Heather Shank
City Planner

CITY OF CONCORD

New Hampshire's Main Street™

Community Development Department

Planning Board

January 18, 2023
Project Summary – Major Site Plan & Conditional Use Permit

Project:	Hospitality & Charitable Gaming (2022- 59)
Property Owners:	Big Step, LLC
Address:	Break O' Day
Map/Block/Lot:	46Z/36 & 37

Comprehensive Development Plan (CDP)

The applicant is proposing a two-phase project on a currently undeveloped piece of land off Loudon Road in the Gateway Performance (GWP) District. Phase 1 includes a charity gaming hall and a restaurant with a microbrewery. Phase 2 expands the gaming hall and adds a hotel, conference center, and parking structure.

Staff recommends that the Planning Board open the public hearing for review of the Comprehensive Development Plan (CDP).

Please note, initial concerns regarding the CDP layout pertained to inadequate emergency access. The applicant has since provided a secondary means of egress for emergency purposes. The secondary egress is under review as part of the Major Site Plan application for Phase 1.

In response to the layout revisions pertaining to emergency access, Staff recommends approval of the CDP.

Project Description:

In addition to Comprehensive Development Plan approval, the applicant is seeking Major Site Plan approval for Phase 1, consisting of a new building of approximately 45,000 square feet and related site improvements. Conditional Use Permit (CUP) approval is also requested to allow impacts to wetland buffers.

Determination of Completeness:

If the Board votes to approve the CDP, staff recommends the Major Site Plan application be determined complete, and the public hearing set for the February 15, 2023 Planning Board meeting. As part of the motion, indicate that the project meets the criteria for a Development of Regional Impact (DRI), per RSA 36:55, due to the intensity of the development and anticipated traffic impact on the interstate system and adjacent municipalities.

Project Details:

Zoning:	Gateway Performance (GWP)
Existing Use:	Undeveloped

Proposed Use:	Charitable Gaming Hall
Parking spaces required:	366 spaces, including 8 ADA spaces
Parking spaces provided:	367 spaces, including 10 ADA spaces
Setbacks required:	25’ front, 25’ side, 25’ rear
Setbacks provided:	107.8’ front, 95.3’ side, 71.3’ rear
Maximum lot coverage:	85%
Lot coverage proposed:	34%

1. General Comments

1.1 The following comments pertain to the site development plan set titled “Proposed Hospitality Venue”, prepared by TF Moran, dated September 21, 2022, **revised December 21st, 2022.**

1.2 A Traffic Study is required as part of the submission. The City met with the Applicant, representatives from DOT, and staff from the Central New Hampshire Regional Planning Commission (CHRPC) to scope the study. The traffic study has been submitted by the applicant and is awaiting review by the City traffic consultant.

1.3 A third party review by Wright-Pierce, the City’s water system consultants, is needed to evaluate the impact on the City’s water system from the proposed use. Please provide fire protection requirements and domestic water demand estimates so that the consultant can generate a scope of work and cost estimate.

Staff notes that the applicant has provided a hydrant flow test to the City for review of water pressure. However, this does not provide adequate information to the City to determine the impact on other users and the City’s system.

1.4 Architectural Design Review (ADR) is required for the Major Site Plan application. The Applicant attended the September 6, 2022 ADR meeting for a conceptual design review. The Committee gave suggestions regarding architecture, recommended that the façade materials wrap around the building, and recommended that views from the highway focus on visibility of the sign and not the building.

The Applicant is scheduled to go before the ADR Committee again on January 31st, 2023 for the formal Major Site Plan submission.

1.5 See comments from the Engineering Division in a separate memo.

1.6 The plan is proposed to impact 26,692 sf of wetlands, which must be authorized by DES. The Applicant previously stated an interest in donating other land in the City for easement as mitigation for the wetland impacts. The Applicant has attended several Conservation Commission meetings to discuss the DES application and possible locations for easements. These discussions are ongoing.

