

A. INTRODUCTION

The preceding chapters of the EIS discuss the potential for significant adverse impacts to result from the Proposed Action. Where such significant adverse impacts have been identified, pursuant to *CEQR Technical Manual* guidelines, measures are examined to minimize or eliminate the anticipated significant adverse impacts. This chapter provides a description of the measures needed to mitigate identified significant adverse impacts in the areas of hazardous materials and traffic.

B. HAZARDOUS MATERIALS

Human exposure to hazardous material can be reduced or eliminated using proven remedial technologies and/or institutional and engineering controls. Typical hazardous materials mitigation measures include remedial activities (remediation) such as excavation of contaminated soil or the installation of a groundwater pump and treat system. Mitigation also includes institutional and engineering controls that may already be in place or may be inherent to the proposed redevelopment (e.g., paving an area for parking results in a “cap” that prevents direct contact with contaminated soil below). As discussed in Chapter 7, “Hazardous Materials,” there is a potential for adverse impacts during construction activities resulting from the presence of possible subsurface contamination due to historic and existing uses at the Project Site. The ESA reports prepared for the Project Site have identified *recognized environmental conditions* (e.g., hazardous materials and/or petroleum product contamination) that could have the potential to impact the proposed development. Excavation and construction activities on the Project Site could disturb potential hazardous materials and increase pathways for human exposure. However, it is anticipated that impacts would be avoided by performing construction activities in accordance with all applicable regulations related to the removal and/or containment of contaminated soil.

Intrusive activities (construction) at most previously developed urban sites would involve mitigation in the form of proper soil handling and management, preparation and adherence to a site-specific Construction Health and Safety Plan (CHASP) that considers the presence of contaminants, and implementation of a Community Air Monitoring Plan (CAMP) to minimize the creation and dispersion of fugitive airborne dust.

A CHASP and Remedial Action Plan (RAP) have been prepared in accordance with the applicable requirements set forth by the Occupational, Safety and Health Administration (OSHA), NYSDOH, NYCDEP, and any other applicable regulations to address the recognized environmental concerns on-site. The CHASP identifies the possible locations and risks associated with the potential contaminants that may be encountered during construction, and the administrative and engineering controls that would be utilized to mitigate concerns. The RAP addresses the implementation of remedial measures that would be required to safely construct the proposed project on-site. NYCDEP has reviewed and approved the CHASP and RAP for the proposed project. The New York State Department of Environmental Conservation (NYSDEC) must also approve any remedial plans related to spill cleanup.

The following measures would ensure that no significant adverse impact related to hazardous material would occur. Impacted soils in the area of proposed excavation should be removed and disposed of in accordance with all applicable local, state and federal laws. Application of engineering controls, including the use of an impervious medium (i.e., concrete slab foundation, impermeable bituminous asphalt pavement, concrete sidewalks and curbs) and/or a 24-inch soil cover media consisting of clean fill and vegetative topsoil to cap the entire site. The project would include installation of a 20-mil vapor barrier underneath the floor slab and underlain by a sub-slab vapor venting system (that will have that ability to be retrofitted to an active system) to prevent the migration and intrusion of methane gas and potential volatile organic compounds (VOCs) from soils and groundwater at the site and/or the surrounding area into the constructed buildings. Finally, implementation of institutional controls such as a deed restriction may be required to prevent accidental exposure to contaminants.

Due to the presence of VOC, SVOC and metal concentrations above applicable standards at several sampling locations, dust control procedures are recommended during excavation activities to minimize the creation and dispersion of fugitive airborne dust. A CAMP should be developed in accordance with NYSDEC DER-10 Regulations. The CAMP requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated site. The CAMP is intended to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities.

At areas of the Project Site where contaminants are found in excess of groundwater quality standards, the groundwater must be addressed prior to or during redevelopment. Human exposure pathways can be reduced or eliminated during construction and for the future with the Proposed Action by the use of engineering controls and by prohibiting groundwater use for potable purposes in the future; however, at areas with significant concentrations of contaminants in groundwater, remediation may be required prior to construction.

