ALLIANT

Seagate Technology Addition

PARKING STUDY

DRAFT REPORT

Prepared for:

City of Bloomington
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1. Introduction

Alliant has conducted a parking study in response to a proposed addition to the existing Seagate Technology facility at 7801 Computer Avenue which spans the municipal boundaries of Bloomington and Edina, MN (**Figure 1**). The proposed two-story addition will have a footprint of approximately 35,000 square feet, expanding existing fabrication space along with supporting infrastructure to accommodate increased production volumes. Seagate is also considering future expansion of their campus beyond the current addition, including a nitrogen plant project under a separate contract, and would like to better understand the current parking supply and demand for the entire campus. Although the primary driveway and a portion of the building and parking supply are located within the Edina city limits, much of the campus – including the parking lot affected by the proposed addition – is located within the Bloomington city limits. The proposed addition would be constructed on an existing parking lot on the south side of the building, removing 117 parking spaces from the total campus supply, with the proposed nitrogen plant project constructed on a different parking lot to the southeast, removing 12 parking spaces from the supply (see **Figure 2**).

1.1 Purpose & Need

Given the specialized nature of the proposed facility, and its unique location spanning both Bloomington and Edina, it is understood that standard parking ratios per each respective City Code may not be sufficient to estimate parking demand. Therefore, the purpose of this study is twofold: 1) to analyze whether a reduction in the total campus supply would still support the parking demand of the facility with the proposed expansion and 2) to document the actual parking demand of the facility for future expansions. To achieve this, the following goals have been established:

- Document the total campus supply of the existing facility
- Document typical operations of the Seagate campus, including a detailed breakdown of the facility, day-to-day variations, hours of operation, and employees per shift
- Identify any unique site, use, or management circumstances that could affect parking
- Determine the existing and/or estimated peak parking demand of the campus using:
  - Site observations (in-person counts and in/out access counts) of the Seagate facility
  - Average and 85th-percentile rates from the *ITE Parking Generation Manual, 6th Edition*
  - Parking requirements based on Bloomington and Edina City Codes
- Estimate the future parking demand of the campus including the 35,000 square foot addition
- Compare the estimated future parking demand against the proposed parking supply to determine a surplus or deficit and, if not met, how far the supply deviates from City Code
  - If estimated future parking demand exceeds the proposed parking supply, document impacts to the surrounding roadways and identify any alternative parking supply options that could be considered in the event of any expected parking supply shortfalls

