edge of the platforms shall be at least five feet horizontally from the wall of the structure and shall be higher than the inside edge. The supports shall consist of yellow pine or spruce outriggers three inches by twelve inches, placed on edge, and secured against turning, spaced not more than ten feet apart. Each outrigger shall have ample bearing on the structure and the inside end shall be adequately secured. The planking shall be at least two inches thick. Plank shall lap the supports at least one foot at each end or shall be secured to the supports to prevent displacement.
- b. A fence of galvanized wire netting of at least No. 18 steel wire gage and with mesh which will reject a ball five-eighths of an inch in diameter or of one-inch boards laid close shall be provided along the outer edge and ends of the catch platform. Such fence shall be supported by substantial posts not more than ten feet apart, shall be pitched outward at an angle of approximately forty-five degrees from the horizontal and shall be at least forty-six inches high, measured along the slope of the fence, above the planking of the catch platform with which the fencing shall make a tight connection.
- c. Catch platforms may be constructed of other materials and following other designs, if they provide strength and security from falling material equal to that provided by the details specified above, and are approved by the superintendent.
- d. It shall be unlawful to use catch platforms for the storage of materials.
- (9.2.9). §C26-560.0 Riding on Hoisting Apparatus Prohibited.-It shall be unlawful for any person to ride on any platform hoist or on any elevator car which is not equipped and operated as required for carrying passengers or for any person to ride on any concrete bucket, derrick, or other hoisting apparatus, or on loads.
- **§C26-560.1. Sidewalk Sheds; Fences; Railings, etc.-**It shall be unlawful to construct any sidewalk shed, fence, railing, footbridge, catch platform, builder's sidewalk shanty or an over the sidewalk chute without a permit therefor. The fee for such permit shall be ten dollars except that in the case of a sidewalk shed, such fee shall be ten dollars for the first twenty-five feet or fraction thereof in the length of such shed plus two dollars for each additional twenty-five feet or fraction thereof.

Sub-Article 4. Protection of Adjoining Property

(9.4.1). §C26-561.0 Protection of Skylights, Roofs and Roof Outlets.-

a. When any structure is to be carried above the roof of an adjoining structure, proper means for the protection of the skylights, roofs and roof outlets of such adjoining building shall be provided, at his own expense, by the person constructing or causing such structure to be

erected, provided he is granted the necessary license to enter the adjoining premises for that purpose.

- b. The owner and tenants of adjoining premises shall allow the person causing a structure to be erected adjacent to a property line to place protections, hanging scaffolds and other usual equipment suspended over the adjoining premises provided every reasonable care is exercised to avoid interference with the use of the adjoining premises.
- c. An owner of adjoining premises who shall fail to afford any license to enter thereon referred to in section C26-387.0 and this section shall cease to be entitled to any of the benefits otherwise accruing to him under any of the provisions of sections C26-383.0 through C26-390.0, and sections C26-561.0 through C26-570.0.
- (9.4.2). §C26-562.0 Regulation of Lots.-The regulation of lots in conformity with the street on which they are situated, shall be calculated at curb level. Where a lot has more than one street frontage, and is so situated that the street frontages intersect, the curb of the longest street frontage shall be used. When the street frontages do not intersect, the curb along each frontage shall be used to one-half the depth of the lot between street frontages. A lot, as referred to in this section, shall mean a parcel of land twenty-five feet by one hundred feet, or less, in one ownership whether adjacent land be in the same or other ownership; but, for this purpose, no land in the same ownership may be divided into lots smaller than twenty-five feet by one hundred feet.

(9.4.3.1). §C26-563.0 Retaining Walls.-

- a. Retaining Walls to Conform to Street Regulation.-When the regulation of a lot, in conformity with section C26-562.0, requires the ground on such lot to be raised or lowered and kept higher than the ground of an adjoining lot, provided the ground of such adjoining lot is not maintained at a grade lower than in conformity with the street or streets on which it is situated, any necessary retaining wall shall be made and maintained jointly by the owners of the land on each side and shall stand one-half upon the land of each owner, unless otherwise agreed to by both owners.
- (9.4.3.2). b. Retaining Walls to Support Adjoining Earth.-Where an excavation has been made or a fill placed on any lot within the legal grade required by section C26-562.0, and the adjoining land is maintained at a grade in conformity with or lower than the street or streets on which it is situated and is without permanent structures other than frame sheds or similar structures, any retaining wall which shall be necessary to support the adjoining earth shall stand equally upon the lot of each owner and shall be made and maintained jointly by the owners of the land on each side, unless otherwise agreed to by both owners.
- (9.4.3.3). c. Surplus Retaining Wall.-Where any owner shall insist on maintaining his ground either higher or lower than the legal regulation as provided in section C26-562.0, the surplus retaining wall, which may be necessary to support such height or provide for such excavation, shall be made and maintained at the sole expense of such owner, and such additional thickness as may be required shall be built on the land of such owner.
- (9.4.3.4). d. Construction of Retaining Walls.-All retaining walls required under this section shall be constructed in accordance with the requirements of sections C26-412.0 through C26-467.0, or sections C26-1455.0 through C26-1555.0, and shall be provided with a substantial fence or guard rail at least four feet high, on the top thereof.
- (9.4.3.5). e. Removal of Retaining Walls.-Any retaining wall erected or provided under section C26-384.0, or sections C26-561.0 through C26-570.0, standing partly on the land of

each owner, may be removed by either owner when the necessity for such retaining wall ceases to exist.

