



WELLS + ASSOCIATES

MEMORANDUM

TO: Dennis Hughes – Holland & Knight

CC: Jim Voelzke – MV+A Architects
Wayne Broadfield – MV+A Architects
Jonathan Fischel – Shalom Baranes Associates
Jane Cafritz – The Cafritz Foundation

FROM: Jami Milanovich, P.E.
Amber N. Mikec, P.E.

RE: Art Place + Shops at Fort Totten
Transportation Memo for 2nd Stage PUD Submission for Building B

DATE: January 16, 2011

INTRODUCTION

On November 9, 2009, the District of Columbia Zoning Commission approved the Cafritz Foundation's application for first-stage PUD approval and related Zoning Map amendment for the entire 16.5-acre property generally located west of South Dakota Avenue, north of Galloway Street, east of the Fort Totten Station apartments, and south of Riggs Road and Food and Friends. On November 9, 2009, the Zoning Commission also approved the Foundation's application for consolidated PUD approval for the first phase of the project, which includes Building A, and is proposed on the southern portion of the site.

The Cafritz Foundation now is seeking second-stage PUD approval for Building B, which is located north of the proposed Building A along South Dakota Avenue between Kennedy Street and Ingraham Street. Since obtaining first-stage PUD approval, several changes to the overall site and, specifically, to Building B have been made to accommodate current market conditions as well as specific requests of the District Department of Transportation (DDOT).

This memorandum summarizes: (1) the changes in size and nature of certain uses proposed on the site, (2) the impact of the changes to the development program on the trip generation, (3) additional roadway improvements that are proposed in conjunction with the development per DDOT's request, (4) changes to the loading operations for Building B, and (5) changes to the on-site parking supply and its impact on the shared parking analysis.

DEVELOPMENT DATA

Since approval of the first-stage PUD in November 2009, several changes have been made to the development program. Modifications to Building A recently were approved by the Zoning Commission on October 17, 2011. With the second-stage PUD approval being sought at this time, some changes now are proposed for Building B due to changes in market conditions. Table I outlines the development program approved with the first-stage PUD and the current development program, which includes the proposed changes associated with the approved modifications to Building A and the proposed modifications to Building B. Note that no changes currently are proposed for Buildings C and D.⁷

Table I
Development Data – Original PUD versus Current Development Program

Building	Land Use	Approved Development Program per Original PUD	Current Development Program ¹
A	Residential – Mixed Income	431 dwelling units	431 dwelling units
	Residential – Senior Housing	98 dwelling units	98 dwelling units
	Retail – Grocery	59,000 square feet ²	--
	Retail – General	72,210 square feet ^{3,4}	131,210 square feet ^{5,6}
	Daycare	7,250 square feet	7,250 square feet
B	Retail – General	203,000 square feet	172,925 feet ⁷
	Children's Museum	47,000 square feet	38,807 square feet
	Senior Center	15,000 square feet	--
	Recreation with Mezzanine	--	144,450 square feet
C	Residential – Mixed Income	400 dwelling units	400 dwelling units
D	Multipurpose/Rehearsal Space	126,000 square feet	126,000 square feet
	Theater/Opera Offices	44,000 square feet	44,000 square feet
	Library	20,000 square feet	20,000 square feet
	Community Use	30,000 square feet	30,000 square feet

¹ Current development program reflects approved changes to Building A and proposed changes to Building B per the second-stage PUD.
² Includes FAR and non-FAR space. Approximately 25,195 SF of the 59,000 SF counts toward FAR.
³ Includes FAR and non-FAR space. Approximately 46,715 SF of the 72,210 SF counts toward FAR.
⁴ Includes both general retail and flexible commercial space.
⁵ Includes FAR and non-FAR space. Approximately 71,910 SF of the 131,210 SF counts toward FAR.
⁶ Includes both general retail and flexible commercial space.
⁷ Includes FAR and non-FAR space. Approximately 135,355 SF of the 172,925 SF counts toward FAR.

As shown in Table I, compared to the original PUD, the size of the retail component in Building A remains unchanged; however, the grocery store was eliminated. All retail uses in Building A are now non-grocery, or general retail uses. The number of residential units and the size of the daycare were maintained with the approved modification to Building A.

The proposed changes to Building B include decreasing the square footage of the general retail and the Children's Museum. Additionally, a senior center no longer is proposed and, instead, a recreational use, which is envisioned to include two hockey rinks, is planned.

In addition to comparing the current development program to the original PUD, a comparison of the current development program and the development program evaluated in the transportation impact study for the site also was undertaken. In conjunction with the first stage PUD submittal for the site, the Applicant commissioned a transportation impact study (TIS), which evaluated the traffic impacts associated with the proposed development at full build-out. The most recent analysis for the Fort Totten development was performed in an addendum to the TIS submitted by Wells + Associates, Inc. on April 21, 2009. Table 2 compares the development program analyzed in the April 2009 TIS Addendum to the current development program.

Table 2
Development Data – April 2009 TIS Addendum versus Current Development Program

Building	Land Use	Development Program per April 2009 TIS Addendum	Current Development Program ¹
A	Residential – Mixed Income	431 dwelling units	431 dwelling units
	Residential – Senior Housing	98 dwelling units	98 dwelling units
	Retail – Grocery	59,000 square feet ²	--
	Retail – General	34,392 square feet ²	131,210 square feet ²
	Daycare	6,530 square feet	7,250 square feet
B	Retail – General	162,400 square feet	172,925 feet ²
	Children's Museum	47,000 square feet	38,807 square feet
	Senior Center	15,000 square feet	--
	Recreation with Mezzanine	--	144,450 square feet
C	Residential – Mixed Income	400 dwelling units	400 dwelling units
D	Multipurpose/Rehearsal Space	126,000 square feet	126,000 square feet
	Theater/Opera Offices	44,000 square feet	44,000 square feet
	Library	20,000 square feet	20,000 square feet
	Community Use	30,000 square feet	30,000 square feet
¹ Current development program reflects approved changes to Building A and proposed changes to Building B per the second-stage PUD.			
² Includes FAR and non-FAR space.			

As shown in Table 2, the current development program generally is comparable to the development program examined in the April 2009 TIS Addendum. In Building A, the retail square footage and the daycare square footage have increased from that analyzed in April 2009.

In Building B, the size of the retail component has increased slightly while the size of the children's museum has decreased slightly since the April 2009 Addendum. As stated previously,

a recreational use, which is envisioned to include two hockey rinks is proposed now in lieu of the senior center.

TRIP GENERATION

To determine the transportation impact of the proposed changes, a comparison of the anticipated trip generation was performed. According to the April 2009 TIS Addendum, the Fort Totten development was anticipated to generate 669 new AM vehicular site trips and 1,078 new PM vehicular site trips. Applying the same methodology utilized in the April 2009 TIS Addendum to the development program that ultimately was approved by the Zoning Commission under the original PUD, the Fort Totten development would generate 708 new AM vehicular site trips and 1,195 new PM vehicular site trips as approved under the original PUD.

