

Lower Merion

301 East Montgomery Ave.

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School District

Ardmore, PA 19003-3399

July 23, 2019

Mr. Christopher Leswing  
Director  
Department of Building and Planning  
Township of Lower Merion  
75 E. Lancaster Avenue  
Ardmore, PA 19003

**RE: Township Zoning Code Update  
Draft 3.0 dated July 19, 2019  
Building Height for Institutions (school buildings)**

Dear Chris:

Thank you for the opportunity to discuss some of LMSD's observations regarding Draft 3.0 (dated July 19, 2019) of the proposed zoning code update during the July 22, 2019 Planning Commission Meeting. Fred Fromhold and I both appreciate the ability to present specific items to the Township for review and consideration.

There are a number of items in Draft 3.0 that we would like to bring to the Township's attention. In the interest of time, Fred and I did not present all of them at Monday night's meeting. However, you will receive a separate correspondence from Fred with specific language that we feel should be evaluated by Township Staff.

With respect to my comments regarding building height regulations listed in Table 4.4.3.A (Page 107) of Draft 3.0, this letter includes the additional information that I agreed to provide to you.

As I stated on July 22, building height regulations for school buildings should be based on a nominal 15' – 0" floor to floor height in lieu of the "3 stories up to 40 ft." currently listed.

During Monday's meeting, you indicated that Note 4 in the table would allow height in excess of 40 ft. Concerns regarding these provisions are also discussed below.

Lot Occupation (see section "155-3.4 Lot Occupation")		Notes
A Lot Width	none	<p>1 Minimum 30,000 sq.ft. abutting LDR1-LDR3. Minimum 5,000 sq.ft. abutting LDR4, MDR, VC, and TC.</p> <p>The impervious surface standard will match that of the most restrictive abutting zoning district, plus 10%.</p>
Lot Area	See Note (1)	
Impervious Surface	See note (2)	
Primary Frontage	n/a	
<b>Setbacks (see section "155-3.5 Frontages") (3)</b>		<p>2 A lot legally in existence on July 31, 2019, which became nonconforming or within 5% of the maximum impervious surface permitted, to such impervious surface provisions may expand the impervious surface on such lot by up to 5%.</p> <p>In no case shall the impervious surface exceed 47%.</p>
B Front	per abutting district	
C Side	50 ft. (3)	
D Rear	50 ft. (3)	
<b>Building Height (max.) (see section "155-3.3 Building Height")</b>		<p>3 Minimum 20 ft. buffer is required</p>
I Principal	3 stories up to 40 ft. (4)	
<b>Parking (see "Article 8: Parking Standards")</b>		<p>4 Maximum 5 stories where setbacks are increased by an additional 50 ft. for each story above 3 stories. Buildings may be 4 stories or 52 ft. in height without an increased setback along the primary road.</p>

School buildings are typically designed with a finished floor to finished floor height of approximately 14' - 8". This is based on the following:

- Acoustical ceiling grid and tiles at an elevation 10' - 0" above finished floor
- Approximately 2' - 8" between the acoustical tile ceiling and the bottom of the structural steel for the floor above. The volume between the acoustical tile ceiling and the bottom of the building structure is used primarily for heating, ventilation, and air-conditioning (HVAC) distribution ductwork. Code requirements for fresh air (ventilation) in school buildings are dramatically higher than residences and significantly high than office buildings. This requires large ducts to be installed between the ceiling and the building structure
- The building structural steel (horizontal members) and elevated concrete slabs on metal decks require approximately 2' - 0" in height.

As shown in the attached examples (Harriton High School, Lower Merion High School and the proposed New Middle School at 1860 W. Montgomery Avenue), a 3 story school with a low-sloped (“flat”) roof will typically be 44’ - 0” to 45’ - 0” tall.

In order to be consistent with the “3 stories up to 40 ft.” provision in Draft 3.0, schools (both public and private) could be forced to construct 8 foot high acoustical ceiling grids and tiles – which is far less desirable and less advantageous for the learning environment.

The provisions in TABLE 4.4.3.A – including Note 4 – are confusing and impractical for a three story classroom building.

*Building Height (max.)* 3 stories up to 40 ft. <sup>(4)</sup>

*Note 4 – Maximum 5 stories where setbacks are increased by an additional 50 ft. for each story above 3 stories. Buildings may be 4 stories or 52 ft. in height without an increased setback along the primary road.*

Applying these provisions to a three-story classroom building with 10 foot ceilings and a nominal floor to floor height of 15' – 0" (i.e., 45 foot Building Height):

<i>3 stories up to 40 ft.</i>	Creates a nominal floor to floor height of 13' – 4" which is not practical (see above). 15' – 0" nominal is more appropriate.  <b>RECOMMENDATION = 3 stories up to 45 ft.</b>
<i>Maximum 5 stories where setbacks are increased by an additional 50 ft. for each story above 3 stories.</i>	Does not apply to a 3 story classroom building
<i><u>Buildings may be 4 stories or 52 ft. in height without an increased setback along the primary road.</u></i>	The word "or" appears in this provision. The 4 story portion of this sentence would not apply to a 3 story classroom building.
<i><u>Buildings may be 4 stories or 52 ft. in height without an increased setback along the primary road.</u></i>	The word "or" appears in this provision. A 52 foot building height would allow a 3 story classroom building with a nominal floor to floor height of 17' – 4". A 52 foot tall, 3 story building could be constructed without any additional setback along the "primary road".  <u>However,</u> <ul style="list-style-type: none"> <li>• "Primary Road" is not defined in Article 2 – Definitions</li> <li>• This provision does not identify any side or rear yard setback increases that may (or may not) apply if a 3 story building height exceeds 40 feet</li> </ul>

As stated on July 22, building height provisions for INSTITUTIONAL EDUCATION (IE) and INSTITUTIONAL EDUCATION (IE) – PUBLIC SCHOOLS should be based on a nominal "floor to floor" height of at least 15'-0".

