

PLANNING

October 15, 2014

ARCHITECTURE

Mr. Dennis Fields, Planner

ENGINEERING

Planning Division

INTERIORS

City of Bloomington



1800 West Old Shakopee Road

Bloomington, MN 55431-3027

EST. 1915

Project: The Toro Company, Corporate Headquarters
Phase 2, Existing Building Renovation – East
600 West 82nd Street, Bloomington, MN 55420

ABU DHABI

RE: Standard Variance for Exception to Bloomington Code Section 19.52.01
Screening of Roof-Mounted Equipment

ATLANTA

AUSTIN

Mr. Fields:

BENGHAZI

Pursuant to our recent discussion, please accept this letter and its attachments as a request for consideration of a variance to the subject code requirement for screening of roof-mounted equipment.

CHICAGO

COLLEGE STATION

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DENVER

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ISTANBUL

LAS VEGAS

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OMAHA

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SACRAMENTO

SAN ANTONIO

SAN MARCOS

TAMPA

TRIPOLI

WACO

WASHINGTON, DC

Code Requirement

Section 19.52.01: Roof-mounted mechanical equipment installed on buildings constructed within the City shall be screened from view. This requirement shall be deemed satisfied when all parts of the roof-mounted equipment are not visible from ground level observation or at any point on the property, adjacent property, or from adjacent streets”.

Summary of Revisions to Roof-Mounted Equipment

In order to properly upgrade facilities for present and future operations, several modifications have been proposed to the existing heating, ventilating and air conditioning (HVAC) systems. These changes resulted in the following quantitative summary for Phase 2 roof-mounted equipment, all on the east portion of the existing building:

- 19 new roof units, new locations;
- 13 new roof units, replacing existing units, one-for-one;
- 07 existing roof units removed, not replaced.

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The net outcome is: an overall increase of 12 roof units on the east portion of the roof.

Need for Variance

Recently completed Phase 1 of the Corporate Headquarters was a new building, designed to accommodate a significant screening system for enclosure of the roof-mounted equipment.

Phase 2 consists of renovations to the existing building. This existing building has long-served The Toro Company as their center for product development and testing, and will continue to fill this role following the proposed remodeling project.

Unlike Phase 1, the existing Phase 2 building was designed and constructed with a highly efficient structural roof system – it does not have excess capacity available for the support of additional roof-mounted equipment, screening or snow-drift loads. Of particular concern is the potential of imposing snow-drift loads either from roof units or screens that exceed 15'-0" in length. In order to handle such loading, entire bays of the existing roof structure would require reinforcement. Such overall re-structuring of the roof is neither logistically nor financial feasible. *Snow drift loads must be avoided, wherever possible.*

Snow drifting considerations:

- If a roof-mounted unit and its required screen (<15'-0" length) do not create the potential for excessive snow-drift loads, the unit can be installed at or near roof level.
- If a roof-mounted unit or its required screen (>15'-0" length) does create the potential for excessive snow-drift loads, the unit and its required screen will need to be installed on a 4'-0" high stand to eliminate snow drifting. Such elevation will result in roof-mounted equipment more visible from adjacent properties or streets.
- No roof-mounted units or screens >15'-0" in length can be installed at or near roof level. All will need to be elevated.

Further Considerations

Views to roof-mounted equipment from adjacent properties and public ways to the north and west (American Blvd. and Lyndale Ave.) are distant. In most cases, new roof units are screened by existing units. Please refer to attached photographs.

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Any continuous or substantial screen walls erected along the north or west wall of the existing building will also create snow drifting and will require prohibitively extensive reinforcement of multiple structural roof bays.

A few (quantity to be verified) of the proposed roof units will not accommodate integral screens on one or more sides. If required to be screened, such independent screen walls will also need to be elevated 4'-0" above the roof level.

Proposed Variance

- 1) For reasons noted above, eliminate the screening requirement for:
 - New roof units that will need to be elevated due to the addition of screening (screen >15'-0" length);
 - New roof units that are screened by existing units;
 - New roof units that are seen only distantly from American Blvd. or Lyndale Ave.
- 2) Provide screening at new roof units visible from 82nd Street. Refer to attached drawing.
- 3) Paint all new roof units and screens a uniform, light gray, color.

Thank you for considering this variance.

Respectfully submitted,
LEO A DALY

Mark Longworth, Project Manager

Attach Application
Drawing Sheet GI-003, Overall Site Plan
Photographs (from adjacent properties and streets)
Photograph (aerial)