Table 3 displays the trip generation for the current development program with the approved modifications to Building A and the proposed modifications to Building B. The same methodology utilized in the April 2009 TIS Addendum was applied to the current development program.

As shown in Table 3, the current development program would generate 624 new AM vehicular site trips and 1,153 new PM vehicular site trips. The difference in trips associated with the current development program compared to the development program analyzed in the April 2009 TIS Addendum would represent a decrease of approximately seven percent during the AM peak hour and an increase of seven percent (75 trips) during the PM peak hour. Compared to the approved PUD, the difference in trips associated with the current development program would represent a decrease of approximately 12 percent during the AM peak hour and a decrease of approximately four percent during the PM peak hour.

Based on the foregoing trip generation comparison, changes associated with the second-stage PUD for Building B would not have any additional impact on traffic operations in the site vicinity.

Table 3
Full Build-out Trip Generation Summary

LAND USE/TRIP TYPE	AM PEAK HOUR			PM PEAK HOUR			WEEKDAY ADT
	In	Out	Total	In	Out	Total	
Residential Apartment – Building A (ITE Land Use Code 220) – 431 Dwelling Units							
Total Site Trips	43	172	215	166	89	255	2,741
Internal Capture	-	-	-	73	46	119	1,092
External Site Trips	43	172	215	93	43	136	1,649
Non-Auto Site Trips (50%)	22	86	108	47	22	69	825
External Vehicular Site Trips	21	86	107	46	21	67	824
Senior Adult Housing-Attached – Building A (ITE Land Use Code 252) – 98 Dwelling Units							
Total Site Trips	4	4	8	7	4	11	341
Internal Capture	-	-	-	3	2	5	136
External Site Trips	4	4	8	4	2	6	205
Non-Auto Site Trips (50%)	2	2	4	2	1	3	103
External Vehicular Site Trips	2	2	4	2	1	3	102
Shopping Center – Building A (ITE Land Use Code 820) – 131,210 Square Feet							
Total Site Trips	112	72	184	360	389	749	8,102
Internal Capture	-	-	-	39	53	92	951
External Site Trips	112	72	184	321	336	657	7,151
Non-Auto Site Trips (30%)	34	22	56	96	101	197	2,145
External Vehicular Site Trips	78	50	128	225	235	460	5,006
Pass-by Site Trips (34%)	27	17	44	77	80	157	1,702
New External Vehicular Site Trips	51	33	84	148	155	303	3,304
Daycare – Building A (ITE Land Use Code 565) – 7,250 Square Feet							
Total Site Trips	49	44	93	36	41	77	575
Internal Capture	-	-	-	3	5	8	58
External Site Trips	49	44	93	33	36	69	517
Non-Auto Site Trips (0%)	-	-	-	-	-	-	-
External Vehicular Site Trips	49	44	93	33	36	69	517

Table 3 (continued)
Full Build-out Trip Generation Summary

LAND USE/TRIP TYPE	AM PEAK HOUR			PM PEAK HOUR			WEEKDAY ADT
	In	Out	Total	In	Out	Total	
Shopping Center – Building B (ITE Land Use Code 820) – 172,925 Feet							
Total Site Trips	132	85	217	432	467	899	9,695
Internal Capture	-	-	-	47	63	110	1,138
External Site Trips	132	85	217	385	404	789	8,557
Non-Auto Site Trips (30%)	40	26	66	116	121	237	2,567
External Vehicular Site Trips	92	59	151	269	283	552	5,990
Pass-by Site Trips (34%)	31	20	51	91	96	187	2,037
New External Vehicular Site Trips	61	39	110	178	187	365	3,953
Children's Museum** – Building B – 38,807 Square Feet							
Total Site Trips	4	4	8	7	7	14	50
Internal Capture	-	-	-	1	1	2	20
External Site Trips	4	4	8	6	6	12	30
Non-Auto Site Trips (0%)	-	-	-	-	-	-	-
External Vehicular Site Trips	4	4	8	6	6	12	30
Recreational Facility – Building B (ITE Land Use Code 465) – 144,450 Square Feet							
Total Site Trips	-	-	-	77	93	170	1,705
Internal Capture	-	-	-	7	11	18	171
External Site Trips	-	-	-	70	82	152	1,534
Non-Auto Site Trips (30%)	-	-	-	21	25	46	460
External Vehicular Site	-	-	-	49	57	106	1,074
Residential Apartment – Building C (ITE Land Use Code 220) – 400 Dwelling Units							
Total Site Trips	40	160	200	155	83	238	2,554
Internal Capture	-	-	-	69	43	112	1,018
External Site Trips	40	160	200	86	40	126	1,536
Non-Auto Site Trips (50%)	20	80	100	43	20	63	768
External Vehicular Site Trips	20	80	100	43	20	63	768

Table 3 (continued)
Full Build-out Trip Generation Summary

LAND USE/TRIP TYPE	AM PEAK HOUR			PM PEAK HOUR			WEEKDAY ADT
	In	Out	Total	In	Out	Total	
Theater/Opera Offices – Building D (ITE Land Use Code 715) – 44,000 Square Feet							
Total Site Trips	85	11	96	15	87	102	509
Internal Capture	-	-	-	1	10	11	51
External Site Trips	85	11	96	14	77	91	458
Non-Auto Site Trips (30%)	26	3	29	4	23	27	137
External Vehicular Site Trips	59	8	67	10	54	64	321
Multipurpose/Rehearsal Space ¹ – Building D – 126,000 Square Feet							
Total Site Trips	18	6	24	15	28	43	430
Internal Capture	-	-	-	1	3	4	43
External Site Trips	18	6	24	14	25	39	387
Non-Auto Site Trips (30%)	5	2	7	4	8	12	116
External Vehicular Site Trips	13	4	17	10	17	27	271
Library – Building D (ITE Land Use Code 590) – 20,000 Square Feet							
Total Site Trips	15	6	21	63	68	131	1,185
Internal Capture	-	-	-	18	22	40	462
External Site Trips	15	6	21	45	46	91	723
Non-Auto Site Trips (50%)	8	3	11	23	23	46	362
External Vehicular Site Trips	7	3	10	22	23	45	361
Community Center – Building D (ITE Land Use Code 495) – 30,000 Square Feet							
Total Site Trips	30	19	49	14	35	49	686
Internal Capture	-	-	-	4	4	8	69
External Site Trips	30	19	49	10	31	41	617
Non-Auto Site Trips (30%)	9	6	15	3	9	12	185
External Vehicular Site Trips	21	13	34	7	22	29	432

Table 3 (continued)
Full Build-out Trip Generation Summary

LAND USE/TRIP TYPE	AM PEAK HOUR			PM PEAK HOUR			WEEKDAY ADT
	In	Out	Total	In	Out	Total	
Total Development							
Total Site Trips	532	583	1,115	1,347	1,391	2,738	28,573
Internal Capture	-	-	-	266	263	529	5,209
External Site Trips	532	583	1,115	1,081	1,128	2,209	23,364
Non-Auto Site Trips	166	230	396	359	353	712	7,668
External Vehicular Site Trips	366	353	719	722	775	1,497	15,696
Pass-by Site Trips	58	37	95	168	176	344	3,739
New External Vehicular Site Trips	308	316	624	554	599	1,153	11,957

* Directional distribution not available for the AM and PM peak hours; therefore, a 50/50 inbound/outbound distribution was assumed.