If water would be discharged to a NYCDEP combined sanitary and storm sewer, the water must be sampled for NYCDEP sewer discharge parameters. Based on the above findings, a NYCDEP sewer discharge permit may be required, and prior to discharge into sanitary and combined sewers, sampling, laboratory analysis, and pretreatment of water from this location would be required. A NYSDEC SPDES permit may also be required to discharge into a storm sewer.

Contract documents should identify provisions and a contingency plan for managing, handling, transporting and disposing of non-hazardous petroleum impacted soil and potentially hazardous soil. The Contractor should be required to submit a Materials Handling Plan, to identify the specific protocol and procedures that will be employed to manage the waste in accordance with applicable regulations. At the completion of remedial activities at the Site, a Remedial Action Report, certified by a Professional Engineer or Registered Architect, will be completed to document that the activities identified in the RAP have been completed.

With these precautions in place, development of the proposed Academy site would not have significant adverse impacts related to hazardous materials.

C. TRAFFIC AND PARKING

The Proposed Action's significant adverse traffic impacts are summarized in Chapter 11, "Traffic and Parking." As also described in Chapter 11, there are significant adverse traffic impacts at five different intersections. This chapter analyses feasible mitigation measures to address these traffic impacts. Significant adverse impacts to parking are not anticipated. The proposed 1,800-space accessory

parking facility would generally provide enough capacity to accommodate all of the anticipated demand generated by the proposed Police Academy at 100-percent occupancy; however, between 2 PM and 3 PM a parking shortfall of approximate 97 spaces could occur. As noted in Chapter 11, while this is not considered a significant adverse impact due to the presence of legal on-street parking capacity, this chapter identifies measures to better accommodating the anticipated parking demand in close proximity to the Project Site.

Traffic

As discussed in Chapter 11, the Proposed Action would result in significant adverse traffic impacts at a total of five intersections (three intersections which would be impacted in the AM, and three intersections that would be impacted in the PM) when the Academy is fully staffed and training classes are at their maximum. A traffic mitigation plan was therefore developed to address these impacts. This mitigation plan, summarized in Table 17-1, consists of minor geometric improvements, changes to signal timing and phasing, and changes to curbside parking regulations at impacted intersections.

According to the *CEQR Technical Manual*, a significant traffic impact can be considered mitigated if measures implemented return projected future conditions to what they would have been if the Proposed Action were not in place, or to an acceptable level. For a future No-Build LOS A, B or C, mitigating to mid-LOS D is required (45 seconds of delay for signalized intersection and 30 seconds for unsignalized intersections).

The effectiveness of the proposed traffic plan, in terms of addressing significant adverse impacts that would result from the proposed Police Academy when it is operating at full capacity is shown in Table 17-2. As discussed below, the proposed traffic mitigation measures would fully mitigate the traffic impacts that would occur as a result of the Proposed Action in both the AM (6:00 AM to 7:00 AM) and PM (3:00 PM to 4:00 PM) peak hours. These mitigation measures and their effectiveness are discussed below for each impacted intersection.

College Point Boulevard at 31st Street

The mitigation plan for this intersection would provide a new dedicated 11-foot wide westbound right-turn lane approaching College Point Boulevard by re-striping 31st Street for approximately 200 feet east of the intersection. As such, the westbound approach would have on 11-foot wide left-turn/thru/right-turn lane and a right-turn-only lane. The mitigation plan also calls for changes to signal timing as described in Table 17-1. As shown in Table 17-2, under this mitigation plan, the westbound movement (aggregate) would operate with approximately 44.7 seconds of delay (LOS D) compared to 127.3 seconds of delay (LOS F) under the No-Build condition in the AM peak hour, fully mitigating the project's impact in the AM peak hour.

College Point Boulevard at Roosevelt Avenue (Southside)

The mitigation plan for this intersection would consist of minor signal timing changes in the PM peak hour as shown in Table 17-2. Under this mitigation plan, the northbound exclusive left-turn approach would operate with approximately 139.7 seconds of delay (LOS F) compared to 145.8seconds of delay (LOS F) under the No-Build condition in the PM peak hour.

