



Application for a Zoning Appeal

To/From BZA
Zoning Section
Dept. of Safety & Inspections
375 Jackson Street, Suite 220
Saint Paul, MN 55101-1806
(651) 266-9008

To/From Planning Commission
Zoning Section
Dept. of Planning & Econ. Dev.
1400 City Hall Annex
25 West Fourth Street
Saint Paul, MN 55102-1634
(651) 266-6589

Zoning office use only

File # 24-039-050

Fee \$462

Tentative hearing date:

June 12, 2024

Appellant Information

Name Daniel L. M. Kennedy
On behalf of Advocates for Responsible Development
Address 3400 E. Lake St., Suite 200
City Minneapolis State MN Zip 55406 Daytime phone 612-728-8080
Email dan@lakestreetlaw.com

Property Location

Project Name Multipurpose Arena at University of St. Thomas
Address 2260 Summit Avenue

Type of Appeal: Application is hereby made for an appeal to the:

- ☒ **Planning Commission**, under the provision of Chapter 61, Section 701, Paragraph C of the Zoning Code, of a decision made by the Planning Administrator or Zoning Administrator on May 10, 2024.
(date of decision)
- ☐ **Board of Zoning Appeals (BZA)**, under the provisions of Chapter 61, Section 701, Paragraph C of the Zoning Code, to appeal a decision made by the Zoning Administrator on _____.
(date of decision)
- ☐ **City Council**, under the provision of Chapter 61, Section 702, Paragraph A of the Zoning Code, of a decision made by the Planning Commission or the Board of Zoning Appeals (BZA). _____
(file number)

Grounds of Appeal: Explain why you feel there has been an error in any requirement, permit, decision or refusal made by an administrative official, or an error in fact, finding, or procedure made by the Planning Commission or BZA.

Please see attached memorandum.

(Attach additional information as needed.)

Appellant's signature

Date 5/20/2024

City agent T. Anderson



MEMORANDUM

TO: Members of the St. Paul City Council
FROM: Advocates for Responsible Development,
info@advocates4rd.org
RE: Multipurpose Arena at 2260 Summit Avenue, File no. 24-029-110
DATE: May 20, 2024

Advocates for Responsible Development (ARD) is appealing the administrative approval of a site plan submitted by the University of St. Thomas (“UST”) to construct an arena seating as many as 6,000 on the part of its St. Paul campus that is south of Summit Avenue and between Cretin Avenue and the Mississippi River (UST’s “South Campus”). ARD urges the City Council to uphold this appeal and to deny approval of this site plan.

What is ARD?

Advocates for Responsible Development is a 501(c)(3) nonprofit organization that was formed in October 2023 after UST announced its plans to build an arena on the South Campus. ARD currently has 280 members, including UST students and faculty members.

What has St. Thomas proposed?

UST wants to build a multipurpose arena that holds up to 6,000 seated attendees; UST has not disclosed the total capacity with standing room. The arena would host approximately 66 home games for men’s and women’s basketball and hockey teams each winter, plus conventions, job fairs, and concerts. The arena could be rented out for high school sports and as an entertainment venue. The 250,000-SF complex would also include two practice basketball courts and a practice hockey rink. Two buildings designed by Cass Gilbert and funded by James J. Hill are being demolished and 256 parking spaces are being removed for the arena.

What is the status of the proposal?

The city issued an environmental assessment worksheet (EAW) that was drafted by UST’s consultants. Despite outcry from ARD members (acting individually; ARD was formed later) about the environmental effects, the city concluded that no environmental impact statement (EIS) would be required. ARD was formed and appealed; the court of appeals heard oral arguments on April 11. Without waiting for the outcome of that case, St. Thomas submitted a site plan, which the city administratively approved on April 4. ARD is appealing that approval to the City Council.¹

¹ ARD requested a copy of the approved site plan on April 4 from a planning department employee who had sent out notifications that the site plan had been approved. ARD also submitted a data practices act request on the same date. The site plan was provided on April 9. When ARD noted that no TDMP was included, a further response provided Exhibit 6 to the site plan on April 11. When ARD noted that none of the other exhibits to the site plan had been provided, a further response was provided on April 12. With ten days to appeal the site plan approval (eleven days due to the tenth day falling on a Sunday), the late production of the site plan has handicapped ARD’s ability to analyze the site plan and provide a thorough response.

What is the setting of the South Campus?

Until 1987, the South Campus was owned by the St. Paul Seminary (which continues to own and occupy the northwest corner of its former campus). The South Campus lies on the bluff above the Mississippi River, which from there flows through St. Paul on its way to the Gulf of Mexico. Mississippi River Boulevard, a designated parkway, lies between the river and the South Campus's western lot line. North of the South Campus is Summit Avenue, another designated parkway, and a residential community that extends north. East of the South Campus are Grand Avenue and Lincoln Avenue. Property on Grand west of Cleveland is owned by UST on the north side and is 100% residential (mostly apartment buildings) on the south except one restaurant at Cleveland Avenue. Lincoln is 100% residential. South of the South Campus is a residential community that extends miles to Ford Parkway.

OBJECTIONS TO THE APPROVAL OF UST'S SITE PLAN

1. THE SITE PLAN SHOULD NOT BE APPROVED BECAUSE IT IS INCONSISTENT WITH UST'S 2004 SPECIAL CONDITIONAL USE PERMIT.

The first bullet point of the City's Site Plan Approval Letter of April 4, 2024 states, "The development is subject to the existing Campus SCUP including maximum heights and minimum setbacks." By this reference, the Approval Letter incorporates paragraph 16 of the 2004 St. Thomas University Special Conditional Use Permit ("SCUP"), which provides:

Goodrich Avenue Access. At such time as the University remodels or replaces the Binz Refectory or replaces Grace Hall, the loading drive which currently exists between Goodrich Ave. and the Binz refectory shall be removed, such that there shall be no vehicular access from Goodrich Ave. to any of the University's buildings on the south campus.

St. Thomas substantially remodeled the basement and first floor of the Binz Refectory in 2022-23, yet has not removed the drive from Goodrich Avenue to the Binz Refectory as required. UST is therefore in violation of the SCUP.

The Binz Refectory is a dining hall that was constructed in 1978 by the Saint Paul Seminary. After the 2020-21 academic year, St. Thomas stopped preparing meals in the Binz Refectory.

In the summer of 2022, St. Thomas's contractor Ryan Companies obtained Permit No. 20 22 074023 from the City to "**Remodel** a Portion of the Binz Building to Accommodate Athletic Offices, Team Rooms, and Addition of Unisex Restrooms" (emphasis added). By that point, St. Thomas was no longer referring to it as a "refectory" and was calling it the "Binz Building." According to the permit application, the remodeling work was to start by July 11, 2022 and end by September 9, 2022. The construction plans show that much of the first floor would be remodeled into offices for coaches, an office, lounge, and conference room, team meeting room, and bathrooms. The estimated value of the remodel would be \$795,000, plus electrical work of \$100,000 and other add-ons that brought the total 2022 remodel cost to \$937,000.

Shortly thereafter in December of 2022, a different UST contractor obtained Permit No. 20 23 104295 to “install a new exhaust fan” and “supply ductwork to accommodate new spaces” in the Binz Building. The work was to begin in December 2022 and be completed in January 2023. The value of the work was listed as \$85,000. Ryan Companies also obtained permit 20 23 103724 for \$250,000 in basement work to “remodel lower level.” Construction drawings show that the entirety of the basement except utility rooms was remodeled to locker rooms for men’s and women’s soccer, softball, a visiting locker room, official’s room, and related athletic spaces. With associated electrical work, the total 2023 remodel cost was \$356,500.

Year	Permit #	Contractor	Work
2022	20 22 085078	Collins Electrical	• Fire Alarm System Remodel Binz Refectory • Partial Floor Remodel in The Binz Building On The South Campus At Ust (no stated value)
2022	20 22 088212	Total Mechanical	• Commercial Alter (\$22,000 value)
2022	20 22 082764	Collins Electrical	• Binz Athletics Remodel (\$100,000 value)
2022	20 22 066784	Ryan Companies	• Remodel of a portion of the Binz Building to accommodate athletic offices, team rooms and addition of unisex bathrooms (\$20,000 value)
2022	20 22 074023	Ryan Companies	• Remodel of a portion of the Binz Building to accommodate athletic offices, team rooms and addition of unisex bathrooms (\$795,000 value)
2023	20 23 103724	Ryan Companies	• Remodel lower level into dry locker rooms and laundry closet (\$250,000)
2023	20 23 107519	Horwitz LLC	• Re-routing existing steam lines and connecting to existing systems (St Thomas Bldgs: FDD, Grace, Binz, Brady, Cretin). (\$1,046,033 value)
2023	20 23 104416	Horwitz LLC	• UST Binz hall. Installing 1 floor sink. (\$3,500 value)
2023	20 23 104295	Horwitz LLC	• Binz hall. Altering existing supply ductwork to accommodate new spaces. Installing a new exhaust fan and associated ductwork. All work is being done on the basement level space. (\$85,000 value)
2023	20 23 109872	Collins Electrical	• Commercial Repair / Alter (\$9,000 value)
2023	20 23 109877	Collins Electrical	• Installation of horn/strobes & module for fire alarm at UST Binz (\$9,000 value)

As part of its remodeling of the Binz Building, St. Thomas was required to remove the drive from Goodrich Avenue to be in compliance with the SCUP. That remodeling work was



Fig. 1. Overview of drive from Goodrich Avenue to the Binz Building. (Source: Google maps, with three labels added for orientation)

completed by January 2023, yet the drive remains in place more than one year later.

St. Thomas has produced various plans showing that it intends to build a multipurpose arena on the South Campus, and none of those plans show the removal of the drive from Goodrich Avenue. Specifically, the administratively approved site plan retains the Goodrich drive. While UST seeks to take advantage of the benefits of the SCUP, it fails to comply with its responsibilities under the SCUP.

Because the City's April 4, 2024 Site Plan Letter of Approval specifically states that the "development is subject to the existing Campus CUP," it must have necessarily concluded that UST's failure to remove the Goodrich Avenue drive is in compliance with the SCUP. That is an

obvious error. The correct finding is that any development must be consistent with the SCUP, and the site plan must be denied because it does not conform to the SCUP.

2. THE SITE PLAN MUST BE REJECTED BECAUSE IT INCLUDES DEVELOPMENT WITHIN THE SETBACK AREA FROM THE MISSISSIPPI RIVER BLUFF, WHICH IS STRICTLY PROHIBITED.

Congress established the Mississippi National River and Recreation Area (“MNRRA”) which protects the 72 miles of the river and riparian lands in Minneapolis, St. Paul, and the seven-county metropolitan area. The purpose of passing the MNRRA was “to protect, preserve, and enhance the significant values of the waters and land of the Mississippi Corridor within the Saint Paul-Minneapolis Metropolitan Area.” *See* 16 U.S.C. § 460zz(a)-(b). The federal government also established a Comprehensive Management Plan for development within the MNRRA. The Comprehensive Management Plan (at p.18) requires preservation of “the bluff impact area (40 feet back from the bluff line) in a natural state or restore natural vegetation.” Following passage of federal law, the Minnesota Legislature established the Mississippi River Corridor Critical Area (“MRCCA”), which is co-extensive with the MNRRA. The purpose of the MRCCA Act was to “protect and preserve the Mississippi River and adjacent lands,” “prevent and mitigate irreversible damages,” “preserve and enhance the natural, aesthetic, cultural, and historical values,” “protect and preserve the Mississippi River,” and “protect and preserve the biological and ecological functions of the Mississippi River corridor.” Minn. Stat. § 116G.15. The MRCCA Act authorized the Minnesota Department of Natural Resources (“DNR”) to develop and adopt rules and oversee the administration of the MRCCA. The DNR did so in Minnesota Rules Chapter 6106, and St. Paul is required to adopt an MRCCA ordinance.

The policy of the MRCCA Rules is to preserve the Mississippi River corridor and to “protect its environmentally sensitive areas.” Minn. R. 6106.0010. In its Statement of Need and Reasonableness (SONAR) establishing the MRCCA Rules, the DNR was explicit: “Protection of bluffs in the MRCCA was a major focus of this rulemaking.” SONAR at 22. The MRCCA Rules also define “primary conservation areas” to be protected by the MRCCA Rules as “key resources and features.” Minn. R. 6106.0050, Subp. 53. The primary conservation areas include bluff impact zones, gorges, and natural drainage routes. *Id.*

The MRCCA rules provide that no development (including impervious surfaces) may exist within 40 feet of the bluffline. St. Paul Leg. Code § 68.402(b)(4) contains the same restriction.

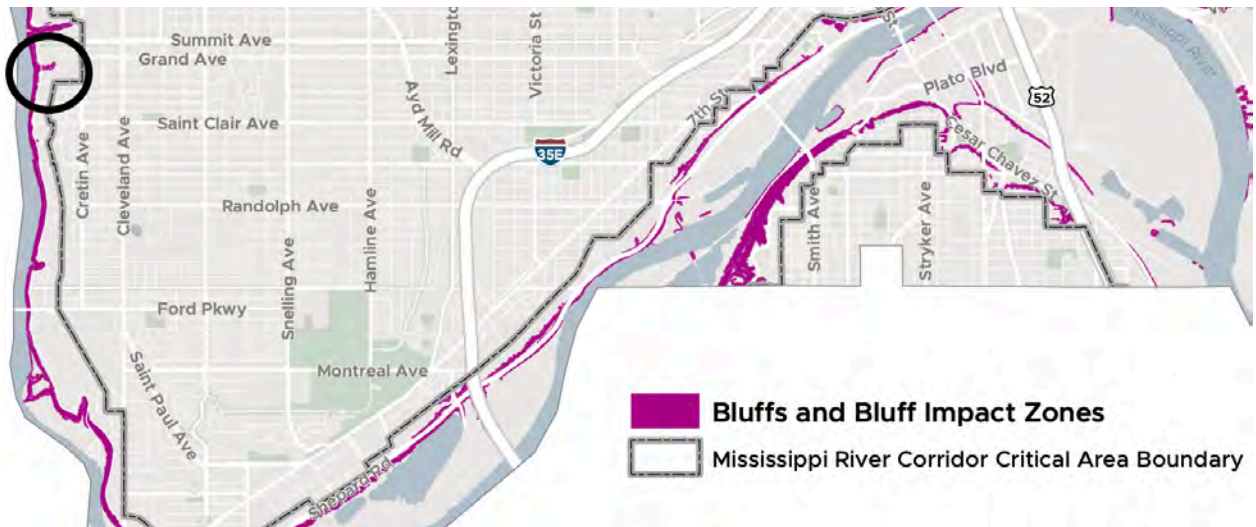


Fig. 3. This figure in St. Paul's MRCCA Publication was taken from Minn. R. 6106.0050, Subp. 9. The grotto is circled.