2. Conditional Use Permit (CUP)

2.1 The Applicant requests a CUP in accordance with Article 28-4-3 of the Zoning Ordinance (ZO) to allow impacts within the wetland buffer. The plan proposes to permanently disturb 37,105 sf of wetland buffer for the building, parking, and access/loading lane. The applicant will go before the Conservation Commission to discuss the CUP and wetland buffer impacts.

2.2 The Applicant's narrative addresses the criteria for granting a CUP for wetland impacts with regard to Articles 28-4-3(d) and 28-9-4(b)(4) (ZO). The narrative is included as a supplemental document to this report. Staff finds the narratives complete and sufficient.

3. Waivers

3.1 The applicant requests waivers from the following Sections of the Site Plan Regulations (SPR):

- Section 16.03(11) Signs, to allow the Applicant to submit sign applications separately. Providing sign applications after approval of site plans is a common practice. **Staff supports this request.**
- Section 22.07(2) Stormwater Recharge, to allow 3 feet of separation between the bottom of the infiltration system and the groundwater instead of four (4) feet. The applicant notes that the 3-foot separation complies with the DES Alteration of Terrain regulations. **Staff is not opposed to this request** provided no concerns are raised after a complete review of the technical aspects of the site.
- Section 21.02, Sidewalks Required, to not provide sidewalks along the Break O' Day or Loudon Road frontages since connecting sidewalks do not exist in this location. **Staff does not support this waiver.**

  It is very likely that local residents will walk to this business. Safe pedestrian access should be provided for Phase 1. Staff also notes that the site is also within the Sidewalk Master Plan.

  The Applicant proposes a sidewalk along their entrance drive, terminating at the Break O' Day intersection. This sidewalk should be extended down Break O' Day Drive and along the Loudon Road frontage where it is adjacent to the site within the City right of way.

  Alternatively, the Applicant could pay into the sidewalk reserve fund to support future sidewalk connectivity if the sidewalks are not provided.

4. Grading and Landscaping

4.1 The Grading Plan refers to an "Offsite Improvement Plan" though this does not appear to be included in the plan set. Offsite improvements should be provided as part of the current plan set, including for grading, utility, and design purposes.

4.2 Per Section 28-7-10(a) (ZO), parking lots with less than 375 required spaces shall provide a Parking Lot Perimeter Buffer of five (5) feet in width. Staff notes that the Phase 2 build out requires over 750 parking spaces. The ordinance requires a perimeter buffer of fifteen (15) feet in width where more than 750 spaces are required. Staff recommends that the 15-foot buffer be provided to ensure that adequate space is provided for the full build out condition,

4.3 Section 28-7-10(b) (ZO) indicates similar standards for Parking Lot Interior Landscaping requirements for parking lots of less than 375 or greater than 750 spaces. As noted above, staff recommends the standard for greater than 750 spaces be met to account for the full build out of Phase 2. This would increase the interior landscape requirement from 5% to 7%.

4.4 Section 28-7-10(d) (ZO) requires that all required landscape area consist of trees, shrubs, and groundcover plantings. The proposed plan indicates only trees and grass in the majority of required landscape areas. In order to provide adequate screening of parking areas, staff recommends that a mix of deciduous and evergreen shrubs be provided around the perimeter of the parking lot. Staff

notes that additional ornamental grasses would also satisfy this requirement, though they should be supplemented with deciduous and evergreen shrubs.

4.5 Please note, Section 28-7-10(b) (ZO) requires that no parking space be more than 120 feet from an Interior Landscaped Area consisting of trees, shrubs, and ground cover. In addition, Section 18.14 of the Site Plan regulations (SPR) requires that medians and traffic separators greater than four (4) feet in width be appropriately landscaped. In accordance with both Sections, additional landscaping should be provided along the northern perimeter of the parking lot, and in the median at the northwest corner of the parking lot.

Staff recognizes that these are areas proposed for future expansion. We suggest that inexpensive materials such as ornamental grasses and large shrubs (in place of trees) be planted, or that the applicant post a bond for required landscaping to be utilized in the event Phase 2 does not get constructed within a certain time frame.

4.6 Staff notes that no trees are provided along the rear access drive or along the connecting drive to the parking lot. Plans should be revised to provide trees in this location. In addition, screening for the loading and trash area may be inadequate considering the high visibility of this location.

