CITY OF DOVER

# PLANNING TECHNICAL REVIEW COMMITTEE –AGENDA

Meeting Type: Regular Meeting
Meeting Location: Council Chambers, City Hall, 288 Central Ave, Dover NH 03820
Meeting Date: **Thursday, November 17, 2022**
Meeting Time: **10:30 AM**

1. 10:30 AM – 11:15 AM: Site Review for VC Dover Investment, LLC Assessor's Map H, Lot 4-3, zoned Commercial, located at 30 Grapevine Drive. (Proposal is for a 4-story mixed-use building, consisting of forty-nine (49) apartment units, 4,030 sf fitness area, and a 1,320 sf coffee shop). A Conditional Use Permit for RCM Overlay District will also appear before the Planning Board. (P22-72/SITE-2022-0017)

2. 11:15 AM – 12:00 PM: Site Review for Charter Foods North, LLC, (Owner: VC Dover Investments, LLC) Assessor's Map H, Lot 4-3, zoned Commercial, located at 30 Grapevine Drive. (Proposal is for a 2,500 sf Fast-food Restaurant). A Conditional Use Permit for RCM Overlay District will also appear before the Planning Board. (P22-74/SITE-2022-0018)

# City of Dover, New Hampshire
# CONDITIONAL USE PERMIT APPLICATION

[Revision Date: October 19, 2020]

| Office Use Only | Project #: | | Date Received: | |
|---|---|---|---|---|
| | Amount Paid: | | Time Received: | |

**APPLICANT AND OWNER INFORMATION**

Name of Applicant: VC Dover Investment, LLC Telephone # 603-472-4488

Address of Applicant: 48 Constitution Dr Bedford, NH 30110

E-Mail Address: alexvailasllc@aol.com

Name of Property Owner (if different from applicant): _____ Telephone #_____

Address of Property Owner: _____

**PROPERTY INFORMATION**

Assessor's Map # H Lot(s) # 4-3

Address of Property: 30 Grapevine Dr

Zoning District(s) Commercial Overlay District(s) Mixed-use RCM

Existing Use of Property: Mixed-use

**CONDITIONAL USE PERMIT INFORMATION**

**Type of Conditional Use Permit (Check All That Apply):**

| | | |
|---|---|---|
| ☐ Conservation District | ☒ RCM Use Overlay District | ☐ Gateway District |
| ☐ Groundwater Protection | ☐ Off-Street Parking and Loading | ☐ Alternative Treatment Center |
| ☐ Wetland Protection District | ☐ Central Business District | ☐ Heritage Residential District |

Describe Proposed Use or Activity That Requires Conditional Use Permit and Describe Any Impacts:

Constructing a mixed-use building in the RCM District.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: NHDES AoT (Amendment Pending), NHDES Sewer (not applied for at this time), EPA GCP (not applied for at this time)

Name of Professional That Prepared Plans: Robert Duval, P.E

Address 48 Constitution Dr Bedford, NH 30110 Telephone #: 603-472-4488

Professional License #: 7105 E-mail address: rduval@tfmoran.com

**SIGNATURES**

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner: See Site Plan Application Date: _____

Signature of Applicant (if different from owner): _____ Date: _____

Signature of Agent: _____ Date: _____

**AUTHORIZATION TO ENTER SUBJECT PROPERTY**

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: See Site Plan Application Date: _____

# CITY OF DOVER CONDITIONAL USE
# LIST OF ABUTTERS

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. Staff will provide the abutter information, while the applicant must provide accurate contact information for the owner, applicant and professional agents representing the project.

**Owner:**

| TAX MAP | LOT # | PROPERTY OWNER | MAILING ADDRESS |
|---|---|---|---|
| H | 4-3 | VC Dover Investments, LLC | 48 Constitution Dr, Bedford NH 03110 |

**Applicant (if different from owner):**

| APPLICANT NAME | APPLICANT COMPANY | MAILING ADDRESS |
|---|---|---|
| | VC Dover Investments, LLC | 48 Constitution Dr, Bedford NH 03110 |

**Surveyor and/or Engineer/Professional Agent:**

| NAME | COMPANY | MAILING ADDRESS |
|---|---|---|
| James Robinson P.E | TF Moran, Inc. | 48 Constitution Dr, Bedford NH |
| | | 03110 |
| | | |

**Conservation Easement Holder:**

| TAX MAP | LOT # | NAME OF EASEMENT HOLDER | MAILING ADDRESS |
|---|---|---|---|
| | | | |

# PLANNING BOARD FEE SCHEDULE/INVOICE

*(Revised July 1, 2021)*

Below are the fees associated with plan review and are subject to a nonrefundable application fee to cover administrative expenses. Please complete the information below and provide payment with your application submittal. **Plan Review Fees shall be paid prior to technical review committee (TRC) being scheduled.** For plans not requiring TRC review, **fees are due 21 days prior** to the Planning Board meeting. Staff will coordinate abutter/notice fees, which will be invoiced and must be paid 28 hours before the Planning Board meeting for an application to be heard. Fees shall be paid by cash or check made payable to "City of Dover".

**A. Plan Review Fees**

**1. Application fee for the following (SELECT ALL THAT APPLY):**

- ☐ SUBDIVISION Application fee $200.00 + $150.00 x # _____ new lots created = $_____
- ☐ LOT LINE ADJUSTMENT Application fee $200.00 + $100.00 X # ___ of lots involved = $_____
- ☐ TRANSFER OF DEVELOPMENT RIGHTS Application fee $200.00 = $_____
- ☐ SITE REVIEW – RESIDENTIAL Application fee $200.00+ $100.00 x # __ per dwelling unit =$_____
- ☐ SITE REVIEW – NON-RESIDENTIAL Application fee $200.00 + (not to exceed $10,000)
  - New construction $.15 sq. ft. x # _____ sq. ft.= $_____
  - Additions (new floor space) $.10 per sq. ft. x # _____sq. ft.= $_____
- ☐ MOTEL/HOTEL $35.00 x # ___ per lodging unit= $_____
- ☐ CHANGE OF USE Application fee $200.00 + (not to exceed $5,000)
  - Existing floor spaces $.10 per sq. ft. x # _____ sq. ft. = $_____
- ☐ CONDITIONAL USE PERMIT Application fee $200.00 x # _____ per Application = $_____
- ☐ GRAVEL PIT/ EXCAVATIONS
  - Application fee $50.00= $_____
  - Permit fee $75.00= $_____
- ☐ EXTENSIONS/AMENDMENTS/WAIVERS FOR AN APPROVED PLAN Application fee $200.00 = $_____
- ☐ REQUEST FOR REZONING Application fee $200.00 = $_____
- ☐ DRIVEWAY WAIVER Application fee $200.00 = $_____

**2. TOTAL IMPERVIOUS PAVED AREA** (for new development, roadways or additions to existing parking lots, (not to exceed $10,000)) Application fee of $200.00 is N/A if it is part of a Site Review or Subdivision Plan. $200.00 + $.07 per sq. ft. x # _____ sq. ft. = $_____

**SUBTOTAL PLAN REVIEW FEE (A) = $_____**

**AND**

**B. Abutter Notification/Mailing Labels -** this office will create and print the abutter list and provide labels in triplicate for each abutter. The applicant/owner will review the list for accuracy and provide to us the engineer, architect, licensed land surveyor (LLS), licensed landscape architect (LLA) and/or soil scientist whose professional seal appears on the plan with names and addresses for notices.

- ☐ Applicant & Owner, engineer, architect, LLS, LLA and/or soil scientist
  - Certified letters fee # _____ of x $8.00= $_____
- ☐ Certified letters fee: # of abutters _____ X $8.00= $_____
- ☐ First Class Mail fee (for individual owner of units within a condominium or other collective form of ownership): # of abutters _____ X $1.00= $_____
- ☐ Creating/Printing Abutter Labels in triplicate per sheet _____ x $10.00= $_____

**C. Foster's newspaper public notice fee $100.00 x # _____ applications =** $_____

**SUBTOTAL NOTICE FEE (B & C ) = $_____**

**TOTAL INVOICE AMOUNT (A, B & C) = $_____**

**PLAN REVIEW FEE COLLECTED/PAID = $ _____**

**BALANCE DUE = $ _____**

**The balance due must be paid 28 hours prior to the Planning Board Meeting, to be heard.**

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

# MEMORANDUM

**Date:** **October 14, 2022**

**To:** **City of Dover**

**From:** **Robert Duval, PE**
**Jen Porter, PE**

**Project:** **Mixed Use Development – Dover Fields & Arbor Woods**
**NH108 and Mast Road, Dover NH**

**Subject:** **2022 Update to Traffic Study**

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The purpose of this memorandum is to update the previously-approved traffic study prepared for VC Dover Investments, to replace the currently vacant retail and bank pads with a commercial/residential building and a fast-food restaurant, respectively.

The original approved traffic study is dated October 30, 2006. There have been several prior revisions to the development traffic study since the original approval:

- In 2010 the residential portion of the project along Cielo Drive was updated to include 144 units of detached and attached elderly housing and associated congregate care buildings (the Arbor Woods project).
- In 2012 the medical office pad was replaced with 58 units of senior independent housing (the Housing Initiatives project).
- There is still one remaining pad site at the corner of Grapevine Drive and NH108 that is undeveloped.

The following table outlines the original and currently proposed uses for this project.

**Table 1 – 2006 Original vs 2022 Existing and Proposed Uses**

| **2006 Original Proposal** | | **2022 Update** | |
|---|---|---|---|
| Supermarket | *37,443 sf* | *Supermarket** | *37,443 sf* |
| Elderly Housing | 66 units | *Arbor Woods** | 144 units |
| Shopping Center (Retail, Bank, & Medical Office) | 82,815 sf | *Housing Initiatives** | *60 units* |
| | | **Apartments** | **49 units** |
| | | **Gym** | **4,030 sf** |
| | | **Fast-food** | **2,500 sf** |
| Coffee Shop | 2,232 sf | **Coffee Shop** | **1,320 sf** |

**These projects already exist on site. Projects in bold type are currently proposed uses.*

### *Approved Peak Hour Trip Generation*

The original 2006 traffic study calculated trip generation for the anticipated full buildout of both the commercial and residential portions of the project:

**Table 2 – 2006 Approved Trip Generation**

| Peak Hour Volumes – Original Site Buildout | | | |
|---|---|---|---|
| Scenario | In | Out | Total |
| **Weekday AM Peak Hour** | 264 | 211 | 475 |
| **Weekday PM Peak Hour** | 531 | 537 | 1,068 |
| **Saturday Midday Peak Hour** | 673 | 647 | 1,320 |

### *Proposed (2022) Peak Hour Trip Generation*

The new 2022 proposal includes replacing the retail pad with a mixed-use building that includes 49 apartment units above, a 4 ksf gym, and a 1,320 sf coffee shop. The proposed coffee shop is only 1,320 sf, which is a reduction of 40% based on square foot area and there is no drive-thru at the new building. There is also a fast-food restaurant proposed in the former bank location. The coffee shop in the original approval was a 2,232 sf coffee shop with drive-thru and the trip generation was calculated based on empirical data, not ITE for AM & PM.

**Table 3a – 2022 AM Peak Hour Trip Generation by Use**

| 2006 ORIGINAL | | | | 2022 UPDATE | | | |
|---|---|---|---|---|---|---|---|
| | IN | OUT | TOTAL | | IN | OUT | TOTAL |
| Supermarket | 74 | 48 | 122 | Supermarket | 74 | 48 | 122 |
| Elderly Housing | 7 | 12 | 19 | Arbor Woods | 18 | 28 | 46 |
| Shopping Center | 85 | 55 | 140 | Housing Initiatives | 3 | 1 | 4 |
| | | | | **Apartments** | **4** | **14** | **18** |
| | | | | **Gym** | **3** | **2** | **5** |
| | | | | **Fast-food** | **57** | **55** | **112** |
| Coffee Shop | 98 | 96 | 194 | **Coffee Shop** | **63** | **60** | **123** |
| Total 2006 AM Trips | | | 475 | **Total 2022 AM Trips** | | | **430** |

**Table 3b – 2022 PM Peak Hour Trip Generation by Use**

| 2006 ORIGINAL | | | | 2022 UPDATE | | | |
|---|---|---|---|---|---|---|---|
| | | | | | IN | OUT | TOTAL |
| Supermarket | 212 | 204 | 416 | Supermarket | 212 | 204 | 416 |
| Elderly Housing | 22 | 14 | 36 | Arbor Woods | 25 | 18 | 43 |
| Shopping Center | 265 | 287 | 552 | Housing Initiatives | 5 | 5 | 10 |
| | | | | **Apartments** | **12** | **7** | **19** |
| | | | | **Gym** | **8** | **6** | **14** |
| | | | | **Fast-food** | **43** | **40** | **83** |
| Coffee Shop | 32 | 32 | 64 | **Coffee Shop** | **22** | **21** | **43** |
| Total 2006 PM Trips | | | 1,068 | **Total 2022 PM Trips** | | | **628** |

**Table 3c – 2022 SAT Peak Hour Trip Generation by Use**

| 2006 ORIGINAL | | | | 2022 UPDATE | | | |
|---|---|---|---|---|---|---|---|
| | | | | | IN | OUT | TOTAL |
| Supermarket | 232 | 223 | 455 | Supermarket | 232 | 223 | 455 |
| Elderly Housing | 9 | 9 | 18 | Arbor Woods | 24 | 23 | 47 |
| Shopping Center | 398 | 368 | 766 | Housing Initiatives | 13 | 11 | 24 |
| | | | | **Apartments** | **10** | **10** | **20** |
| | | | | **Gym** | **6** | **7** | **13** |
| | | | | **Fast-food** | **70** | **68** | **138** |
| Coffee Shop | 34 | 47 | 81 | **Coffee Shop** | **37** | **38** | **75** |
| Total 2006 SAT Trips | | | 1,320 | **Total 2022 SAT Trips** | | | **772** |

***Internal Capture:***
Because the proposed development includes multiple uses, a significant portion of site traffic will visit more than one use on the site; (e.g. bank and supermarket, residential and coffee, etc.). This interaction, known as “Internal Trip Capture” reduces external traffic volumes on adjacent roadways to a value less than a simple summation of individual uses. This reduction rate is calculated by evaluating use pairs for the development, according to ITE and NCHRP 684 guidelines.

In the 2006 original study, the retail uses were calculated under the ITE LUC 820 ”Shopping Center” land use code, which already accounts for interaction between individual uses. For the 2022 proposal, some of the new uses do not fit well into the Shopping Center category, so trip interaction was calculated separately using procedures set forth by NCHRP 684.

These calculations show onsite interaction will reduce external trips by 11% in the AM peak hour, 28% in the PM peak hour, and 34% in the SAT midday peak hour. Net trip generation incorporating these results are tabulated below:

**Table 4 – 2022 Adjusted Trip Generation**

| **Unadjusted Trip Generation for 2022 Update** | | | |
|---|---|---|---|
| Scenario | In | Out | Total |
| Weekday AM | 222 | 208 | 430 |
| Weekday PM | 327 | 301 | 628 |
| Saturday Midday | 392 | 380 | 772 |
| **Internal Capture Reduction** | | | |
| Scenario | In | Out | Total |
| Weekday AM | (23) | (23) | (46) |
| Weekday PM | (90) | (84) | (174) |
| Saturday Midday | (133) | (129) | (262) |
| **Adjusted Trip Generation for 2022 Update** | | | |
| Scenario | In | Out | Total |
| Weekday AM | 199 | 185 | 384 |
| Weekday PM | 237 | 217 | 454 |
| Saturday Midday | 259 | 251 | 510 |

**Table 5 – Net Change in Trip Generation - 2006 vs 2022**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | (42) | (3) | (45) |
| Weekday PM | (204) | (236) | (440) |
| Saturday Midday | (281) | (267) | (548) |

***Conclusion***

Based on the trip generation calculations summarized above, the new proposal shows a significant decrease in traffic volumes associated than was anticipated in the original approved Dover Fields traffic study, allowing substantial capacity for the remaining vacant building pad.

Therefore, all study area roadways and intersections will have additional reserve capacity at full project buildout.

Respectfully Submitted,
**TFMORAN, INC.**

Robert E. Duval, PE
Chief Engineer

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**APPENDIX A** 2022 Updated Trip Generation & Internal Capture

**APPENDIX B** 2006 Original Study – Trip Generation

**APPENDIX C** 2010 Memo – Trip Generation

**APPENDIX D** 2012 Memo – Trip Generation

# APPENDIX A

**2022 UPDATED PROPOSED TRIP GENERATION - Full Build: Dover Fields & Arbor Woods**

*Based on ITE Trip Generation 11th Edition*

*Dover Fields - Hannaford Supermarket is constructed*
*Arbor Woods - Detached and Attached Housing is constructed*

**LUC 936 - Coffee/Donut Shop without Drive-through Window: 1,320 sf**

| Time Period | Rate/Equn | | Rate/ Eq | Trip Ends | Directional Split | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Rate | Used | | In | Out | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | 1.32 | 93.08 | Rate | 123 | 51% | 49% | 63 | 60 | 11% | 7 | 7 | 56 | 53 | 109 |
| Weekday PM Peak Hour Adjacent Street | 1.32 | 32.29 | Rate | 43 | 50% | 50% | 22 | 21 | 28% | 6 | 6 | 16 | 15 | 31 |
| Weekend SAT Peak Hour of Generator | 1.32 | 56.50 | Rate | 75 | 49% | 51% | 37 | 38 | 34% | 13 | 13 | 24 | 25 | 49 |

**LUC 850 - Hannaford Supermarket [Based on 2006 Study]**

| Time Period | *2006 Study* | | | Trip Ends | | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *IN* | *OUT* | | | | | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | *74* | *48* | | 122 | | | 74 | 48 | 11% | 8 | 5 | 66 | 43 | 109 |
| Weekday PM Peak Hour Adjacent Street | *212* | *204* | | 416 | | | 212 | 204 | 28% | 59 | 57 | 153 | 147 | 300 |
| Weekend SAT Peak Hour of Generator | *232* | *223* | | 455 | | | 232 | 223 | 34% | 79 | 76 | 153 | 147 | 300 |

**LUC 251/252/253 - Arbor Woods Elderly Housing**

| Time Period | 2010 Memo | | | Trip Ends | | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *IN* | *OUT* | | | | | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | *18* | *28* | | 46 | | | 18 | 28 | 11% | 2 | 3 | 16 | 25 | 41 |
| Weekday PM Peak Hour Adjacent Street | *25* | *18* | | 43 | | | 25 | 18 | 28% | 7 | 5 | 18 | 13 | 31 |
| Weekend SAT Peak Hour of Generator | *24* | *23* | | 47 | | | 24 | 23 | 34% | 8 | 8 | 16 | 15 | 31 |

**LIC 253 - Housing Initiativess**

| Time Period | 2012 Memo | | | Trip Ends | | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *IN* | *OUT* | | | | | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | *3* | *1* | | 4 | | | 3 | 1 | 11% | 0 | 0 | 3 | 1 | 4 |
| Weekday PM Peak Hour Adjacent Street | *5* | *5* | | 10 | | | 5 | 5 | 28% | 1 | 1 | 4 | 4 | 8 |
| Weekend SAT Peak Hour of Generator | *13* | *11* | | 24 | | | 13 | 11 | 34% | 4 | 4 | 9 | 7 | 16 |

**ITE LUC 221 - Multi-family (Mid-Rise): 49 units**

| Time Period | Rate/Equn | | Rate/ Eq | Trip Ends | Directional Split | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Rate | Used | | In | Out | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | 49 | 0.37 | RATE | 18 | 23% | 77% | 4 | 14 | 11% | 0 | 2 | 4 | 12 | 16 |
| Weekday PM Peak Hour Adjacent Street | 49 | T=0.39(X)+0.34 | EQ | 19 | 61% | 39% | 12 | 7 | 28% | 3 | 2 | 9 | 5 | 14 |
| Weekend SAT Peak Hour of Generator | 49 | Ln(T)=1.00Ln(X)-0.91 | EQ | 20 | 51% | 49% | 10 | 10 | 34% | 3 | 3 | 7 | 7 | 14 |

**ITE LUC 492 - Health/Fitness Club: 4,030 sf**

| Time Period | Rate/Equn | | Rate/ Eq | Trip Ends | Directional Split | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Rate | Used | | In | Out | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | 4.1 | 1.31 | Rate | 5 | 51% | 49% | 3 | 2 | 11% | 0 | 0 | 3 | 2 | 5 |
| Weekday PM Peak Hour Adjacent Street | 4.1 | 3.45 | Rate | 14 | 57% | 43% | 8 | 6 | 28% | 2 | 2 | 6 | 4 | 10 |
| Weekend SAT Peak Hour of Generator | 4.1 | 3.19 | Rate | 13 | 49% | 51% | 6 | 7 | 34% | 2 | 2 | 4 | 5 | 9 |

**ITE LUC 934 - Fast-food with Drive-through Window: 2,500 sf**

| Time Period | Rate/Equn | | Rate/ Eq | Trip Ends | Directional Split | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Rate | Used | | In | Out | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | 2.5 | 44.61 | Rate | 112 | 51% | 49% | 57 | 55 | 11% | 6 | 6 | 51 | 49 | 100 |
| Weekday PM Peak Hour Adjacent Street | 2.5 | 33.03 | Rate | 83 | 52% | 48% | 43 | 40 | 28% | 12 | 11 | 31 | 29 | 60 |
| Weekend SAT Peak Hour of Generator | 2.5 | 55.25 | Rate | 138 | 51% | 49% | 70 | 68 | 34% | 24 | 23 | 46 | 45 | 91 |

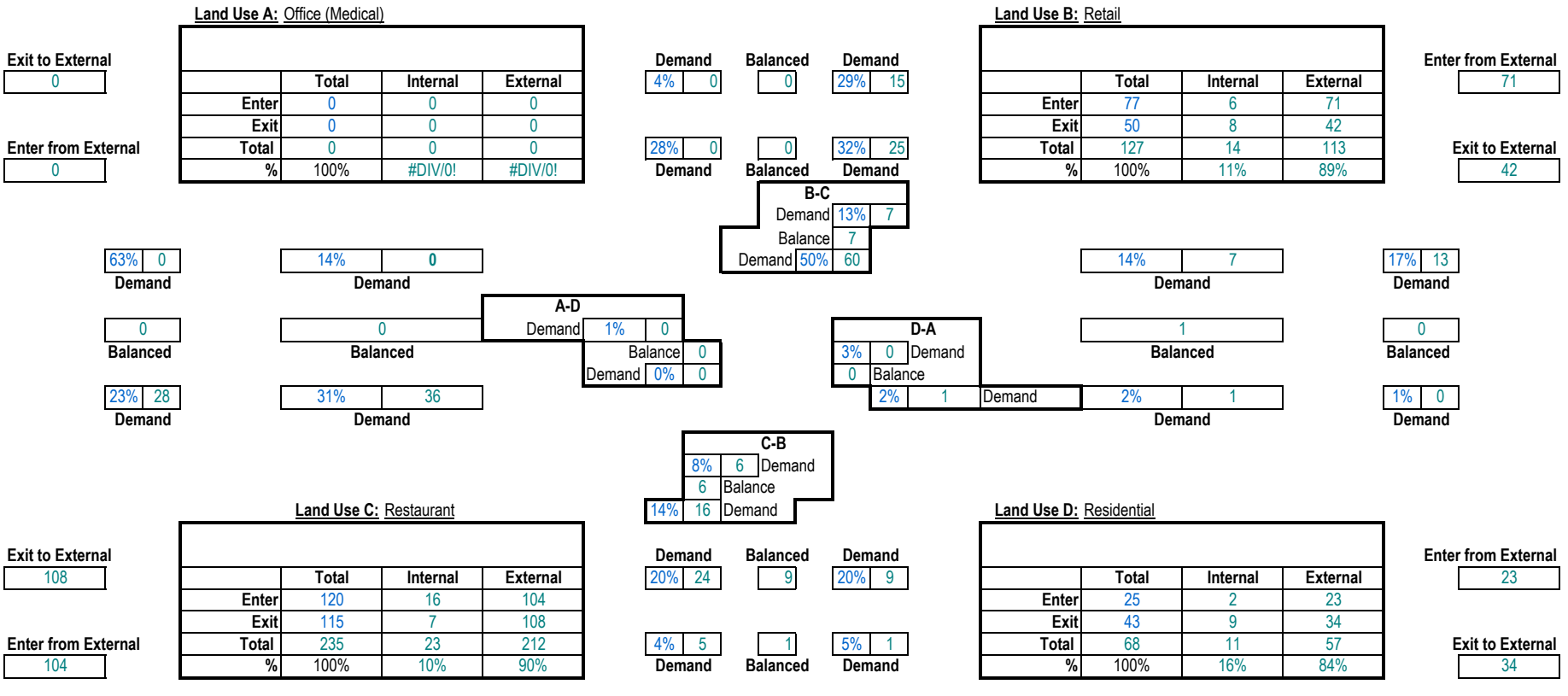
**TOTAL**

| Time Period | | | Trip Ends | | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | | | 430 | | | 222 | 208 | 11% | 23 | 23 | 199 | 185 | 384 |
| Weekday PM Peak Hour Adjacent Street | | | 628 | | | 327 | 301 | 28% | 90 | 84 | 237 | 217 | 454 |
| Weekend SAT Peak Hour of Generator | | | 772 | | | 392 | 380 | 34% | 133 | 129 | 259 | 251 | 510 |

**Multi-Use Development: 2022 UPDATED - Dover Fields & Arbor Woods**
**Internal Capture Summary per NCHRP Report 684**

**Analyst:** TFMoran Inc.
**Date:** 10/11/2022
**Project:** 46001.31
**Time Period:** AM Peak Hour
**Phase:** Full Build

| | | LUC | Enter | Exit |
|---|---|---|---|---|
| **Land Use A:** | Office (Medical) | - | 0 | 0 |
| **Land Use B:** | Retail | 850/495 | 77 | 50 |
| **Land Use C:** | Restaurant | 933/934 | 120 | 115 |
| **Land Use D:** | Residential | 221/251/252/253 | 25 | 43 |
| | | | 222 | 208 Total |



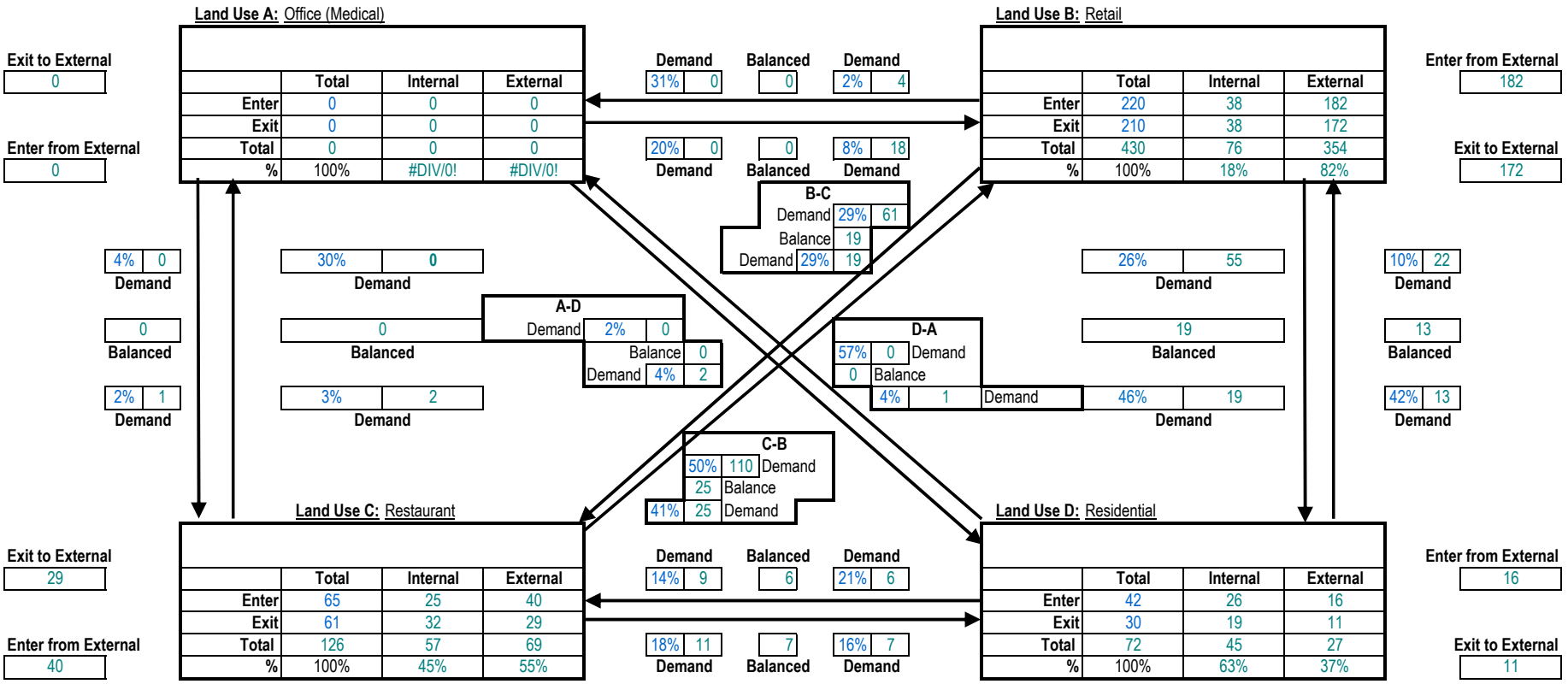

| Net External Trips for Multi-Use Development | | | | | |
|---|---|---|---|---|---|
| | Land Use A | Land Use B | Land Use C | Land Use D | Total |
| Enter | 0 | 71 | 104 | 23 | 198 |
| Exit | 0 | 42 | 108 | 34 | 184 |
| Total | 0 | 113 | 212 | 57 | 382 |
| Single-Use Trip Gen. Est. | 0 | 127 | 235 | 68 | 430 |

**Internal Capture**
**11%**

**Multi-Use Development: 2022 UPDATED - Dover Fields & Arbor Woods**
**Internal Capture Summary per NCHRP Report 684**

**Analyst:** TFMoran Inc.
**Date:** 10/11/2022
**Project:** 46001.31
**Time Period:** PM Peak Hour
**Phase:** Full Build

| | | LUC | Enter | Exit |
|---|---|---|---|---|
| **Land Use A:** | Office (Medical) | - | 0 | 0 |
| **Land Use B:** | Retail | 850/495 | 220 | 210 |
| **Land Use C:** | Restaurant | 933/934 | 65 | 61 |
| **Land Use D:** | Residential | 221/251/252/253 | 42 | 30 |
| | | | 327 | 301 Total |



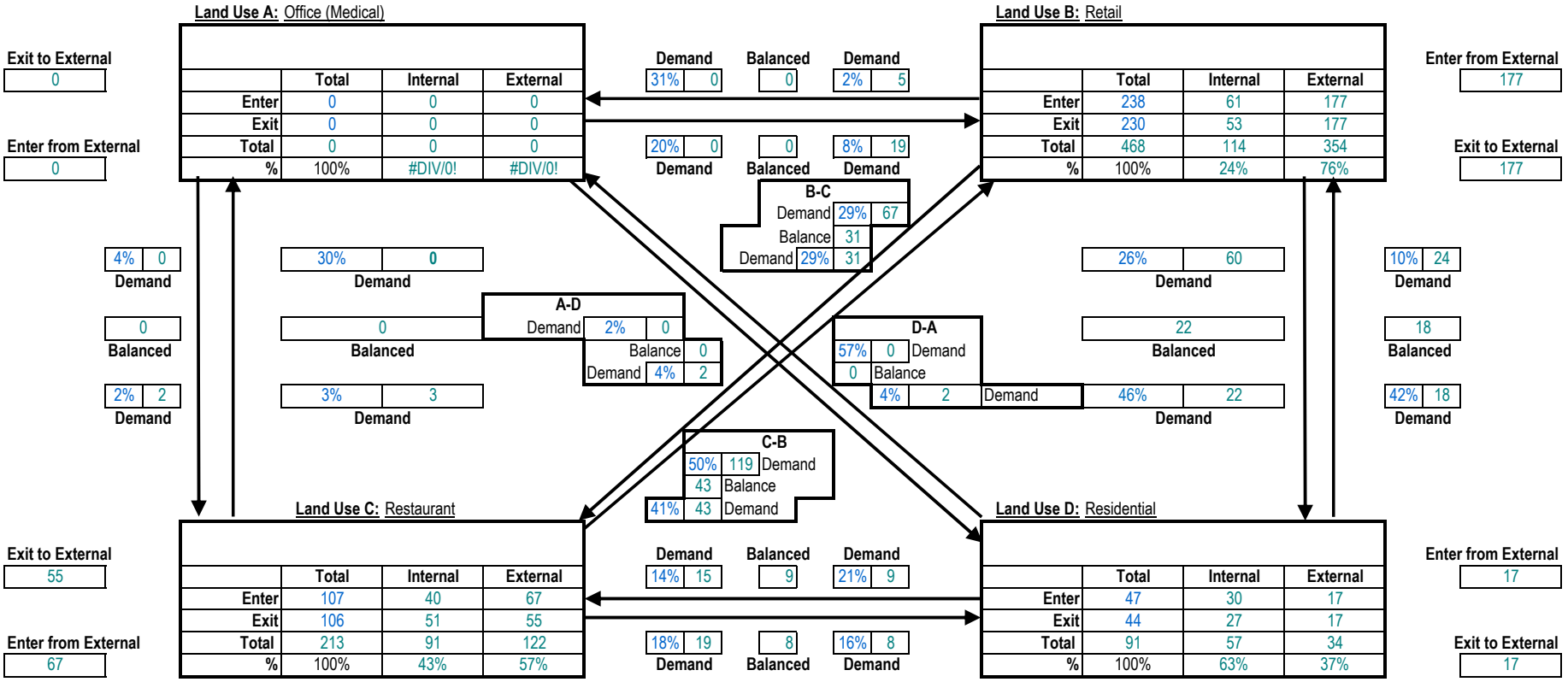

| Net External Trips for Multi-Use Development | | | | | |
|---|---|---|---|---|---|
| | Land Use A | Land Use B | Land Use C | Land Use D | Total |
| Enter | 0 | 182 | 40 | 16 | 238 |
| Exit | 0 | 172 | 29 | 11 | 212 |
| Total | 0 | 354 | 69 | 27 | 450 |
| Single-Use Trip Gen. Est. | 0 | 430 | 126 | 72 | 628 |

**Internal Capture**
**28%**

**Multi-Use Development: 2022 UPDATED - Dover Fields & Arbor Woods**
**Internal Capture Summary per NCHRP Report 684**

**Analyst:** TFMoran Inc.
**Date:** 10/11/2022
**Project:** 46001.31
**Time Period:** SAT Peak Hour (PM rates)
**Phase:** Full Build

| | LUC | Enter | Exit |
|---|---|---|---|
| **Land Use A:** Office (Medical) | - | 0 | 0 |
| **Land Use B:** Retail | 850/495 | 238 | 230 |
| **Land Use C:** Restaurant | 933/934 | 107 | 106 |
| **Land Use D:** Residential | 221/251/252/253 | 47 | 44 |
| | | 392 | 380 Total |



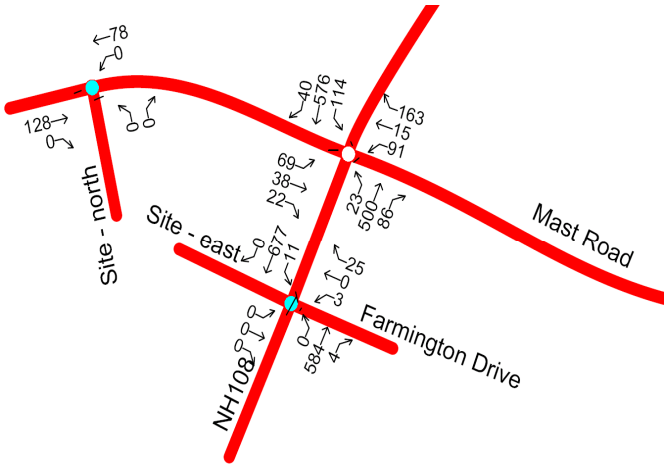

| Net External Trips for Multi-Use Development | | | | | |
|---|---|---|---|---|---|
| | Land Use A | Land Use B | Land Use C | Land Use D | Total |
| Enter | 0 | 177 | 67 | 17 | 261 |
| Exit | 0 | 177 | 55 | 17 | 249 |
| Total | 0 | 354 | 122 | 34 | 510 |
| Single-Use Trip Gen. Est. | 0 | 468 | 213 | 91 | 772 |

**Internal Capture** **34%**

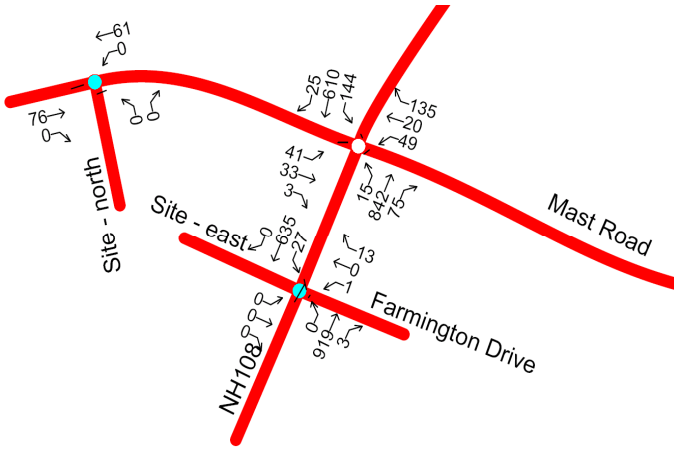
# APPENDIX B

**2017 No-Build Volumes**

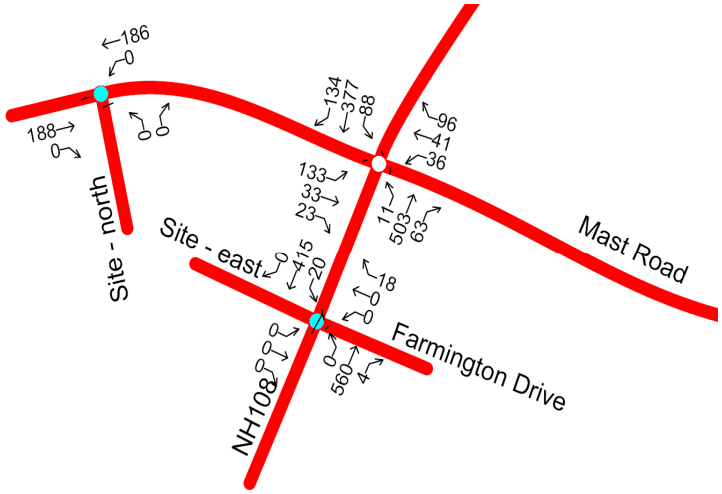
**AM Peak Hour**




**PM Peak Hour**




**Saturday Midday Peak Hour**




## 6. Trip Generation:

In order to determine the trip generation characteristics of the proposed development, the standard trip generation rates and equations published by the Institute of Transportation Engineers (ITE)[3] were employed. Please note that the trip generation for the AM and PM scenarios for the coffee shop was calculated based on empirical data presented in the traffic analysis for a Dunkin' Donuts restaurant on NH28 in Londonderry[4]. The data was collected at eight operating facilities in Massachusetts and New Hampshire.

[3] Institute of Transportation Engineers, *Trip Generation, 7th* Edition (Washington, D.C., 2003).

[4] *Traffic Impact and Access Study, Technical Memorandum, Proposed Dunkin' Donuts, Londonderry, New Hampshire.* Prepared for TFMoran Inc. by Highway & Traffic Signal Design, Inc., June 2002.

The trip generation calculations for the coffee shop are based on an AM peak hour volume of 1,118 vph on the adjacent roadways and a PM peak hour volume of 1,370 vph on the adjacent roadways. The empirical data was not used for Saturday's peak hour because the ITE data provided a higher (more conservative) result.

## Trip Generation Tables for Phase 1

***AM Peak Hour Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Coffee Shop (HTSD) | 2,232 SF | 98 | 96 |
| Supermarket (LUC 850) | 37,443 SF | 74 | 48 |

***PM Peak Hour Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Coffee Shop (HTSD) | 2,232 SF | 32 | 32 |
| Supermarket (LUC 850) | 37,443 SF | 212 | 204 |

***Saturday Midday Peak Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Coffee Shop (LUC 933) | 2,232 SF | 34 | 47 |
| Supermarket (LUC 850) | 37,443 SF | 232 | 223 |

## Trip Generation Tables for Phase 2

***AM Peak Hour Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Elderly Housing - Detached (LUC 251) | 66 Units | 7 | 12 |
| Shopping Center (LUC 820) | 82,815 SF | 85 | 55 |

***PM Peak Hour Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Elderly Housing - Detached (LUC 251) | 66 Units | 22 | 14 |
| Shopping Center (LUC 820) | 82,815 SF | 265 | 287 |

***Saturday Midday Peak Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Elderly Housing - Detached (LUC 251) | 66 Units | 9 | 9 |
| Shopping Center (LUC 820) | 82,815 SF | 398 | 368 |

# APPENDIX C

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
Bedford, NH 03110
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Fax (603) 472-9747
www.tfmoran.com

# M E M O R A N D U M

**Date:** August 26, 2010

**To:** Bruce Woodruff
Dover Planning Department
288 Central Avenue
Dover, NH 03820

**From:** Robert E. Duval, P.E.

**Re:** **Mixed Use Development/Residential Revisions**
**NH Route 108, Dover, NH**

**Subject:** **Update to Previous Traffic Study**

---

The purpose of this memorandum is to update the residential uses included in the previously approved traffic study prepared for VC Dover Investments dated October 30, 2006. The number of age-restricted single-family homes studied has been reduced, and two new residential uses have been added: attached senior adult housing units (duplexes and triplexes) and congregate care units. These revisions are outlined in further detail in the following sections.

