December 17, 2015

Comment Response Letter

Re: Project Number 12-2015

The purpose of this letter is to address comments received from you via e-mail on 2015-10-27-17 regarding the aforementioned project. For your convenience and to expedite the review and approval process, your original comments are included and Benjamin-Ryan responses are provided in **BOLD**.

**FIRE REVIEW**

1. The project has failed fire review. An additional fire hydrant is required. See red line plans page C-4.1

**RESPONSE:** Additional proposed new fire hydrants provided to meet fire flow and maximum distance of 300-feet.

2. This project shall comply with the Milton Municipal Code, the 2012 International Fire Code and the set standards of Milton as established by the Fire Chief. (NFPA)

**RESPONSE:** 2012 IFC has been considered for this Project.

3. The site or building address shall be displayed at the start of construction, either visible from or at the nearest access street.

**RESPONSE:** A temporary site building address will be provided until the permanent site signage is installed. Note has been provided on the site plan.

4. An approved all weather surface (paved) fire apparatus access road/lane shall be provided to within 150 feet of all exterior walls of the first floor of the building. The route of the fire apparatus access road shall be approved by the fire department.

**RESPONSE:** The proposed 20 foot wide private road will be constructed to comply with requirements for apparatus weighing at least 75,000 pounds per the 2012 IFC Section D102.

5. Apparatus access roads shall have a minimum unobstructed width of 20 feet
The Interior Drive has a total unobstructed width of 20 feet, measured from curb face to curb face. Specifically, there is 18 feet of asphalt, and 2 gutter pans, each measuring 1-foot in width.

6. The minimum inside turning radius for access roads shall be 28 feet.

**RESPONSE:** The proposed turning radius at the north and south intersections of the Interior Drive and 28th Avenue Court have been revised to 28', as measured from the face of curb. The minimum proposed turning radius within the Interior Drive is 30', as measured from the face of curb.

7. Dead-end roads or fire lanes in excess of 150 feet in length shall be provided with an approved means of turning the apparatus around.

**RESPONSE:** The proposed site layout considers a private street loop accessed from 28th Ave Ct. This loop has been designed to comply with fire apparatus access. There are no proposed dead-end roadways in excess of 150-feet in length.

8. To prevent the obstruction of fire roads/lanes, fire hydrants and fire equipment, provide approved red painted curbs or 6 inch striping with white 3 inch minimum size letters stating "NO PARKING FIRE LANE" at 50 foot intervals. Contact the EPFR Prevention office for a site walk prior to painting.

**RESPONSE:** Architectural site plan has been revised to indicate the requirement for signage to help prevent obstruction of the fire roads/lanes. Civil Sheet C-5.0 has been revised accordingly.

9. The maximum spacing between fire hydrants shall not exceed 300 feet for Commercial and Multi-family and provide 5 inch Storz caps on all fire hydrants. Fire hydrant location shall be approved by the Fire Marshal and the City Engineer.

**RESPONSE:** Three new fire hydrants are proposed to comply with the 300-feet max spacing between hydrants. Note 7 on Civil Sheet C-4.1 has been updated with the following additional verbiage: "Provide 5-inch Storz caps on all fire hydrants. Fire hydrant locations shall be approved by Fire Marshal and City Engineer prior to construction."

10. Provide the required fire flow for the building which is XXXX gpm at 20 psi residual pressure for 2 hours. (IFC Appendix Table B105.1)

**RESPONSE:** Per IFC Section B105 minimum fire flow for one and two family dwellings having a fire flow calculation area that does not exceed 3,600 sf shall be 1,000 gpm for 1-hour. All proposed buildings shall be designed under 2012 IRC as semi-attached individual dwelling units with fire separation walls. Fire flow for semi-attached buildings have been calculated with a reduction for fully sprinklered buildings per IFC Section B105.
PLANNING REVIEW

11. The project site is located within the Uptown Special Planning District and must conform to the Uptown Design Standards. Per MMC 17.43.020, when there are conflicts between the design guidelines and the underlying zoning code, the design guidelines shall apply. Please consult the Uptown Design Guidelines while designing the site.

   a. Please submit architectural plans for the proposed buildings. The site plan submitted is not sufficient to review the project for full compliance with all of the building and site criteria found in the Uptown Design Guidelines.

