



STORMWATER POLLUTION PREVENTION PLAN YELLIN TRAILER PARKING LOT

Haskell Project Number: 3401365
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STORMWATER POLLUTION CONTROL PLAN
For
YELLEN TRAILER
PARKING LOT
Prepared for FRITO-LAY, INC.

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A. SITE DESCRIPTION

The Site consists of 81.5 acres located at 1886 Upper Maple Street in the Dayville section of the Town of Killingly, Connecticut. The Site is shown on the attached location plan, which appears in Appendix A.

The Site is not within a Coastal Area. A formal investigation has not been conducted for this project. On the previous project done by KWP Associates, Inc., a review with CT DEP's Natural Diversity Database staff took place. The review indicated that no threatened or endangered species are present on site. A letter attesting to this is shown in Appendix C. The Site is not listed on the National Register of Historic Places.

The project consists of the construction of 426,394 square feet of a new asphalt trailer parking lot.

A total of approximately 13.15 acres of the site will be disturbed as a result of these construction activities.

No construction or erosion and sediment controls will encroach on wetlands.

Stormwater will be collected from disturbed area in a series of catch basins and pipes and be directed to a stormwater remediation and detention basin on the southern boundary of the site.

Complete Hydrological Calculations have been complete for post development conditions and the anticipated run-off for the 1, 2, 10, 25 and 100-year storms has been calculated. A summary of these discharges is shown on page 2. These are based on Hydrologic Group A due to the fact that soils on the site are primarily Hinckley sand and gravels.

A detailed set of plans are included in Appendix D showing existing and proposed storm drainage facilities, grading, limits of disturbance, structural and non-structural controls, erosion controls, those areas to be stabilized and vegetated, as well as existing wetlands and watercourses.

Proposed stormwater facilities include the filling in of an existing retention pond and the creation of a new multi-system dry detention pond in the south east corner of the proposed Yellin lot. The proposed pond has been designed to meet pre/post discharge requirements while maintaining one foot of freeboard for the 100 year, 24 hour event. Two hydrodynamic separators are being utilized in unison with a sediment forbay for pre-treatment upstream of the detention pond.

The multi-system pond includes 1.80 feet of water quality storage that is slowly infiltrated through 4' of clean fill, uncompacted imported sand. Effective infiltration rates were taken from Connecticut Stormwater Quality Manual Chapter 11. An infiltration rate of 3.75 in/hr was determined, then a factor of safety of "2.0" was then applied to this infiltration rate per the Connecticut Stormwater Manual for an effective rate of 1.875 in/hr. Pond attenuation volume was designed to fully recover in 5 days, and water quality volume was designed to fully recover within 3 days.

POND DESIGN SUMMARY

PRE-POST PEAK DISCHARGE							
POINT OF ANALYSIS	PRE/POST	2 YR-24HR (CFS)	10YR-24HR (CFS)	25YR-24HR (CFS)	100YR-24HR (CFS)	-	-
1	PRE-DEVELOPMENT	4.69	14.41	19.40	30.18		
1	POST-DEVELOPMENT	0.00	0.00	0.00	0.00		

POND DRAWDOWN ANALYSIS							
NODE	PROPOSED POND	2 YR-24HR (HOURS, DAYS)	10YR-24HR (HOURS, DAYS)	25YR-24HR (HOURS, DAYS)	100YR-24HR (HOURS, DAYS)	WQv (HOURS, DAYS)	-
	REQUIRED DRAWDOWN (DAYS)	3-5	3-5	3-5	3-5	3	

POND PEAK STAGE, BASED ON TOP OF POND 259 WITH OVERFLOW 258 (FEET)							
NODE	PROPOSED POND	2 YR-24HR (ft)	10YR-24HR (ft)	25YR-24HR (ft)	100YR-24HR (ft)	WQv (ft)	-
		252.93	254.90	255.58	256.99	251.80	

B. CONSTRUCTION SEQUENCING

Construction has been phased to limit disturbance to not more than 5 contiguous acres at one time.

The following is a description of the sequence of operations:

Parking Lot Construction Mobilization	June 6 – June 11, 2021
Install SWPPP Items for Erosion & Control	June 16 – June 22, 2021
Relocate Electrical Lines	July 5 – July 09, 2021
Cut/Fill Parking Lot	July 12 – August 06, 2021
Excavate/Install Stormwater Line with Connections	July 12 – September 09, 2021
Excavate/Install Electrical Lines for Site Lighting	July 26 – August 27, 2021
Fine Grade and Place Asphalt	September 13 – October 8, 2021
Final Inspections	October 11 – October 13, 2021

C. CONTROLS

C-1. EROSION AND SEDIMENT CONTROLS

There are two possible pollutants that could be generated by the activities described:

- Pollution caused by soil erosion
- Pollution caused by use of the site after the construction is completed

In the scope of work for the proposed trailer parking area, the existing pond will be filled in. The area that initially drained to the existing and the new trailer parking addition will drain to a new detention basin that will be referred to as DA-POND. Based on the existing grades of the site and construction sequencing, it would not be feasible to utilize a sediment basin. BMP's such as silt fence and check dams will provide adequate erosion and sediment control.

In addition, all disturbed areas will be stabilized with loam and seed in accordance with plans and specifications immediately upon achieving final grades. In the event that certain areas will not be permanently stabilized prior to winter months or not permanently stabilized within 30 days, temporary seeding shall be installed. In addition, if an unfinished excavated or filled area is going to be left dormant for 7 days, temporary seeding shall be installed.

To reduce erosion and increase the stability of the slopes, in general 3:1 slopes have been utilized. In addition, where slopes are steeper than 3:1 a soil stabilization mat will be installed prior to seeding. Silt fence is specified at the tow of 3:1 slopes. Combination haybale/silt fence is specified at the tow of 2:1 slopes.

Maintenance shall take place as described above or as needed as determined by the inspection schedule established within the plan and in accordance with guidelines established by the Commissioner of the Department of Environmental Protection.

<u>TEMPORARY SEED MIX</u>		<u>PERMANENT SEED MIX</u>	
<u>VARIETY</u>	<u>LBS/1000SF</u>	<u>VARIETY</u>	<u>LBS/1000SF</u>
Scotchgrass	0.1	Perennial Ryegrass	0.35
Big Bluestem	0.1	Kentucky Bluegrass	<u>0.15</u>
Perennial Ryegrass	0.1	TOTAL	0.5
Bird's-foot Trefoil with inoculant	<u>0.1</u>		
TOTAL	0.4		

C-2. SCHEDULE OF SEDIMENT CONTROLS

The following stabilization and structural practices will be implemented as part of the activities as referenced in Section B. Construction Sequencing (Page 2).