Ulmer Street and Southbound Whitestone Expressway Service Road

The mitigation plan for this intersection would redesign the Ulmer Street approach as well as modify the cycle length to 120 seconds. As shown in Table 17-1, the Ulmer Street approach would be re-aligned to more efficiently process the traffic movement headed to the Whitestone Expressway on-ramp (presently it is an inefficient right-turn) as shown in Figure 17-1. The approach lanes would be widened to 13 feet each. The proposed configuration is also more efficient for large trucks that try to

make the right turn from Ulmer Street onto the service road (see Figure 17-1). As shown in Table 17-2, with this mitigation plan, the significant adverse impact at the westbound (u-turn) movement in the AM peak hour would be fully mitigated, with the delay declining from 159.2 seconds of delay (LOS F) under No-Build conditions to 44.4 seconds of delay (LOS D) under Build conditions. Also under this mitigation plan, the southbound Ulmer Street movement would operate with approximately 123.3 seconds of delay (LOS F) compared to 128.1 seconds of delay (LOS F) under the No-Build condition in the PM peak hour.

Linden Place and Northbound Whitestone Expressway Service Road

The mitigation plan for this intersection consists of minor signal timing changes in the PM peak hour as shown in Table 17-1. This signal timing adjustment would fully mitigate the significant adverse impact at the eastbound service road approach in the PM peak hour. Under this mitigation plan, the eastbound approach would operate with 85.9 seconds of delay (LOS F), compared to 91.4 seconds of delay (LOS F) under the No-Build condition in the PM peak hour.

20th Avenue and the Southbound Whitestone Expressway Service Road

At the intersection of 20th Avenue and the southbound service road, the proposed Academy would result in the addition of 20 vehicles in the AM peak hour. As shown in Table 11-6, several movements at this intersection operate at LOS E and F under No-Build and Build conditions. Between the DEIS and FEIS, alternate mitigation concepts will be reviewed with NYCDOT for feasibility. Alternative measures that could potentially mitigate the intersection include:¹

- Widening of the Southbound Service Road from 30 feet (three 10 foot lanes) to 33 feet (three 11 foot lanes).
- Introducing an additional phase that permits the westbound left-turn movement along with the southbound right-turn movement. The green time for this phase would be taken from the existing westbound only phase that permits both the thru and left-turn movements.

Should no feasible mitigation plan be developed, this impact would remain non-mitigable.

Parking

As noted in Chapter 11, “Traffic and Parking,” the peak demand at a fully utilized Police Academy with an HOV-restriction of 3-persons per vehicle on recruits would exceed supply by approximately 97 spaces at midday. In order to address this potential exceedance, it is proposed to modify the curbside parking regulations on the periphery of the Project Site along 28th Avenue between College Point Boulevard and Ulmer Street to read “No Standing Except Authorized Vehicles 7 AM to 4 PM Monday thru Friday”. This new regulation would increase supply by approximately 86 spaces (1,900 sq. ft. frontage divided by 22). The intent of this proposed change is to satisfy the anticipated parking demand on a street that is immediately adjacent to the proposed Academy, reducing the anticipated parking shortfall to approximately 11 spaces. It is proposed that this measure be implemented only after the campus becomes fully occupied and the parking garage demand begins to exceed 1,800 spaces. This would minimize the potential demand for on street parking within the quarter-mile study area.

¹ The potential mitigation measures for 20th Avenue and the Southbound Whitestone Expressway Service Road are still being studied.

Table 17-1: Proposed 2014 Traffic Mitigation Measures

Intersection	Approach	No-Build Signal Timing (Seconds) (1)	Proposed Mitigation	
			Mitigation Signal Timing (Seconds) (1)	Description of Mitigation
College Point Blvd. (N-S) @ 31st Ave (E-W)	NB/SB	47.7 (all times)	40.7/47.7	Restripe WB approach for exclusive right-turn only and left-thur-right Transfer 7 seconds from NB / SB phase to EB / WB in AM
	EB/WB	29.7 (all times)	36.7/29.7	
	NB + LT	12.6 (all times)	12.6 (all times)	
College Point Blvd. (N-S) @ Roosevelt Ave. (E-W)	NB/SB	50/45	50/45	Transfer 1 second from EB/WB phase to NB+LT in the PM
	NB+LT	17/14	17/15	
	NB+LT (cl)	13/16	13/16	
	EB/WB	40/45	40/44	
Ulmer Street (N-S) @ Southbound Service Road (WB) & U-Turn (WB)	SB	27 (all times)	37/44	Change Signal Cycle length from 90 seconds to 120 seconds Reconfigure the SB Ulmer Street approach of this intersection as shown in Figure 17-1
	WB	36 (all times)	43/38	
	WB (U-Turn)	27 (all times)	40/38	
Linden Place (NB/SB) @ Northbound Service Road (EB)	NB/SB	29 (all times)	29/27	Transfer 2 seconds from NB / SB phase to EB in PM
	NB+LT	23 (all times)	23 (all times)	
	EB	38 (all times)	38/40	

Notes:

(1) Signal timings shown indicate green plus yellow (including all-red) for each phase. AM/PM

n/c - no change.