The definition of a bluffline is graphically illustrated in the City's publication *Mississippi River*

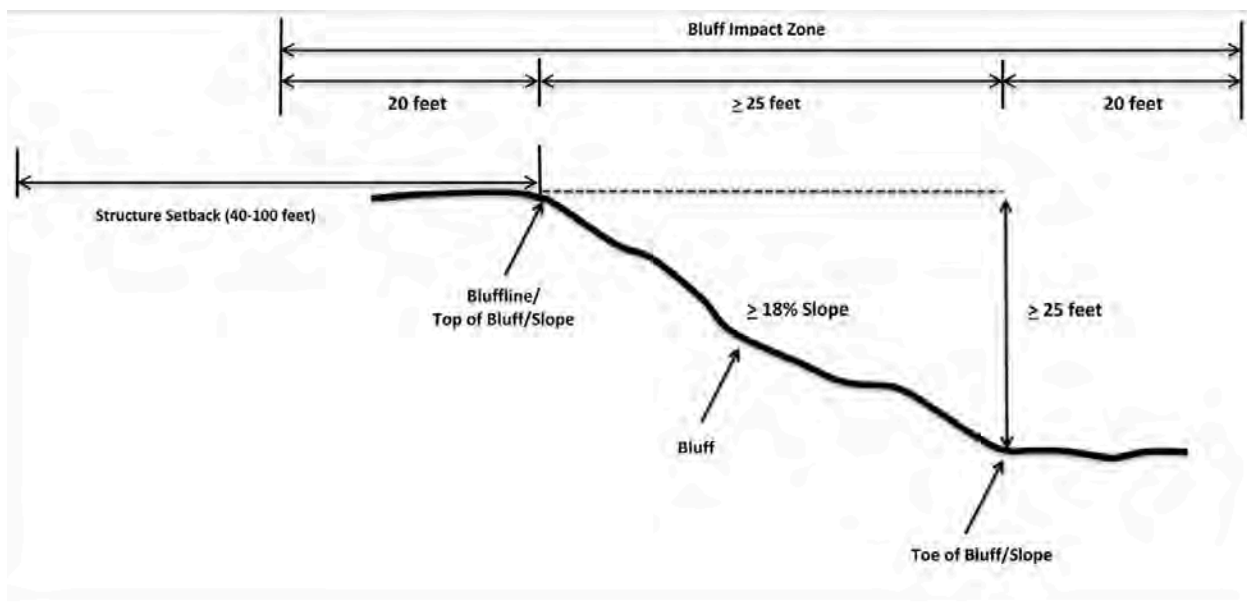


Fig. 2. A graphic illustration of the definition of the "bluffline"

Corridor Critical Area (Nov. 18, 2021) at 245. See Fig. 2.

The same publication shows that the grotto is part of the river's bluff area. See Fig. 3.

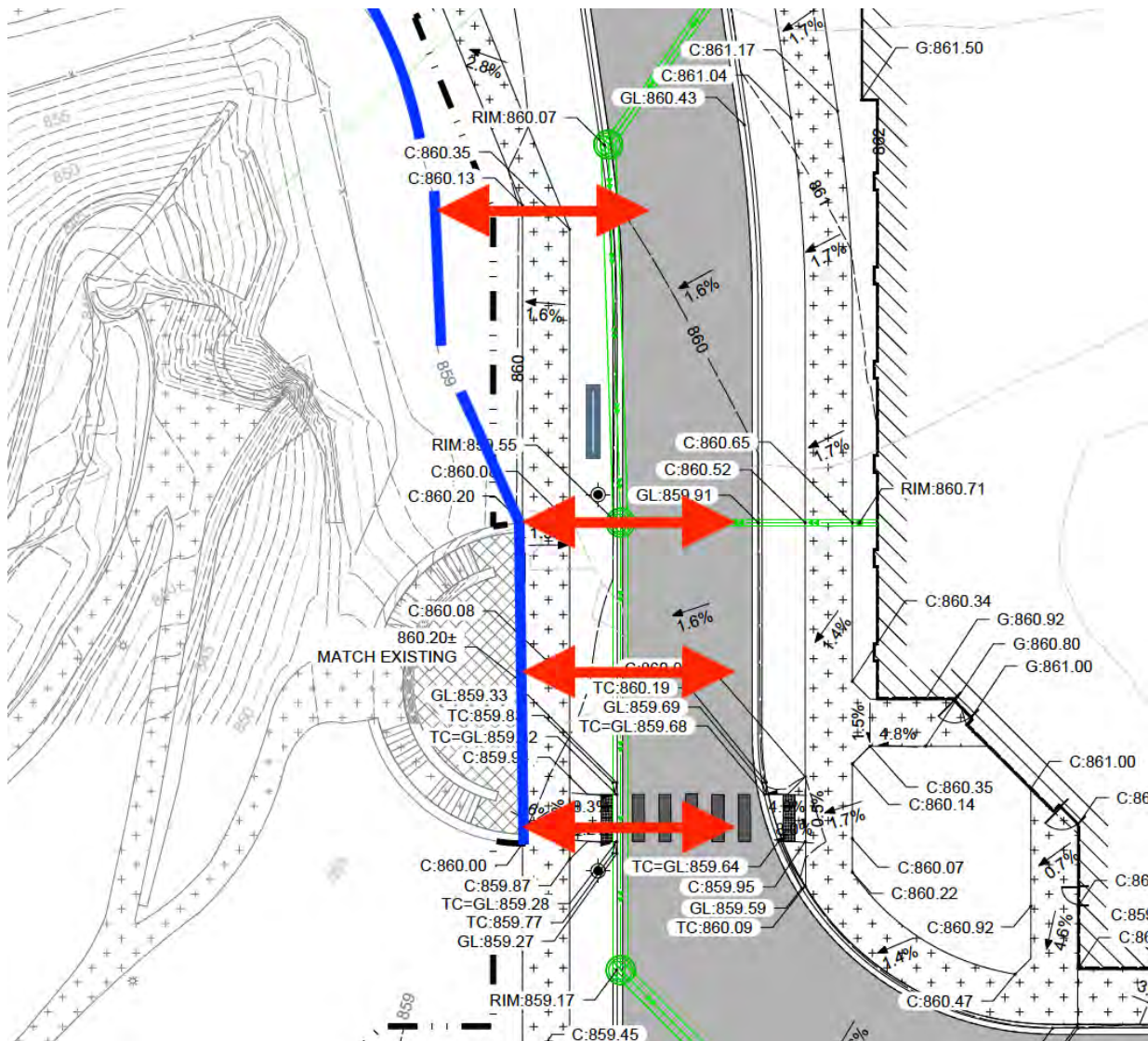
When UST took title of the South Campus from the St. Paul Seminary in 1987, the Planning Commission's College Zoning Committee determined, "In addition to specific requirements for

each district, there are general standards regarding placement of structures, grading and filling, protection of wildlife and vegetation, and runoff, as specified in Section 65.410, that apply to uses in all River Corridor districts. These general standards will apply to development that occurs on the former Seminary campus as well. ... Two of these standards, which will affect where development can occur on the Seminary campus, prohibit development on slopes greater than 18 percent or within 40 feet of the bluffline (Section 65.411, Subd. 2, (5) and (6)). This means that no development can occur in the large river gorge that extends into the campus from under the Mississippi River Boulevard or within 40 feet of the bluffline created by the gorge (see Map 3, p. 14).” Recommendations of College Zoning Committee of the St. Paul Planning Commission, August 1988, at 11.

The consequences to a city if it permits a development that is prohibited by the MNRRA or MRCCA could include a finding by the federal government that the city is noncompliant and is therefore ineligible for financial assistance until it returns to compliance. The federal government took exactly that action in 2023 when the city of Minneapolis approved construction of a house within the bluff impact zone. The DNR has also sued Minneapolis to halt construction of the house. *Minnesota Dep’t of Nat. Resources v. City of Minneapolis and Wattenhofer*, Hennepin County District Court file 27-CV-24-1524.

A specific area of concern is a ravine extending east from the river called the grotto. The grotto runs under the Mississippi River Boulevard and into the South Campus. The arena would be located just 40 feet from the bluffline of the grotto. By extension, this is also the bluffline of the river itself, and is specifically included in the mapping of the bluffs of the Mississippi River. To state it another way, the river bluff is located a little over about 40 feet west of the arena’s western wall, and is located at approximately the midpoint of that wall. There is just no possible way to redirect the groundwater around the arena and have it flow in a natural way toward the grotto and the river. Concentrating the water (e.g., running it through a pipe) would cause massive erosion wherever the pipe ends. At the same time, the lack of groundwater will dry the soil, kill the vegetation, and result in erosion from rainfall.

The site plan shows that UST plans extensive development above and below ground adjacent to the bluff. Above ground, the site plan includes a two-way roadway with parking lane and a sidewalk within the 40-foot zone next to the bluffline. That leaves no permeable surface for rainwater to fall and soak into the ground, rather than running into a gutter and being transported



elsewhere by pipe. Fig. 4. Unfortunately, the site plan is consistent with UST's plan in its Environmental Assessment Worksheet that 5.97 acres of the arena's 6-acre site will consist of impermeable surfaces. The MRCCA Rules mandate that "structures and impervious surfaces must not be located in the bluff impact zone." Minn. R. 6106.0120, Subp. 3B. St. Paul Leg. Code § 68.402(b)(4) is more restrictive, prohibiting development of any kind within 40 feet of the bluffline.

That prohibition of development of any kind would apply to the extensive underground pipework that the site plan envisions within 40 feet of the bluffline. Page C500B of the site plan shows a utility plan that includes multiple utilities underground adjacent to the bluffline. A fiberoptic line would run under a sidewalk just feet from the bluff; a new stormwater pipe, new electrical lines, and new water lines would lie a few feet further east, all within 40 feet of the bluffline. Steam

and condensate pipes would lie east of all those pipes and would be about 40 feet from the bluffline.

In the specific case of UST's South Campus, the importance of the bluff impact zone is heightened. According to the EAW, the groundwater beneath the site is only 6-12 feet below surface and the groundwater flows directly to the Mississippi River. Anyone walking along Cretin Avenue at Lincoln Avenue can hear the groundwater running beneath through an uncovered grate. If the arena were built in a narrow configuration on an axis perpendicular to the river, groundwater would flow around the building and continue on its way to the river. But the planned arena is such a huge building that there is no possible way to avoid cutting off the groundwater flow to the area between the arena and the river. This leaves the bluff impact zone high and dry — too high to benefit from any groundwater that could flow underneath the arena and dry because its paved surface is impervious. There will be insufficient moisture to maintain the vegetation in the bluff area, and the death of the vegetation and its root structures will accelerate erosion during any introduction of moisture, whether it be a rainfall or a release of water from the arena. The bluff will eventually broaden, and the soil supporting the UST sidewalks and roadway may give way, pulling those hardscape structures into the river gorge.

A natural spring exists within the arena site near the grotto; its water flows toward the river, although its flow is not at the surface level because St. Thomas previously paved over it for a parking lot. The spring is cited as a natural feature in the Department of Natural Resources Inventory. Presumably, the spring water contributes to the health of vegetation and the river bank. Perhaps St. Thomas believes that depriving the arena area of groundwater will cause the spring to dry up. That would be bad for the health of the river, but good for St. Thomas; the spring has previously created a sinkhole that UST has filled in. This spring area would include the outer wall of the planned arena, so if UST is unsuccessful in killing the spring, the structural integrity of the arena could be in peril.

The arena's effects on the bluff area will extend to the wildlife that inhabit the grotto. Most of them (e.g., foxes, deer, coyotes, waterfowl, most raptors) restrict themselves to spaces that are not immediately adjacent to human habitat. The Mississippi River is a gathering place for many of our more wild creatures. With the immediate proximity of the building to the bluff, the shadow that the 76-foot high arena would cast for much of the day, and the lack of moisture and resulting loss of vegetation, the grotto and the remainder of this section of the river bluff will become inhospitable as a habitat.

The MRCCA prohibits *any* development within 40 feet of the bluffline, and UST's planned development is extensive above and below ground. No plan with such development in the bluff impact zone can be approved. This is far more than a technicality; UST's planned development would have dire consequences for the river bluff.

3. THE SITE PLAN MUST BE REJECTED BECAUSE IT INCLUDES TRANSPORTATION ROUTES, UTILITY AND OTHER TRANSMISSION SERVICE FACILITIES AND CORRIDORS ON SOILS SUSCEPTIBLE TO EROSION, AREAS OF UNSTABLE SOILS, AND AREAS WITH HIGH WATER TABLES, ALL OF WHICH ARE STRICTLY PROHIBITED.

The City's Legislative Code contains provisions to prevent damage to soil structures that are fragile for a variety of reasons. One provision that protects fragile soils is section 68.402 regarding the placement of structures, with "structures" meaning not just buildings but also the physical elements (roads, pipes, tunnels, etc.) that may lie outside the buildings.

Section 68.402(b)(5) prohibits the placement of facilities and corridors for "transportation, utility and other transmission service" in ten environments, three of which are present in the arena site: (g) "Soils susceptible to erosion, which would create sedimentation and pollution problems"; (h) Areas of unstable soils which would be subject to extensive slippages"; and (i) "Areas with high water tables."

The nature of a river bluff is that there is a marked drop-off in ground level, such that soils lack lateral support to keep them in place. Without that support, forces acting vertically or horizontally displace the soil to a lower elevation, which is the essence of erosion. Combined with the flow of water, the soil may be carried from its starting point into a river. The above



Fig. 5. Map CA-8 of the MRCCA Publication, showing unstable soils as measured by soil erosion susceptibility. South Campus is in upper left.

section discussing the bluff impact zone discusses how the incredible size of the arena will choke the supply of groundwater to the westward side along the bluff, and how that deprivation will accelerate erosion as the vegetation dies and loses its hold on the soil. But even without the added effects of the arena, this site would be considered prone to erosion.

St. Paul has already identified the South Campus as a site with unstable soils. Map CA-8 of the MRCCA Publication graphically demonstrates the locations in St. Paul where the soils are considered unstable. Fig. 5. Various shades on Figure 4 identify the soil as being unstable.

Within the classification of unstable soils are gradations for “low” instability or “high” instability. Although some of the arena site is on the lower end of the gradations, the fact that it is identified as having soils that are unstable *at all* is sufficient for the application of statutory restrictions that apply where unstable soils are present. Of course, the bluff and the areas immediately adjacent are at the extreme high end of the scale of unstable soils (note the dark shading of these areas in Figure 4), indicating that the area is extremely susceptible to erosion.

The high water table is shown by the EAW, which determined that groundwater is a mere 6 to 12 feet below ground level in the arena site. That would normally be considered a high water table, but in this context it seems even higher: the cross section of the arena indicates that it will extend further than that below the ground surface. That disruption to the natural water table on such a massive scale will surely have ramifications for the surrounding areas. For example, if the groundwater cannot flow naturally through the arena site and is instead diverted to the north and south on its way west toward the river, one would expect that the groundwater volume would be much greater to the north and south of the arena, making the water table higher there than it already was. That diversion effect is already present in the saturated, spongy soils that have resulted from the construction of Schoenecker Center near the arena site. Yet the arena plans contain utilities, tunnels, and paved surfaces in the areas north and south of the actual arena building.

The Legislative Code makes it clear that these structures should not be placed in these ecologically fragile settings. Leg. Code § 68.402(b)(5) prohibits the massive network of structures that service the arena. Underground, these include the various utility services described above that exist in the bluff impact zone and throughout the arena site, sewer pipes, stormwater pipes, and tunnels. This includes the extremely long sewer line run to Summit Avenue, where the sewer main surely was not built to handle the peaks of waste that an arena of this size would add. Above ground, these include sidewalks, curbs, and of course the new roadways that would carry the heavy trucks needed to service a major entertainment venue. Before the Planning Commission, UST claimed that its road is exempt from the prohibition against transportation routes next to a bluff because its planned road is a “public transportation facility.” Minnesota Rule 6106.0180 indeed exempts public transportation facilities, but UST’s road does not meet the definition: “all transportation facilities provided by federal, state, or local government and dedicated to public use, such as roadways, transit facilities, railroads, and bikeways. Minnesota Rule 6106.0150, subd. 57 (emphasis added). This roadway is being built by St. Thomas, not the government. The exemption does not apply. The roadway is prohibited. The road next to the bluff is just a road, designed to get buses and trucks to and from Summit Avenue. Pursuant to Minnesota Rule 6106.0180, roads are not permitted within 40 feet of the river bluff unless “no alternatives exist.” The site plan includes an alternative, namely the access road directly to Cretin Avenue.

Each the three conditions (susceptible to erosion, unstable soils, and high water table) would independently be sufficient to serve as a bar to St. Thomas building an arena at this location. Together, they indicate exactly why shoehorning a massive arena into a riverbluff site was destined for failure. The site is protected from such harmful development. The City Council must therefore reject the site plan.

4. THE SITE PLAN MUST BE REJECTED BECAUSE ITS BUILDINGS ARE TOO TALL.

The entirety of the South Campus lies in the RC3 zoning district, also known as the River Corridor Urban Open Overlay District. St. Paul's legislative code restricts buildings in the RC3 zoning district to 40 feet in height. Leg. Code 68.233(a). This applies to all properties, including those owned by St. Thomas. The arena would be twice the applicable height limitation.

