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2.0 SUMMARY OF IMPACTS

EMH&T has prepared this document in accordance with a request by Kroger for Section 401 Water Quality Certification from the Ohio EPA and Section 404 authorization from the USACE for impacts to Waters of the United States in association with the development of the potential Kroger N549 Bethel Woods Marketplace. The potential development is located on West Fifth Avenue, east of the U.S. Route 33/36 interchange in the City of Marysville, Union County, Ohio and is shown on Exhibit 1 (Section 6). Kroger is seeking authorization from the Ohio EPA and the USACE to construct the proposed Preferred Design Alternative.

The proposed development site has 950 linear feet of intermittent stream, 568 linear feet of ephemeral stream and 4.1 acres of onsite pond, as shown on Exhibit 7 (Section 6). The proposed impacts, based on the Preferred Alternative (Exhibit 8 in Section 6), include 414 linear feet of ephemeral stream, 308 linear feet of intermittent stream and 4.1 acres of onsite jurisdictional pond. Based on the Minimal Degradation Alternative (Exhibit 9 in Section 6), the proposed impacts include 284 linear feet of ephemeral stream, 38 linear feet of intermittent stream and 4.1 acres of pond. For both alternatives, the proposed mitigation includes a total of 642 linear feet of stream preservation and a 1.02-acre water quality basin with a 0.21-acre vegetated wetland shelf, which is further discussed in Section 7. The proposed impacts are summarized on the Proposed Stream Impacts Table (Attachment 2A) and Proposed Lake Impacts Table (Attachment 2B).

The Preferred Alternative is feasible, cost effective and a desirable alternative for onsite development. By implementing the Preferred Alternative, numerous social and economic benefits would be gained by the City of Marysville, Union County and State of Ohio. Some environmental benefits would be lost during the construction of the proposed Kroger N549 Bethel Woods Marketplace, but with the implementation of the proposed mitigation techniques, environmental benefits would also be gained via onsite stream preservation and improved water quality at the site.



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ATTACHMENT 2A

401 WQC PROPOSED STREAM IMPACTS AND MITIGATION TABLE



Application for Section 401 Water Quality Certification — Proposed Stream Impacts and Mitigation

Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Section 1: Streams Onsite and Proposed Impacts									
Stream ID	Jurisdictional?	Flow	Aquatic Life Use Designation in 3745-1	Existing Use?	Length Onsite (linear ft.)	Preferred Alternative		Minimal Degradation Alternative	
						Impact Length (linear ft.)	Impact Type	Impact Length (linear ft.)	Impact Type
Stream 1	YES	Ephemeral	Undesignated	MWH	540.00	30.00	Fill	30.00	Culvert/Pipe
Stream 1	YES	Ephemeral	Undesignated	MWH	0.00	356.00	Fill	226.00	Fill
Stream 2	YES	Intermittent	Undesignated	MWH	950.00	308.00	Culvert/Pipe	38.00	Culvert/Pipe
Stream 3	YES	Ephemeral	Undesignated	MWH	28.00	28.00	Fill	28.00	Fill
Click here to enter text.	Choose an item.	Choose an item.	Choose an item.	Choose an item.			Choose an item.		Choose an item.
Click here to enter text.	Choose an item.	Choose an item.	Choose an item.	Choose an item.			Choose an item.		Choose an item.
Click here to enter text.	Choose an item.	Choose an item.	Choose an item.	Choose an item.			Choose an item.		Choose an item.
Click here to enter text.	Choose an item.	Choose an item.	Choose an item.	Choose an item.			Choose an item.		Choose an item.
Click here to enter text.	Choose an item.	Choose an item.	Choose an item.	Choose an item.			Choose an item.		Choose an item.
Click here to enter text.	Choose an item.	Choose an item.	Choose an item.	Choose an item.			Choose an item.		Choose an item.
Click here to enter text.	Choose an item.	Choose an item.	Choose an item.	Choose an item.			Choose an item.		Choose an item.
Click here to enter text.	Choose an item.	Choose an item.	Choose an item.	Choose an item.			Choose an item.		Choose an item.
Click here to enter text.	Choose an item.	Choose an item.	Choose an item.	Choose an item.			Choose an item.		Choose an item.
Stream Length Totals					1518.00	722.00		322.00	

Section 2: Proposed Stream Mitigation (Check All That Apply) Preferred Alternative				
<input type="checkbox"/>	In-Lieu Fee Program	ILF Sponsor: Choose an item.	Number of Stream Credits:	Number of Buffer Credits: Proof of Reservation? YES <input type="checkbox"/> NO <input type="checkbox"/>
<input checked="" type="checkbox"/>	On-Site Permittee-Responsible Mitigation	<input type="checkbox"/> Restoration/Creation Choose an item. linear feet <input checked="" type="checkbox"/> Preservation of Choose an item. 642 linear feet with 50 foot buffers		<input type="checkbox"/> Enhancement of linear feet of a Choose an item. to a Choose an item. through Choose an item. <input checked="" type="checkbox"/> Other 1.02-acre retention basin with vegetated wetland shelf
<input type="checkbox"/>	Off-Site Permittee-Responsible Mitigation	<input type="checkbox"/> Restoration/Creation Choose an item. linear feet <input type="checkbox"/> Preservation of Choose an item. linear feet with Choose an item. foot buffers		<input type="checkbox"/> Enhancement of linear feet of a Choose an item. to a Choose an item. through Choose an item. <input type="checkbox"/> Other Click here to enter text.
Section 3: Proposed Stream Mitigation (Check All That Apply) Minimal Degradation Alternative				
<input type="checkbox"/>	In-Lieu Fee Program	ILF Sponsor: Choose an item.	Number of Stream Credits:	Number of Buffer Credits: Proof of Reservation? YES <input type="checkbox"/> NO <input type="checkbox"/>
<input checked="" type="checkbox"/>	On-Site Permittee-Responsible Mitigation	<input type="checkbox"/> Restoration/Creation Choose an item. linear feet <input checked="" type="checkbox"/> Preservation of Choose an item. 642 linear feet with 50 foot buffers		<input type="checkbox"/> Enhancement of linear feet of a Choose an item. to a Choose an item. through Choose an item. <input checked="" type="checkbox"/> Other 1.02-acre retention basin with vegetated wetland shelf
<input type="checkbox"/>	Off-Site Permittee-Responsible Mitigation	<input type="checkbox"/> Restoration/Creation Choose an item. linear feet <input type="checkbox"/> Preservation of Choose an item. linear feet with Choose an item. foot buffers		<input type="checkbox"/> Enhancement of linear feet of a Choose an item. to a Choose an item. through Choose an item. <input type="checkbox"/> Other Click here to enter text.



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ATTACHMENT 2B

401 WQC PROPOSED LAKES IMPACTS TABLE



Application for Section 401 Water Quality Certification — Proposed Lake Impacts

Division of Surface Water 401 Water Quality Certification and Isolated Wetland Permitting Unit

Other Water Body ID	Coastal Erosion Area?	Impact Type	Preferred Alternative			Minimal Deg. Alternative			Placement of Dredged Material into a:
			Cubic Yards of Fill/Dredged Material	Lakeward Extent (linear ft.)	Shoreline Impacted (linear ft.)	Cubic Yards of Fill/Dredged Material	Lakeward Extent (linear ft.)	Shoreline Impacted (linear ft.)	
Pond 1	NA	Fill	12001.00			12001.00			<input type="text" value="Choose an item"/>
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
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Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
Click here to enter text.	Choose an item.	Choose an item.							Choose an item.
TOTALS			12001.00	0.00	0.00	12001.00	0.00	0.00	