4.7 To soften the appearance of buildings and enhance the aesthetics of the site visible to the frontage, Staff suggest providing a landscape area between the sidewalk and the south side of the building, vegetated with groundcovers or ornamental grasses. Staff again recognizes that this is an area for future expansion, yet landscaping should be provided due to the high visibility of the location.

4.8 The Plant Schedule indicates Spirea japonica. As this is recognized as an invasive species, Staff recommends replacing this with Spirea alba, Spirea tomentosa, or another native species with similar habit.

4.9 In their response letter, the Applicant states that fewer trees were previously provided due to the assumption that existing trees to remain would satisfy the Perimeter Landscaping requirement. In accordance with Section 18.17 (SPR), existing trees within 20 feet of a parking area may be counted towards the requirement. Trees to remain that are used to meet requirements shall be identified on all plans by species and caliper, with tree protection shown on the demolition and grading plans. Tree protection details shall be provided and noted in the construction sequence. A note shall be added to plans indicating that any trees that do not survive shall be replaced to meet landscaping requirements.

5. Technical Review Comments

5.1 Revise the parking calculations on Sheet C-06 to indicate how many ADA spaces are required. Note 5 on the Comprehensive Development Plan (Sheet C-04) appears to have been revised for Phase 1. However, this information should also be included in Note 5 on the Site Plan (Sheet C-06).

5.2 There is no legend for existing conditions features. Please revise accordingly.

5.3 The plan indicates three different hatchings used for wetlands and buffers, including one for wetlands and two different hatchings for buffers. None of the symbols are included in the legend. Please revise accordingly and clarify why two different hatchings are used for the wetland buffer, or revise to make them consistent.

5.4 The wetland buffer labels on Sheet C-06 are incorrect. Please revise as needed.

5.5 Please note that electric utilities are required to be located underground. Where is electric being connected through the site? Please revise plans to indicate how electricity will be delivered.

Prepared by: HRS

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CITY OF CONCORD

New Hampshire's Main Street™

Community Development Department

David Cedarholm, PE
City Engineer

MEMORANDUM

TO: Heather Shank, City Planner

FROM: José Lovell, PE, Associate Engineer

DATE: January 11, 2023

SUBJECT: Proposed Hospitality Venue - Phase I Major Site Plan – Engineering Review
7 Break O' Day Drive; Map 46Z Lot 36 & 37 Project 2022-59

The Engineering Services Division (Engineering) has received the following items for review:

- Drawings titled "Proposed Hospitality Venue" prepared by TFMoran, dated September 21, 2022 (last revised on December 21, 2022)
- Stormwater Management Plan prepared by TFMoran dated September 21, 2022 (last revised on December 21, 2022)
- Response to City Comments Letter prepared by TFMoran dated December 21, 2022

As a supplement to any comments offered by the Planning Division, Engineering offers the following design related comments. With subsequent submissions, the Applicant shall provide a response letter that acknowledges or addresses each of these comments and discusses any additional changes to the plans.

It is strongly recommended that the Applicant schedule a meeting to discuss these comments prior to beginning any revisions. All revisions shall be highlighted or clouded and accompanied by a response letter addressing all comments.

This review is for Phase I of the proposed Hospitality Venue. While a conceptual outline of Phase II was previously shown, details have not been provided and therefore have not been reviewed for conformance. No aspect of items shown in Phase II should be considered approved.

Additional review is being performed on the plans, stormwater report and TIAS by the City's 3rd party consultant. This review is not yet complete and additional comments will be forwarded when available.

Additional review is required with respect to the effects of this proposed development on the City's water and sewer infrastructure. This review is pending submission of a financial guarantee from the Applicant.

1. General Comments

a. Please add the following notes to the plan set, if not already incorporated:

ii. All utilities shall be installed underground in accordance with Section 25.02(1) of the Site Plan Regulations.