UST argues that its special conditional use permit (SCUP) allows buildings up to 75 feet tall in the central portion of the South Campus, and asserts that the SCUP trumps the city code. There is no legal support for such an argument. While there is no question that the City granted a SCUP to UST and that the SCUP stated a height restriction that is greater than the legislated maximum height in the CA-3 zoning district, a municipality's grant only extends as far as its authority. The SCUP does not exist in a vacuum but rather is subject to other applicable restrictions. "Conditional use permits for River Corridor areas are supplementary to other zoning and building permits." Leg. Code. § 68.502. One example is cited above: the existence of a river bluff may restrict where structures can be placed, even if the normal setback rules are more permissive.

A municipality's ability to approve development plans is limited to the authority granted to the municipality. *Breza v. City of Minnetrista*, 725 N.W.2d 106, 114 (Minn. 2006). The City cannot grant a SCUP that permits what City laws prohibit.²

Of the zoning tools available to the City, a variance is the one that can allow a use that is not otherwise permitted: "The board of zoning appeals and the planning commission shall have the power to grant variances from the strict enforcement of the provisions of this code." Leg. Code. § 61.601. A conditional use permit can only modify conditions that have been placed on the property. Leg. Code. § 61.502. Thus, a CUP cannot be used to grant a variance on building heights. That would require a variance, which requires a set of specific findings that notably include a finding that the property owner faces a hardship that was not created by the property owner. In other words, the property owner's desire to have a building taller than the code allows is not a hardship. St. Thomas would not qualify for a variance.

UST's site plan is not consistent with the intent of the greater height limits stated in the SCUP at any rate. "[A]ssuming St. Thomas builds facilities at the square footage it requires on the Seminary campus, a 40 foot height restriction would force new buildings to occupy a larger footprint than a building of the same square footage at a taller height. Higher building height limits will encourage the preservation of more green space on the campus." Recommendations of the College Zoning Committee of the St. Paul Planning Commission, August 1988, at 8. UST wants to build a sprawling arena complex that could about fit all of the remaining South Campus buildings within its footprint, hardscaping 5.97 acres of its 6-acre site. But the arena would also be twice as tall as the 40-foot height limit applicable in the RC3 zoning district. There is no

² An exception would be in cases where a variance is available and is granted, but no variance is at issue here. At any rate, a variance for height would not be available to UST in this instance because any claimed hardship is simply UST's desire to have a taller structure than the code allows.

preservation of green space, and it constitutes an abuse of the intent behind the SCUP's greater height limits.

Because the city does not have the discretion to permit a violation of its code provisions, the height allowances in the SCUP do not displace the maximum height allowance of 40 feet set forth in Leg. Code 68.233(a). The site plan sets forth a building that is almost double that height, and the site plan must therefore be rejected.

5. THE SITE PLAN MUST BE REJECTED BECAUSE IT INTERFERES WITH PUBLIC RIVER CORRIDOR VIEWS.

A "primary objective of the [MRCCA] is to protect views to and from the Mississippi River." MRCCA Publication at 244. The MRCCA Publication reflects three policies relevant to the UST arena:

Policy CA-10. Regulate building height, placement and design consistent with the intent of the MRCCA rules to protect, enhance and minimize impacts to Public River Corridor Views.

Policy CA-12. Consider designated Public River Corridor Views from other communities in developing dimensional standards, view impact evaluation procedures, and mitigation



Fig. 6. View of arena from Minneapolis side of the Mississippi River. (Source: UST site plan application, Ex. 3).

identification procedures.

Policy CA-13. Support shorter buildings closer to the river's edge and taller buildings as distance from the river increases in order to maximize views of and from the river, and preserve visual access to the river as a public good (rather than privatized right).

The new arena would dominate sightlines from the Mississippi River, presenting its gray western facade to those who would otherwise be enjoying the river's wildness. Fig. 6. The City's MRCCA Publication identifies the scenic overlook at East 36th Street and West River Boulevard in Minneapolis (Fig. 7, upper left corner) as a Public River Corridor View, and it looks directly

at the arena site. The arena would be a dominating presence when viewed across the Mississippi River. At 76 feet tall, the arena would be taller than mature trees — but there will be no mature trees growing near the arena. The trees shown in UST’s rendering in Figure 6 would have no place to grow because the surface west of the arena is nearly 100% impervious. Any mature trees west of the arena grow from a lower part of the bluff, 40 feet below the blufftop perch of the arena. They would not screen the arena from the river.

While St. Paul already has some other tall buildings that soar over the riverside treetops and negatively impact the public river views, these are currently considered the results of poor city planning allowed by prioritizing private development over public enjoyment of the river’s wild beauty. They would not have been permitted under the City’s current codes, and neither should the UST arena. The City Council should reject the site plan due to its interference with public river views.

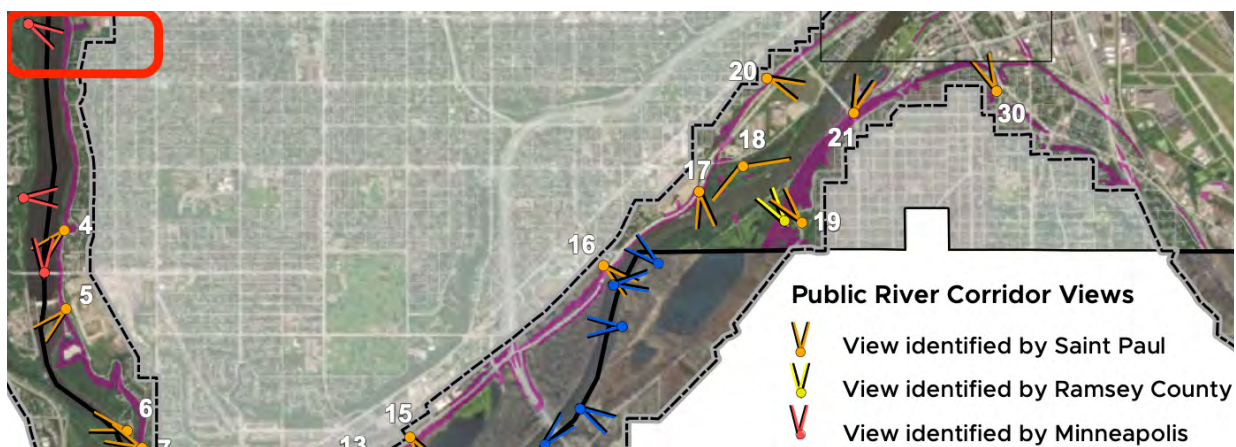


Fig. 7. Source: *Mississippi River Corridor Critical Area*, adopted Nov. 18, 2021 (City of St. Paul), at 263 (the Public River Corridor View in the corner was identified by Minneapolis).

6. THE SITE PLAN MUST BE REJECTED BECAUSE IT IS LIKELY TO CAUSE POLLUTION.

Erection of an ice arena on the river bluff is not permitted due to the toxic nature of the two main chemicals used in rink refrigeration and the likelihood of a leak. There are many locations in St. Paul where an ice rink may be permitted, but the Mississippi River Bluff is not one of them.

Leg. Code 68.233(d) provides that “No use shall be permitted which is likely to cause pollution of water, as defined in Minnesota Statutes, Section 115.01, unless adequate safeguards, approved by the state pollution control agency, are provided.” Minn. Stat. § 115.01(13) contains the following definition: “‘Pollution of water,’ ‘water pollution,’ or ‘pollute the water’ means: (a) the discharge of any pollutant into any waters of the state or the contamination of any waters of the state so as to create a nuisance or render such waters unclean, or noxious, or impure so as to be actually or potentially harmful or detrimental or injurious to public health, safety or welfare,

to domestic, agricultural, commercial, industrial, recreational or other legitimate uses, or to livestock, animals, birds, fish or other aquatic life; or (b) the alteration made or induced by human activity of the chemical, physical, biological, or radiological integrity of waters of the state.”

Any ice arena placed next to a waterway risks the release of fluids that could contaminate and poison the waterway in the adjacent area and downstream. Ice arenas rely on refrigerants that are highly toxic, and leaks are all too common. Rink refrigeration systems use ethylene glycol (also known as concentrated antifreeze) to lower the freezing point in the rink’s chiller system. Short-term exposure from the oral intake of ethylene glycol can cause vomiting, drowsiness, coma, respiratory failure, convulsions, cardiopulmonary effects, and kidney and brain damage. The immediate effects of exposure to high concentrations of ethylene glycol can cause death to animals, birds or fish.³

Given the high toxicity of ethylene glycol, one would expect that it would be handled in a manner to avoid leaks. But the high volume needed (even for one rink, but UST’s arena would have two) and the complex systems required to keep a sheet of ice refrigerated in an arena that is warmed for spectator comfort make it difficult to avoid leaks. The following are documented leaks of ethylene glycol ice arenas:

- The Ralph Engelstad Arena, Grand Forks, ND, December 13, 2023 (500 gallons)
- Northbrook Park District, Northbrook, IL, September 27, 2021
- Folsom Ice Rink , Sacramento, CA, November 21, 2021
- “Patsy” Di Lungo Veterans Memorial Ice Rink, East Haven, CT, March 2020
- Crystal Fieldhouse Ice Arena, Burton, MI, July 10, 2018
- Seymour-Hannah Sports and Entertainment Center, Niagara Falls, May 1, 2016
- Pelham Civic Complex, Shelby County, Alabama, September 20, 2016
- Huron County Expo Center, Bad Axe, MI, Aug 12, 2008
- Ice Palace, Spokane, WA, October 19, 2007

Anhydrous (without water) ammonia is an inexpensive refrigerant widely used in ice arenas. It does not cause global warming (unlike some of its alternatives), but can be deadly. At room temperature and atmospheric pressure, ammonia is a gas. It can be compressed into a liquid under pressure, or when cooled. This liquified ammonia is used as a refrigerant. It is classified as a B2 refrigerant (toxicity class B, flammability class 2) according to ASHRAE, the American Society of Heating, Refrigerating and Air Conditioning Engineers. The refrigerant is highly toxic, with inhalation potentially causing respiratory failure, unconsciousness, skin or eye irritation, freezing injuries or death. The physical effects are a result of anhydrous ammonia (NH₃) reacting with moisture in the mucous membranes to produce ammonium hydroxide (NH₄OH), a corrosive, alkaline compound. Liquid ammonia is a common cause of fish kills. Arenas use thousands of gallons, and the EAW specifically identifies ammonia as a refrigerant

³ CDC.gov Ethylene Glycol Public Health Statement
<https://www.atsdr.cdc.gov/ToxProfiles/tp96-c1.pdf>.

that UST intends to use in its ice rink. Fatal ammonia gas leaks have occurred in industrial uses and in ice arenas.⁴

To protect the community from potential chemical risks, including ammonia refrigeration system operations, the U.S. EPA region 1 (Minnesota is region 5) passed an “Emergency Planning and Right-to-Know Act.” Improper application or handling of liquid anhydrous ammonia can lead to ammonia volatilization (loss of ammonia gas to the atmosphere). Clouds of anhydrous ammonia are subject to air movement and will change direction with the breeze. The ammonia is heavier than air and will settle in low areas of surrounding landscape. Areas surrounding the leak would need to be evacuated. The Minnesota Department of Health, designates permanent rules for indoor ice arenas, Minnesota Rules Ch. 4620, but there is no system in place to notify the public of their risk of hazard exposure or safety procedures in the event of a chemical leak. Causes of leaks can include a broken weld, loose valve packing or compressor shaft seal failure. These failures are not infrequent in ice rink chiller systems. A Minnesota Department of Agriculture report states “ammonia is a strong base and will corrode galvanized metals, cast iron, copper brass or copper alloys.”

With ammonia exposure being deadly and a high volume required by ice rinks, it is vital that the ammonia be properly contained. That is evidently easier said than done. The following are documented ammonia leaks at ice arenas:

- Oyster Bay Ice Skating Center, Nassau, NY, January 28, 2024
- Centennial Sports Arena, Circle Pines, MN, December 1, 2023, latest of “3-4” leaks
- Leddy Ice Arena, Burlington, VT, July 7, 2023
- Reno Ice, Reno, NV, April 10, 2023
- Falmouth Ice Arena, Falmouth, MA, November 18, 2022
- Tewsbury Ice Rink, Tewksbury, MA, August 30, 2022 (1 hospitalization, neighbors evacuated)
- Capital Clubhouse Ice Rink, Waldorf, MD, March 9, 2021
- Loring Arena, Framington, MA, March 2, 2021
- Fernie Memorial Arena, Fernie, B.C., October 18, 2017 (3 fatalities)
- Ashburn Ice House, Leesburg, VA, June 27, 2017
- Canal Park Ice Rink, Washington, D.C., January 6, 2016
- Prospect Park Ice Rink, New York, NY, October 15, 2015 (2 hospitalizations)
- Louis Astorino Ice Rink, Hamden, CT, August 25, 2015

⁴ <https://www.mlive.com/public-interest/2023/04/ice-maker-arctic-glacier-fined-232k-over-michigan-ammonia-spill.html> (reporting second leak of Arctic Glacier ice packaging facility and one fatality in first leak; ISSUU North American Guide to Natural Refrigerants in Ice Arenas <https://www.dccew.gov.au/environment/protection/npi/substances/fact-sheets/ethylene-glycol-12-ethanediol>). See also <https://www.nts.gov/investigations/AccidentReports/Reports/RAR0401.pdf> (1 death, 11 serious injuries, and 322 minor injuries from railway anhydrous ammonia spill in Minot, ND).

- Pineville Ice House, Pineville, NC, April 22, 2015

The numerosity and severity of the documented leakage events indicate that this is a serious problem. Vague assurances that “we know what we are doing” do not constitute safeguards, particularly when uttered by an institution that has never owned a refrigerated ice rink. Chemical skills can be deadly to fish and wildlife. See

<https://www.desmoinesregister.com/story/tech/science/environment/2024/03/29/fish-kill-in-nishnabotna-river-spill-said-to-exceed-750000-department-natural-resources-nitrogen/73125495007/> (750,000 fish dead due to fertilizer leak). Luckily, none of the arenas with documented leaks of ammonia or ethylene glycol are adjacent to a river bluff.

The UST’s EAW states (in section 12(b)(ii)) that the Grotto is a “linear aquatic feature that conveys stormwater runoff from impervious surfaces within the project site.” It also states that “2 acres of impervious surfaces drain into the grotto” and that the grotto “follows a drainage channel west towards the Mississippi River.” The EAW goes on to say that the remaining 2.8 acres of impervious surfaces drain southeast to an existing storm sewer tunnel which discharges to the Mississippi River.” Consequently, all chloride from salt use for 4.8 acres of deicing sidewalks and roads will drain into the Mississippi. Any hazardous material leaked and not contained would also likely drain into the Mississippi River. The Minnesota Department of Agriculture report quoted above also stated that, “since ammonia is very soluble in water, there will be no layering effect when liquid ammonia is spilled into a surface water body. Brooms, pads, sweeps and pillows that are usually used to contain and recover petroleum are ineffective on spills of ammonia into surface water.”

The MRCCA chapter of the 2040 Minnesota Comprehensive Policy places the UST Multipurpose arena in districts CA-RN (river neighborhood), CA-RTC (river towns and crossings) and CA-ROS (rural and open space). It also places the proposed arena in the following primary conservation areas: shore impact zone, natural drainage ways, bluff and bluff impact zone, significant existing vegetative strand, and unstable soils area with areas of high erosion susceptibility. As the arena has already been designated to be in an unstable soils area, there must be complete evaluation regarding the distinct possibility that the ground may shift during the arena’s lifetime with cracking of equipment, pipes or coils and leak of hazardous waste.

When rinks are constructed, they use the newest technology to protect against toxic spills. Breakaway Ice Center in Tewksbury, MA boasts two “state of the art ice rinks.” An ammonia leak there in 2022 sent one person to the hospital and led to an evacuation of the neighborhood. The Ralph Engelstad Arena in Grand Forks, ND has marble floors, leather seats, and a rink cooling system that leaked 500 gallons of ethylene glycol sixteen months ago. The nature of ice rinks that requires thousands of gallons of toxic chemicals is that they are reasonably likely to leak, even when the soils are stable and even when the rink staff has extensive experience. St. Thomas does not have those advantages, and it has no prevention plan other than optimism.