** Trip generation data from National Harbor TIS performed by Wells + Associates, LLC dated May 25, 2001.

~ ITE Trip Generation (8th Edition) Land Use 465 (Ice Rink) was used to estimate trips for the recreational facility. Because the ITE use is for public use and the proposed facility is for private use, the rate was reduced by 50 percent. The daily trips were calculated by applying a "K" factor of 10 percent to the PM peak hour trip total.

† Trip generation data from the Wedgewood II and Wedgewood South Traffic Count Summary memo by Wells + Associates, LLC dated January 30, 2008. The daily trips were calculated by applying a "K" factor of 10 percent to the PM peak hour trip total.

ROADWAY IMPROVEMENTS

Based on the original TIS and the subsequent submissions (including the April 2009 TIS Addendum), the Applicant agreed to a number of transportation improvements to offset the impact of the proposed development, including: (1) optimization of signal timings at several intersections, (2) construction of an eastbound right turn lane on Kennedy Street at its intersection with South Dakota Avenue, (3) construction of a third southbound lane on South Dakota Avenue along the site frontage, and (4) installation of a traffic signal at the South Dakota Avenue/Ingraham Street intersection.

Based on discussions with DDOT subsequent to the approval of the original PUD, the Applicant will modify the existing traffic signal at the South Dakota Avenue/Hamilton Street intersection (maintaining signalization of the intersection) in addition to installing a new traffic signal at the South Dakota Avenue/Ingraham Street intersection.

During discussions with DDOT regarding the traffic signals on South Dakota Avenue at Hamilton and Ingraham Streets, DDOT requested that a 250-foot southbound right turn lane on South Dakota Avenue at Kennedy Street and a 200-foot southbound right turn lane on South Dakota Avenue at Hamilton Street be constructed by the Applicant. In accordance with the approved PUD plan, the Applicant planned to construct a third southbound lane along its

frontage on South Dakota Avenue. Per DDOT's request during the PUD process, the additional lane was to be a parking lane 24-hours per day, 7 days per week. Due to DDOT's request to provide southbound right turn lanes at Kennedy Street and Hamilton Street, the Applicant has agreed to stripe portions of the parking lane as right turn lanes at Kennedy Street and Hamilton Street. Provision of a 250-foot right turn lane at Kennedy Street and a 200-foot right turn lane at Hamilton Street would have resulted in a loss of approximately 22 proposed parking spaces. Therefore, based on further discussions with DDOT, the Applicant has agreed to provide 100 foot right turn lanes so that the loss of parking is minimized.

LOADING OPERATIONS

With the requested second-stage PUD approval for Building B, the loading area for Building B has been reconfigured to better serve prospective tenants. Consistent with the original PUD, access to the Building B loading area will take place from the public alley to the rear of the building. Under the current design, trucks will access the loading area front-first and also will exit front-first. Both the access to the loading from the alley and the ability of trucks to enter and exit the loading area front first meet DDOT's guidelines for curb cuts.

The original PUD provided for three 55-foot loading berths, two 30-foot loading berths, and two 20-foot service/delivery spaces in the Building B loading area. Based on input from potential tenants, the second-stage PUD for Building B now includes four 65-foot loading berths, two 55-foot loading berths, and four 20-foot service/delivery spaces in the Building B loading area.

According to the requirements outlined in the District of Columbia Municipal Regulations (DCMR), three 55-foot loading berths, three 30-foot loading berths, and three 20-foot service/delivery spaces would be required for Building B.

Figures 1A, 1B, and 1C display the entering and exiting maneuvers for each of the loading berths located in the museum/retail loading area. Figures 2A, 2B, and 2C display the entering and exiting maneuvers for each of the loading berths located in the junior anchor/retail loading area.

As shown in the figures, both the WB-65 and WB-50 trucks are able to maneuver into the loading area front-first and out of the loading area front-first utilizing the proposed curb cuts on the alley. To accommodate pedestrian traffic on the alley sidewalk, which is anticipated to be minimal, these curb cuts have been narrowed to the extent possible without prohibiting the truck maneuvers.

PARKING EVALUATION

With the second-stage PUD for Building B, changes to the parking access and to the number of parking spaces are proposed. Under the original PUD, access to the Building B garage was provided via the public alley to the rear of the building and via Kennedy Street, near its intersection with the public alley. Under the current plans, the access from the alley has been removed and an access from Ingraham Street has been added. Additionally, the access from Kennedy Street has been retained but it has been shifted closer to South Dakota Avenue. In order to address the shift in location of the driveway on Kennedy Street, the Applicant should install a "Do Not Block Driveway" sign to ensure that queues extending from the signalized South Dakota/Kennedy Street intersection do not block access to the driveway.

In addition to the modification to the Building B garage access, the number of parking spaces provided in Building A and Building B has changed since the original PUD. Specifically, our latest analysis of the number of proposed parking spaces was undertaken in April 2009, at which time a total of 2,456 spaces were proposed for the site at full build-out. With the changes to the development program (approved modifications to Building A and proposed modifications to Building B), a total of 2,164 spaces now are planned for the site at full build-out. This decrease of 292 spaces is attributable to 95 fewer spaces approved for Building A and 197 fewer spaces now proposed for Building B.

To ensure that adequate parking will be available with the proposed development program and the reduced parking supply, the shared parking analysis performed in April 2009 was updated. Table 4 displays the results of the updated shared parking analysis for full build-out with the approved modifications to Building A and the proposed modifications to Building B. For purposes of comparison, the results of the April 2009 shared parking analysis for full build-out also are included in Table 4. Note that no changes to the development program or parking supply were assumed for Buildings C and D.

In addition to analyzing shared parking under full build-out, a shared parking analysis also was conducted under the condition with only Buildings A and B. Table 5 presents the results of the shared parking analysis for Buildings A and B considering the approved modifications to Building A and the proposed modifications to Building B.

Table 4
Shared Parking Analysis for Full Build-out

Full Build-out Shared Parking Results	Development Program per April 2009 Shared Parking Analysis		Current Development Program	
	Weekday	Weekend	Weekday	Weekend
Peak Month	December	December	December	December
Peak Hour	1:00 PM	3:00 PM	1:00 PM	7:00 PM
Maximum Demand without Sharing	2,639 spaces	2,547 spaces	3,029 spaces	2,943 spaces
Maximum Demand with Sharing	1,958 spaces	1,851 spaces	2,100 spaces	1,979 spaces
Shared Parking Savings	681 spaces (26 percent)	696 spaces (27 percent)	929 spaces (31 percent)	964 spaces (33 percent)
Proposed Supply	2,456 spaces	2,456 spaces	2,164 spaces	2,164 spaces
Excess Supply with Shared Parking	498 spaces (20 percent)	605 spaces (25 percent)	64 spaces (3 percent)	185 spaces (9 percent)
Parking Required per DCMR	1,050 spaces	1,050 spaces	904 spaces	904 spaces

The results in both Tables 4 and 5 indicate that utilizing shared parking techniques reduces overall parking demands significantly compared to the baseline parking demands without sharing. Additionally, the shared parking analysis indicates that the proposed parking supply will satisfy the anticipated demand with shared parking at both full build-out and at build-out of Buildings A and B. Finally, as shown in both Tables 4 and 5, the proposed parking supply at full build-out and at build-out of Buildings A and B will meet the required number of parking spaces per the DCMR.