<u>ACTIVITY</u>	<u>STABILIZATION¹. PRACTICES</u>	<u>STRUCTURAL PRACTICES¹.</u>
Install Contractor's Laydown Area	3.Install fencing and Landscaping 5.Dust Control, as needed	1.Install stone construction entrance 2.Install detention basin 4.Provide dumpsters
Relocate Existing Utilities	Dust Control	None required
Construct Southern Trailer Parking Area and Sediment/Detention Basins	2.Stake limits of disturbance 3.Install silt fence and combination haybale/silt fence Dust control 6.Install Landscaping 7.Temporary Seeding (if required) 8.Permanent stabilization and seeding	1.Install stone construction entrance 4.Construct sediment/detention basins 5.Provide spill kit
Fill existing Southerly Detention Basin	1.Stake limits of disturbance 2.Install silt fence and combination haybale/silt fence 4.Dust control 3.Install Landscaping 5.Temporary Seeding (if required) 6.Permanent stabilization and seeding	None required
Remove Laydown Area Trailers and Pavement	Permanent stabilization and seeding	None required

NOTE: 1. Numerical sequencing shown for Stabilization and Structural Practices represents the order in which these practices shall be implemented within each activity.

2. All of the above measures comply with Controls outlined in the Connecticut Guidelines for the Soil Erosion & Sedimentation Control.

C-3. MAINTENANCE

Maintenance shall be performed in accordance with the Guidelines.

Inspections of all stabilization practices and structural practices shall take place as later described in the section of this SWPPP entitled "Inspection". All silt fence and combination haybale silt fence shall be cleaned on an as needed basis and/or replaced if damaged. Silt removed from temporary sedimentation basins and silt fence and combination haybale silt fence shall be disposed within the project site as fill material.

Any areas that have been previously loamed and seeded that exhibit erosion shall be promptly repaired and reseeded.

Any areas of vegetation which do not exhibit a luxuriant growth shall be re-stabilized with loam and seed as described in this plan. Discharge points for surface water shall be inspected as described herein and cleaned of any debris as is needed.

The following is a schedule of maintenance for Stabilization and Structural Practices:

<u>EROSION & SEDIMENT CONTROL MEASURE</u>	<u>MAINTENANCE REQUIRED</u>
Silt Fence	Remove silt and soil after an accumulation of 2" depth or more. Ensure that bottom of fence is buried. Replace tom sections. Replace damaged or tipped stakes.
Combination Haybales/Silt Fence	Remove silt and soil after an accumulation of 2" depth or more. Ensure that bottom of fence is buried. Replace tom sections. Replace damaged or tipped stakes.
Temporary Seeded Areas	Re-loam and seed eroded or damaged areas. Install additional silt fence in sensitive areas Install stabilization fabric if area is to over-winter without permanent stabilization.
Permanent Seeded Areas	Replace stabilization fabric in eroded or damaged areas. Re-loam and seed eroded or damaged areas. Install additional silt fence in sensitive areas.
Swales	Remove silt and soil after an accumulation of 2" depth or more. Install additional silt fence in sensitive areas.
Discharge Points	Remove silt and soil after an accumulation of 2" depth or more. Replace riprap if damaged.

C-4. DEWATERING WASTEWATERS

Extensive borings were conducted on the Site. In general, the soils were found to be sand and gravel deposits and the groundwater table to be well below the level of excavation contemplated.

Due to these soil types and the established groundwater levels, it is not anticipated that dewatering will be required as a result of this construction project.

Detailed boring logs are kept at the Site and are available for inspection.

C-5. POST-CONSTRUCTION STORMWATER MANAGEMENT

The Frito-Lay facility has a current Stormwater Pollution Prevention Plan for Industrial Activities. The plan will be updated within 60 days after the completion of construction.

Stormwater quantity and peak discharge control has been designed to meet the pre development peak discharge rate for the 2, 10, 25, and 100 year, 24 hour events. Refer to the tables on Page 2 for peak discharge summary. The pond fully contains the 100 year, 24 hour event while maintaining 1 foot of freeboard. An emergency overflow for larger events has been provided along the southern pond bank and proper erosion control devices such as a concrete weir and riprap outlet protection have been provided. Peak discharge for the design events is controlled by means of a multi-stage concrete control structure that discharges through an 18" pipe to the point of connection downstream.

Pre-treatment into the pond is provided by several BMP's in series to create an effective BMP treatment train in addition to the required water quality volume supported within the multisystem pond. The upper lot impervious area maintains treatment through two concrete oil-water separators. Runoff is then conveyed downstream to be treated once again by means of two Hydro-international Downstream Defender hydrodynamic separators to capture sediment and oils/greases from pavements. All runoff is then discharged into a sediment forbay sized to accommodate 25% of the total water quality volume required for the effective drainage area. The forebay is designed with a low flow, perforated riser pipe and a concrete overflow weir to accommodate larger storms. The forebay also includes a 30 mil liner to prevent contaminants from infiltrating through the soil strata.

The multi-system pond includes 1.80 feet of water quality storage that is slowly infiltrated through 4' of clean fill, uncompacted imported sand. Effective infiltration rates were taken from Connecticut Stormwater Quality Manual Chapter 11. An infiltration rate of 3.75 in/hr was determined, then a factor of safety of "2.0" was then applied to this infiltration rate per the Connecticut Stormwater Manual for an effective rate of 1.875 in/hr. Pond attenuation volume was designed to fully recover in 5 days, and water quality volume was designed to fully recover within 3 days.

C-6. OTHER CONTROLS

Frito Lay, Inc. has an up to date Stormwater Pollution Prevention Plan for Industrial Activities and an up-to-date Spill Prevention Control and Countermeasure Plan on site and available for inspection. It deals with other controls to address spills, waste disposal, litter, debris, etc to ensure that no materials or fluids are discharged to waters of the state.

Once construction of improvements has been completed, new facilities/improvements will be incorporated into those plans within regulatory timelines.

Controls that shall be implemented during construction and after construction are as follows:

- All trash and refuse shall be deposited in covered containers such as dumpsters. The condition of such containers shall be monitored on a weekly basis by the inspector. The containers shall be covered when not in use and shall not be allowed to overflow.
- Signs shall be erected at detention basins listing 24 hour-a-day emergency contact information (Fire Marshall, Site Superintendent, Security Office, Facility Project Manager).
- Spill kits shall be kept at detention basins.
- The on-site storage of fuel or other hazardous materials for construction activities shall be prohibited.
- Storage of equipment, tools and supplies shall be confined to roll-off containers or if outside, shall be covered and fully protected from rain.
- A stone construction entrance (anti-tracking pad) shall be installed and maintained in good working order at the entrance to the facility prior to any construction.
- Dust shall be minimized by use of water during dry periods.
- All structural measures (catch basins, detention basins, swales, etc.) shall be cleaned of silt and debris as required based upon inspections, after significant rain events and at the conclusion of construction.
- Maintenance of construction vehicles on-site (except lubricating grease fittings) shall be prohibited.
- For oils and chemicals stored within the plant, 110% secondary containment shall be provided for liquids in containers of 55 gallons or more.

D. INSPECTION

The construction period for this project is anticipated to span a nine-month time period. During that time, there will be a full-time resident inspector on the project site. The responsibilities of that individual will be as follows:

1. Inspect disturbed areas, areas used for storage of material that are exposed to precipitation, storm drainage discharge points, silt fence, combination haybale/silt fence and entrance/exits for off-site sediment tracking, and temporary and permanent seeded areas and trash receptacles after rainfall events of 0.1" in a 24 hour period or at least on a weekly basis.
2. Ensure any recommended modifications to procedures and/or design elements of the plan are communicated to the appropriate personnel, including Killingly facility personnel, within a 24-hour period and are implemented within 3 calendar days following inspections. The Plan shall be revised accordingly.
3. Prepare weekly inspection reports noting major observations, points of inspection, recommendations for modifications, date of implementation and any other actions taken to comply with this plan. The report shall be signed by the inspector and the permittee or its authorized agent. All actions taken shall be made and retained as part of the Plan for at least 3 years after the completion of construction.