The site plan was erroneously approved without required safeguards approved by the pollution control agency. Without safeguards approved by the Minnesota Pollution Control Agency, there is no means to prevent chemical spillage and water pollution. The arena cannot be constructed unless it incorporates safeguards against leakage into its design. UST’s claims that it

knows what it is doing are meaningless (particularly in light of its inexperience) and do not meet the clearly stated legislated requirement of approved safeguards. The City Council must reject the site plan because it does not address the high risk of water pollution from the high volume of toxic chemicals that would be perched atop its river bluff amid groundwater just 6-12 feet below the surface.

7. THE SITE PLAN MUST BE REJECTED BECAUSE THE EAW IS INADEQUATE.

Advocates for Responsible Development appeal the City's decision not to require an environmental impact statement for UST's arena project, and oral arguments were heard by the Court of Appeals on April 11, 2024. This memorandum will not recite all of the arguments raised in ARD's appeal, but two issues bear noting here.

The EAW was required to consider the UST development of the South Campus as a whole, rather than isolating just the arena for examination. Particularly close in time of construction is Schoenecker Center, which is just now being completed and which added 130,000 square feet of new users and demands on traffic and parking. Schoenecker Center also displaced 127 parking spaces, which should have been considered relevant when the arena would eliminate and additional 265 spaces. The City Council should reject UST's site plan because it is based on a site plan that was inadequate.⁵

The required mitigation strategies in the city's approval of the EAW are not only inadequate, but unquestionably will be ineffective: monitoring for a 2 year period **AFTER** the arena opens [See "Recommended Mitigation" in City Findings of Fact dated September 2023, including Appendix D (Site Plan) and Site Plan summary, page 6]. The City's proposed mitigation does not meet the legal standards for mitigation, which are that they must be specific, definite, and certain to be effective. Under Minn. R. 4410.1700, when a responsible governmental unit, like the City, considers mitigation measures as offsetting the potential for significant environmental effects, it may reasonably do so only if those measures are specific, targeted, and are certain to be able to mitigate the environmental effects." *Citizens Advocating Responsible Development v. Kandiyohi County Board of Commissioners*, 713 N.W. 2d 817 (Minn. 2006). The City must "ensure" that mitigation measures meet this test. The word "ensure" is often defined as "to secure or guarantee" and "to make sure or certain." There is nothing "certain" about simply listing "possibilities" for mitigation, when the University has not committed to implement specific, definite mitigation activities, which are certain to be effective. Nothing in the EAW or the Site Plan based on the EAW evidences any commitment to specific mitigation measures certain to be effective. The Site Plan's approval of the traffic study's purported mitigation analysis is disjointed and fails to establish how or even if the possible ideas for mitigation will actually solve the parking and congestion problems likely to occur. The Minnesota courts have concluded that a responsible governmental unit, like the City, may not rest its decision "on 'mitigation' that amounts to only 'vague statements of good intentions.'"

⁵ Other inadequacies of the EAW, such as its failure to consider greenhouses of arena attendees and its misrepresentations about the production of GHGs by the arena building, are discussed elsewhere in this memorandum.

Will the City compel this enormous Arena to be demolished after it is built if it has endangered the City's residents, violated the City's policies and comprehensive plan and damaged City infrastructure, resources, and finances? If the answer is "no" then the City Council should not approve the site plan unless it ensures that those effects will not occur.

The City's position in the lawsuit is that the EAW is not the sole means of evaluating the arena's environmental effects. Specifically, the Assistant City Attorney stated that the site plan would parking needs and requirements would be addressed in the site plan. Yet the site plan does not address them. The City Council has the opportunity and the obligation to fully examine all aspects of the site plan, including those that were in the EAW. In that regard, it is important to note that the City has not accepted the EAW, but has simply determined that an environmental impact statement is not required. That does not mean that City cannot reject the site plan on grounds that were addressed in the EAW or should have been addressed and were not.

8. THE SITE PLAN MUST BE REJECTED BECAUSE IT IS UNSAFE FOR PEDESTRIANS, MOTORISTS, AND RESIDENTS.

Pedestrians

There are two types of pedestrians at issue: residents and arena attendees. Residents already cross Cretin Avenue in large numbers to walk along the Mississippi River. Arena attendees would also cross Cretin, since some of the nearest on-street parking is east of Cretin and the arena lies west of Cretin.

Residents typically cross at Goodrich, Fairmount, Princeton, and Sargent Avenues, consecutive streets that intersect with Cretin without any stop sign or signal. Crossing Cretin Avenue can be difficult and is becoming more so as the Highland Bridge development south of UST continues to add thousands of residents. As described in UST's traffic study, these intersections will degrade to a level of service of E/F during arena events. The delays experienced by vehicles unable to turn onto Cretin will be worse for pedestrians; vehicles are capable of rapid acceleration to take advantage of small gaps in traffic. Pedestrians generally lack that capability, particularly those with strollers or dogs.

Policy T-7 of the City's 2040 Comprehensive Plan provides the City will "Implement intersection safety improvements such as traffic signal confirmation lights, pedestrian countdown timers, and leading pedestrian signal intervals. Reduce pedestrian roadway exposure via median refuge islands, curb extensions, narrowed travel lanes, and other elements designed to lower motor vehicle speeds." In approving the arena site plan, the City would move in an opposition direction: massively increased vehicle traffic that will make Cretin Avenue impossible to cross on foot at least 66 days out of the year.

The addition of curb bumpouts on Cretin Avenue at Goodrich Avenue demonstrates a recognition that this crossing will be perilous.⁶ With a continuous stream of attendee traffic, the bumpouts will be no substitute for a break in traffic.

One might think that arena attendees will be able to avoid this danger by walking north to Grand Avenue, where a signalized crossing will help them cross Cretin Avenue. That will get them across Cretin, but that does not remove them from automobile traffic as they pass the Anderson Parking Facility (“APF”) on their way to the arena.

The entrance to the APF is just west of the intersection of Cretin and Grand Avenues. According to the EAW, that intersection functions with a “B” level of service today. The EAW predicts that the levels of service will be “E” before games and “F” after games. But UST has now changed its plan to make that intersection totally non-functional both before and after games. Although there is no doubt that the abysmal levels of service will cause gridlock on residential streets surrounding the arena site, UST’s design change escalates the risk of pedestrian collisions with vehicles.

The site plan submitted with the EAW included a skyway from the APF to the arena, allowing all 1700+ predicted attendees who parked in the APF to enter the arena without mixing with automobile traffic.

UST’s subsequent submissions (Exhibits 11 and 12 to the administratively approved site plan) state that the skyway has been eliminated for cost reasons. The new pedestrian route from APF to the arena is down a stairwell at the intersection of Cretin and Grand Avenues, across Grand Avenue, and then along a narrow sidewalk on the north side of Grand to the arena.

Ideally, the 1700+ pedestrians who parked in the APF will cross Grand Avenue when the light is green for north-south traffic. But that same green light is when the vehicles coming southbound from I-94 and northbound from Ford Parkway will want to turn into the APF. There will be two options available to drivers waiting for pedestrians: to try to drive through gaps in the pedestrian flow or just before the light turns red, or remain in place despite the lines of cars behind.

The site plan offers no alternative to this conflict. The pedestrians must walk north at the same location and same green light as vehicles must drive west to the APF. The pedestrians have no other route and the vehicles have no other route.

It should be further noted that the number of pedestrians is not just 1700+ from the APF. The thousands of spectators who parked in the neighborhood south of campus will also be crossing Grand Avenue at this same location. And once they all cross Grand, they will be met by all of the people who parked to the east of Cretin Avenue and crossed Cretin at Grand.

⁶ The bumpouts are meant to benefit pedestrians, but a collateral effect is that they endanger bicyclists by forcing them from the curb into the main flow of traffic.

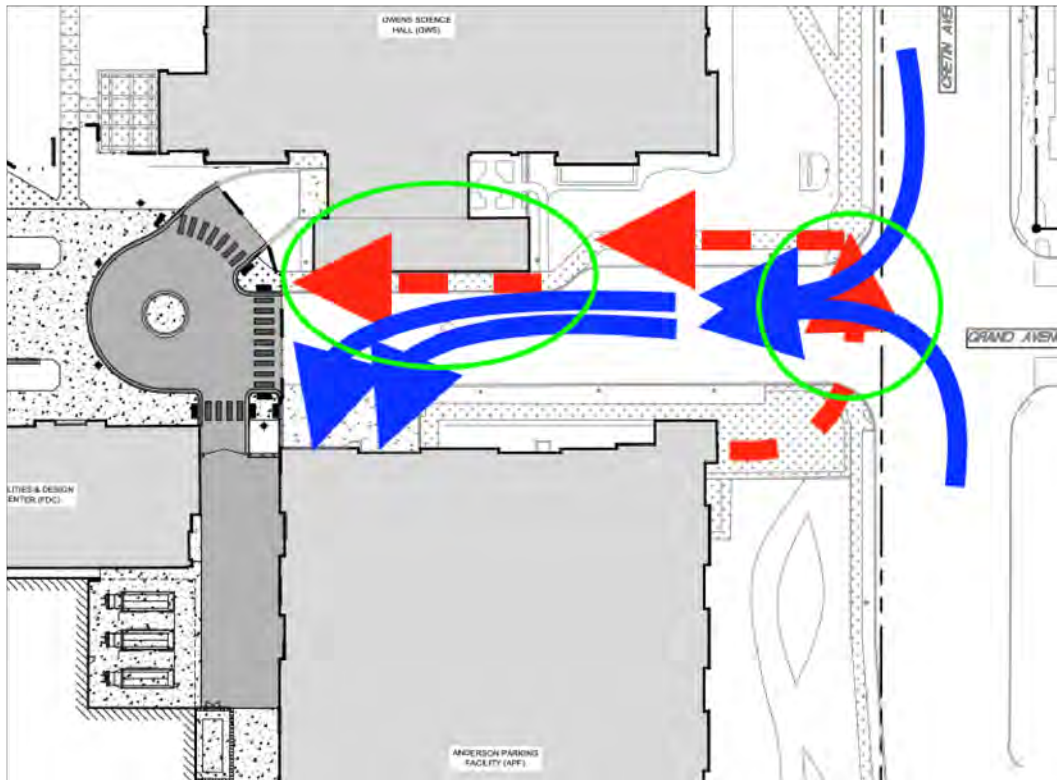


Fig. 1. Circled in green are the two new conflict areas UST has created between vehicles entering the ramp (blue arrows) and pedestrians (red arrows).

Source: Exhibit 7 of administratively approved site plan.

For those pedestrians who safely cross Grand Avenue, the danger does not end there. All of these combined flows of pedestrians will continue to conflict with traffic as they walk from Cretin Avenue toward the arena. The sidewalk on the north side of Grand Avenue is only 8 feet wide and cannot be widened because it abuts Owens Hall, so pedestrians will assuredly be walking in the street leading west to the APF. But UST's site plan calls for cars entering the APF to occupy two lanes, which means they will drive along the curb next to the sidewalk on the north side of Grand Avenue. See Fig. 1. This is inherently dangerous, with pedestrians walking in the street and cars driving up behind them on winter nights.

Motorists

Besides being a danger to pedestrians, UST's new traffic design would degrade the former predicted E/F levels of service to levels that would be below F if such a lower grade existed. That would affect not just Cretin and Grand, but all intersections into which this backup would extend — certainly to Summit and Grand (one block) and Goodrich and Grand (two blocks), but likely much further.

ARD's appeal memorandum included a section discussing how the EAW was inadequate. The above discussion shows how the traffic problems disclosed in the EAW, already forecast to be

E/F, have now been downgraded further. This plan will affect not only arena attendees, but everybody who lives along Cretin Avenue.

The increased risk of accidents involving motorists results not just from the high concentration of vehicles that the arena would bring, although that is certainly a factor. The conflict of northbound and southbound cars on Cretin Avenue turning into the APF at the same time while pedestrians have the green light to cross in front of them is a certain recipe for disaster. Assuming that the cars yield, the backups caused up and down Cretin will increase congestion for the majority of cars, who do not have a reserved spot in the APF. With northbound Cretin's turn lane to the APF holding just a few cars, a small delay will quickly back up northbound Cretin.

The steady stream of cars on Cretin will encourage risky attempts to enter Cretin from the side streets, where dozens of cars will have found no parking spot and will seek to try on a different block. Cars that are parallel parked on Cretin near UST's stadium will attempt to pull into traffic, but will find a heavy flow of vehicles passing. Considering that all of these scenarios will occur in winter after nightfall, the risks mentioned here seem understated.

Residents

Because St. Thomas lacks parking for 1100-1600 vehicles (depending on game attendance and assumptions about how many people ride in each vehicle), these vehicles will drive around the neighborhood, looking for parking. This endangers the safety of surrounding residents in two ways:

- a. Streets that are impassible to cars are also impassible to emergency vehicles

St. Thomas's traffic study predicts that Cretin Avenue will be gridlocked (level of service = E/F) south of the arena, which makes sense: the one-lane street cannot handle the addition of hundreds of vehicles in a short period. It also predicts that vehicles on side streets will not be able to turn onto Cretin Avenue before or after games due to the gridlock. If there are just 50 vehicles driving on each of these streets looking for parking, that is a backlog that will make each of these streets impassible.

Appendix A to this memorandum is an insightful analysis by Dr. Jerome Abrams that fully analyzes St. Thomas's model and shows that delays in exiting the side streets would exceed 17 minutes and would more likely be 28 minutes. Given the narrowed drive aisle caused by snowfalls that lead vehicles (especially those with passengers who must exit) to park a distance from the curb, it is impossible for an emergency vehicle to enter a side street during the time when vehicles backlogged from Cretin are clogging the side streets. Each time there is an arena event, neighborhood residents would be left without assistance in case of fire or health

emergency. By allowing the arena to be constructed, the City would be imposing a perilous risk upon UST's neighbors, a risk that is reasonably foreseeable and has disastrous consequences.⁷

b. Emissions from vehicles

The EAW did not discuss the effect that spectators arriving to and departing the arena will have in producing greenhouse gases (GHGs). To the general public, GHGs constitute an environmental hazard from the reduction in ozone. But this section discusses a more direct hazard to the people who live among the nightly gridlock that would beset the neighborhood.

It would be problematic for each street surrounding UST's South Campus to add 50-100 cars driving through, looking for parking spaces. As described above, however, the problem is worse; vehicles will enter the street and sit idling for 17-28 minutes while waiting to turn onto Cretin Avenue. There is no parking on Cretin Avenue, so their journey will continue onto a different side street marginally further from the arena, where they will again idle in line.

As they idle in front of the homes in the neighborhood, these vehicles expel exhaust into the air. That is the same air that is breathed by people who live in the neighborhood. With hundreds of them walking to the river or walking their dogs, this exhaust presents a noxious prohibition against going outside when the arena is in use. For those with asthma or other respiratory conditions, the hazard is considerably more serious.

It should be noted that the EAW did not address GHGs emitted by vehicles at all. In fact, that was one of the points raised in ARD's lawsuit challenging the adequacy of the EAW. The City's position in that lawsuit is that the EAW is not the sole means of evaluating the arena's environmental effects; the site plan and other approvals offer the City the opportunity to determine whether the project is appropriate for the site. Here is one instance where the EAW failed to address an important topic and the City Council is required to determine whether it should permit construction of an arena that will have a harmful effect on the residents and the environment. This is the opportunity for the City Council to reject this site plan.

In sum, the site plan presents numerous hazards to pedestrians: crossing busy streets with no signals, crossing Grand Avenue at the same time as vehicles drive through, and walking in the driveway to APF when cars are using both lanes. The City Council should not approve a site plan that endangers pedestrians, motorists, and residents.