(cl) - clearance phase.

ped. - pedestrian phase.

Table 17-2a, 2014 AM Mitigation Traffic Conditions

SIGNALIZED INTERSECTIONS	LANE GROUP	NO-BUILD AM PEAK HOUR			BUILD AM PEAK HOUR			MITIGATION AM PEAK HOUR			
		V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	
		RATIO	(sec.)		RATIO	(sec.)		RATIO	(sec.)		
College Point Boulevard											
College Point Blvd. (N-S) @ 31th Ave. (E-W)	EB-LTR	0.65	34.6	C	0.65	34.6	C		0.49	25.4	C
	WB-LTR	0.54	30.9	C	1.18	127.3	F	*	0.87	44.7	D
	WB-R								0.85	44.8	D
	NB-L	0.46	12.2	B	0.47	12.3	B		0.57	19.0	B
	NB-T	0.23	8.2	A	0.26	8.4	A		0.30	12.1	B
	SB-L	0.04	13.1	B	0.04	13.1	B		0.05	17.3	B
	SB-T	0.35	15.8	B	0.35	15.8	B		0.43	21.0	C
Ulmer Street											
Ulmer St. (N-S) @ Whitestone Expressway Southbound Service Road (WB)	WB-TR	0.63	27.4	C	0.74	30.2	C		0.80	44.0	D
	SB-R	1.12	103.1	F	1.12	103.6	F		1.09	103.0	F
	Service Road U-Turn	WB-TR	0.84	43.1	D	1.25	159.2	F	*	0.80	44.4

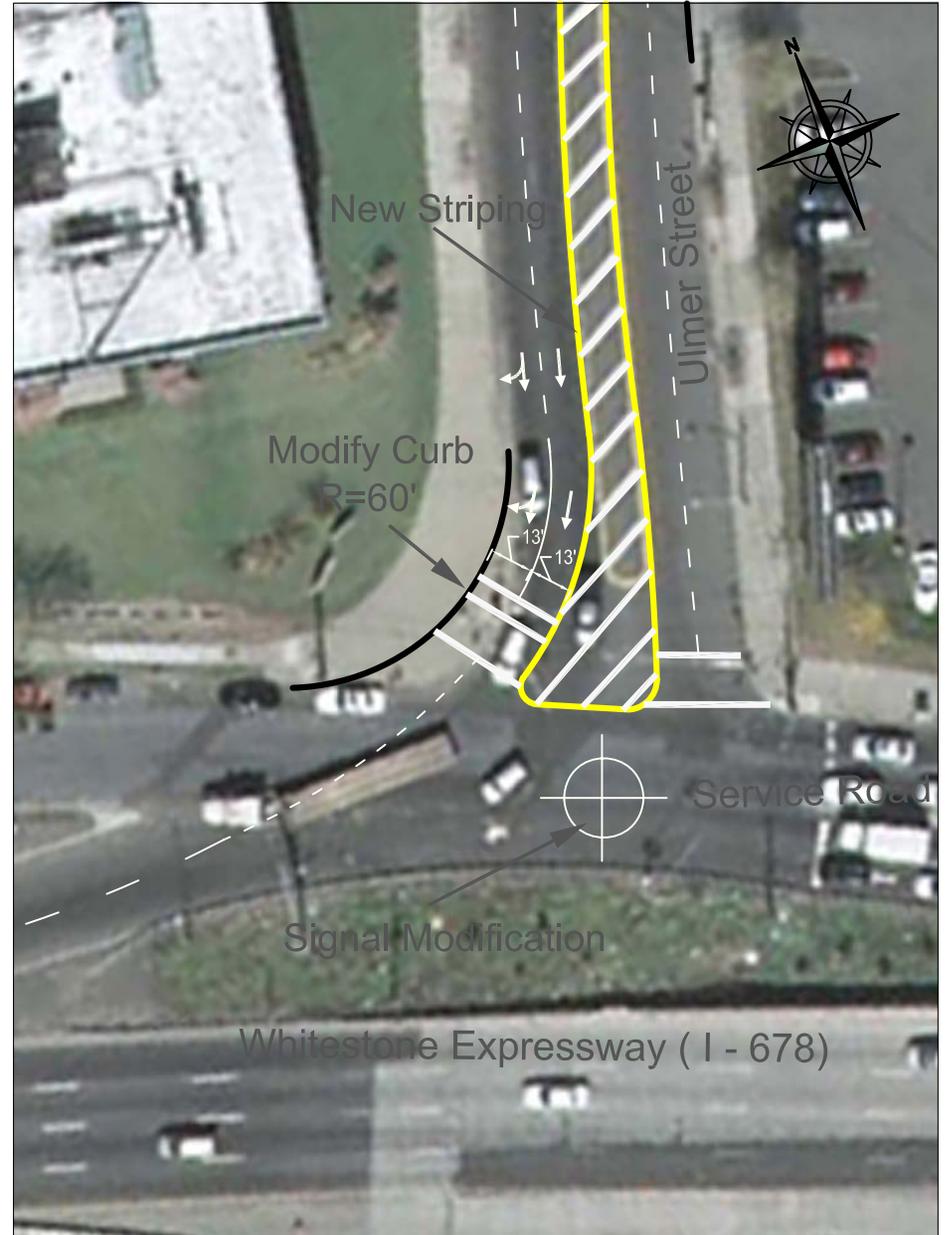
Table 17-2b, 2014 PM Mitigation Traffic Conditions