(9.4.4). §C26-564.0 Maintenance and Repair of Partition Fences and Retaining Walls.-

- a. Partition fences, unless erected under special agreements, shall be so built that the dividing line between the properties shall run through the center of the fence and such fences shall be built and maintained at the joint expense of the owners of the land on each side.
- b. If any person whose duty it is jointly to maintain or repair any partition fence, or retaining wall according to section C26-563.0, shall neglect to do so, or to join in doing so within six days after a written request has been made by the owner of the adjoining ground, the owner of such adjoining ground may make the necessary repairs and may recover from such person a proportionate share of the cost of the repairs, with costs, in any court having jurisdiction, except that where the replacement of a partition fence removed by one owner is necessary for safety, the person removing the fence shall replace it at his own cost.
- (9.4.5). §C26-565.0 Disputes.-In case of any dispute between parties as to what part of the expense shall be borne by either of them, for building or maintaining any partition fence or wall, and in all cases of dispute concerning the sufficiency of any fence or wall, the dispute shall be settled by a board of survey similar to that provided for in sections C26-193.0 through C26-201.0.
- (9.4.6). §C26-566.0 Wall Openings.-It shall be unlawful to construct wall openings in a lot line wall within twelve feet vertically of the top of any chimney or flue, carrying combustion products, on an adjoining existing structure unless such openings, located on the lot line, are distant at least ten feet in a horizontal direction from the top of such chimney or flue. Fixed fire window assemblies having a fire resistive rating of three-quarters of an hour shall not be considered wall openings within the meaning of this section.
- (9.4.7). §C26-567.0 Cellar Drainage.-During the course of construction of the foundation walls of any structure, provisions shall be made to prevent the accumulation of water in the excavation or cellar to the injury of the foundation or adjoining property.

(9.4.8.1). §C26-568.0 Protection of Party Walls During Demolition.-

- a. Party Walls.-When a structure containing a party wall is being demolished, the owner of the demolished structure shall, at his own expense, bend over the anchors at the beam ends in the standing wall and shall brick in all open beam holes.
- (9.4.8.2). b. Party Wall Fire Escape Balconies.-No party wall balcony fire exit shall be demolished or removed when such demolition or removal will destroy the full effectiveness of such party wall balconies as means of egress, unless and until the owner of the structure from which the party wall balcony is to be removed has erected or legally obligates himself to erect on the structure to be deprived of a required means of egress, a legal fire escape meeting the requirements of the superintendent.

(9.4.9). §C26-569.0 Enforcement of Provisions for Protection of Adjoining Property.-

The superintendent, in order further to effectuate the purposes of sections C26-383.0 and C26-390.0, and sections C26-561.0 through C26-570.0, shall if requested by the person aggrieved or otherwise notify in writing any owner or tenant of any requirements under any provision of sections C26-383.0 and C26-390.0, and sections C26-561.0 through C26-570.0. If any person, whose duty it is under sections C26-383.0 and C26-390.0 and sections C26-561.0 through C26-570.0, to protect his own or adjoining property, fails to proceed within three days in accordance with such notice and to comply therewith within such reasonable time thereafter as may be allowed by the superintendent, the superintendent may cause the work to be done and the cost of

doing such work shall become a lien against the property recoverable in any court having jurisdiction.

(9.4.10-11.3.13). §C26-570.0 Protection of Chimney Draft and Exterior of Soil and Vent Stacks.-

- a. Whenever any wall or structure is constructed within ten feet of any stack, chimney or flue of any adjoining structure, and whenever such wall or structure is greater in height than such adjoining structure, the owner of such wall or structure shall either:
 - 1. Carry up such stacks, chimneys or flues, either independently or within his own structure, to a height above the level of the roof parapet wall of such higher structure; or
 - 2. Equip such stacks, chimneys or flues with such simple mechanical devices as will ensure up-draft and prevent down-draft. Such devices need only provide such draft as can reasonably be expected, considering the design, construction and physical condition of such stacks, chimneys or flues; except that whenever the higher structure is within three feet of the property line, and extends above the top of such stacks, chimneys or fines, such draft shall be as effective as the draft existing prior to the erection of the higher structure.
- b. The superintendent may waive the provisions of this section when he believes such equipment to be unnecessary. The superintendent shall waive such provisions when a written release, from the owner of such stacks, chimneys or flues to the owner of such higher structure, is filed with him.
- c. Devices used to equip stacks, chimneys or flues, as required in this section shall be of such types as are approved by the board and are prescribed in specific cases by the superintendent. All construction done pursuant to this section shall be approved by the superintendent.
- d. At least ten days before any work is done pursuant to this section, the owner of the higher wall or structure shall notify the owner of the stacks, chimneys or flues of his intention to do such work.
- e. Whenever a structure is of a height greater than that of any adjoining structure, the owner of the structure of greater height may, with the consent of the owner of the structure of lesser height, extend to a level above the parapet of the higher roof, any or all soil, waste and vent stacks above the lower roof and within twenty feet of the common lot line.