⁷ The Minnesota United soccer team hosts 21 home games per year at Allianz Stadium, compared to UST's 66 home basketball and hockey games. The United play in the summer, so snow is no issue and bicycles can utilize the 400 bicycle parking spaces. Allianz has more than 1,000 available parking spaces on site plus dozens of commercial lots and ramps nearby. There is also a designated Lyft/Uber/Taxi zone at Allianz. Vehicles can access Allianz on the three major adjacent thoroughfares: Interstate 94, University Avenue, and Snelling Avenue. Most importantly, the stadium is on the A express bus line and has bus and light rail service on University Avenue. Even with these amenities, neighbors find the parking and traffic unbearable. In comparison, the UST arena has 691 parking spaces that are already occupied, no major thoroughfare, one bus line, and no zone for Lyft/Uber/Taxi.

9. THE SITE PLAN MUST BE REJECTED BECAUSE ST. THOMAS MISLED THE CITY REGARDING PARKING AVAILABILITY.

In the EAW, UST's consultants provided a count of available parking spaces at and around UST's campus. UST argues that its decision to count vehicles on streets around campus on March 30-April 1 was not intended to undercount vehicles in order to minimize UST's parking shortage. Whether that is a truthful representation can be discerned from the following Department of Natural Resources report of the storm that started early on March 30 and continued into April 1, 2023:

March 30 to April Fools' Day, 2023: Thunder, Slush, and Damaging Snow

An intense barrage of rain, sleet, thunderstorms, and very heavy snow blasted southern and central Minnesota from Thursday March 30 into Saturday April 1, 2023, resulting in widespread power outages, tree and limb damage, and new daily precipitation records.

By early morning on Saturday April 1, over 85 thousand households were without power—mostly in and around the Twin Cities Metropolitan Area.

[8.5 inches fell at the Twin Cities International Airport, starting Friday morning.]
<https://www.dnr.state.mn.us/climate/journal/damaging-winter-storm-march-30april-1-2023.html>

Given the weather, it is likely that most UST students decided not to attend classes on March 30 - April 1. Given that only 2,500 of UST's 9,000 students live on campus, the result would dramatically change the demand on parking during that three-day storm. By choosing to count available parking on days when UST students would choose to stay home, UST vastly skewed its parking counts to misrepresent parking availability.

10. THE SITE PLAN MUST BE REJECTED BECAUSE ST. THOMAS MISLED THE CITY REGARDING EVENT ATTENDANCE.

St. Thomas argues that community and the planning commission should ignore the public representations of UST's administrator that UST expects 35 sell-out events each winter. UST instead suggests that the representations of its traffic consultants should be believed, namely that UST expects 1-2 sellouts per year.

	
UST's depiction of its planned full arena on its website (source: https://news.stthomas.edu/publication-article/making-a-big-impact/)	To the planning commission, UST describes its intent to design its facility so that its teams will play in a half-empty arena

ARD notes that this gives the city three alternatives. UST favors the alternative that the city should believe that UST is wasting tens of millions of dollars building an arena that will make its teams look hapless, playing in a mostly empty arena. This, while UST lays off dozens of staff to trim non-athletic programs. UST pushes this narrative to downplay its net loss of 265 parking spaces and the lack of infrastructure in this residential neighborhood to handle traffic.⁸

The second alternative is that the UST administrator was accurate and reflected the efforts of UST to build winning basketball and hockey programs through recruitment and enhanced facilities so that UST can fill this arena. This alternative would mean that the traffic study in the EAW does not accurately reflect the traffic and parking problems this arena will cause.

This second alternative is consistent with UST's announcement, just days after the Planning Commission approved the arena site plan, that UST would be leaving the Central Collegiate Hockey Association (CCHA) and joining the Northern Collegiate Hockey Conference (NCHC). The traffic and parking projections in the EAW were based on St. Thomas's membership in the CCHA. Among CCHA teams, average home game attendance was 2,464 in 2023-24. <https://www.uscho.com/stats/attendance/division-i-men/> (accessed May 20, 2024). Only one CCHA team (Minnesota State) has any appreciable fan base in the Twin Cities. In the NCHC, average home game attendance is 5,467, *id.*, and three teams (UM-Duluth, North Dakota, and St. Cloud State) would bring Twin Cities fan bases to games at UST. Those attendance figures are more than double the assumptions on which the EAW was based; if UST's attendance was just 75% of the average attendance in the NCHC, every home game would be a sell-out with standing room only crowds.

⁸ UST's argument naturally raises questions by analogy. Could any college or university in St. Paul erect a 50,000-seat stadium for its intercollegiate teams under the guise of building an "athletic facility" while admitting that it does not need such a large facility, and then rent it out for concerts by touring musicians, monster truck shows, political rallies, and other users who have no relationship to the athletic or academic programs at the college or university?

A third alternative, which is not mutually exclusive to the second, is that UST is building this arena as a midsize venue for rental. UST's Senior Associate Athletic Director Ben Fraser notes, "The new arena will also generate revenue through use for commencements, concerts and rentals of the arena's second sheet of ice."⁹ This arena size is where many of the musical acts perform in Minnesota. For example:

- In Mankato's 4,800-seat arena (home to the Minnesota State Mavericks hockey teams), the following artists have performed: Aerosmith, Tom Petty, Brooks & Dunn, Styx, Kiss, Def Leppard, REO Speedwagon, Poison, Sammy Hagar, Bob Dylan, ZZ Top, John Fogerty, Kenny Rogers, John Denver, Steve Miller, John Mellencamp, Miranda Lambert, Sugarland, Alan Jackson, Eric Church and Elton John.
- In the 5,500-seat Minneapolis Armory, the following artists have performed: The Chainsmokers, Henry Connick Jr., Trampled by Turtles, Wiz Khalifa, Lewis Capaldi, Macklemore, H.E.R., Lorde, Olivia Rodrigo, Judas Priest, Kesha, Machine Gun Kelly, Lizzo, Wu-Tang Clan, Tyler the Creator, Billie Eilish, Halsey, Alice in Chains, Jonas Brothers, and Dua Lipa.
- In St. Paul's 5,500-seat Roy Wilkins Auditorium, performing artists include Shawn Mendes, Hozier, Annie Lennox, Sam Smith, Imagine Dragons, Alice in Chains, Smashing Pumpkins, Kesha, Bruno Mars, Janelle Monáe, Foo Fighters, Snoop Dogg, Green Day, Alanis Morissette, R.E.M., Sting, Cyndi Lauper, Alice Cooper, Jethro Tull, Ozzy Osbourne, David Bowie, Bruce Springsteen, Bob Dylan, and The Grateful Dead.

Concert tickets sell for hundreds of dollars, while hockey and basketball tickets sell for tens of dollars. It seems probable that UST's plan to finance its arena will include frequent rentals for maximum-capacity crowds. At a public meeting on April 30, 2024, UST chief of staff Amy McDonough acknowledged that UST plans to rent out the arena to generate revenue. If the city assumes that St. Thomas has a rational plan to derive revenue to pay for a \$175 million arena, only alternative #2 and alternative #3 — or most likely, both — are possible.

Because UST has not been forthright about the full extent of its planned use of the arena, the City should assume that UST will be using the facility as often and as fully as it is allowed to use it. This means assuming full attendance for every event, and for maximum year-round use for large events. Once it is assumed that UST will fully utilize the arena, it is even clearer that locating the arena on the South Campus is inappropriate for multiple reasons: parking, traffic congestion, danger to pedestrians, motorists, and residents. Those are on top of the aspects of building on the river bluff that are independent of attendance. St. Thomas has not presented any parking or traffic data for those projections, and for good reason: it would show that this site is a poor choice. The City Council should not allow St. Thomas to build its arena on the South Campus.

⁹ <https://www.tommiemedia.com/anderson-arena-funding-nears-completion-as-st-thomasadjusts-to-d1-costs/>

11. THE SITE PLAN MUST BE REJECTED BECAUSE ITS TRAFFIC DEMAND MANAGEMENT PLAN IS INADEQUATE.

Exhibit 6 to the site plan is a “City of Saint Paul Transportation Demand Management Form” but the site plan as produced to Advocates for Responsible Development did not include any Transportation Demand Management Plan (TDMP). Because it is required that the site plan include a TDMP, the site plan must be rejected.

St. Paul Leg. Code § 63.122(c) provides that “No building or grading permit shall be issued for any project subject to this section until a TDMP has been prepared which meets the requirements of this section and the Travel Demand Management (TDM) Program Standards Guide.” Leg. Code §63.122(c)(1) adds, “The TDMP must be submitted and approved as part of site plan review under the provision of section 61.402.”

The Transportation Demand Management Form contains almost no information to help the City decide whether to approve the site plan. What it does provide, however, discloses that UST’s parking plan is to provide zero parking spaces to accommodate the needs of a new arena. But even that complete failure understates UST’s dire situation; St. Thomas actually plans to reduce parking by 265 spaces instead of increasing it to meet the arena’s demand.

In lieu of parking spaces, UST’s responses on the form offers to add 102 bicycle parking spaces, as if that would impact parking for a basketball and hockey arena where games are played in winter. UST also says it will partially subsidize transit passes for full-time employees who do not purchase parking passes, without stating how many, if any, employees would be affected.

St. Thomas wants to build a complex and invite 6,000 people to campus while not providing any plan to handle the traffic and parking problems that it is creating. The City Council cannot approve such site plan without a TDMP that demonstrates that UST is capable of managing traffic and parking. The City Council therefore must reject UST’s site plan.

Although the site plan application does not contain a TDMP, UST’s EAW contained a “Transportation Study” written by the consulting firm SRF (“SRF Study”) as Exhibit D. Although the Transportation Study is inadequate as a TDMP, ARD will analyze it because it is the only transportation-related document UST has offered.

A. Traffic: Volume

Neither the EAW nor the city’s approval of it reconciled the increased traffic which will be caused by the arena with the city’s commendable goal of reducing vehicle trips in and through the city. The EAW acknowledged that 78% of the visits to the arena would involve non-student trips; a substantial percentage of those visits will be from other communities in the metropolitan area. The city has made progress on reducing vehicle trips; this arena will entirely undermine the city’s progress on that important environmental goal. We will never reach our climate goals if we make exceptions for new developments like this that have virtually no transit service.

The SRF Study dramatically understates the number of cars that will arrive at the arena. It does this by making multiple incorrect assumptions:

Incorrect assumption: UST students are wild about basketball and hockey and will walk to games. St. Thomas unrealistically asserts that 1,200 students will attend games. But only 2,600 UST students live on campus. It is not realistic to predict that almost half of the on-campus population will walk to games on a consistent basis. The sole purpose of this inflated estimate is to understate UST's traffic and parking problems.

Incorrect assumption: The average car will contain 2.75 people. In order to minimize its projected parking demand, UST assumed that an average of 2.75 people would arrive in every vehicle attending an event. The basis for this number was a study of event attendees that provided a range of 2.2 to 2.8 people per vehicle. Even within that high range, the use of the high end of the range is not justified in the SRF Study. The state and federal government apply an assumption of 1.9 people per vehicle. Using a rate of 2.75 minimizes the admitted traffic by eliminating hundreds of vehicles from the models.

Even using the 2.75 AVO, the EAW predicts that 4,250 arena attendees will arrive by car (a minor percentage will arrive by bus). Using MNDOT average vehicle occupancy (AVO) of 1.9 persons per car means 2,237 cars arriving. UST revealed in its legal brief that it applied 2.75 AVO, which is at the extreme high end of a 2.2-2.8 AVO range derived from a study on baseball game attendance. A 2.75 AVO allows UST to claim that "only" 1,545 vehicles will arrive and that "only" 742 vehicles will have no place to park on campus or on streets adjacent to campus.

Incorrect assumption: Traffic will see almost no growth. For its modeling, SRF applied an assumption that traffic would grow a mere 0.25% per year. That would be unrealistically small under normal circumstances; SRF has employed a 1.00% annual growth factor in other traffic studies it has performed. But in this case, it is wildly inaccurate. The biggest housing development St. Paul has seen in 80 years is in the years-long process of opening at Highland Bridge (the former Ford Motor Co. factory) at the south end of Cretin Avenue. Neighbors along Cretin Avenue protested, predicting that the Highland Bridge development would dramatically increase traffic along Cretin Avenue. Cretin Avenue serves as the link between Highland Bridge and Interstate 94. As apartment buildings and condominiums are being built and populated, the traffic count on Cretin Avenue has started to rise. But Highland Bridge is only partly settled at this point, and thousands more residents will populate that development in the upcoming years. SRF provided traffic analyses for Highland Bridge and the same engineer at Ryan Companies (Anthony Adams) has worked on Highland Bridge and the arena, so St. Thomas cannot make a good-faith claim that it was not aware of the impacts that Highland Bridge will bring.

Incorrect Assumption: Attendees will know where they are going to park. Although UST's parking problem is a crisis by itself, the assumption in the SRF Study that cars will have designated places to park leads SRF to omit the problems created by cars driving up and down the neighborhood streets, looking for parking. Focusing on the traffic volume issue, this means that every car that arrives at the arena does not terminate its route at a parking facility. The car arrives on Cretin Avenue and turns down a residential street (for instance, Lincoln Avenue, the

closest to the arena). Finding no open parking space, the car drives down Lincoln and then back to Cretin Avenue on Goodrich Avenue, again finding no parking.¹⁰ At this point, this car will have doubled its impact on Cretin and added impacts on Lincoln and Goodrich. When the car drives down Fairmount and returns on Princeton, it will have tripled its impact on Cretin. By assuming that cars have a place to park, the SRF study severely undercounts the traffic impact on Cretin Avenue and on the side streets such as Lincoln, Goodrich, and Princeton. It should be noted that UST's plan to pre-sell parking spaces in the Anderson Parking Facility will have limited impact, because UST cannot pre-sell or assign spaces to the 1000+ vehicles that will park on neighborhood streets.

Incorrect Assumption: Cars can pass on side streets. UST's reliance on neighborhood parking means that cars will driving up and down the streets near campus, looking for parking. Some will approach the block from the east, some from the west. It is possible for two cars to pass on these streets if parked cars are near the curb and the cars slow to maintain control as they maneuver past each other. But basketball and hockey are winter sports, and cars do not park close to the curb because snow has encroached into the street and snowbanks make it difficult to open passenger-side doors if the car is parked too close to the curb. An additional factor is rutting of ice on the street that effectively creates a track for one vehicle down the middle of the street. These are the expected Minnesota conditions, yet the SRF Study fails to address them. The impact on these streets is that twenty vehicles may attempt to drive eastward on a side street and twenty vehicles may attempt to drive westward. These vehicles will be unable to pass and proceed; they will be gridlocked. Cars will eventually have to back out one way or the other, but the traffic levels will be too high to make that feasible. And once clear, a new set of vehicles will cause the same logjam. This will be a great inconvenience to the drivers, but also to the residents who will be unable to drive through their own neighborhood.

Incorrect Assumption: Attendees won't park on local streets. The worst levels of service predicted by the SRF Study were the intersections of Cretin Avenue and side streets, where cars may be unable to leave the side streets for the 30 minutes before or after an arena event. The EAW dismisses those drivers as local residents, but UST's parking plan would direct hundreds of vehicles to park on those streets. For example, if Sargent Avenue has 44 attendee vehicles parked on it, they will be unable to leave for 30 minutes after the game due to the regular traffic on Cretin Avenue combined with the vehicles leaving the arena — and that is UST's rosy estimate.

Even while making every unrealistic assumption in order to minimize arena traffic, the SRF Study still concludes that the traffic levels of service will nosedive as a result of the arena. Around the arena site, those levels are currently A and B. The SRF Study asserts that those levels of service will decrease to D and F for arena events. If SRF had used accurate projections, the levels of service would have been lower; since F is the lowest rating on the level of service scale, we can assume that they would have been a low F.

¹⁰ This scenario will definitely occur for every weekday event, as Lincoln, Goodrich, Fairmount, and parts of Princeton Avenues require a permit for on-street parking M-F until 8:00 p.m. The scenario will continue to occur on weekends because arena attendees will quickly occupy the nearest residential streets.