This analysis includes calculations of the change in trip generation associated with the current residential proposal, and a review of the potential impacts of these vehicle trips on the previously completed traffic signal warrant analysis and on traffic operations at the NH108/Mast Road signalized intersection.

## Trip Generation

The approved traffic study calculated the following trip generation for the full buildout of both the commercial and residential portions of the project:

**Trip Generation for Original Full Site Buildout**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 264 | 211 | 475 |
| Weekday PM | 531 | 537 | 1,068 |
| Saturday Midday | 673 | 647 | 1,320 |

The following table summarizes the trip generation for the approved residential portion of the proposal:

**Trip Generation for Original Residential Phase**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 7 | 12 | 19 |
| Weekday PM | 22 | 14 | 36 |
| Saturday Midday | 9 | 9 | 18 |

In order to determine the trip generation characteristics of the proposed residential portion of the development, the standard trip generation rates and equations published by the Institute of Transportation Engineers (ITE)[1] were employed for each of the three proposed uses.

**Proposed Residential Units**

For the single family detached units, ITE Land Use Code 251, Senior Adult Housing - Detached, was utilized. The trip generation calculations are based on 47 units, and are as follows:

**Trip Generation for 47 Units of Senior Adult Housing - Detached**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 13 | 25 | 38 |
| Weekday PM | 16 | 10 | 26 |
| Saturday Midday | 5 | 6 | 11 |

For the single family duplex and triplex units, ITE Land Use Code 252, Senior Adult Housing - Attached, was utilized. The trip generation calculations are based on 27 occupied units, and are as follows:

**Trip Generation for 27 Units of Senior Adult Housing - Attached**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 2 | 2 | 4 |
| Weekday PM | 3 | 2 | 5 |
| Saturday Midday | 4 | 4 | 8 |

And finally for the congregate care units, ITE Land Use Code 253, Congregate Care Facility, was utilized. Since no data was reported under this land use code for the Saturday peak hour, we also reviewed the similar ITE Land Use Code 255, Continuing Care Retirement Community, which was used for the Saturday peak hour calculation. The trip generation calculations for the weekday AM and PM peak hours are based on 72 units, and the Saturday peak hour is based on 72 occupied units. The results of the calculations are as follows:

**Trip Generation for 72 Units of Congregate Care Facility**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 3 | 1 | 4 |
| Weekday PM | 6 | 6 | 12 |
| Saturday Midday | 15 | 13 | 28 |

[1] Institute of Transportation Engineers, *Trip Generation, 8th Edition* (Washington, D.C., 2008).

The total trip generation for the proposed residential phase of the project is calculated by adding each of the three uses:

**Total Proposed Trip Generation for Residential Phase**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 18 | 28 | 46 |
| Weekday PM | 25 | 18 | 43 |
| Saturday Midday | 24 | 23 | 47 |

As a final step, we subtracted the approved trip generation for the residential phase from the proposed trip generation to calculate the change in trip generation that is currently proposed. The following table summarizes these results:

**Change In Trip Generation**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | +11 | +16 | +27 |
| Weekday PM | +3 | +4 | +7 |
| Saturday Midday | +15 | +14 | +29 |

Based on the above table, the change in trips generated by the residential development would not be perceptible to the average bystander. The most significant change would be during the Saturday peak hour, with one additional trip entering or exiting every two minutes.

### Traffic Signal Warrants – Main Site Driveway

During the NHDOT driveway permit application process, a traffic signal warrant analysis was completed for the main site driveway on NH108. As was previously presented in the original traffic study completed for this development, the trips associated with the residential phase will generally use the Mast Road driveway, with the exception of trips to/from the south, calculated at 6% of the total.

Applying this distribution to the maximum change in trip generation from the above table (29 trips), we calculate a maximum of one trip exiting and one trip entering will be added at the NH108/Main Driveway intersection. This minimal effect does not change the original conclusion that a traffic signal is not warranted in this location.

### NH108/Mast Road Intersection

We reviewed the traffic model using the new trip generation figures. Since the highest number of trips added to any movement is 8 trips (a change of 1% or less overall), the model LOS and capacity differences are insignificant.

**Conclusions**

Based on our analysis of the minimal effects of the proposed changes in trip generation on the traffic models and signal warrants, we find that the proposal does not alter the conclusions of our original traffic analysis for the overall multi-use development and no additional traffic improvements are necessary or warranted.

Please let me know if you have any questions.

Respectfully submitted,

**TFMORAN INC.**

Robert E. Duval, P.E.
Chief Engineer

# APPENDIX D

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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# M E M O R A N D U M

**Date:** May 23, 2012

**To:** Bruce Woodruff
Dover Planning Department
288 Central Avenue
Dover, NH 03820

**From:** Robert E. Duval, P.E.

**Re:** **Mixed Use Development**
**Senior Housing**
**NH Route 108, Dover, NH**

**Subject:** **Update to Previous Traffic Study**

---

The purpose of this memorandum is to update the previously approved traffic study prepared for VC Dover Investments dated October 30, 2006 to replace the 15,600 sf medical office building with a 60-unit congregate care facility. This analysis includes calculations of the change in trip generation associated with the current proposal, which are significantly fewer than those generated by the approved medical office building. The calculations are summarized below.

## Trip Generation

The approved traffic study considered the medical office building under the calculation for the overall shopping center. However, for the purposes of evaluating the changes in trip generation associated with this proposal, we compare only the two individual buildings involved: the approved 15,600 sf medical office building and the proposed 60-unit congregate care facility.

In order to determine the trip generation characteristics of these uses, the standard trip generation rates and equations published by the Institute of Transportation Engineers (ITE)[1] were employed for each of the three proposed uses.

For the medical office building, ITE Land Use Code 720, Medical-Dental Office Building, was utilized. The trip generation calculations are based on 15,600 sf, and are as follows:

[1] Institute of Transportation Engineers, *Trip Generation, 8th Edition* (Washington, D.C., 2008).

**Trip Generation for 15,600 sf Medical-Dental Office Building**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 28 | 7 | 36 |
| Weekday PM | 15 | 39 | 54 |
| Saturday Midday | 32 | 24 | 57 |

For the congregate care facility, ITE Land Use Code 253, Congregate Care Facility, was utilized. Since no data was reported under this land use code for the Saturday peak hour, we also reviewed the similar ITE Land Use Code 255, Continuing Care Retirement Community, which was used for the Saturday peak hour calculation. The trip generation calculations are based on 60 units, and are as follows:

**Trip Generation for 60 Units of Congregate Care**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 3 | 1 | 4 |
| Weekday PM | 5 | 5 | 10 |
| Saturday Midday | 13 | 11 | 24 |

As a final step, we subtracted the approved trip generation for the residential phase from the proposed trip generation to calculate the change in trip generation that is currently proposed. The following table summarizes these results:

**Change In Trip Generation**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | -25 | -6 | -31 |
| Weekday PM | -10 | -34 | -44 |
| Saturday Midday | -19 | -13 | -32 |

## Conclusions

Based on our trip generation calculations, the change in trips generated by the proposal to construct the 60-unit congregate care facility in place of the approved 15,600 sf medical office building results in a decrease in traffic impacts associated with the site.

Please let me know if you have any questions.

Respectfully submitted,

**TFMORAN INC.**

Robert E. Duval, P.E.
Chief Engineer




## MASTER LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | CONCRETE BOUND | CBF |
| | STONE BOUND | SBF |
| | IRON PIPE | IPF |
| | IRON PIN | IPinF or IRF |
| | DRILL HOLE | DHF |
| | NAIL OR RAILROAD SPIKE | PK or RRS |
| | GUARD RAIL | |
| | BITUMINOUS CONCRETE CURB | |
| SGC | SLOPED GRANITE CURB | |
| VGC | VERTICAL GRANITE CURB | |
| ICC | INTEGRAL CONCRETE CURB | |
| | CONCRETE CURB | |
| | EDGE OF PAVEMENT | |
| | EDGE OF GRAVEL | |
| SBWL | SINGLE BROKEN WHITE LINE | |
| SSWL | SINGLE SOLID WHITE LINE | |
| DSYL | DOUBLE SOLID YELLOW LINE | |
| SSYL | SINGLE SOLID YELLOW LINE | |
| SBYL | SINGLE BROKEN YELLOW LINE | |
| | RETAINING WALL | |
| X | WIRE FENCE | |
| | CHAIN LINK FENCE | |
| | WOOD FENCE | |
| | SIGN | |
| | MAILBOX | |
| | TRAFFIC FLOW | |
| | GASGATE | |
| | LIGHT POLE | |
| | BUILDING MOUNTED LIGHT | |
| | HYDRANT | |
| | WATER GATE | |
| | ELECTRIC MANHOLE | |
| | TELEPHONE MANHOLE | |
| S | SEWER MANHOLE | |
| D | DRAIN MANHOLE | |
| | CATCH BASIN | |
| E | TRANSFORMER PAD | |
| | UTILITY POLE | |
| 200 | INDEX CONTOUR | 200 |
| 202 | INTERMEDIATE CONTOUR | 202 |
| | STONEWALL (BOUNDARY) | |
| | STONEWALL (INTERIOR) | |
| | ZONING BOUNDARY | |
| XX | | |
| | EDGE OF WATER | |
| | LIMITS OF CLEARING / TREELINE | |
| | TREES | |
| | RIP-RAP | |

This plan is for conceptual purposes only. It is not necessarily the result of a complete on-site survey, nor is it intended for construction uses. Locations of boundaries and wetlands are approximate, and not necessarily correct or accurate. Compliance with current regulations must be verified.

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This plan is not effective unless signed by a duly authorized officer of Thomas F. Moran, Inc.

DIG SAFE
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ALL UTILITIES UNDER GROUND. PLAN! DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

**March 31, 2022**

CONCEPTUAL DRAWING
Not For Construction

Graphic Scale 40 20 0 40

| REV. | DATE | DESCRIPTION | DR. | CK. |
|---|---|---|---|---|

# CONCEPTUAL SITE LAYOUT PLAN
# MIXED USE DEVELOPMENT
# RETAIL PHASE

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

*OWNER OF RECORD*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

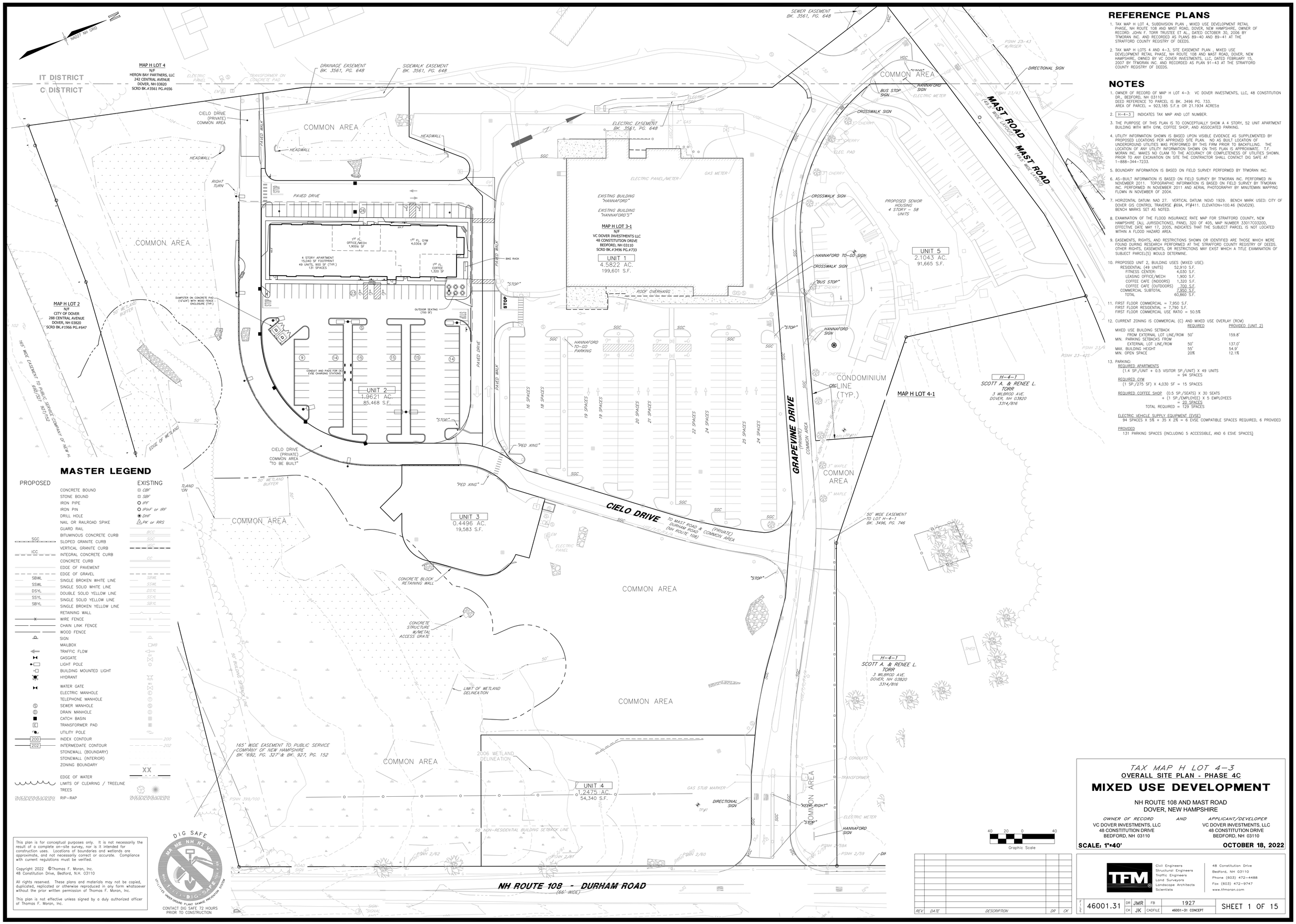
*AND*

*APPLICANT/DEVELOPER*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

**SCALE: 1" = 40'** **MARCH 31, 2022**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

| FILE | DR | FB | |
|---|---|---|---|
| 46001.24 | DC | 1927 | SHEET 1 OF 1 |
| | CK | CADFILE | |
| | MSK | 46001-24 CONCEPT 03-31-2022 | |




## REFERENCE PLANS

1. TAX MAP H LOT 4, SUBDIVISION PLAN , MIXED USE DEVELOPMENT RETAIL PHASE, NH ROUTE 108 AND MAST ROAD, DOVER, NEW HAMPSHIRE, OWNER OF RECORD: JOHN F. TORR TRUSTEE ET AL., DATED OCTOBER 30, 2006 BY TFMORAN INC. AND RECORDED AS PLANS 89-40 AND 89-41 AT THE STRAFFORD COUNTY REGISTRY OF DEEDS.
2. TAX MAP H LOTS 4 AND 4-3, SITE EASEMENT PLAN , MIXED USE DEVELOPMENT RETAIL PHASE, NH ROUTE 108 AND MAST ROAD, DOVER, NEW HAMPSHIRE, OWNED BY VC DOVER INVESTMENTS, LLC, DATED FEBRUARY 15, 2007 BY TFMORAN INC. AND RECORDED AS PLAN 91-43 AT THE STRAFFORD COUNTY REGISTRY OF DEEDS.

## NOTES

1. OWNER OF RECORD OF MAP H LOT 4-3: VC DOVER INVESTMENTS, LLC, 48 CONSTITUTION DR., BEDFORD, NH 03110
   DEED REFERENCE TO PARCEL IS BK. 3496 PG. 733.
   AREA OF PARCEL = 923,185 S.F.± OR 21.1934 ACRES±
2. H-4-3 INDICATES TAX MAP AND LOT NUMBER.
3. THE PURPOSE OF THIS PLAN IS TO CONCEPTUALLY SHOW A 4 STORY, 52 UNIT APARTMENT BUILDING WITH WITH GYM, COFFEE SHOP, AND ASSOCIATED PARKING.
4. UTILITY INFORMATION SHOWN IS BASED UPON VISIBLE EVIDENCE AS SUPPLEMENTED BY PROPOSED LOCATIONS PER APPROVED SITE PLAN . NO AS BUILT LOCATION OF UNDERGROUND UTILITIES WAS PERFORMED BY THIS FIRM PRIOR TO BACKFILLING. THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. T.F. MORAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
5. BOUNDARY INFORMATION IS BASED ON FIELD SURVEY PERFORMED BY TFMORAN INC.
6. AS-BUILT INFORMATION IS BASED ON FIELD SURVEY BY TFMORAN INC. PERFORMED IN NOVEMBER 2011. TOPOGRAPHIC INFORMATION IS BASED ON FIELD SURVEY BY TFMORAN INC. PERFORMED IN NOVEMBER 2011 AND AERIAL PHOTOGRAPHY BY MINUTEMAN MAPPING FLOWN IN NOVEMBER OF 2004.
7. HORIZONTAL DATUM: NAD 27. VERTICAL DATUM: NGVD 1929. BENCH MARK USED: CITY OF DOVER GIS CONTROL TRAVERSE #69A, PT#411. ELEVATION=100.46 (NGVD29). BENCH MARKS SET AS NOTED.
8. EXAMINATION OF THE FLOOD INSURANCE RATE MAP FOR STRAFFORD COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS), PANEL 320 OF 405, MAP NUMBER 33017C0320D, EFFECTIVE DATE MAY 17, 2005, INDICATES THAT THE SUBJECT PARCEL IS NOT LOCATED WITHIN A FLOOD HAZARD AREA.
9. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
10. PROPOSED UNIT 2, BUILDING USES (MIXED USE):

| | |
|---|---|
| RESIDENTIAL (49 UNITS) | 52,910 S.F. |
| FITNESS CENTER: | 4,030 S.F. |
| LEASING OFFICE/MECH | 1,900 S.F. |
| COFFEE CAFE (INDOORS) | 1,320 S.F. |
| COFFEE CAFE (OUTDOORS) | 700 S.F. |
| COMMERCIAL SUBTOTAL | 7,950 S.F. |
| TOTAL | 60,860 S.F. |

11. FIRST FLOOR COMMERCIAL = 7,950 S.F.
    FIRST FLOOR RESIDENTIAL = 7,790 S.F.
    FIRST FLOOR COMMERCIAL USE RATIO = 50.5%
12. CURRENT ZONING IS COMMERCIAL (C) AND MIXED USE OVERLAY (RCM)

| | REQUIRED | PROVIDED (UNIT 2) |
|---|---|---|
| MIXED USE BUILDING SETBACK FROM EXTERNAL LOT LINE/ROW | 50' | 159.8' |
| MIN. PARKING SETBACKS FROM EXTERNAL LOT LINE/ROW | 50' | 137.0' |
| MAX. BUILDING HEIGHT | 55' | 54.9' |
| MIN. OPEN SPACE | 20% | 12.1% |

13. PARKING:
    REQUIRED APARTMENTS
    (1.4 SP./UNIT + 0.5 VISITOR SP./UNIT) X 49 UNITS = 94 SPACES
    REQUIRED GYM
    (1 SP./275 SF) X 4,030 SF = 15 SPACES
    REQUIRED COFFEE SHOP (0.5 SP./SEATS) X 30 SEATS + (1 SP./EMPLOYEE) X 5 EMPLOYEES = 20 SPACES
    TOTAL REQUIRED = 129 SPACES
    ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE)
    94 SPACES X 5% + 35 X 2% = 6 EVSE COMPATIBLE SPACES REQUIRED, 6 PROVIDED
    PROVIDED
    131 PARKING SPACES (INCLUDING 5 ACCESSIBLE, AND 6 ESVE SPACES)

## MASTER LEGEND

| PROPOSED | EXISTING |
|---|---|
| CONCRETE BOUND | CBF |
| STONE BOUND | SBF |
| IRON PIPE | IPF |
| IRON PIN | IPinF or IRF |
| DRILL HOLE | DHF |
| NAIL OR RAILROAD SPIKE | PK or RRS |
| GUARD RAIL | BCC |
| BITUMINOUS CONCRETE CURB | SGC |
| SLOPED GRANITE CURB | VGC |
| VERTICAL GRANITE CURB | CC |
| INTEGRAL CONCRETE CURB | |
| CONCRETE CURB | |
| EDGE OF PAVEMENT | |
| EDGE OF GRAVEL | |
| SINGLE BROKEN WHITE LINE | SBWL |
| SINGLE SOLID WHITE LINE | SSWL |
| DOUBLE SOLID YELLOW LINE | DSYL |
| SINGLE SOLID YELLOW LINE | SSYL |
| SINGLE BROKEN YELLOW LINE | SBYL |
| RETAINING WALL | |
| WIRE FENCE | X |
| CHAIN LINK FENCE | |
| WOOD FENCE | |
| SIGN | |
| MAILBOX | MB |
| TRAFFIC FLOW | |
| GASGATE | |
| LIGHT POLE | |
| BUILDING MOUNTED LIGHT | |
| HYDRANT | |
| WATER GATE | |
| ELECTRIC MANHOLE | |
| TELEPHONE MANHOLE | |
| SEWER MANHOLE | |
| DRAIN MANHOLE | |
| CATCH BASIN | |
| TRANSFORMER PAD | |
| UTILITY POLE | |
| INDEX CONTOUR | 200 |
| INTERMEDIATE CONTOUR | 202 |
| STONEWALL (BOUNDARY) | |
| STONEWALL (INTERIOR) | |
| ZONING BOUNDARY | XX |
| EDGE OF WATER | |
| LIMITS OF CLEARING / TREELINE | |
| TREES | |
| RIP-RAP | |

Graphic Scale 40 20 0 40

*TAX MAP H LOT 4-3*

**OVERALL SITE PLAN - PHASE 4C**

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

*OWNER OF RECORD*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

*AND*

*APPLICANT/DEVELOPER*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

**SCALE: 1"=40'** **OCTOBER 18, 2022**

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|


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| FILE | DR | CK | CADFILE | |
|---|---|---|---|---|
| 46001.31 | JMR | JK | 46001-31 CONCEPT | SHEET 1 OF 15 |

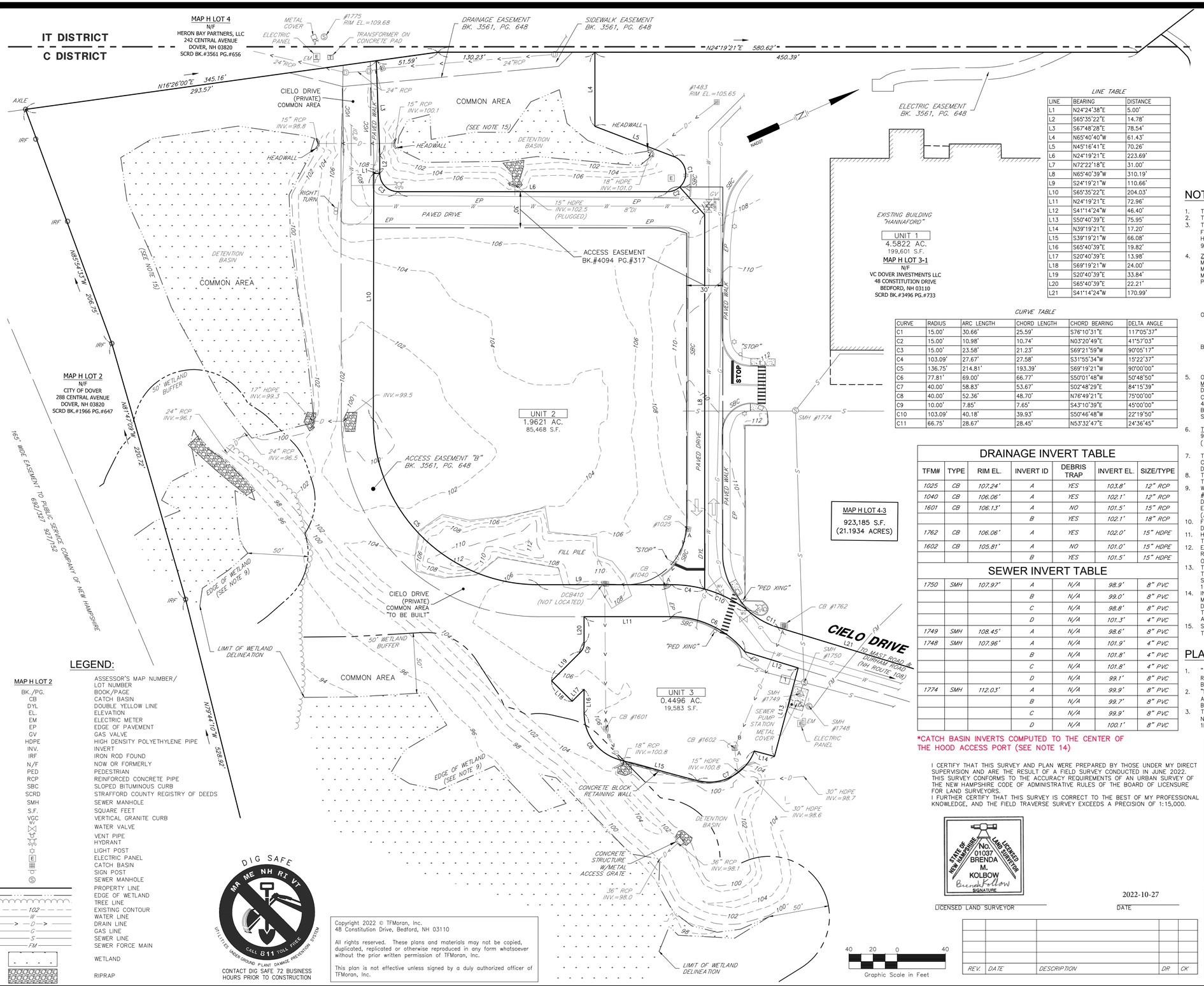

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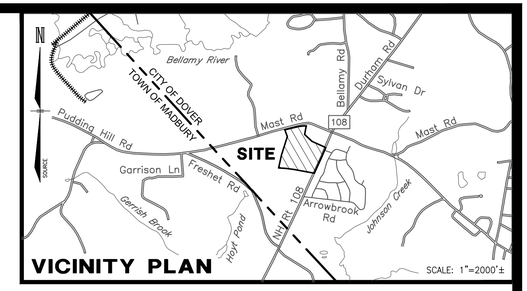
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UTILITIES, UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION




## LINE TABLE

| LINE | BEARING | DISTANCE |
|---|---|---|
| L1 | N24°24'38"E | 5.00' |
| L2 | S65°35'22"E | 14.78' |
| L3 | S67°48'28"E | 78.54' |
| L4 | N65°40'40"W | 61.43' |
| L5 | N45°16'41"E | 70.26' |
| L6 | N24°19'21"E | 223.69' |
| L7 | N72°22'18"E | 31.00' |
| L8 | N65°40'39"W | 310.19' |
| L9 | S24°19'21"W | 110.66' |
| L10 | S65°35'22"E | 204.03' |
| L11 | N24°19'21"E | 72.96' |
| L12 | S41°14'24"W | 46.40' |
| L13 | S50°40'39"E | 75.95' |
| L14 | N39°19'21"E | 17.20' |
| L15 | S39°19'21"W | 66.08' |
| L16 | S65°40'39"E | 19.82' |
| L17 | S20°40'39"E | 13.98' |
| L18 | S69°19'21"W | 24.00' |
| L19 | S20°40'39"E | 33.84' |
| L20 | S65°40'39"E | 22.21' |
| L21 | S41°14'24"W | 170.99' |

## CURVE TABLE

| CURVE | RADIUS | ARC LENGTH | CHORD LENGTH | CHORD BEARING | DELTA ANGLE |
|---|---|---|---|---|---|
| C1 | 15.00' | 30.66' | 25.59' | S76°10'31"E | 117°05'37" |
| C2 | 15.00' | 10.98' | 10.74' | N03°20'49"E | 41°57'03" |
| C3 | 15.00' | 23.58' | 21.23' | S69°21'59"W | 90°05'17" |
| C4 | 103.09' | 27.67' | 27.58' | S31°55'34"W | 15°22'37" |
| C5 | 136.75' | 214.81' | 193.39' | S69°19'21"W | 90°00'00" |
| C6 | 77.81' | 69.00' | 66.77' | S50°01'48"W | 50°48'50" |
| C7 | 40.00' | 58.83' | 53.67' | S02°48'29"E | 84°15'39" |
| C8 | 40.00' | 52.36' | 48.70' | N76°49'21"E | 75°00'00" |
| C9 | 10.00' | 7.85' | 7.65' | S43°10'39"E | 45°00'00" |
| C10 | 103.09' | 40.18' | 39.93' | S50°46'48"W | 22°19'50" |
| C11 | 66.75' | 28.67' | 28.45' | N53°32'47"E | 24°36'45" |

## DRAINAGE INVERT TABLE

| TFM# | TYPE | RIM EL. | INVERT ID | DEBRIS TRAP | INVERT EL. | SIZE/TYPE |
|---|---|---|---|---|---|---|
| 1025 | CB | 107.24' | A | YES | 103.8' | 12" RCP |
| 1040 | CB | 106.06' | A | YES | 102.1' | 12" RCP |
| 1601 | CB | 106.13' | A | NO | 101.5' | 15" RCP |
| | | | B | YES | 102.1' | 18" RCP |
| 1762 | CB | 106.06' | A | YES | 102.0' | 15" HDPE |
| 1602 | CB | 105.81' | A | NO | 101.0' | 15" HDPE |
| | | | B | YES | 101.5' | 15" HDPE |

## SEWER INVERT TABLE

| | | | | | | |
|---|---|---|---|---|---|---|
| 1750 | SMH | 107.97' | A | N/A | 98.9' | 8" PVC |
| | | | B | N/A | 99.0' | 8" PVC |
| | | | C | N/A | 98.8' | 8" PVC |
| | | | D | N/A | 101.3' | 4" PVC |
| 1749 | SMH | 108.45' | A | N/A | 98.6' | 8" PVC |
| 1748 | SMH | 107.96' | A | N/A | 101.9' | 4" PVC |
| | | | B | N/A | 101.8' | 4" PVC |
| | | | C | N/A | 101.8' | 4" PVC |
| | | | D | N/A | 99.1' | 8" PVC |
| 1774 | SMH | 112.03' | A | N/A | 99.9' | 8" PVC |
| | | | B | N/A | 99.7' | 8" PVC |
| | | | C | N/A | 99.9' | 8" PVC |
| | | | D | N/A | 100.1' | 8" PVC |

*CATCH BASIN INVERTS COMPUTED TO THE CENTER OF THE HOOD ACCESS PORT (SEE NOTE 14)

## NOTES:

1. THE PARCEL IS LOCATED IN THE COMMERCIAL (C) ZONE.
2. THE PARCEL IS SHOWN ON CITY OF DOVER ASSESSORS MAP H AS LOT 4-3.
3. THE PARCEL IS LOCATED IN FLOOD ZONE X (AREAS OF MINIMAL FLOODING) AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM (NFIP), FLOOD INSURANCE RATE MAP (FIRM) STRAFFORD COUNTY, NEW HAMPSHIRE, PANEL 320 OF 405, MAP NUMBER 33017C0320E, WITH AN EFFECTIVE DATE OF 9/30/2015.
4. ZONING REQUIREMENTS: — REQUIRED:
   - MINIMUM LOT SIZE: 20,000 S.F
   - MAXIMUM LOT COVERAGE: 50%
   - MINIMUM FRONTAGE: 125 FT
   - PRINCIPAL BUILDING
     - FRONT SETBACK: 30 FT
     - ABUT A STREET SETBACK: 30 FT
     - SIDE SETBACK: 12 FT
     - REAR SETBACK: 15 FT
   - OUTBUILDING/ACCESSORY USE
     - FRONT SETBACK: 50 FT
     - ABUT A STREET SETBACK: 50 FT
     - SIDE SETBACK: 10 FT
     - REAR SETBACK: 10 FT
   - BUILDING HEIGHT
     - PRINCIPAL BUILDING: 40 FT MAX.
     - OUTBUILDING/ACCESSORY USE 40 FT MAX.
5. OWNER OF RECORD:
   MAP H LOT 4-3:
   DOVER FIELDS CONDOMINIUM
   C/O VC DOVER INVESTMENTS LLC
   48 CONSTITUTION DR
   BEDFORD, NH 03110
   SCRD BK.#3496 PG.#0733 SEE SCRD BK.#4094 PG.#317 & BK.#4979 PG.#349 FOR DECLARATION
6. TOTAL PARCEL AREA:
   923,185 S.F.
   (21.1934 ACRES)
7. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
8. THE PURPOSE OF THIS PLAN IS TO SHOW A PORTION OF THE EXISTING CONDITIONS OF UNIT 2 AND THE COMMON AREA OF MAP H LOT 4-3.
9. WETLANDS DEPICTED ON THIS PLAN WERE DELINEATED ON JUNE 13, 2022 BY JASON R. AUBE CWS #313. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (JANUARY 1987) AND THE REGIONAL SUPPLEMENT TO THE U.S. CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0 (JANUARY 2012).
10. FIELD SURVEY COMPLETED BY TCE & PID IN JUNE 2022 USING A LEICA TS-16 AND CARLSON SURVPC DATA COLLECTION SOFTWARE.
11. HORIZONTAL DATUM IS NAD27 PER STATIC GPS OBSERVATIONS AND THE VERTICAL DATUM IS NGVD29. THE CONTOUR INTERVAL IS 2 FEET.
12. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
13. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIGSAFE @ 1-888-DIGSAFE TO VERIFY UTILITIES.
14. INVERTS OF CATCH BASIN OUTLET PIPES WITH DEBRIS TRAPS WERE INACCESSIBLE FOR DIRECT MEASUREMENT. INVERTS SHOWN WERE COMPUTED BASED ON MEASUREMENTS TO THE CENTER OF THE DEBRIS TRAP ACCESS PORT ASSUMING THIS CENTER POINT BEING LOCATED AT THE CENTERLINE OF THE OUTLET PIPE. HALF THE DIAMETER OF THE OUTLET PIPE LOCATED ON THE OPPOSING END WAS ADDED TO THE CENTERLINE MEASUREMENT TO DERIVE THE INVERT ELEVATION SHOWN.
15. SEDIMENTATION/DETENTION BASINS OR ROADSIDE DRAINAGE DITCHES DO NOT REQUIRE A BUFFER PER THE CITY OF DOVER ZONING ORDINANCE SECTION 170-27.1.G.(1)(a).

## PLAN REFERENCES:

1. "TAX MAP H LOT 4, SUBDIVISION PLAN , MIXED USE DEVELOPMENT RETAIL PHASE, NH ROUTE 108 AND MAST ROAD, DOVER, NEW HAMPSHIRE, OWNER OF RECORD: JOHN F. TORR TRUSTEE ET AL.," DATED OCTOBER 30, 2006 BY TFMORAN INC. AND RECORDED AS PLANS 89-40 AND 89-41 AT THE STRAFFORD COUNTY REGISTRY OF DEEDS.
2. "TAX MAP H LOTS 4 AND 4-3, SITE EASEMENT PLAN , MIXED USE DEVELOPMENT RETAIL PHASE, NH ROUTE 108 AND MAST ROAD, DOVER, NEW HAMPSHIRE, OWNED BY VC DOVER INVESTMENTS, LLC," DATED FEBRUARY 15, 2007 BY TFMORAN INC. AND RECORDED AS PLAN 91-43 AT THE STRAFFORD COUNTY REGISTRY OF DEEDS.
3. TAX MAP H LOT 4-3 SITE LAYOUT PLAN - RETAIL PHASE 4C MIXED USE DEVELOPMENT RETAIL PHASE NH ROUTE 108 AND MAST ROAD DOVER, NEW HAMPSHIRE" DATED DECEMBER 12, 2011 WITH REVISION 1DATED JANUARY 4, 2012 BY TFMORAN, INC. PLAN NOT RECORDED.

## LEGEND:

| MAP H LOT 2 | |
|---|---|
| BK./PG. | ASSESSOR'S MAP NUMBER/ LOT NUMBER |
| CB | BOOK/PAGE |
| DYL | CATCH BASIN |
| EL | DOUBLE YELLOW LINE |
| EM | ELEVATION |
| EP | ELECTRIC METER |
| GV | EDGE OF PAVEMENT |
| HDPE | GAS VALVE |
| INV. | HIGH DENSITY POLYETHYLENE PIPE |
| IRF | INVERT |
| N/F | IRON ROD FOUND |
| PED | NOW OR FORMERLY |
| RCP | PEDESTRIAN |
| SBC | REINFORCED CONCRETE PIPE |
| SCRD | SLOPED BITUMINOUS CURB |
| SMH | STRAFFORD COUNTY REGISTRY OF DEEDS |
| S.F. | SEWER MANHOLE |
| VGC | SQUARE FEET |
| WV | VERTICAL GRANITE CURB |
| | WATER VALVE |
| | VENT PIPE |
| | HYDRANT |
| | LIGHT POST |
| E | ELECTRIC PANEL |
| | CATCH BASIN |
| | SIGN POST |
| S | SEWER MANHOLE |
| | PROPERTY LINE |
| | EDGE OF WETLAND |
| 102 | TREE LINE |
| W | EXISTING CONTOUR |
| D | WATER LINE |
| G | DRAIN LINE |
| S | GAS LINE |
| FM | SEWER LINE |
| | SEWER FORCE MAIN |
| | WETLAND |
| | RIPRAP |

DIG SAFE
MA ME NH RI VT
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CALL 811 TOLL FREE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

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I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN JUNE 2022. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS.
I FURTHER CERTIFY THAT THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

STATE OF NEW HAMPSHIRE — No. 01037 BRENDA M. KOLBOW — LICENSED LAND SURVEYOR — SIGNATURE

LICENSED LAND SURVEYOR

2022-10-27
DATE

| REV. | DATE | DESCRIPTION | DR. | CK. |
|---|---|---|---|---|
| | | | | |

TAX MAP H LOT LOT 4-3
**LIMITED EXISTING CONDITIONS PLAN**
# DOVER FIELDS CONDOMINIUMS
**DURHAM ROAD / MAST ROAD / GRAPEVINE DRIVE**
**DOVER, NEW HAMPSHIRE**
**COUNTY OF STRAFFORD**
OWNED BY
**DOVER FIELDS CONDOMINIUM**

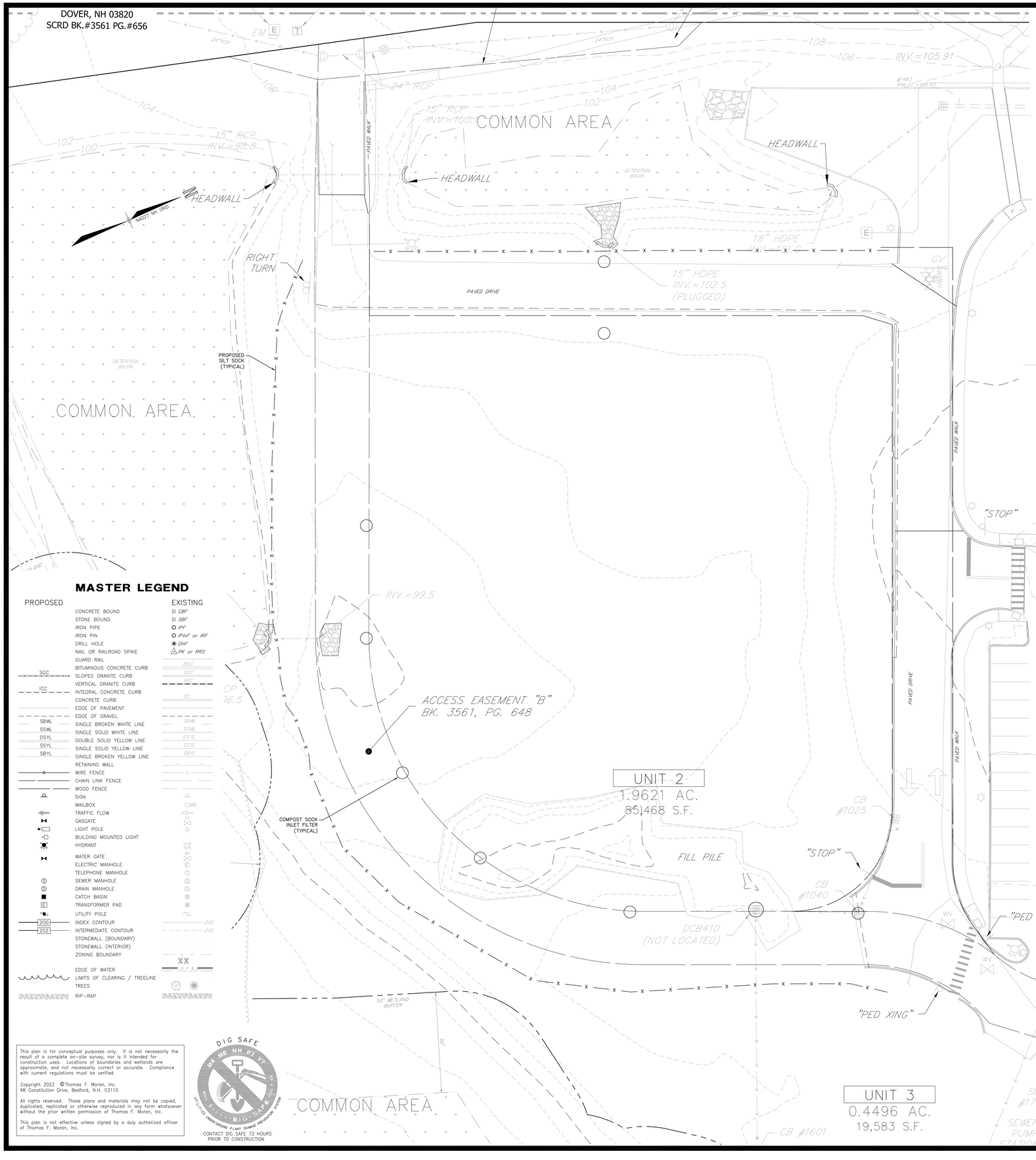
**SCALE: 1" = 40' (22x34)**
**1" = 80' (11x17)**
**JULY 20, 2022**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

| FILE | | DR | IID | FB | 558 | |
|---|---|---|---|---|---|---|
| | 46001-31 | CK | BMK | CADFILE | SEE MARGIN | S-1 |

Oct 27, 2022 - 8:08am
F:\TFM Projects\46001-Care\46001-31 VC Dover - Grapevine DR & Durham RD Dover NH\Carlson Survey\Dwgs\46001-31 Survey, 2022.dwg

DOVER, NH 03820
SCRD BK.#3561 PG.#656




## MASTER LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | CONCRETE BOUND | CBF |
| | STONE BOUND | SBF |
| | IRON PIPE | IPF |
| | IRON PIN | IPinf or IRF |
| | DRILL HOLE | DHF |
| | NAIL OR RAILROAD SPIKE | PK or RRS |
| | GUARD RAIL | |
| | BITUMINOUS CONCRETE CURB | BCC |
| SGC | SLOPED GRANITE CURB | SGC |
| ICC | VERTICAL GRANITE CURB | |
| | INTEGRAL CONCRETE CURB | |
| | CONCRETE CURB | CC |
| | EDGE OF PAVEMENT | |
| | EDGE OF GRAVEL | |
| SBWL | SINGLE BROKEN WHITE LINE | SBWL |
| SSWL | SINGLE SOLID WHITE LINE | SSWL |
| DSYL | DOUBLE SOLID YELLOW LINE | DSYL |
| SSYL | SINGLE SOLID YELLOW LINE | SSYL |
| SBYL | SINGLE BROKEN YELLOW LINE | SBYL |
| | RETAINING WALL | |
| X | WIRE FENCE | X |
| | CHAIN LINK FENCE | |
| | WOOD FENCE | |
| | SIGN | |
| | MAILBOX | MB |
| | TRAFFIC FLOW | |
| | GASGATE | GVE |
| | LIGHT POLE | |
| | BUILDING MOUNTED LIGHT | |
| | HYDRANT | |
| | WATER GATE | |
| | ELECTRIC MANHOLE | E |
| | TELEPHONE MANHOLE | T |
| S | SEWER MANHOLE | S |
| D | DRAIN MANHOLE | D |
| | CATCH BASIN | |
| E | TRANSFORMER PAD | |
| | UTILITY POLE | |
| 200 | INDEX CONTOUR | 200 |
| 202 | INTERMEDIATE CONTOUR | 202 |
| | STONEWALL (BOUNDARY) | |
| | STONEWALL (INTERIOR) | |
| | ZONING BOUNDARY | XX |
| | EDGE OF WATER | |
| | LIMITS OF CLEARING / TREELINE | |
| | TREES | |
| | RIP-RAP | |

This plan is for conceptual purposes only. It is not necessarily the result of a complete on-site survey, nor is it intended for construction uses. Locations of boundaries and wetlands are approximate, and not necessarily correct or accurate. Compliance with current regulations must be verified.