Applicant Response 12/21/22 – Included as Note #21 on Sheet C-06. Underground electrical service begins at the limits of the property

City Response 1/11/23 – All new utilities shall be constructed underground. There appears to be a new pole and overhead wires proposed near the southeastern corner of the property.

b. The Applicant has provided a Traffic Impact and Access Study. However, the meeting to discuss the scope of the report had not yet been held at the time of submittal. Therefore, the City has not reviewed the provided report and understands that a revised report will be provided by the Applicant in conformance with the traffic scoping meeting.

Applicant Response 12/21/22 – An updated traffic impact and access study reflective of the traffic scoping meeting has been submitted.

City Response 1/11/23 – Response is forthcoming.

e. The Applicant shall confirm that there is adequate water and sewer capacity to supply the project without adverse effects to other water and sewer users. Please note that, based on the projected demand, 3rd party engineering review of the City's infrastructure may be required at the Applicant's expense.

Applicant Response 12/21/22 – A hydrant flow test was conducted on October 13, 2022 showing adequate pressure is available. The project team fire protection engineer will review the need for further evaluation with the City. Sewer flow calculations have been provided as part of this submittal for City review.

City Response 1/11/23 – This response does not address the effects of the development's usage on the other water and sewer users. Please provide calculations and a narrative to show that other users will not be

negatively affected. This comment can be addressed by the pending 3rd party review.

f. Profiles of all municipal utilities shall be provided per Section 16.02 of the Site Plan Regulations.

Applicant Response 12/21/22 – Sewer profiles have been provided as is typically requested. Water services are shown on the sewer profiles where crossings occur, the proposed driveway profile, as well as in the plan view of the proposed driveway and utility.

City Response 1/11/23 – Entirety of water service not shown – please provide a separate profile along the centerline of the water. Drainage profiles not provided.

g. Emergency egress during a large event appears problematic under the proposed access configuration. Confirm that appropriate emergency egress from this facility has been provided. Provide a description of any alternative egress routes that have been investigated.

Applicant Response 12/21/22 – The updated plans address the City Fire Department's request for a second means of access to Loudon Road. As shown on the plans a gated gravel emergency access road has been added to connect the center aisle of the proposed parking lot to Loudon Road via the Break O' Day Drive ROW. The access road is 20' wide, with 3' level shoulders, and provides 2% platforms at the top and bottom with a 7.4% slope in between. In addition to this, we have also revised the maneuvering area behind the proposed building to eliminate the "Y" turnaround and in its place connected the two paved site driveways with an additional 20' wide gated fire department access road so that there is now complete circulation around the building during all phases of the project.

City Response 1/11/23 – The secondary access drive shall be maintained at all times to be in a travelable condition and able to support fire department apparatus. Please add a note to the Site Plan to this effect. Note that, while not specifically required, it is highly recommended that the secondary access drive be paved to promote safe passage either during or directly following large storm events that may damage the drive surface.

Both ends of the access drive shall flare out with a minimum 2-ft radius on each side.

Also, it is highly recommended though the Life Safety Evaluation requirement outlined in Chapter 12 Section 12.1.7.3 of the NFPA 101 Life Safety Code 2018 edition is not triggered in Phase I of the project, the process should be started to minimize any major setbacks, delays, and costs. Additional phases may trigger this for the entire project.

Emergency Action Plans for all phases of the project are required and outlined in NFPA 101 2018 edition Chapter 12 Section 12.7.13. This is required to be completed before the end of each phases.

Crowd manager training for employees as outlined in NFPA 101 2018 edition Chapter 12 Section 12.7.6 is required and will need to be fulfilled prior to the completion of each phases.

h. A fire protection engineer shall provide, on their letterhead, a document certifying that the new proposed water service line is adequately sized and designed for the proposed site conditions, including addressing whether domestic water is also tapped off of the same line. All fire prevention requirements shall be satisfactorily demonstrated.

Applicant Response 12/21/22 – It would be our expectation that such a letter from the project Fire Protection Engineer can be provided upon final design approval.

City Response 1/11/23 – No exception taken. Plan approval will be contingent upon the fire protection letter.

i. The Site Layout Plan references Offsite Improvement Plans for Break O' Day Drive. Copies of these plans should be submitted for review.