By applying assumptions that do not reflect reality, the SRF Study produced results that did not reflect the full impact that UST's arena would have on traffic patterns around the site. The City Council should determine that UST has not presented a TDMP that accurately assesses the impact of the arena and should reject the site plan.¹¹

B. Traffic: Emergency Vehicles

From a safety perspective, it is extremely worrying that St. Thomas projects that its arena will cause lengthy delays in being able to access Cretin Avenue during its arena events. If someone (resident or attendee in a vehicle) has a medical emergency, no emergency vehicles will be able to enter the side streets because they will be blocked by vehicles that can't pass each other. Even UST's projected 30-minute logjam would likely prevent adequate and timely medical intervention in the case of heart failure or stroke. But UST is undercounting traffic and not accounting for street conditions in the snow; the real delay would be much worse. As an appendix to this document, Dr. Jerome Abrams has modeled the delays that would be caused by the arena traffic.

C. Traffic: Emissions

In 2019, the City adopted the Climate Action and Resiliency Plan (the "Climate Plan"). The goal of the Climate Plan is to achieve carbon neutrality in the city by 2050. The 2040 Comprehensive Plan Policy T-21 states, "Reduce vehicle miles traveled (VMT) by 40% by 2040 by improving transportation options beyond single-occupant vehicles." The City, the State of Minnesota, and the University of Saint Thomas all have plans to be carbon neutral. The Site Plan does not satisfy, or even adequately address, these goals; instead, it flies in the face of these public goals.

The Arena will produce a huge increase in greenhouse gases both because of the Arena itself and the traffic and parking problems it will generate. The mandatory Environmental Assessment Worksheet (the "EAW") for the project found the Arena would triple greenhouse gases (GHG) from the building alone (despite the building's planned LEED Silver status) but it did not

¹¹ An apt comparison is to the Starbucks coffee shop at Snelling Avenue and Marshall Avenue in St. Paul. On its face, it seemed implausible that a popular coffee shop could exist at that intersection with minimal parking and a drive-through lane. The neighborhood took the position that the use was incompatible with such a tight site. But the applicant brought consultants who testified that, based on the assumptions Starbucks made about its use, the traffic snarls foretold by the neighbors would not occur. The Planning Commission believed the applicant's consultants and approved the project. From the outset, it was clear that the site could not handle the traffic generated by the drive-through line, which backed up into traffic on Marshall and Snelling Avenues. After years of trying to make that drive-through lane work using traffic police, Starbucks closed the drive-through lane. The Planning Commission should note that consultants make whatever assumptions will benefit their client to get the project approved, and should reject a project where, as here, the consultants' conclusions do not reflect the probable results of building a large arena on a small site on the river bluff in a residential neighborhood with easy vehicular access and no parking.

measure many important aspects of GHG generation in the building and, notably, did not measure new vehicle trips generated into the city by the Arena.

Who in the city enforces City policies? Does anyone in the City government review projects for GHG reductions? Looking at the Site Plan review, there is no statement that the project meets the climate action plan goals or the 2040 Comprehensive Plan, because the Arena will not meet those goals.

The Arena EAW provided more GHG questions than answers. In response to a comment, it noted, “Evaluation of expected GHG emissions and potential impacts to climate change are required elements of an EAW process” (page 7). Although the state mandated the EAW process and the 2040 Comprehensive Plan require actions to move the City toward carbon neutrality, the only assessment is that the project is “generally consistent” with the Comprehensive Plan. How was this determination made? **The response in the final EAW to a comment, on page 14, states “The subsequent permitting process will provide opportunities for further comment on the appropriateness of the project and compliance with the Comprehensive Plan.”** However, the Site Plan is silent on the calculation of GHG from the Arena.

ARD has asked the City Department for Resilience and Sustainability, headed by Russ Stark, if that department weighed in on this project and the answer was that it had not. He said this is the job of the planning department. Who will make the determination to allow a facility that will be one of the largest generators of GHG in the City? We think it must be the City Council. The lack of clarity is important because, as we demonstrate below, the Arena will be a huge GHG generator.

Sports are a major contributor to GHGs. Even the United Nations has a program urging carbon reductions in sports. [United Nations Environment Program, Sports and the Environment <http://www.unenvironment.org/>]. In spite of the importance of the Arena, the EAW emissions (at Item 18) estimate omits many key contributors to GHG in the Arena, including refrigeration and A/C, chemical fire suppressants, industrial gases, employee commuting [UST has 138 sports employees], and travel of employees and teams to away games. The EAW failed Minnesota Environmental Quality Board guidance to provide project-specific emission sources, describe the methods used to quantify emissions, describe the process used to determine emissions and, most importantly, to describe “any GHG emission sources not included in the total calculation.” The biggest omission, however, is GHGs generated by the fans it attracts to its games. The inclusion of fan visits in calculating GHG is a standard which has been endorsed and adopted by the Minnesota Court of Appeals in the 2003 case of City of Bloomfield v. City of Burnsville, 666 NW 2d 414.

On page 17, the EAW response to a comment about GHG emissions, states “The Project is in the early stages of design and the design details have not been finalized. The mitigation strategies identified in the EAW have not been incorporated into the operational emissions calculations as presented in the EAW.” If all of this information is incomplete, how could the City decide that this project is “generally consistent” with the Climate Plan? Was that work completed but not shared with the public? And if the EAW is incomplete on GHG, how can the planning

department have approved a Site Plan which does not provide this information and provide clarity?

The Climate Plan states that transportation represents 31% of citywide greenhouse gas emissions. “Reducing transportation emissions is critical to achieving the goal of carbon neutrality by 2050” (Page 8) and “land use and urban form” is one of the three key influencers of transportation emissions. On November 9, 2023, the City of Saint Paul celebrated its success on its Climate Plan at an inaugural climate forum. Most of the projects highlighted sought to reduce auto usage. However, using the numbers St. Thomas provided in the EAW, the Arena will generate 59,000 NEW vehicle trips for sports alone—not including other events, which remain undetermined. The sports complex and the traffic it generates will emit greenhouse gases (GHGs). Even though their toxicity is well documented, even though there are federal, state and local governmental actions to reduce them, even though we are already experiencing their effects on our climate, even though St. Thomas claims it wants to be carbon neutral within a decade, UST nonetheless puts forward the least efficient arena plan in the worst possible location. In this case, the GHGs are being emitted in a residential neighborhood and on the bluff of the Mississippi River.

St. Thomas is hoping that thousands of people come to the arena, but has not addressed in any way the pollution that will be generated by all those trips.¹² The Minnesota Court of Appeals recently noted that greenhouse gases from attendees *must* be analyzed in EAWs, *In re Mankato Motorsports*, No. A23-0091, *18 (Minn. App. 2023). In the case of UST’s arena, this is a complicated subject because attendees will drive to campus and then will drive around and around the neighborhood looking for parking because UST admits its parking supply is many hundreds of spaces short, even after utilizing all of the on-street spaces adjacent to campus and making unrealistic assumptions to disguise the extent of the parking shortage. People will drive down residential street after street until they finally find a parking space far from campus. These neighborhood tours — undesired by fans and residents alike but favored by UST — will greatly increase the GHGs emitted, both by each vehicle and as a total.

¹² Similarly, St. Thomas’s EAW avoided discussing the pollution that would be emitted by a 6,000-seat arena. It is intuitive that a facility that maintains two permanent ice rinks will have a large energy footprint. At times, the rink will be covered so a temporary basketball floor and seating can be placed atop it, but the fact remains that a facility that warms the basketball arena while simultaneously freezing the ice beneath is inherently energy-inefficient. The EAW states (at 32), “Emissions from cooling and refrigeration systems are not accounted for in this operational analysis as GHGs from refrigerants are approximately less than five percent of the total GHG emissions of a building.” The EAW then cites to a source that says *no such thing*, and has nothing to do with arenas or ice rinks. The cited source states, “There are typically refrigerants or coolants that inadvertently leak from HVAC or refrigeration equipment. Project Drawdown ranks refrigerants as the No. 1 solution for reversing global warming. Given the regulatory environment for the U.S. health care sector, most hospitals report that this is less than 5 percent of their overall GHG footprint, but it is still critical to confirm that is the case for each hospital.” Yes, the *leakage* (not *usage*) of GHGs from *most hospitals* (given the applicable regulations) is less than 5% of their total GHG emissions. UST’s consultant, Kimley Horn, put that statement in the EAW to avoid disclosing of the arena’s energy use, and the city did not notice or question this deception.

Most large arenas are in downtown areas to take advantage of freeway and transit access, available evening parking, and the absence of adverse effects upon neighbors. UST has instead chosen to site an arena on a tight campus footprint, immediately adjacent on three sides to residential neighborhoods (and with the river on the fourth side). All of the pollutants emitted by the facility and the attendees' vehicles will adversely affect those who live in this community.

UST's imposition on the surrounding environment will be made worse by buses that deliver visiting teams and their equipment, youth teams, groups coming from bars or from campuses of visiting teams, and others arriving by chartered bus. The site plan does not include any place for those buses to park during games. The result is that they will park illegally on one of the nearby residential streets that does not allow parking without a permit (probably Summit Avenue, because the few other streets with 24/7 permit requirements will be impassible due to the problems described above) and will idle to stay warm because basketball and hockey are played in winter. With 66 home games per winter, this bus exhaust will impose a significant burden upon the residents and the wildlife along the river.

Arenas and stadiums, especially hockey rinks, are significant sources of GHG but the largest generator is fans' transportation to these venues. [Triantafyllis, Ries and Kaplanidou. Carbon Dioxide Emissions of Spectators Transportation in Collegiate Sporting Events: Comparing On-Campus and Off-Campus Stadium Locations. *Sustainability*, 2018, 10, 241.] A study of professional hockey team in Finland found that 54% of total GHGs came from fans transportation to games. See Uusitala, V.; Halonen, V. In search of climate neutrality in ice hockey: A case of carbon footprint reduction in a Finnish professional team. *Journal of Environmental Management*. 2024, Vol. 355 120455. See Appendix A, page 12-A to this appeal. The location of stadiums and arenas can make a big difference in how much GHGs are produced. A recent study of two football stadiums compared GHG emissions in an urban on-campus venue to a suburban off-campus facility. The on-campus stadium "provided easy access for transportation and parking lots" and was served by several bus routes. The suburban off-campus stadium was 22 miles from its university, provided on-site parking for cars and chartered buses but had no public transportation. Despite the increased distance and lack of public transportation, the off-campus stadium produced significantly less transportation emissions per sports fan. The difference is that when a car is idling from traffic and parking congestion, it produces much greater emissions than when it is moving. (U.S. Department of Energy 2015). These studies, and others like them, are significant in analyzing the Arena. Unlike the football stadiums studied above, UST's campus is legendary for lack of parking, and this will be greatly aggravated by the new Arena. Under the Site Plan at Exhibit 6 (traffic demand), UST will not add new parking for the Arena but will remove a total of 264 parking spaces or more than 20% of the 1,317 on-campus total (EAW Transportation Study Table 5). When the Arena is complete, fans (and students and staff) will have to drive around searching for parking, and traffic will be highly congested in the area, which generates very high emissions. We believe the greenhouse gas emissions produced per fan would likely exceed any other arena in the metro area. The proposed Arena would likely double the number of cars that come to the campus during the sports season, with even more for non-sports events.¹³ Because these sports trips are more

¹³ Total Parking spaces available on or adjacent to campus (from UST Traffic Study) = 1,686. Number of class days from October 1 to March 31 = 82. Campus parking spaces total 1,686 (minus 86 unoccupied per

concentrated in time, and even less parking is provided, traffic congestion and searching for parking spaces will magnify GHG impacts. It is likely the new Arena will cause GHG from cars on campus to at least double. If other events at the Arena are counted (concerts, lectures, etc.), the consequences will be even more dire.

D. Traffic: Effect on Summit Avenue

Besides being a parkway, Summit Avenue is part of the West Summit Avenue Heritage Preservation District. That district was established in 1980 to preserve the historical nature of Summit Avenue west of Lexington Avenue. With an arena, Summit would carry traffic from neighborhoods east of UST, particularly as a means of avoiding the backlog on Cretin Avenue as thousands of cars drive from Interstate 94 toward campus.

The burden on Summit is compounded by the fact that the arena service road connecting directly to Summit. All trucks and buses servicing the arena will either enter on Cretin Avenue and exit on Summit (there is no place for such large vehicles to turn around and go back to Cretin Avenue). That means all of the food vendor trucks (e.g., Sysco), beer trucks, soda trucks, equipment trucks, garbage trucks, recycling trucks, and team buses will travel on Summit Avenue. Each of these weighs two or three times the maximum gross vehicle weight on any parkway of 9,000 pounds. Summit will deteriorate into a private commercial drive for UST heavy traffic.

Smaller vehicles will also use Summit Avenue. The only conceivable location where taxi/Uber/Lyft vehicles would discharge and pick up customers near the arena is through the entrance from Summit Avenue, which goes to the arena and has a turn-around circle. The EAW predicts that 335 event attendees will arrive and depart by ride share, but each vehicle must arrive twice (once before and once after the game) and depart twice (same), making four trips down Summit for every use of ride share. That is, at a minimum, hundreds of additional trips down Summit (if 335 people crammed into 100 taxis, that would result in 400 trips down Summit per event; if they rode solo it would result in 1,340 trips per event). Summit Avenue would become a very busy street for each arena event, night after night.

Summit Avenue's parkway exists because property owners west of Lexington Avenue donated 50 feet of land on both sides of the avenue to create the space for the entire city to enjoy. But Summit remains a residential street, and a well-known one at that. Its architecture has inspired books and drawn tourists to St. Paul. If Mitchell Hamline Law School or Macalester College (both are on Summit) were to decide to build a 6,000-seat

EAW Transportation Study) times 82 class days October 1 to March 31 equals 131,200 car trips. Using Transportation Study numbers we estimate NEW car trips to campus by fans during October 1 to March 31 as 59,124 or 31% of all trips to campus. In this estimate we excluded the fans currently attending campus basketball games.

arena and use Summit Avenue as a connecting street to the arena, the city would not allow it because it would destroy the avenue and make it unlivable. Both are in residential settings, and the arena would be incompatible. The same should be true for St. Thomas. Turning Summit into UST's service drive presents the same problems (the sight, vibration, sound, and smelly emissions of buses and trucks) for residents as for bicyclists and pedestrians. But residents must live through it all the time. Feeding 6,000 people per event takes a fleet of trucks, and each truck must pass every house as it accelerates, drives, and stops. Because the basketball and hockey seasons are in winter when dusk is earlier, the headlights from trucks coming from the arena will be a constant annoyance to residents (see photo to the right of vehicle leaving UST toward Summit Avenue). It would be bad enough if arena-related traffic only affected those who live or drive on Summit Avenue. But Summit is a destination for bicyclists and pedestrians who travel to the river and either turn around or connect to the Mississippi River Boulevard to travel north or south. The presence of the trucks and buses and ride share vehicles will have an adverse impact on one of St. Paul's most heavily used recreational routes.



For example, trucks using the South Campus's drive to Summit will cross both a sidewalk and a bicycle path, endangering both pedestrians and bikers. For each of UST's 66 home games, one would expect a Pepsi truck, a beer truck, several food semi trucks (e.g., Sysco) smaller food vendor trucks (e.g., Papa John's, Subway), and garbage and recycling trucks — it takes a lot to provide food and drinks to an arena full of people.

The example of the Pepsi truck maneuvering across the Summit Avenue sidewalk and bicycle path illustrates the danger posed to those who traverse Summit.



It is further worth noting that St. Paul limits vehicles on all parkways, including Summit Avenue, to 9,000 pounds gross vehicle weight. Leg. Code §§ 145.02, 170.07. Trucks and buses are two or three times heavier than that maximum.



F. Parking

UST's parking plan is to not only refuse to add any parking for its 6,000-seat arena, but to eliminate 265 parking spaces instead. Even using every manipulation to minimize its projected shortfall, UST admits that it lacks the parking to meet the arena's demand. More specifically, UST admits that its parking supply is more



than 1,000 spaces short. Its plan is for people to fend for themselves by parking on the street in a 1/2 mile radius around the arena. If a plan to have people park on the street up to 1/2 mile away met city requirements, then those requirements are so lax as to have no meaning at all.