      RESPONSE: Building plans have been provided with this revised submittal for Major Site Plan Approval.

   b. For the commercial building, the setbacks do not conform to the Uptown Design Guidelines.

      i. Parcels fronting Milton Way shall be set back 10’ from the right-of-way to allow for sidewalks.

      RESPONSE: The proposed commercial office building has been revised on the site plan and is set back 10 feet from the street right-of-way.

      ii. Buildings shall be located directly abutting the sidewalk except where set back to highlight building entrances, plazas or to provide wider sidewalks. A minimum setback of four feet shall be allowed to highlight entrances or to provide wider sidewalks. A maximum setback of up to ten feet shall be allowed to provide seating in a landscaped public area.

      RESPONSE: The proposed commercial office building has been located 10-feet from the Milton Way ROW with sidewalk abutting the building. Fixed seating is proposed along the landscaped building frontage.

   c. For the residential buildings, the setbacks do not conform to the Uptown Design Guidelines.

      i. A maximum 10 foot setback, a minimum 6 foot setback, with an average setback of 8 feet per street frontage shall be required of primary structures to allow for shallow, residential front yards. The minimum setback for garages, carports, and paved parking shall be 10 feet.

      RESPONSE: The residential detached buildings have been aligned such that the garage is set back from the curb to allow safe exit/entry to the garage. However, a covered front porch is proposed extending to approximately 10-feet of the public sidewalk to facilitate modulation of the buildings from the street frontage, and create a front yard transition to the dwelling unit using elements such as steps and site furnishings.

   d. The site plan is lacking pedestrian connections specified in the design guidelines. Please include pedestrian walkways that provide linkages to adjacent development.
RESPONSE: A proposed continuous pedestrian walkway is shown from the Milton Way ROW to the adjacent development south of the subject property accessed by the shared 28th Ave Ct. Street. Additional public walkways extend from the property line adjacent to the existing commercial Uptown District properties to the East and continue throughout the proposed development, providing direct access to new proposed dwellings and to Milton Way.

12. The scale on the site plan contradicts itself and it is unclear what scale the drawing is at. The scale measures 1’ = 20’ but indicates that 1” = 40’. Please revise.

RESPONSE: The scale of the revised architectural site plan included with this submittal is 1” = 40’ when plotted to a sheet size of 22-inches by 34-inches. Civil scale has been revised such that the scale is 1”=40’ when plotted full size.

13. MMC 17.15(A), (B) and (C) contain the bulk and dimensional requirements (height, setback, lot coverage, etc.) for development of the site. Please review for conformance.
   a. It appears that the side yard planting strip within the B district is only 7.5’. Per 17.15(C) the required side yard planting strip is 8’. Internal parking lot landscaping is required for parking lots of 18 spaces or more. This will be reviewed at the time of site plan for the commercial building if more than 18 parking spaces are required.

RESPONSE: The site plan has been revised to provide a minimum 8-foot side yard planting strip adjacent to the B Zoned commercial property. Internal parking lot landscaping is not required for the proposed 15-parking double loaded spaces; however, if revisions are made to the design at the time of application for building permit, parking lot landscaping will be designed to comply with Milton Municipal Code, including landscaping for 18-spaces or more double loaded and 9-spaces single loaded.

14. A planting plan and irrigation plan are required to be prepared for any landscape subject to the provision of MMC 17.44.110. Please include a landscape plan including planting schedule and irrigation when submitting revisions.

RESPONSE: A landscape plan including planting schedule and irrigation is included with the revised submittal.

15. Parking requirements are found in MMC 17.48. Please be aware that depending on the use of the commercial building, the amount of required parking may be more/less than the 15 indicated on the site plan.

RESPONSE: Consideration for off-street parking requirements per MMC 17.48.040 will be provided for the final intended use of the proposed commercial building at the time of building permit.
16. Per MMC 16.30, criteria for approval of a binding site plan, “if the site abuts an existing residential use, the applicant must construct, and the city approve, a solid visual and noise barrier composed of fencing and landscaping prior to occupancy.” Solid visual and noise screening or landscaping will need to be shown on the site plan. The screening will need to be consistent with the Uptown Design Guidelines (see page 36).