This plan and all inspection reports shall be made part of the facility's SWPPP for Industrial Activities at the conclusion of construction and retained for a period of 3 years thereafter.

E. **CONTRACTORS**

THE FOLLOWING IS A LIST OF THE APPROPRIATE PARTIES INVOLVED IN THE PROJECT

General Contractor: Haskell
111 Riverside Avenue
Jacksonville, FL 32202
Contact Person: Donald Gerlach
Telephone: 972-731-6152

Engineer: Haskell Architects & Engineers, P.C.
111 Riverside Ave.
Jacksonville, FL 32202
Contact Person: Joshua R. Hough, P.E.
Telephone: 904-791-4744

Owner: Frito Lay, Inc.
1886 Upper Maple Street
Dayville, CT 06241
Contact Person: Kerry Shields
Telephone: 860-412-1101

Inspector: Haskell
111 Riverside Avenue
Jacksonville, FL 32202
Contact Person: Donald Gerlach
Telephone: 972-731-6152

Prior to any additional Contractor/Sub-Contractors whose activities have the potential to impact stormwater quality arriving on site, they shall execute a Contractor's Certification and be provided with a copy of this plan.

_____	_____
Contractor	_____
	Address
_____	_____
Contact Person	Phone No.

F. REPORTING AND RECORD KEEPING

The Contractor shall distribute this plan to all pertinent individuals such as the General Contractor/Sub-Contractors, the Site contractor, the Inspector. Copies of the report shall be kept in the offices of the Contractor throughout the entire period of the construction.

This Plan and the Inspection Reports shall be maintained in the Contractor's offices at all times. This plan shall be incorporated in the Facility's Stormwater Pollution Prevention Plan for Industrial Activity at the conclusion of the construction and retained for a period of three (3) years thereafter.

G. DUTY TO CORRECT AND REPORT VIOLATION

Upon learning of a violation of a condition of this general permit, the permittee shall immediately take all reasonable action to determine the cause of such violation, correct and mitigate the results of such violation, prevent further such violation, and report in writing such violation and such corrective action to the commissioner within five (5) days of the permittee 's learning of such violation. Such information shall be certified by the permittee and shall be made part of this plan.

H. CORRECTION OF INACCURACIES

Within fifteen (15) days after the date the permittee becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, the permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be certified by the permittee and shall be made part of this plan.

CERTIFICATION OF GENERAL CONTRACTOR

"I certify under penalty of the law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a contractor or subcontractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this permit, including but not limited to the requirements of the Stormwater Pollution Control Plan prepared for the site."

Haskell
111 Riverside Avenue
Jacksonville, FL 32202
Donald Gerlack

Telephone

Name of General Contractor

Name of Preparer

Signature of General Contractor

Date

PROJECT: Frito Lay, Inc.

LOCATION: 1886 Upper Maple Street
Dayville, CT 06241

CERTIFICATION OF APPLICANT

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.

I also certify under penalty of law that I have read and understand all conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities issued on October 1, 2002 (or as reissued or modified), that all conditions for eligibility for authorization under the general permit are met, all terms and conditions of the general permit are being met for all discharges which have been initiated and are the subject of this registration, and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements."

Frito Lay, Inc.
1886 Upper Maple Street
Dayville, CT 06241
Kerry Shields, RVP
Telephone:

Name of Applicant

Name of Applicant

Signature of Applicant

Date

PROJECT: Frito-Lay, Inc.

LOCATION: 1886 Upper Maple Street
Dayville, CT 06241

CERTIFICATION OF PREPARER

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I certify that this general permit registration is on complete and accurate forms as prescribed by the commissioner without alteration of the text. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute. I also certify under penalty of law that I have read and understand all conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, that all conditions for eligibility for authorization under the general permit are met, all terms and conditions of the general permit are being met for all discharges which have been initiated and are the subject of this registration, and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements."

Haskell Architects & Engineers, P.C.
111 Riverside Ave.
Jacksonville, FL 32202
Joshua R. Hough, P.E.
Telephone: 904-791-4744

JOSHUA R. HOUGH
Name of Preparer

DIRECTOR - GROUP LEAD - CIVIL
Title

Signature of Preparer

Date

PROJECT: Frito-Lay, Inc.

LOCATION: 1886 Upper Maple Street
Dayville, CT 06241

CERTIFICATION OF PROFESSIONAL ENGINEER

"I certify that I have thoroughly and completely reviewed the Stormwater Pollution Control Plan for the site. I further certify, based on such review and on my professional judgment, that the Stormwater Pollution Control Plan has been prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, and the conditions for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities issued on October 1, 2002 (or as reissued or modified), and the controls required for such Plan are appropriate for the site. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

Haskell Architects & Engineers, P.C.
111 Riverside Ave.
Jacksonville, FL 32202
Joshua R. Hough, P.E.
Telephone: 904-791-4744

JOSHUA R. HOUGH
Name of Engineer

DIRECTOR - GROUP LEAD - CIVIL
Title

Name of Engineer

Date

PROJECT: Frito-Lay, Inc.