Applicant Response 12/21/22 – Reconstruction of Break O' Day Drive has been shown graphically on the site plans with a note stating it shall be built to the City Non-Residential Mixed Use Local Street construction standards. The Fire department recently confirmed the access considerations as outlined on the current plan set are appropriate subject to final engineering review, so it is our expectation that final design of this offsite improvement can move forward imminently.

City Response 1/11/23 – A 5-ft-wide (min.) sidewalk should be provided along Break O' Day Drive extending west onto Loudon Road along the entirety of the lot frontage. The City standard detail mentioned in the applicant's response was not found. Proposed grading should be provided on Break O' Day Drive. Other details should be considered such as raising/lowering of castings to meet proposed grade, resetting of curbing, etc. and Applicant should coordinate with Engineering.

Drawings

4. Site Layout Plan (Sheet C-07)

b. Areas dedicated to snow storage in the winter should be indicated on the Site Plan.

Applicant Response 12/21/22 – Snow storage areas have been added to the revised plans.

City Response 1/11/23 – Snow storage areas proposed on the uphill (northwest) side of the parking area would appear to impede the suggested flow pattern of the hillside runoff. Snow storage is also shown on top of CB#13. Please revise.

6. Grading & Drainage Plan (Sheet C-08)

b. A detail of the proposed diversion swale was not provided. Please include a swale detail conforming to local requirements and NHDES Stormwater Manual recommendations.

Applicant Response 12/21/22 – A grass swale detail has been added to Sheet D-01.

City Response 1/11/23 – Detail not found.

c. Some areas of parking are noted to have slopes of approximately 6%. Slopes of parking spaces shall not exceed five percent (5%) in any direction. Please revise as necessary.

Applicant Response 12/21/22 – We are not aware of a city limitation of a 5% maximum grade within parking areas. Although not necessarily the basis for the design we note the areas of parking that exceed 5% are within areas that will be regraded to accommodate future phases.

City Response 1/11/23 – Per 18.22 of the Site Plan regulations, slopes of parking spaces shall not exceed 5% in any direction.

f. It appears that Infiltration Basin #1 only has a single grate catch basin and 12" pipe to provide for emergency outflow. It is recommended that a secondary emergency outlet or increased capacity be considered to help avoid potential overflow into Break O' Day Drive and the adjacent Loudon Road. A secondary

outlet could potentially be directed toward the wetland and 18" CMP culvert on the north side of the main driveway, but should confirmed by the Applicant.

Applicant Response 12/21/22 – A proposed outlet structure with vertical orifice and horizontal overflow grate is now proposed. Due to the elevation of the wetland, the access drive and the infiltration basin, a secondary connection cannot be accommodated.

City Response 1/11/23 – Outlet control structure not found. Plan shows CB #14 with only a horizontal grate on top. Pipe downstream of CB#14 does not show size, material (RCP required) or slope. Please clarify. Please also clarify where the stormwater flows when leaving CB 19702 through the existing 12" RCP towards the Chappell Tractor building.

Infiltration basins require emergency overflows per NHDES Stormwater Manual Vol. 2. With about an inch of freeboard (peak=357.91, overflow=358.0) for the 100-yr storm and no clear destination for the stormwater flowing towards Chappell Tractor, the stormwater management here appears to need some clarification / revision.

Test pit information shows that ESHWT for TP-#1 is at 350.3. The bottom of the infiltration basin is 351, which is less than 1 ft above ESHWT. The bottom of the sediment forebay is below the ESHWT at 348.0.

The sediment forebay appears to be considered a recharge BMP in the calculations. This does not appear appropriate according to the NHDES Stormwater Manual Vol. 2.

g. Provide note stating all stormwater improvements built will be maintained by the property owner in perpetuity in accordance with:
    i. local, state, federal regulations
    ii. NHDES Stormwater Manual recommendations
    iii. stormwater Operation & Maintenance plan
    iv. any manufacturer specifications.

Applicant Response 12/21/22 – Grading Note #32 has been added to Sheet C-02 reflecting the above notes.