RESPONSE: Locations adjacent to proposed residential uses shall be provided with new visual and noise barrier as noted on the revised site plan.

BUILDING REVIEW
17. The driveway locations in the NE corner and the SE corner could be problematic, creating a pinch-point.

RESPONSE: Driveway layout anticipates shared access for the corner units, facilitated by Home Owners Association agreements that will be put in place requiring no parking in the driveways, all vehicle parking and storage shall be in each unit’s garage. Shared access driveways load onto a private street without dead ends.

18. Distance between units to comply with the 2012 IRC Section R302, Table 302.1(1).

RESPONSE: Proposed semi-attached dwelling units are designed to comply with 2012 IRC, and have been spaced such that there is 6-feet of building separation from the primary building walls, resulting in a minimum fire resistance rating of 0-hours per IRC Table 302.1(1) except for the adjoining portions of the exterior walls which shall be rated 1-hour with a minimum 2-hour building separation wall between adjoining units.

19. All foundations to be surveyed.

RESPONSE: Foundation locations shall be staked by a surveyor prior to construction.

CIVIL REVIEW

GENERAL COMMENTS
20. The scale used in the plan set is 1:50. This scale makes the plans difficult to read and understand. A scale of 1:20 should be used in order to provide clear and understandable drawings.

RESPONSE: The civil sheets have been revised to 1”= 40’ and 1”=30” (when space allows) to provide for better clarity.
21. Plans do not address the additional impervious area created along 28th Avenue Ct. It appears that the new impervious area, including the parking areas, drains to 28th Avenue Ct without detention.

RESPONSE: The drainage system has been revised such that the parking lot no longer drains into 28th Avenue Court. Some of the sidewalks will be draining into the 28th Avenue Ct. storm system; however, 2781 square feet of 28th Avenue Ct is being collected at the intersections of the Interior Drive and 28th Avenue Ct. that was not tributary in the existing condition. This PGIS is being treated and then detained. The sidewalk area that is draining to 28th Avenue Ct. is non-pollution generating. Thus, the City is receiving benefit from this area “trade off”. Additionally, the approximately 0.008 acre of sidewalk that exceeds the “trade off” is accounted for as a bypass system within the detention vault calculations.

22. Information regarding the vault was limited. Structural drawings and calculations will need to be submitted prior to engineering approval.

RESPONSE: In an effort to minimize vault design to the maximum extent possible, we will be submitting the vault to our structural consultants upon approval of the Civil plans. At such time the vault is designed, we will submit structural drawings and calculations accordingly.

SHEET C-1.0

23. Per City of Milton Development Guidelines and Public Works Standards (Development Standards) section 3.01. The datum shall be NGVD for vertical control and NAD 83/91 for horizontal unless otherwise approved by the City.

RESPONSE: We have updated the Vertical Datum with an equation to convert NAVD to NGVD. Additionally, the Basis of Bearing specifically references NAD 83/91.

24. The legend does not include all line types and symbols. A few of the items missing are the property line, right-of-way line, roof drain line, and the valve in the square box.

RESPONSE: The legend has been updated such that all items contained within for both existing and proposed match the symbols contained within the plan set. We could not locate the “valve in the square box” mentioned in the comment above.

25. The legend line type for water does not match the in the plan set.

RESPONSE: The legend line type has been revised to match the line type contained within the plan set.

SHEET C-2.0
26. The distance and bearing text sizes are of different text heights. The plans need to provide consistent text heights.

RESPONSE: The plan has been revised such that the distance and bearing text sizes are of equal height.

27. The existing information for the storm system is difficult to read. The text should be a minimum 0.1 inch in height.

RESPONSE: The plans have been updated such that the minimum text height is 0.1 inch.

28. There are existing 2 catch basins; the first is along the eastern property line the second along the northern property line. Both catch basins state that there are pipes leaving the catch basin both north and south, however the drawing do not show the catch basins connecting to each other. Based on old system maps, it appears that these two catch basins are connected to each other. The plans will need to address this issue since the existing line is located under proposed structures.