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DIG SAFE
NH ME NH RI VT
DIG-SAFE
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

## NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATIONS, SIZE, AND ELEVATIONS OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS PRIOR TO THE START OF ANY DEMOLITION. THE LOCATIONS SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED DEMOLITION TO DETERMINE APPROPRIATE ACTION TO BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO ANTICIPATE CONFLICTS AND REPAIR EXISTING UTILITIES AS NECESSARY TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
2. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
3. THE CONTRACTOR SHALL VERIFY ALL SURVEY INFORMATION IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
4. EXISTING UTILITY SERVICES TO BE DISCONTINUED ARE TO BE CAPPED AS REQUIRED BY THE RESPECTIVE UTILITY COMPANIES.
5. CONSTRUCTION DEBRIS AND INVASIVE SPECIES SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
6. PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL PLACE ORANGE CONSTRUCTION FENCING AROUND EACH TREE TO BE RETAINED THROUGHOUT CONSTRUCTION. NO STOCKPILES OF MATERIAL ARE PERMITTED WITHIN THE DRIP LINE OF THE TREES TO BE SAVED.
7. CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY IF ANY TREES ARE DAMAGED DURING CONSTRUCTION.

## CONSTRUCTION SEQUENCE NOTES

1. TO MINIMIZE EROSION AND SEDIMENTATION DUE TO CONSTRUCTION, CONSTRUCTION SHALL FOLLOW THIS GENERAL CONSTRUCTION SEQUENCE.
2. MODIFICATIONS TO THE SEQUENCE NECESSARY DUE TO THE CONTRACTOR'S SCHEDULE SHALL INCLUDE APPROPRIATE TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES.
3. THE CONTRACTOR SHALL SCHEDULE WORK SUCH THAT ANY CONSTRUCTION AREA IS STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE EXCEPT AS NOTED BELOW. NO MORE THAN 5 ACRES OF DISTURBED LAND SHALL BE UNSTABILIZED AT ANY ONE TIME.
4. THE PROJECT SHALL BE MANAGED SO THAT IT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER ARG 3800 RELATIVE TO INVASIVE SPECIES.
5. DO NOT TRAFFIC EXPOSED SOIL SURFACE OF INFILTRATION SYSTEMS WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
6. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO STORMWATER BMP'S. STORMWATER RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMP'S ARE STABILIZED.
7. DO NOT PLACE STORMWATER BMP'S INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
8. NOTIFY EASEMENT OWNERS PRIOR TO COMMENCEMENT OF WORK.
9. INSTALL ALL PERIMETER EROSION PROTECTION MEASURES AS INDICATED ON THE PLANS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. STORMWATER TREATMENT PONDS AND SWALES SHALL BE INSTALLED BEFORE ROUGH GRADING THE SITE.
11. DURING CONSTRUCTION EVERY EFFORT SHALL BE MADE TO MANAGE SURFACE RUNOFF QUALITY.
12. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT BARRIERS, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED. (TEMPORARY SEED MIXTURE OF WINTER RYE APPLIED AT A RATE OF 2.5 LBS/1000 SF SHALL BE USED).
13. CONDUCT MAJOR EARTHWORK, INCLUDING CLEARING AND GRUBBING, WITHIN THE LIMITS OF WORK. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
14. ALL STRIPPED TOPSOIL AND OTHER EARTH MATERIALS SHALL BE STOCKPILED OUTSIDE THE IMMEDIATE WORK AND WETLAND AREAS. A SILT BARRIER SHALL BE CONSTRUCTED AROUND THESE PILES IN A MANNER TO PROVIDE ACCESS AND AVOID SEDIMENT OUTSIDE OF THE WORK AREA.
15. CONSTRUCT BUILDING PAD AND COMMENCE NEW BUILDING CONSTRUCTION.
16. CONSTRUCT TEMPORARY CULVERTS AND DIVERSIONS AS REQUIRED.
17. BEGIN PERMANENT AND TEMPORARY INSTALLATION OF SEED AND MULCH.
18. PERFORM EARTHWORK NECESSARY TO ESTABLISH ROUGH GRADING AROUND PARKING FIELDS AND ACCESS DRIVES. MANAGE EXPOSED SOIL SURFACES TO AVOID TRANSPORTING SEDIMENTS INTO WETLANDS. PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
19. INSTALL SUBSURFACE UTILITIES (WATER, SEWER, GAS, ELECTRIC, COMMUNICATIONS, DRAINAGE, DRAINAGE FACILITIES, ETC.).
20. CONSTRUCT PROPOSED ROADWAY, RAIN GARDENS, GRAVEL WETLANDS AND DRAINAGE SWALES. ALL DITCHES, SWALES, AND GRAVEL WETLANDS SHALL BE FULLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
21. COMPLETE BUILDING AND ALL OFF-SITE IMPROVEMENTS.
22. COMPLETE SEEDING AND MULCHING. SEED TO BE APPLIED WITH BROADCAST SPREADER OR BY HYDRO-SEEDING, THEN ROLLED, RAKED, OR DRAGGED TO ASSURE SEED/SOIL CONTACT.
23. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDED AREAS HAVE BECOME FIRMLY ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE.
24. DURING THE COURSE OF THE WORK AND UPON COMPLETION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT DEPOSITS, EITHER ON OR OFF SITE, INCLUDING CATCH BASINS, AND SUMPS, DRAIN PIPES AND DITCHES, CURB LINES, ALONG SILT BARRIERS, ETC. RESULTING FROM SOIL AND/OR CONSTRUCTION OPERATIONS.
25. SEE WINTER CONSTRUCTION SEQUENCE FOR WORK CONDUCTED AFTER OCTOBER 15TH.

## CONSTRUCTION GENERAL PERMIT

1. THE OWNER, IN CONJUNCTION WITH THE CONTRACTOR (OPERATORS), MUST OBTAIN A CONSTRUCTION GENERAL PERMIT (CGP) FOR LARGE CONSTRUCTION ACTIVITIES (FIVE OR MORE ACRES) OR SMALL CONSTRUCTION ACTIVITIES (GREATER THAN ONE ACRE BUT LESS THAN FIVE ACRES) FROM THE ENVIRONMENTAL PROTECTION AGENCY (EPA). AS PART OF THE CGP, A STORMWATER NOTICE OF INTENT (NOI) MUST BE SUBMITTED TO THE EPA AT LEAST 7 DAYS PRIOR TO COMMENCING CONSTRUCTION. THE NOI MUST BE SUBMITTED TO STORM WATER NOTICE OF INTENT (4203M), USEPA, 1200 PENNSYLVANIA AVE. NW, WASHINGTON, DC 20460.
2. THE CGP OUTLINES A SET OF PROVISIONS MANDATING THE OWNER AND CONTRACTOR TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER REGULATIONS, INCLUDING, BUT NOT LIMITED TO, STORM WATER POLLUTION PREVENTION PLANS (SWPPP'S), IMPLEMENTATION OF EROSION AND SEDIMENTATION CONTROLS, EQUIPMENT MAINTENANCE GUIDELINES, ETC. PLEASE CONTACT USEPA OFFICE OF WASTEWATER MANAGEMENT AT 202-564-9545 OR AT WWW.EPA.GOV/NPDES/STORMWATER FOR ADDITIONAL INFORMATION. FOR FURTHER ASSISTANCE, CONTACT ABBY SWAINE OF NEW ENGLAND'S EPA REGION 1 AT 617-918-1841.

## NOTES

1. TOTAL SITE AREA: 1.91 AC
   TOTAL AREA OF DISTURBANCE: 1.82 AC
2. SOILS SHOWN ARE FROM THE SOIL SURVEY OF HILLSBOROUGH COUNTY, NH, EASTERN PART, PREPARED BY USDA-SOIL CONSERVATION SERVICES.
3. STORM WATER DRAINAGE SYSTEM IS SHOWN ON THE PLAN. SEE GRADING & DRAINAGE PLAN FOR RIM, INVERT, PIPE LENGTH, AND SLOPE INFORMATION.
   POST-CONSTRUCTION RUNOFF COEFFICIENT: CN=
   IMPERVIOUS SURFACE AREA: ± AC
4. STABILIZATION PRACTICES FOR EROSION AND SEDIMENTATION CONTROLS:

   TEMPORARY STABILIZATION – TOPSOIL STOCKPILES AND DISTURBED AREAS OF THE CONSTRUCTION SITE THAT WILL NOT BE REDISTURBED FOR 14 DAYS OR MORE MUST BE STABILIZED BY THE 14TH DAY AFTER THE LAST DISTURBANCE. THE TEMPORARY SEED SHALL BE ANNUAL RYE APPLIED AT THE RATE OF 1.1 LBS PER 1,000 SF. PRIOR TO SEEDING, A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 1.5 TONS PER ACRE OF HAY MULCH. MULCH TO BE ANCHORED IN PLACE WHERE NECESSARY. AREAS OF THE SITE THAT WILL BE PAVED WILL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILES AND A STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED. CALCIUM CHLORIDE SHALL BE USED FOR DUST CONTROL IF NEEDED.

   PERMANENT STABILIZATION – DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 3 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX SHALL BE AS SPECIFIED BY THE LANDSCAPE PLAN NOTES OR MAY OTHERWISE CONSIST OF 0.45 LBS./1,000 SF TALL FESCUE, 0.20 LBS./1,000 SF CREEPING RED FESCUE, AND 0.20 LBS./1,000 SF BIRDSFOOT TREFOIL. PRIOR TO SEEDING, A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS PER ACRE IF 10-20-20 FERTILIZER SHALL BE APPLIED. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 1.5 TONS PER ACRE OF HAY MULCH. MULCH TO BE ANCHORED IN PLACE WHERE NECESSARY.
5. STRUCTURAL PRACTICES FOR EROSION AND SEDIMENTATION CONTROL

   SILT SOCK – WILL BE CONSTRUCTED AROUND THE PERIMETER OF THE DISTURBED AREAS AND WILL DELINEATE THE LIMITS OF WORK FOR THE PROPOSED CONSTRUCTION. THE SILT SOCK WILL BE INSTALLED BY OTHERS. POSTS SHALL BE USED WITH AT LEAST 6" OF THE POST BURIED BELOW THE GROUND SURFACE TO PREVENT THE SILT SOCK FROM FORMING GAPS NEAR THE GROUND SURFACE. RUNOFF WILL FLOW THROUGH THE OPENINGS IN THE SILT SOCK WHILE RETAINING THE SEDIMENT WITHIN THE CONSTRUCTION AREA.

   SILT FENCE – WILL BE CONSTRUCTED AROUND THE PERIMETER OF THE DISTURBED AREAS AND WILL DELINEATE THE LIMITS OF WORK FOR THE PROPOSED CONSTRUCTION. THE SILT FENCE WILL BE INSTALLED BY STRETCHING REINFORCED FILTER FABRIC BETWEEN POSTS WITH AT LEAST 8" OF THE FABRIC BURIED BELOW THE GROUND SURFACE TO PREVENT GAPS FROM FORMING NEAR THE GROUND SURFACE. RUNOFF WILL FLOW THROUGH THE OPENINGS IN THE FILTER FABRIC WHILE RETAINING THE SEDIMENT WITHIN THE CONSTRUCTION AREA.

   STABILIZED CONSTRUCTION ENTRANCE – WILL BE INSTALLED IN ACCORDANCE WITH THE DETAIL AT THE ENTRANCE TO THE CONSTRUCTION SITE TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS OFF THE SITE. THE STABILIZED ENTRANCE WILL BE 20'-WIDE AND FLARE AT THE ENTRANCE TO THE PAVED ROAD AND HAVE A DEPTH OF 12" OF STONE. THE STABILIZED ENTRANCE SHALL BE MAINTAINED UNTIL THE REMAINDER OF THE CONSTRUCTION SITE HAS BEEN FULLY STABILIZED. THE PAVED STREET ADJACENT TO THE SITE SHALL BE SWEPT ON A WEEKLY BASIS TO REMOVE EXCESS MUD AND DIRT FROM BEING TRACKED FROM THE SITE. TRUCKS HAULING MATERIAL TO AND/OR FROM THE SITE SHALL BE COVERED WITH A TARPAULIN.

   CATCH BASINS – WILL BE CLEANED ON AN ANNUAL BASIS TO REMOVE ALL SEDIMENTS FROM THE CATCH BASIN SUMPS.

   CATCH BASIN PROTECTION – WILL BE INSTALLED AT ALL CATCH BASINS WITHIN THE CONSTRUCTION AREA. FILTER FABRIC WILL BE INSTALLED AROUND THE GRATES OF CATCH BASINS THAT ARE LOCATED IN THE TRAVEL WAY AND STONE/FILTER FABRIC PROTECTION WILL BE INSTALLED AT THE CATCH BASINS FOUND WITHIN THE PARKING AREA AND GRASS.

   BLANKET SLOPE PROTECTION – SHALL BE INSTALLED ON ALL 2:1 SLOPES OR STEEPER ON SITE. ANCHOR THE TOP OF THE BLANKET BY ANCHORING THE BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING. ROLL THE BLANKET IN THE DIRECTION OF STORM WATER FLOW. WHERE 2 OR MORE STRIPS OF BLANKET ARE REQUIRED, A MINIMUM OF 4" OF OVERLAP SHALL BE PROVIDED.

   STONE CHECK DAMS – WILL BE INSTALLED IN EXISTING AND PROPOSED GRASS SWALES TO REDUCE THE VELOCITY OF CONCENTRATED STORM WATER FLOWS AND PREVENT EROSION OF THE SWALE.
6. STORM WATER MANAGEMENT

   STORM WATER DRAINAGE FOR DEVELOPED AREAS WILL BE COLLECTED BY A PIPE AND CATCH BASIN CLOSED DRAINAGE SYSTEM AND OPEN CONVEYANCE, APPROXIMATELY 3.41 ACRES OF THE 6.04 ACRE SITE WILL REMAIN UNTOUCHED AND IN ITS NATURAL STATE.
7. ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURE DUMPSTERS OR APPROVED ENCLOSURE AND REMOVED FROM THE SITE ON A WEEKLY BASIS. NO CONSTRUCTION WASTE SHALL BE BURIED ON SITE. PORTABLE TOILET SANITARY WASTE FACILITIES WILL BE PROVIDED DURING CONSTRUCTION AND MAINTAINED/DISPOSED OF ON A REGULAR BASIS IN ACCORDANCE WITH TOWN AND STATE REGULATIONS.
8. THRUST BLOCK SHALL BE PROVIDED WHERE WATER LINE CHANGES DIRECTION OR TAPS INTO EXISTING WATER LINE.
9. A LIST OF CONSTRUCTION ITEMS AND OTHER PRODUCTS USED ON THIS PROJECT SHALL BE KEPT ON RECORD WITH THIS PLAN ONSITE. ALL CHEMICALS, PETROLEUM PRODUCTS AND OTHER MATERIALS USED DURING CONSTRUCTION SHALL BE STORED IN A SECURE AREA, AND PRECAUTIONS USED TO PREVENT POTENTIAL SOURCES OF CONTAMINATION OR POLLUTION. ANY SPILL OF THESE TYPES OF SUBSTANCES SHALL BE CLEANED UP AND DISPOSED OF IN A LEGAL MANNER AS SPECIFIED BY STATE REGULATIONS AND THE MANUFACTURER. ANY SPILL IN AMOUNTS EQUAL TO OR EXCEEDING REPORTABLE QUANTITY AS DEFINED BY THE EPA SHALL TAKE THE FOLLOWING STEPS:
   - NOTIFY THE NATIONAL RESPONSE CENTER IMMEDIATELY AT (888) 424-8802; IN WASHINGTON, D.C., CALL (202) 426-2675.
   - WITHIN 14 DAYS, SUBMIT A WRITTEN DESCRIPTION OF THE RELEASE TO THE EPA REGIONAL OFFICE PROVIDING THE DATE AND CIRCUMSTANCES OF THE RELEASE AND THE STEPS TO BE TAKEN TO PREVENT ANOTHER RELEASE.
   - MODIFY THE POLLUTION PREVENTION PLAN TO INCLUDE THE INFORMATION LISTED ABOVE.

   GOOD HOUSEKEEPING:
   THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.
   - AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB;
   - ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE;
   - PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL;
   - SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
   - WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER;
   - MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED;
   - TRASH DUMPSTERS SHALL BE GASKETED OR HAVE A SECURE WATERTIGHT LID AND BE PLACED AWAY FROM STORMWATER CONVEYANCES AND DRAINS.
   - THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

   HAZARDOUS PRODUCTS:
   THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
   - PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE;
   - ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION;
   - IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

   PRODUCT SPECIFIC PRACTICES:
   THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:

   PETROLEUM PRODUCTS:
   ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

   FERTILIZERS:
   FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

   PAINTS:
   ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

   CONCRETE TRUCKS:
   EXCESS CONCRETE SHALL BE USED IN AREAS DESIGNATED BY THE SITE CONTRACTOR. WASH WATER SHALL BE DISPOSED OF USING BEST MANAGEMENT PRACTICES. BUILDING CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL DRUM WASH WATER ASSOCIATED WITH CONCRETE FOR THE BUILDING PAD. SITE CONTRACTOR TO COORDINATE AND PROVIDE BUILDING CONTRACTOR WITH AN AREA FOR DRUM WASH WATER.

   SPILL CONTROL PRACTICES:
   IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
   - MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
   - MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
   - ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
   - THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
   - SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF SIZE.
   - THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
   - THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THEY WILL DESIGNATE AT LEAST THREE OTHER SITE PERSONNEL WHO WILL EACH RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.
11. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN RECORDS OF CONSTRUCTION ACTIVITIES, INCLUDING DATES OF MAJOR GRADING ACTIVITIES, DATES WHEN CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED ON A PORTION OF THE SITE, DATES WHEN WORK IS COMPLETED ON A PORTION OF THE SITE, AND DATES WHEN STABILIZATION MEASURES ARE INITIATED ONSITE.
12. THE CONTRACTOR SHALL PERFORM INSPECTIONS OR HAVE A CONSULTING ENGINEER PERFORM INSPECTIONS EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS AFTER A STORM OF 0.5" OR GREATER. INSPECTIONS REPORTS ARE TO BE KEPT ON FILE AT THE SITE WITH THIS PLAN. MAINTENANCE OR MODIFICATION SHALL BE IMPLEMENTED AND ADDED TO THE PLAN AS RECOMMENDED BY THE QUALIFIED INSPECTOR.

20 10 0 20
Graphic Scale

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| | | | | |

*TAX MAP H LOT 4-3*

**DEMOLITION AND EROSION CONTROL PLAN - PHASE 4C**

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

| *OWNER OF RECORD* | *AND* | *APPLICANT/DEVELOPER* |
|---|---|---|
| VC DOVER INVESTMENTS, LLC | | VC DOVER INVESTMENTS, LLC |
| 48 CONSTITUTION DRIVE | | 48 CONSTITUTION DRIVE |
| BEDFORD, NH 03110 | | BEDFORD, NH 03110 |

**SCALE: 1"=20'** **OCTOBER 18, 2022**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

| FILE | DR | FB | | |
|---|---|---|---|---|
| 46001.31 | JMR | 1927 | SHEET 3 OF 15 | |
| | CK | CADFILE | | |
| JK | 46001-31 CONCEPT | | | |

DOVER, NH 03820
SCRD BK.#3561 PG.#656

MAGNETIC NORTH GRID

CIELO DRIVE (PRIVATE) COMMON AREA

COMMON AREA

HEADWALL

LIMIT OF 1.5" ASPHALT OVERLAY

RIGHT TURN

R1-1

STOP

PAVED DRIVE

8"D

PAVED WALK

HC RAMPS & LANDING W/ FLUSH PAVEMENT

HC RAMP W/ 2" ALUMINUM HANDRAIL

ACCESS EASEMENT BK.#3002 PG.#317

1ST FL. OFFICE/MECH 1,900± SF

1ST FL. GYM 4,030± SF

1ST FL. COFFEE 1,320 SF

4 STORY APARTMENT
15,040 SF FOOTPRINT
49 UNITS, 900 SF (TYP.)
131 SPACES

5' WIDE CONCRETE SIDEWALK

DUMPSTER ON CONCRETE PAD (12'x24') WITH WOOD FENCE ENCLOSURE (TYP.)

WETLAND

OUTDOOR SEATING (700 SF)

CONDUIT AND PADS FOR (6) EVSE CHARGING STATIONS

UNIT 2
1.9621 AC.
85,468 S.F.

CIELO DRIVE (PRIVATE) COMMON AREA "TO BE BUILT"

50' WETLAND BUFFER

COMMON AREA

UNIT 3
0.4496 AC.
19,583 S.F.

BIKE RACK

CUT IN HC RAMP

"STOP"

"PED XING"

CONNECT TO EXISTING 8" PVC SEWER STUB

PAVED DRIVE

SEWER PUMP STATION

ELECTRIC EASEMENT
BK. 3561, PG. 648

ELECTRIC PANEL

EXISTING BUILDING "HANNAFORD"

EXISTING BUILDING "HANNAFORD'S"

ROOF OVERHANG

HANNAFORD TO-GO PARKING

16 SPACES
18 SPACES
19 SPACES
19 SPACES
20 SPACES
21 SPACES

SMH #1774
SMH #1750
SMH #1749

**MAP H LOT 3-1**
N/F
VC DOVER INVESTMENTS LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110
SCRD BK.#3496 PG.#733

UNIT 1
4.5822 AC.
199,601 S.F.

## MASTER LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | CONCRETE BOUND | CBF |
| | STONE BOUND | SBF |
| | IRON PIPE | IPF |
| | IRON PIN | IPinF or IRF |
| | DRILL HOLE | DHF |
| | NAIL OR RAILROAD SPIKE | PK or RRS |
| | GUARD RAIL | |
| | BITUMINOUS CONCRETE CURB | BCC |
| SGC | SLOPED GRANITE CURB | SGC |
| ICC | VERTICAL GRANITE CURB | VGC |
| | INTEGRAL CONCRETE CURB | |
| | CONCRETE CURB | CC |
| | EDGE OF PAVEMENT | |
| | EDGE OF GRAVEL | |
| SBWL | SINGLE BROKEN WHITE LINE | SBWL |
| SSWL | SINGLE SOLID WHITE LINE | SSWL |
| DSYL | DOUBLE SOLID YELLOW LINE | DSYL |
| SSYL | SINGLE SOLID YELLOW LINE | SSYL |
| SBYL | SINGLE BROKEN YELLOW LINE | SBYL |
| | RETAINING WALL | |
| | WIRE FENCE | X |
| | CHAIN LINK FENCE | |
| | WOOD FENCE | |
| | SIGN | |
| | MAILBOX | MB |
| | TRAFFIC FLOW | |
| | GASGATE | |
| | LIGHT POLE | |
| | BUILDING MOUNTED LIGHT | |
| | HYDRANT | |
| | WATER GATE | |
| | ELECTRIC MANHOLE | |
| | TELEPHONE MANHOLE | |
| S | SEWER MANHOLE | S |
| D | DRAIN MANHOLE | D |
| | CATCH BASIN | |
| E | TRANSFORMER PAD | |
| | UTILITY POLE | |
| 200 | INDEX CONTOUR | 200 |
| 202 | INTERMEDIATE CONTOUR | 202 |
| | STONEWALL (BOUNDARY) | |
| | STONEWALL (INTERIOR) | |
| | ZONING BOUNDARY | XX |
| | EDGE OF WATER | |
| | LIMITS OF CLEARING / TREELINE | |
| | TREES | |
| | RIP-RAP | |

Graphic Scale 20 10 0 20

*TAX MAP H LOT 4-3*
**LANDSCAPE PLAN - PHASE 4C**

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

*OWNER OF RECORD*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

*AND*

*APPLICANT/DEVELOPER*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
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**SCALE: 1"=20'** **OCTOBER 18, 2022**

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|


TFM
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FILE 46001.31 | DR JMR | FB 1927 | CK JK | CADFILE 46001-31 CONCEPT

SHEET 4 OF 15


This plan is for conceptual purposes only. It is not necessarily the result of a complete on-site survey, nor is it intended for construction uses. Locations of boundaries and wetlands are approximate, and not necessarily correct or accurate. Compliance with current regulations must be verified.

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48 Constitution Drive, Bedford, N.H. 03110

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DIG SAFE
NH ME NH RI VT
811 888-DIG SAFE
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

DOVER, NH 03820
SCRD BK.#3561 PG.#656

COMMON AREA

HW801

HEAD

HW803 WITH RIPRAP APRON

HEADWALL

HW800 WITH PLUNGE POOL

HEADWALL

HW802 WITH RIPRAP APRON

18" HDPE INV.=101.0

15" HDPE INV.=102.5 (PLUGGED)

24" RCP

15" RCP INV.=100.

15" RCP INV.=98.8

RIGHT TURN

106.89'

106.72'

CB811

107.10'

106.75'

PAVED DRIVE

107.33'

107.38'

CB810

107.86

107.78

107.73

107.66

107.80

108.38

110.40

FF=110.6

ACCESS EASEMENT BK.6404 PG.1317

FF=110.6

COMMON AREA

CB710

8"RD

109.90

109.30

INV.=99.5

CONNECT TO EXISTING 18" DRAIN

ACCESS EASEMENT "B" BK. 3561, P. 648

CB715

108.60

DCB720

CB725

109.30

SMH 130

109.30

109.30

109.30

109.50

DCB410

DCB410 (NOT LOCATED)

RESET EXISTING FRAME AND GRATE

FILL PIPE

"STOP"

"PED XING"

"PED XING"

50' WETLAND BUFFER

UNIT 2
1.9621 AC.
85,468 S.F.

UNIT 3
0.4496 AC.
19,583 S.F.

CB #1601

CB #1025

CB #1046

CB #1762

SMH #1749

SEWER PUMP STATION

SMH #1750

SMH #1774

SGC

HANNAFORD TO-GO PARKING

16 SPACES

18 SPACES

19 SPACES

19 SPACES

EXISTING BUILDING "HANNAFORD"

EXISTING BUILDING "HANNAFORD'S"

FLAG POLE

"STOP"

STOP

PAVED WALK

PAVED DRIVE

ELECTRIC BK. 3561, PG

GV

WV

CB806

8" HDPE INV.=106.33

#1481 RIM=CLOSED

INV.=105.91

MAP H LOT 3-1
N/F
VC DOVER INVESTMENTS LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110
SCRD BK.#3496 PG.#733

UNIT 1
4.5822 AC.
199,601 S.F.

## NOTES

1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF DOVER, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL SURROUNDING CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
5. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
6. STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
7. ALL MANHOLES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
8. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
9. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
10. THE SITE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT.
11. THE SITE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.
12. THE EROSION CONTROL PRACTICES SHOWN ON THESE PLANS ARE ILLUSTRATIVE ONLY AND SHALL BE SUPPLEMENTED BY THE SITE CONTRACTOR AS REQUIRED.
13. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES.
14. COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ROOF DRAIN INFORMATION.
15. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS AND ALIGNMENTS.
16. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS AT THE SITE. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT DISCREPANCIES TO THE ENGINEER.
17. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
18. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.
19. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
20. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
21. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
22. TFMORAN INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
23. THE SITE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 AS APPLICABLE.
24. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS.
25. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS, AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.

## MASTER LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | CONCRETE BOUND | CBF |
| | STONE BOUND | SBF |
| | IRON PIPE | IPF |
| | IRON PIN | IPinF or IRF |
| | DRILL HOLE | DHF |
| | NAIL OR RAILROAD SPIKE | PK or RRS |
| | GUARD RAIL | |
| | BITUMINOUS CONCRETE CURB | BCC |
| SGC | SLOPED GRANITE CURB | SGC |
| | VERTICAL GRANITE CURB | VGC |
| ICC | INTEGRAL CONCRETE CURB | |
| | CONCRETE CURB | CC |
| | EDGE OF PAVEMENT | |
| | EDGE OF GRAVEL | |
| SBWL | SINGLE BROKEN WHITE LINE | SBWL |
| SSWL | SINGLE SOLID WHITE LINE | SSWL |
| DSYL | DOUBLE SOLID YELLOW LINE | DSYL |
| SSYL | SINGLE SOLID YELLOW LINE | SSYL |
| SBYL | SINGLE BROKEN YELLOW LINE | SBYL |
| | RETAINING WALL | |
| X | WIRE FENCE | X |
| | CHAIN LINK FENCE | |
| | WOOD FENCE | |
| | SIGN | |
| | MAILBOX | MB |
| | TRAFFIC FLOW | |
| | GASGATE | |
| | LIGHT POLE | |
| | BUILDING MOUNTED LIGHT | |
| | HYDRANT | |
| | WATER GATE | WV |
| | ELECTRIC MANHOLE | E |
| | TELEPHONE MANHOLE | T |
| S | SEWER MANHOLE | S |
| D | DRAIN MANHOLE | D |
| | CATCH BASIN | |
| E | TRANSFORMER PAD | |
| | UTILITY POLE | |
| 200 | INDEX CONTOUR | 200 |
| 202 | INTERMEDIATE CONTOUR | 202 |
| | STONEWALL (BOUNDARY) | |
| | STONEWALL (INTERIOR) | |
| | ZONING BOUNDARY | |
| | EDGE OF WATER | XX |
| | LIMITS OF CLEARING / TREELINE | |
| | TREES | |
| | RIP-RAP | |

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DIG SAFE
NH ME NH RI VT
811 IT'S THE LAW! DIG-SAFE WELL 1 LOCATION
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

Graphic Scale 20 10 0 20

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

TAX MAP H LOT 4-3
GRADING AND DRAINAGE PLAN - PHASE 4C

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

OWNER OF RECORD
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

AND

APPLICANT/DEVELOPER
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

SCALE: 1"=40'

OCTOBER 18, 2022

TFM Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

| FILE | 46001.31 | DR | JMR | FB | 1927 | SHEET 5 OF 15 |
|---|---|---|---|---|---|---|
| | | CK | JK | CADFILE | 46001-31 CONCEPT | |

## NOTES

1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF DOVER, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILARIZE HIMSELF WITH THE SITE AND ALL SURROUNDING CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
6. ALL MANHOLES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
7. ON-SITE WATER DISTRIBUTION SHALL BE TO PENNICHUCK WATER WORKS STANDARDS AND SPECIFICATIONS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5 FEET COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10 FEET MINIMUM.
8. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
9. VERIFY UTILITY CONNECTIONS TO BUILDING WITH ARCHITECTURAL DRAWINGS.
10. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
13. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS AND ALIGNMENTS.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS AT THE SITE. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT DISCREPANCIES TO THE ENGINEER.
15. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.

## MASTER LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | CONCRETE BOUND | CBF |
| | STONE BOUND | SBF |
| | IRON PIPE | IPF |
| | IRON PIN | IPINF or IRF |
| | DRILL HOLE | DHF |
| | NAIL OR RAILROAD SPIKE | PK or RRS |
| | GUARD RAIL | |
| | BITUMINOUS CONCRETE CURB | BCC |
| SGC | SLOPED GRANITE CURB | SGC |
| | VERTICAL GRANITE CURB | VGC |
| ICC | INTEGRAL CONCRETE CURB | |
| | CONCRETE CURB | CC |
| | EDGE OF PAVEMENT | |
| | EDGE OF GRAVEL | |
| SBWL | SINGLE BROKEN WHITE LINE | SBWL |
| SSWL | SINGLE SOLID WHITE LINE | SSWL |
| DSYL | DOUBLE SOLID YELLOW LINE | DSYL |
| SSYL | SINGLE SOLID YELLOW LINE | SSYL |
| SBYL | SINGLE BROKEN YELLOW LINE | SBYL |
| | RETAINING WALL | |
| X | WIRE FENCE | X |
| | CHAIN LINK FENCE | |
| | WOOD FENCE | |
| | SIGN | |
| | MAILBOX | MB |
| | TRAFFIC FLOW | |
| | GASGATE | GV |
| | LIGHT POLE | |
| | BUILDING MOUNTED LIGHT | |
| | HYDRANT | |
| | WATER GATE | WV |
| | ELECTRIC MANHOLE | E |
| | TELEPHONE MANHOLE | T |
| S | SEWER MANHOLE | S |
| D | DRAIN MANHOLE | D |
| | CATCH BASIN | |
| E | TRANSFORMER PAD | |
| | UTILITY POLE | |
| 200 | INDEX CONTOUR | 200 |
| 202 | INTERMEDIATE CONTOUR | 202 |
| | STONEWALL (BOUNDARY) | |
| | STONEWALL (INTERIOR) | |
| | ZONING BOUNDARY | XX |
| | EDGE OF WATER | |
| | LIMITS OF CLEARING / TREELINE | |
| | TREES | |
| | RIP-RAP | |

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DIG SAFE
NH ME MA RI VT
CALL DIG-SAFE
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

COMMON AREA
HW801
HW803 WITH RIPRAP APRON
HW800 WITH PLUNGE POOL
HW802 WITH RIPRAP APRON
DETENTION BASIN
PAVED WALK
PROPOSED GAS MAIN
INSTALL 8"X6" TAPPING SLEEVE AND 6" TAPPING GATE VALVE
8"X4" TAPPING SLEEVE AND 4" DOMESTIC SERVICE
CONNECT TO EXISTING GAS MAIN
CB811
CB810
CB715
CB720
CB725
DCB720
DCB410
SMH 130
PAVED DRIVE
STOP
4" RD (TYP.)
8" RD
GAS SERVICE
231.7'
63.3'
1ST FL. OFFICE/MECH 1,900± SF
1ST FL. GYM 4,030± SF
1ST FL. COFFEE 1,320 SF
4 STORY APARTMENT
15,040 SF FOOTPRINT
49 UNITS, 900 SF (TYP.)
131 SPACES
2 – 4" PVC SCH 40
2 – 5" PVC SCH 40
4 – 4" PVC SCH 40
2 – 4" PVC SCH 40 (TYP.)
CONNECT TO EXISTING 18" DRAIN
CONNECT TO EXISTING 8" PVC SEWER STUB
RESET EXSITING FRAME AND GRATE
UNIT 1
4.5822 AC.
199,601 S.F.
UNIT 2
1.9621 AC.
85,468 S.F.
UNIT 3
0.4496 AC.
19,583 S.F.
EXISTING BUILDING "HANNAFORD'S"
FLAG POLE
ROOF
SGC
ELECTRIC
CB806
INV.=105.91
INV.=106.33
8" HDPE
#1483 RIM EL.=105.65
50' WETLAND BUFFER
WETLAND
104
106
24"RCP

Graphic Scale 20 10 0 20

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

TAX MAP H LOT 4-3
UTILITY PLAN - PHASE 4C

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

OWNER OF RECORD
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

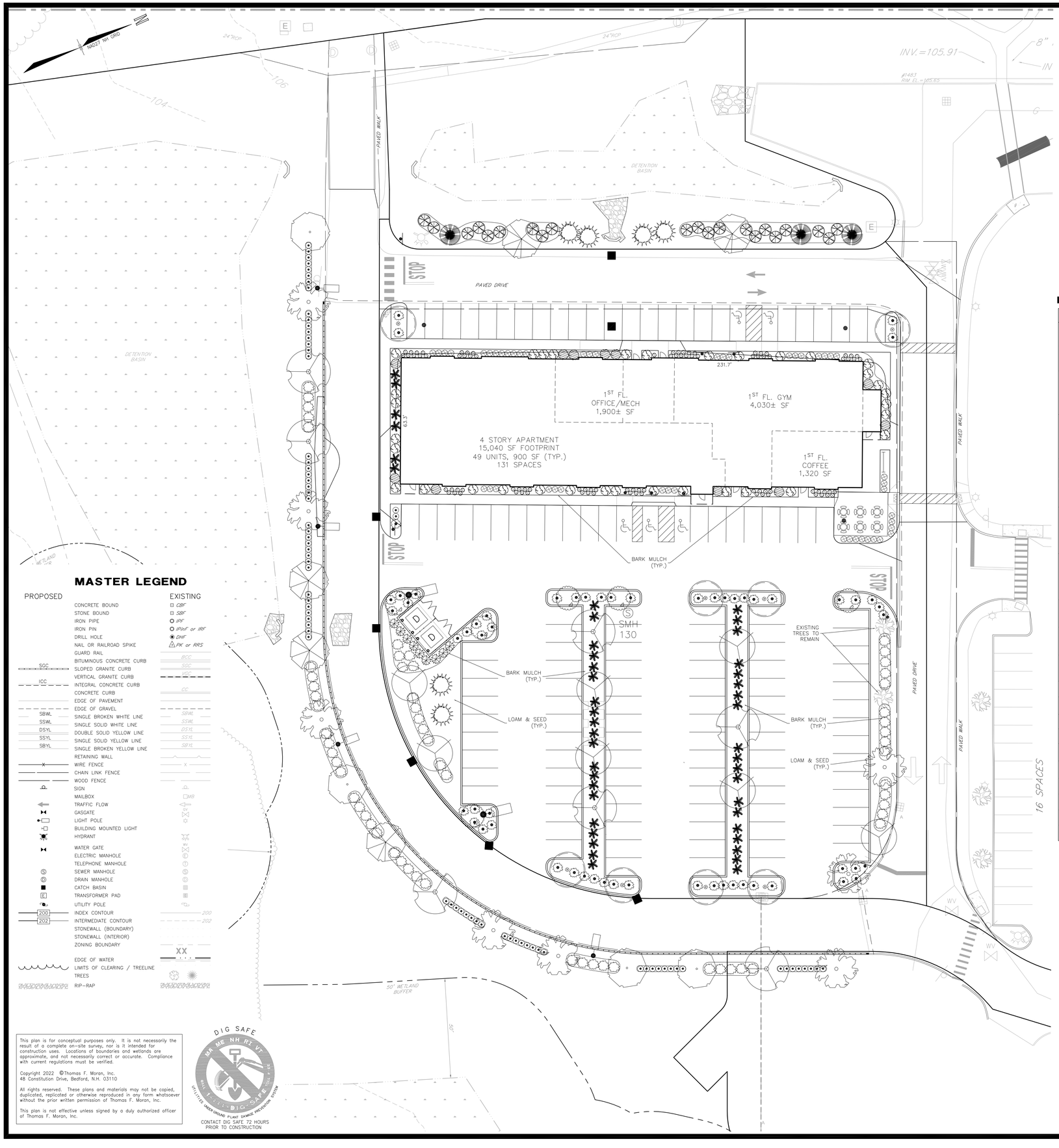
AND

APPLICANT/DEVELOPER
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

SCALE: 1"=20' OCTOBER 18, 2022

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
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| JOB | 46001.31 | DR | JMR | FB | 1927 | SHEET 6 OF 15 |
|---|---|---|---|---|---|---|
| | | CK | JK | CADFILE | 46001-31 CONCEPT | |




## MASTER LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | CONCRETE BOUND | CBF |
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| | IRON PIN | IPinF or IRF |
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| | CONCRETE CURB | CC |
| | EDGE OF PAVEMENT | |
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| SBWL | SINGLE BROKEN WHITE LINE | SBWL |
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| DSYL | DOUBLE SOLID YELLOW LINE | DSYL |
| SSYL | SINGLE SOLID YELLOW LINE | SSYL |
| SBYL | SINGLE BROKEN YELLOW LINE | SBYL |
| | RETAINING WALL | |
| X | WIRE FENCE | X |
| | CHAIN LINK FENCE | |
| | WOOD FENCE | |
| | SIGN | |
| | MAILBOX | MB |
| | TRAFFIC FLOW | |
| | GASGATE | |
| | LIGHT POLE | |
| | BUILDING MOUNTED LIGHT | |
| | HYDRANT | |
| | WATER GATE | WV |
| | ELECTRIC MANHOLE | |
| | TELEPHONE MANHOLE | |
| S | SEWER MANHOLE | S |
| D | DRAIN MANHOLE | D |
| | CATCH BASIN | |
| E | TRANSFORMER PAD | E |
| | UTILITY POLE | |
| 200 | INDEX CONTOUR | 200 |
| 202 | INTERMEDIATE CONTOUR | 202 |
| | STONEWALL (BOUNDARY) | |
| | STONEWALL (INTERIOR) | |
| | ZONING BOUNDARY | XX |
| | EDGE OF WATER | |
| | LIMITS OF CLEARING / TREELINE | |
| | TREES | |
| | RIP-RAP | |

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DIG SAFE
NH ME NH RI VT
CALL BEFORE YOU DIG SAFE 1 DIG SAFE SYSTEM
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

CONTACT DIG SAFE 72 HOURS
PRIOR TO CONSTRUCTION

## LANDSCAPE CALCULATIONS:

STREET TREE LANDSCAPE:(CIELO DRIVE) SECTION 149-14(1)G(1)
REQUIRED MIN. ONE TREE PER 35', NOT MORE THAN SIX (6) FEET APART FOR INDIVIDUAL SHRUBS, AND NOT MORE THAN THREE (3) FEET BETWEEN INDIVIDUAL PERENNIALS AND GROUNDCOVERS OR PORTION THEREOF.