City Response 1/11/23 – Please provide note on Grading & Drainage Plan.

h. Invert out in CB #10 is higher than invert in.

i. CB#12 shows a trench drain coming in that is not apparent. Please clarify and label trench drain in plan. Roof drains should be labeled as well.

7. Driveway Plan & Profile (Sheet C-09)

a. Additional information should be provided on the proposed driveway profiles to ensure the Concord driveway standards will be met. Provide plan, profile, and sight distance profiles for each proposed lot driveway in conformance with City standards and regulations.

Applicant Response 12/21/22 – Sight Distance Profiles have been added as Sheet C-10 as requested. Driveway plan and profiles consistent with City requirements are located on sheet C-09.

City Response 1/11/23 – Proposed driveway profiles do not show grade and do not appear realistic (surface seems unnecessarily erratic). Please provide profiles showing that the vertical geometry meets City standards.

8. Utility Plan (Sheet C-10)

a. Confirm that hydrant locations satisfy Concord Fire Department requirements.

Applicant Response 12/21/22 – Review by the Fire Department is ongoing. Hydrant locations will be revised as necessary pending final Fire Department review.

City Response 1/11/23 – Please provide confirmation when available.

9. Sewer Plan & Profile (Sheet C-11)

b. Existing SMH4578 is being proposed to be cored for the new 8" sewer, however the plan view shows an existing 12" stub that is not shown in profile. Please describe how the connection of the proposed 8" sewer will be made to the existing SMH where there is currently an existing 12" sewer stub shown. Existing 12" stub should be shown in profile view. It is recommended that the Applicant consider removing the existing stub and boot connection and providing a reducing boot connection at the manhole.

Applicant Response 12/21/22 – The existing 12" stub will be removed, and a reducing boot connection shall be installed to connect the proposed 8" stub at the

existing core. The Site Preparation (Sheet C-05) and Sewer Plan & Profile (Sheet C-11) have been revised for clarity.

<u>City Response 1/11/23</u> – The design on Sheet C-12 appears to need to be updated to reflect this statement. Please clarify.

12. Construction Details (Sheets D-01 – D-08)

a. When there is a standard detail available from the City of Concord Construction Standards and Details it shall be used and the non-City detail removed. Where a non-City detail is preferred by the Applicant, and is more robust than the City detail, a request to substitute the detail shall be made to the Engineering Services Division in writing by the Applicant.

<u>Applicant Response 12/21/22</u> – It is our understanding that the Details accurately reflect the City Standards. Should there be any which need to be revised, the plans can be updated accordingly.

<u>City Response 1/11/23</u> – There are two Redi-Rock Retaining Wall Details on D-03 and D-04. Please clarify.

Where will Pavement Section detail be used? This does not meet the Major Commercial Drive standard as the wearing course may be too thin for the aggregate size. Detail D-8 should be added to the plans. Vertical granite curb should be added at the entrances within the ROW as required.

No detail was found for the secondary egress drive.

Detail for Break O' Day Drive roadway reconstruction not found.

Outlet control structure detail should be revised as necessary based on redesign and should show orifice sizes, elevations, etc.

Please review project details and add/revise as necessary to clarify construction requirements.

<u>Reports</u>

13. Stormwater Management Report

a. The provided StreamStats report highlights an input value being "outside the suggested range" and that the estimates have "unknown errors." This methodology of estimating the amount of runoff discharging into the site from the existing 24" and 30" NHDOT culverts does not appear to be appropriate. It would

seem that using a USGS map to estimate the watershed size and amount of impervious area of the watershed may be more appropriate. Please clarify.

Applicant Response 12/21/22 – Offsite runoff was evaluated using the USGS StreamStats as well as LiDAR derived terrain in conjunction with NHDOT Record Plans to determine the off-site contributing areas. In that the StreamStats generated a larger off-site flow (due in part to a larger contributing upstream watershed area), a single-node HydroCAD analysis was developed to calibrate the inflow hydrograph to meet the StreamStats Peak Flow hydrographs.