RESPONSE: Sheet C-2.0 has been revised such that the line between the two catch basins is now shown. Keynote 25, which points to this line, has been added, which reads, “Demolish existing storm line. Approximate location shown based off old maps.” We are redirecting the flow from these catch basins to the offsite system east of the project. In the existing condition, the flow from these catch basins dumps into the low area on the south portion of the site, then is conveyed to the existing storm system at the southwest corner of the site at the end of 28th Avenue Court. The new point of connection for this flow is directed to the south in a 36” pipe, then turns west at the southeast corner of the site and flows to the aforementioned storm system at the southwest corner of the site. Thus, the original discharge point remains essentially unchanged. This is discussed in Section 4 of the Stormwater Site Plan.

SHEET C-2.1

29. The silt fence detail needs to be included in the TESC and Demolition Notes and Details sheet.

RESPONSE: The City of Milton Silt Fence Detail (Dwg. No ER-8) has been added to the TESC and Demolition Notes and Details sheet.

SHEET C-3.0

30. Per Development Standard 5.02.E, pipes shall not be located underneath sidewalks. In order to meet this standard, the design provides bump-outs for the storm catch basins. The catch basins should be relocated such that there is a straight curb line.

RESPONSE: The catch basins along the west side 28th Avenue Court are existing and are laterals to the west. We have relocated the catch basins such that they allow for a straight curb line, as requested.
31. The typical section for 28th Ave Ct does not provide the minimum thickness for the asphalt section. Minimum thickness shall be 3 inches or match the existing thickness, whichever is greater.

**RESPONSE:** The following note has been added to the 28th Avenue Court typical section: “HMA Cl. ½” PG 64-22. 3” min. or match existing pavement thickness (whichever is greater).

32. The typical section for 28th Ave Ct does not provide the minimum thickness for the subgrade beneath the sidewalk and curb. The minimum thickness shall be 4 inches of crushed surfacing top course.

**RESPONSE:** The following note has been added to the 28th Avenue Court typical section beneath the curb and sidewalk: 4” min. crushed surfacing top course (WSDOT 9.03.9(3)).

33. The note referring to the water design located in the profile at station 107+00 is written over text.

**RESPONSE:** The note referring to the water design located in the profile at Station 107+00 has been relocated such that it is no longer overlapping other text.

34. The enlarged parking lot plan shows the parking area draining across the sidewalk. Storm water should be collected prior to crossing the sidewalk. Also note that it appears that the parking lot areas are not being treated for water quality.

**RESPONSE:** The parking area referenced above has been reconfigured with regards to stall layout. We have also regraded the parking area such that storm water runoff no longer flows across the parking area, is collected and conveyed to both the flow control and water quality facility.

**SHEET C-3.1**

35. The catch basin information provided in the northeast corner of the project is unreadable. We believe that there is an existing line from that catch basin flowing to the south. See comment for Sheet C-2.0. In addition, no information is provided for the catch basin located along the eastern property line.

**RESPONSE:** We have revised the plans such that the catch basin information provided in the northeast corner of the project is readable.

36. The enlarged parking lot plan shows the parking area draining across the sidewalk. Storm water should be collected prior to crossing the sidewalk. Also note that it appears that the parking lot areas are not being treated for water quality.

**RESPONSE:** The parking area referenced above has been reconfigured with regards to stall layout. We have also regraded the parking area such that storm water runoff no longer flows across the parking area. Additionally, runoff from the parking area is conveyed through the stormwater conveyance system such that it is treated before final discharge from the site.
37. The plans do not show the location of the access hatch to the vault. Per the Washington State Department of Ecology Stormwater Management Manual for Western Washington (Storm Manual), vaults with greater than 1,250 square feet of floor area, a 5’ by 10’ removable panel should be provided over the inlet pipe. This note also pertains to Sheet C-3.6.

RESPONSE: A 5’x10’ removable panel has been added to the vault

38. Plans do not clarify what driveways will be used for the individual units.

RESPONSE: Sheet C-5.0, Note 3 states driveways shall be Type 1 without pedestrian curb per City of Milton Standard Drawing ST-32, Sheet C-5.1.