It appears that Table 4.4.3.A intended to allow school buildings to be constructed with a maximum of 5 stories – subject to additional setback requirements. However, the Building Height provisions should be revised to provide clearer and more specific regulations for building height (both number of stories and overall height) and additional setback requirements for additional height.



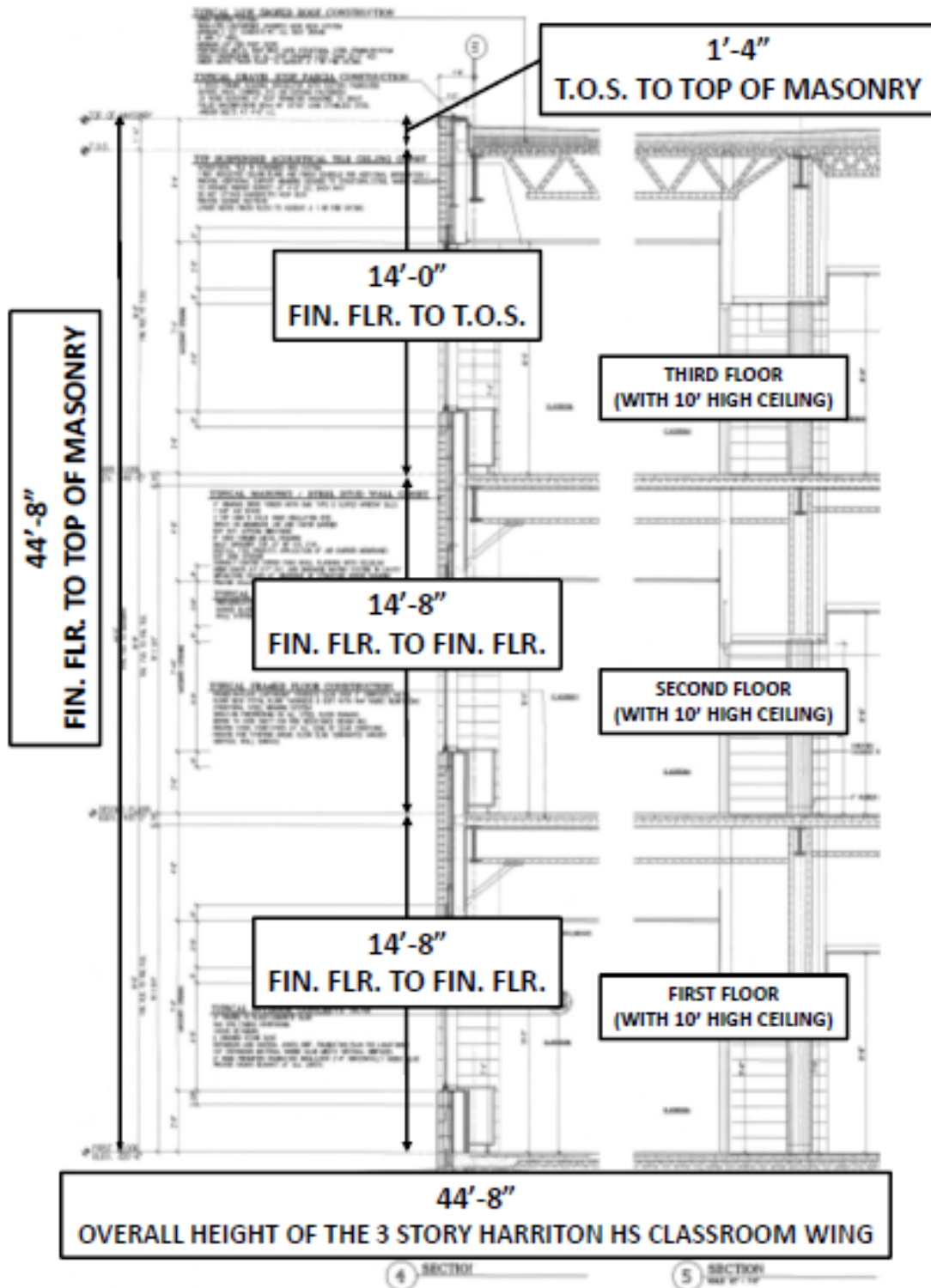
Sincerely,  
LOWER MERION SCHOOL DISTRICT



James K. Lill  
Director of Operations

Enclosures

cc: Robert L. Copeland – Superintendent of Schools – Lower Merion School District  
Fred Fromhold, Esquire – Fromhold, Jaffe & Adams  
Ken Roos – Wisler Pearlstine



**HARRITON HIGH SCHOOL**  
**Drawing A3.11**  
**Building Sections 4 and 5**