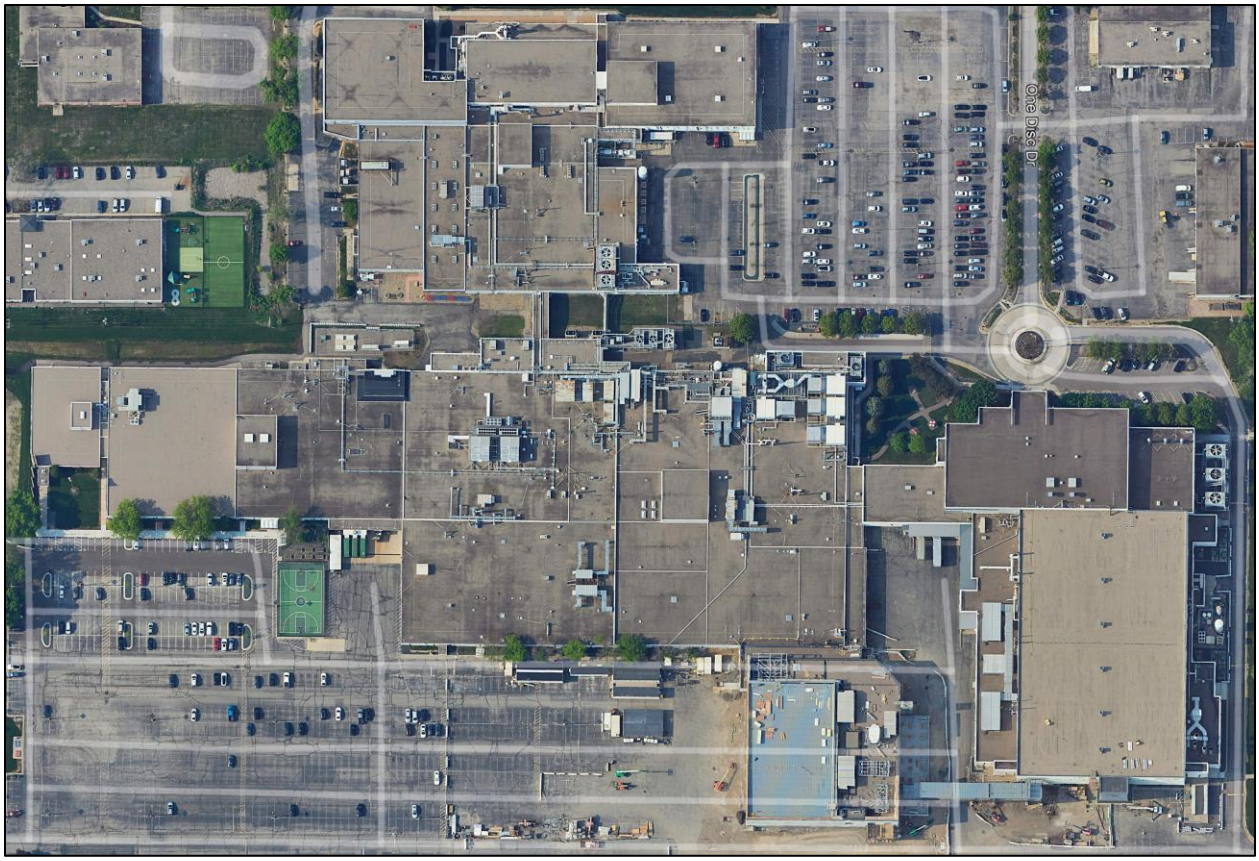

Figure 1. Seagate Technology Campus (Edina & Bloomington)

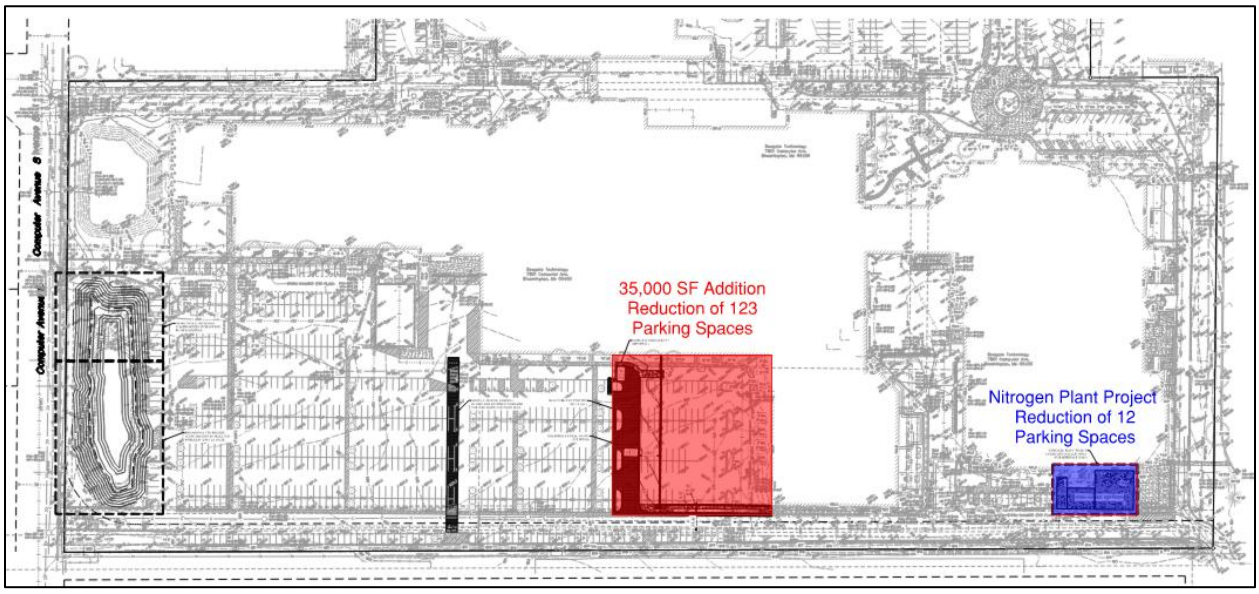

Figure 2. Seagate Technology Addition & Nitrogen Plant Project (Bloomington)

2. Parking Supply

Prior to calculating the parking demand of the Seagate Technology facility, the existing conditions were documented to ensure a consistent understanding of how the overall campus is utilized and how various access points and parking lots function. For the sake of documentation, seven (7) **access points** and seven (7) **parking lots** were identified as shown in **Figure 3**. Facility operations including shift schedules, badge-in data, and a facility land use breakdown were also documented.