PROVIDED TREES: 17 TREES AT 35' O.C.

PROVIDED SHRUBS: 35 SHRUBS AT 6' O.C. & 72 PERENNIALS (GRASS) AT 3' O.C..

INTERIOR LANDSCAPE: SECTION 149-14(2)(a)
MINIMUM INTERIOR PARKING LOT LANDSCAPING REQUIREMENTS:
NUMBER OF PARKING SPACES IN LOT MINIMUM PERCENT OF INTERIOR LANDSCAPING.
0 TO 20 SPACES = NOT REQUIRED
21 TO 50 SPACES = 5%
51 TO 200 SPACES = 8%
GREATER THAN 200 SPACES = 10%

PARKING = 131 SPACES
REQUIRED: 8% (4,052 SF)
PROVIDED: 12.3% (6,234 SF)

INTERIOR LANDSCAPE: SECTION 149-14(2)(b)
MINIMUM 10' WIDE PLANTING ISLAND REQUIRED FOR SEPARATING EVERY FOUR ROWS OF PARKING WITH TREES AT 40' O.C. AND SHRUBS AT 5' O.C. BETWEEN TREES. TREES SHALL BE A MINIMUM CALIPER OF THREE AND A HALF (3.5) INCHES (MEASURED AT FOUR FEET ABOVE GRADE LEVEL). SHRUBS SHALL BE A MINIMUM HEIGHT OF TWO (2) FEET.

PROVIDED TREES: 7 TREES AT 40' O.C.

PROVIDED SHRUBS: 39 SHRUBS AT 5' O.C.

PERIMETER LANDSCAPE: SECTION 149-14(3)(a)
ALONG THE PERIMETER OF PARKING LOTS WITH 10 OR MORE SPACES, DECIDUOUS AND/OR EVERGREEN SHADE TREES SHALL BE PLANTED AT 35 FEET ON CENTER WITHIN THE BUFFER AREA REQUIRED BY § 153-17C. TREES SHALL BE A MINIMUM CALIPER OF THREE AND A HALF (3.5) INCHES (MEASURED AT FOUR FEET ABOVE GRADE LEVEL). SHRUBS SHALL BE A MINIMUM HEIGHT OF TWO (2) FEET.

PROVIDED TREES: 15 TREES AT 35' O.C. (2 EXISTING, 13 PROPOSED)

PROVIDED SHRUBS: 46 SHRUBS AT 5' O.C.

## LANDSCAPE LEGEND

| SYMBOL | QTY | BOTANICAL NAME<br>COMMON NAME | SIZE | REMARKS |
|---|---|---|---|---|
| | 8 | ACER RUBRUM 'OCTOBER GLORY'<br>OCTOBER GLORY RED MAPLE | 3 1/2" CAL. MIN. | B&B |
| | 7 | PLATANUS X ACREIFOLIA 'EXCLAMATION'<br>EXCLAMATION PLANETREE | 3 1/2" CAL. MIN. | B&B |
| | 4 | QUERCUS ALBA<br>WHITE OAK | 3 1/2" CAL. MIN. | B&B |
| | 5 | QUERCUS RUBRA<br>RED OAK | 3 1/2" CAL. MIN. | B&B |
| | 8 | TILIA TOMENTOSA 'STERLING'<br>STERLING LINDEN | 3 1/2" CAL. MIN. | B&B |
| | 7 | ULMUS A. 'VALLEY FORGE'<br>VALLEY FORGE AMERICAN ELM | 3 1/2" CAL. MIN. | B&B |
| | 6 | MALUS 'SNOWDRIFT'<br>SNOWDRIFT FLOWERING CRABAPPLE | 2 1/2" TO 3" CAL. | B&B |
| | 6 | PICEA ABIES<br>NORWAY SPRUCE | 6' TO 7' | B&B |
| | 3 | PINUS RESINOSA<br>RED PINE | 6' TO 7' | B&B |
| | 48 | CALAMAGRSTIS BRACHYTRICHA<br>KOREAN FEATHER REED GRASS | 2 GAL. | CONT. |
| | 62 | JUNIPERUS C. 'PFITZERIANA COMPACTA'<br>COMPACT PFITZER JUNIPER | 2' MIN. | CONT. |
| | 58 | JUNIPERUS H. 'BAR HARBOR'<br>BAR HARBOR JUNIPER | 3 GAL. | CONT. |
| | 21 | MYRICA PENSLYVANICA<br>NORTHERN BATBERRY | 2' TO 2 1/2' | CONT. |
| | 74 | MISCANTHUS S. 'VARIEGATA'<br>VARIEGATED SILVER GRASS | 3 GAL. | CONT. |
| | 86 | SPIRAEA JAPONICA 'LEMON PRINCESS'<br>LEMON PRINCESS SPIREA | 3 GAL. | CONT. |
| | 45 | SPIRAEA NIPPONICA 'SNOWMOUND'<br>SNOWMOUND SPIREA | 3' TO 3 1/2' | CONT. |
| | 34 | TAXUS C. 'GREENWAVE'<br>GREENWAVE YEW | 18" TO 24" | B&B |
| | 11 | TAXUS M. 'HICKSII'<br>HICK'S YEW | 2 1/2' TO 3' | B&B |
| | 9 | THUJA O. 'SMARAGD'<br>EMERALD GREEN ARBORVITAE | 4" TO 5" | B&B |

## LANDSCAPE NOTES

**(SEE DETAILS FOR ADDITIONAL NOTES)**

GENERAL

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS, LAWS, AND ORDINANCES HAVING JURISDICTION OVER THIS PROJECT SITE.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON PLANS BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION. LANDSCAPE QUANTITIES SHOWN ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN LANDSCAPE LEGEND.
4. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK AND VERIFY THAT THE PLANS IN THE CONTRACTOR'S POSSESSION ARE THE MOST CURRENT PLANS AVAILABLE AND ARE THE APPROVED PLAN SET FOR USE IN CONSTRUCTION.
5. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) [FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN] IN THE AMERICAN STANDARD FOR NURSERY STOCK (AS AMENDED) [ANSI Z60.1-1996].
6. ALL PLANTS SHALL BE FIRST CLASS AND SHALL BE REPRESENTATIVE OF THEIR NORMAL SPECIES AND/OR VARIETIES. ALL PLANTS MUST HAVE GOOD, HEALTHY, WELL-FORMED UPPER GROWTH AND A LARGE, FIBEROUS, COMPACT ROOT SYSTEM.
7. ALL PLANTS SHALL BE FREE FROM DISEASE AND INSECT PESTS AND SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS PERTAINING TO PLANT DISEASES AND INFESTATIONS.
8. ALL TREES SHALL BE BALLED AND BURLAPPED (B & B) UNLESS OTHERWISE NOTED OR APPROVED BY LANDSCAPE ARCHITECT.
9. ALL LANDSCAPED AREAS INCLUDING LAWNS SHALL BE PROVIDED WITH UNDERGROUND IRRIGATION. SEE IRRIGATION NOTES.
10. IF APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
11. ALL INVASIVE PLANT SPECIES IDENTIFIED IN CHAPTER AGR 3800, PURSUANT TO RSA 430:55 AND ALL NON-NATIVE PLANT SPECIES IDENTIFIED IN THE NEW HAMPSHIRE RESTRICTED INVASIVE PLANTS SPECIES/WATCH LIST ARE PROHIBITED.

GUARANTEE

THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE WORK FOR A PERIOD OF ONE YEAR, BEGINNING AT THE START OF THE MAINTENANCE PERIOD.

## IRRIGATION NOTES

1. THE IRRIGATION SYSTEM SHALL BE DESIGNED BY AN APPROVED IRRIGATION DESIGN/BUILD CONTRACTOR ACCEPTABLE TO THE OWNERS REPRESENATIVE.
2. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE IRRIGATION SYSTEM DESIGN AND SHOP DRAWINGS TO THE OWNER 30 DAYS PRIOR TO THE START OF CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING AND PROPOSED UTILITIES AND NOTIFY THE OWNER'S REPRESENTATIVE OF CONFLICTS.
4. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR A COMPLETE AND OPERABLE IRRIGATION SYSTEM AND SHALL FOLLOW ALL APPLICABLE CODES.
5. REFER TO ARCHITECTURAL PLANS FOR LOCATION OF THE IRRIGATION SYSTEM'S BUILDING CONNECTION AND CONTROLS.
6. FOLLOW ALL MANUFACTURER'S INSTRUCTIONS AND PRODUCT SPECIFICATIONS FOR INSTALLATION.

20 10 0 20
Graphic Scale

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|
| | | | | |

*TAX MAP H LOT 4-3*
SITE LAYOUT PLAN - PHASE 4C

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

*OWNER OF RECORD*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

*AND*

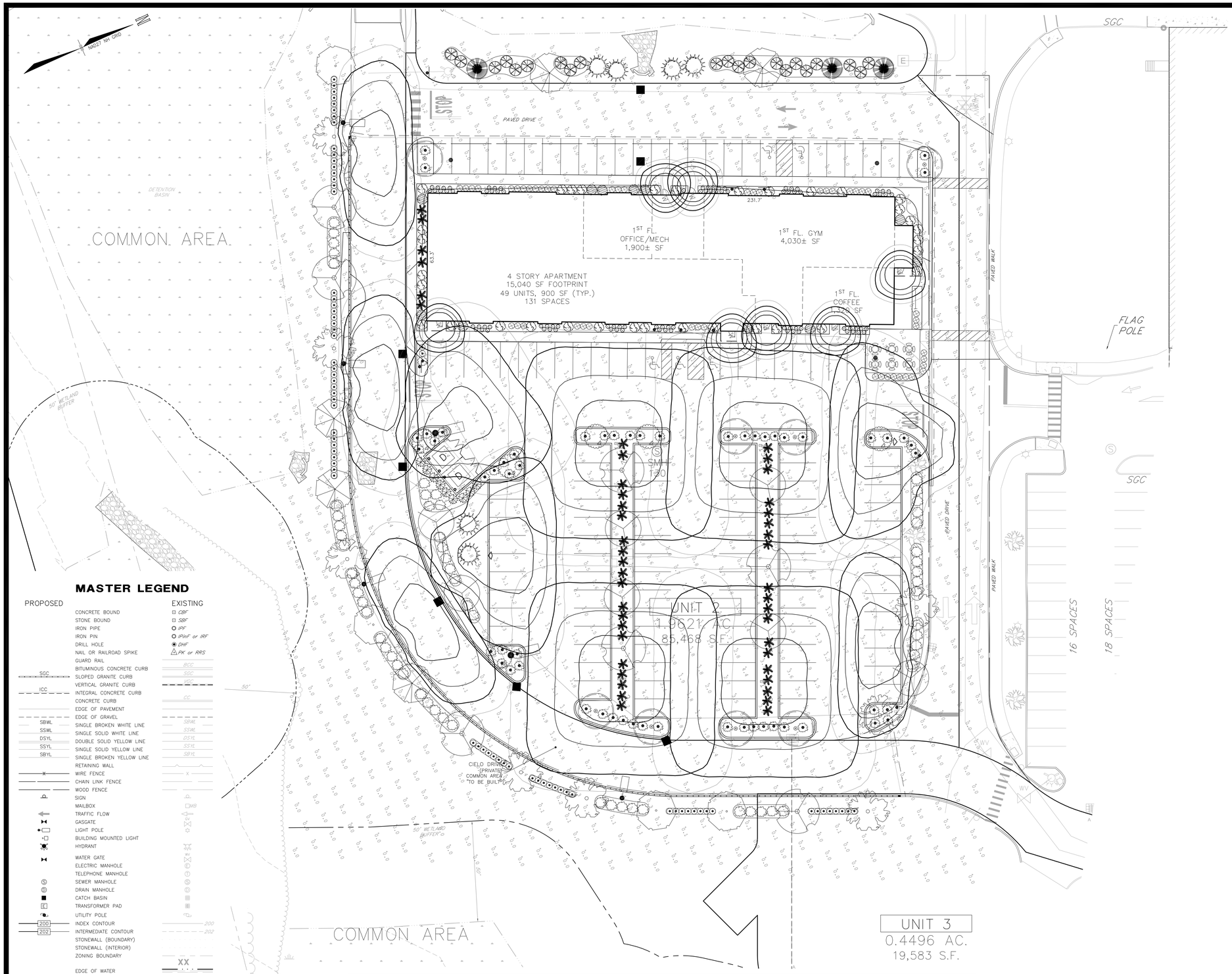
*APPLICANT/DEVELOPER*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

**SCALE: 1"=20'** **OCTOBER 18, 2022**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

| FILE | 46001.31 | DR | JMR | FB | 1927 | SHEET 7 OF 15 |
|---|---|---|---|---|---|---|
| | | CK | JK | CADFILE | 46001-31 CONCEPT | |




PARKING LOT

Illuminance (Fc)
Average = 1.75
Maximum = 4.5
Minimum = 0.5
Avg/Min Ratio = 3.50
Max/Min Ratio = 9.00

## MASTER LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | CONCRETE BOUND | CBF |
| | STONE BOUND | SBF |
| | IRON PIPE | IPF |
| | IRON PIN | IPinF or IRF |
| | DRILL HOLE | DHF |
| | NAIL OR RAILROAD SPIKE | PK or RRS |
| | GUARD RAIL | |
| SGC | BITUMINOUS CONCRETE CURB | BCC |
| | SLOPED GRANITE CURB | SGC |
| ICC | VERTICAL GRANITE CURB | VGC |
| | INTEGRAL CONCRETE CURB | |
| | CONCRETE CURB | CC |
| | EDGE OF PAVEMENT | |
| | EDGE OF GRAVEL | |
| SBWL | SINGLE BROKEN WHITE LINE | SBWL |
| SSWL | SINGLE SOLID WHITE LINE | SSWL |
| DSYL | DOUBLE SOLID YELLOW LINE | DSYL |
| SSYL | SINGLE SOLID YELLOW LINE | SSYL |
| SBYL | SINGLE BROKEN YELLOW LINE | SBYL |
| | RETAINING WALL | |
| | WIRE FENCE | X |
| | CHAIN LINK FENCE | |
| | WOOD FENCE | |
| | SIGN | |
| | MAILBOX | MB |
| | TRAFFIC FLOW | |
| | GASGATE | GA |
| | LIGHT POLE | |
| | BUILDING MOUNTED LIGHT | |
| | HYDRANT | |
| | WATER GATE | WV |
| | ELECTRIC MANHOLE | E |
| | TELEPHONE MANHOLE | T |
| | SEWER MANHOLE | S |
| | DRAIN MANHOLE | D |
| | CATCH BASIN | |
| | TRANSFORMER PAD | |
| | UTILITY POLE | |
| 200 | INDEX CONTOUR | 200 |
| 202 | INTERMEDIATE CONTOUR | 202 |
| | STONEWALL (BOUNDARY) | |
| | STONEWALL (INTERIOR) | |
| | ZONING BOUNDARY | |
| | EDGE OF WATER | |
| | LIMITS OF CLEARING / TREELINE | |
| | TREES | |
| | RIP-RAP | |

| Luminaire Schedule | | | | |
|---|---|---|---|---|
| Symbol | Qty | Label | Arrangement | Description |
| | 2 | T3 | Single | MRM-LED-07L-SIL-3-UNV-DIM-40-70CRI / 4SQS11G16SCXX (16' POLE MTD ON 1.5' BASE) |
| | 4 | T3-IL | Single | MRM-LED-07L-SIL-3-UNV-DIM-40-70CRI-IL / 4SQS11G16SCXX (16' POLE MTD ON 1.5' BASE) |
| | 1 | T4 | Single | MRM-LED-07L-SIL-FT-UNV-DIM-40-70CRI / 4SQS11G16SCXX (16' POLE MTD ON 1.5' BASE ) |
| | 4 | T5-2 | Back-Back | MRM-LED-07L-SIL-5W-UNV-DIM-40-70CRI / 4SQS11G16SCXX (16' POLE MTD ON 1.5' BASE) |
| | 7 | W | Single | WPSLS-01L-40 / WALL MTD 8' AFG |

This plan is for conceptual purposes only. It is not necessarily the result of a complete on-site survey, nor is it intended for construction uses. Locations of boundaries and wetlands are approximate, and not necessarily correct or accurate. Compliance with current regulations must be verified.

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UTILITIES UNDER GROUND PLANT DAMAGE PREVENTION SYSTEM
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20 10 0 20
Graphic Scale

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

TAX MAP H LOT 4-3
PHOTOMETRIC PLAN

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

OWNER OF RECORD
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

AND

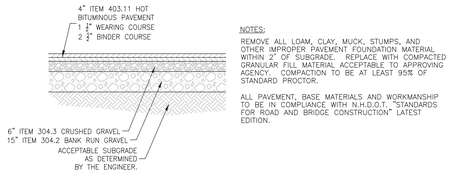
APPLICANT/DEVELOPER
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

SCALE: 1"=20' OCTOBER 18, 2022

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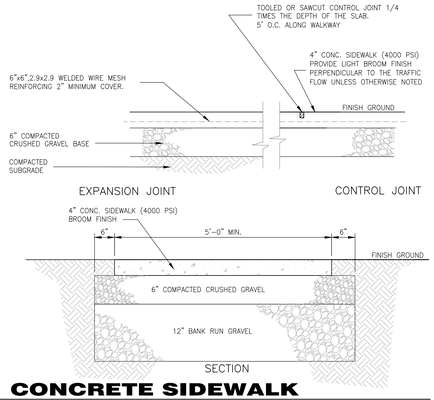

NOTES:

REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER PAVEMENT FOUNDATION MATERIAL WITHIN 2' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO APPROVING AGENCY. COMPACTION TO BE AT LEAST 95% OF STANDARD PROCTOR.

ALL PAVEMENT, BASE MATERIALS AND WORKMANSHIP TO BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION.

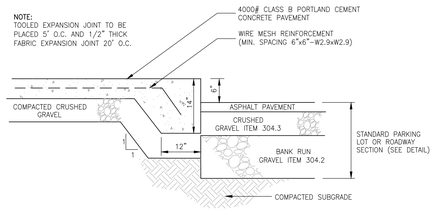
## TYPICAL PAVEMENT SECTION

NOT TO SCALE



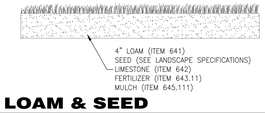

## CONCRETE SIDEWALK

NOT TO SCALE



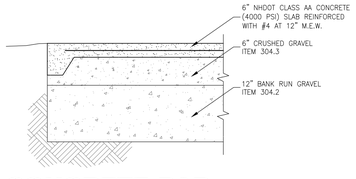

## CONCRETE CURB AT SIDEWALK

NOT TO SCALE



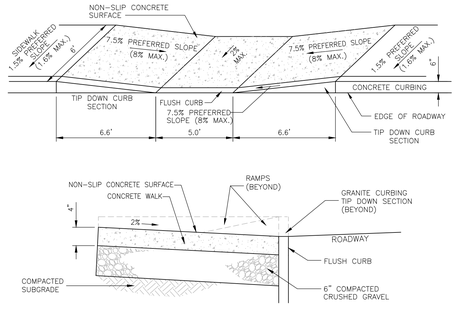

## LOAM & SEED

NOT TO SCALE




## CONCRETE PAD

NOT TO SCALE




## ACCESSIBLE RAMP RECESSED IN WALK

NOT TO SCALE

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NH ME NH RI VT
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

**DETAILS**

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

*OWNER OF RECORD*
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BEDFORD, NH 03110

*AND*

*APPLICANT/DEVELOPER*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

AS SHOWN

**OCTOBER 18, 2022**

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

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|---|---|---|---|---|---|---|
| | | CK | JK | CADFILE | 46001-31 CONCEPT | |

# GENERAL NOTES

1. IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
2. BARRELS, CONE SECTIONS AND CONCRETE GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AND SHALL CONFORM ENV-WQ 704.12 & 704.13.
3. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478-06.
4. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
5. MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
6. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
7. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
8. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
9. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT. APPROVED ELASTOMERIC SEALANTS ARE:

   SIKAFLEX-12-SL

   SONNEBORN BUILING PRODUCTS-SONOLASTIC SL-1
10. THE MINIMUM INTERNAL DIAMETER OF MANHOLES SHALL BE 48 INCHES. FOR SEWERS LARGER THAN 24-INCH DIAMETER, MANHOLE DIAMETERS SHALL BE INCREASED SO AS TO PROVIDE AT LEAST 12-INCHES OF SHELF ON EACH SIDE OF THE SEWER.
11. LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE TO ENV-WQ 704.17.
    (a) ALL MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST IN ACCORDANCE WITH THE ASTM C1244 STARNDARD IN EFFECT WHEN THE TESTING IS PERFORMED.
    (b) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
        1. THE INITIAL VACUUM GUAGE TEST PRESSURE SHALL BE 10 INCHES Hg.
        2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR 1-INCH Hg PRESSURE DROP TO 9 INCHES SHALL BE:
           A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP.
           B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP.
           C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.
    (c) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (b) ABOVE.
    (d) INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETE.
    (e) FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.
12. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL COMPLY WITH ASTM C32-05, CLAY OR SHALE, FOR GRADE SS HARD BRICK.
13. MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
    (a) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
    (b) 4.5 PARTS SAND, 1 PART CEMENT AND 0.5 PART HYDRATED LIME

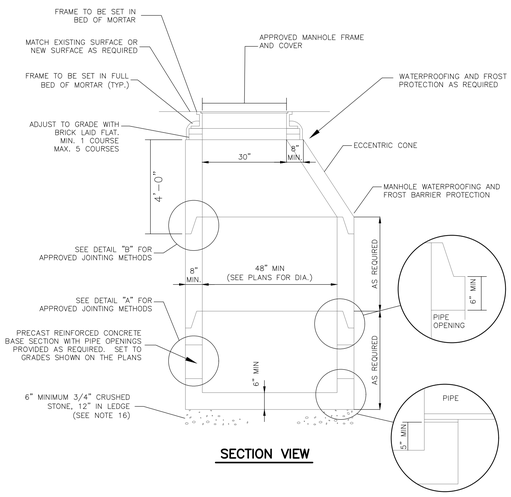
    CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05. HYDRATED LIME SHALL BE TYPE S CONFORMING TO ASTM C207-06 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES". SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO ASTM C33-03 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES".
14. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED OR PRECAST CONCRETE SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
15. FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN, CLASS 30, CONFORMING TO ASTM A48/48M AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH WORD (MINIMUM HEIGHT) LETTERS "SEWER" SHALL BE PLAINLY CAST INTO THE TOP SURFACE. THE CASTING SHALL BE OF EVEN GRAINED CAST IRON, SMOOTH, AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HOLES AND DEFECTS. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION.
16. BEDDING: PRECAST BASES SHALL BE PLACED ON A 6-INCH LAYER OF COMPACTED BEDDING MATERIAL THAT CONFORMS TO ASTM C33-03 NO. 67 STONE AND FREE FROM CLAY, LOAM AND ORGANNIC MATTER. THE EXCAVATION SHALL BE PROPERLY DEWATERED WHILE PLACING BEDDING MATERIAL AND SETTING OF THE BASE OR POURING CONCRETE. WATER-STOPS SHALL BE USED AT THE HORIZONTAL JOINT OF THE CAST-IN-PLACE MANHOLES.

    | | |
    |---|---|
    | 100% PASSING | 1" SCREEN |
    | 90-100% PASSING | 3/4" SCREEN |
    | 20-55% PASSING | 3/8" SCREEN |
    | 0-10% PASSING | #4 SIEVE |
    | 0-5% PASSING | #8 SIEVE |

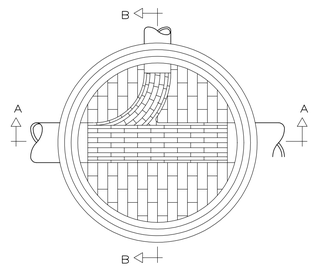
17. FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WIbHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION: (a) WITHIN 48 INCHES FOR REINFORCED CONCRETE PIPE (RCP). (b) WITHIN 60 INCHES FOR PVC PIPE LARGER THAN 15" DIAMETER.
18. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR DUCTILE IRON PIPE OR PVC PIPE UP THROUGH 15-INCH DIAMETER.
19. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS FOLLOWS:
    A. ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;
    B. CAST INTO WALL OR SECURRED WITH STAINLESS STEEL CLAMPS.
    C. ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH THE SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING.
    D. NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
20. THE INVERT OF THE INCOMING PIPE SHALL BE NO MORE THAN 6 INCHES ABOVE THE OUTGOING PIPE UNLESS A DROP ENTRY IS USED.

# CITY NOTES

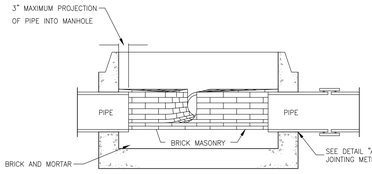
1. IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE.
2. SEWER MANHOLE DIAMETER SHALL BE AS INDICATED ON THE PLANS.
3. LEAKAGE TEST SHALL BE PERFORMEND IN ACCORDANCE WITH THE CITY OF DOVER AND NHDES REQUIREMENTS. INVERT AND SHELF TO BE PLACED AFTER PASSING THE LEAKAGE TEST.
4. CARE SHOULD BE TAKEN TO ENSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. INVERT BRICKS SHALL BE LAID ON EDGE. BASE SECTION TO BE FULL.
5. MANHOLE CHANNELS REQUIRING CHANGE IN ALIGNMENT ARE TO BE BUILT ON A SMOOTH RADIUS.
6. IN CROSS COUNTRY AREAS BEYOND ROADWAY RIGHT-OF-WAYS, THE MANHOLE FRAME ELEVATION SHALL BE A MINIMUM OF 6" ABOVE FINISHED GRADE. GRADE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE MANHOLE.
7. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE AO HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH (MINIMUM HEIGHT) LETTERS WITH THE WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH MANHOLE COVER.



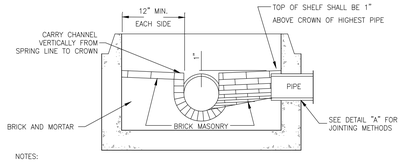

SECTION VIEW




TYPICAL MANHOLE - PLAN VIEW

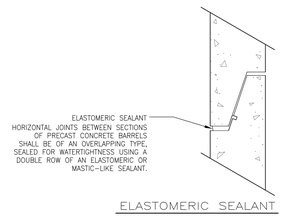



SECTION "A-A"




NOTES:
1. INVERT AND SHELF TO BE PLACED AFTER LEAKAGE TEST.
2. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. INVERT BRICKS SHALL BE LAID ON EDGE.
3. BASE SECTION TO BE FULL WALL THICKNESS AND MONOLITHIC TO A POINT 6" ABOVE THE PIPE CROWN.

SECTION "B-B"

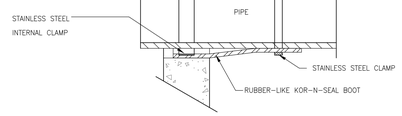



ELASTOMERIC SEALANT

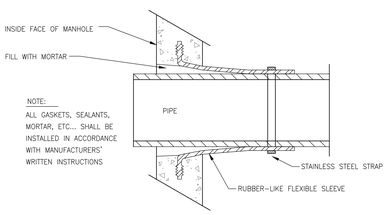
NOTES:
ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.

STATE OF NEW HAMPSHIRE APPROVED PRODUCTS
A) SIKAFLEX-12-SL
B) SONNEBORN BUILDING PRODUCTS SONOLASTIC SL-1

DETAIL "B" - HORIZONTAL JOINTS

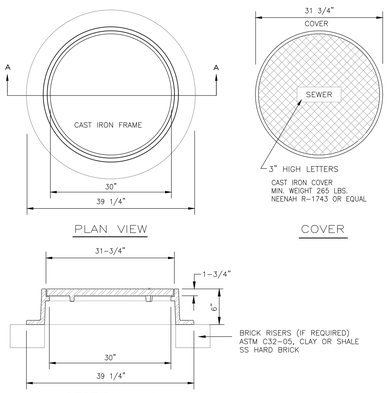



KOR-N-SEAL JOINT SLEEVE
(OR ACCEPTABLE SUBSTITUTE)




LOCK-JOINT FLEXIBLE MANHOLE SLEEVE
(OR ACCEPTABLE SUBSTITUTE)

DETAIL "A" - PIPE TO MANHOLE JOINTS



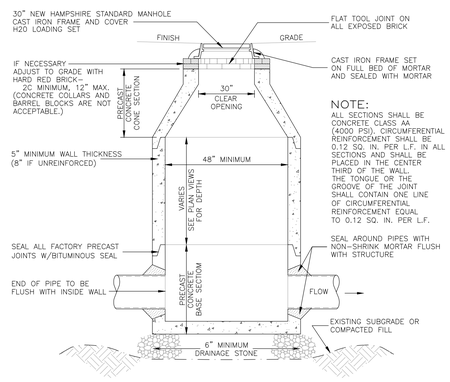

PLAN VIEW

COVER

SECTION A-A

MANHOLE FRAME & COVER
HEAVY DUTY

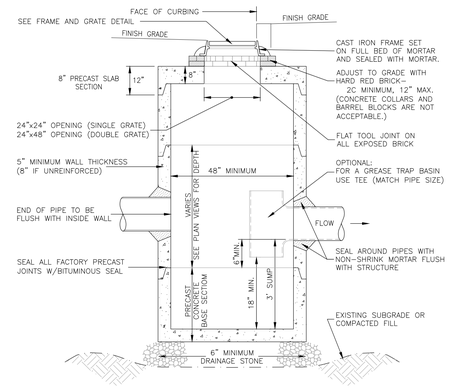
# TYPICAL SEWER MANHOLE
(NOT TO SCALE)




NOTE:
ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 PSI). CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER L.F. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER L.F.

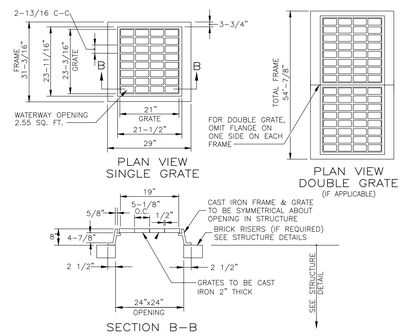
NOTE: ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C-478

## DRAIN MANHOLE
CONCENTRIC CONE — NOT TO SCALE




NOTE: ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C-478

## CATCH BASIN
SLAB TOP (FOR USE IN DOUBLE GRATE APPLICATIONS) — NOT TO SCALE

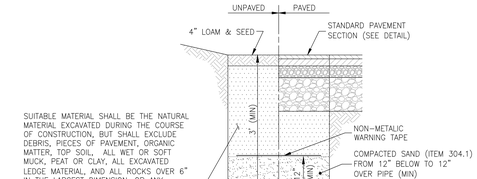



PLAN VIEW SINGLE GRATE

PLAN VIEW DOUBLE GRATE (IF APPLICABLE)

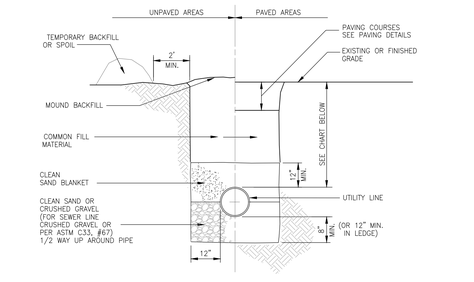
SECTION B-B

## FRAME AND GRATE
NHDOT TYPE B ALT 1 — NOT TO SCALE



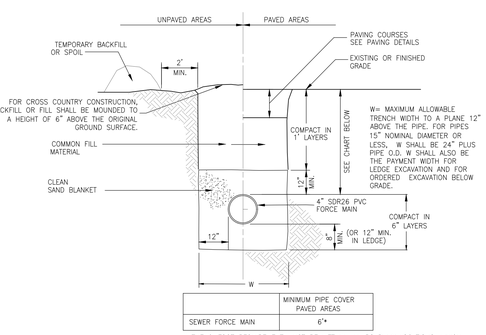

SUITABLE MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER 6" IN THE LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. SUITABLE MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 98% STANDARD PROCTOR DENSITY.

## UTILITY TRENCH
FOR FUTURE ELECTRICAL CAR CHARGING STATIONS — NOT TO SCALE




| UTILITY | MINIMUM PIPE COVER | |
|---|---|---|
| | PAVED AREAS | UNPAVED AREAS |
| SANITARY SEWER MAIN | 6' | 4' |
| STORM DRAIN | 2.5' | 2' |

## TRENCH
FOR SEWER AND DRAIN LINES — NOT TO SCALE




| | MINIMUM PIPE COVER PAVED AREAS |
|---|---|
| SEWER FORCE MAIN | 6'* |

* THE 6-FOOT REQUIREMENT MUST BE MET IN ALL ROADWAY LOCATIONS, WHICH INCLUDE TRAVELED WAYS, ROADWAY SHOULDERS, PARKING LOTS, DRIVEWAYS (PAVED OR UNPAVED) IN WHICH SNOW IS REMOVED.

## TRENCH
FOR SEWER FORCE MAIN — NOT TO SCALE

This plan is for conceptual purposes only. It is not necessarily the result of a complete on-site survey, nor is it intended for construction uses. Locations of boundaries and wetlands are approximate, and not necessarily correct or accurate. Compliance with current regulations must be verified.

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DETAILS

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

*OWNER OF RECORD*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

*AND*

*APPLICANT/DEVELOPER*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

AS SHOWN — **OCTOBER 18, 2022**

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

TFM Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
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| FILE | DR | CK | CADFILE | |
|---|---|---|---|---|
| 46001.31 | JMR | JK | 46001-31 CONCEPT | 1927 |

# GENERAL NOTES

1. MINIMUM SIZE PIPE FOR SEWER SERVICE, PER CITY OF DOVER PUBLIC WORKS AND ENGINEERING DEPARTMENT, SHALL BE SIX INCHES.

2. PIPE AND JOINT MATERIALS:
   A. PLASTIC SEWER PIPE
      1. PIPE AND FITTINGS UNLESS OTHERWISE NOTED SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

| ASTM STANDARDS | GENERIC PIPE MATERIAL | SIZES APPROVED |
|---|---|---|
| D3034 | *PVC (SOLID WALL) | 8" THROUGH 15" (SDR 35) |
| F679 | PVC (SOLID WALL) | 18" THROUGH 27" (T-1 & T-2) |
| F789 | PVC (SOLID WALL) | 4" THROUGH 18" (T-1 TO T-3) |
| F794 | PVC (RIBBED WALL) | 8" THROUGH 36" |
| D2680 | *ABS (COMPOSITES WALL) | 8" THROUGH 15" |

      *PVC: POLY VINYL CHLORIDE
      *ABS: ACRYLONITRILE-BUTADIENE-STYRENE

      2. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.

      ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-2680, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322).

      JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SC IN ACCORDANCE WITH ASTM D-2680, FORMING A CHEMICAL WELDED JOINT.

   B. DUCTILE-IRON PIPE, FITTINGS AND JOINTS.
      1. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE UNITED STATES OF AMERICA STANDARDS INSTITUTE:
         A21.50 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536 DUCTILE IRON CASTINGS.
         A21.51 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.
      2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO: A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS

3. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

4. JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER-TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.

5. TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE, FOLLOWING MANUFACTURERS' INSTRUCTIONS USING A BOLTED, CLAMPED OR EPOXY-CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER.

6. SEWER SERVICE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.

   THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4" INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.

7. TESTING: THE COMPLETED SEWER SERVICE SHALL BE SUBJECTED TO A THIRD-PARTY LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS (PRIOR TO BACKFILLING):

   A. AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.

   B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER, TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANOUT WITH A FLASHLIGHT.

   C. DRY FLUORESCENE DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWN-STREAM MANHOLE.

   LEAKAGE OBSERVED IN ANY ONE OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.

8. ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM TOILETS, SINKS, LAUNDRY, ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.

9. WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE.

10. BEDDING: CRUSHED STONE, FREE FROM CLAY, LOAM, ORGANIC MATERIAL, MEETING ASTM C33-67.

| | |
|---|---|
| 100% PASSING | 1 INCH SCREEN |
| 90%-100% PASSING | 3/4 INCH SCREEN |
| 20%-55% PASSING | 3/8 INCH SCREEN |
| 0%-10% PASSING | #4 SIEVE |
| 0%-5% PASSING | #8 SIEVE |

    WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.

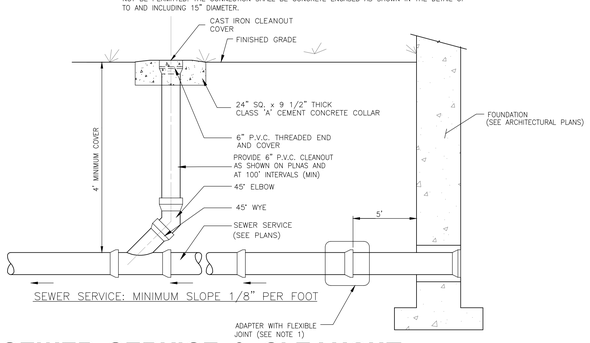
11. LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.

12. CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE SEWER CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.

NOTES:

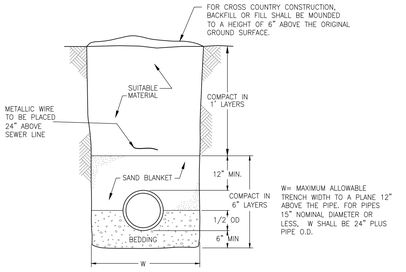
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2) TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE, FOLLOWING MANUFACTURERS' INSTRUCTIONS USING A BOLTED, CLAMPED OR EPOXY-CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER.