Table 5
Shared Parking Analysis for Buildings A and B

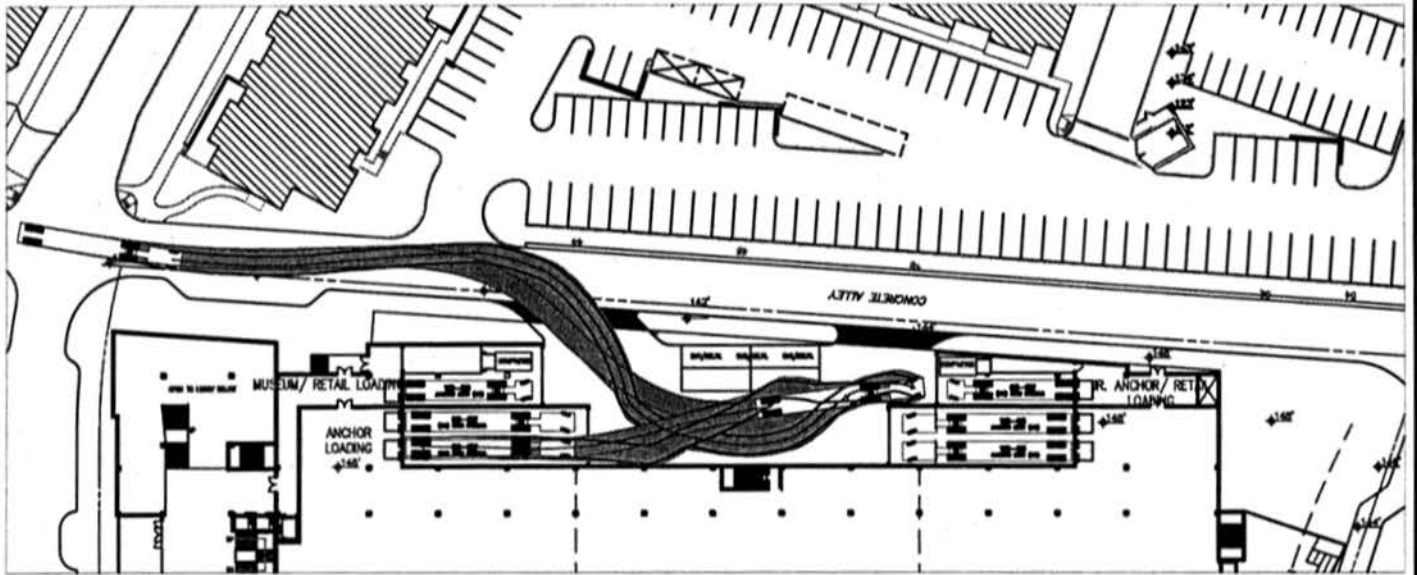
Full Build-out Shared Parking Results	Current Development Program	
	Weekday	Weekend
Peak Month	December	December
Peak Hour	7:00 PM	7:00 PM
Maximum Demand without Sharing	2,254 spaces	2,360 spaces
Maximum Demand with Sharing	1,494 spaces	1,518 spaces
Shared Parking Savings	760 spaces (34 percent)	842 spaces (36 percent)
Proposed Supply	1,584 spaces	1,584 spaces
Excess Supply with Shared Parking	90 spaces (6 percent)	66 spaces (4 percent)
Parking Required per DCMR	567 spaces	567 spaces

CONCLUSIONS

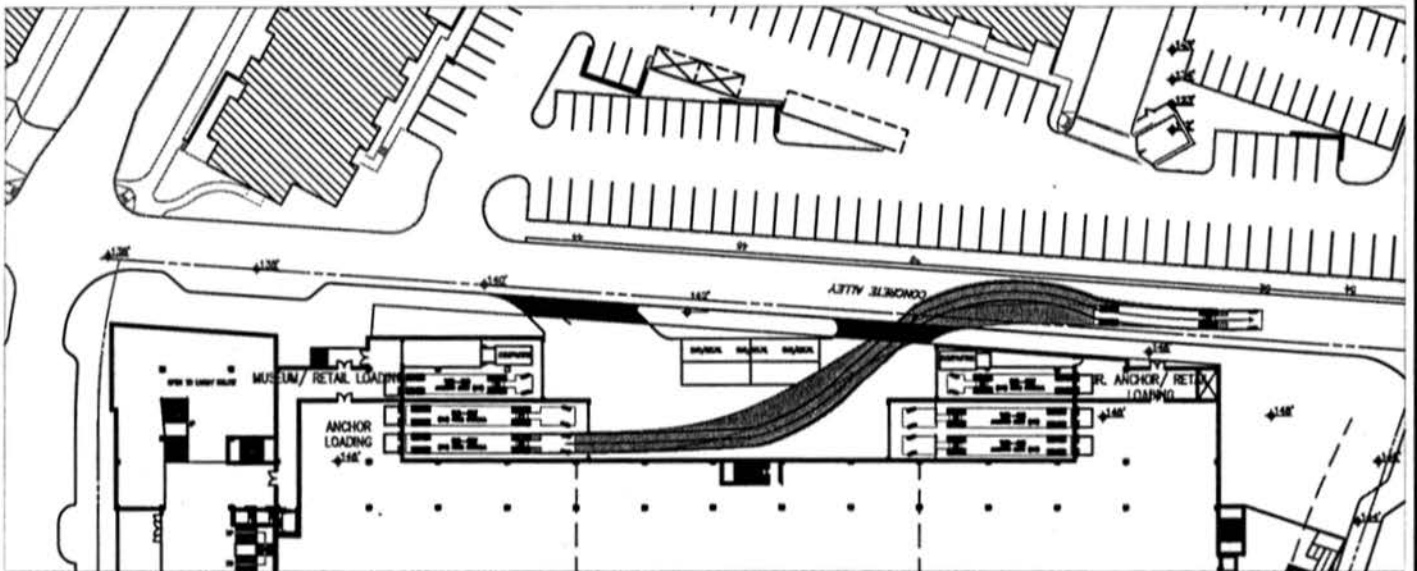
The proposed modifications to Building B will have no additional impact to the traffic operations in the site vicinity. The roadway improvements recommended in the original TIS and subsequent addendums coupled with the additional roadway improvements that the Applicant has agreed construct to per discussions with DDOT will accommodate the traffic generated by the proposed development. The proposed changes to the Building B loading area will provide sufficient maneuvering room for trucks delivering to the museum and retail uses while allowing for front-first entry and front-first exit from the alley. Finally, the reduced parking supply in Buildings A and B will be sufficient considering shared parking will take place between the various land uses on the site.