LOCATION: 1886 Upper Maple Street
Dayville, CT 06241

APPENDIX A

LOCATION PLAN



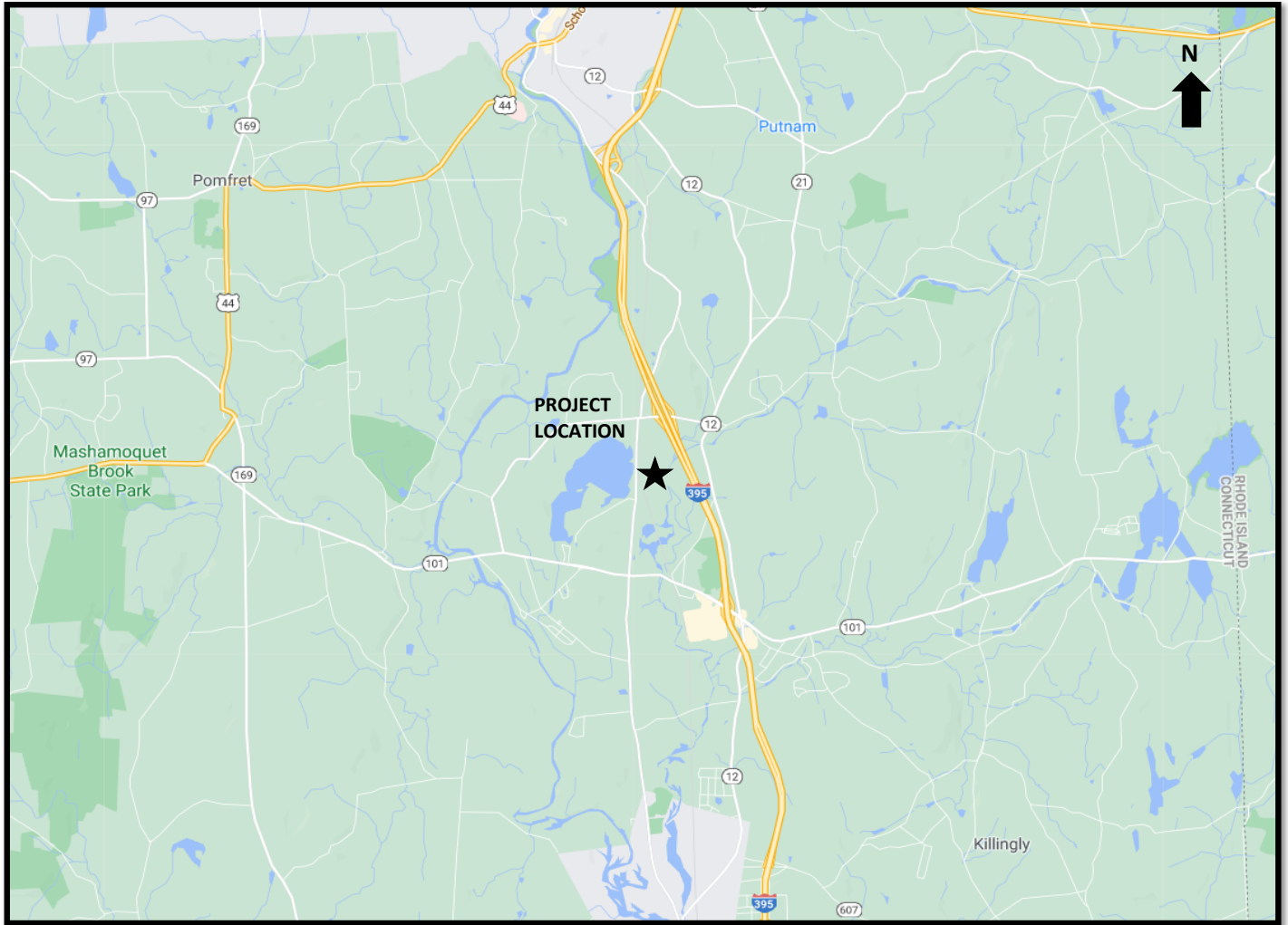
Client Name:	Frito-Lay		
Project Name:	Project Knight		
Location:	Killingly, CT	Project Num:	3401365
Prepared by:	SBC	Date:	1/21/2021

MAPS & SUPPORTING DOCUMENTS **1**

<u>SUB-SECTION</u>	<u>DESCRIPTION</u>
1.1	VICINITY MAP
1.2	LOCATION MAP
1.3	AERIAL PHOTO
1.4	F.E.M.A. MAP
1.5	NRCS HYDROLOGIC SOILS GROUP MAP
1.6	USGS MAP
1.7	NOAA RAINFALL DATA