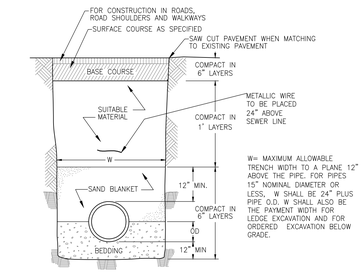

## SEWER SERVICE & CLEANOUT

NOT TO SCALE



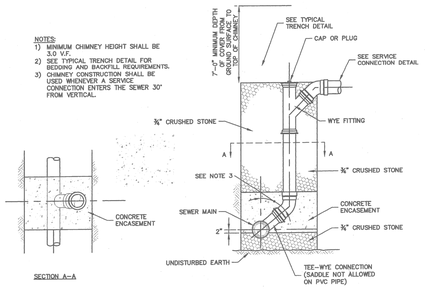

## EARTH CONSTRUCTION

NOT TO SCALE



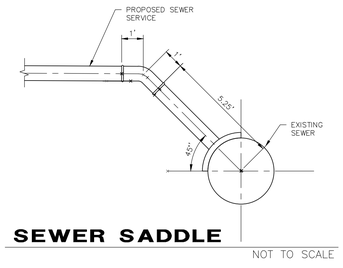

## LEDGE CONSTRUCTION

NOT TO SCALE




## SEWER SERVICE CHIMNEY

NOT TO SCALE




## SEWER SADDLE

NOT TO SCALE

# GRAVITY SEWER NOTES

1. MINIMUM SIZE PIPE FOR GRAVITY SEWER SHALL BE 8-INCHES.

2. PIPE AND JOINT MATERIALS FOR PLASTIC SEWER PIPE SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

| ASTM STANDARDS | GENERIC PIPE MATERIAL | SIZES APPROVED |
|---|---|---|
| D3034-04e | * PVC (SOLID WALL) | 8" THROUGH 15" (SDR 35) |
| F679-03 | PVC (SOLID WALL) | 18" THROUGH 27" (T-1 & T-2) |
| F794-03 | PVC (RIBBED WALL) | 8" THROUGH 36" |
| F1760-01(2005)e1 | PVC, RECYCLED | ALL DIAMETERS |

   *PVC: POLY VINYL CHLORIDE

3. PLASTIC SEWER PIPE SHALL HAVE A PIPE STIFFNESS RATING OF AT LEAST 46 POUNDS PER SQUARE INCH AT 5 PERCENT PIPE DIAMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTM D2412-02 DURING MANUFACTURE.

4. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212-96(a)(2003)e1 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.

5. DUCTILE-IRON PIPE, FITTINGS AND JOINTS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA).

   AWWA C151/A21.51-02 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536-84 (2004) DUCTILE IRON CASTINGS.

   AWWA C151/A21.51-02 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.

   JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO AWWA C151/A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS.

6. CONCRETE PIPE SHALL CONFORM TO AWWA C302-04.

7. PRESTRESSED CONCRETE CYLINDER PIPE AND FITTINGS SHALL CONFORM TO AWWA C301-99.

   JOINTS SEALS FOR CONCRETE CYLINDER PIPE SHALL BE OIL RESISTANT ELASTOMERIC MATERIAL CONFORMING TO ASWWA C301-99 SPECIFICATIONS.

8. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

9. GRAVITY SEWER PIPE TESTING SHALL BE AS FOLLOWS:

   ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.

   LOW PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:

      ASTM F1417-92(2005) "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW PRESSURE AIR".

      UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE".

10. ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED AND SHALL BE TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.

11. ALL PLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED NOT LESS THAN 30 DAYS FOLLOWING INSTALLATION.

12. THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5 PERCENT OF THE AVERAGE INSIDE DIAMETER.

13. TRENCH CONSTUCTION SHALL CONFORM TO THE FOLLOWING:

   TRENCH DIMENSIONS FOR SEWER PIPE LESS THAN 15 INCHES IN DIAMETER, THE ALLOWABLE TRENCH WIDTH AT A PLANE 12 INCHES ABOVE THE PIPE SHALL BE NO MORE THAN 36 INCHES AND FOR PIPE 15 INCHES AND LARGER, THE ALLOWABLE WIDTH SHALL BE EQUAL TO THE PIPES OUTSIDE DIAMETER PLUS 24 INCHES.

   PIPE TRENCH BEDDING MATERIAL AND FILL MATERIAL FOR EXCAVATION BELOW GRADE SHALL BE SCREENED GRAVEL OR CRUSHED STONE TO ASTM C33-03 STONE SIZE NO. 67. THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND FREE FROM ANY ORGANIC MATERIALS, GRADED SUCH THAT 100 PERCENT PASSED THE 1/2-INCH SIEVE AND A MAXIMUM OF 15 PERCENT PASSES A #200 SIEVE. IN LIEU OF A SAND BLANKET, A STONE ENVELOPE 6 INCHES THICK COMPLETELY AROUND THE PIPE USING 3/4-INCH STONE MAY BE USED.

   PIPE BEDDING MATERIAL SHALL EXTEND FROM A HORIZONTAL PLANE THROUGH THE PIPE AXIS TO 6-INCHES BELOW THE BOTTOM OF THE OUTSIDE SURFACE OF THE PIPE.

   PIPE SAND BLANKET MATERIAL SHALL COVER THE PIPE A MINIMUM OF 12 INCHES ABOVE THE CROWN OF THE OUTSIDE SURFACE.

   COMPACTION SHALL BE IN 12-INCH LAYERS FOR BEDDING AND BLANKET MATERIALS.

   BACKFILL MATERIAL SHALL BE IN 3-FOOT LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION WHERE THE FINAL 3-FEET SHALL BE COMPACTED IN 12-INCH LAYERS TO THE ROAD BASE SURFACE.

   TRENCH BACKFILL MATERIAL IN ROADWAY LOCATIONS SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION, EXCLUDING DEBRIS, PAVEMENT PIECES, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT, CLAY, EXCAVATED LEDGE, ROCKS OVER 6 INCHES IN THE LARGEST DIMENSION, OR ANY OTHER UNSUITABLE MATERIAL NOT APPROVED BY THE ENGINEER.

   TRENCH BACKFILL AT CROSS-COUNTRY LOCATIONS SHALL BE AS DESCRIBED ABOVE EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLE RECONSTRUCTION, WHEN NECESSARY WILL BE PRESERVED. BACKFILL SHALL BE MOUNDED 6-INCHES ABOVE ORIGINAL GROUND.

   BASE COURSE MATERIALS FOR TRENCH REPAIRS SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

   WHERE SHEETING IS PLACED ALONG SIDE OF THE PIPE AND EXTENDS BELOW MID-DIAMETER, THE SHEETING SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AND AT LEAST 3 FEET BELOW FINISH GRADE.

   TRENCHES FOR SEWER PIPES WITH SLOPES OVER 0.08 FEET PER FOOT AND TRENCHES FOR SEWER PIPES BELOW THE SEASONAL HIGH GROUND WATER LEVEL SHALL HAVE IMPERVIOUS TRENCH DAMS CONSTRUCTED EVERY 300 FEET TO PREVENT POTENTIAL DISTURBANCE TO PIPE BEDDING AND BLANKET MATERIALS.

This plan is for conceptual purposes only. It is not necessarily the result of a complete on-site survey, nor is it intended for construction uses. Locations of boundaries and wetlands are approximate, and not necessarily correct or accurate. Compliance with current regulations must be verified.

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DIG SAFE
ME NH RI VT
811 IT'S - LAW - DIG-SAFE - CALL or E
UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

**DETAILS**

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

*OWNER OF RECORD* — VC DOVER INVESTMENTS, LLC, 48 CONSTITUTION DRIVE, BEDFORD, NH 03110

*AND*

*APPLICANT/DEVELOPER* — VC DOVER INVESTMENTS, LLC, 48 CONSTITUTION DRIVE, BEDFORD, NH 03110

AS SHOWN

**OCTOBER 18, 2022**

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Traffic Engineers
Land Surveyors
Landscape Architects
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| FILE | 46001.31 | DR | JMR | FB | 1927 | SHEET 14 OF 15 |
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| | | CK | JK | CADFILE | 46001-31 CONCEPT | |

## LANDSCAPE NOTES

SITE AND SOIL PREPARATION

1. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR LEDGE, NOTIFY LANDSCAPE ARCHITECT/ENGINEER BEFORE PLANTING.

2. ALL DISTURBED AREAS & PLANTING AREAS, INCLUDING AREAS TO BE SODDED, SHALL RECEIVE THE FOLLOWING SOIL PREPARATION PRIOR TO PLANTING: A MINIMUM OF 6 INCHES OF LIGHTLY COMPACTED TOPSOIL SHALL BE INSTALLED OVER THE SUBSOIL IF TOPSOIL HAS BEEN REMOVED OR IS NOT PRESENT.

3. LOAM SHALL CONSIST OF LOOSE FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN TWO INCHES (2") IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.0. LOAM SHALL CONTAIN A MINIMUM OF TWO PERCENT (2%) AND A MAXIMUM OF FIVE PERCENT (5%) ORGANIC MATTER AS DETERMINED BY LOSS BY IGNITION. SOIL TEXTURE SHALL BE SANDY CLAY LOAM OR SANDY LOAM WITH CLAY CONTENT BETWEEN 15 AND 25%, AND A COMBINED CLAY/SILT CONTENT OF NO MORE THAN 55%. NOT MORE THAN SIXTY-FIVE PERCENT (65%) SHALL PASS A NO. 200 SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH ASTM D1140. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE #4 SIEVE CONSIST OF CLAY SIZE PARTICLES.

4. NATURAL TOPSOIL NOT CONFORMING TO THE PARAGRAPH ABOVE OR CONTAINING EXCESSIVE AMOUNTS OF CLAY OR SAND SHALL BE TREATED BY THE CONTRACTOR TO MEET THOSE REQUIREMENTS.

5. SUBMIT TEST RESULTS OBTAINED FROM SOURCE TO ENGINEER/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO SPREADING OPERATIONS.

6. APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT TO USE THE TOPSOIL WILL DEPEND UPON THE RESULTS OF THE SOIL TESTS.

7. THE BURDEN OF PROOF OF SOIL AMENDMENT INSTALLATION RESTS WITH THE CONTRACTOR. SOIL TESTS MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE IN ORDER TO CONFIRM AMENDMENT INSTALLATION.

SEEDING

1. ROUGH GRADING SHALL BE COMPLETED PRIOR TO THE START OF PLANTING IN ANY GIVEN AREA OF THE PROJECT SITE.

2. SEEDING SHALL BE DONE BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 15, EXCEPT FOR RESEEDING OF BARE SPOTS AND MAINTENANCE. ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PAVING OR AREAS THAT HAVE NOT BEEN OTHERWISE DEVELOPED SHALL BE SEEDED OR SODDED. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. AFTER OCTOBER 15 DISTURBED SOILS SHALL BE PROTECTED IN ACCORDANCE WITH THE WINTER CONSTRUCTION NOTES.

ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

PARK SEED MIX (NHDOT TYPE 15) MIN. 120 LBS/ACRE:

| | |
|---|---|
| 33% CREEPING RED FESCUE | (MIN. 40 LBS/ACRE) |
| 42% PERENNIAL RYEGRASS | (MIN. 50 LBS/ACRE) |
| 21% KENTUCKY BLUEGRASS | (MIN. 25 LBS/ACRE) |
| 4% REDTOP | (MIN. 5 LBS/ACRE) |

TEMPORARY LAWN MIX: (MIN. 47 LBS/ACRE)
100% ANNUAL RYE

SLOPE SEED (WF) (NHDOT TYPE 45) MIX 3:1 OR GREATER SLOPES (MIN. 95 LBS/ACRE):

| | |
|---|---|
| 38% CREEPING RED FESCUE | (MIN. 35 LBS/ACRE) |
| 32% PERENNIAL RYEGRASS | (MIN. 30 LBS/ACRE) |
| 5% REDTOP | (MIN. 5 LBS/ACRE) |
| 5% ALSIKE CLOVER | (MIN. 5 LBS/ACRE) |
| 5% BIRDSFOOT TREFOIL | (MIN. 5 LBS/ACRE) |
| 3% LANCE-LEAF COREOPSIS | (MIN. 4 LBS/ACRE) |
| 3% OXEYE DAISY | (MIN. 3 LBS/ACRE) |
| 3% BLACKEYED SUSAN | (MIN. 4 LBS/ACRE) |
| 3% WILD LUPINE | (MIN. 4 LBS/ACRE) |

SLOPE SEED (NHDOT TYPE 44) MIX 3:1 OR GREATER SLOPES (MIN. 80 LBS/ACRE):

| | |
|---|---|
| 44% CREEPING RED FESCUE | (MIN. 35 LBS/ACRE) |
| 38% PERENNIAL RYEGRASS | (MIN. 30 LBS/ACRE) |
| 6% REDTOP | (MIN. 5 LBS/ACRE) |
| 6% ALSIKE CLOVER | (MIN. 5 LBS/ACRE) |
| 6% BIROSFOOT TREFOIL | (MIN. 5 LBS/ACRE) |

PLANTING

1. EXCAVATE PITS, PLANTERS, BEDS AND TRENCHES WITH VERTICAL SIDES AND WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.

2. ANY LEDGE OR RUBBLE MATERIAL SHALL BE FRACTURED TO A DEPTH OF 3 FEET AND EXCAVATED TO A DEPTH OF 30 INCHES FOR TREE POCKETS AND 18 INCHES FOR SHRUB BEDS. THIS PROCEDURE SHALL BE HANDLED BY THE SITE CONTRACTOR. SITE TOPSOIL SHALL BE DEPOSITED IN ALL EXCAVATED POCKETS.

3. DISPOSE OF SUBSOIL REMOVED FROM PLANTING EXCAVATIONS. DO NOT MIX WITH PLANTING SOIL OR USE AS BACKFILL.

4. FILL EXCAVATIONS FOR TREES AND SHRUBS WITH WATER AND ALLOW TO PERCOLATE OUT BEFORE PLANTING.

5. DISH TOP OF BACKFILL TO ALLOW FOR MULCH – PLANT SAUCERS SHALL BE AS SHOWN ON DETAIL SHEETS; 6' DIAMETER FOR ALL DECIDUOUS TREES, AND FOR EVERGREEN TREES A RADIUS 2' BEYOND THE OUTER MOST BRANCHES.

6. MULCH TREES, SHRUBS, PLANTERS AND BEDS. PROVIDE NOT LESS THAN 3" THICKNESS OF BARK MULCH, 3/8"–2" OF WIDTH, AND WORK INTO TOP OF BACKFILL. FINISH LEVEL WITH ADJACENT FINISH GRADES AS DIRECTED IN THE FIELD.

7. TREEGATOR WATERING SYSTEM OR APPROVED EQUAL SHALL BE INSTALLED FOR ALL DECIDUOUS TREES AT TIME OF PLANTING AND REMOVED BEFORE FROST. WATERING RATE TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.

8. ALL PLANT MATERIALS SHALL HAVE DEAD OR DAMAGED BRANCHES REMOVED AT TIME OF PLANTING. ALL TAGS AND RIBBONS SHALL BE REMOVED AT THIS TIME.

9. THE CONTRACTOR SHALL REQUEST A FINAL OBSERVATION BY THE OWNER'S REPRESENTATIVE UPON COMPLETION OF INSTALLATION.

## LANDSCAPE MAINTENANCE

LAWN

1. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE LAWN IS ESTABLISHED, BUT NOT LESS THAN THE FOLLOWING PERIODS:

   A. SEEDED LAWNS: 60 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.

      1. WHEN FULL MAINTENANCE PERIOD HAS NOT ELAPSED BEFORE END OF PLANTING SEASON, OR IF LAWN IS NOT FULLY ESTABLISHED, CONTINUE MAINTENANCE DURING NEXT PLANTING SEASON.

   B. SODDED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
   C. PLUGGED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
   D. SPRIGGED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.

2. MAINTAIN AND ESTABLISH LAWN BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND OTHER OPERATIONS. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH LAWN.

   A. IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS, ADD NEW MULCH. ANCHOR AS REQUIRED TO PREVENT DISPLACEMENT.

3. WATERING: PROVIDE AND MAINTAIN TEMPORARY PIPING, HOSES, AND LAWN-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND KEEP LAWN UNIFORMLY MOIST TO A DEPTH OF FOUR INCHES (100 mm).

   A. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
   B. WATER LAWN AT A MINIMUM RATE OF ONE INCH (25 mm) PER WEEK.

4. MOW LAWN AS SOON AS TOP GROWTH IS TALL ENOUGH TO CUT. REPEAT MOWING TO MAINTAIN SPECIFIC HEIGHT WITHOUT CUTTING MORE THAN 40 PERCENT OF GRASS HEIGHT. REMOVE NO MORE THAN 40 PERCENT OF GRASS-LEAF GROWTH IN INITAL OR SUBSEQUENT MOWINGS. DO NOT DELAY MOWING UNTIL GRASS BLADES BEND OVER AND BECOME MATTED. DO NOT MOW WHEN GRASS IS WET. SCHEDULE INITIAL AND SUBSEQUENT MOWINGS TO MAINTAIN THE FOLLOWING GRASS HEIGHT.

5. LAWN POSTFERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY.

   BEST PRACTICES TO MINIMIZE ENVIRONMENTAL IMPACTS SUCH AS THE USE OF LOW PHOSPHOROUS FERTILIZER AND SLOW RELEASE NITROGEN, SHALL BE USED.

MEADOW

1. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE MEADOW IS ESTABLISHED, BUT FOR NOT LESS THAN 40 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.

2. MAINTAIN AND ESTABLISH MEADOW BY WATERING, WEEDING, MOWING, TRIMMING, REPLANTING, AND OTHER OPERATIONS. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH.

3. WATERING: PROVIDE AND MAINTAIN TEMPORARY PIPING, HOSES, AND LAWN-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND KEEP MEADOW UNIFORMLY MOIST.

   A. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
   B. WATER LAWN AT A MINIMUM RATE OF 1/2 INCH (13 mm) PER WEEK FOR 4 WEEKS.

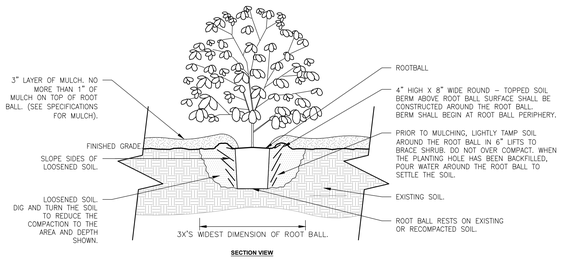
TREES AND SHRUBS:

1. PRUNING SHOULD BE STARTED EARLY AND KEPT UP AT REGULAR INTERVALS. TREES SHOULD BE PRUNED AND SHAPED TO AVOID SPLITTING LATER IN LIFE. BROKEN TOPS AND BRANCHES SHOULD BE REMOVED AS SOON AS POSSIBLE AFTER INJURY. BROKEN, WEAK OR DISEASED BRANCHES SHOULD BE REMOVED FIRST, DEAD BRANCHES SECOND AND HEALTHY BRANCHES LAST.

2. TREES AND SHRUBS SHOULD BE PROTECTED AGAINST DAMAGE INCURRED WITH LAWN MOWERS AND GARDEN EQUIPMENT. KEEPING GRASS AWAY FROM TREE TRUNKS WITH THE USE OF MULCH IS RECOMMENDED.

3. THE USE OF ROAD SALT AROUND TREES AND SHRUBS SHOULD BE AVOIDED OR MINIMIZED.

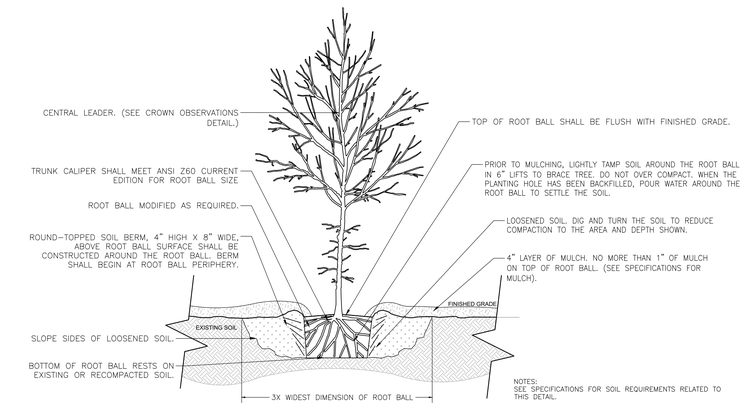
4. LANDSCAPED AREAS SHALL BE ROUTINELY MAINTAINED FREE OF DEBRIS AND LITTER. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. MAINTAINENCE SHALL INCLUDE THE REPLACEMENT OF ALL DEAD PLANT MATERIAL WITHIN THE GUARANTEED CONTRACT PERIOD.




SECTION VIEW

## SHRUB PLANTING

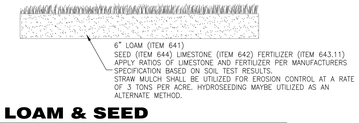
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SECTION VIEW

## TREE WITH BERM

NOT TO SCALE




## LOAM & SEED

NOT TO SCALE

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DIG SAFE
MR ME NH RI VT
DIG SAFE
UTILITIES, UNDER GROUND, PLANT DAMAGE PREVENTION SYSTEM

CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

**DETAILS**

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

| OWNER OF RECORD | AND | APPLICANT/DEVELOPER |
|---|---|---|
| VC DOVER INVESTMENTS, LLC<br>48 CONSTITUTION DRIVE<br>BEDFORD, NH 03110 | | VC DOVER INVESTMENTS, LLC<br>48 CONSTITUTION DRIVE<br>BEDFORD, NH 03110 |

AS SHOWN

**OCTOBER 18, 2022**

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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| FILE | 46001.31 | DR | JMR | FB | 1927 | SHEET 15 OF 15 |
|---|---|---|---|---|---|---|
| | | CK | JK | CADFILE | 46001-31 CONCEPT | |

## CONSTRUCTION NOTES

1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF DOVER, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTION AT LEAST 48 HOURS IN ADVANCE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (800-344-7233) AT LEAST 72 HOURS BEFORE DIGGING.
4. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE N.H.D.O.T. STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
5. ON-SITE WATER DISTRIBUTION SHALL BE TO CITY OF DOVER STANDARDS AND SPECIFICATIONS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5 FEET COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10 FEET MINIMUM.
6. SANITARY SEWER SHALL BE CONSTRUCTED TO THE STANDARDS AND SPECIFICATIONS AS SHOWN ON THESE PLANS. ALL SEWER MAINS AND FITTINGS SHALL BE PVC AND SHALL CONFORM TO ASTM F 679 (SDR 35 MINIMUM). SANITARY MANHOLES SHALL CONFORM TO N.H.D.E.S. WATER SUPPLY AND POLLUTION CONTROL DIVISION STANDARDS AND SPECIFICATIONS SHOWN HEREON. ALL STRUCTURES TO BE H-20 DESIGN.
7. STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. ALL PIPE MATERIAL SHALL BE REINFORCED CONCRETE AND CONFORM TO AASHTO M170 CLASS IV REINFORCED CONCRETE PIPE. CONSTRUCTION METHODS SHALL CONFORM TO N.H.D.O.T. STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO N.H.D.O.T. STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED. ALL STRUCTURES TO BE H-20 DESIGN.
8. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN IN THE PLANS THROUGHOUT THE DURATION OF THE PROJECT. 10. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT DISCREPANCIES TO THE ENGINEER.

## CONSTRUCTION SEQUENCE NOTES

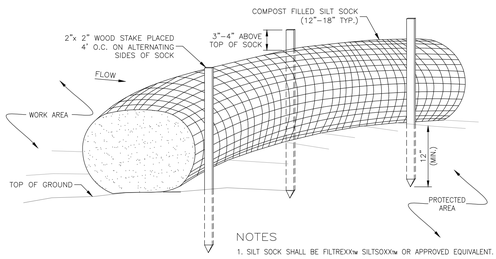
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. CUT AND CLEAR TREES WITHIN AREA OF DISTURBANCE UNLESS OTHERWISE NOTED.
3. CONSTRUCT TEMPORARY AND PERMANENT EROSION CONTROL FACILITIES PRIOR TO ANY EARTH MOVING OPERATION.
4. ROUGH GRADE SITE OR PHASED WORK AREA. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED NO LATER THAN 72 HOURS AFTER CONSTRUCTION ACTIVITY CEASES. IF EARTHWORK TEMPORARILY CEASES ON A PORTION OF OR THE ENTIRE SITE, AND WILL NOT RESUME WITHIN 21 DAYS, THE AREA SHALL BE STABILIZED.

   AN AREA SHALL BE CONSIDERED STABILIZED IF:
   A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED, OR
   D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
5. CONSTRUCT CULVERTS, DETENTION BASINS AND TREATMENT SWALES. PLACE HEADWALLS, RIP-RAP AND OTHER DRAINAGE FACILITIES ACCORDING TO PLAN. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS/BASINS PRIOR TO DIRECTING FLOW TO THEM.
6. INSTALL ALL UNDERGROUND UTILITIES.
7. CONSTRUCT BUILDINGS.
8. CONSTRUCT PARKING AND FINISH GRADE SITE ACCORDING TO PLAN. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
9. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES PERIODICALLY AND IMMEDIATELY AFTER STORM EVENTS.
10. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
11. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE ALL AREAS ARE STABILIZED WITH A SUITABLE STAND OF GRASS, PAVEMENT OR COMPACTED GRAVELS.

* REFER TO THE STORM WATER MANAGEMENT PLAN FOR EROSION CONTROL MEASURES AND SPECIFIC INFORMATION.

## GENERAL NOTES

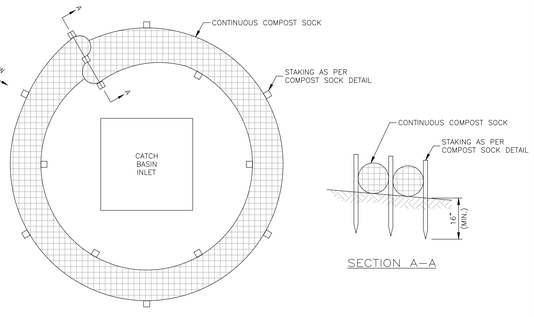
1. ALL IN PAVEMENT MANHOLES SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
2. WHERE DEPTH OF COVER IS LESS THAN 3 FEET CLASS V REINFORCED CONCRETE PIPE SHALL BE USED.
3. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
5. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
6. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THESE DETAILS SERVE AS A GUIDE ONLY.
7. REFER TO THE TOWN STANDARD DETAILS, LATEST REVISION, FOR ADDITIONAL INFORMATION AND CRITERIA.
8. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS PRIOR TO DIRECTING FLOW TO THEM.
9. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.




NOTES
1. SILT SOCK SHALL BE FILTREXX® SILTSOXX® OR APPROVED EQUIVALENT.
2. SEE SPECIFICATIONS FOR SOCK SIZE AND COMPOST FILL REQUIREMENTS.
3. SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED AS NEEDED.
4. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.

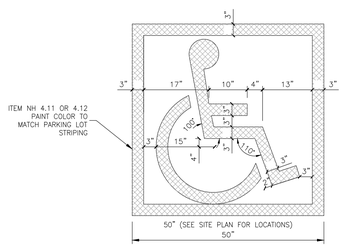
## SILT SOCK

NOT TO SCALE



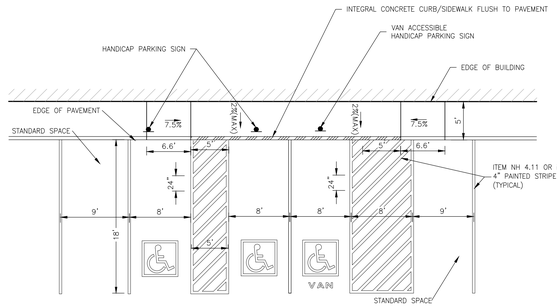

## COMPOST SOCK INLET PROTECTION

AT CATCH BASIN — NOT TO SCALE




## PAINTED HANDICAP SYMBOL

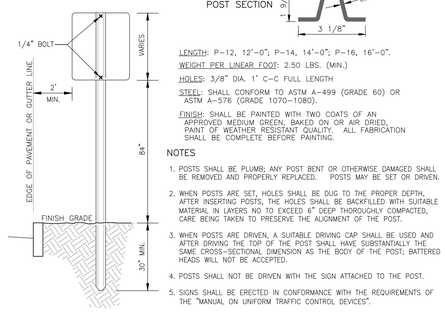
NOT TO SCALE




## ACCESSIBLE STRIPING AND RAMP ALONG WALK

NOT TO SCALE




LENGTH: P-12, 12'-0"; P-14, 14'-0"; P-16, 16'-0".

WEIGHT PER LINEAR FOOT: 2.50 LBS. (MIN.)

HOLES: 3/8" DIA. 1" C-C FULL LENGTH

STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070-1080).

FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN, BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

NOTES
1. POSTS SHALL BE PLUMB; ANY POST BENT OR OTHERWISE DAMAGED SHALL BE REMOVED AND PROPERLY REPLACED. POSTS MAY BE SET OR DRIVEN.
2. WHEN POSTS ARE SET, HOLES SHALL BE DUG TO THE PROPER DEPTH, AFTER INSERTING POSTS, THE HOLES SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN LAYERS NO TO EXCEED 6" DEEP THOROUGHLY COMPACTED, CARE BEING TAKEN TO PRESERVE THE ALIGNMENT OF THE POST.
3. WHEN POSTS ARE DRIVEN, A SUITABLE DRIVING CAP SHALL BE USED AND AFTER DRIVING THE TOP OF THE POST SHALL HAVE SUBSTANTIALLY THE SAME CROSS-SECTIONAL DIMENSION AS THE BODY OF THE POST; BATTERED HEADS WILL NOT BE ACCEPTED.
4. POSTS SHALL NOT BE DRIVEN WITH THE SIGN ATTACHED TO THE POST.
5. SIGNS SHALL BE ERECTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
6. WHEN SIGN IS IN PLACE NO PART OF POST SHALL EXTEND ABOVE THE SIGN.
7. DIMENSIONS SHOWN ARE NOMINAL.
8. ALTERNATE SECTIONS MUST BE APPROVED PRIOR TO USE.

## TRAFFIC SIGN POST IN GRADE

NOT TO SCALE

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DIG SAFE
MR ME NH RI VT
DIG-SAFE
UTILITIES, UNDER GROUND, PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

| REV. | DATE | DESCRIPTION | DR | CK |
|---|---|---|---|---|

**DETAILS**

# MIXED USE DEVELOPMENT

NH ROUTE 108 AND MAST ROAD
DOVER, NEW HAMPSHIRE

*OWNER OF RECORD*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

*AND*

*APPLICANT/DEVELOPER*
VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NH 03110

AS SHOWN — **OCTOBER 18, 2022**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
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Scientists

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| PROJ. | 46001.31 | DR | JMR | FB | 1927 | SHEET 11 OF 15 |
|---|---|---|---|---|---|---|
| | | CK | JK | CADFILE | 46001-31 CONCEPT | |




WEST ELEVATION

SCALE 1/8" = 1'-0"




NORTH ELEVATION

SCALE 1/8" = 1'-0"

| Issue Dates | |
|---|---|
| 3/10/2022 | Preliminary |
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| | |

BURNELL JOHNSON
A R C H I T E C T S
80 STARK STREET
MANCHESTER, N.H.
03101
( 603 ) 625-5098
( 603 ) 625-5107 FAX

VC Dover Investments LLC

DOVER, NEW HAMPSHIRE

West & North Elev

P-06



EAST ELEVATION

SCALE 1/8" = 1'-0"



SOUTH ELEVATION

SCALE 1/8" = 1'-0"

| Issue Dates | |
|---|---|
| 3/10/2022 | Preliminary |
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BURNELL JOHNSON

A R C H I T E C T S

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03101


VC Dover Investments LLC

DOVER, NEW HAMPSHIRE

P-07




Rendering from North West

BURNELL △ JOHNSON
A R C H I T E C T S
80 STARK STREET MANCHESTER, N.H.
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VC Dover Investments LLC

DOVER, NEW HAMPSHIRE

P-01

# City of Dover, New Hampshire
# SITE REVIEW APPLICATION

[Revision Date: July 1, 2021]

| *Office Use Only* | Project #: | | Date Received: | |
|---|---|---|---|---|
| | Amount Paid: | | Time Received: | |

## APPLICANT AND OWNER INFORMATION

Name of Applicant: Scott Bradley-Charter Food North, LLC Telephone # 423-438-0216

Address of Applicant: P.O. Box 430, Talbott, TN 37877

E-Mail Address: sbradley@charterfoods.net

Name of Property Owner (*if different from applicant*): VC Dover Investment, LLC Telephone # 603-472-4488

Address of Property Owner: 48 Constitution Drive, Bedford, NH 03110

## PROPERTY INFORMATION

Address of Property: Durham Rd. and Grapevine Dr.

Assessor's Map # H Lot(s) # 4-3

Zoning District(s) C-Commercial Overlay District(s) _____

Size of Parcel: 54,340 sq. ft. 1.25 ac. Property Deed: Book 3496 Page: 733

Existing Use of Property: Open field

## SITE PLAN INFORMATION

Describe Proposed Use: New Taco Bell drive-thru resturant with parking

Area of Parcel to be Developed: 49,658 sq. ft.

If Multi-family Residential: Number of Units _____ & Buildings Proposed _____

If lodging: Number of Units _____ & number of Buildings _____

Number of Parking Spaces: Existing 0 Proposed 21

Highway Access (check where applicable): X City Street X State Highway

Number of Employees Total: 7 In Maximum Shift: 4

Disposition of Parcel:

Building Footprint 2,550 sq. ft.

Total Building Area 2,550 sq. ft.

Paved Area 18,787 sq. ft.

Building Setbacks:

Front Yard 30 ft.

Rear Yard 15 ft.

Side Yard: Right 12 ft. Left 12 ft.

City Water? X Yes ___ No How far is city water from the property? At R/W Line

City Sewer? X Yes ___ No How far is city sewer from the property? At R/W Line

**TRANSFER OF DEVELOPMENT RIGHTS INFORMATION**

**Type of TRANSFER OF DEVELOPMENT RIGHT REQUEST (Check All That Apply):**

□ Residential □ Residential (reduced size) □ Industrial | □ Purchase □ Land Preservation

**Relief sought (Check All That Apply):**

□ Lot Size □ Frontage □ Setback □ 30' Buffer □ Increase by _____ units

Describe Proposed Use or Activity that requires TDR; describe any impacts and document mitigation:

**BUILDING INFORMATION**

Type of Building to be Built: Drive-thru restaurant

Height of Building: 23 Feet Finished Floor Elevation: 109.00

Number of Seats (where applicable) 52 seats

Estimated value of construction: $1.3 mil Refuse removal: Public/(Private) (circle one)

**WAIVER REQUESTS**

Site Review Regulations section(s) to be waived: Stormwater management and traffic

Justification for waiver request(s) (*attach additional sheets as needed*):

Overall subdivision master stormwater basin includes the watershed from this property. Owner's developer to provide updated storm calculations.

Overall traffic report was performed for overall sub division by developer's engineer and included this parcel.

**SURVEYOR INFORMATION**

Name of Surveyor and Company (Licensed in N.H.) McEneaney Survey Associates

Address PO Box 681-24 Chestnut Street Dover, NH Telephone #: 603-742-0911

Professional License #: 661 E-mail address: _____

**ENGINEER INFORMATION**

Name of Engineer and Company (Licensed in N.H.) Chris Bednar-Karpinski Engineering

Address 3135 Euclid Ave Cleveland, OH 44115 Telephone #: 216-391-3700

Professional License #: 17258 E-mail address: cbednar@karpinskieng.com

**ARCHITECT INFORMATION**

Name of Architect and Company (Licensed in N.H.) Kathleen Day

Address 8535 Ferry Rd. Waynesville, OH 45068 Telephone #: 617-331-2545

Professional License #: 4065 E-mail address: kathleendayarchitect@gmail.com

**LANDSCAPE ARCHITECT INFORMATION**

Name of Landscape Architect and Company (Licensed in N.H.) Kathleen Day

Address 8535 Ferry Rd. Waynesville, OH 45068 Telephone #: 617-331-2545

Professional License #: 4065 E-mail address: kathleendayarchitect@gmail.com

**SOIL SCIENTIST INFORMATION** (wetlands)

Name of Soil Scientist and Company (Licensed in N.H.) Damon E. Burt

Address 38 Garland Road, Stafford NH 03884 Telephone #: 603-969-5574

Professional License #: 163 E-mail address: frenvironmental@gmail.com

**CONSERVATION EASEMENT HOLDER**

Name of Easement Holder: _____ Telephone #_____

Address Easement Holder: _____

## SIGNATURES

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. Furthermore, I/we submit that the existing conditions sheet of the plan represents the lot in question, and that no alteration of the site shall take place during Planning Board review up to and including the pre-construction meeting. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner: Dylan Cuneo, Manager Date: 11/01/2022

Signature of Applicant (*if different from owner*): Date: 10/31/2022

Signature of Agent: Chris Bednar Date: 10/31/2022

## AUTHORIZATION TO ENTER SUBJECT PROPERTY

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: Dylan Cuneo, Manager Date: 11/01/2022

## AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY

I, and my successors, hereby the City of Dover or its assigns to enter my property for the purpose of completing the site work as required by the approved plan should the letter or credit or other surety be called. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: Dylan Cuneo, Manager Date: 11/01/2022

Signature of Applicant (*if different from owner*): Date: 10/31/2022

## CERTIFICATION OF FEES

I, and my successors, hereby certify that I understand that the City of Dover collects impact fees, utility investment fees and inspection fees for projects developed in Dover. Said fees must be paid before a Certificate of Occupancy can be obtained for a structure, unless a different payment schedule is agreed to by the applicant and the City prior to approvals being issued by the Dover Planning Board. Additionally, should the property be in "Current Use" it will be subject to the Land Use Change Tax.

Signature of Property Owner: Dylan Cuneo, Manager Date: 11/01/2022

Signature of Applicant (*if different from owner*): Date: 10/31/2022

## *CITY OF DOVER SITE REVIEW*
## *LIST OF ABUTTERS*

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. Staff will provide the abutter information, while the applicant must provide accurate contact information for the owner, applicant and professional agents representing the project.

**Owner:**

| TAX MAP | LOT # | PROPERTY OWNER | MAILING ADDRESS |
|---|---|---|---|
| H | 4-3 | Dover Fields Condominium C/O VC Dover Investments, LLC | 48 Constitution Drive, Bedford, NH 03110 |

**Applicant (if different from owner):**

| APPLICANT NAME | APPLICANT COMPANY | MAILING ADDRESS |
|---|---|---|
| Scott Bradley | Charter Food North, LLC | P.O. Box 430, Talbott, TN 37877 |

**Surveyor and/or Engineer/Professional Agent:**

| NAME | COMPANY | MAILING ADDRESS |
|---|---|---|
| Kevin McEneaney | McEneaney Survey Assoc. | P.O. Box 681-24 Chestnut Street, Dover NH 03820 |
| Chris Bednar | Karpinski Engineering | 3135 Euclid Ave, Cleveland OH |
| | | |

**Conservation Easement Holder:**

| TAX MAP | LOT # | NAME OF EASEMENT HOLDER | MAILING ADDRESS |
|---|---|---|---|
| | | | |

# City of Dover, New Hampshire
# SITE PLAN REVIEW SUBMISSION CHECKLIST

[Revision Date: June 4, 2019]

This site plan review checklist, as required by Chapter 153-6-B(2), should be completed by the applicant. It is intended to assist the applicant in the planning process of preparing a Site Plan Review application for Planning Board action. The size of the project will determine the types of information required for review, therefore, a **pre-application conference** with the Planning Department to determine the list of items that must be completed is strongly encouraged.