We hope that this memorandum provides you with sufficient information regarding the transportation impacts of the modifications to Building B proposed in conjunction with the request for second-stage PUD approval. Please do not hesitate to contact us at (724) 933-9010, jlmilanovich@mjwells.com, or anmikec@mjwells.com with any questions you may have regarding this memorandum.

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Exiting

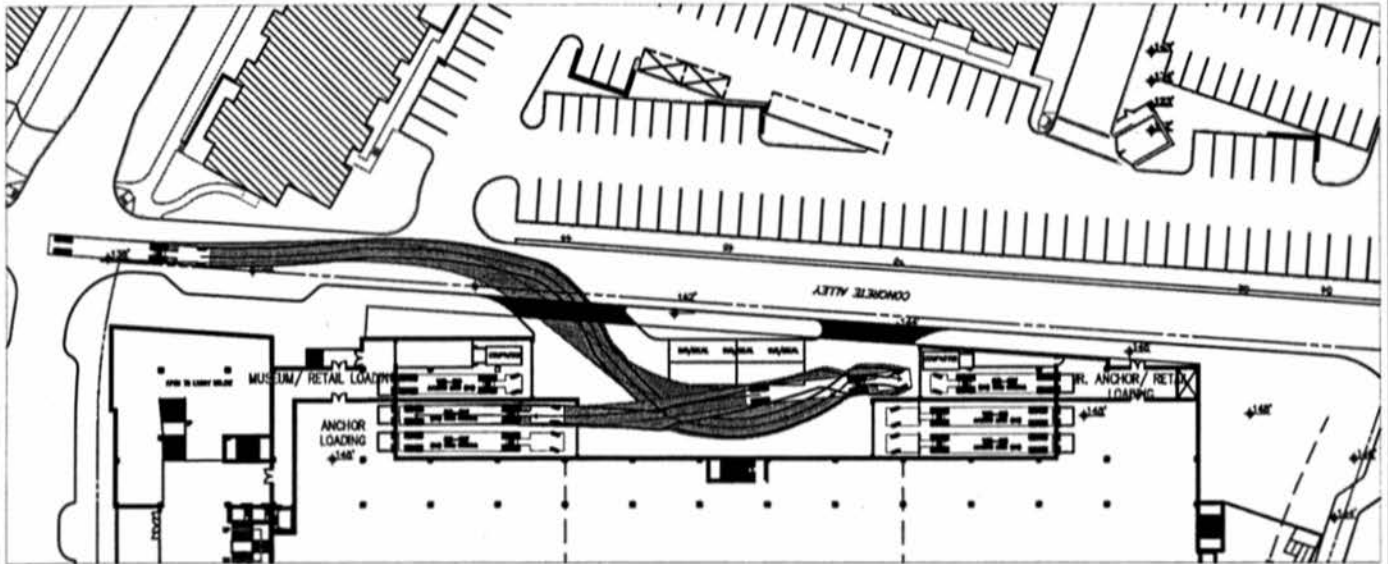


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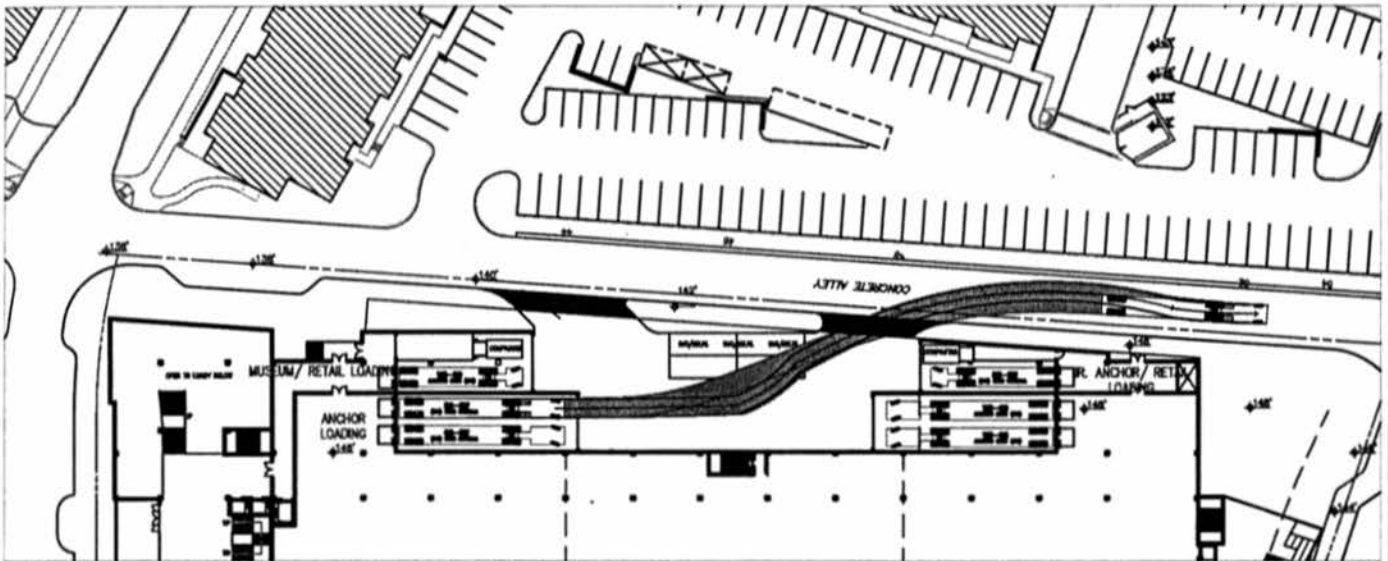
Figure 1A
WB 65 Entering and Exiting Museum/Retail Loading Area
Space A



