From: Teresa Barnes
To: "Kyle J. Wrentmore"
Subject: RE: Burger King - Horseshoe Bend Rd.
Date: Friday, August 03, 2018 2:58:23 PM

Kyle

I have released BCEO portions of the building permit – with the following comments seen below:

This office has reviewed the construction drawings as submitted via email on August 3, 2018 and has found them to be acceptable with the following comments:

Sheet C301 calls out both a 5.5-inch and a 6-inch orifice for structure 11; please revise drawing according to the storm water calculations.

Please note that the certificate of occupancy will be held for the submission of the storm drain system as-built drawing.

Let me know if you have any questions
THANKS

Teresa

Teresa K. Barnes, P.E., CPESC
DESIGN ENGINEER
1921 Fairgrove Avenue
Hamilton, OH 45011

513-785-4142
Fax 513-867-8549

barnest@bceo.org

From: Kyle J. Wrentmore [mailto:KWrentmore@manniksmithgroup.com]
Sent: Friday, August 03, 2018 2:12 PM
To: Teresa Barnes

Cc: Melissa A. Miller
Subject: RE: Burger King - Horseshoe Bend Rd.

Teresa,

Attached is a revised set of construction site plans and Stormwater management report. See responses to your comments below. Please let us know if you need anything further.

1. The calculated 100-year ponding elevation is stated to be 753.65; however, structures 10, 11 and 15 have grate elevations below this. Therefore, water will be exiting these structures – has this volume been accounted for? Options would be to increase the size of the basin to lower the elevation or raise the structure grate elevations. Please note that it is not permissible to utilize the parking lot as ponding/storage for detention purposes.

The orifice in storm structure 11 was modified to lower the 100 year elevation as well as slight modifications to the grading. The current 100 year storm does not overtop structures 11 and 15. Storm structure #10 is downstream of the control structure and will not overtop.

2. The N-value used to calculate the depth of water within the re-routed channel is 0.015. Per the ODOT Hydraulic Manual, the minimum N-value for rip rap is 0.023 – with a normal value of 0.033. If the higher N-value is used – what is the water surface elevation within the re-routed channel compared to the existing water surface elevation? Would grouting the rip-rap for the first 50-feet of the channel be possible – this would allow for the lower N-value to be used. Again, we need to ensure that the new channel does not alter the existing water surface elevation on the property to the south.

Keyed Note 7 was added to sheet C300 to specify grouting the rip-rap for the first 50 feet of the channel.

Thank you,

Kyle J. Wrentmore, EI
Civil Engineer
The Mannik & Smith Group, Inc.
1160 Dublin Road, Suite 100
Columbus, OH 43215-1052
614-441-4222 (Office)
www.manniksmithgroup.com

From: Teresa Barnes <BarnesT@bceo.org>
Sent: Friday, August 3, 2018 9:50 AM
To: Kyle J. Wrentmore <KWrentmore@manniksmithgroup.com>; Melissa A. Miller <MAMiller@manniksmithgroup.com>
Subject: FW: Burger King - Horseshoe Bend Rd.

Kyle and Melissa

I have received a set of construction drawings with a building permit for the proposed Burger King site – however – I have not received a response to my last email with additional questions/comments.
I cannot approve BCEO portion of the building permit until these items are addressed.
Let me know if you have any questions.

THANKS
Teresa

Teresa K. Barnes, P.E., CPESC
DESIGN ENGINEER
1921 Fairgrove Avenue
Hamilton, OH 45011
513-785-4142
Fax 513-867-8549
barnest@bceo.org

From: Teresa Barnes
Sent: Wednesday, July 18, 2018 11:56 AM
To: 'Kyle J. Wrentmore'
Cc: Melissa A. Miller
Subject: RE: Burger King - Horseshoe Bend Rd.

Kyle and Melissa

I have reviewed the updated drawings and calculations and have the following comments:

1. The calculated 100-year ponding elevation is stated to be 753.65; however, structures 10, 11 and 15 have grate elevations below this. Therefore, water will be exiting these structures – has this volume been accounted for? Options would be to increase the size of the basin to lower the elevation or raise the structure grate elevations. Please note that it is not permissible to utilize the parking lot as ponding/storage for detention purposes.
2. The N-value used to calculate the depth of water within the re-routed channel is 0.015. Per the ODOT Hydraulic Manual, the minimum N-value for rip rap is 0.023 – with a normal value of 0.033. If the higher N-value is used – what is the water surface elevation within the re-routed channel compared to the existing water surface elevation? Would grouting the rip-rap for the first 50-feet of the channel be possible – this would allow for the lower N-value to be used. Again, we need to ensure that the new channel does not alter the existing water surface elevation on the property to the south.

Let me know if you have any questions.
THANKS

Teresa

Teresa K. Barnes, P.E., CPESC
DESIGN ENGINEER
1921 Fairgrove Avenue
Hamilton, OH 45011

513-785-4142
Fax 513-867-8549

barnest@bceo.org

From: Kyle J. Wrentmore [mailto:KWrentmore@manniksmithgroup.com]
Sent: Friday, June 29, 2018 4:59 PM

To: Teresa Barnes
Cc: Melissa A. Miller
Subject: RE: Burger King - Horseshoe Bend Rd.