**The first step would be to appear before the Technical Review Committee, to apply, eight (8) folded copies of the site plan with scale of not less than 1"=50' or 1" =100' for larger site plans, need to be provided, along with payment of plan review fees.**

**Two weeks prior to Planning Board, three (3) full size and twelve (12) half size (11x17), folded, copies of the plan set and materials, including response to TRC comments, will be due. Abutter/Notice Fees will be invoiced and need to be paid 28 hours prior to the Planning Board meeting.**

*The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all site plan review requirements. Please refer to the Site Plan Review Regulations for full details.*

APPLICANT: Charter Foods File Number: _____

PROJECT TITLE: Taco Bell

PROPERTY LOCATION: Dunham and Grapevine Tax Map: H Lot: 4-4

| | Where/How Provided | Reviewed |
|---|---|---|
| **1. Completed and signed Application form** | provided | |
| **2. Plan Review Fees are provided** | TBD | |
| **3. Electronic copy of the engineered/surveyed plan layout** | City website upload | |
| **4. Electronic copy of supplementary materials and application** | City website upload | |
| **5. Traffic Impact Assessment and Analysis (Standard or Advanced)** | provided by property owner | |
| **6. Waiver requests to the Site Plan Review Regulations, with written justification** | | |
| **7. Conditional Use Permit applications** | provided | |
| **8. A colored rendering of the streetscape that will be created along the existing public right-of-way** | See landscape plan in plans | |
| **9. A colored architectural plan showing all sides of buildings** | provided sets of plans | |
| **10. Folded copies of site plan w/scale of not less than 1"=50' or 1"=100' for larger site plans, for TRC. Plans shall contain the following items as appropriate:** | provided sets of plans | |
| Location map at appropriate scale | see cover sheet | |
| Proposed Project name and title and Planning File # | see site plan sheets | |
| Date, north arrow and scale | see site plan sheets | |
| Names of all abutting property owners | see site plan sheets | |
| Name and address of owners and/or applicants | see site plan sheets | |
| Signature & stamp of NH licensed land surveyor and/or engineer | see site plan sheets | |
| Zoning District boundaries, including any special or overlay districts | see site plan sheets | |
| Location of Conservation District areas | NA | |
| Location, names and widths of existing and proposed streets, including pavement widths, grades, curbs and crosswalks | see site plan sheets | |
| Location and widths of existing & proposed easements & right of ways | see site plan sheets | |
| Location and width of existing and proposed access/egress ways | see site plan sheets | |

| | Explain How Provided | Reviewed |
|---|---|---|
| Depict pedestrian walkways and accessible access | see site plan sheets | |
| Existing and proposed property lines with dimensions and bearings tied into Dover's Geographic Information System coordinate system | see site plan sheets | |
| Existing and proposed topographic information at two foot intervals | see site plan sheets | |
| Existing and proposed buildings and structure locations | see site plan sheets | |
| Minimum building setbacks or build to lines on all lots | see site plan sheets | |
| Location and size of existing and proposed electric, telephone, gas cable and other underground utilities | see site plan sheets | |
| Existing and proposed water lines and fire hydrants, including materials and capacity needed | see site plan sheets | |
| Location and materials of sanitary sewage facilities within project site and projected additional peak hour sewer load | see site plan sheets | |
| Existing and proposed stormwater lines and facilities | see site plan sheets | |
| Lighting plan depicting all existing and proposed exterior light fixtures and a lighting level analysis for parking lots | see site plan sheets | |
| Location of Flood Hazard Zone | see site plan sheets | |
| Location of all bodies of water and watercourses | see site plan sheets | |
| Location of wetlands and buffers | see site plan sheets | |
| Neighborhood plan with aerial underlay showing how project relates to abutting uses within the plan set | see cover sheet | |
| Existing natural features and/or significant vegetation on property | see site plan sheets | |
| Depict existing contours up to 100 ft. beyond project limits | see site plan sheets | |
| Landscape plan depicting existing and proposed landscaping, prepared by a licensed Professional Landscape Architect | see site plan sheets | |
| Location of parking layout delineating spaces and arrangement; note addressing maximum required spaces | see site plan sheets | |
| Location, material and size of existing and proposed pavement area | see site plan sheets | |
| Location of proposed fire lanes | see site plan sheets | |
| Specify finished floor elevations of buildings | see site plan sheets | |
| Location of solid waste disposal facilities (dumpster, pad and screening, etc.), including required screening | see site plan sheets | |
| Depict all service, storage, loading bays and utility areas | see site plan sheets | |
| All applicable Dover Common Site Plan notes | see site plan sheets | |
| **11. Additional Information if appropriate** | | |
| Stormwater Management Plan depicting the existing & proposed storm drainage system and engineered drainage analysis | Site part of subdiv master basin | |
| Stormwater Management System Operation and Maintenance Plan | to be provided | |
| Letter to Serve from Public and Private Utilities | to be provided | |
| Erosion and Sedimentation Control Plan | see site plan sheets | |
| Landscape Operation and Maintenance Plan | see site plan sheets | |
| Proposed restrictive covenants or homeowners association documents | N/A | |
| Dates and permit numbers of all required state and federal permits | to be provided | |
| If wetland buffer, indicate placards locations, as applicable | see site plan sheets | |
| Depict test boring locations, groundwater elevations and soil profiles and/or soils types call-outs | to be provided | |
| Location of proposed drive-in facilities | see site plan sheets | |
| Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required | TBD | |

REVIEWED BY: _____ DATE_____ TRC DATE_____

# City of Dover, New Hampshire
# CONDITIONAL USE PERMIT APPLICATION

[Revision Date: October 19, 2020]

| Office Use Only | Project #: | | Date Received: | |
|---|---|---|---|---|
| | Amount Paid: | | Time Received: | |

**APPLICANT AND OWNER INFORMATION**

Name of Applicant: Charter Foods North LLC Telephone # 423-438-0216

Address of Applicant: PO Box 430, Talbott, TN 37877

E-Mail Address: sbradley@charterfoods.net

Name of Property Owner (if different from applicant): VC Dover Investments, LLC Telephone # 603-472-4488

Address of Property Owner: 48 Constitution Drive, Bedford, NH 03110

**PROPERTY INFORMATION**

Assessor's Map # H Lot(s) # ~~4-4~~ 4-3

Address of Property: Durham Rd. and Grapevine Dr.

Zoning District(s) C-Commercial Overlay District(s) _____

Existing Use of Property: Open field

**CONDITIONAL USE PERMIT INFORMATION**

**Type of Conditional Use Permit (Check All That Apply):**

| | | |
|---|---|---|
| ☐ Conservation District | ☐ RCM Use Overlay District | ☐ Gateway District |
| ☐ Groundwater Protection | ☐ Off-Street Parking and Loading | ☐ Alternative Treatment Center |
| ☐ Wetland Protection District | ☐ Central Business District | ☐ Heritage Residential District |

Describe Proposed Use or Activity That Requires Conditional Use Permit and Describe Any Impacts:

_____

_____

_____

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: N/A

Name of Professional That Prepared Plans: Chris Bednar

Address 3135 Euclid Ave. Cleveland OH 44115 Telephone #: 216-391-1127

Professional License #: 17258 E-mail address: cbednar@karpinskieng.com

**SIGNATURES**

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner: [signature], Manager Date: 10/28/2022

Signature of Applicant (if different from owner): [signature] Date: 10/28/2022

Signature of Agent: Chris Bednar Date: 10/28/2022

**AUTHORIZATION TO ENTER SUBJECT PROPERTY**

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: [signature], Manager Date: 10/28/2022

# CITY OF DOVER CONDITIONAL USE
# LIST OF ABUTTERS

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. Staff will provide the abutter information, while the applicant must provide accurate contact information for the owner, applicant and professional agents representing the project.

**Owner:**

| TAX MAP | LOT # | PROPERTY OWNER | MAILING ADDRESS |
|---|---|---|---|
| H | ~~4-4~~ 4-3 | VC Dover Investment, LLC | 48 Constitution Dr. Bedford, NH 30110 |

**Applicant (if different from owner):**

| APPLICANT NAME | APPLICANT COMPANY | MAILING ADDRESS |
|---|---|---|
| Scott Bradley | Charter Foods North LLC | PO Box 430, Talbott, TN 37877 |

**Surveyor and/or Engineer/Professional Agent:**

| NAME | COMPANY | MAILING ADDRESS |
|---|---|---|
| Chris Bednar | Karpinski Engineering | 3135 Euclid Ave. Cleveland, OH 44115 |
| Kevin McEneaney | McEneaney Survey Assoc. | P.O. Box 681-24 Chestnut Street, Dover NH 03820 |
| | | |

**Conservation Easement Holder:**

| TAX MAP | LOT # | NAME OF EASEMENT HOLDER | MAILING ADDRESS |
|---|---|---|---|
| | | | |

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

# MEMORANDUM

**Date:** **October 14, 2022**

**To:** **City of Dover**

**From:** **Robert Duval, PE**
**Jen Porter, PE**

**Project:** **Mixed Use Development – Dover Fields & Arbor Woods**
**NH108 and Mast Road, Dover NH**

**Subject:** **2022 Update to Traffic Study**

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The purpose of this memorandum is to update the previously-approved traffic study prepared for VC Dover Investments, to replace the currently vacant retail and bank pads with a commercial/residential building and a fast-food restaurant, respectively.

The original approved traffic study is dated October 30, 2006. There have been several prior revisions to the development traffic study since the original approval:

- In 2010 the residential portion of the project along Cielo Drive was updated to include 144 units of detached and attached elderly housing and associated congregate care buildings (the Arbor Woods project).
- In 2012 the medical office pad was replaced with 58 units of senior independent housing (the Housing Initiatives project).
- There is still one remaining pad site at the corner of Grapevine Drive and NH108 that is undeveloped.

The following table outlines the original and currently proposed uses for this project.

**Table 1 – 2006 Original vs 2022 Existing and Proposed Uses**

| **2006 Original Proposal** | | **2022 Update** | |
|---|---|---|---|
| Supermarket | *37,443 sf* | *Supermarket** | *37,443 sf* |
| Elderly Housing | 66 units | *Arbor Woods** | 144 units |
| Shopping Center (Retail, Bank, & Medical Office) | 82,815 sf | *Housing Initiatives** | *60 units* |
| | | **Apartments** | **49 units** |
| | | **Gym** | **4,030 sf** |
| | | **Fast-food** | **2,500 sf** |
| Coffee Shop | 2,232 sf | **Coffee Shop** | **1,320 sf** |

**These projects already exist on site. Projects in bold type are currently proposed uses.*

### *Approved Peak Hour Trip Generation*

The original 2006 traffic study calculated trip generation for the anticipated full buildout of both the commercial and residential portions of the project:

**Table 2 – 2006 Approved Trip Generation**

| Peak Hour Volumes – Original Site Buildout | | | |
|---|---|---|---|
| Scenario | In | Out | Total |
| **Weekday AM Peak Hour** | 264 | 211 | 475 |
| **Weekday PM Peak Hour** | 531 | 537 | 1,068 |
| **Saturday Midday Peak Hour** | 673 | 647 | 1,320 |

### *Proposed (2022) Peak Hour Trip Generation*

The new 2022 proposal includes replacing the retail pad with a mixed-use building that includes 49 apartment units above, a 4 ksf gym, and a 1,320 sf coffee shop. The proposed coffee shop is only 1,320 sf, which is a reduction of 40% based on square foot area and there is no drive-thru at the new building. There is also a fast-food restaurant proposed in the former bank location. The coffee shop in the original approval was a 2,232 sf coffee shop with drive-thru and the trip generation was calculated based on empirical data, not ITE for AM & PM.

**Table 3a – 2022 AM Peak Hour Trip Generation by Use**

| 2006 ORIGINAL | | | | 2022 UPDATE | | | |
|---|---|---|---|---|---|---|---|
| | IN | OUT | TOTAL | | IN | OUT | TOTAL |
| Supermarket | 74 | 48 | 122 | Supermarket | 74 | 48 | 122 |
| Elderly Housing | 7 | 12 | 19 | Arbor Woods | 18 | 28 | 46 |
| Shopping Center | 85 | 55 | 140 | Housing Initiatives | 3 | 1 | 4 |
| | | | | **Apartments** | **4** | **14** | **18** |
| | | | | **Gym** | **3** | **2** | **5** |
| | | | | **Fast-food** | **57** | **55** | **112** |
| Coffee Shop | 98 | 96 | 194 | **Coffee Shop** | **63** | **60** | **123** |
| Total 2006 AM Trips | | | 475 | **Total 2022 AM Trips** | | | **430** |

**Table 3b – 2022 PM Peak Hour Trip Generation by Use**

| 2006 ORIGINAL | | | | 2022 UPDATE | | | |
|---|---|---|---|---|---|---|---|
| | | | | | IN | OUT | TOTAL |
| Supermarket | 212 | 204 | 416 | Supermarket | 212 | 204 | 416 |
| Elderly Housing | 22 | 14 | 36 | Arbor Woods | 25 | 18 | 43 |
| Shopping Center | 265 | 287 | 552 | Housing Initiatives | 5 | 5 | 10 |
| | | | | **Apartments** | **12** | **7** | **19** |
| | | | | **Gym** | **8** | **6** | **14** |
| | | | | **Fast-food** | **43** | **40** | **83** |
| Coffee Shop | 32 | 32 | 64 | **Coffee Shop** | **22** | **21** | **43** |
| Total 2006 PM Trips | | | 1,068 | **Total 2022 PM Trips** | | | **628** |

**Table 3c – 2022 SAT Peak Hour Trip Generation by Use**

| 2006 ORIGINAL | | | | 2022 UPDATE | | | |
|---|---|---|---|---|---|---|---|
| | | | | | IN | OUT | TOTAL |
| Supermarket | 232 | 223 | 455 | Supermarket | 232 | 223 | 455 |
| Elderly Housing | 9 | 9 | 18 | Arbor Woods | 24 | 23 | 47 |
| Shopping Center | 398 | 368 | 766 | Housing Initiatives | 13 | 11 | 24 |
| | | | | **Apartments** | **10** | **10** | **20** |
| | | | | **Gym** | **6** | **7** | **13** |
| | | | | **Fast-food** | **70** | **68** | **138** |
| Coffee Shop | 34 | 47 | 81 | **Coffee Shop** | **37** | **38** | **75** |
| Total 2006 SAT Trips | | | 1,320 | **Total 2022 SAT Trips** | | | **772** |

***Internal Capture:***
Because the proposed development includes multiple uses, a significant portion of site traffic will visit more than one use on the site; (e.g. bank and supermarket, residential and coffee, etc.). This interaction, known as “Internal Trip Capture” reduces external traffic volumes on adjacent roadways to a value less than a simple summation of individual uses. This reduction rate is calculated by evaluating use pairs for the development, according to ITE and NCHRP 684 guidelines.

In the 2006 original study, the retail uses were calculated under the ITE LUC 820 ”Shopping Center” land use code, which already accounts for interaction between individual uses. For the 2022 proposal, some of the new uses do not fit well into the Shopping Center category, so trip interaction was calculated separately using procedures set forth by NCHRP 684.

These calculations show onsite interaction will reduce external trips by 11% in the AM peak hour, 28% in the PM peak hour, and 34% in the SAT midday peak hour. Net trip generation incorporating these results are tabulated below:

**Table 4 – 2022 Adjusted Trip Generation**

| **Unadjusted Trip Generation for 2022 Update** | | | |
|---|---|---|---|
| Scenario | In | Out | Total |
| Weekday AM | 222 | 208 | 430 |
| Weekday PM | 327 | 301 | 628 |
| Saturday Midday | 392 | 380 | 772 |
| **Internal Capture Reduction** | | | |
| Scenario | In | Out | Total |
| Weekday AM | (23) | (23) | (46) |
| Weekday PM | (90) | (84) | (174) |
| Saturday Midday | (133) | (129) | (262) |
| **Adjusted Trip Generation for 2022 Update** | | | |
| Scenario | In | Out | Total |
| Weekday AM | 199 | 185 | 384 |
| Weekday PM | 237 | 217 | 454 |
| Saturday Midday | 259 | 251 | 510 |

**Table 5 – Net Change in Trip Generation - 2006 vs 2022**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | (42) | (3) | (45) |
| Weekday PM | (204) | (236) | (440) |
| Saturday Midday | (281) | (267) | (548) |

***Conclusion***

Based on the trip generation calculations summarized above, the new proposal shows a significant decrease in traffic volumes associated than was anticipated in the original approved Dover Fields traffic study, allowing substantial capacity for the remaining vacant building pad.

Therefore, all study area roadways and intersections will have additional reserve capacity at full project buildout.

Respectfully Submitted,
**TFMORAN, INC.**

Robert E. Duval, PE
Chief Engineer

## Table of Contents – Appendix

**APPENDIX A** 2022 Updated Trip Generation & Internal Capture

**APPENDIX B** 2006 Original Study – Trip Generation

**APPENDIX C** 2010 Memo – Trip Generation

**APPENDIX D** 2012 Memo – Trip Generation

# APPENDIX A

**2022 UPDATED PROPOSED TRIP GENERATION - Full Build: Dover Fields & Arbor Woods**

*Based on ITE Trip Generation 11th Edition*

*Dover Fields - Hannaford Supermarket is constructed*
*Arbor Woods - Detached and Attached Housing is constructed*

**LUC 936 - Coffee/Donut Shop without Drive-through Window: 1,320 sf**

| Time Period | Rate/Equn | | Rate/ Eq | Trip Ends | Directional Split | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Rate | Used | | In | Out | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | 1.32 | 93.08 | Rate | 123 | 51% | 49% | 63 | 60 | 11% | 7 | 7 | 56 | 53 | 109 |
| Weekday PM Peak Hour Adjacent Street | 1.32 | 32.29 | Rate | 43 | 50% | 50% | 22 | 21 | 28% | 6 | 6 | 16 | 15 | 31 |
| Weekend SAT Peak Hour of Generator | 1.32 | 56.50 | Rate | 75 | 49% | 51% | 37 | 38 | 34% | 13 | 13 | 24 | 25 | 49 |

**LUC 850 - Hannaford Supermarket [Based on 2006 Study]**

| Time Period | *2006 Study* | | | Trip Ends | | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *IN* | *OUT* | | | | | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | *74* | *48* | | 122 | | | 74 | 48 | 11% | 8 | 5 | 66 | 43 | 109 |
| Weekday PM Peak Hour Adjacent Street | *212* | *204* | | 416 | | | 212 | 204 | 28% | 59 | 57 | 153 | 147 | 300 |
| Weekend SAT Peak Hour of Generator | *232* | *223* | | 455 | | | 232 | 223 | 34% | 79 | 76 | 153 | 147 | 300 |

**LUC 251/252/253 - Arbor Woods Elderly Housing**

| Time Period | 2010 Memo | | | Trip Ends | | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *IN* | *OUT* | | | | | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | *18* | *28* | | 46 | | | 18 | 28 | 11% | 2 | 3 | 16 | 25 | 41 |
| Weekday PM Peak Hour Adjacent Street | *25* | *18* | | 43 | | | 25 | 18 | 28% | 7 | 5 | 18 | 13 | 31 |
| Weekend SAT Peak Hour of Generator | *24* | *23* | | 47 | | | 24 | 23 | 34% | 8 | 8 | 16 | 15 | 31 |

**LIC 253 - Housing Initiativess**

| Time Period | 2012 Memo | | | Trip Ends | | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *IN* | *OUT* | | | | | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | *3* | *1* | | 4 | | | 3 | 1 | 11% | 0 | 0 | 3 | 1 | 4 |
| Weekday PM Peak Hour Adjacent Street | *5* | *5* | | 10 | | | 5 | 5 | 28% | 1 | 1 | 4 | 4 | 8 |
| Weekend SAT Peak Hour of Generator | *13* | *11* | | 24 | | | 13 | 11 | 34% | 4 | 4 | 9 | 7 | 16 |

**ITE LUC 221 - Multi-family (Mid-Rise): 49 units**

| Time Period | Rate/Equn | | Rate/ Eq | Trip Ends | Directional Split | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Rate | Used | | In | Out | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | 49 | 0.37 | RATE | 18 | 23% | 77% | 4 | 14 | 11% | 0 | 2 | 4 | 12 | 16 |
| Weekday PM Peak Hour Adjacent Street | 49 | T=0.39(X)+0.34 | EQ | 19 | 61% | 39% | 12 | 7 | 28% | 3 | 2 | 9 | 5 | 14 |
| Weekend SAT Peak Hour of Generator | 49 | Ln(T)=1.00Ln(X)-0.91 | EQ | 20 | 51% | 49% | 10 | 10 | 34% | 3 | 3 | 7 | 7 | 14 |

**ITE LUC 492 - Health/Fitness Club: 4,030 sf**

| Time Period | Rate/Equn | | Rate/ Eq | Trip Ends | Directional Split | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Rate | Used | | In | Out | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | 4.1 | 1.31 | Rate | 5 | 51% | 49% | 3 | 2 | 11% | 0 | 0 | 3 | 2 | 5 |
| Weekday PM Peak Hour Adjacent Street | 4.1 | 3.45 | Rate | 14 | 57% | 43% | 8 | 6 | 28% | 2 | 2 | 6 | 4 | 10 |
| Weekend SAT Peak Hour of Generator | 4.1 | 3.19 | Rate | 13 | 49% | 51% | 6 | 7 | 34% | 2 | 2 | 4 | 5 | 9 |

**ITE LUC 934 - Fast-food with Drive-through Window: 2,500 sf**

| Time Period | Rate/Equn | | Rate/ Eq | Trip Ends | Directional Split | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Rate | Used | | In | Out | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | 2.5 | 44.61 | Rate | 112 | 51% | 49% | 57 | 55 | 11% | 6 | 6 | 51 | 49 | 100 |
| Weekday PM Peak Hour Adjacent Street | 2.5 | 33.03 | Rate | 83 | 52% | 48% | 43 | 40 | 28% | 12 | 11 | 31 | 29 | 60 |
| Weekend SAT Peak Hour of Generator | 2.5 | 55.25 | Rate | 138 | 51% | 49% | 70 | 68 | 34% | 24 | 23 | 46 | 45 | 91 |

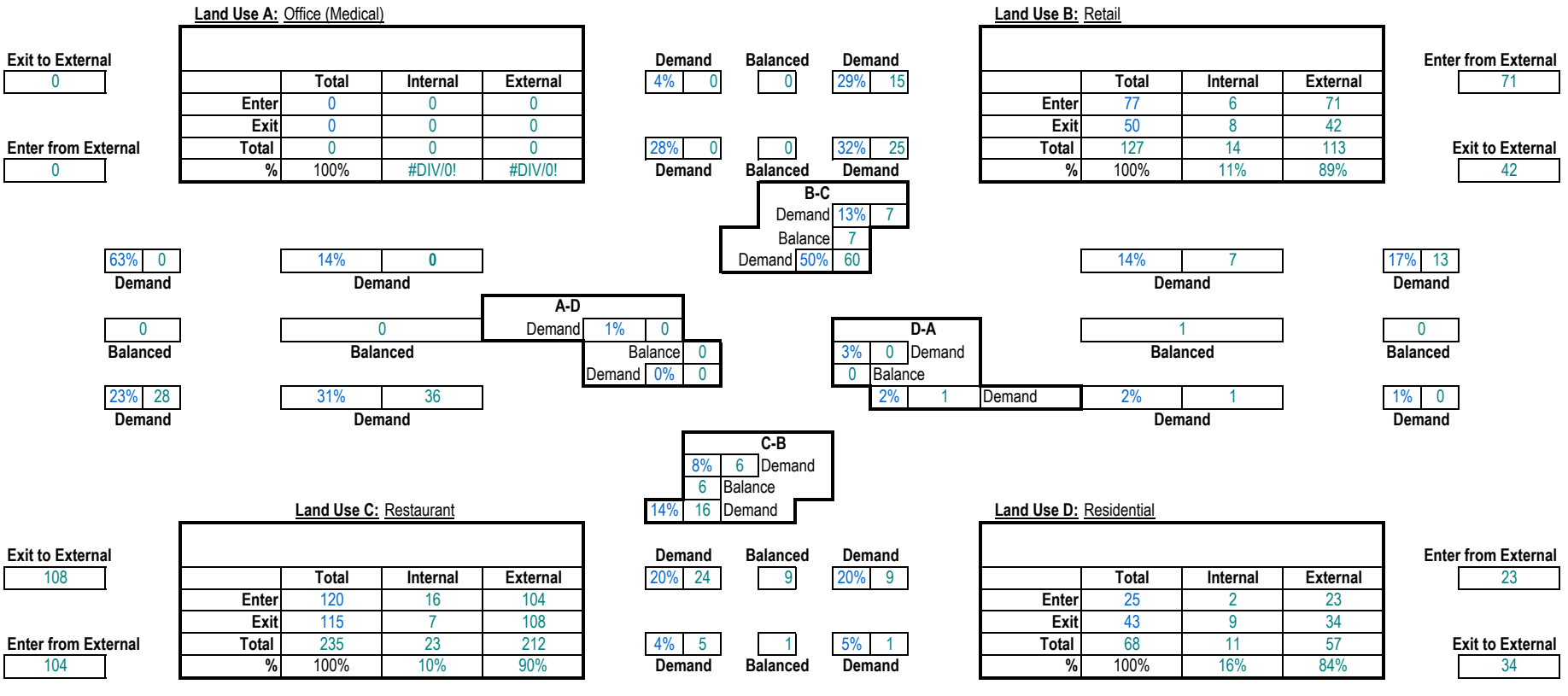
**TOTAL**

| Time Period | | | Trip Ends | | | Directional Distribution | | Internal Capture | Internal Trips | | External Trips | | External Trips |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | In | Out | % | In | Out | In | Out | TOTAL |
| Weekday AM Peak Hour Adjacent Street | | | 430 | | | 222 | 208 | 11% | 23 | 23 | 199 | 185 | 384 |
| Weekday PM Peak Hour Adjacent Street | | | 628 | | | 327 | 301 | 28% | 90 | 84 | 237 | 217 | 454 |
| Weekend SAT Peak Hour of Generator | | | 772 | | | 392 | 380 | 34% | 133 | 129 | 259 | 251 | 510 |

**Multi-Use Development: 2022 UPDATED - Dover Fields & Arbor Woods**
**Internal Capture Summary per NCHRP Report 684**

**Analyst:** TFMoran Inc.
**Date:** 10/11/2022
**Project:** 46001.31
**Time Period:** AM Peak Hour
**Phase:** Full Build

| | | LUC | Enter | Exit |
|---|---|---|---|---|
| **Land Use A:** | Office (Medical) | - | 0 | 0 |
| **Land Use B:** | Retail | 850/495 | 77 | 50 |
| **Land Use C:** | Restaurant | 933/934 | 120 | 115 |
| **Land Use D:** | Residential | 221/251/252/253 | 25 | 43 |
| | | | 222 | 208 Total |



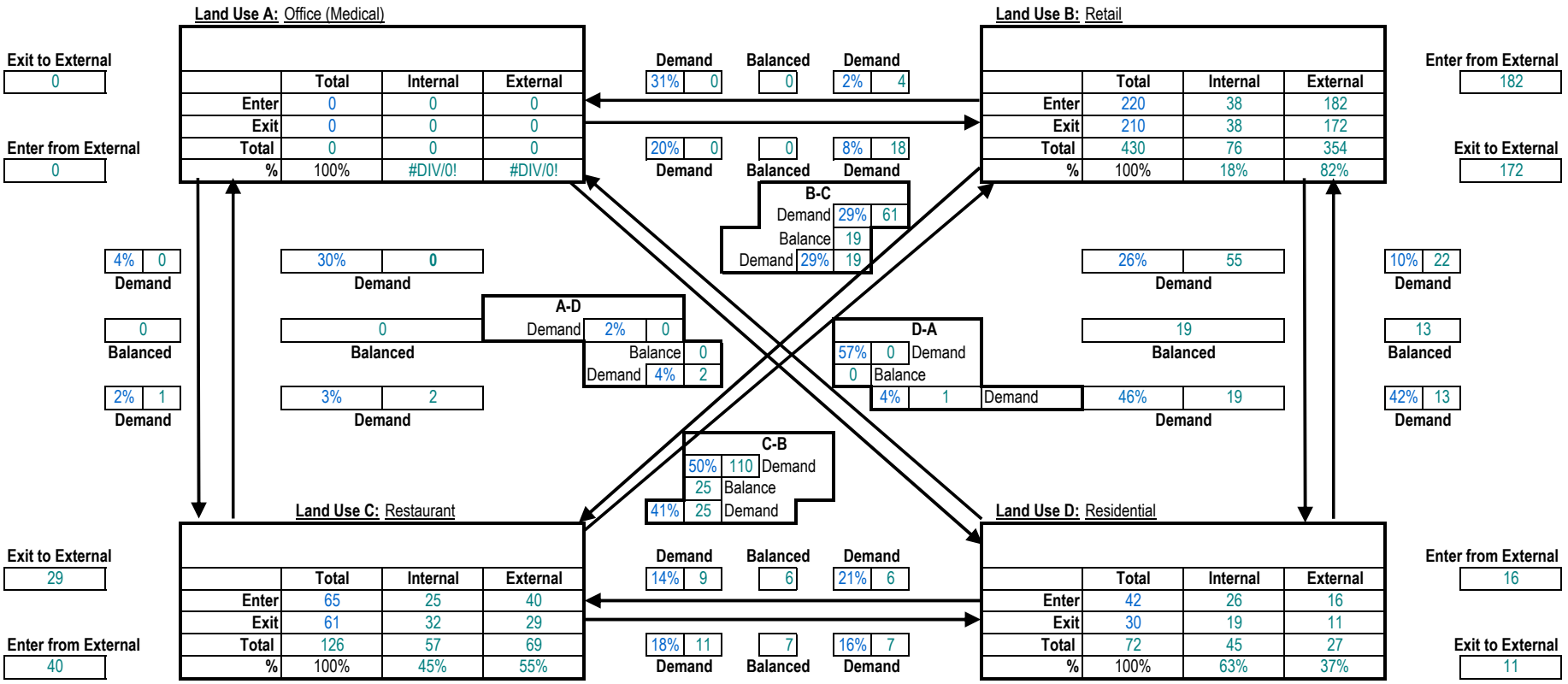

| Net External Trips for Multi-Use Development | | | | | |
|---|---|---|---|---|---|
| | Land Use A | Land Use B | Land Use C | Land Use D | Total |
| Enter | 0 | 71 | 104 | 23 | 198 |
| Exit | 0 | 42 | 108 | 34 | 184 |
| Total | 0 | 113 | 212 | 57 | 382 |
| Single-Use Trip Gen. Est. | 0 | 127 | 235 | 68 | 430 |

**Internal Capture**
**11%**

**Multi-Use Development: 2022 UPDATED - Dover Fields & Arbor Woods**
**Internal Capture Summary per NCHRP Report 684**

**Analyst:** TFMoran Inc.
**Date:** 10/11/2022
**Project:** 46001.31
**Time Period:** PM Peak Hour
**Phase:** Full Build

| | | LUC | Enter | Exit |
|---|---|---|---|---|
| **Land Use A:** | Office (Medical) | - | 0 | 0 |
| **Land Use B:** | Retail | 850/495 | 220 | 210 |
| **Land Use C:** | Restaurant | 933/934 | 65 | 61 |
| **Land Use D:** | Residential | 221/251/252/253 | 42 | 30 |
| | | | 327 | 301 Total |



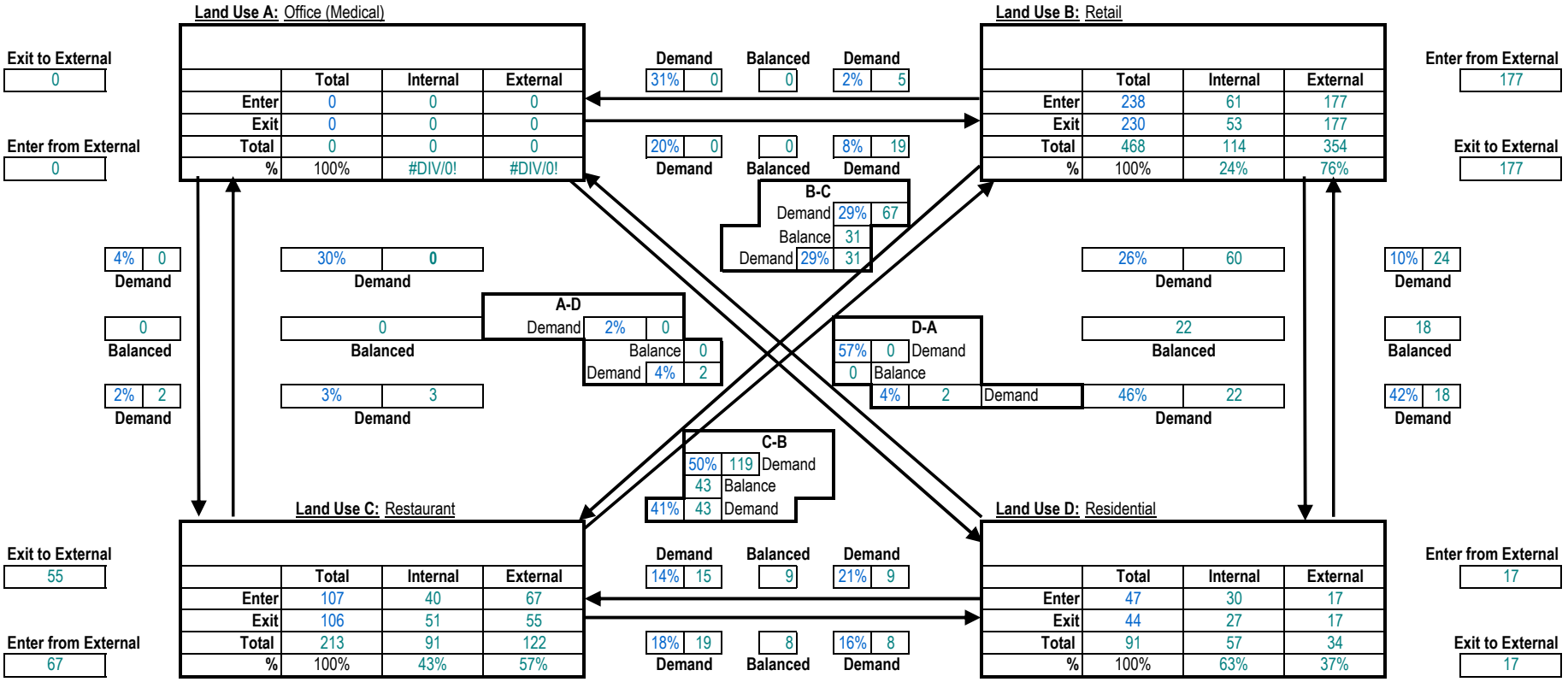

| Net External Trips for Multi-Use Development | | | | | |
|---|---|---|---|---|---|
| | Land Use A | Land Use B | Land Use C | Land Use D | Total |
| Enter | 0 | 182 | 40 | 16 | 238 |
| Exit | 0 | 172 | 29 | 11 | 212 |
| Total | 0 | 354 | 69 | 27 | 450 |
| Single-Use Trip Gen. Est. | 0 | 430 | 126 | 72 | 628 |

**Internal Capture**
**28%**

**Multi-Use Development: 2022 UPDATED - Dover Fields & Arbor Woods**
**Internal Capture Summary per NCHRP Report 684**

**Analyst:** TFMoran Inc.
**Date:** 10/11/2022
**Project:** 46001.31
**Time Period:** SAT Peak Hour (PM rates)
**Phase:** Full Build

| | LUC | Enter | Exit |
|---|---|---|---|
| **Land Use A:** Office (Medical) | - | 0 | 0 |
| **Land Use B:** Retail | 850/495 | 238 | 230 |
| **Land Use C:** Restaurant | 933/934 | 107 | 106 |
| **Land Use D:** Residential | 221/251/252/253 | 47 | 44 |
| | | 392 | 380 Total |



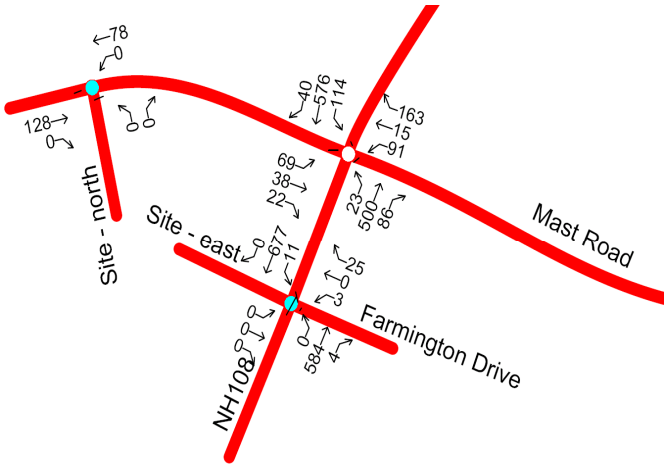

| Net External Trips for Multi-Use Development | | | | | |
|---|---|---|---|---|---|
| | Land Use A | Land Use B | Land Use C | Land Use D | Total |
| Enter | 0 | 177 | 67 | 17 | 261 |
| Exit | 0 | 177 | 55 | 17 | 249 |
| Total | 0 | 354 | 122 | 34 | 510 |
| Single-Use Trip Gen. Est. | 0 | 468 | 213 | 91 | 772 |

**Internal Capture** **34%**

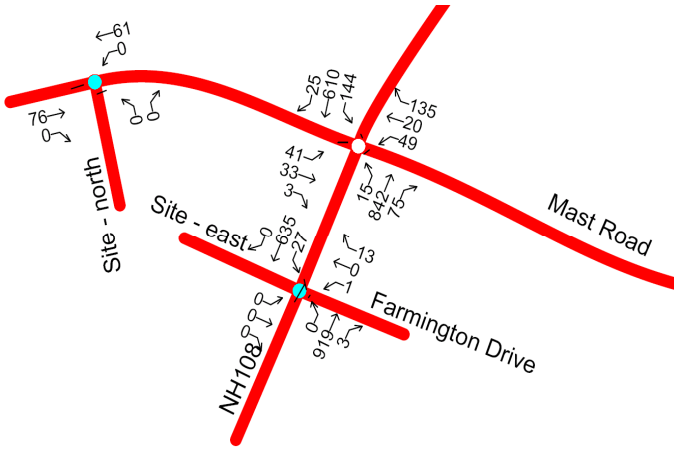
# APPENDIX B

**2017 No-Build Volumes**

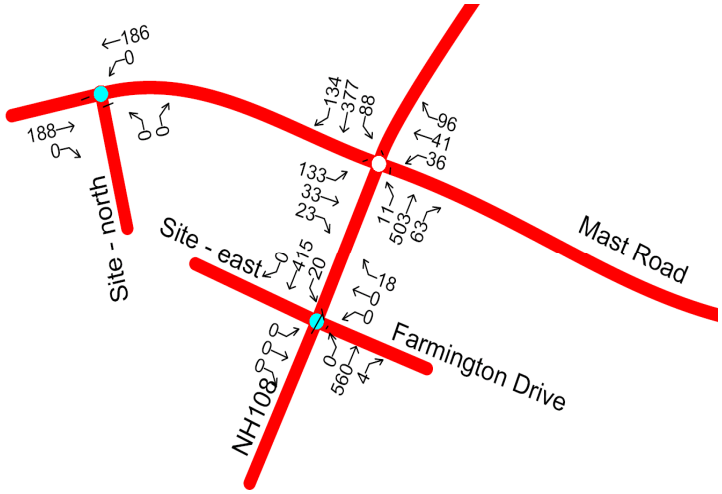
**AM Peak Hour**




**PM Peak Hour**




**Saturday Midday Peak Hour**




## 6. Trip Generation:

In order to determine the trip generation characteristics of the proposed development, the standard trip generation rates and equations published by the Institute of Transportation Engineers (ITE)[3] were employed. Please note that the trip generation for the AM and PM scenarios for the coffee shop was calculated based on empirical data presented in the traffic analysis for a Dunkin' Donuts restaurant on NH28 in Londonderry[4]. The data was collected at eight operating facilities in Massachusetts and New Hampshire.

[3] Institute of Transportation Engineers, *Trip Generation, 7th* Edition (Washington, D.C., 2003).

[4] *Traffic Impact and Access Study, Technical Memorandum, Proposed Dunkin' Donuts, Londonderry, New Hampshire.* Prepared for TFMoran Inc. by Highway & Traffic Signal Design, Inc., June 2002.

The trip generation calculations for the coffee shop are based on an AM peak hour volume of 1,118 vph on the adjacent roadways and a PM peak hour volume of 1,370 vph on the adjacent roadways. The empirical data was not used for Saturday's peak hour because the ITE data provided a higher (more conservative) result.

## Trip Generation Tables for Phase 1

***AM Peak Hour Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Coffee Shop (HTSD) | 2,232 SF | 98 | 96 |
| Supermarket (LUC 850) | 37,443 SF | 74 | 48 |

***PM Peak Hour Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Coffee Shop (HTSD) | 2,232 SF | 32 | 32 |
| Supermarket (LUC 850) | 37,443 SF | 212 | 204 |

***Saturday Midday Peak Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Coffee Shop (LUC 933) | 2,232 SF | 34 | 47 |
| Supermarket (LUC 850) | 37,443 SF | 232 | 223 |

## Trip Generation Tables for Phase 2

***AM Peak Hour Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Elderly Housing - Detached (LUC 251) | 66 Units | 7 | 12 |
| Shopping Center (LUC 820) | 82,815 SF | 85 | 55 |

***PM Peak Hour Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Elderly Housing - Detached (LUC 251) | 66 Units | 22 | 14 |
| Shopping Center (LUC 820) | 82,815 SF | 265 | 287 |

***Saturday Midday Peak Totals***

| Land Use | Size | Enter | Exit |
|---|---|---|---|
| Elderly Housing - Detached (LUC 251) | 66 Units | 9 | 9 |
| Shopping Center (LUC 820) | 82,815 SF | 398 | 368 |

# APPENDIX C

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

# M E M O R A N D U M

**Date:** August 26, 2010

**To:** Bruce Woodruff
Dover Planning Department
288 Central Avenue
Dover, NH 03820

**From:** Robert E. Duval, P.E.

**Re:** **Mixed Use Development/Residential Revisions**
**NH Route 108, Dover, NH**

**Subject:** **Update to Previous Traffic Study**

---

The purpose of this memorandum is to update the residential uses included in the previously approved traffic study prepared for VC Dover Investments dated October 30, 2006. The number of age-restricted single-family homes studied has been reduced, and two new residential uses have been added: attached senior adult housing units (duplexes and triplexes) and congregate care units. These revisions are outlined in further detail in the following sections.

This analysis includes calculations of the change in trip generation associated with the current residential proposal, and a review of the potential impacts of these vehicle trips on the previously completed traffic signal warrant analysis and on traffic operations at the NH108/Mast Road signalized intersection.