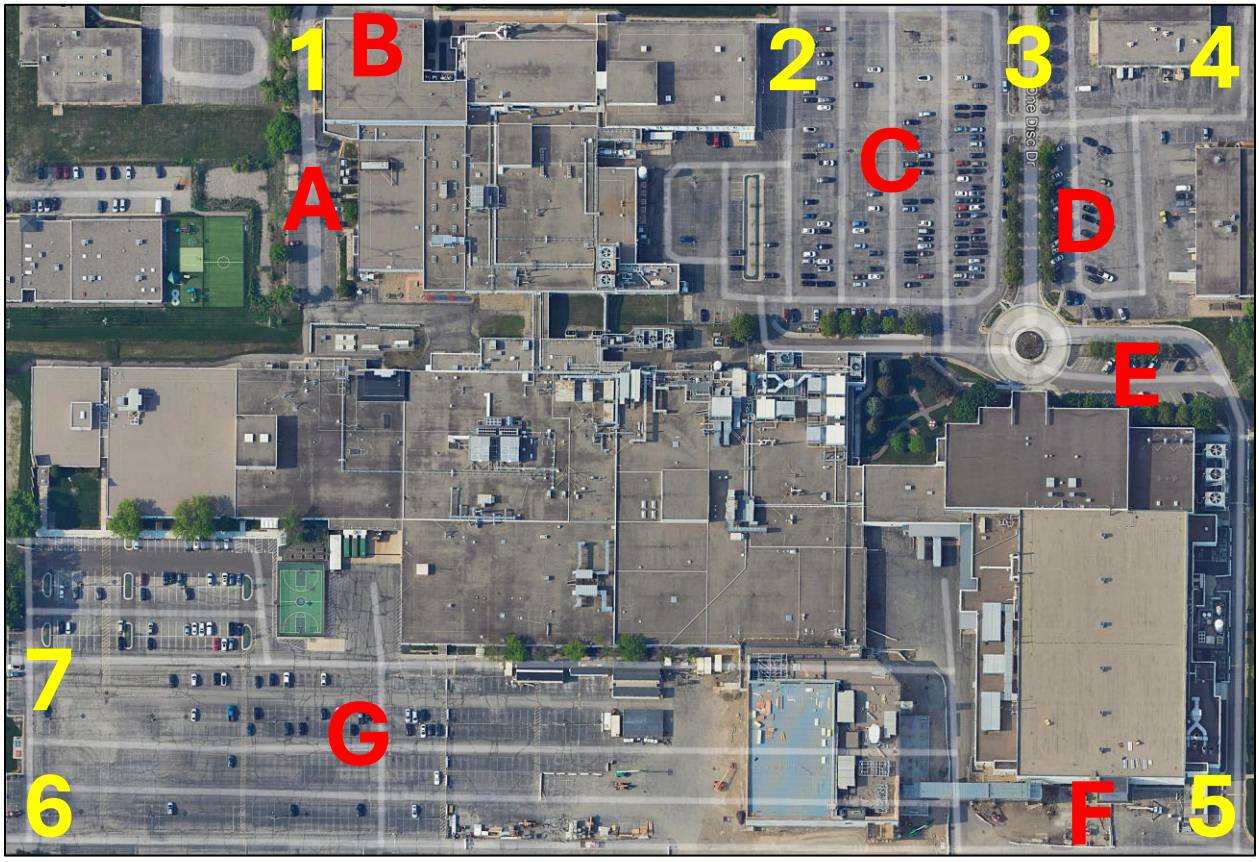

Figure 3. Seagate Technology Campus – Access & Lots

Based on site observations, the seven existing parking lots consist of 1,266 total parking stalls:

- Lot A – 37 parking stalls
- Lot B – 14 parking stalls
- Lot C – 402 parking stalls
- Lot D – 56 parking stalls
- Lot E – 25 parking stalls
- Lot F – 24 parking stalls
- Lot G – 708 parking stalls
  - Including 81 parking spaces not meeting typical front setbacks
  - Excluding 81 parking spaces within partial public right-of-way

2.1 Facility Operations

The Seagate Technology facility operates using a shift schedule (see **Table 1**) that results in 24-hour, seven-day a week operation. Each of the four rotating shifts – A Shift, B Shift, C Shift, and D Shift – have approximately similar numbers but the fifth "Day" shift makes up most personnel onsite. A Shift and B Shift work Monday to Wednesday and every other Thursday with C Shift and D Shift working Friday to Sunday and every other Thursday.

Table 1. Seagate Technology Shift Schedule

Time of Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
7:00am - 4:00pm	-	DAY	DAY	DAY	DAY	DAY	-
6:30am - 6:30pm	C	A	A	A	A / C	C	C
6:30pm - 6:30am	D	B	B	B	B / D	D	D

2.1.1 Daily Badge-In Data

Badge-in data for the facility was provided by Seagate Technology's security team over three separate weeks in early 2026 (see **Table 2**). The data was broken out by the day of the week (24-hour periods) and removed any duplicate badge-ins throughout the day (lunches, breaks, etc.) to analyze as close to true site population as possible. Although this data would not accurately reflect the population on site due to varying shifts throughout the day, it was used to guide onsite data collection efforts. Based on the badge-in data, Tuesday to Thursday appeared ideal for data collection. Although the Monday in March and the Fridays in March and April were similar to Tuesday through Thursday, the midweek averages were higher and more consistent month-to-month.