SIGNALIZED INTERSECTIONS	LANE GROUP	NO-BUILD PM PEAK HOUR			BUILD PM PEAK HOUR			MITIGATION PM PEAK HOUR			
		V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	
		RATIO	(sec.)		RATIO	(sec.)		RATIO	(sec.)		
College Point Boulevard											
College Point Blvd. (N-S) @ Roosevelt Ave. (E-W) (North Side)	WB-LTR	0.25	29.7	C	0.25	29.7	C		0.26	30.5	C
	NB-L	0.69	41.2	D	0.70	43.1	D		0.69	41.4	D
	NB-T	0.40	14.2	B	0.40	14.8	B		0.39	13.7	B
	SB-TR	0.68	37.1	D	0.72	38.5	D		0.72	38.5	D
College Point Blvd. (N-S) @ Roosevelt Ave. (E-W) (South Side)	EB-LTR	0.76	41.7	D	0.76	41.7	D		0.78	43.4	D
	NB-L	1.15	145.8	F	1.18	158.5	F	*	1.13	139.7	F
	NB-TR	0.86	38.1	D	0.86	38.3	D		0.84	36.5	D
	SB-T	0.59	35.0	C	0.62	35.7	D		0.62	35.7	D
Ulmer Street											
Ulmer St. (N-S) @ Whitestone Expressway Southbound Service Road (WB)	WB-TR	0.55	25.8	C	0.56	26.0	C		0.70	43.6	D
	SB-R	1.18	128.1	F	1.66	317.0	F	*	1.16	123.3	F
	Service Road U-Turn	WB-TR	0.76	38.2	D	0.80	40.6	D		0.73	44.8
Linden Place											
Linden Pl. (N-S) @ Whitestone Expressway Northbound Service Road (EB)	EB-LT	1.12	94.6	F	1.22	135.4	F	*	1.10	85.9	F
	EB-R	0.26	21.3	C	0.26	21.3	C		0.25	19.7	B
	NB-T	0.73	35.7	D	0.73	35.8	D		0.80	40.8	D
	SB-L	0.79	38.6	D	0.80	38.9	D		0.83	43.2	D
	SB-T	0.33	13.0	B	0.30	12.7	B		0.32	13.9	B

Key: * Impacted intersection under With-Action Conditions (asterisk, shading)



Existing Conditon



Proposed Mitigation

D. NOISE

As noted in Chapter 13, “Noise,” significant adverse impacts are projected for the Fairfield Inn west of the site and the All Nations Church and Christian Gospel School southeast of the site. These impacts are solely due to the brief periods of up to half an hour when EVOC activities would be in progress. During these periods, noise level increases would range from 9.8 dBA at the church/school to 13.2 dBA for the Fairfield Inn. These projections of impacts are conservative, as the walls along the EVOC area on the roof of the parking area would provide partial shielding. It is unlikely that these temporary noise impacts could be mitigated.