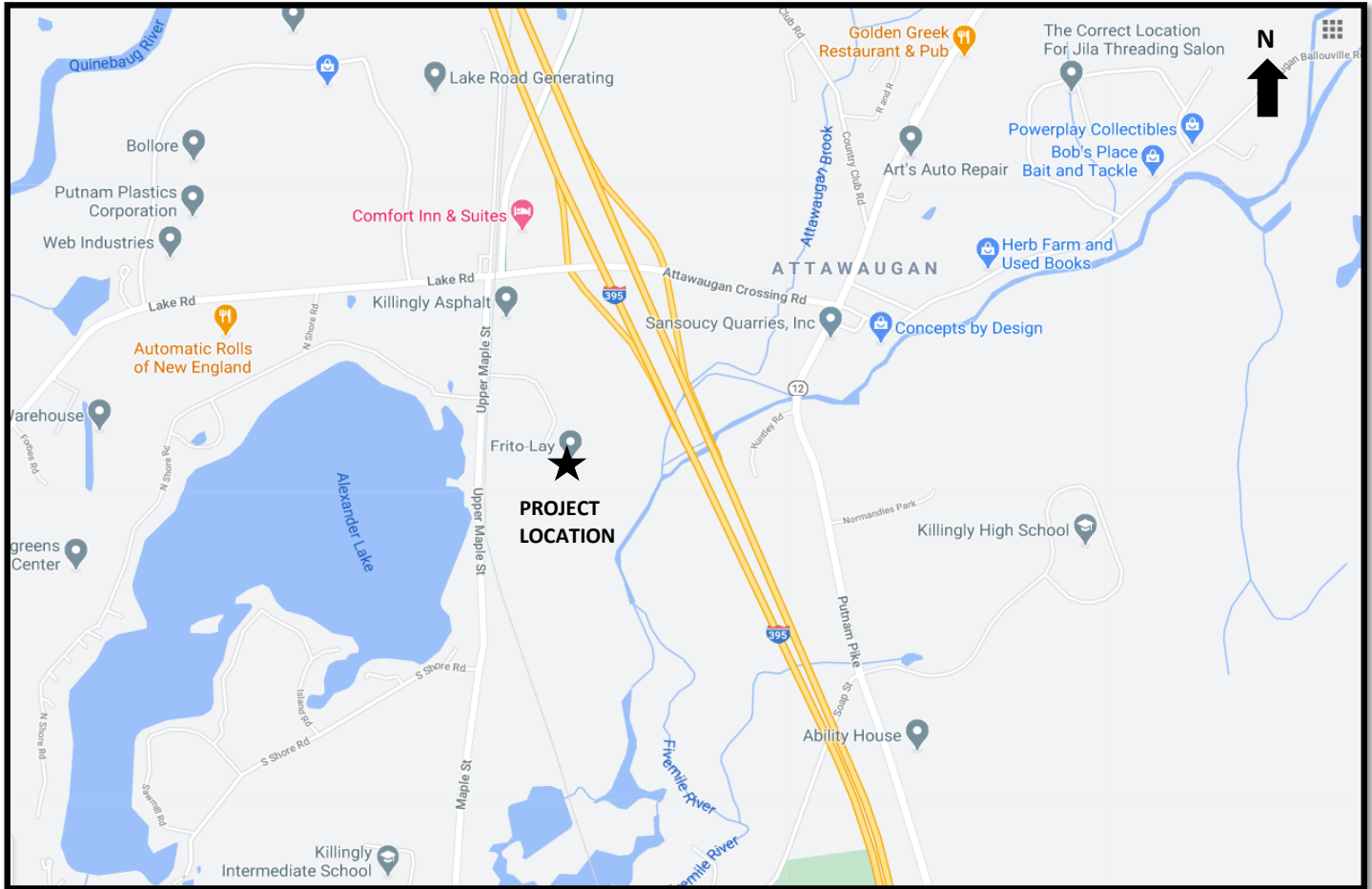
VICINITY MAP

1.1



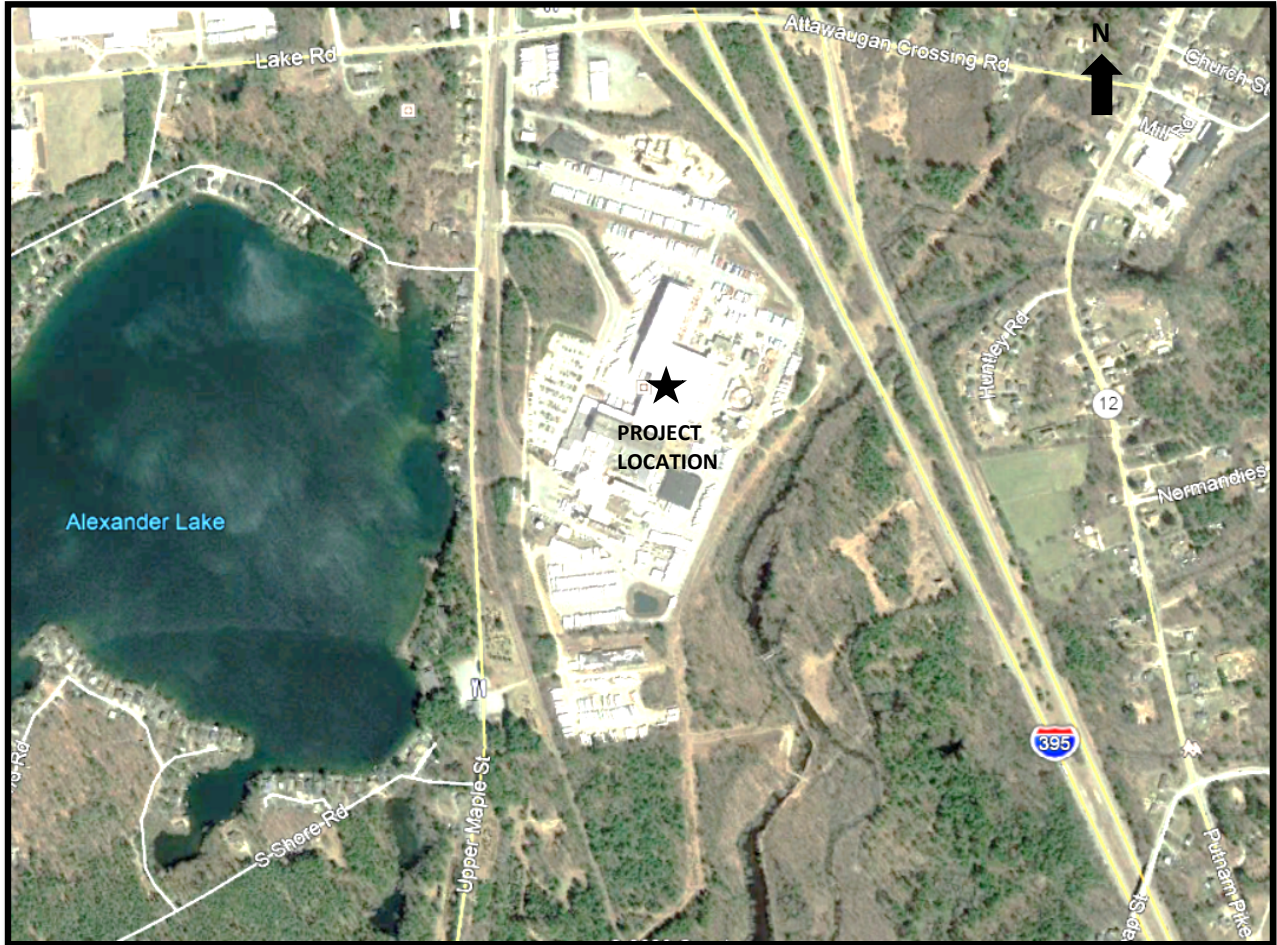
LOCATION MAP

1.2



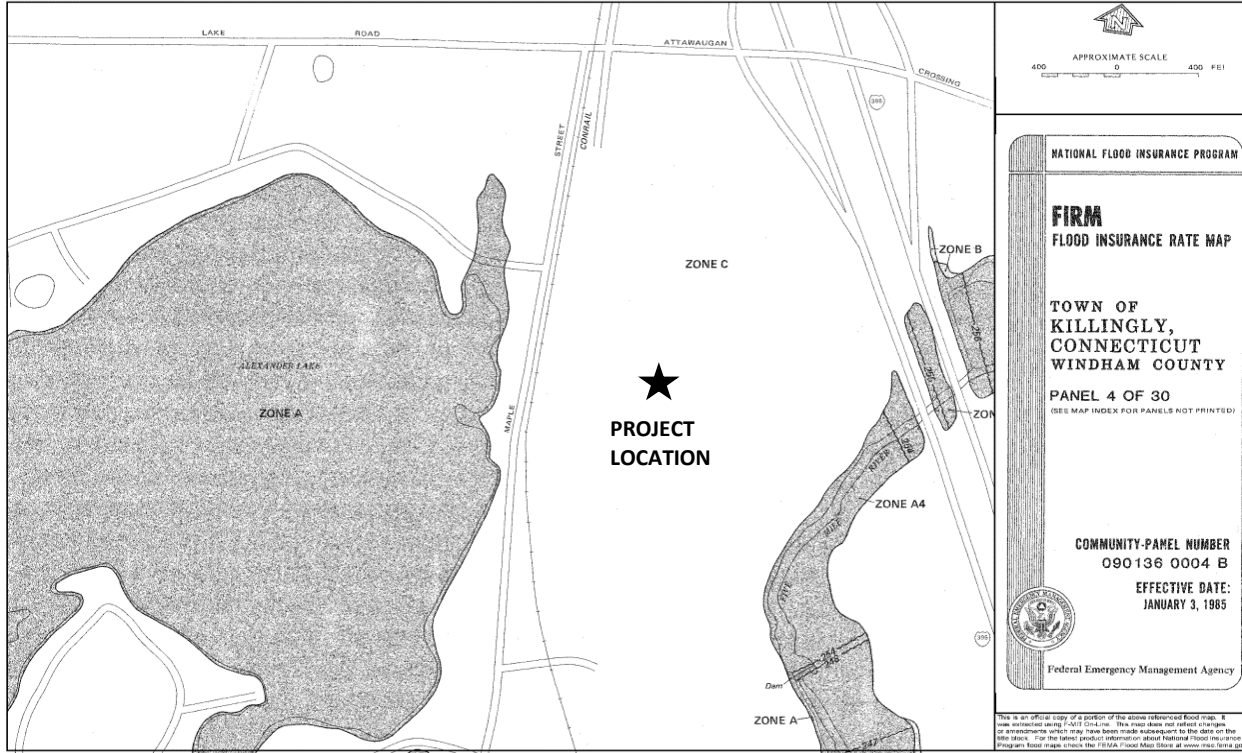
AERIAL PHOTO

1.3



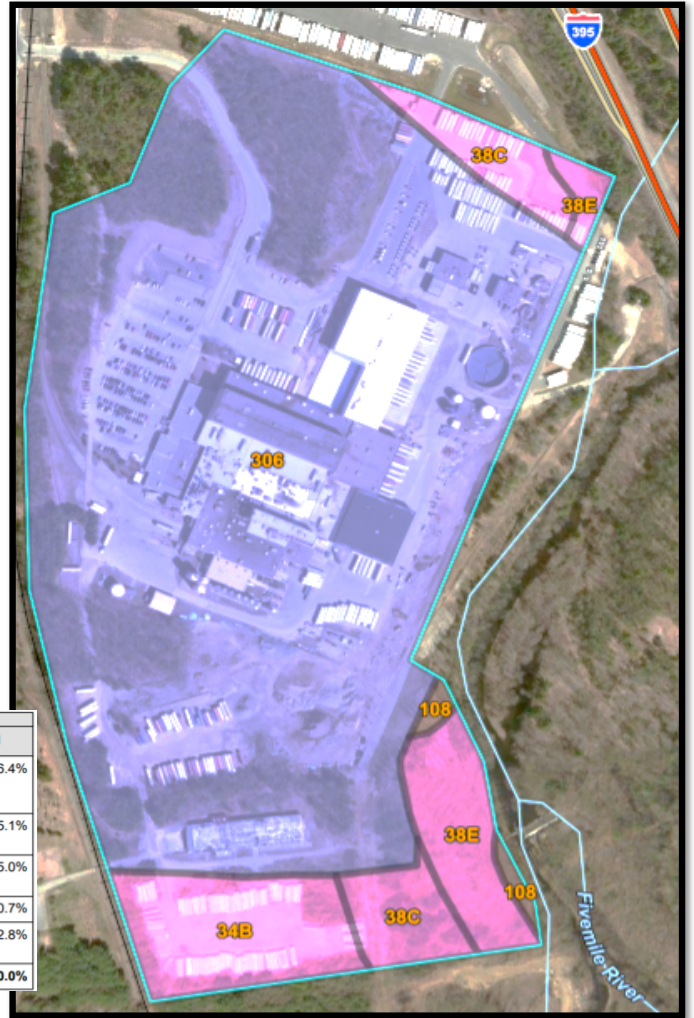
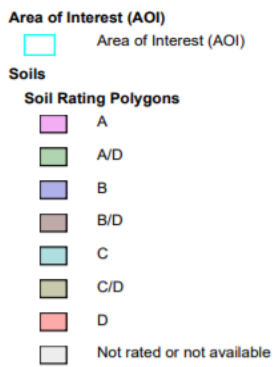
F.E.M.A. MAP

1.4



NRCS HYDROLOGIC SOILS GROUP MAP

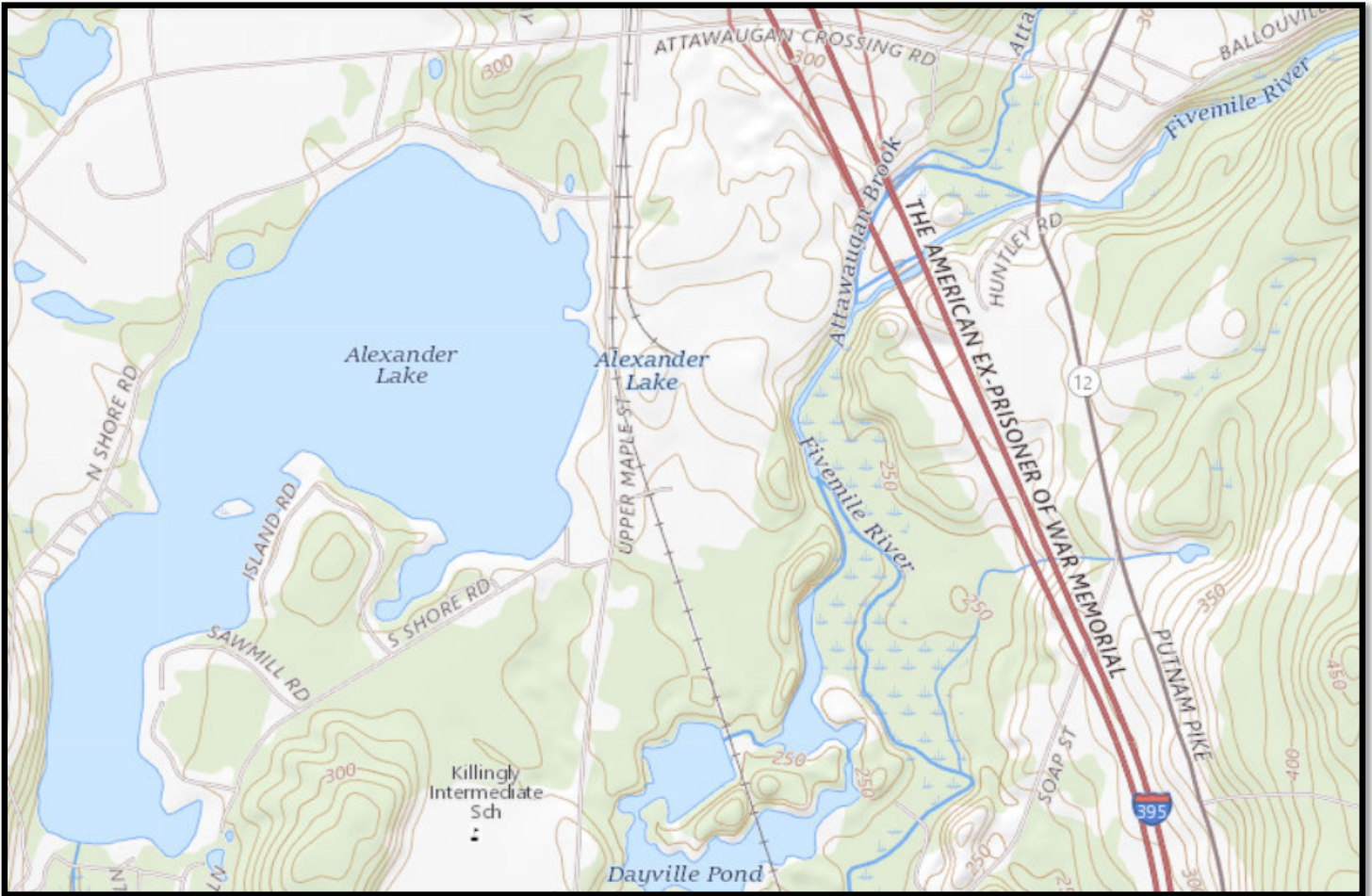
1.5



Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
34B	Merrimac fine sandy loam, 3 to 8 percent slopes	A	4.5	6.4%
38C	Hinckley loamy sand, 3 to 15 percent slopes	A	3.6	5.1%
38E	Hinckley loamy sand, 15 to 45 percent slopes	A	3.5	5.0%
108	Saco silt loam	B/D	0.5	0.7%
306	Udorthents-Urban land complex	B	58.6	82.8%
Totals for Area of Interest			70.7	100.0%