Impervious coverage ranging from 1 to 20% of the total watershed area were evaluated in conjunction with varying Tc values to meet the StreamStats Peak Flows for the 2-yr, 10-yr, 25-yr, 50-yr and 100-year storm events. Calibration results below:

	2-yr	10-yr	25-yr	50-yr	100-yr
StreamStats Peak Flow (cfs)	1.71	4.52	6.58	8.39	10.6
HydroCAD Off-Site Calibration Model (cfs)	1.70	4.20	6.60	9.00	12.00
Delta (%)	-0.6%	-7.1%	0.3%	7.3%	13.2%

In that the 25-year and greater storms produced peak flows greater than the StreamStats output, the modeled subcatchment was determined to be conservative.

City Response 1/11/23 – It appears as though the StreamStats data is being discarded for the new data described here, but this is not entirely clear. Please contact Engineering to discuss.

c. The Limit of Drainage Sub-catchment line between sub-catchment ES-2 and sub-catchment ES-3 was not reused in the post-development drainage plan, although this area was not developed. It would appear as though this sub-catchment boundary should have been kept and that sub-catchment PS-2 should be shown as multiple sub-catchments. Please review the Limits of Sub-catchments for this development and revise as necessary.

Applicant Response 12/21/22 – Subsequent revisions to the post-development drainage design necessitated a revision to this subcatchment line as runoff from a portion of the hillside is being redirected.

City Response 1/11/23 – The subcatchment lines still do not appear to be consistent in areas that are not being developed, which may be acceptable – please contact Engineering to discuss. Also, newly proposed

locations of snow storage appear to impede runoff from the existing hillside and will likely divert the runoff from the suggested paths. The Tc path for PS-23 is not shown flowing downhill. Grading at the toe of slope suggests that hillside runoff would not flow onto the parking lot and would instead head towards CB#13. Subcatchment PS-3 appears to have two Tc paths shown. A re-examination of subcatchment boundaries and Tc calculations should be performed.

e. Watersheds to the north and west of the property are only partially shown. It would appear that more runoff will flow to the proposed stormwater management system than is currently being indicated. Please clarify.

Applicant Response 12/21/22 – The limits of offsite run-on have been expanded, noting that the additional offsite run-on is minimal and did not result in substantial changes to the stormwater management design.

City Response 1/11/23 – It would appear that the limits of off-site run-on should also be expanded to the north near the existing culverts.

g. In the Tc calculation for sub-catchment PS-19 it was noted that an assumption of 100 feet of sheet flow was assumed on an 11% slope. A similar assumption of sheet flow on steep slopes was made for the Tc calculation in sub-catchment PS-2. It would seem that sheet flow on such steep slopes would be unlikely. The Applicant should perform a thorough review of the stormwater calculations and revise as necessary.

Applicant Response 12/21/22 – Although at a slope of 11% this Tc is through an existing unaltered wooded area that exhibits no signed of rilling that might suggest shallow concentrated flow. We believe the value as stated is appropriate and consistent with industry standards and values allowable by NHDES Alteration of Terrain Bureau. For PS-2, we believe this is a similar occurrence, and that the Tc calculation is appropriate as originally presented. We have thoroughly reviewed the stormwater calculations and made edits where deemed appropriate.

City Response 1/11/23 – See response to comment 13.c above.

h. The 12-inch drain leaving CB-2 appears to be surcharging in the 10-yr storm. Please revise design as necessary to provide adequate drainage capacity for the stormwater management system.

Applicant Response 12/21/22 – The surcharge during the 10-year storm has been resolved.

City Response 1/11/23 – Confirm that the 12-in pipe leaving CB-#14 is sufficient to convey the flow entering the structure during the 100-yr storm to show that it is not an unintended restriction.

i. The surface area at the 358 contour in the calculations shows 15,255 sf, however an area takeoff on the grading and drainage plan indicates that the surface area is closer to 14,000 sf. Please clarify.

j. A significant portion of the site access drives flows out onto Break O' Day drive and should be captured and managed on-site to the maximum extent practicable.