Entering



Exiting



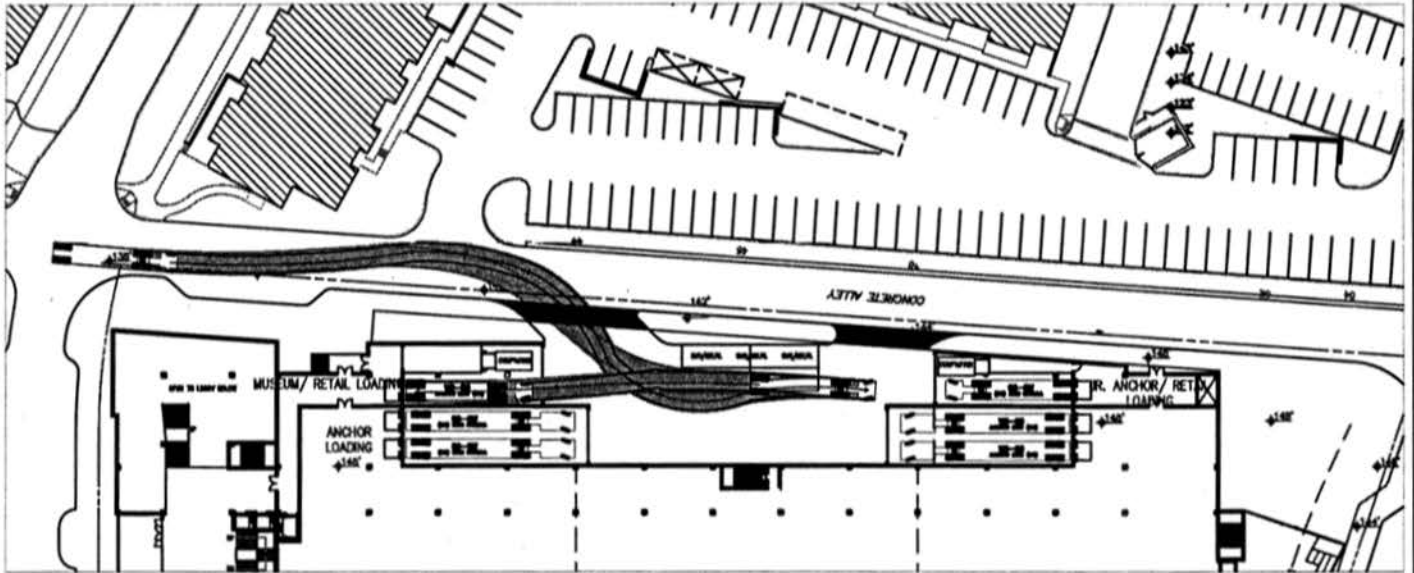
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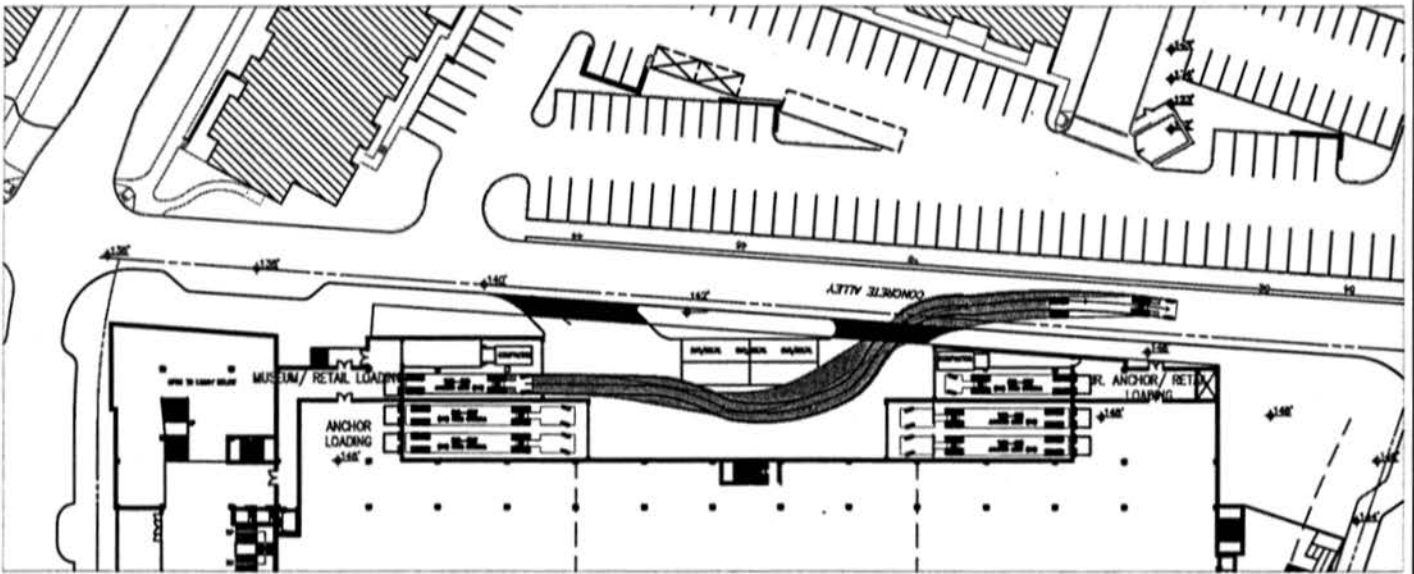
Figure 1B
WB 65 Entering and Exiting Museum/Retail Loading Area
Space B