As with the traffic count, UST's claims about parking rely heavily on incorrect assumptions and misrepresentations of fact. Many of them are listed here:

Incorrect assumption: On-street parking is available.

UST's consultants took a count of available on-street parking spaces adjacent to campus, but chose to do so as a winter snowstorm was imminent. Obviously, many people who would otherwise have driven either stayed home or took the bus. The only reason to include this defective parking count is to mislead the city into thinking that fewer cars will need to park in the neighborhood. UST's overall parking plan raises the question: What other business is permitted to claim all on-street parking as its own to demonstrate that it provides adequate parking?

The current situation evidences a severe shortage of parking on the St. Thomas campus. The university has a lottery system for parking for current students and staff, but that system already has cars parking off campus on surrounding streets, especially on Selby Avenue, Dayton Avenue, in Shadow Falls, on Cleveland Avenue, Summit, Grand, Lincoln, and Goodrich Avenue, where the entire length of the street west of Cretin is filled with cars every weekday and most evenings, including on the weekends. Construction of the Schoenecker Center by St. Thomas eliminated 127 parking spaces and added 130,000 square feet of space to be used for performance venues as well as typical campus activities.

Incorrect assumption: Residents do not need on-street parking. The homes in the community around the South Campus were built in the 1920s, 1930s, and 1940s, when owning more than one vehicle was rare. Many houses therefore have one-car garages. Today, many households have two vehicles and park one on the street. Adult children who live with their parents also rely on street parking. To an elderly or handicapped person, the ability to park near one's home is essential, particularly in winter. The areas around campus also have apartment buildings, duplexes, and other multi-family housing where residents depend on on-street parking near their building. During arena events, attendees' vehicles will line the streets for blocks, making it impossible for any resident of those blocks to park on any nearby street. And it will be impossible to host a social event unless it corresponds with a gap in the arena's booking schedule. With most arena events and most social events on weekends, that seems unlikely.

False representation: UST plans to have small crowds. St. Thomas claims that the arena crowds will usually be far below capacity, so parking will not be a big problem. If that were true, UST would not be building such a large arena. Playing to a half-empty arena is embarrassing, and UST has no intention to spend extra money to build an arena that would embarrass its athletes. And UST is certainly not recruiting with any intention other than to have

winning teams that can fill arenas. In fact, UST represented at a community meeting that 35 of its 66 home games are expected to sell out.¹⁴ The only reason UST is misrepresenting its projected attendance in its traffic plan is to convince the city that UST doesn't have a massive parking shortage.

False representation: The number of events. St. Thomas has stated that it plans to hold 66 home basketball and hockey games at the arena, but has been coy about what other events will be held. The EAW refers to graduation and job fairs, but it is likely that UST will use the arena as a revenue center and lease it to promoters for concerts and conventions that could keep the arena busy year-round. The arena could also host high school tournaments; the Cretin-Derham Hall football team already plays games in the St. Thomas stadium. The city should expect that UST will use the arena to the full extent it can legally utilize it. UST's withholding its plans constitutes a misrepresentation by omission of its full intentions for use of the arena.

False representation: The dead campus. St. Thomas does not account for activities on campus that will require parking at the same time that the arena requires parking. The most obvious conflict is classes, with courses meeting on weekday evenings and on weekends when arena events are likely to occur. In addition, UST has a theater, a 1,000-seat reception hall in the Anderson Student Center, other athletic competition spaces, and new performance spaces in Schoenecker Center next to the arena. There will be other events held at the same time as arena events, and those other events will contribute significantly to the demand for parking. That translates to additional competition for scarce parking spaces, and more important, cars circling the neighborhoods looking for places to park, and contributing even further to greenhouse gas emissions.

False representation: Wrong baseline. St. Thomas presents numbers as to parking availability, but those numbers fail to consider that UST just opened a new 130,000-SF science hall, Schoenecker Center, across the lawn from the arena site. Even before Schoenecker opened, the streets adjacent to St. Thomas were lined solid with cars for daytime and evening classes. Since Schoenecker opened, illegal parking has escalated due to the shortage of on-campus parking. This includes the St. Paul Parks and Recreation parking lot on the Mississippi River Boulevard west of the South Campus. When Schoenecker was built, it displaced 127 parking spaces that were not replaced.

False representation: Free parking. St. Thomas does not mention the fact that it will charge people to park on campus for arena events. By doing so, UST is encouraging attendees to park in the neighborhood (where parking costs nothing). The likely result would be that UST's parking lots will not be full because attendees would parking for free in the neighborhood.

False assumption: Free parking. St. Thomas assumes its arena attendees can park anywhere in the neighborhood. That is an incorrect assumption for four reasons. First, St. Thomas students already take up all of the spaces on streets adjacent to campus where no permit is required. Second, neighbors also park on their streets, meaning the available

¹⁴ In stark contrast, UST's EAW (at 36-37) represented that it would have only 1-2 capacity basketball games and 2-4 capacity hockey games per season.

parking spaces are not as numerous as UST posits. When neighbors have events (and plan to start before arena attendees take all the parking), that further restricts the supply of parking for UST. Third, much of the surrounding neighborhood requires a permit to park on the street, M-F 8am-8pm (in some cases, 24/7). In fact, the neighborhoods around the UST campus contain about one third of the permit parking spaces in St. Paul. Many colleges in the city have no permit parking zones around them. The differences are that UST's business model relies heavily on commuters and that UST refuses to build adequate parking facilities. The effect of the permit zones is that arena attendees may not park nearby on weeknights, when many of the events occur — unless they park illegally and hope not to receive a citation before 8:00 p.m. Fourth, it is likely that the permit parking regime will become more restrictive. Already, blocks without permit parking are petitioning to require permits, and blocks with permits are petitioning to include weekends. The city has recently seen that Allianz arena's model of providing insufficient parking creates the need for permit parking in the neighborhood — and Allianz lies on robust LRT and bus lines that UST lacks.

12. UST MUST OBTAIN A NEW CUP TO BUILD AN ARENA.

The St. Paul Legislative Code limits the applicability of conditional use permits when the property owner changes the use of the property in designated ways. With this limitation, the city is able to ensure that the changed use of the property is consistent with the use that was originally approved.

Section 61.503 of the Legislative Code requires a new conditional use permit due to UST's massive expansion over the years:

A change to a conditional use requires a new permit when one (1) of the following conditions occurs:

....

(b) The floor area of a conditional use expands by fifty (50) percent or more. For a conditional use existing on October 25, 1975, expansion is the sum of the floor area of all the expansions since then. For a conditional use established after October 25, 1975, expansion is the sum of the floor area of all the expansions since being established. Floor area does not include floor area which is accessory to a principal use and which does not result in the expansion of a principal use.

Leg. Code § 61.503.

Since the CUP was last amended in 2004, the following buildings have been built on the St. Thomas campus in St. Paul:

South Campus

Anderson Multipurpose Arena	270,000.....	TBD
Schoenecker STEAM Center	130,000.....	2024
St. John Vianney Seminary Addition	20,000.....	2023
Facilities and Design Center	40,000	2018
Anderson Parking Facility	170,000	2009
TOTAL	630,000	

North Campus

Tommie North Residence Hall	210,000.....	2020
Frey Residence Hall	139,300.....	2020
Iverson Center for Faith	25,000	2020
Anderson Student Center	258,000.....	2012
Anderson Athletic and Recreation Complex	180,000.....	2010
McNeely Hall	75,000.....	2006
Flynn Residence Hall	96,000.....	2005
Center for Well Being	19,500.....	2005
TOTAL	1,002,800	

Source: <https://libguides.stthomas.edu/university-archives#:~:text=2019%2D2020%20Constructed%20as%20an,Thomas%20Aquinas.&text=1946%2F1948%20Constructed%20as%20science%20classroom%20building> (accessed April 21, 2024).

Even without the massive arena, these buildings constitute more than 2/3 of St. Thomas's square footage. A 50% increase would occur when only 1/3 of the square footage consisted of additions since 2004. Leg. Code 61.503(b) requires a new conditional use permit, and no further construction can be completed under the old CUP.

13. THE ARENA DOES NOT MEET THE REQUIRED SETBACK FROM THE PROPERTY LINE.

Although colleges and universities are a permitted use in the H2 zoning district, they are subject to the limitations, including a setback requirement from adjacent properties. Because the arena does not provide the required setback from the adjacent parcel, the City Council must deny the site plan.

As stated in ARD's Argument #9 above, there is no conditional use permit in place because the thresholds for requiring a new CUP have been exceeded. But even if the 1990 SCUP as amended were still effective, its provisions may only be used to limit the development on UST's campus. The SCUP may not allow that which the zoning code does not permit. Again, no variance to the zoning code's requirements has been sought.

The SCUP permits a zero setback from property belonging to the Saint Paul Seminary. As explained in ARD's Argument #4, a conditional use permit is a vehicle to place limitations on an otherwise permitted use; it is not a vehicle to permit what would otherwise not be permitted. The proper means to permit something that is otherwise not permitted is a variance, for which stringent requirements are applied including that the applicant's "necessity" is not simply wanting something that is not permitted.

The zero setback stated in the SCUP therefore does not apply. The applicable setback is set forth in Leg. Code § 65.220(b) applying to colleges and universities: “Buildings shall be set back a minimum of fifty (50) feet from every property line, plus an additional two (2) feet for every foot the building's height exceeds fifty (50) feet.”

The arena’s elevation at its eastern side is 60 feet. The required setback is therefore 70 feet: 50 feet plus 20 feet because the building is 10 feet higher than 50 feet.

Examining the site plan, it appears that the arena building is about 45 feet from the property line shared with the Saint Paul Seminary. As shown in Exhibit 2 to the site plan, the seminary owns half of the roadway running just west of the northern part of the arena, leaving just one lane, a parking bay, and a sidewalk between the seminary’s property and the arena building. Using the scale on the drawing, it is easy to see that the setback of the arena is substantially less than 50 feet.

Because the arena does not meet the required setback, the City Council cannot approve this site plan and must uphold ARD’s appeal.

SEARCHING FOR SOLUTIONS:

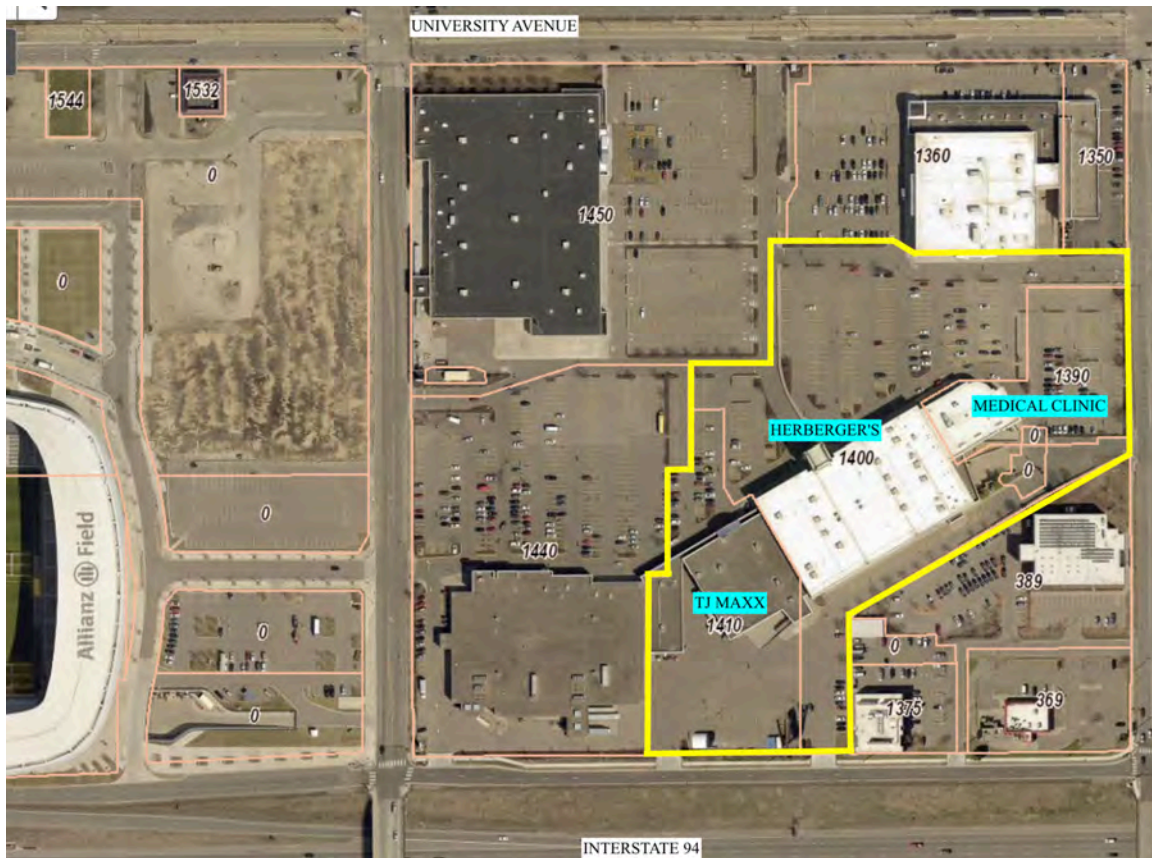
IS THERE ANY ALTERNATIVE TO PUTTING AN ARENA ON CAMPUS?

It is not incumbent upon the zoning administrator to find a suitable location for St. Thomas to build an arena. But it is worth noting here that several alternatives exist that are far better than the South Campus.

St. Thomas has moved to Division 1 and has aspirations of gaining national prominence through athletic achievement. UST also recognizes that basketball and hockey ticket sales generate significant revenue at other D1 universities. Ticket sales can be maximized at a larger arena.

UST’s first choice for its arena was Highland Bridge, but it was quickly recognized that the former Ford plant site did not offer the infrastructure (transit, freeway access, parking) required. The second site choice was a quickly rejected bid of \$61.4 million for Town and Country Club’s 100-acre golf course. After those off-campus sites failed, UST moved to option 3, its South Campus. But St. Thomas has better options.

Midway: West of Allianz Stadium lies the site of the former Montgomery Ward department store. It was replaced by a retail strip mall anchored by Herberger's, which occupied a 6-acre site

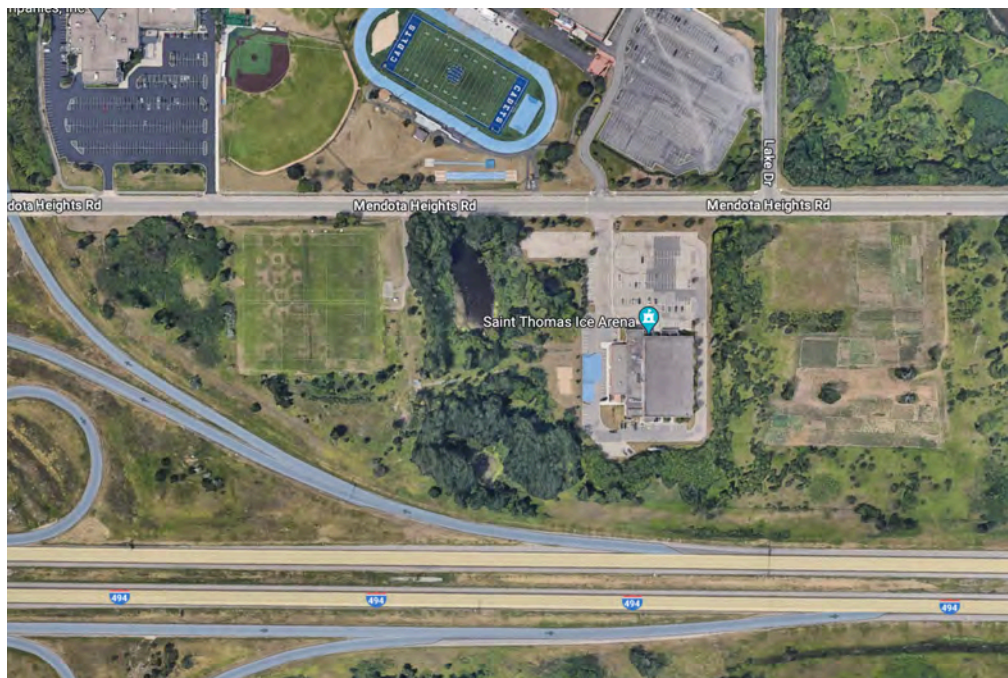


until it closed in 2018. That site remains vacate. The adjacent TJ Maxx (2.6 acres) closed in 2023 and remains vacant. A medical clinic (1.5 acres) is also adjacent to Herberger's, but could be relocated. The resulting 10-acre site could be redeveloped as a high-profile and high-visibility sports campus, with ample parking. Parking could be reciprocal with Allianz Field.