USGS MAP

1.6

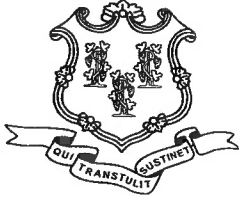


NOAA RAINFALL DATA
1.7

PDS-based precipitation frequency estimates with 90% confidence intervals (in inches/hour) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	3.98 (3.10-5.10)	4.75 (3.68-6.07)	5.99 (4.62-7.68)	7.02 (5.39-9.06)	8.42 (6.26-11.3)	9.50 (6.91-13.0)	10.6 (7.49-15.0)	11.8 (7.96-17.1)	13.5 (8.74-20.2)	14.8 (9.37-22.6)
10-min	2.83 (2.20-3.61)	3.36 (2.60-4.30)	4.24 (3.28-5.44)	4.97 (3.82-6.41)	5.97 (4.44-8.00)	6.73 (4.90-9.20)	7.51 (5.30-10.6)	8.36 (5.63-12.1)	9.55 (6.19-14.3)	10.5 (6.64-16.0)
15-min	2.22 (1.72-2.83)	2.64 (2.04-3.38)	3.32 (2.57-4.27)	3.90 (2.99-5.02)	4.68 (3.48-6.28)	5.28 (3.84-7.22)	5.89 (4.16-8.32)	6.56 (4.42-9.50)	7.49 (4.85-11.2)	8.23 (5.21-12.5)
30-min	1.55 (1.20-1.98)	1.84 (1.43-2.36)	2.32 (1.79-2.98)	2.72 (2.09-3.51)	3.27 (2.43-4.38)	3.68 (2.68-5.03)	4.11 (2.90-5.80)	4.57 (3.08-6.62)	5.22 (3.38-7.80)	5.73 (3.63-8.74)
60-min	0.996 (0.773-1.27)	1.18 (0.917-1.51)	1.49 (1.15-1.91)	1.75 (1.34-2.25)	2.10 (1.56-2.81)	2.36 (1.72-3.23)	2.64 (1.86-3.72)	2.93 (1.97-4.25)	3.35 (2.17-5.00)	3.68 (2.33-5.60)
2-hr	0.636 (0.497-0.809)	0.754 (0.588-0.960)	0.946 (0.736-1.21)	1.11 (0.854-1.42)	1.33 (0.994-1.77)	1.49 (1.09-2.04)	1.66 (1.19-2.36)	1.87 (1.26-2.69)	2.16 (1.41-3.22)	2.41 (1.53-3.65)
3-hr	0.489 (0.383-0.619)	0.579 (0.453-0.734)	0.726 (0.566-0.924)	0.848 (0.657-1.09)	1.02 (0.765-1.36)	1.14 (0.842-1.56)	1.28 (0.917-1.81)	1.44 (0.971-2.06)	1.68 (1.09-2.48)	1.88 (1.20-2.84)
6-hr	0.313 (0.246-0.394)	0.371 (0.292-0.468)	0.467 (0.366-0.591)	0.546 (0.426-0.695)	0.656 (0.496-0.871)	0.736 (0.547-1.00)	0.824 (0.596-1.16)	0.930 (0.631-1.33)	1.09 (0.712-1.61)	1.23 (0.784-1.84)
12-hr	0.196 (0.155-0.246)	0.234 (0.185-0.294)	0.296 (0.234-0.373)	0.348 (0.273-0.440)	0.419 (0.318-0.553)	0.472 (0.352-0.636)	0.528 (0.383-0.740)	0.596 (0.406-0.845)	0.698 (0.457-1.02)	0.785 (0.502-1.17)
24-hr	0.117 (0.093-0.146)	0.141 (0.112-0.176)	0.181 (0.143-0.226)	0.213 (0.168-0.268)	0.258 (0.197-0.339)	0.291 (0.218-0.391)	0.327 (0.238-0.455)	0.370 (0.253-0.520)	0.433 (0.285-0.630)	0.487 (0.313-0.721)
2-day	0.066 (0.053-0.082)	0.080 (0.064-0.100)	0.104 (0.083-0.129)	0.123 (0.097-0.154)	0.150 (0.115-0.196)	0.170 (0.128-0.226)	0.191 (0.140-0.264)	0.216 (0.148-0.303)	0.255 (0.168-0.368)	0.288 (0.185-0.423)
3-day	0.048 (0.038-0.059)	0.058 (0.047-0.072)	0.075 (0.060-0.093)	0.089 (0.071-0.111)	0.108 (0.083-0.141)	0.123 (0.093-0.163)	0.138 (0.102-0.191)	0.157 (0.108-0.219)	0.185 (0.122-0.266)	0.209 (0.135-0.306)
4-day	0.038 (0.031-0.047)	0.047 (0.037-0.057)	0.060 (0.048-0.074)	0.071 (0.057-0.088)	0.087 (0.067-0.112)	0.098 (0.074-0.130)	0.110 (0.081-0.152)	0.125 (0.086-0.174)	0.148 (0.098-0.212)	0.167 (0.108-0.244)
7-day	0.026 (0.021-0.032)	0.031 (0.025-0.038)	0.040 (0.032-0.049)	0.047 (0.038-0.058)	0.057 (0.044-0.074)	0.064 (0.049-0.085)	0.072 (0.053-0.099)	0.082 (0.056-0.113)	0.096 (0.064-0.137)	0.109 (0.070-0.158)

APPENDIX B

LETTER FROM NATURAL DIVERSITY DATABASE



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Natural Resources
Wildlife Division
79 Elm Street, Sixth Floor
Hartford, CT 06106
Natural Diversity Data Base

Mr. Terence P. Chambers
KWP Associates
250 Killingly Road
Pomfret Center, CT 06259-0106

March 23, 2010

RECEIVED Mar 23 2010

re: Frito Lays Property in Dayville,
Connecticut

Dear Mr. Chambers:

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the Frito Lay's property in Dayville, Connecticut, Connecticut. There are no extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur on this property. Instead, this area is highlighted because of historic plants associated with Alexander Lake and the floodplain forest, which is considered a significant natural community along the Five-Mile River.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the DEP's Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions at 860-424-3592. Thank you for consulting the Natural Diversity Data Base. Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

Sincerely,


Dawn M. McKay
Biologist/Environmental Analyst 3

Cc: NDDB File # 17574, 15901

APPENDIX C

INSPECTION FORM

Site Inspection Worksheet for E&S and Stormwater Control Measures

Project #: _____ Plans Dated _____ Last Revised _____

District: _____ Reviewer: _____

Location: _____

Project Description: _____

Contact Person for the Site:

Name: _____

Company: _____ Phone: _____

Site Visit Date: _____

Weather conditions: _____

Photographs taken Yes No

Contacted Responsible Party Yes No

Inspection submitted to CT DEP Yes No

Inspection submitted to Permittee Yes No

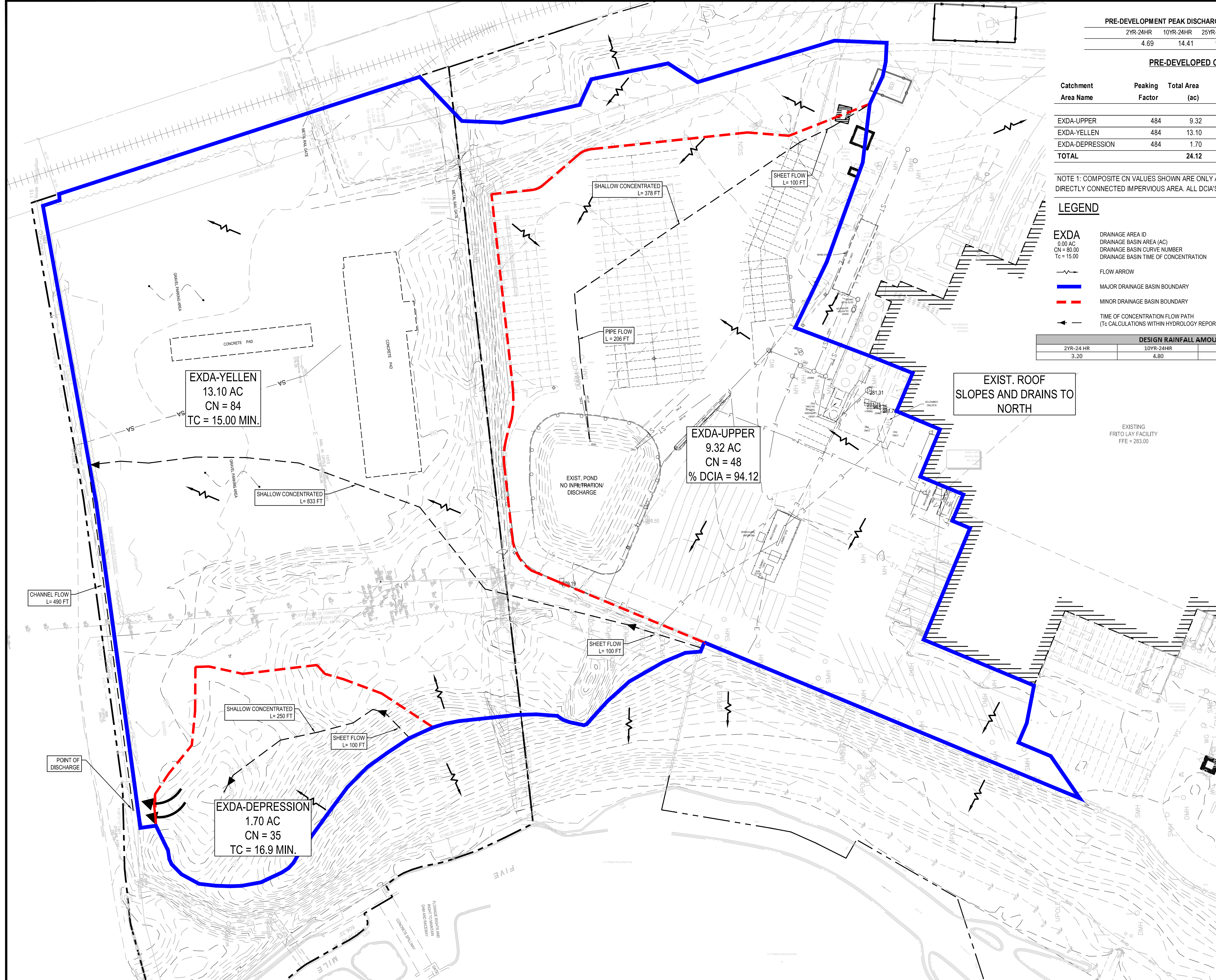
Comments:

APPENDIX D

SITE PLAN

XREF: 3401365201.LOGRITE - Phase 1 Vain P 340 Foodbev3401365 Frito Lay Project KnightDesign Working Common\11666666\3401365201.LOGRITE - Phase 1 Vain.dwg
 XREF: 3401365201.CM 71.LUS Model FreshPhase 1 Vain Lot3401365201.CM 71.dwg
 XREF: 3401365201.CM 01.LUS Model FreshPhase 1 Vain Lot3401365201.CM 01.dwg
 XREF: 3401365201.CM 01.LUS Model FreshPhase 1 Vain Lot3401365201.CM 01.dwg

P:340_Foodbev3401365 Frito Lay Project KnightDesign Working\Civil\AubCAD\06 Sheet Files\Phase 1 YELLIN.LOT3401365201.LC-170.dwg Layout Name: LC-170 Mar 12, 2021 - 6:58am PLOTTED BY: MS Lyons



PRE-DEVELOPMENT PEAK DISCHARGE (SOUTH BASIN), CFS

2YR-24HR	10YR-24HR	25YR-24HR	100YR-24HR
4.69	14.41	19.40	30.18

PRE-DEVELOPED CONDITIONS

Catchment Area Name	Peaking Factor	Total Area (ac)	Impervious (ac)	% DCIA	CN ¹	T _c (min)
EXDA-UPPER	484	9.32	8.8	94.12	48	10.00
EXDA-YELLEN	484	13.10	5.71	-	62.46	15.00
EXDA-DEPRESSION	484	1.70	-	-	32.00	10.00
TOTAL		24.12	14.48			

NOTE 1: COMPOSITE CN VALUES SHOWN ARE ONLY APPLIED TO THE AREAS NOT CONSIDERED DIRECTLY CONNECTED IMPERVIOUS AREA. ALL DCIA'S ARE ASSIGNED A CN VALUE OF 98.

- LEGEND**
- EXDA: DRAINAGE AREA ID
 - 0.00 AC: DRAINAGE BASIN AREA (AC)
 - CN = 80.00: DRAINAGE BASIN CURVE NUMBER
 - Tc = 15.00: DRAINAGE BASIN TIME OF CONCENTRATION
 - Flow Arrow: FLOW ARROW
 - Blue Line: MAJOR DRAINAGE BASIN BOUNDARY
 - Red Dashed Line: MINOR DRAINAGE BASIN BOUNDARY
 - Black Arrow: TIME OF CONCENTRATION FLOW PATH (Tc CALCULATIONS WITHIN HYDROLOGY REPORT)

DESIGN RAINFALL AMOUNTS (INCHES)

2YR-24 HR	10YR-24HR	25YR-24HR	100YR-24HR
3.20	4.80	5.50	6.90

EXIST. ROOF SLOPES AND DRAINS TO NORTH

EXISTING FRITO LAY FACILITY
FFE = 283.00

EXDA-YELLEN
13.10 AC
CN = 84
TC = 15.00 MIN.

EXDA-UPPER
9.32 AC
CN = 48
% DCIA = 94.12

EXDA-DEPRESSION
1.70 AC
CN = 35
TC = 16.9 MIN.

JOSHUA R. HOUGH
 CHARTERED PROFESSIONAL ENGINEER
 STATE OF CONNECTICUT
 REG. NO. 100138

HASKELL ARCHITECTS and ENGINEERS, P.C.
 CONNECTICUT - Architecture and Engineering # 0000056

The Haskell Company
 111 Riverside Avenue
 Jacksonville, Florida 32202
 Phone # (904) 791-4500

HASKELL

YELLIN TRAILER PARKING LOT

Good fun!

No	DESCRIPTION	DATE
K	CRPI	03/12/21
I	CPI_EVER	02/16/21
G	CPI	01/21/21

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DRAWN BY: SBC/MSL
 CHECKED BY: JRH

AE JOB NUMBER
3401365

PRE DEVELOPMENT DRAINAGE MAP

1C-170
 SHEET NUMBER