Table 2. Seagate Technology Daily Badge-In Data

Month	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
February 2026 2/15/2026 - 2/21/2026	439	547	1026	1051	1085	979	460
March 2026 3/1/2026 - 3/7/2026	449	1163	1071	1055	1206	996	469
April 2026 4/5/2026 - 4/11/2026	388	1038	1121	1067	1077	1107	459
Daily Average	**425**	**916**	**1073**	**1058**	**1123**	**1027**	**463**

2.1.2 Facility Breakdown

A previous expansion of the Seagate Technology facility took place in 2022. The City of Bloomington did not require a parking study to be performed at the time; however, Seagate provided an overall campus map depicting square footage by land use including a breakdown of parking requirements. To remain consistent with how Seagate is denoting their spaces the previous breakdown is included in **Table 3** below and attached in the appendix for reference.

Table 3. Seagate Technology Interior Land Use Breakdown

Facility Use	Square Footage			Land Use	Total SF by Land Use
	Bloomington	Edina	Total		
Lab	78,962.72	59,185.40	138,148.12	Industrial	288,410.50
Clean Room	150,262.38	-	150,262.38		
	-	30,116.21	30,116.21	Manufacturing	30,116.21
Common	28,514.94	5,297.27	33,812.21	Proportionate	33,812.21
Non-Occupied	17,625.86	969.98	18,595.84	Non-Occupied	18,595.84
Office	126,214.36	31,649.74	157,864.10	Office	157,864.10
Support / MEP	214,812.44	22,592.34	237,404.78	Warehouse	237,404.78
Total	616,392.70	149,810.94	766,203.64		

2.2 Unique Site Conditions

Due to multiple driveways, interconnected internal roadways, and adjacent businesses there are a few unique site conditions worth documenting for the Seagate Technology campus. These will be called out using the access point numbers and parking lot letters as previously noted.

Access 1, Lots A & B

Based on conversations with Seagate, Access 1 is not currently operated as valid parking and there is at most one car in that lot on any given day. As such, Alliant did not deploy cameras at this location. However, spot-checks were still performed for Lot A and Lot B when on site.

Access 4, Lot D

Based on conversations with Seagate, Lot D is a valid lot with the southwest portion owned by Seagate and occupied throughout the day by Seagate employees. Due to the proximity of the buildings to Access 4 and the corresponding signing, an assumption was made that trips in/out of Access 4 would not be considered part of the larger Seagate Technology campus parking demand.

Lot G

As noted in a Bloomington staff report completed for a 2022 addition to the Seagate Technology facility, a portion of Lot G includes surplus parking spaces (93 spaces in 2022, 81 spaces in 2026) which are within the partial public right-of-way and would not count towards overall parking supply.

3. Parking Observations

Parking observations were conducted by Alliant the week of April 27th, 2026, for a 48-hour period starting on Tuesday, April 28th and ending on Thursday, April 30th. The timing of the data collection was consistent with peak usage as documented using badge-in data provided by Seagate Technology's security team, avoided day shift ingress/egress and the lunch hour, and provided multiple data points across the week. Leveraging two methods of data collection – onsite spot-checks and deployment of traffic cameras – allowed graphical summaries documenting site occupancy over a 48-hour period and the ability to verify circulation patterns as needed.

3.1 Onsite Spot-Checks

Alliant conducted two separate onsite spot-checks, with **Table 4** summarizing the observed parking demand. One spot-check was conducted the morning of Tuesday, April 28th with the second spot-check conducted the afternoon of Thursday, April 30th. In both cases, the spot-checks were completed by driving through the lots and counting the number of occupied parking spaces. These were conducted as efficiently as possible, however, some inconsistencies in counting or in vehicles coming or going during the count may have resulted in a slight margin of error (5 to 10 vehicles).

Table 4. Seagate Technology Campus – Spot-Checks

Lot	Available Stalls	Occupied Stalls	
		Tuesday AM	Thursday PM
A	37	0	0
B	14	0	0
C	402	267	259
D	56	54	59
E	25	2	2
F	24	21	19
G	708	380	371
Total	1,266	724	710

Note 1: AM collected 10:09-11:22 AM, PM collected 1:51-3:00 PM

Note 2: Lot G has 81 additional spaces within the partial public R/W

Based on the spot-checks, the peak parking demand for the Seagate Technology campus was 724 vehicles, which indicates a parking surplus of 542 parking stalls based on a parking supply of 1,266 parking stalls. Parking surplus and/or deficit will be discussed in more detail in Section 4.0.