Teresa,

The following documents are attached addressing the comments mentioned below.

- Revised construction site plans
- Stormwater management report
- Disposition of comments
- Tele-vac email regarding water quality structure maintenance.

Please let us know if you need anything further.

Thank you,

Kyle J. Wrentmore, EI
Civil Engineer
The Mannik & Smith Group, Inc.
1160 Dublin Road, Suite 100
Columbus, OH 43215-1052
614-441-4222 (Office)
www.manniksmithgroup.com

From: Teresa Barnes <BarnesT@bceo.org>
Sent: Friday, June 15, 2018 4:42 PM
To: Kyle J. Wrentmore <KWrentmore@manniksmithgroup.com>
Cc: Melissa A. Miller <MAMiller@manniksmithgroup.com>
Subject: RE: Burger King - Horseshoe Bend Rd.

Kyle

I sincerely apologize for the delay – there has just been a massive rush of submittals – and I am getting through things as fast as I possibly can.

Below are comments for the proposed Burger King

1. The proposed entrance of Horseshoe Bend indicates the painting of a

"straight" arrow in; however, the traffic is not permitted to go straight – therefore, this arrow should be changed to a "right-only" arrow

2. "Do Not Enter" signs should also be added to the plan – not just the painting on the pavement.
3. Is there a cross-access agreement with the property to the west along SR 4? Will a cross-access easement be provided through this site? How does this proposed access point align with the existing improvments on the west property? Why is the pavement stopped short of the property line – if this stops short – who is responsible for completing the pavement in the future? Ensure that the grading of this area allows for the water to get to the nearby catch basin, the proposed sidewalk appears high.
4. The proposed culvert under the sidewalk will be required to a 12-inch diameter pipe minimum.
5. Sheet C300, lists the Existing Storm Structure schedule – using numbers to identify the structures; #6 invert appears to be below the invert for #5 which is downstream – please verify and revise accordingly; and where is structure #7
6. The proposed storm structures are also labeled with numbers – this is very confusing with the existing storm structures; please consider different labeling. Reference to the proposed structures should be included with the existing structure schedule.
7. The proposed water quality structure is proposed to be installed approximately 40-feet from pavement. The specified structure will require maintenance – usually performed using a vactor truck – how will the truck be able to access this structure?
8. Include invert information on the orifice plate detail for structure #3 on sheet C301.
9. The proposed/required silt fence must be placed on the Burger King property (not on the property to the south)
10. Page 64 of the storm water report indicates that the 100-year water elevation within the relocated ditch will reach 753.68; however, on sheet C300, the 100-year elevation is marked well below that elevation; please verify and revise accordingly.

The placement of a private drainage easement over the re-routed drainage

easement is a possibility – however, it really does not alter anything – it is a natural waterway that is required to be maintained by the property owner – therefore, the inclusion of a drainage easement would not be "required" by BCEO.

Let me know if you have any questions.
THANKS
Teresa

Teresa K. Barnes, P.E., CPESC
DESIGN ENGINEER
1921 Fairgrove Avenue
Hamilton, OH 45011

513-785-4142
Fax 513-867-8549

barnest@bceo.org

From: Kyle J. Wrentmore [mailto:KWrentmore@manniksmithgroup.com]
Sent: Wednesday, May 23, 2018 11:37 AM
To: Teresa Barnes
Cc: Melissa A. Miller
Subject: Burger King - Horseshoe Bend Rd.

Teresa,

Per our phone conversation last Friday, attached is a current set of site construction drawings and a copy of the Stormwater management report for engineering review. Will the proposed re-route of the ditch along the southwest portion of the site require a drainage easement? Refer to sheet C300. Please let us know if you need anything further.

Thank you,

Kyle J. Wrentmore, EI
Civil Engineer
The Mannik & Smith Group, Inc.
1160 Dublin Road, Suite 100
Columbus, OH 43215-1052
614-441-4222 (Office)
www.manniksmithgroup.com

CONFIDENTIALITY NOTICE

The information contained in this communication and its attachment(s) is intended only for the use of the individual to whom it is addressed and may contain information that is privileged, confidential or exempt from disclosure. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is prohibited. If you have received this communication in error, please notify postmaster@manniksmithgroup.com and delete the communication without retaining any copies. Thank you.

CONFIDENTIALITY NOTICE

The information contained in this communication and its attachment(s) is intended only for the use of the individual to whom it is addressed and may contain information that is privileged, confidential or exempt from disclosure. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is prohibited. If you have received this communication in error, please notify postmaster@manniksmithgroup.com and delete the communication without retaining any copies. Thank you.

CONFIDENTIALITY NOTICE

The information contained in this communication and its attachment(s) is intended only for the use of the individual to whom it is addressed and may contain information that is privileged, confidential or exempt from disclosure. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is prohibited. If you have received this communication in error, please notify postmaster@manniksmithgroup.com and delete the communication without retaining any copies. Thank you.