

File: 564-127-20
November 6, 2020
Update: 02/09/2021

Preliminary Stormwater Management Summary
For
Arlington Heights Industrial
Phase 2-Frito Lay

703 W. Algonquin Road
Arlington Heights, IL
Phase 2 Parcel-8.73 Acres

Narrative Description of Proposed Phase 2 Development
(Refer Also to Preliminary Engineering Plans, Notes and Exhibits.)

Final engineering plans and documents for the Phase 2 area of the Arlington Heights Industrial project were previously approved by the Village of Arlington Heights (VAH) and the Metropolitan Water Reclamation District (MWRD) as part of the overall approval and permitting process for the parcel, which included a Phase 1 and a Phase 2 portion. The MWRD permit, Permit No 18-180, was issued on August 20, 2018. Phase 1 improvements for the project have been completed and the plan is now to proceed with construction of the Phase 2 portion with a slightly modified site plan from the previously approved documents.

The Phase 2 stormwater management system is independent and separate from the completed Phase 1 system. In regards to the Phase 2 Parcel, the previously approved documents for the stormwater water management system included a total tributary area (with offsite) of 8.560 acres, with 7.502 acres of impervious surface. Stormwater storage was being provided within a vegetated basin, underground basins, surface ponding in the truck dock area, and storm pipe. The following is a summary of the Phase 2 storage amounts provided at the design High Water Elevation of 715.2, based on the respective VAH and MWRD design criteria:

- MWRD – Detention Storage -----2.902 Ac-Ft
- MWRD – Volume Control Storage -----0.626 Ac-Ft
- MWRD Total Storage -----3.528 Ac-Ft
- VAH Detention Storage (Above Outlet/Underdrain Elev) ---3.222 Ac-Ft

With the modified Phase 2 plans for Frito Lay, the tributary drainage area to the Phase 2 stormwater management system does not change and remains at 8.560 acres. With the modified site plan for Phase 2, the proposed impervious area is 7.359 acres, a reduction of 0.143 acres from the impervious area included with the previously approved documents.

Although the current proposed site plan for Phase 2 is modified from the previously approved documents, the current stormwater management plan is to maintain the basic design elements of the previously approved documents. To maintain future site flexibility, the proposed stormwater storage basins will remain in proximity to their original locations with the total overall storage amounts provided with the approved documents adjusted slightly based on the modified site design. The site grading design will maintain the 715.2 HWL, and the proposed release rate from the site will remain as previously designed. It is noted the current site plan reduces the number of truck docks along the west side of the building, which will result in a reduction in the detention storage provided by the surface ponding within this dock area. In conjunction with final design, updated storage amounts within the respective elements of the Phase 2 storage system will be provided and any storage lost within the dock area, etc will be addressed by an increase in storage amounts within the underground basins as necessary to provide required volumes for both MWRD and Village of Arlington Heights criteria.

Although there is a modification to the site plan for the Phase 2 area, the scope of work in regards to storm water management and sanitary sewer service for the parcel is generally consistent with the previously approved Phase 2 design. Therefore, the stormwater management standards in place at the time of the original permit would remain applicable to any necessary permit revision associated with the currently proposed Phase 2 modifications. (The proposed Phase 2 site plan and preliminary stormwater management information have been submitted to MWRD for their concurrence stormwater management standards in place for the original permit are to remain applicable for the modified site plan.)