Due to the configuration of building heights and segments, the office, academic, and lodging components of the Proposed Action would be protected from the EVOC noise levels. This is due to their distances of at least 100 feet from the EVOC location as well as the barrier effects of the Central Service and Tactical Village structures that would be higher than the EVOC rooftop by approximately 34 to 60 feet.

As shown in Table 14-9, L_{10} noise levels on the streets around the site would range from 74.9 dBA on Ulmer Street to 81.3 dBA on 31st Avenue. Since the site buildings would be approximately 400 feet from 31st Street, the traffic noise levels on the southern side of the site would be lower and similar to noise levels for the rear of the All Nations Church as discussed in Chapter 14. Based on this information, noise levels at the exterior of the project buildings would generally fall into the 75.0 to 80.0 dBA range, which would place them in the Marginally Unacceptable II CEQR category. The recommended building attenuation would be 35 dBA as shown in Table 14-3. This attenuation can be achieved through installing double-glazed windows on a heavy frame in masonry structures or windows consisting of laminated glass. The *NYC CEQR Technical Manual* states that when maximum L_{10} levels are greater than 70 dBA, alternate means of ventilation should be incorporated into building, and building attenuation is required. All buildings will be serviced by central HVAC systems. Since some of the buildings would be used for office purposes, more refined analyses during final design may indicate that a lower building attenuation value of 30 dBA may be suitable.

E. CONCLUSION

As described above in the discussion of Hazardous Materials, the Project Site contains identified *recognized environmental conditions* (e.g., hazardous materials and/or petroleum product contamination) that have the potential to impact the proposed development. Excavation and construction activities on the Project Site could disturb potential hazardous materials and increase pathways for human exposure. Intrusive activities would involve mitigation in the form of proper soil handling and management, preparation and adherence to a site-specific CHASP and RAP that consider the presence of contaminants, and implementation of a CAMP in accordance with NYSDEC DER-10 Regulations to minimize the creation and dispersion of fugitive airborne dust. With these precautions in place, construction of the proposed Academy would not result in significant adverse impacts to Hazardous Materials.

As discussed above, the Proposed Action would result in significant adverse traffic impacts at a total of five intersections (three intersections which would be impacted in the AM, and three intersections that would be impacted in the PM) when the Academy is fully staffed and training classes are at their maximum. A traffic mitigation plan was therefore developed to address these impacts. As discussed above, the proposed traffic mitigation measures would fully mitigate the traffic impacts that would occur as a result of the Proposed Action in both the AM (6:00 AM to 7:00 AM) and PM (3:00 PM to 4:00 PM) peak hours. Application and implementation of the traffic engineering improvements described above would require the approval of NYCDOT and coordination with NYCDOT would be

undertaken in order to implement the proposed mitigation measures. In the absence of the implementation of the mitigation plans discussed above, a total of up to five signalized intersections (three in the AM and three in the PM) would remain unmitigated. In addition, as discussed above, the significant adverse impact at the intersection of 20th Avenue and the Southbound Whitestone Expressway Service Road is still being studied and efforts to develop a potential mitigation plan will be undertaken with the NYCDOT between the DEIS and FEIS.

As described above in the parking analysis, the proposed mitigation would ensure that the parking shortage is addressed. The proposed modification to the on-street parking regulations would provide new on-street parking capacity on 28th Avenue, immediately adjacent to the Academy, reducing the demand for available on-street parking elsewhere.

Intermittent noise from tire squeal and occasional siren use would result in temporary noise impacts on sensitive uses to the south and west for short periods of time. These impacts are thought to be unmitigable. Potential noise impacts to on-site uses would be mitigated with the appropriate building attenuation value by installing double-glazed windows on a heavy frame in masonry structures or windows consisting of laminated glass.