39. The catch basins #7 and #9 are eight feet deep. It is unclear as to purpose of the extra depth for these catch basins.

RESPONSE: We have revised the entire storm drain system to accommodate the revised vault layout. The storm is deep due to the fact that the constricting point is at the northern intersection of 28th Avenue Court and the Interior Drive. Unnecessary depths have been removed from the catch basins.

SHEET C-3.6

40. The elevations provided for the vault are inconsistent. There is a water surface elevation of 321.43 in the vault plan and 323.43 in the flow restrictor detail. The elevations for the elbows are 328.43 and 327.43 which is above the finished grade.

RESPONSE: We have regraded to accommodate for the new vault configuration. New spot elevations are provided,

41. The plan view for the stormwater vault show a portion of the vault located in the open space. Per Development Standards section 5.02.H, vaults are not allowed under recreation space. The plans need to verify that the open space is not recreation space.

RESPONSE: Recreation space is not required as part of this project.

42. The plan view for the stormwater vault show two property lines. It is unclear as which property line is correct.

RESPONSE: The erroneous property line has been removed.

43. The plan view for the stormwater vault shows the vault approximately 10 feet from the structure to the east. Per Development Standard section 5.02 K, vaults shall be accommodated with easements or setbacks large enough to provide for the complete replacement (without encroaching on any other structures or roads) of the structure should replacement be required in the future. Since the vault is over 17 feet deep along the eastern edge of the vault, verification from the design engineer is needed to insure that the standard can be met. Also note that per the Storm Manual, section 3.2.3, it is recommended that facilities be a minimum of 20 feet from any structure or property line.

RESPONSE: We have revised the vault such that the total interior depth is 9.07’ and moved the walls as far as possible from roads and structures. If complete replacement becomes a necessity, shoring and
cribbing will be necessary, but will allow for removal/replacement without encroachment. Per Storm Manual Section 3.2.3, the recommended minimum of 20 feet cannot be achieved due to the required footprint of the vault, which is a function of the depth of the existing conveyance system at the end of 28th Avenue Court, which is our point of connection.

44. Per the Storm Manual, section 3.2.3, ventilation pipes (minimum 12-inch diameter or equivalent) should be provided in all four corners of the vault to allow for artificial ventilation prior to entry of maintenance personnel into the vault. The plans do not show any ventilation pipes.

RESPONSE: 12-inch diameter ventilation pipes have been added at (or near where appropriate) the corners of the vault to allow for artificial ventilation prior to entry of maintenance personnel into the vault.

SHEET C-4.0
45. The water profile shows a highpoint in the system at station 105-00. An air-vac will be required at this location.

RESPONSE: We have re-designed the water profile such that a high point no longer exists at this location.

46. The plans do not show any thrust blocks for bends along the water main. Thrust blocks need to be placed against undisturbed soils. Based on the plan views, it appears that the thrust blocks will be placed against existing trench backfill. The plans need to verify that the thrust blocks can be constructed against undisturbed soil or restrained joints will be required. This comments also pertains to Sheet C-4.1

RESPONSE: Adding thrust blocking to the plan view severely impacts the clarity of the drawings. We have revised Note 6 on Sheets C-4.0 and C-4.1 to read “Thrust blocks not shown for clarity. Contractor to provide blocking at all bends, tees and crosses per City of Milton Standard Drawing WT-5, Sheet C-4.2. Thrust blocking shall be constructed against undisturbed soil. Restrained joints may be used in lieu of thrust blocking if thrust blocking against undisturbed soil is not viable.”

SHEET C-4.1
47. The water profile shows a highpoint in the system at stations 200-15 and 204-30. An air-vac will be required at these locations.

RESPONSE: We have revised the profile to remove the high point at station 200+15. An air-vac is shown at the high point at approximately 204+30.

48. Per Development Standard 6.02.P, the Developer shall furnish and install water-sampling stations in field per City direction. The plans do not show the location of the sampling station.