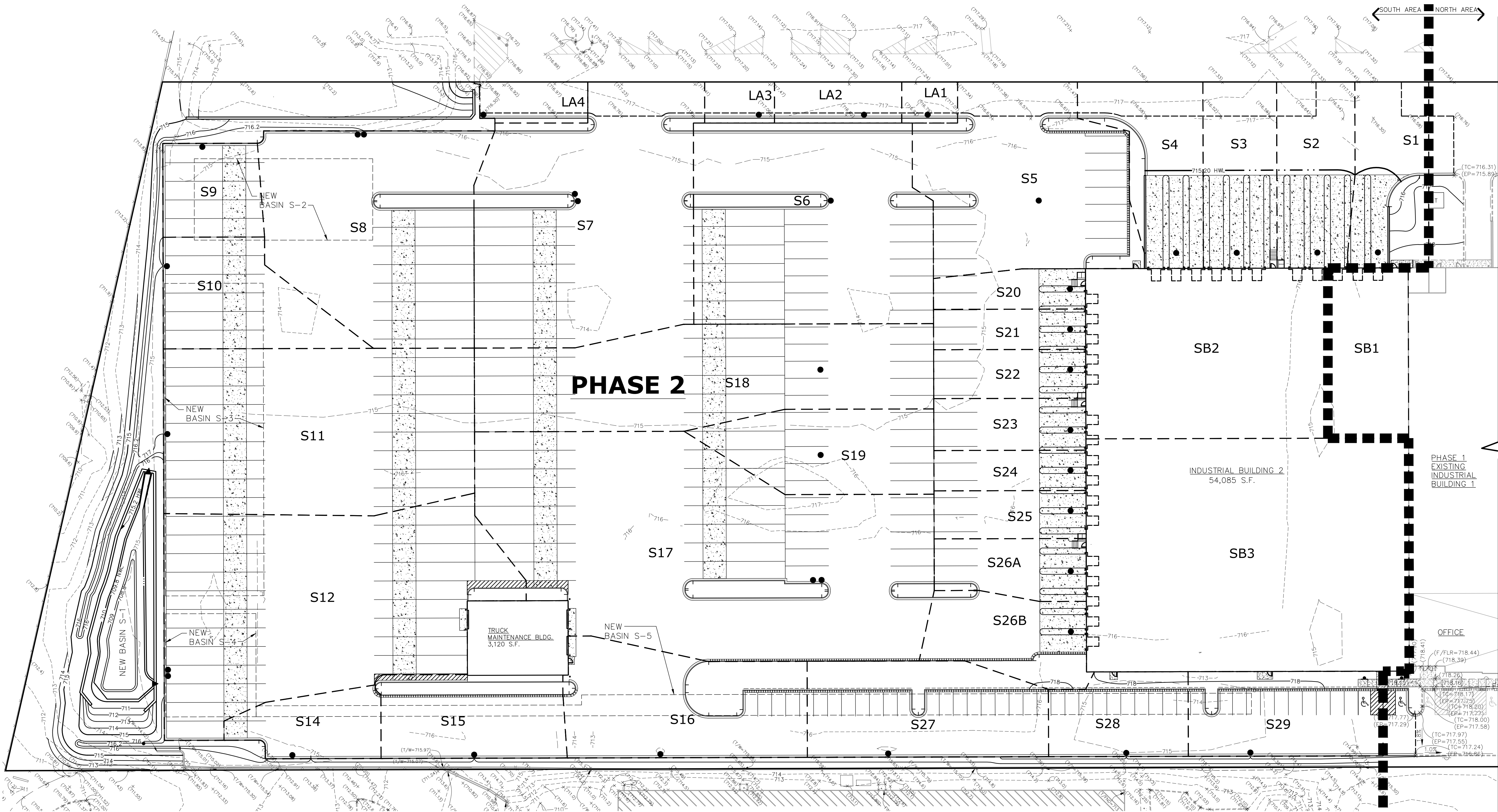
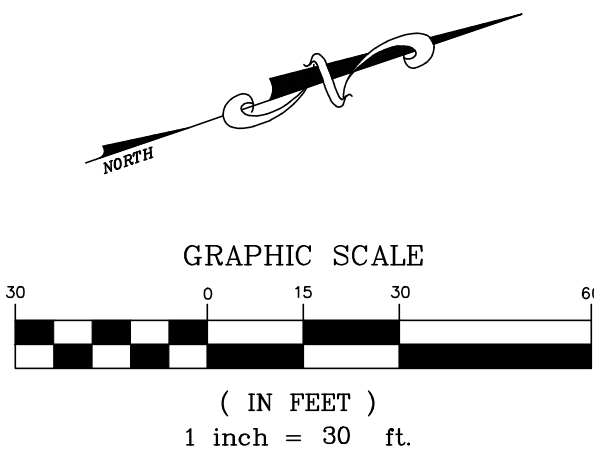
In accordance with the MWRD existing permit, construction activity for items covered by the permit are to be completed within three years from the date of permit issuance, or August 20, 2021. Per communications with MWRD, if the applicable work is not complete by 8/21/2021; however, construction activity for Phase 2 has begun and is continuously progressing, an extension to the date of completion may be requested/obtained as long as construction continues to progress.

DRAINAGE AREA	TOTAL AREA (Ac)	IMPERVIOUS AREA (Ac) "C"=0.95	PERVIOUS AREA (Ac) "C"=0.50	COMPOSITE "C"
S1	0.135	0.105	0.030	0.85
S2	0.135	0.135	0.000	0.95
S3	0.131	0.131	0.000	0.95
S4	0.146	0.131	0.016	0.91
S5	0.343	0.320	0.023	0.92
S6	0.445	0.409	0.037	0.91
S7	0.495	0.471	0.025	0.93
S8	0.400	0.387	0.013	0.94
S9	0.088	0.088	0.000	0.95
S10	0.152	0.152	0.000	0.95
S11	0.483	0.483	0.000	0.95
S12	0.577	0.577	0.000	0.95
S13	Eliminated - Included with other Drainage Areas			
S14	0.083	0.083	0.000	0.95
S15	0.218	0.183	0.035	0.88
S16	0.242	0.195	0.047	0.86
S17	0.783	0.756	0.027	0.93
S18	0.393	0.393	0.000	0.95
S19	0.162	0.162	0.000	0.95
S20	0.055	0.055	0.000	0.95

DRAINAGE AREA	TOTAL AREA (Ac)	IMPERVIOUS AREA (Ac) "C"=0.95	PERVIOUS AREA (Ac) "C"=0.50	COMPOSITE "C"
S21	0.058	0.058	0.000	0.95
S22	0.071	0.071	0.000	0.95
S23	0.075	0.075	0.000	0.95
S24	0.058	0.058	0.000	0.95
S25	0.070	0.070	0.000	0.95
S26A	0.083	0.081	0.003	0.95
S26B	0.121	0.093	0.028	0.85
S27	0.210	0.152	0.057	0.82
S28	0.106	0.091	0.016	0.89
S29	0.157	0.126	0.031	0.86
LA1	0.022	0.019	0.002	0.87
LA2	0.050	0.044	0.006	0.90
LA3	0.027	0.024	0.003	0.90
LA4	0.042	0.038	0.004	0.91

SB1	0.131	0.131	0.000	0.95
SB2	0.393	0.393	0.000	0.95
SB3	0.717	0.717	0.000	0.95

TOTAL SITE AREA:			
SOUTH			
IMPERVIOUS	320,544 SF	(7.359 Ac.)	
PERVIOUS	52,326 SF	(1.201 Ac.)	
TOTAL	372,870 SF	(8.560 Ac.)	



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DRAINAGE AREA EXHIBIT - PHASE 2 (FRITO-LAY)

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PROJECT NO.: 32212717
DATE: 01/15/21
SCALE: 1"=30'
PROJ. MGR.: PDL
PROJ. ASSOC.: RWG
DRAWN BY: TLM

SHEET
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