## Trip Generation

The approved traffic study calculated the following trip generation for the full buildout of both the commercial and residential portions of the project:

**Trip Generation for Original Full Site Buildout**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 264 | 211 | 475 |
| Weekday PM | 531 | 537 | 1,068 |
| Saturday Midday | 673 | 647 | 1,320 |

The following table summarizes the trip generation for the approved residential portion of the proposal:

**Trip Generation for Original Residential Phase**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 7 | 12 | 19 |
| Weekday PM | 22 | 14 | 36 |
| Saturday Midday | 9 | 9 | 18 |

In order to determine the trip generation characteristics of the proposed residential portion of the development, the standard trip generation rates and equations published by the Institute of Transportation Engineers (ITE)[1] were employed for each of the three proposed uses.

**Proposed Residential Units**

For the single family detached units, ITE Land Use Code 251, Senior Adult Housing - Detached, was utilized. The trip generation calculations are based on 47 units, and are as follows:

**Trip Generation for 47 Units of Senior Adult Housing - Detached**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 13 | 25 | 38 |
| Weekday PM | 16 | 10 | 26 |
| Saturday Midday | 5 | 6 | 11 |

For the single family duplex and triplex units, ITE Land Use Code 252, Senior Adult Housing - Attached, was utilized. The trip generation calculations are based on 27 occupied units, and are as follows:

**Trip Generation for 27 Units of Senior Adult Housing - Attached**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 2 | 2 | 4 |
| Weekday PM | 3 | 2 | 5 |
| Saturday Midday | 4 | 4 | 8 |

And finally for the congregate care units, ITE Land Use Code 253, Congregate Care Facility, was utilized. Since no data was reported under this land use code for the Saturday peak hour, we also reviewed the similar ITE Land Use Code 255, Continuing Care Retirement Community, which was used for the Saturday peak hour calculation. The trip generation calculations for the weekday AM and PM peak hours are based on 72 units, and the Saturday peak hour is based on 72 occupied units. The results of the calculations are as follows:

**Trip Generation for 72 Units of Congregate Care Facility**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 3 | 1 | 4 |
| Weekday PM | 6 | 6 | 12 |
| Saturday Midday | 15 | 13 | 28 |

[1] Institute of Transportation Engineers, *Trip Generation, 8th Edition* (Washington, D.C., 2008).

The total trip generation for the proposed residential phase of the project is calculated by adding each of the three uses:

**Total Proposed Trip Generation for Residential Phase**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 18 | 28 | 46 |
| Weekday PM | 25 | 18 | 43 |
| Saturday Midday | 24 | 23 | 47 |

As a final step, we subtracted the approved trip generation for the residential phase from the proposed trip generation to calculate the change in trip generation that is currently proposed. The following table summarizes these results:

**Change In Trip Generation**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | +11 | +16 | +27 |
| Weekday PM | +3 | +4 | +7 |
| Saturday Midday | +15 | +14 | +29 |

Based on the above table, the change in trips generated by the residential development would not be perceptible to the average bystander. The most significant change would be during the Saturday peak hour, with one additional trip entering or exiting every two minutes.

### Traffic Signal Warrants – Main Site Driveway

During the NHDOT driveway permit application process, a traffic signal warrant analysis was completed for the main site driveway on NH108. As was previously presented in the original traffic study completed for this development, the trips associated with the residential phase will generally use the Mast Road driveway, with the exception of trips to/from the south, calculated at 6% of the total.

Applying this distribution to the maximum change in trip generation from the above table (29 trips), we calculate a maximum of one trip exiting and one trip entering will be added at the NH108/Main Driveway intersection. This minimal effect does not change the original conclusion that a traffic signal is not warranted in this location.

### NH108/Mast Road Intersection

We reviewed the traffic model using the new trip generation figures. Since the highest number of trips added to any movement is 8 trips (a change of 1% or less overall), the model LOS and capacity differences are insignificant.

**Conclusions**

Based on our analysis of the minimal effects of the proposed changes in trip generation on the traffic models and signal warrants, we find that the proposal does not alter the conclusions of our original traffic analysis for the overall multi-use development and no additional traffic improvements are necessary or warranted.

Please let me know if you have any questions.

Respectfully submitted,

**TFMORAN INC.**

Robert E. Duval, P.E.
Chief Engineer

# APPENDIX D

Civil Engineers
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Scientists

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Bedford, NH 03110
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www.tfmoran.com

# M E M O R A N D U M

**Date:** May 23, 2012

**To:** Bruce Woodruff
Dover Planning Department
288 Central Avenue
Dover, NH 03820

**From:** Robert E. Duval, P.E.

**Re:** **Mixed Use Development**
**Senior Housing**
**NH Route 108, Dover, NH**

**Subject:** **Update to Previous Traffic Study**

---

The purpose of this memorandum is to update the previously approved traffic study prepared for VC Dover Investments dated October 30, 2006 to replace the 15,600 sf medical office building with a 60-unit congregate care facility. This analysis includes calculations of the change in trip generation associated with the current proposal, which are significantly fewer than those generated by the approved medical office building. The calculations are summarized below.

## Trip Generation

The approved traffic study considered the medical office building under the calculation for the overall shopping center. However, for the purposes of evaluating the changes in trip generation associated with this proposal, we compare only the two individual buildings involved: the approved 15,600 sf medical office building and the proposed 60-unit congregate care facility.

In order to determine the trip generation characteristics of these uses, the standard trip generation rates and equations published by the Institute of Transportation Engineers (ITE)[1] were employed for each of the three proposed uses.

For the medical office building, ITE Land Use Code 720, Medical-Dental Office Building, was utilized. The trip generation calculations are based on 15,600 sf, and are as follows:

[1] Institute of Transportation Engineers, *Trip Generation, 8th Edition* (Washington, D.C., 2008).

**Trip Generation for 15,600 sf Medical-Dental Office Building**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 28 | 7 | 36 |
| Weekday PM | 15 | 39 | 54 |
| Saturday Midday | 32 | 24 | 57 |

For the congregate care facility, ITE Land Use Code 253, Congregate Care Facility, was utilized. Since no data was reported under this land use code for the Saturday peak hour, we also reviewed the similar ITE Land Use Code 255, Continuing Care Retirement Community, which was used for the Saturday peak hour calculation. The trip generation calculations are based on 60 units, and are as follows:

**Trip Generation for 60 Units of Congregate Care**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | 3 | 1 | 4 |
| Weekday PM | 5 | 5 | 10 |
| Saturday Midday | 13 | 11 | 24 |

As a final step, we subtracted the approved trip generation for the residential phase from the proposed trip generation to calculate the change in trip generation that is currently proposed. The following table summarizes these results:

**Change In Trip Generation**

| Scenario | In | Out | Total |
|---|---|---|---|
| Weekday AM | -25 | -6 | -31 |
| Weekday PM | -10 | -34 | -44 |
| Saturday Midday | -19 | -13 | -32 |

## Conclusions

Based on our trip generation calculations, the change in trips generated by the proposal to construct the 60-unit congregate care facility in place of the approved 15,600 sf medical office building results in a decrease in traffic impacts associated with the site.

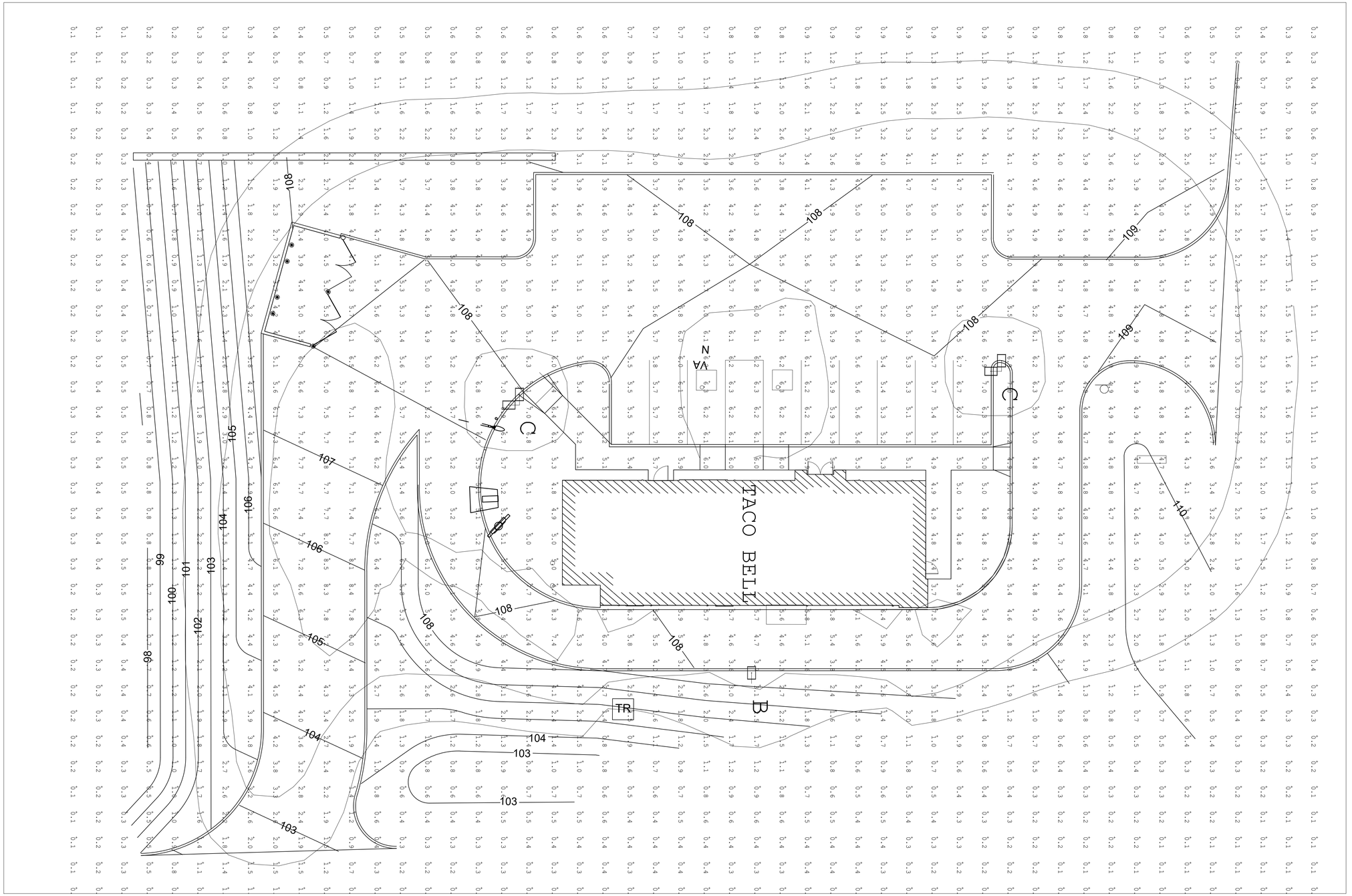
Please let me know if you have any questions.

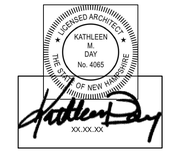
Respectfully submitted,

**TFMORAN INC.**

Robert E. Duval, P.E.
Chief Engineer

kathleen day, architect
8535 ferry road
waynesville, oh 45068
617.331.2545
kathleendayarchitect@gmail.com




CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
STORE NUMBER: TBD

TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

TACO BELL

ENDEAVOR 2.0

LARGE 50

PERMIT PLOT DATE:

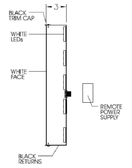
V-1006

V-09.12W V-09.16W

TACO BELL

**GENERAL SPECIFICATIONS:**

- 3" Deep fabricated aluminum cabinet, black
- .118 #7328 White acrylic faces w/ 3/4" black trim cap
- Internally illuminated with white LEDs
- Sign Area (Squared): 13.9



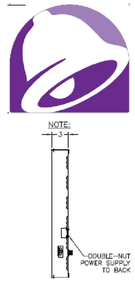

**ELECTRICAL SPECIFICATIONS:**

- White LEDs
- Power Supply: One (1) 60 watt
- .90amps @ 100-277 V
- One (1) 20 amp circuit, 60HZ UL 48 & NEC compliant

**COLOR SPECIFICATIONS:**

Black
White

V-04.36 V-04.42




**GENERAL SPECIFICATIONS:**

3" aluminum returns & trim cap w/ black finish
.150 White poly face w/ vinyl applied to first surface

**ELECTRICAL SPECIFICATIONS:**

- LED: LS-PRO160-50K-2B1

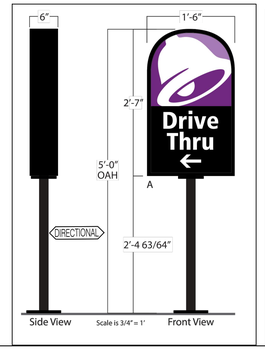
Power Supply: One (1) 60 watt

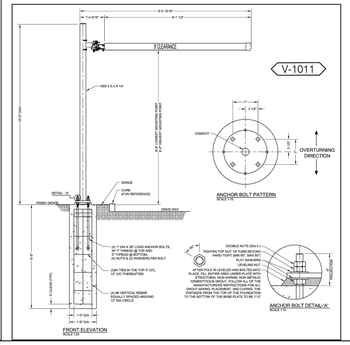
.9 amps @ 100-277 VAC

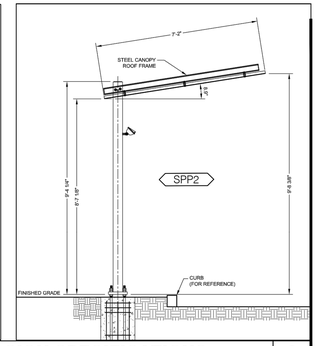
- One (1) 20 amp circuit

**COLORS:**

Dark Purple: 3630-9327; PMS 2603
Light Purple: 3630-9141; PMS 2577
Black
White



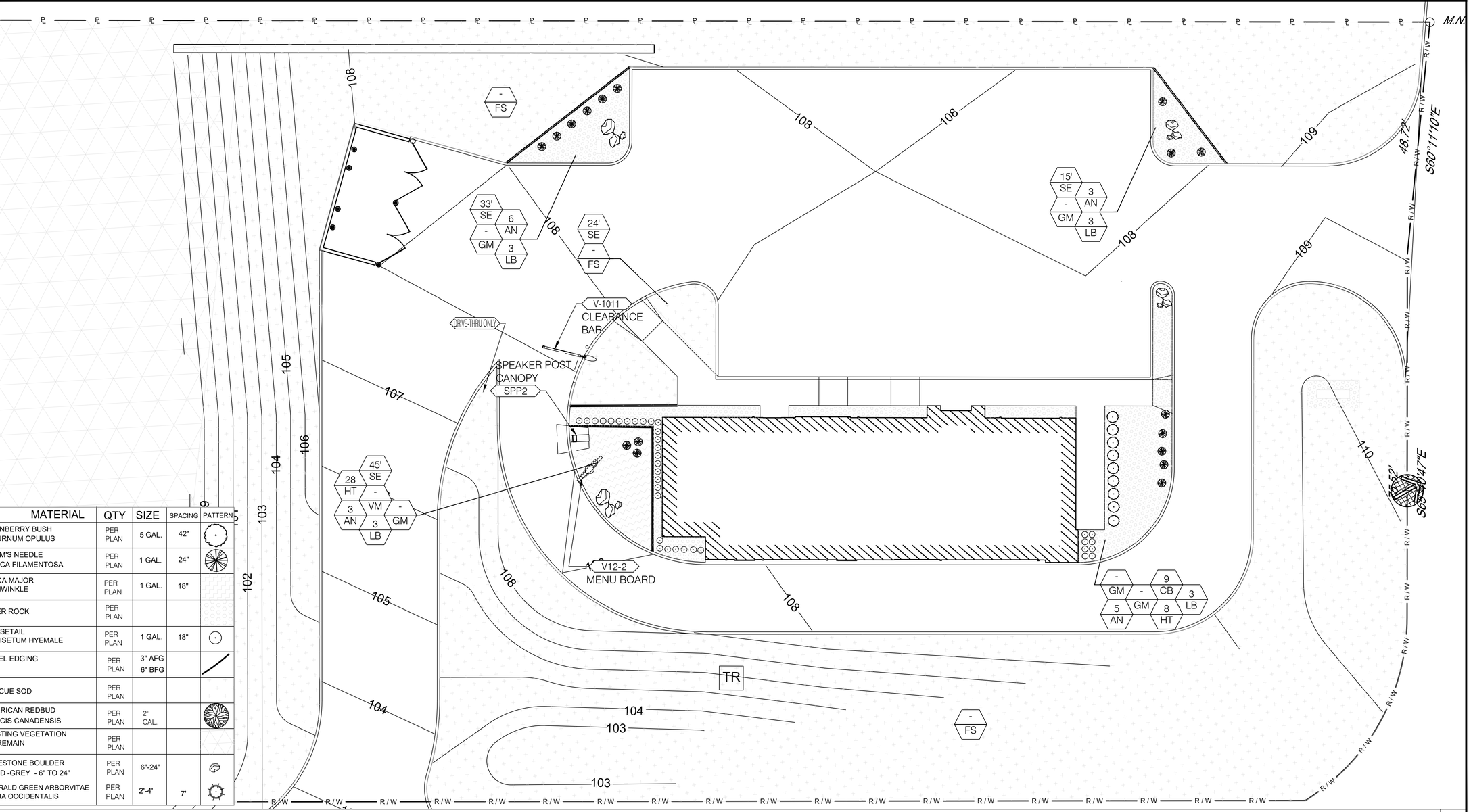




**SIGN SPECIFICATIONS** 2


kathleen day, architect
8535 ferry road
waynesville, oh 45068
617.331.2545
kathleendayarchitect@gmail.com








| MATERIAL | QTY | SIZE | SPACING | PATTERN |
|---|---|---|---|---|
| NBERRY BUSH<br>URNUM OPULUS | PER PLAN | 5 GAL. | 42" | |
| M'S NEEDLE<br>CA FILAMENTOSA | PER PLAN | 1 GAL. | 24" | |
| CA MAJOR<br>IWINKLE | PER PLAN | 1 GAL. | 18" | |
| ER ROCK | PER PLAN | | | |
| SETAIL<br>ISETUM HYEMALE | PER PLAN | 1 GAL. | 18" | |
| EL EDGING | PER PLAN | 3" AFG<br>6" BFG | | |
| CUE SOD | PER PLAN | | | |
| RICAN REDBUD<br>CIS CANADENSIS | PER PLAN | 2" CAL. | | |
| TING VEGETATION<br>REMAIN | PER PLAN | | | |
| ESTONE BOULDER<br>D -GREY - 6" TO 24" | PER PLAN | 6"-24" | | |
| RALD GREEN ARBORVITAE<br>A OCCIDENTALIS | PER PLAN | 2'-4' | 7' | |

**SITE PLAN** 3/32" = 1'-0" 1

CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
STORE NUMBER: TBD

TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

ENDEAVOR 2.0
LARGE 50

**SIGN & LANDSCAPE PLAN**

# SD0.0

PERMIT PLOT DATE:

# PROPOSED RESTAURANT
# "TACO BELL - CHARTER FOODS"

# DURHAM ROAD (NH 108) AND GRAPEVINE DRIVE
# CITY OF DOVER, COUNTY OF STRAFFORD
# STATE OF NEW HAMPSHIRE

## CIVIL SYMBOL LEGEND

| DESCRIPTION | EXISTING | PROPOSED |
|---|---|---|
| BUILDING | | |
| CATCH BASIN / CURB INLET | | |
| UTILITY POLE | | |
| DIRECTIONAL ARROWS | | |
| TREE | | |
| FLOW ARROWS | | |
| SANITARY MANHOLE | | |
| GAS VALVE | GV | |
| LIGHT POLE | | |
| STORM MANHOLE | | |
| PAVEMENT STRIPING | | |
| SIGN | | |
| PROPERTY PIN | | |
| HEADWALL / ENDWALL | | |
| HYDRANT | | |
| WATER VALVE | WV | |
| SANITARY MANHOLE | | |

## CIVIL LINE TYPE LEGEND

| DESCRIPTION | EXISTING | PROPOSED |
|---|---|---|
| APPROXIMATE LIMIT OF CONST. | LOCN | LOCN |
| CABLE TELEVISION (UG) | CATV | CATV |
| CENTER LINE | ℄ | ℄ |
| COMBINATION SEWER LINE | COMB | COMB |
| COMMUNICATION LINE (UG) | COMM | COMM |
| CONTOUR (MAJOR) | XXX | XXX |
| CONTOUR (MINOR) | XXX | XXX |
| FENCE | X | X |
| FILTER SOCK | FS | FS |
| FIRE LINE | F | F |
| FORCE MAIN | FM | FM |
| GAS LINE | G | G |
| IRRIGATION | IRRG | IRRG |
| ORANGE CONSTRUCTION FENCE | OCF | OCF |
| POWER LINE (OVH) | OH | OH |
| POWER LINE (UG) | E | E |
| PROPERTY LINE | ℙ | ℙ |
| RIGHT-OF-WAY LINE | R/W | R / W |
| SILT FENCE | SF | SF |
| STEAM LINE | STEAM | STEAM |
| STORM LINE | ST | ST |
| SANITARY LINE | SAN | SAN |
| WATER LINE | W | W |




AERIAL IMAGE SOURCE: MAINE GEOLIBRARY, MAXAR TECHNOLOGIES, USDA/FPAC/GEO

**LOCATION MAP**
SCALE NTS

**APPLICANT:**
CHARTER FOODS, INC.
PO BOX 430
TALBOTT, TN 37877
CONTACT: CHRISTOPHER BEDNAR, P.E.
EMAIL: CBEDNAR@KARPINSKIENG.COM
(216) 391-3700

**BUILDING OWNER OF RECORD:**
CHARTER FOODS, INC.
PO BOX 430
TALBOTT, TN 37877
CONTACT: KATHLEEN DAY
EMAIL: KATHLEENDAYARCHITECT@GMAIL.COM
(617) 331-2545

**ARCHITECT/ LANDSCAPE DESIGN:**
KATHLEEN DAY, ARCHITECT
8535 FERRY RD.
WAYNESVILLE, OH 45068
(617) 331-2545
CONTACT: KATHLEEN DAY
EMAIL: KATHLEENDAYARCHITECT@GMAIL.COM

**CIVIL ENGINEER:**
KARPINSKI ENGINEERING
3135 EUCLID AVE.
CLEVELAND, OH 44115
(216) 391-3700
CONTACT: CHRISTOPHER BEDNAR, P.E.
EMAIL: CBEDNAR@KARPINSKIENG.COM

**SURVEYOR:**
MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND
P.O. BOX 681-24 CHESTNUT STREET
DOVER, NH 03820
(603) 742-0911

**UTILITIES:**

**DOVER UTILITIES COMMISSION-WATER AND SEWER**
PUBLIC WORKS BUILDING
271 MAST ROAD
DOVER, NH 03820
(603)-516-6450

**EVERSOURCE-ELECTRIC**
780 N COMMERCIAL ST
MANCHESTER, NH 03101
(800) 662-7764

**UNITIL-GAS**
6 LIBERTY LANE W
HAMPTON, NH 03842
(603) 772-0775

**CONSOLIDATED COMMUNICATIONS-TELEPHONE**
1575 GREENLAND RD
GREENLAND, NH 03840
(800) 240 5019

**SHEET INDEX:**


| | |
|---|---|
| C0.0 | COVER SHEET |
| C1.0 | EXISTING CONDITIONS & DEMOLITION PLAN |
| C2.0 | SITE PLAN |
| C3.0 | UTILITY PLAN |
| C4.0 | GRADING PLAN |
| C5.0 | STORM WATER POLLUTION PREVENTION PLANS |
| D1.0-D6.0 | NOTES AND DETAIL SHEETS |
| ES1.0-ES3.0 | EROSION & SEDIMENT CONTROL DETAILS |
| SD0.0 | SIGN & LANDSCAPE PLAN |
| E1.1 | SITE PHOTOMETRIC PLAN |


**ABBREVIATIONS**

WSO - WATER SHUT OFF (CURB STOP)
HYD. - FIRE HYDRANT
I.R.(tbs) - IRON ROD (TO BE SEST)
M.N. (tbs) - MAGNETIC NAIL (TO BE SET)
UP - UTILITY POLE


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STATE OF NEW HAMPSHIRE
CHRISTOPHER J. BEDNAR
NO. 17258
LICENSED PROFESSIONAL ENGINEER
©
10.27.22

△ 1 10.27.22 TECHNICAL REVIEW MEETING

CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
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TACO BELL
Durham Road & Grapevine Drive
Dover, New Hampshire 03820

TACO BELL
ENDEAVOR 2.0
LARGE 50

**COVER SHEET**
**C0.0**

PERMIT PLOT DATE:

1. SCOPE OF WORK
THE FOLLOWING IS INTENDED TO CONVEY A GENERAL DESCRIPTION OF THE WORK TO BE PERFORMED FOR THIS PROJECT:

THE CONTRACTOR'S RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO, CONSTRUCTION PROCEDURES, MATERIALS, INSTALLATION SEQUENCE, AND COORDINATION WITH THE OWNER.

THE CONTRACTOR SHALL SECURE AND PAY FOR ANY AND ALL LICENSES, GOVERNMENT FEES, AND PERMITS THAT MAY BE REQUIRED TO PROPERLY EXECUTE AND COMPLETE THE WORK. COMPLY WITH ALL APPLICABLE CODES, RULES, ORDINANCES AND OTHER LEGAL REQUIREMENTS.

CONTRACTOR SHALL IMMEDIATELY LOCATE ALL REFERENCE POINTS, LAYOUT WORK, AND BE RESPONSIBLE FOR ALL MEASUREMENTS AND OTHER WORK TO BE EXECUTED UNDER THE CONTRACT. VERIFY ALL FIGURES SHOWN ON THE PLANS, VERIFY ALL DIMENSIONS OF ANY EXISTING AND NEW WORK, BE RESPONSIBLE FOR THEIR ACCURACY AND SUBMIT ANY DIFFERENCES FOUND TO THE OWNER BEFORE PROCEEDING WITH THE WORK. NO EXTRA COMPENSATION WILL BE PERMITTED BECAUSE OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND MEASUREMENTS INDICATED ON THE DRAWINGS.

2. STANDARDS & SPECIFICATIONS
CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND / OR MATERIAL INSIDE OR OUTSIDE CONTRACT LIMIT / PROPERTY LINE DUE TO CONSTRUCTION. ALL WORK MUST BE IN ACCORDANCE WITH LOCAL AND / OR STATE CODES AND REGULATIONS. CONTRACTOR IS TO COMPLY WITH ODOT ITEM 107.10. WORK IS TO BE SATISFACTORY TO THE PROPERTY OWNER.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS OF THE CITY, AND THE LATEST EDITION OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. IN THE CASE OF A CONFLICT BETWEEN CITY AND ODOT REQUIREMENTS, THE CITY REQUIREMENTS WILL TAKE PRECEDENCE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

3. PLAN DISCREPANCIES
ANY DISCREPANCIES FROM THE PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY SO THAT APPROPRIATE ADJUSTMENTS IN ALIGNMENT AND / OR GRADE MAY BE MADE PRIOR TO THE START OF CONSTRUCTION.

FAILURE BY THE CONTRACTOR TO VERIFY AND / OR DETERMINE EXISTING INFORMATION AS INDICATED WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR ANY CHANGES NECESSARY TO COMPLETE THE WORK SPECIFIED WITHOUT ADDITIONAL COMPENSATION.

4. PLAN MODIFICATION
ANY MODIFICATIONS TO THE NOTES, OR CHANGES TO THE WORK AS SHOWN ON THESE PLANS MUST HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER.

5. SAFETY
IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF THE RESIDENTS (INCLUDING EMPLOYEES), WORKERS, GENERAL PUBLIC AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.

THE CONTRACTOR SHALL PROPERLY SUPPORT AND / OR MAINTAIN ALL EXCAVATIONS PER. APPLICABLE SAFETY REQUIREMENTS AND COMPLY WITH ALL OSHA REGULATIONS. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER OF THE PROJECT'S ASSIGNED "COMPETENT PERSON" IN OSHA EXCAVATION STANDARDS.

PUBLIC STREETS SHALL BE KEPT CLEAN AND FREE OF DEBRIS (MUD, STONE, ETC.) AT ALL TIMES.

THE CONTRACTOR SHALL ALERT ALL LOCAL EMERGENCY AGENCIES (FIRE, POLICE, AMBULANCE, ETC.) OF THE NATURE OF THE PROPOSED PROJECT PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. ACCESS FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES.

6. BASE MAPPING
SURVEY INFORMATION HAS BEEN PROVIDED BY MCENEANEY SURVEY ASSOCIATES. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR. BENCHMARKS SHOWN ON PLAN ESTABLISHED BY OR FOUND BY DEMPSEY SURVEYING. CONDITION OF BENCHMARK MUST BE VERIFIED PRIOR TO CONSTRUCTION.

7. EXISTING UTILITIES
VIEW THE SITE AND COORDINATE WITH THE OWNER REGARDING LOCATION OF EXISTING FACILITIES AND ANY POSSIBLE UTILITY SERVICE INTERRUPTION OR RELOCATION. THE CONTRACTOR'S RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO, THE INVESTIGATION, VERIFICATION OF EXISTING UTILITY DIMENSIONS AND LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT.

THE CONTRACTOR SHALL NOTIFY THE OHIO UTILITY PROTECTION SERVICE (OUPS) AT 1-800-362-2764, THE CITY ENGINEER, AND ALL PRIVATE UTILITY OWNERS A MINIMUM OF 48 HOURS PRIOR TO ANY EARTH DISTURBING ACTIVITY.

ALL UTILITY INFORMATION SHOWN ON THESE PLANS IS BASED UPON THE SURVEY COMPLETED BY MCENEANEY SURVEY ASSOCIATES, AND RECORD DRAWINGS, AND IS PROVIDED AS A REFERENCE ONLY. IT IS BELIEVED THAT THESE LOCATIONS ARE ESSENTIALLY CORRECT. HOWEVER, THE OWNER AND ENGINEER DO NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THESE EXISTING UTILITIES. CONTRACTOR MAY DIG TEST PITS AT THEIR OWN EXPENSE.

8. EXISTING MONUMENTATION
THE CONTRACTOR SHALL PRESERVE ALL CORNERSTONES, IRON PINS, CONCRETE MONUMENTS AND / OR ANY TYPE OF LAND MONUMENT. ALL MONUMENTS IN THE PROXIMITY OF THE WORK SHALL BE REFERENCED. THE CONTRACTOR SHALL REPLACE / RESET ANY DISTURBED OR DAMAGED MONUMENTS, AND SHALL FURNISH A CERTIFICATION BY A REGISTERED SURVEYOR THAT THE MONUMENTS HAVE BEEN RESTORED TO THEIR ORIGINAL STATE.

9. DEWATERING OPERATIONS
WHEN DEEMED NECESSARY, THE CONTRACTOR MAY PLAN AND INSTALL DEWATERING EQUIPMENT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND PLANS FOR THE INSTALLATION AND SUBSEQUENT REMOVAL OF DEWATERING EQUIPMENT AS MAY BE NECESSARY PER STATE AND LOCAL GOVERNING AGENCIES.

10. INSPECTION
ALL WORK REQUIRED FOR THIS IMPROVEMENT PLAN SHALL BE SUBJECT TO INSPECTION BY THE CITY OR THEIR DESIGNATED REPRESENTATIVE. THE CONTRACTOR SHALL GIVE A 48 HOUR NOTICE BEFORE STARTING ANY WORK ON THIS PROJECT AND SHALL KEEP THE CITY AND THE OWNER INFORMED OF HIS / HER CONSTRUCTION SCHEDULE. NO WORK SHALL BE PERFORMED AND / OR BURIED UNLESS AN AUTHORIZED INSPECTOR IS PRESENT.

11. CONSTRUCTION NOISE
CONSTRUCTION NOISE ASSOCIATED WITH ANY IMPROVEMENT PROJECT, SHALL BE LIMITED TO LEVELS COMMENSURABLE WITH ADJOINING LAND AND THEIR ASSOCIATED USAGE AS DETERMINED BY THE CITY ENGINEER, IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICE SHALL NOT BE OPERATED BETWEEN THE HOURS OF 7:00 P.M. AND 8:00 A.M, UNLESS AUTHORIZED BY THE OWNER AND CITY ENGINEER.

CONSTRUCTION HOURS AND ACCEPTABLE NOISE LEVELS ARE TO BE APPROVED BY THE OWNER.

12. DUST CONTROL
THE CONTRACTOR SHALL FURNISH AND APPLY WATER AND CALCIUM CHLORIDE FOR DUST CONTROL AS DIRECTED BY THE OWNER AND / OR CITY ENGINEER. SUFFICIENT QUANTITIES OF CALCIUM CHLORIDE SHALL BE STORED ON THE JOB SITE AT ALL TIMES TO BE USED FOR DUST CONTROL.

13. MAINTENANCE OF TRAFFIC
THE CONTRACTOR IS TO MAINTAIN ACCESS ALONG RAVENNA ROAD AT ALL TIMES. THE CONTRACTOR MUST SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE OWNER AND CITY (IF APPLICABLE) FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.

USE SIGNS, BARRICADES, FLAGMEN OR GUARDS AS REQUIRED DURING CONSTRUCTION ACTIVITIES TO ENSURE THE SAFETY FOR ALL VEHICULAR AND PEDESTRIAN TRAFFIC. NO UNMANNED EXCAVATION SHALL BE LEFT UNPROTECTED. ALL TEMPORARY TRAFFIC CONTROL / FLAGGING ARE TO BE IN ACCORDANCE WITH NHDOT.

14. DIMENSION
ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, AND FACE OF BUILDING, UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REGULATIONS AND RELATIONS TO OTHER WORK BEFORE FABRICATION AND / OR INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT OF WORK.

15. CONSTRUCTION AREA
CONFINE OPERATIONS TO AREAS BEING CONSTRUCTED OR REPAIRED. DO NOT UNREASONABLY ENCUMBER THE SITE WITH MATERIALS OR EQUIPMENT. COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE OWNER.

TAKE ALL PRECAUTIONS TO PREVENT INTERFERENCE WITH NORMAL OPERATIONS OF THE OWNER. DO NOT BLOCK OR INTERFERE WITH REQUIRED LEGAL EXITING.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER THAT LOCAL TRAFFIC SHALL HAVE ACCESS THROUGHOUT THE PROJECT IN A MANNER APPROVED BY THE CITY ENGINEER.

NO TRENCH OR EXCAVATION SHALL BE LEFT OPEN OVERNIGHT. OPEN AREAS ARE TO BE BACKFILLED OR STEEL PLATED. IN CASE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH SHALL BE BACKFILLED OR STEEL PLATED AT THE DIRECTION OF THE ENGINEER OR THE AUTHORITY HAVING JURISDICTION.NO TRENCH MAY BE BACKFILLED WITHOUT INSTALLED UTILITIES BEING REVIEWED BY ASSOCIATED INSPECTOR(S).

THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE SITE CLEAN AT ALL TIMES, TAKE RESPONSIBILITY FOR FINAL CLEANING, AND REMOVAL OF ALL TOOLS, EQUIPMENT AND SURPLUS MATERIALS FROM THE SITE AT COMPLETION OF THE WORK. DO NOT STOCKPILE ANY EXCESS CUT MATERIAL THAT IS NOT TO BE USED FOR ON-SITE FILL. HAUL AWAY AND PROPERLY DISPOSE OF ALL EXCESS CUT MATERIAL AT NO ADDITIONAL EXPENSE TO THE OWNER.

16. GENERAL
THE CONTRACTOR SHALL FURNISH A CERTIFICATE FROM A REGISTERED PROFESSIONAL SURVEYOR STATING THAT ALL HORIZONTAL AND VERTICAL CONTROL MONUMENTS AFFECTED BY THE PROJECT WERE REMOVED AND REPLACED TO THEIR ORIGINAL REFERENCE LOCATIONS AND ELEVATIONS.

ALL ROAD SURFACES, UTILITIES, BUILDINGS, STRUCTURES, SITE CONDITIONS, OR RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT ARE TO BE RESTORED COMPLETELY TO THE BEFORE CONSTRUCTION CONDITION. ALL ITEMS ARE INCLUDED IN THE PAY ITEMS.

ALL EXISTING SITE PAVEMENT MATERIAL REMOVED AS PART OF THIS IMPROVEMENT SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR.

ALL DISTURBED SIGNS, GUARDRAIL, MAIL AND / OR PAPER BOXES, DRIVES AND DRIVE CULVERTS SHALL BE REPAIRED AND / OR REPLACED AS DIRECTED BY THE ENGINEER.

ALL DISTURBED AND / OR DAMAGED STORM SEWER PIPES, STORM SEWER APPURTENANCES, PAVEMENTS, BERMS AND DITCHES SHALL BE REPAIRED AND / OR REPLACED AS DIRECTED BY THE ENGINEER.

ANY DEFECTS IN CONSTRUCTION INCLUDING MATERIALS OR WORKMANSHIP SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHOD PRIOR TO ACCEPTANCE BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

THE CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT AND PERFORM SUB-GRADE PREPARATION WORK ACCORDING TO THE GEOTECHNICAL ENGINEER'S REQUIREMENTS AND FIELD DIRECTION. ACTUAL FIELD CONDITIONS MAY REQUIRE DECISIONS ON MATERIAL HANDLING AND USAGE. THE CONTRACTOR SHALL CONTINUALLY MONITOR AND MAINTAIN OVERALL SITE BALANCE AND COORDINATE ANY REVISIONS WITH THE OWNER AND ENGINEER. ANY EXCESS TOPSOIL OR ORGANIC MATERIAL MAY BE SPOILED ON-SITE IF APPROVED BY THE OWNER.

BEFORE ACCEPTANCE OF THE SUB-GRADE BY THE ENGINEER, PROOF-ROLLING SHALL BE REQUIRED ON ALL AREAS TO BE PAVED PER ODOT ITEM 204.06 CMS (LATEST EDITION). IN ADDITION, FOR ANY FILL IN EXCESS OF TWO (2) FEET, NUCLEAR COMPACTION TESTS SHALL BE PERFORMED BY AN APPROVED ODOT COMPANY AS PER ODOT ITEM 203. THESE TESTS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY PAVEMENT CONSTRUCTION.

FOR ODOT ITEMS 301 - ASPHALT CONCRETE BASE, 304 - AGGREGATE BASE, 441 - ASPHALT CONCRETE, 451 - REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, AND 452 - NON-REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A JOB MIX FORMULA FOR REVIEW AND APPROVAL PRIOR TO THE PRE-CONSTRUCTION MEETING. ALL MATERIALS USED MUST BE OBTAINED FROM A SOURCE APPROVED BY ODOT.

THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO PERFORM THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS.

**EXISTING CONDITIONS NOTES**

UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER KARPINSKI ENGINEERING OR DEMPSEY SURVEYING NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION BY CALLING 811,

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STATE OF NEW HAMPSHIRE
CHRISTOPHER J. BEDNAR
NO. 17258
PROFESSIONAL ENGINEER
©

10.27.22

△ 1 10.27.22 TECHNICAL REVIEW MEETING

CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
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SITE NUMBER: TBD
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TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

ENDEAVOR 2.0
LARGE 50

# GENERAL NOTES

# C0.01

PERMIT PLOT DATE:

## GENERAL NOTES

1. UTILITIES: THE CONTRACTOR SHALL GIVE DUE NOTICE TO THE OWNERS OF ALL UTILITIES AND SHALL SEE THAT THEIR PROPERTY IS PROPERLY SUPPORTED AND PROTECTED BEFORE DISTURBING, UNDERMINING, OR INTERFERING WITH THE SAME. AND IN NO CASE SHALL THE SERVICE OF ANY SUCH UTILITY BE DISRUPTED OR INTERFERED WITH, WITHOUT WRITTEN CONSENT OF THE OWNER THEREOF, AND IN CASE OF SEWER, PIPE, CONDUIT, POLE OR OTHER PUBLIC UTILITY PROPERTY IS DAMAGED OR MUST BE MOVED OR SUPPORTED, THE REPAIR, REMOVAL OR SUPPORTING SHALL BE DONE BY THE OWNER AND THE DESIGN BUILDER SHALL PAY ALL NECESSARY EXPENSE IN CONNECTION THEREWITH.

2. DAMAGES TO THE ADJACENT PROPERTY OR STRUCTURES MUST BE CAREFULLY GUARDED AGAINST,ESPECIALLY IN MAKING EXCAVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE FULL EXTENT, IF THE SAME ARE OCCASIONED THROUGH NEGLECT OR FAILURE ON HIS PART, OR THAT OF ANYONE IN HIS EMPLOY, TO TAKE ALL NECESSARY OR PROPER PRECAUTIONS TO PREVENT THE SAME, AND HE SHALL ASSUME ALL RISK OF DAMAGE TO ANY PORTION OF HIS WORK.

3. ALL EXISTING STRUCTURES INCLUDING PAVEMENT AS CALLED FOR TO BE REMOVED SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES. ANY BURNING ON-SITE IS PROHIBITED.

## EXISTING CONDITIONS NOTES

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER KARPINSKI ENGINEERING, MCENEANEY SURVEY ASSOCIATES NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION BY CALLING 811.

2. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR. BENCHMARKS SHOWN ON PLAN ESTABLISHED BY OR FOUND BY MCENEANEY SURVEY ASSOCIATES CONDITION OF BENCHMARK MUST BE VERIFIED PRIOR TO CONSTRUCTION.