3.2 Traffic Camera Deployment

In addition to onsite spot-checks, traffic cameras were deployed at each of the access points (except for Access 1, as previously noted). Ingress and egress data for a 48-hour period (starting at 2:00 PM on Tuesday, April 28th and ending at 2:00 PM on Thursday, April 30th) was compiled for each access and then combined for the entire Seagate Technology campus (see **Figure 4**). Fluctuations throughout the 48-hour period would include shift changes, lunch hours, and breaks as well as any trucks loading and unloading, delivery vehicles, or visitors.

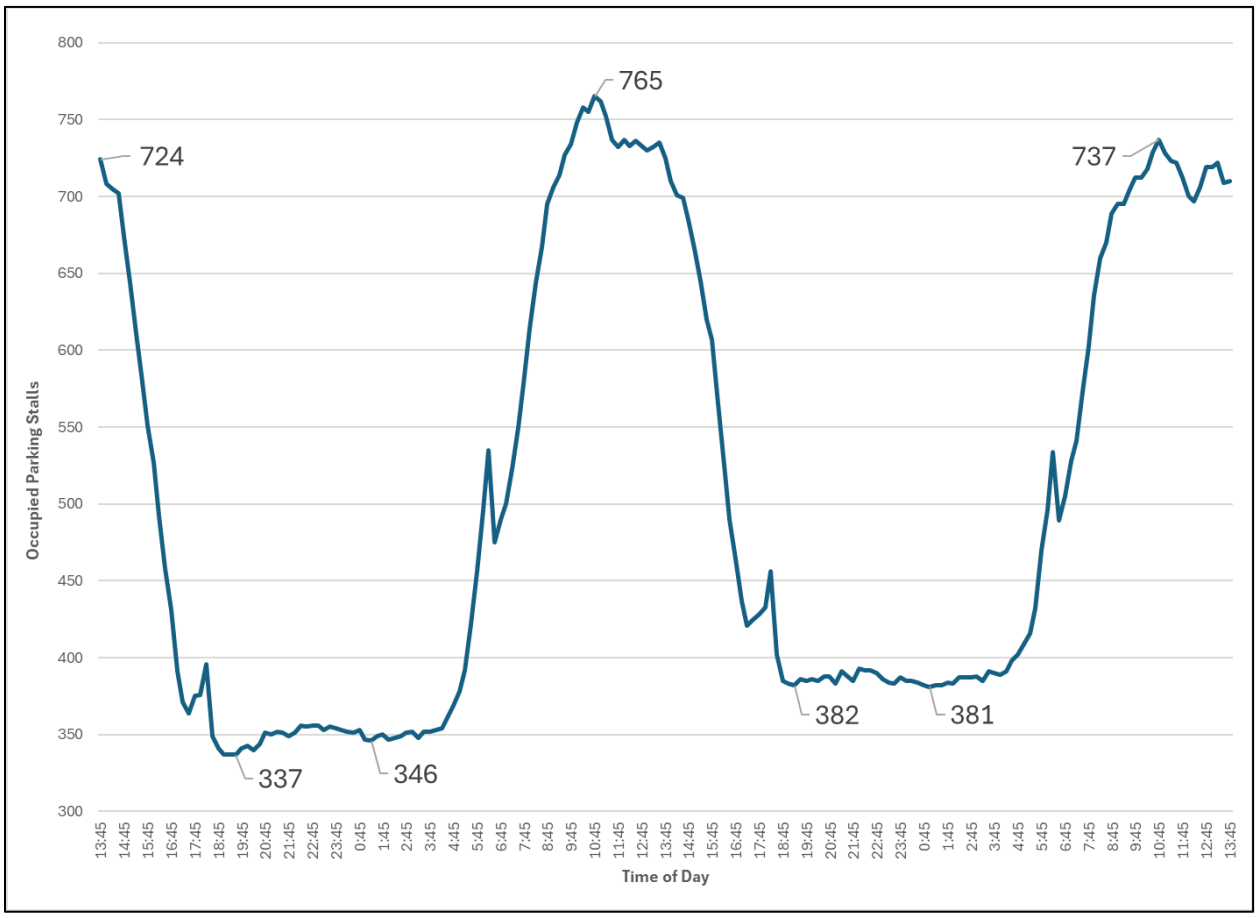

Figure 4. Seagate Technology Campus – 48-Hour Parking Demand

Based on the 48-hour traffic camera deployment, the peak parking demand for the Seagate Technology campus was 765 vehicles, which indicates a parking surplus of 501 parking stalls based on a parking supply of 1,266 parking stalls. This was observed to be 41 vehicles more than the peak parking demand of the spot-checks, and occurred during the 10:00 AM hour on Wednesday, April 29th, 2026. Parking surplus and/or deficit will be discussed in more detail in Section 4.0.