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Entering



Exiting

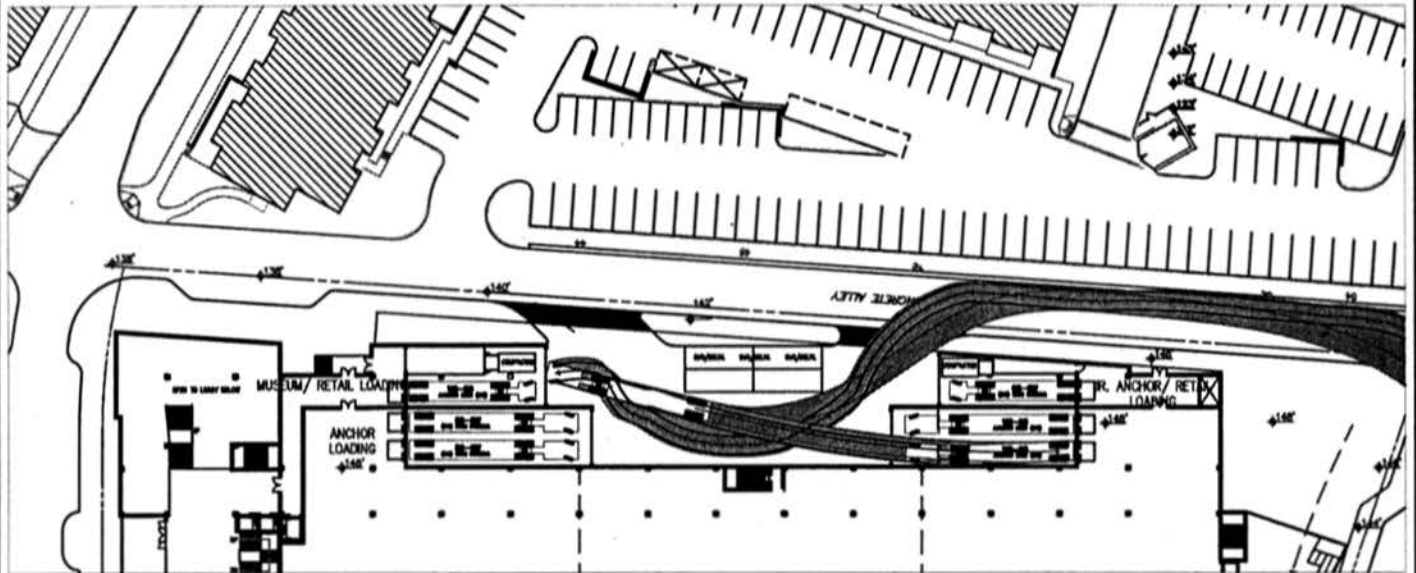


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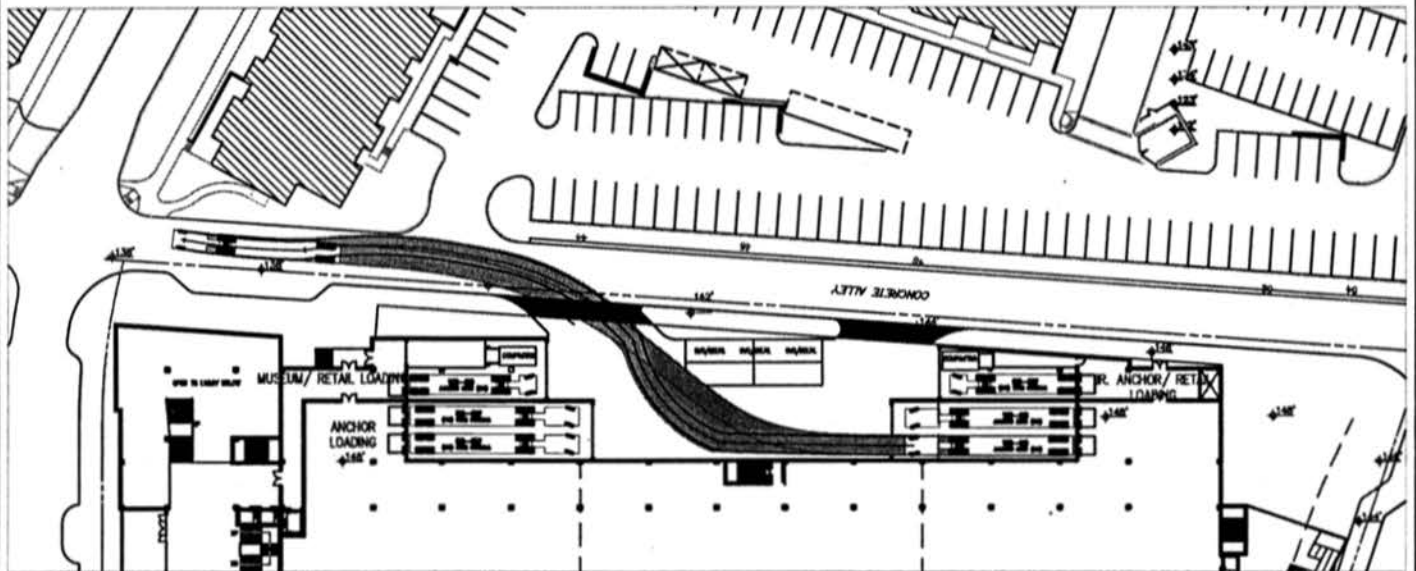


Figure 1C
WB 50 Entering and Exiting Museum/Retail Loading Area
Space C

Entering



Exiting



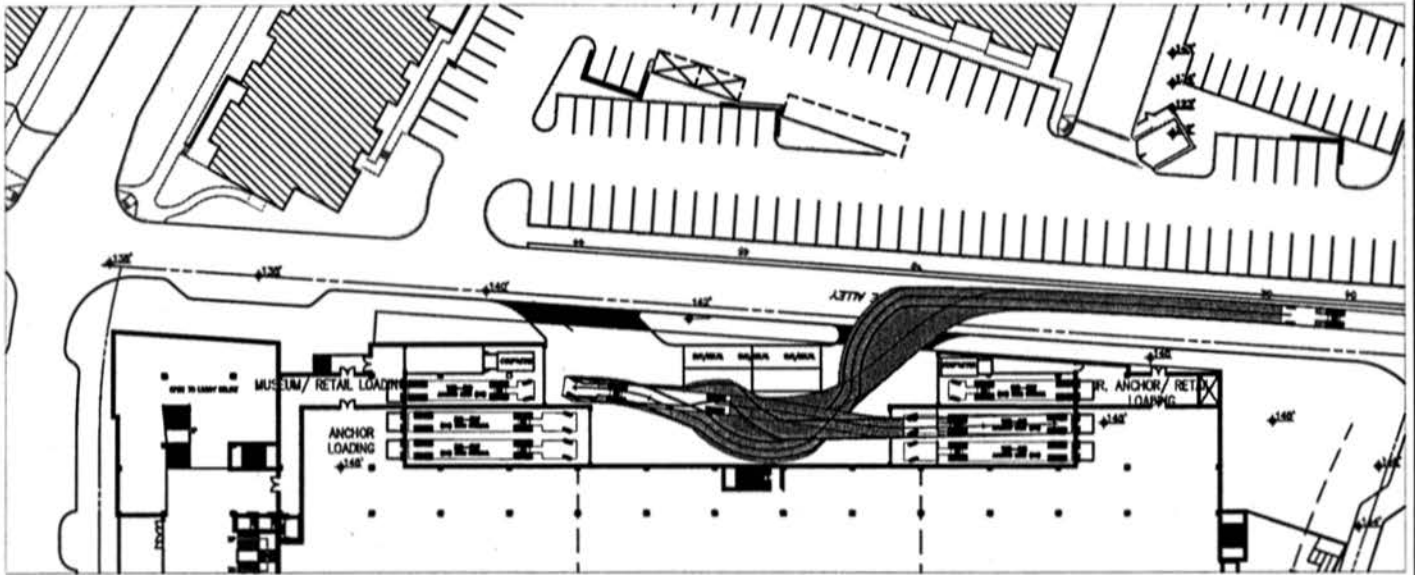
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Figure 2A
WB 65 Entering and Exiting Junior Anchor/Retail Loading Area
Space A