Cleveland & University: The area around Cleveland Avenue and University Avenue is ripe for redevelopment. Its origins are industrial, but parts are already being repurposed for uses like dog daycare, a brew pub, and self storage. Several buildings look vacant or low activity. These parcels are smaller, so that building a site of adequate size would require acquiring property from several owners. It is actually shorter to walk from UST's dorms to I-94 than to the South Campus arena site.

Vandalia & I-94. The West Rock industrial plant contains more than 40 acres but is barely utilized; West Rock eliminated 130 positions in 2022 as it closed its corrugated medium facility. It now operates only its corrugated paper processing facility, which uses a fraction of the West Rock acreage. Acquisition of the West Rock site would provide UST a blank slate to create the sort of sports campus that will allow it to compete at the highest levels, without the constraints of

Other sites would work better for the city, the neighborhood, and even for St. Thomas and its teams and alumni. The arena as proposed will be very difficult for St. Thomas' fans and alumni to attend. The relative merits of each alternative are shown on this diagram:



Area around St. Thomas Academy Arena

Desirable Aspects of Arena Site:

	South Campus	Allianz / Herbergers	Cleveland & University	Vandalia & I-94
Proximity to campus	Green	Orange	Green	Green
Proximity to public transportation	Red	Green	Green	Green
Proximity to major traffic route	Red	Green	Green	Green
Adequate on-site parking	Red	Green	Green	Green
Ecologically stable site	Red	Green	Green	Green
Minimal impact to nearby residents	Red	Green	Green	Green
Visibility to community	Red	Green	Green	Green
Proximity to restaurants	Red	Green	Orange	Orange
Low cost	Green	Orange	Orange	Orange
Opportunity cost	Red	Orange	Green	Green

Conclusion

Advocates for Responsible Development asks the City Council to uphold this appeal and to reject the site plan submitted by the University of St. Thomas.

Daniel L. M. Kennedy
Kennedy & Cain PLLC
3400 East Lake Street, Suite 200
Minneapolis, MN 55406
(612) 728-8080

Appendix A

Appendix to Appeal filed by Advocates for Responsible Development

Safety Risks of the Planned University of St. Thomas Arena

Executive Summary

The current plan for the University of St. Thomas (UST) arena has failed to adequately evaluate safety risks. Part I of the following discussion will examine the risks to neighborhood residents that result from obstruction to arrival of emergency vehicles during arena events. Part II will identify more general risks. The plan states that neighborhood streets will be used for parking during (UST) arena events. The plan does not include data or estimates of parking density, width of streets with two-sided parking during winter snow, or the time for parked cars to exit the neighborhood streets such that emergency vehicles have neighborhood access. The following discussion assumes an event capacity of 5500 attendees. A UST spokesperson stated in the EQ Monitor that events having 5500 attendees will occur 35 times a year. Making the reasonable assumption that individuals will park as close to the arena as possible and will park at the same density as currently measured with UST students and staff parking on the north side of Goodrich Avenue, the neighborhood bordered by Goodrich Avenue, Princeton Avenue, Mississippi River Boulevard, and Cretin Avenue can accommodate over 300 cars. With two-sided parking and narrowing of the streets by snow left at the curbs during winter, measured width of the streets ranges from 15 ft 8 in to 16 ft 5 in. With two-sided parking and travel in one direction, the width was measured at 8 ft 5 in. First responder emergency vehicles are 10 ft wide and require a lane wider than 10 ft when in motion. Cretin Avenue is the likely choice of exit from the neighborhood. Exit time to Cretin Avenue from, for example Fairmount Avenue, was measured at 2 minute intervals from 4:36 PM to 5:30 PM. Average delay for cars to enter the traffic flow on Cretin Avenue was 41.4 seconds. Assuming one way traffic and no pedestrian traffic, emergency vehicle access to the neighborhood will be delayed 41 minutes. With two-way traffic, the delay time is likely to be increased. American Heart Association guidelines state that for, heart attack, door to treatment time goal is less than 30 minutes. For stroke, door to treatment time goal is less than 60 minutes. These guidelines will be impossible to meet under these conditions. The obstruction to emergency vehicle access to the neighborhood as a result of the arena events risks the lives and health of neighborhood residents. Please see Part I for details of the model.

Part I Neighborhood-specific risk features

A neighborhood adjacent to the UST South Campus arena is that area bordered by Cretin Avenue, Goodrich Avenue, Princeton Avenue, and Mississippi River Boulevard. We assume that people will choose to park as close to the arena as possible without paying, even if more distant off-street parking is available. This assumption is reasonable, given that hockey and basketball are primarily winter sports, and arena attendees will likely choose to walk no further than necessary in the cold and snow. Distance from the curb to the curbside of parked cars and the residual width of the streets with two-sided parking was measured 3/26/2024 following a snowfall. The average width of the remaining width for driving was 17 ft 4 in. With a car in the driving lane and two-sided parking, the remaining width was reduced to 8 ft. 5 in. A first responder emergency vehicle is 10 ft wide and, consequently, cannot pass. When in motion, the

emergency vehicle requires a lane greater than 10 ft wide. The measurement did not include the width of parked pick-up trucks and their extended side mirrors.

- A. Determination of the number of cars exceeding the capacity of the Anderson parking ramp and needing parking.

For an event of 5500 attendees, 2.7 passengers per car, and using the UST estimate of 22% arriving by non-motorized means, 1589 cars will seek parking. For the same capacity, 1.7 passengers per car, and 22% arriving by non-motorized means, 2523 cars will seek parking. The figure of 1.7 passengers per car is used in FHA traffic analyses.

- B. Determination of parked car capacity in the neighborhood adjacent to the arena area bordered by Cretin Avenue, Goodrich Avenue, Princeton Avenue, and Mississippi River Boulevard.

This neighborhood was chosen for analysis because of its proximity to the proposed arena. The parked car capacity of the neighborhood was calibrated as follows. UST students and staff park on the north side of Goodrich Avenue, when school is in session. The number of cars parked between Cretin Avenue and Mississippi River Boulevard was counted and averaged 54 vehicles. This value was used as a measure of number of vehicles per street unit length. Capacity of the neighborhood is 330 cars. The number of cars seeking parking is in excess of 330 cars. Consequently, the adjacent neighborhood streets are likely to be used for parking. Fairmount Avenue, as an example, has a capacity of 84 cars parking on both sides of the street from Woodlawn Avenue to Cretin Avenue.

- C. Calculation of delay in exit of parked cars

The issue is the delay that will occur when the arena event concludes, the attendees attempt to leave the streets where their cars are parked, and a neighborhood resident has an emergency. Again, we use Fairmount Avenue as an example. The argument will apply to other neighborhood streets. The model employed is that used by Mao et. al. (Mao, X et al., Optimal Evacuation Strategy for Parking Lots Considering the Dynamic Background Traffic Flows, Intl J Environ Res and Public Health, 2019,16:2194) The model assumes no left turn, no non-motorized or pedestrian traffic, and one car can exit at a time.

Let Q_r = the background traffic flow. Please see appendix for determination of Q_r
 τ_r = minimum time for background traffic to allow exiting vehicle to merge into background traffic. Please see appendix for determination of τ_r
 T_r = average time for two consecutive intervals for car to exit.
 μ_r = average time of arrival in queue. Please see appendix for determination of μ_r .

$T_r = 1/(Q_r * \exp(-Q_r * \tau_r)) - 1/Q_r - \tau_r$. $T_r = 6.05$ minutes.

Since the vehicle at the front of the queue can only leave and merge in to the background traffic flow when vehicle headway is greater than the minimum time for background traffic to allow vehicle to exit into background traffic flow, the average time between the intervals is the service time of queueing system.

Let d_r = average queueing time per car.
 $d_r = T_r / (\mu_r * T_r - 1) = 41$ minutes.

Numerical simulation, by Mao and colleagues, of evacuation of a parking lot with two exits similar to the exits from the neighborhood streets to Cretin Avenue had average queueing times of 17 minutes and 28 minutes. The simulation assumed no left turns, background traffic flow, and no non-motorized traffic. (Mao et al, op. cit.). With left turns and two way traffic, delays in excess of 28 minutes are reasonable. An analogous situation is that of exiting the Lawson parking ramp at the conclusion of a Minnesota Wild hockey game, an Ordway event, or both. With one way traffic and an adequate driving lane, I have personally experienced exit times of 25 to 35 minutes.

Part II General risk features

A review of literature studying traffic safety identifies several risk features for death and serious injuries. Speeding, reduced visibility, neighborhood environment, human behavior, and congestion are all associated with increased risk for accidents.

The AAA Foundation for Traffic Safety reported that 60% of all fatalities on urban streets occurred at dawn, dusk, or in darkness. Rain and snow were identified as risk features by Andreescu et. al. (Clin Res 1988,9:225). Reduced visibility and adverse weather conditions are common in Minnesota winters. The arena is designated to serve hockey and basketball, primarily winter sports, which will be held during these adverse weather conditions. The current plan identifies on street parking as required to manage the parking demand for events. On street parking increased risk to pedestrians 1.8 times. (Congiu,T. et.al., Sustainability, 2019,11:1014) Greater than 50% of crashes on a college campus were associated with crosswalk signs, pedestrian signals, public transit, and at least 3 location and branding signs at intersections (Dai, D. The Impact of Built Environment on Pedestrian Crashes and the Identification of Crash Clusters on an Urban Campus, W J Emerg Med, 2010, 11: 294). The neighborhood selected by UST has many homes that are nearly or greater than 100 years old. Many of these homes house elderly residents, a population identified as having increased risk. Neighborhoods built before 1970 were associated with a higher frequency of crashes. Higher density of residential homes and minor roads were associated with higher crash frequency of all types. (Asadi, Accident and Prevention, 2022,17:9) In a study of pedestrian crashes, intersections with 4 or more legs were identified as having an increased likelihood of crashes. Please note that the Summit-Cretin and Marshall-Cretin intersections have 4 legs. (Dumbaugh, E. and Li, W., Designing for the Safety of Pedestrians, Cyclists, and Motorists in Urban Environments, J Am Planning Assoc, 2011, 77:1). As reported by Wood, et al. (J Consumer Res, 2011,38:611), "Heavy social drinking is a common and deeply ingrained tradition for both professional and college games that often occurs before the game, during the game (although only in stadiums that sell alcoholic beverages), and after the game. Unfortunately, heavy drinking is associated with many types of risky behavior, perhaps most notably, impaired driving. Game-day drinking, especially, has been shown to lead to increased driving danger." Congestion is linked to speeding and aggressive driving behavior. A pedestrian vehicle crash at 30 mph has a 45% mortality, while a crash at 40 mph has an 85% mortality. (National Center for Health Statistics)

Summary and Conclusions

The proposed arena presents neighborhood specific and general safety concerns. Obstruction of emergency vehicle access to the neighborhood with maximum capacity events is calculated at 41 minutes. American Heart Association guidelines state that for heart attack, door to treatment time goal is less than 30 minutes. For stroke, door to treatment time goal is less than 60 minutes. These guidelines will be impossible to meet under these conditions. The obstruction of emergency vehicle access to the neighborhood as a result of the arena events risks the lives and health of neighborhood residents. General risks include poor driving conditions especially in winter, elderly residents in the older adjacent neighborhoods, traffic congestion, speeding, and alcohol consumption.

The residents of St. Paul can reasonably demand that the City of St. Paul government protect the lives, health, and safety of its residents. Please note that the EAW identified 1 recent death and 3 serious crashes without an arena event. The question that needs an explicit answer is how many deaths, serious injuries, and serious crashes will the City of St. Paul endorse as an acceptable price for an entertainment center in a site without adequate infrastructure to support it. The attendees of arena events may willingly accept the increased risks of the current plan. The residents of the adjacent neighborhoods refuse to accept these additional risks.

Respectfully submitted,
Jerome H. Abrams

Appendix

Determination of Q_r

Calculation of Q_r

Road width ft	30
car speed mph	25
	36.6666
speed ft/sec	7
Sec to traverse road	0.81818
	2
	1.22222
Cars/sec across road= Q_r	2

Determination of τ_r

minimum time of the background traffic to allow vehicle at exit to merge into background traffic was estimated at 5 seconds

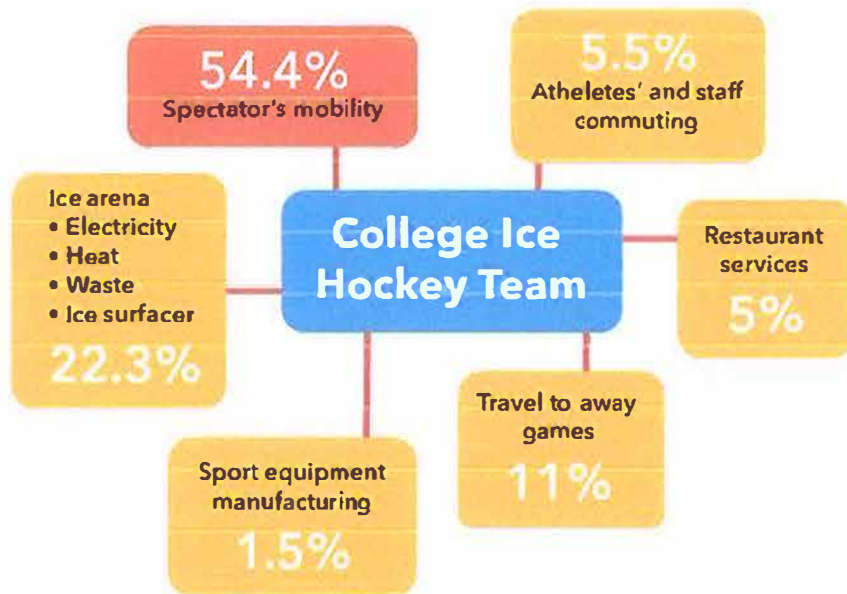
Determination of μ_r

Average time to exit Fairmount Avenue to Cretin Avenue was measured on 4/9/2024 from 4:36 PM to 5:30 PM every 1 to 2 minutes. Average time for a left turn was 41.4 seconds. Average time for a right turn was 12.9 sec. An average of 27.1 seconds was used. Data available on request.

μr = average time for individual car to exit/ number of cars parked
= 0.0369 sec

Appendix B

Hockey Greenhouse Gas Sources Example



Uusitalo, Halonen, Koljonen, Heikkinen, Clavelin
In Search for Climate Neutrality in Ice Hockey
Journal of Environmental Management, Vol 355, March 2024

APPENDIX C

EXTENT OF UST PARKING PERMIT DEMANDS ON CITY AS COMPARED TO OTHER INSTITUTIONS

LOCATION	NUMBER OF AREAS	PARKING SPACES	PERCENTAGE OF SPACES
State Fair/Univ of Minnesota/Como Zoo	2	1,624	23.4%
Xcel Energy Center	3	634	9.1%
St. Catherine University	1	314	4.5%
Saint Paul College	1	242	3.5%
Mitchell Hamline College of Law	1	152	2.2%
Cretin Derham Hall	1	246	3.5%
Concordia University	1	190	2.7%
Miscellaneous commercial	7	1,153	16.6%
University of St. Thomas	10	2,376	34.2%
Citywide total	27	6,931	99.7%