4. Parking Demand

In addition to parking observations the week of April 27th, 2026, the parking demand of the Seagate Technology campus was estimated via four different methodologies: City of Bloomington City Code requirements, City of Edina City Code requirements, a combination of City of Bloomington and Edina Code requirements, and the *ITE Parking Generation Manual, 6th Edition*.

4.1 Proposed Addition

The proposed two-story addition will have a footprint of approximately 35,000 square feet, expanding existing fabrication space along with supporting infrastructure to accommodate increased production volumes. The second level will be smaller than the first at approximately 31,500 square feet with occupied spaces of the addition including:

- 17,900 square feet of fabrication space
- 8,800 square feet of office space
- 18,900 square feet of sub-fabrication and support

A nitrogen plant project under a separate contract is also being considered in the southeast corner of the facility. Based on an initial site plan it will have a footprint of approximately 5,000 square feet. Together, the proposed addition (117 parking spaces) and nitrogen plant (12 parking spaces) will reduce the total campus parking supply by 129 parking spaces to a total of 1,137 parking spaces.

4.2 City of Bloomington Parking Requirements

Section 21.301.06 of the City of Bloomington's Code of Ordinances provides guidance for off-street parking based on the square footage of different land uses. Relevant land uses to this site are Industrial: General Manufacturing, Industrial: Warehousing, and Office: General. A weighted average for the three land uses was calculated and applied to the common areas, whereas the non-occupied spaces were excluded from the parking demand calculations. **Table 5** summarizes the square footages, land uses, City of Bloomington City Code parking requirements, and the required number of parking spaces for the entire Seagate Technology campus.

Table 5. Bloomington City Code – Parking Requirements

Use	Standard	Existing Conditions		Proposed Conditions	
		Square Footage	Parking Spaces	Square Footage	Parking Spaces
Bloomington Facility					
Industrial: Manufacturing	1 per 500 SF	318,526.71	637.1	355,326.71	710.7
Industrial: Warehousing	1 per 1,000 SF	237,404.78	237.4	237,404.78	237.4
Office: General	1 per 285 SF	157,864.10	553.9	166,664.10	584.8
Common Area	1 per 500 SF	33,812.21	67.6	33,812.21	67.6
Non-Occupied	-	18,595.84	0.0	18,595.84	0.0
Parking Spaces Required			1496	Net Change in	1601
Parking Spaces Proposed			1266	Requirement	1137
Parking Surplus / Deficit			-230	105	-464

Based on the Bloomington City Code, the Seagate Technology campus is required to have 1,496 parking stalls under existing conditions and 1,601 parking stalls under future conditions. These requirements exceed the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (parking deficits of 230 stalls and 464 stalls, respectively).

4.3 City of Edina Parking Requirements

Section 36-1311 of the City of Edina's Code of Ordinances provides guidance for off-street parking based on the square footage of different land uses. Relevant land uses to this site are Multitenant Industrial Buildings: Office, Multitenant Industrial Buildings: Warehouse, Multitenant Industrial Buildings: Manufacturing, and Multitenant Industrial Buildings: Reasearch, Testing, or Experimentation. A weighted average for the four land uses was calculated and applied to the common areas, whereas the non-occupied spaces were excluded from the parking demand calculations. **Table 6** summarizes the square footages, land uses, City of Edina City Code parking requirements, and the required number of parking spaces for the entire Seagate Technology campus including a secondary calculation of one space per 500 square feet of gross floor area.

Table 6. Edina City Code – Parking Requirements

Use	Standard	Existing Conditions		Proposed Conditions	
		Square Footage	Parking Spaces	Square Footage	Parking Spaces
Edina Facility					
Multitenant: Industrial	1 per 500 SF	288,410.50	576.8	307,310.50	614.6
Multitenant: Manufacturing	1 per 300 SF	30,116.21	100.4	48,016.21	160.1
Multitenant: Warehousing	1 per 2,000 SF	237,404.78	118.7	237,404.78	118.7
Multitenant: Office	1 per 300 SF	157,864.10	526.2	166,664.10	555.5
Common Area	1 per 540 SF	33,812.21	62.6	33,812.21	62.6
Non-Occupied	-	18,595.84	0.0	18,595.84	0.0
Parking Spaces Required			1385	Net Change in Requirement	1512
Parking Spaces Proposed			1266		1137
Parking Surplus / Deficit			-119	127	-375

Based on the Edina City Code, the Seagate Technology campus is required to have 1,385 parking stalls under existing conditions and 1,512 parking stalls under future conditions. These requirements exceed the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (parking deficits of 119 stalls and 375 stalls, respectively).