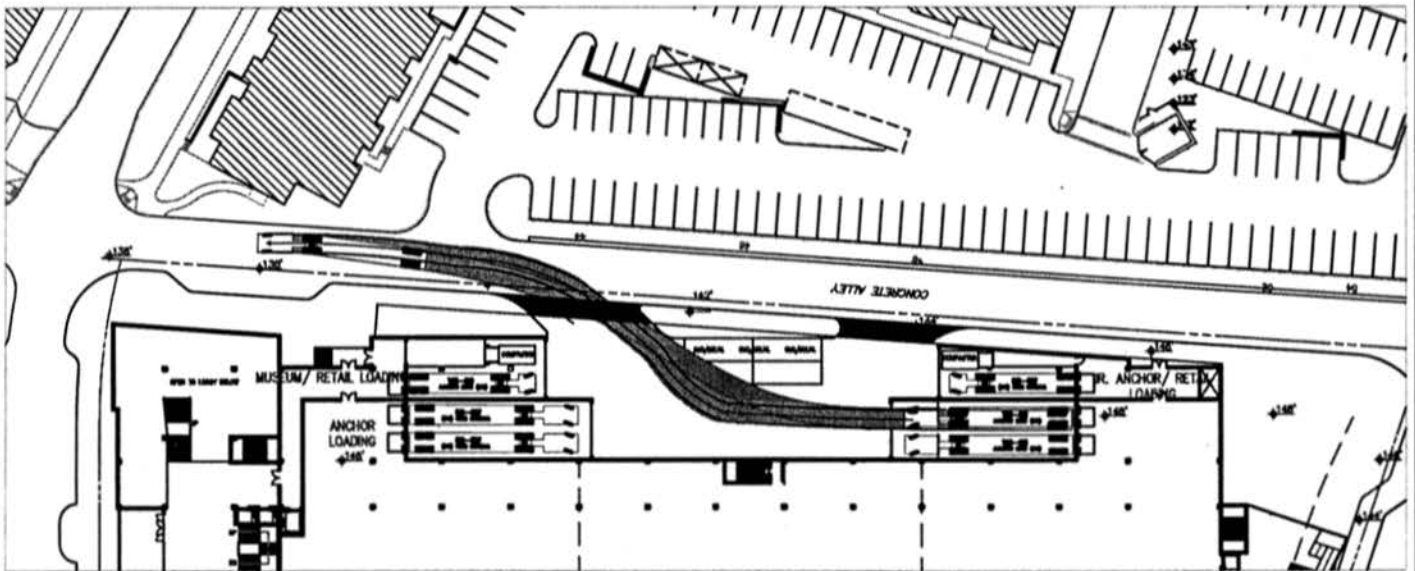


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Entering



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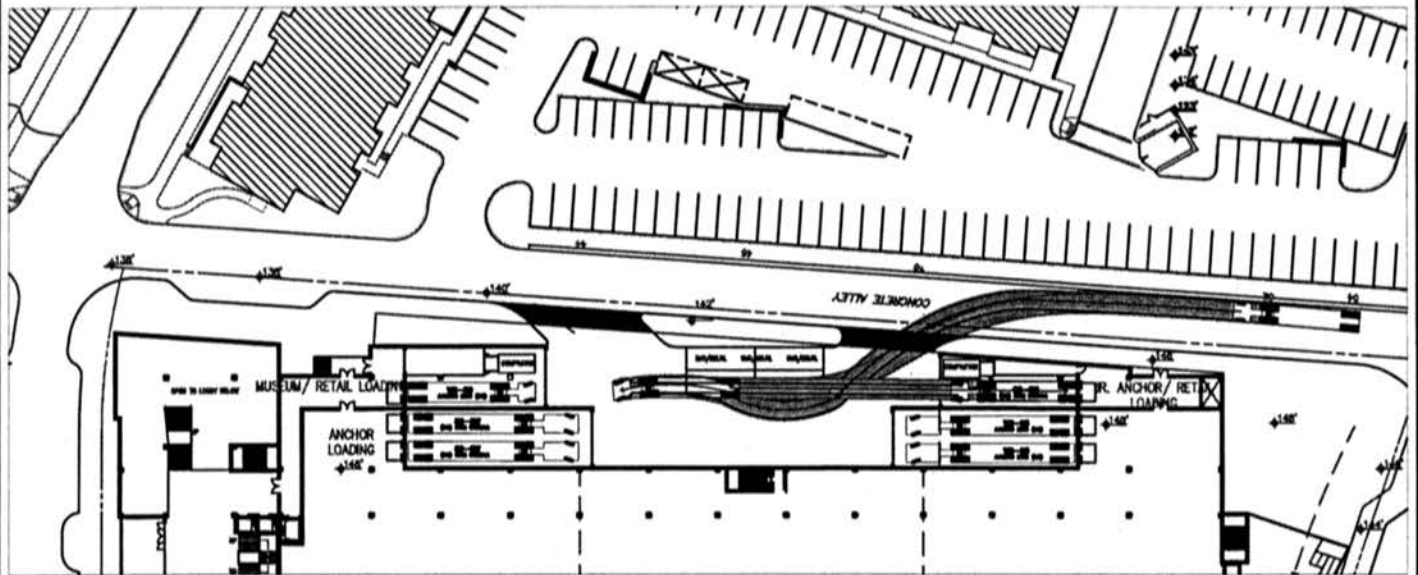
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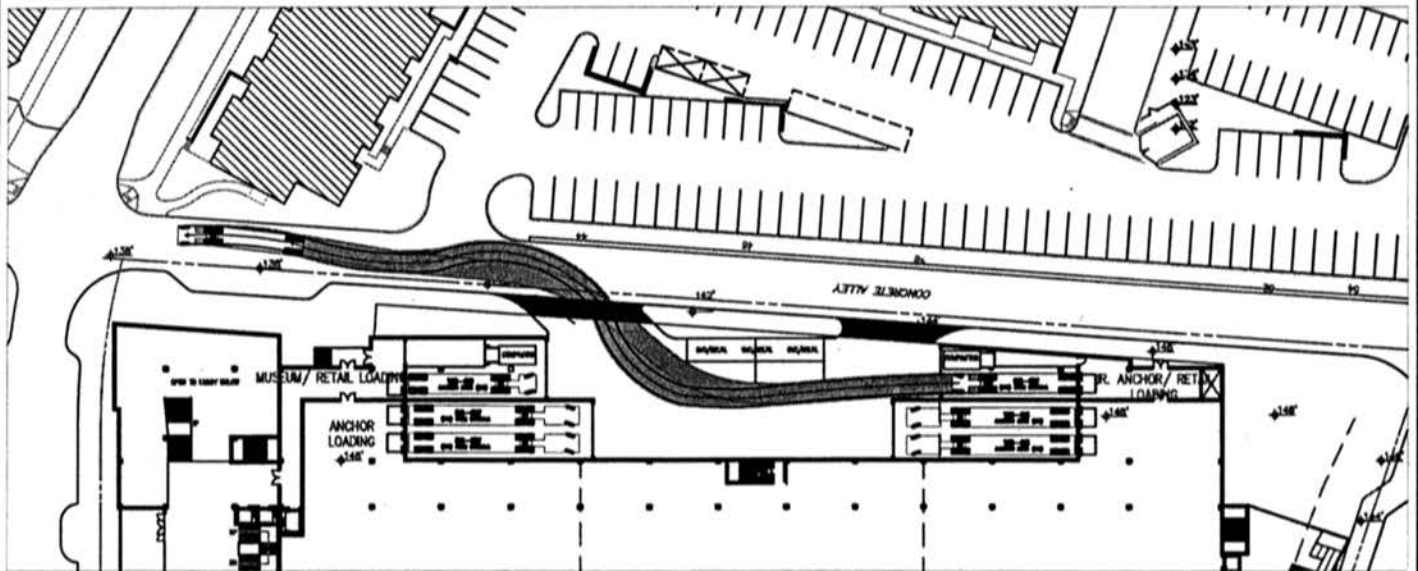
Figure 2B
WB 65 Entering and Exiting Junior Anchor/Retail Loading Area
Space B

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Entering



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Scale: 1"=80'

Figure 2C
WB 50 Entering and Exiting Junior Anchor/Retail Loading Area
Space C



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