RESPONSE: Since the water-sampling station locations are to be installed in the field per City direction, we do not have a location as to where to put them on the plans. As such, we have added the City of Milton Standard Detail WT-32 on Sheet C-4.3. We have also added the following note on Sheets C-4.0 and C-4.1: “Contractor shall provide and install water sampling stations. Locations to be determined in the field by the City of Milton. See City of Milton Standard Detail WT-32, Sheet C-4.3

SHEET C-4.4
49. The sheet provides a wet tap connection. The plans do not a wet tap connection.
RESPONSE: We have removed the detail.

50. An Air and Vacuum Release Assembly detail and Water Sampling Station detail needs to be included on this sheet.

RESPONSE: The Air and Vacuum Release Assembly detail and Water Sampling Details have been added to the plan set.

STORMWATER REPORT

51. The offsite analysis does not mention any offsite flows or potential upstream flows. Nor does it address the storm pipe that enters the property along the northern property line, travels through the property to the eastern property line.

RESPONSE: The northeastern pipe has been rerouted to the existing storm system to the east and bypass the project. The flow runs south then west to where it originally entered the City of Milton conveyance system at the southeast corner of the project. This is addressed in the updated report.

52. The design plans allow the parking areas and sidewalks to drain to 28th Ave Ct and bypass the proposed storm water detention vault and storm filter system. Over-detention will be required in order to mitigate for the bypass flows and additional pollution generating surfaces will need to be collected for water quality treatment.

RESPONSE: The drainage system has been revised such that the parking lot no longer drains into 28th Avenue Court. Some of the sidewalks will be draining into the 28th Avenue Ct. storm system; however, 2781 square feet of 28th Avenue Ct is being collected at the intersections of the Interior Drive and 28th Avenue Ct. that was not tributary in the existing condition. This PGIS is being treated and then detained. The sidewalk area that is draining to 28th Avenue Ct. is non-pollution generating. Thus, the City is receiving benefit from this area “trade off”. Additionally, the approximately 0.008 acre of sidewalk that exceeds the “trade off” is accounted for as a bypass system within the detention vault calculations. The report will be updated accordingly.

53. Section 8 provides a table for the mitigated peak flows, however based on the pump information provided on Sheet C3.6 of the plan set, the pumps operate at 70 GPM (0.156 cfs). Based on the design, there are then only 2 flow rates, 0.156 cfs for when one pump is operating and 0.312 cfs for when both pumps are operating. Thus the design will not match existing flow rates or existing duration flows nor meet the intended reason for detention.

RESPONSE: Since a duplex pump station design can only, at best, be designed to match required peak rates and not required durations, we have removed the pump station from the design. The vault has been redesigned to allow for gravity flow. The plans and stormwater report have been updated accordingly.

54. Section 9 states that a pump rate is set at 10.159 cfs (71.4 gpm). Please note that 10.159 cfs converts to 4560 gpm. It is our belief that this value is a typo and the number should be 0.159 cfs.
RESPONSE: We have removed the pump station from the plans since it can only, at best, match peak rates. The stormwater report has been updated accordingly.

WWHM2012 PROJECT REPORT

55. Per the report provided, it states that the facility passed the duration flows. We re-entered the provided values and the report generated a fail. We have included our results to this letter

RESPONSE: The whole detention system has been redesigned to remove the proposed pump station. New calculations are provided which show the proposed detention system as “pass”.

TRAFFIC ANALYSIS

56. We concur with the projected volumes and anticipated level of service presented in the traffic analysis. However, the developer is planning to restripe the intersection of 28th and Milton Way, the queue length presented in the analysis shows a 75’ left turn lane as opposed to the existing 2-way left turn lane. The resulting channelization will most likely impact the adjacent intersection of Milton and Meridian. The developer will need to show that the restriping will not adversely impact that intersection.

RESPONSE: No restriping is proposed. The Synchro output appears to be misleading. The storage length is 75 feet; however; this is part of the two-way left turn lane. The analysis performed was based on an “as is” situation, and was found to have no issue.

If you have questions or need additional information, please call or e-mail me at michaeln@benjamin-ryan.com.

Respectfully,

Michael R. Norton, P.E.
Executive Civil Engineering Manager