4.4 Combined City Parking Requirements

As a portion of the Seagate Technology facility spans both municipal boundaries of Bloomington and Edina, parking demand calculations have previously divided the building by jurisdiction. Both Code of Ordinances were applied to the applicable portion of the facility to generate the combined city parking requirements as shown in **Table 7**.

Table 7. Combined City Code – Parking Requirements

Use	Standard	Existing Conditions		Proposed Conditions	
		Square Footage	Parking Spaces	Square Footage	Parking Spaces
Bloomington Facility					
Industrial: Manufacturing	1 per 500 SF	229,225.10	458.5	266,025.10	532.1
Industrial: Warehousing	1 per 1,000 SF	214,812.44	214.8	214,812.44	214.8
Office: General	1 per 285 SF	126,214.36	442.9	135,014.36	473.7
Common Area	1 per 511 SF	28,514.94	55.8	28,514.94	55.8
Non-Occupied	-	17,625.86	0.0	17,625.86	0.0
Edina Facility					
Multitenant: Industrial	1 per 500 SF	59,185.40	118.4	59,185.40	118.4
Multitenant: Manufacturing	1 per 300 SF	30,116.21	100.4	30,116.21	100.4
Multitenant: Warehousing	1 per 2,000 SF	22,592.34	11.3	22,592.34	11.3
Multitenant: Office	1 per 300 SF	31,649.74	105.5	31,649.74	105.5
Common Area	1 per 428 SF	5,297.27	12.4	5,297.27	12.4
Non-Occupied	-	969.98	0.0	969.98	0.0
Parking Spaces Required			1520	Net Change in Requirement	1625
Parking Spaces Proposed			1266		1137
Parking Surplus / Deficit			-254	105	-488

Based on the combined City Codes, the Seagate Technology campus is required to have 1,520 parking stalls under existing conditions and 1,625 parking stalls under future conditions. These requirements exceed the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (parking deficits of 254 stalls and 488 stalls, respectively).

4.5 ITE Parking Generation

The *ITE Parking Generation Manual, 6th Edition*, was also utilized to estimate expected parking demand for the two development scenarios. The ITE Parking Generation Manual provides estimated parking demand and hourly parking demand distribution rates based on studies of similar land uses. Two parking demand rates are typically utilized: weighted average and 85th percentile. Weighted average rates provide expected parking demand at an average rate per unit based on study data. 85th percentile rates are more conservative, providing a rate for parking demand that ensures 85 percent of similar developments would fall at or below those values. **Table 8** summarizes the estimated parking demand based on the ITE Parking Generation Manual using weighted average rates and **Table 9** the estimated parking demand based using 85th percentile rates.

Table 8. ITE Weighted Average Rates – Estimated Parking Demand

Use	Standard	Existing Conditions		Proposed Conditions	
		Square Footage	Parking Demand	Square Footage	Parking Spaces
ITE Parking Generation - Average Rates					
130: Industrial Park	1.01 per 1,000 SF	288,410.50	291.3	307,310.50	310.4
140: Manufacturing	0.92 per 1,000 SF	30,116.21	27.7	48,016.21	44.2
150: Warehousing	0.37 per 1,000 SF	237,404.78	87.8	237,404.78	87.8
710: General Office	1.95 per 1,000 SF	157,864.10	307.8	166,664.10	325.0
Common Area	1 per 999 SF	33,812.21	33.8	33,812.21	33.8
Non-Occupied	-	18,595.84	0.0	18,595.84	0.0
Parking Spaces Required			749	Net Change in Demand	802
Parking Spaces Proposed			1266		1137
Parking Surplus / Deficit			517	53	335

Based on weighted average rates, the parking demand of the Seagate Technology campus is expected to be 749 vehicles under existing conditions and 802 vehicles under future conditions. These requirements are below the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (parking surplus of 517 stalls and 335 stalls, respectively).