State/Federal Permits

The project will require the following state and/or federal permit(s) associated with the site design:

- EPA Construction General Permit – Notice of Intent
- NHDES Alteration of Terrain Permit
- NHDES Dredge and Fill Permit
- NHDES Sewer Connection Permit
- NHDOT Driveway Permit

Per Site Plan Regulation 13.02 (8) and/or Subdivision Regulation 13.02 (10), a copy of the State and Federal permit(s) shall be submitted to the City prior to final approval.

Post-Approval/Pre-Construction Requirements

The following items are required prior to the start of construction:

1. Per Site Plan Regulation 27.11, establish a financial guarantee (letter of credit, or cash deposit) for site stabilization.
2. The monumentation for the proposed lot lines shall be set prior to recording the plan.
3. The following permit(s) will need to be obtained from the Engineering Services Division:
    a. Driveway Permit
    b. Excavation Permit
    c. Utility Connection Permit(s)
    d. Other permits deemed necessary by the City Engineer

Please note that all Engineering permits must now be applied for online using the City's new Citizen Self Service (CSS) Permit Portal, which can be found here: http://concordnh.gov/1915/Engineering-Permits-Fees

4. Per Site Plan Regulation 36.24 The Applicant is responsible for paying engineering inspection fees to ensure work is consistent with City standards and the Approved Plans. An advanced deposit must be established for all anticipated site construction inspection fees.
    a. Prior to scheduling the pre-construction meeting, the Applicant should apply for the required Engineering permits listed above and provide an estimate of the anticipated number of inspections for review by Engineering. The Applicant shall provide a project schedule when applying for the required permits.
    b. The permit fees shall be paid prior to scheduling the pre-construction meeting.
5. Provide PE-stamped backup information on the sizing of the proposed grease trap for consistency with the City of Concord specifications, which require a minimum hydraulic detention time of 36 hours and a minimum tank size of 1,000 gallons. Information provided shall include size of the proposed grease trap and anticipated daily average flow (gpd) to the grease trap. The dimensions and layout of the proposed trap shall also be consistent with the relevant City of Concord detail.
6. Water and Sewer Investment Fees will need to be paid (as part of the Utility Connection Permit process).
7. The contractor shall submit a Temporary Traffic Control Plan (TTCP) for all work in and adjacent to the City ROW that will require lane closures or occur adjacent to the edge of road. TTCP must be submitted to Engineering for review and approval a minimum of two weeks prior to the pre-construction meeting.
8. Establish a performance surety (bond, letter of credit, or cash deposit) for work within the Right-of-Way and proposed public improvements or common private improvements per Subdivision Regulation 10.09, prior to subdivision plat sign (13.02 (7), and 30.01. An engineer's cost estimate, prepared by the Applicant and based on the current NHDOT weighted average unit prices, shall be submitted a minimum of two weeks prior to scheduling the pre-construction meeting. The surety shall be established at least one week prior to the pre-construction meeting.
9. Provide copy of NOI submitted to EPA (and accompanying SWPPP) and acknowledgement of receipt by EPA prior to scheduling the pre-construction meeting.
10. When above requirements have been met, request to set up a pre-construction meeting with the Engineering Services Division to discuss construction requirements, site inspections, associated fees, schedules, etc. Engineering permits will not be authorized

(unless explicitly stated otherwise) until final revised plans have been submitted and approved to the satisfaction of Planning and Engineering.

Construction Requirements

1. Shop drawings/submittals shall be submitted to Engineering for the proposed water, sewer, and drainage improvements, as applicable.
2. Per Site Plan Regulation 12.09, prior to issuance of a Certificate of Occupancy (CO), the contractor shall submit digital as-built drawings that are to the satisfaction of Engineering and conforming to the Engineering as-built checklist. A copy of the as-built drawing requirements is available on the Engineering Services Division section of the City of Concord website.
3. For projects with proposed monumentation, the monumentation for the proposed lot lines shall be set prior to recording the plan.
4. Retaining wall design drawings (stamped Structural Engineer licensed in the State of NH) shall be submitted to Engineering for proposed retaining walls that are greater than 4 feet high. In addition, walls greater than 48 inches require a Building Permit from the Code Administration Office.