Table 9. ITE 85th Percentile Rates – Estimated Parking Demand

Use	Standard	Existing Conditions		Proposed Conditions	
		Square Footage	Parking Demand	Square Footage	Parking Demand
ITE Parking Generation - 85th Percentile Rates					
130: Industrial Park	1.85 per 1,000 SF	288,410.50	533.6	307,310.50	568.5
140: Manufacturing	3.36 per 1,000 SF	30,116.21	101.2	48,016.21	161.3
150: Warehousing	1.11 per 1,000 SF	237,404.78	263.5	237,404.78	263.5
710: General Office	2.98 per 1,000 SF	157,864.10	470.4	166,664.10	496.7
Common Area	1 per 522 SF	33,812.21	64.8	33,812.21	64.8
Non-Occupied	-	18,595.84	0.0	18,595.84	0.0
Parking Spaces Required			1434	Net Change in Demand	1555
Parking Spaces Proposed			1266		1137
Parking Surplus / Deficit			-168	121	-418

Based on 85th percentile rates, the parking demand of the Seagate Technology campus is expected to be 1,434 vehicles under existing conditions and 1,555 vehicles under future conditions. These requirements exceed the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (parking deficits of 168 stalls and 418 stalls, respectively).

5. Conclusions

Alliant was retained to complete a parking study in response to a proposed addition to the existing Seagate Technology facility at 7801 Computer Avenue which spans the municipal boundaries of Bloomington and Edina, MN. The following conclusions are offered for consideration:

- Parking Supply
  - Based on site observations, the seven existing parking lots consist of 1,266 total parking stalls, excluding 81 parking spaces within partial public right-of-way. Together, the proposed addition (117 parking spaces) and nitrogen plant (12 parking spaces) will reduce the total Seagate Technology campus parking supply by 129 parking spaces to a total of 1,137 parking spaces.
- Parking Observations
  - Seagate Technology facility operates using a shift schedule (see Table 1) that results in 24-hour, seven-day a week operation. Based on the badge-in data, Tuesday to Thursday appeared to reflect peak parking usage and ideal for onsite data collection.
  - Based on the spot-checks, the peak parking demand for the Seagate Technology campus was 724 vehicles, which indicates a parking surplus of 542 parking stalls based on a parking supply of 1,266 parking stalls.
  - Based on the 48-hour traffic camera deployment, the peak parking demand for the Seagate Technology campus was 765 vehicles, which indicates a parking surplus of 501 parking stalls based on a parking supply of 1,266 parking stalls.
- Parking Demand
  - City of Bloomington Parking Requirements
    - Based on the Bloomington City Code, 1,496 parking stalls under existing conditions and 1,601 parking stalls under future conditions are required. These requirements exceed the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (parking deficits of 230 stalls and 464 stalls, respectively).
  - City of Edina Parking Requirements
    - Based on the Edina City Code, 1,385 parking stalls under existing conditions and 1,512 parking stalls under future conditions are required. These requirements exceed the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (parking deficits of 119 stalls and 375 stalls, respectively).
  - Combined City Parking Requirements
    - Based on the combined City Codes, 1,520 parking stalls under existing conditions and 1,625 parking stalls under future conditions are required. These requirements exceed the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (parking deficits of 254 stalls and 488 stalls, respectively).

- ITE Parking Generation
  - Based on weighted average rates, the parking demand is expected to be 749 vehicles under existing conditions and 802 vehicles under future conditions. These requirements are below the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (parking surplus of 517 stalls and 335 stalls).
  - Based on 85th percentile rates, the parking demand is expected to be 1,434 vehicles under existing conditions and 1,555 vehicles under future conditions. These requirements exceed the existing and proposed parking supply of 1,266 stalls and 1,137 stalls, respectively (deficits of 168 stalls and 418 stalls).

Recommendations

Based on City of Bloomington, City of Edina, ITE Parking Generation, and parking observations conducted by Alliant the week of April 27th, 2026, it is our professional traffic engineering that the existing parking supply of the Seagate Technology campus is sufficient to accommodate the proposed two-story addition and future expansion of their campus beyond the current addition, including a nitrogen plant project under a separate contract. Although the existing parking supply does not meet any combination of City Code requirements, the observed parking demand most closely resembles the weighted average rates per the *ITE Parking Generation Manual, 6th Edition* which indicates a change in parking demand of 53 vehicles with the addition.

Anticipated Parking Supply & Demand

Based on observations, the peak parking demand for the Seagate Technology campus is currently 765 vehicles, which indicated a parking surplus of 501 parking stalls based on a parking supply of 1,266 parking stalls. With 53 additional vehicles and 129 less parking stalls under the proposed conditions, the expected peak parking demand would be 818 vehicles with 1,137 available stalls for a surplus of 319 stalls excluding the 81 parking spaces within the partial public right-of-way.

It is understood that the parking supply deviates greatly from City Code, however, the unique operations and physical infrastructure and equipment within the facility result in a lot of unoccupied space, generating little or no parking demand. The City Code, and the ITE Parking Generation Manual for that matter, are not a perfect match for dictating parking requirements although the weighted average rates of the ITE Parking Generation Manual were quite similar to parking observations.