## DEMOLITION NOTES

1. THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR SITE DEMOLITION. IT SHOULD BE NOTED THAT ALL MANMADE FEATURES, PAVEMENT, SIGNS, POLES, CURBING, CONCRETE WALKS, UTILITIES, ETC. SHALL BE REMOVED AS NECESSARY TO CONSTRUCT WORK, UNLESS OTHERWISE NOTED TO REMAIN. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCIES FROM DATA AS SHOWN ON DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.

2. PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED. CLEARING LIMITS ARE THE EDGE OF THE PROPERTY AND THE LIMITS OF WORK.

3. ALL EXISTING STRUCTURES WITHIN THE CONSTRUCTION AREA, UNLESS OTHERWISE NOTED TO REMAIN, SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES. ANY BURNING ON-SITE SHALL BE SUBJECT TO LOCAL ORDINANCES.

4. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND ANY EARTH MOVING OPERATIONS. SILT FENCE SHALL BE INSTALLED AT THE LIMITS OF IMPACT AREAS ACCORDING TO THE DETAILS SHOWN ON SHEET E1 & E2.

5. CONTRACTOR RESPONSIBLE FOR REPAIRS AND RESTORATION OF AREAS DISTURBED BY UTILITY SERVICE INSTALLATION.

## REFERENCE PLANS

1.) TAX MAP H LOT 4-3 CONDOMINIUM SITE PLAN, DOVER FIELDS CONDOMINIUM, DURHAM ROAD (NH ROUTE 108) AND MAST ROAD, DOVER, NEW HAMPSHIRE, OWNED BY AND PREPARED FOR VC DOVER INVESTMENTS, LLC; SCALE: 1" = 40'; DATED: JUNE 15, 2012; RECORDED S.C.R.D. PLAN 104-90.

## CONTROL POINTS AND COORDINATES

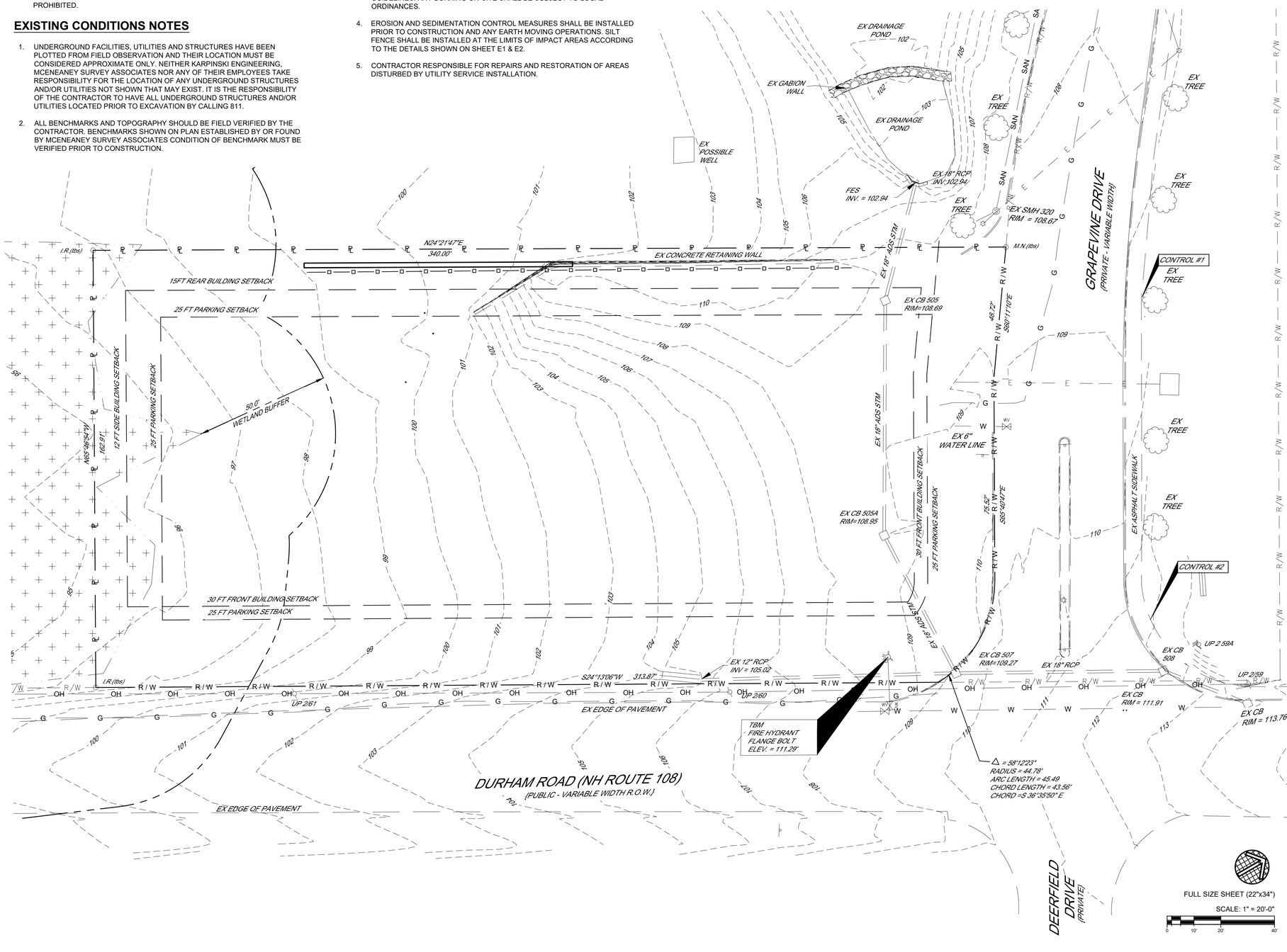
CONTROL #1: MAGNAIL IN ASPHALT SIDEWALK
NORTHING: 244007.7341
EASTING: 1190885.0349
ELEVATION: 109.31

CONTROL #2: MAGNAIL IN ASPHALT SIDEWALK
NORTHING: 243960.4766
EASTING: 1190995.6583
ELEVATION: 111.61

## LEGEND

FULL DEPTH ASPHALT PAVEMENT REMOVAL

EXISTING WETLANDS




FULL SIZE SHEET (22"x34")

SCALE: 1" = 20'-0"

0 10' 20' 40'

## PLAN NOTES

1. REMOVE EXISTING RETAINING WALL
2. BEGIN CURB REMOVAL
3. END CURB REMOVAL
4. REMOVE TREE
5. CURB TO REMAIN

## SURVEYOR'S NOTES

1.) OWNER OF RECORD:

DOVER FIELDS CONDOMINIUM
C/O VC DOVER INVESTMENTS, LLC
48 CONSTITUTION DRIVE
BEDFORD, NEW HAMPSHIRE 03110
S.C.R.D. VOLUME 3496, PAGE 733

2.) PARCEL AREA OF CONDOMINIUM UNIT 4 = 54,340 S.F. / 1.25 Ac.

3.) THE INTENT OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS OF CONDOMINIUM UNIT 4 AS OF SEPTEMBER 7, 2022.

4.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAP 33017C0320E, EFFECTIVE DATE 9/30/2015.

5.) BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION DATED AUGUST 25 2022.
VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATION DATED AUGUST 25 2022.

6.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND ON AUGUST 25 THROUGH SEPTEMBER 7, 2022 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.

7.) THE IMPROVEMENTS AND UTILITIES SHOWN ARE FROM OBSERVATIONS MADE IN THE FIELD OR REFERENCE PLANS. LOCATIONS OF UNDERGROUND UTILITIES NOT MARKED ON THE SURFACE WERE NOT LOCATED. ALL VISIBLE UTILITIES ARE SHOWN.

8.) ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATIONS WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO ANY WORK BEING PERFORMED. CALL DIGSAFE AT 1-888-344-7233.

9.) WETLANDS FLAGGED LINE "A" SHOWN WERE DELINEATED BY ` DAMON E. BURT, N.H.C.W.S. #163 OF FRAGGLE ROCK ENVIRONMENTAL SERVICES. ON SEPTEMBER 2, 2022 IN ACCORDANCE WITH THE 1987 CORPS. OF ENGINEERS WETLANDS DELINEATION MANUAL AND LOCATED BY THIS OFFICE.

## EXISTING SANITARY STRUCTURES

*SMH 320*
*INV.: IN 8" PVC = 101.26 (STUB)*
*INV.: OUT 8" PVC = 101.21*

## EXISTING STORM STRUCTURES

*EX CB 505*
*RIM = 108.64*
*INV. IN 18" ADS = 103.34*
*INV. OUT 18" ADS = 103.26*
*SUMP = 99.37*

*EX CB 505A*
*RIM = 108.95*
*INV. IN 18" ADS = 104.13*
*INV. OUT 18" ADS = 104.05*
*SUMP = 100.82*

*EX CB 507*
*RIM = 109.27*
*INV. IN 18" RCP = 105.87*
*INV. OUT 18" ADS = 105.79*
*SUMP = 100.12*

*EX CB 508*
*RIM = 111.91*
*INV. IN 18" ADS = 106.26*
*INV. OUT 18" RCP = 106.20*
*SUMP = 102.51*


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STATE OF NEW HAMPSHIRE
CHRISTOPHER J. BEDNAR
NO. 17258
LICENSED
PROFESSIONAL ENGINEER

10.27.22

| | |
|---|---|
| 1 | 10.27.22 TECHNICAL REVIEW MEETING |

| | |
|---|---|
| CONTRACT DATE: | 07.05.22 |
| BUILDING TYPE: | ENDEAVOR 2.0 |
| PLAN VERSION: | |
| SITE NUMBER: | TBD |
| STORE NUMBER: | TBD |

TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

TACO BELL
ENDEAVOR 2.0
LARGE 50

# EXISTING CONDITIONS & DEMOLITION PLAN

# C1.0

PERMIT PLOT DATE:

## GENERAL NOTES

1. ZONING DISTRICT: C- COMMERCIAL

2. FLOOD ZONE:

   FEMA FLOOD ZONE = X AREAOF MINIMAL FLOOD HAZARD.

3. PARKING CALCULATIONS: PER SECT. 153.13

   RETAIL/SERVICE: 1 SPACE PER 275 GLA

   2,550 GLA/ 275 GLA= 9.27=10 SPACES REQUIRED
   21 SPACES SHOWN

4. DIMENSIONAL REGULATIONS

   MINIMUM LOT SIZE: 20,000 SF/PARCEL IS 54,340 SF
   MAXIMUM COVERAGE: 50%
   MINIMUM FRONTAGE: 125 FT

   PRINCIPAL BUILDING:

   FRONT SETBACK: 30FT
   ABUT A STREET SETBACK: 30 FT
   SIDE SETBACK: 12FT
   REAR SETBACK: 15FT

   OUTBUILDING/ACCESSORY USE:

   FRONT SETBACK: 50 FT
   ABUT A STREET SETBACK: 50 FT
   SIDE SETBACK: 10 FT
   REAR SETBACK: 10 FT

   HEIGHT OF BUILDING:
   PRINCIPAL BUILDING: 40 FT MAX
   OUTBUILDING: 40 FT MAX

   PARKING SET BACK: 25 FT

5. ALL CONSTRUCTION SHALL CONFORM TO CITY STANDARDS AND REGULATIONS, ODOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, WHICHEVER IS MORE STRINGENT.

6. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER , IN ORDER TO OBTAIN AND/ OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.

7. ALL PROPOSED SIGNAGE SHALL CONFORM WITH THE CITY ZONING REGULATIONS, UNLESS A VARIANCE IS OTHERWISE REQUESTED AND GRANTED.

8. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (O. M.U.T.C.D.) AND NHOT STANDARDS AND SPECIFICATIONS (NON-REFLECTORIZED PAVEMENT MARKINGS), UNLESS OTHERWISE NOTED.

9. ALL PARKING STALLS SHALL BE SEPARATED USING 4" WIDE SOLID STRIPES. STRIPING APPLICATIONS AND MATERIAL SHALL COMPLY WITH DETAILS AND SPECIFICATIONS.

10. ALL STOP BARS SHALL BE 12" IN WIDTH IN A COLOR OF WHITE; ALL TRAFFIC FLOW ARROWS SHALL BE PAINTED IN A COLOR OF YELLOW.

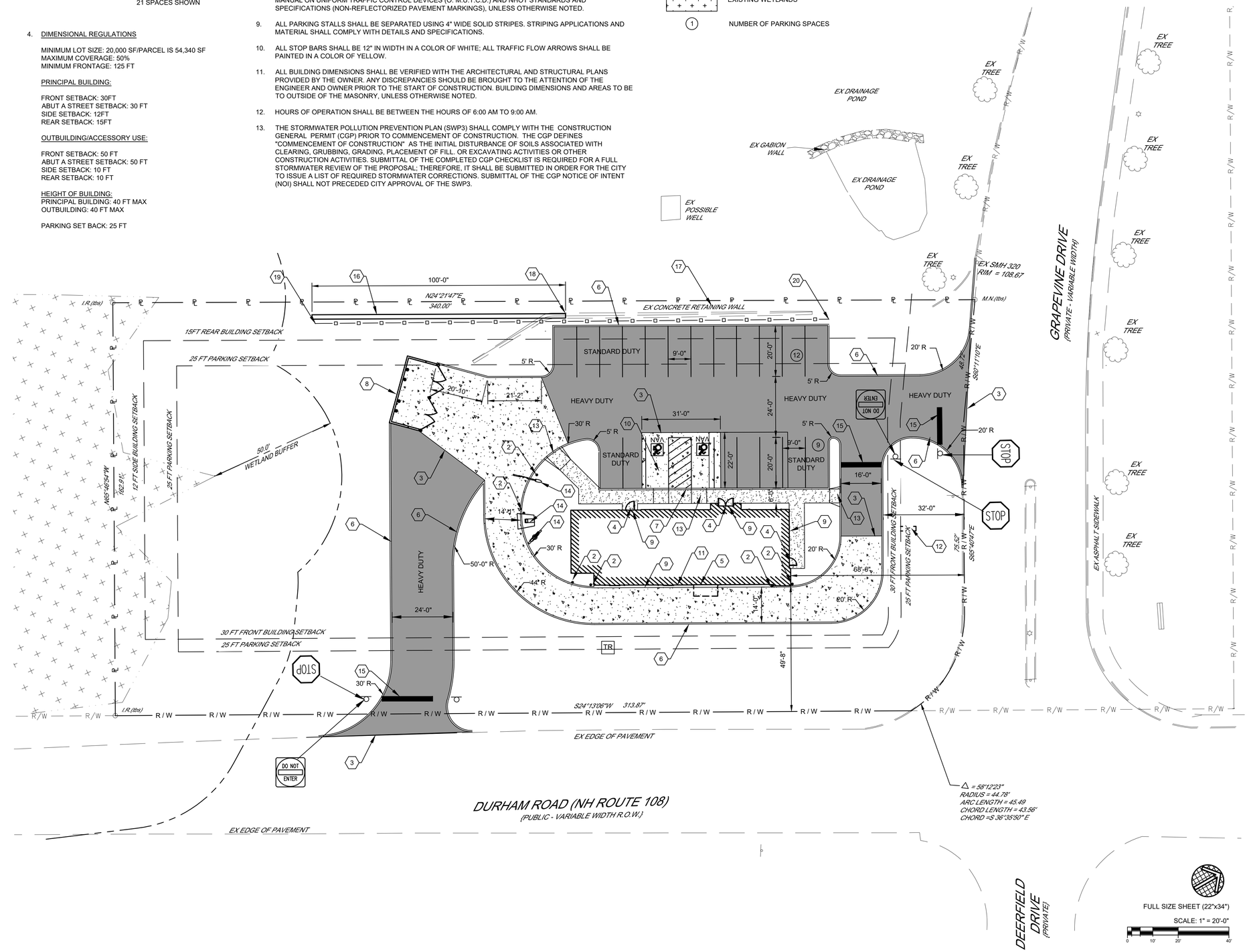
11. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PROVIDED BY THE OWNER. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION. BUILDING DIMENSIONS AND AREAS TO BE TO OUTSIDE OF THE MASONRY, UNLESS OTHERWISE NOTED.

12. HOURS OF OPERATION SHALL BE BETWEEN THE HOURS OF 6:00 AM TO 9:00 AM.

13. THE STORMWATER POLLUTION PREVENTION PLAN (SWP3) SHALL COMPLY WITH THE CONSTRUCTION GENERAL PERMIT (CGP) PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CGP DEFINES "COMMENCEMENT OF CONSTRUCTION" AS THE INITIAL DISTURBANCE OF SOILS ASSOCIATED WITH CLEARING, GRUBBING, GRADING, PLACEMENT OF FILL, OR EXCAVATING ACTIVITIES OR OTHER CONSTRUCTION ACTIVITIES. SUBMITTAL OF THE COMPLETED CGP CHECKLIST IS REQUIRED FOR A FULL STORMWATER REVIEW OF THE PROPOSAL; THEREFORE, IT SHALL BE SUBMITTED IN ORDER FOR THE CITY TO ISSUE A LIST OF REQUIRED STORMWATER CORRECTIONS. SUBMITTAL OF THE CGP NOTICE OF INTENT (NOI) SHALL NOT PRECEDED CITY APPROVAL OF THE SWP3.

## LEGEND

- STANDARD DUTY ASPHALT PAVEMENT IN PARKING STALLS
  HEAVY DUTY ASPHALT PAVEMENT IN ACCESS AISLES
  (SEE DETAIL SHEET D 1.0)
- CONCRETE PAVEMENT (REINFORCED IN DRIVE THRU LANE AND DUMPSTER ENCLOSURE / NON REINFORCED IN ADA ACCESSIBLE SPACES (SEE DETAILS SHEET D 1.0)
- 6" CONCRETE SIDEWALK (SEE DETAIL SHEET D 1.0)
- EXISTING WETLANDS
- (1) NUMBER OF PARKING SPACES




FULL SIZE SHEET (22"x34")

SCALE: 1" = 20'-0"

0 10' 20' 40'

## PLAN NOTES

1. ALL DIMENSIONS ARE TO THE FACE OF CURB
2. INSTALL BOLLARDS
3. SEAL ALL JOINTS WHERE ASPHALT ABUTS CONCRETE, CURBS AND EXISTING ASPHALT PAVEMENT.
4. INSTALL FROST SLAB AT ALL DOORS.
5. DRIVE THRU WINDOW
6. ALL CURBS SHALL BE VERTICAL CURBS UNLESS NOTED IN PLANS
7. INTEGRAL CURB AND WALK ALONG NORTH BUILDING FACE WITH A ZERO (0) INCH CURB REVEAL WHERE SHOWN ON THE GRADING PLANS FOR ADA ACCESSIBILITY PURPOSES
8. SEE SHEET SD1.0 FOR DUMPSTER ENCLOSURE DETAIL AND BOLLARDS
9. CONSTRUCT EXPANSION JOINTS WHERE BUILDING MEETS THE NEW SIDEWALK OR CONCRETE CURB.
10. SEE ADA PARKING SPACE DETAIL FOR WHEEL STOP AND SIGNAGE
11. 12" WIDE CURB ALONG BUILDING ON DRIVE THRU SIDE
12. TACO BELL MEDIUM MONUMENT PYLON SIGN (SEE LANDSCAPE PLAN)
13. INSTALL ADA CURB RAMP
14. SEE SD SERIES SHEETS FOR DRIVE THRU EQUIPMENT DETAILS
15. 2 FOOT WIDE STOP BAR
16. PROPOSED RETAINING WALL (SEE STRUCTURAL PLANS)
17. EXISTING RETAINING WALL
18. CONNECT TO EXISTING RETAINING WALL SEE STRUCTURAL PLANS
19. BEGIN GUARDRAIL
20. END GUARDRAIL


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STATE OF NEW HAMPSHIRE
CHRISTOPHER J. BEDNAR
NO. 17258
PROFESSIONAL ENGINEER
10.27.22

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TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

TACO BELL
ENDEAVOR 2.0
LARGE 50

**SITE PLAN**

**C2.0**

PERMIT PLOT DATE:

## UTILITY NOTES

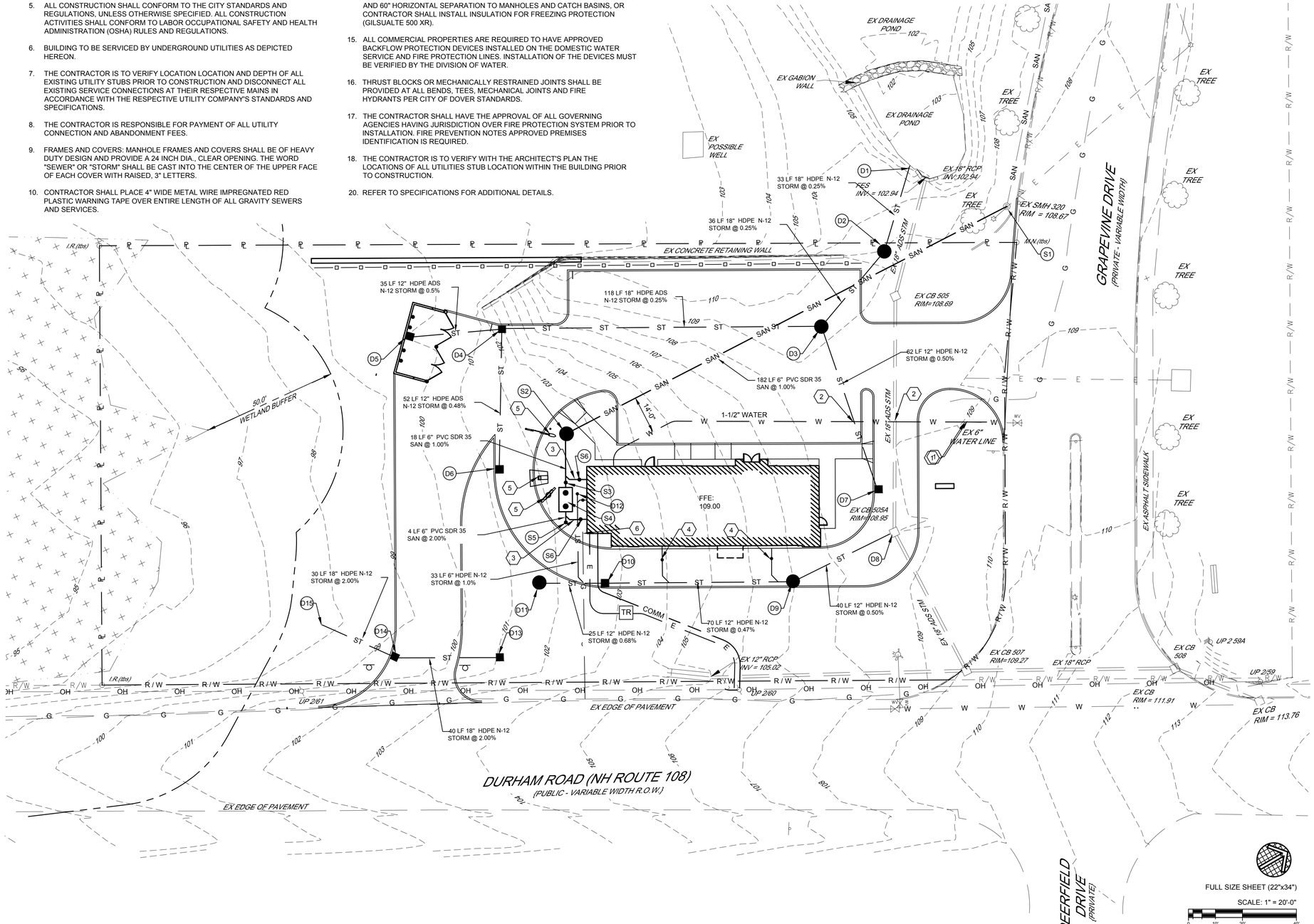
1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS. REQUIRED PERMITS FOR ALL APPROVED WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE OBTAINED, BEFORE WORK BEGINS, CONTACT CITY OF DOVER BUILDING DEPARTMENT.
2. THE CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF FOURTEEN (14) DAYS TO ALL CORPORATIONS, COMPANIES AND/OR LOCAL AUTHORITIES OWNING OR HAVING JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
3. THE LOCATION, SIZE, DEPTH AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY (ELECTRIC, TELEPHONE, CABLE TELEVISION, FIRE ALARM, GAS WATER, AND SEWER).
4. A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS, AND ALL PROJECT-RELATED UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
5. ALL CONSTRUCTION SHALL CONFORM TO THE CITY STANDARDS AND REGULATIONS, UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
6. BUILDING TO BE SERVICED BY UNDERGROUND UTILITIES AS DEPICTED HEREON.
7. THE CONTRACTOR IS TO VERIFY LOCATION LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THEIR RESPECTIVE MAINS IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS.
8. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT OF ALL UTILITY CONNECTION AND ABANDONMENT FEES.
9. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 24 INCH DIA., CLEAR OPENING. THE WORD "SEWER" OR "STORM" SHALL BE CAST INTO THE CENTER OF THE UPPER FACE OF EACH COVER WITH RAISED, 3" LETTERS.
10. CONTRACTOR SHALL PLACE 4" WIDE METAL WIRE IMPREGNATED RED PLASTIC WARNING TAPE OVER ENTIRE LENGTH OF ALL GRAVITY SEWERS AND SERVICES.
11. SANITARY SEWER LINES SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM AN EXISTING OR PROPOSED WATER LINE. WHEN A SEWER LINE CROSSES A WATER LINE, THE SEWER LINE SHALL EXTEND A MINIMUM OF TEN (10) FEET TO EACH SIDE OF THE WATER LINE. THE SEWER LINE SHALL ALSO MAINTAIN A VERTICAL SEPARATION OF NOT LESS THAN 18 INCHES.
12. PROPOSED RIM ELEVATIONS OF STORM AND SANITARY MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS AREA TO BE SET FLUSH WITH FINISHED GRADE. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISHED GRADE AS SHOWN ON THE GRADING AND THE UTILITY PLAN.
13. SEWER AND WATER LINES AND ALL APPURTENANCES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH THE STATE AND CITY OF DOVER SEWER AND WATER SPECIFICATIONS AND DETAILS. SANITARY SEWER SERVICE FOR THIS DEVELOPMENT IS AVAILABLE SUBJECT TO THE RULES AND REGULATIONS OF THE DEPARTMENT OF PUBLIC UTILITIES. A SINGLE SANITARY SEWER TAP FROM THIS SITE SHALL BE ALLOWED INTO THE PUBLIC SANITARY SEWER SYSTEM. DEVELOPER SHALL USE EXISTING SANITARY TAP, WHEN AVAILABLE.
14. ALL WATER MAINS AND SERVICE PIPES SHALL HAVE A MINIMUM 18" VERTICAL AND 60" HORIZONTAL SEPARATION TO MANHOLES AND CATCH BASINS, OR CONTRACTOR SHALL INSTALL INSULATION FOR FREEZING PROTECTION (GILSUALTE 500 XR).
15. ALL COMMERCIAL PROPERTIES ARE REQUIRED TO HAVE APPROVED BACKFLOW PROTECTION DEVICES INSTALLED ON THE DOMESTIC WATER SERVICE AND FIRE PROTECTION LINES. INSTALLATION OF THE DEVICES MUST BE VERIFIED BY THE DIVISION OF WATER.
16. THRUST BLOCKS OR MECHANICALLY RESTRAINED JOINTS SHALL BE PROVIDED AT ALL BENDS, TEES, MECHANICAL JOINTS AND FIRE HYDRANTS PER CITY OF DOVER STANDARDS.
17. THE CONTRACTOR SHALL HAVE THE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER FIRE PROTECTION SYSTEM PRIOR TO INSTALLATION. FIRE PREVENTION NOTES APPROVED PREMISES IDENTIFICATION IS REQUIRED.
18. THE CONTRACTOR IS TO VERIFY WITH THE ARCHITECT'S PLAN THE LOCATIONS OF ALL UTILITIES STUB LOCATION WITHIN THE BUILDING PRIOR TO CONSTRUCTION.
20. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS.

## PROPOSED SANITARY STRUCTURE

| ID | STRUCTURE | RIM | INVERTS | INVERTS | INVERTS |
|---|---|---|---|---|---|
| S1 | EX SAN MANHOLE | 108.67 | EX 8" N = 101.21 | EX 8" STUB = 101.21 | 6" W = 101.21 |
| S2 | PR SAN MANHOLE | 108.67 | 6" E = 103.17 | 6" S = 103.17 | |
| S3 | PR CLEANOUT | 108.75 | 6" N = 103.35 | 6" S = 103.35 | |
| S4 | PR GREASE INTERCEPTOR | 108.75 | 6" N = 103.42 | 6" S = 103.67 | |
| S5 | PR CLEANOUT | 108.83 | 6"N = 103.75 | | |
| S6 | PR CLEANOUT | 109.00 | 6"E = 103.58 | 6"E = 103.58 | |
| S7 | PR CLEANOUT | 109.00 | 6"E = 103.83 | 6"E = 103.83 | |

## PROPOSED STORM STRUCTURE

| ID | STRUCTURE | RIM | INVERTS | | | NOTES |
|---|---|---|---|---|---|---|
| D1 | PR HEADWALL | | 18" SE = 102.94 | | | |
| D2 | PR MANHOLE | 109.00 | 18" N W= 103.02 | 18" SE = 103.02 | | |
| D3 | PR MANHOLE | 107.50 | 18" NW = 103.11 | 18" SW = 103.11 | 12" E = 104.11 | |
| D4 | PR CATCH BASIN | 108.00 | 18" NE = 103.42 | 12" W = 103.42 | 12" SW = 104.42 | |
| D5 | PR CATCH BASIN | 107.67 | 12" NE = 104.58 | | | |
| D6 | PR CATCH BASIN | 107.67 | 12" E = 104.67 | | | |
| D7 | PR CATCH BASIN | 108.25 | 12" W = 104.42 | | | |
| D8 | EX. CATCH BASIN | 108.95 | 18" NW = 104.05 | 18" E = 104.13 | 12" S = 104.13 | LOWER CASTING TO 108.58 |
| D9 | PR MANHOLE | 108.00 | 12" N = 104.33 | 12" SW = 104.33 | | |
| D10 | PR CATCH BASIN | 108.50 | 12" NE = 104.67 | 12" SW = 104.67 | | |
| D11 | PR MANHOLE | 108.50 | 12" NE = 104.83 | | | |
| D12 | PR CLEANOUT | 109.00 | 6" SE = 106.08 | | | |
| D13 | PR CATCH BASIN | 102.25 | INV 18" W = 99.75 | | | |
| D14 | PR CATCH BASIN | 103.42 | INV 18" W = 99.35 | INV 18" E = 99.35 | | |
| D15 | END OF PIPE | | INV 18" E = 98.75 | | | |




FULL SIZE SHEET (22"x34")

SCALE: 1" = 20'-0"

0 10' 20' 40'

## STRUCTURE CALLOUT

(X) STRUCTURE CALLOUT

(D#) STORM STRUCTURE I.D.

(S#) SANITARY STRUCTURE ID

## PIPE MATERIAL NOTES

1. NATURAL GAS SERVICE BY GAS COMPANY.
2. WATER SERVICE: COPPER TYPE K, PROVIDE COMPRESSION FITTING WHEN CONNECTING MORE THAN ONE COPPER ROLE TOGETHER.
3. STORM SEWER: HDPE ADS N-12 (ALL SITE STORM) & RCP CLASS IV DRIVEWAY CULVERT
4. UNDERDRAIN - 6" PERF. PVC SDR 35
5. SANITARY - 6" PVC SDR 35
6. ELECTRIC - PVC CONDUITS ENCASE IN MINIMUM 3" OF 4,000 PSI CONCRETE
7. COMMUNICATIONS - PVC CONDUITS ENCASED IN A MINIMUM 3" OF 4,000 PSI CONCRETE, UNLESS NOTED.

## PLAN NOTES

(X) PLAN NOTES

(1) SITE HAS AN EXISTING 6" WATER CONNECTION. CONTRACTOR SHALL TAP NEW CONNECTION OFF OF THE EXISTING 6 " WATER

(2) DEFLECT WATER CONNECTION UNDER STORM PIPE TO PROVIDE 18" MIN CLEARANCE

(3) PIPE SLOPE FROM BUILDING FOUNDTION TO WYE ON MAINLINE SHALL BE SLOPED AT 2.00%.

(4) ROOF DRAIN CLEANOUT AND EXTEND PIPE TO MAIN LINE AT 2.00% SLOPE.

(5) EXTEND FOUNDATION FOR DRIVE THRU EQUIPMENT BELOW ADJACENT SEWER PIPE

(6) METER BY GAS COMPANY

(7) INSTALL 8" X 6" REDUCER CONNECT NEW SANITARY TO EXISTING 8" STUB AT MANHOLE

## EXISTING SANITARY STRUCTURES

*SMH 320*
*INV. IN 8" PVC = 101.26 (STUB)*
*INV. OUT 8" PVC = 101.21*

## EXISTING STORM STRUCTURES

*EX CB 505*
*RIM = 108.64*
*INV. IN 18" ADS = 103.34*
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*RIM = 109.27*
*INV. IN 18" RCP = 105.87*
*INV. OUT 18" ADS = 105.79*
*SUMP = 100.12*

*EX CB 508*
*RIM = 111.91*
*INV. IN 18" ADS = 106.26*
*INV. OUT 18" RCP = 106.20*
*SUMP = 102.51*


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STATE OF NEW HAMPSHIRE – CHRISTOPHER J. BEDNAR NO. 17258 – PROFESSIONAL ENGINEER ©

10.27.22

△ 1 10.27.22 TECHNICAL REVIEW MEETING

CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
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TACO BELL

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TACO BELL
ENDEAVOR 2.0
LARGE 50

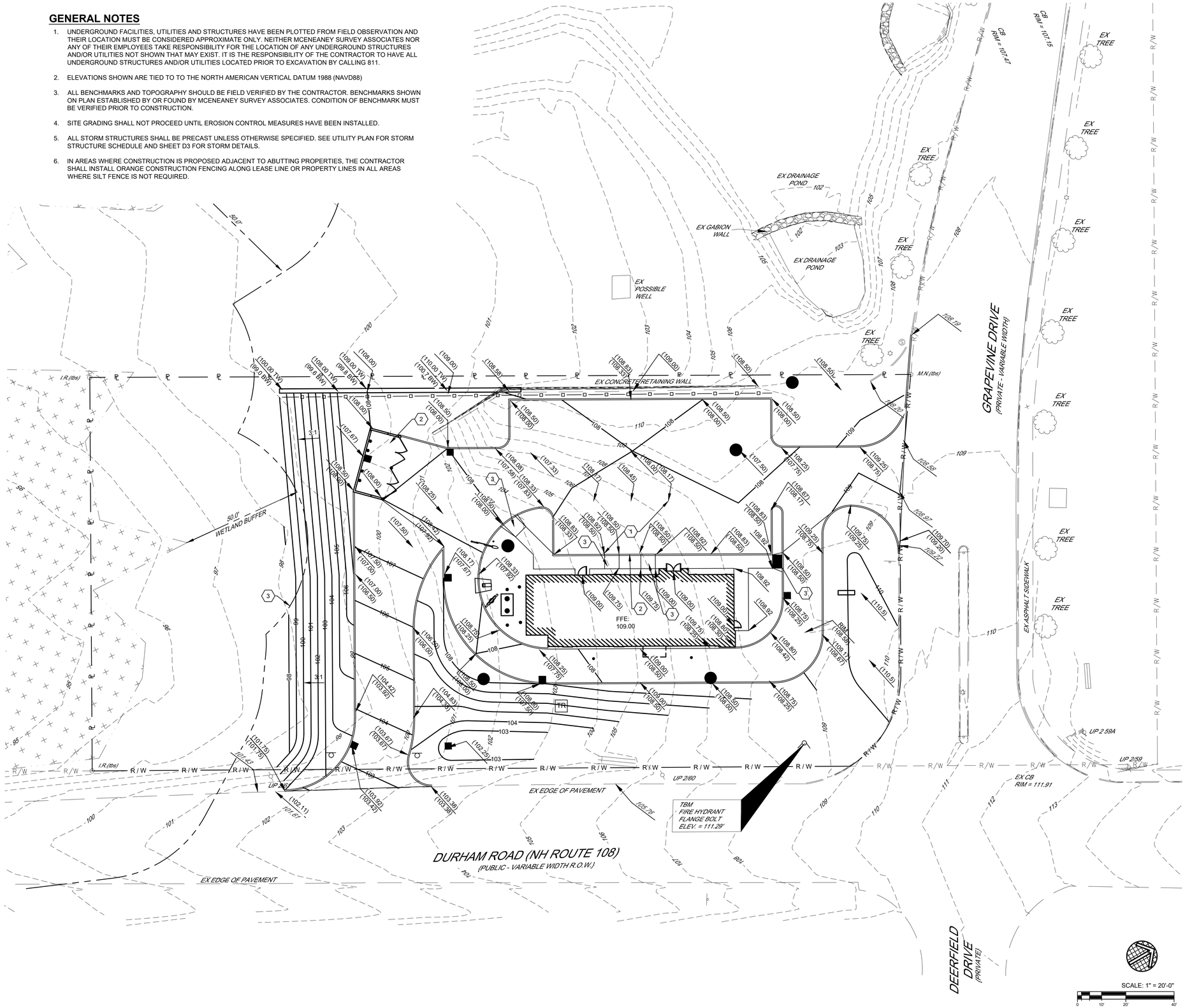
# UTILITY PLAN

# C3.0

PERMIT PLOT DATE:

## GENERAL NOTES

1. UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER MCENEANEY SURVEY ASSOCIATES NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION BY CALLING 811.
2. ELEVATIONS SHOWN ARE TIED TO TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)
3. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR. BENCHMARKS SHOWN ON PLAN ESTABLISHED BY OR FOUND BY MCENEANEY SURVEY ASSOCIATES. CONDITION OF BENCHMARK MUST BE VERIFIED PRIOR TO CONSTRUCTION.
4. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
5. ALL STORM STRUCTURES SHALL BE PRECAST UNLESS OTHERWISE SPECIFIED. SEE UTILITY PLAN FOR STORM STRUCTURE SCHEDULE AND SHEET D3 FOR STORM DETAILS.
6. IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG LEASE LINE OR PROPERTY LINES IN ALL AREAS WHERE SILT FENCE IS NOT REQUIRED.




SCALE: 1" = 20'-0"

0 10' 20' 40'

FULL SIZE SHEET (22"x34")

## LEGEND

- 105.00 / 105.50 — PROPOSED TOP OF CURB ELEVATION / PROPOSED BOTTOM OF CURB ELEVATION
- 105.00 — PROPOSED SPOT ELEVATION
- 104.50 / 104.00 — EXISTING TOP OF CURB ELEVATION / EXISTING BOTTOM OF CURB ELEVATION
- 106.50 — EXISTING ELEVATION
- FLOW ARROW

## PLAN NOTES

1. CROSS SLOPE ON ADA ACCESSIBLE SPACE CONCRETE PAD SHALL NOT EXCEED 2.00% IN ANY DIRECTION.
2. 0" CURB REVEAL
3. PROPOSED ADA RAMP


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kathleendayarchitect@gmail.com


STATE OF NEW HAMPSHIRE
CHRISTOPHER J. BEDNAR
NO. 17258
PROFESSIONAL ENGINEER
10.27.22

| | |
|---|---|
| 1 | 10.27.22 TECHNICAL REVIEW MEETING |

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| SITE NUMBER: | TBD |
| STORE NUMBER: | TBD |

TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

ENDEAVOR 2.0
LARGE 50

# GRADING PLAN

# C4.0

PERMIT PLOT DATE:

| SWPPP LEGEND | | BMPs UTILIZED ON THIS PROJECT "X" |
|---|---|---|
| IP | STORM DRAIN INLET PROTECTION | X |
| TS | TEMPORARY SEEDING | X |
| PS | PERMANENT SEEDING | X |
| DC | DUST CONTROL | X |
| CW | CONCRETE WASHOUT | X |
| CF | 8'-0" CHAIN-LINK FENCE | |
| FS | FILTER SOCK | |
| SF | SILT FENCE | X |
| CD | COVERED AND LEAK PROOF CONSTRUCTION DEBRIS DUMPSTER | X |
| FC | FUEL CONTAINMENT DYKE AND CHEMICAL STORAGE/MIXING AREA | X |
| CE | CONSTRUCTION ENTRANCE MAY USE EX ASPHALT IN PLACE | X |

## SOIL NAMES AND HSG GROUPS:

HYDROLOGIC SOIL GROUP

| SOIL TYPE | NAME | PRE CONSTRUCTION | POST-CON. |
|---|---|---|---|
| EaA | ELMWOOD FINE SANDY LOAM, 0-3% SLOPES | B | D |
| SwA | SWANTON FINE SANDY LOAM, 0-3% SLOPES | B/D | D |
| WdA | WINDSOR LOAMY SAND, 0-3% SLOPES | B | D |
| WfB | WINDSOR LOAMY FINE SAND, CLAY SUBSOIL VARIANT, 0-8% SLOPES. | A | D |

## SITE OPERATOR / SWP3 AGENT:

OPERATOR
CHARTER FOODS, INC.
PO BOX 430
TALBOTT, TN 37877
CONTACT: SCOTT BRADLEY
EMAIL: SBRADLEY@CHARTERFOODS.NET
(615) 310-6558

SWPPP AGENT
TO BE DETERMINED (SITE CONTRACTOR)

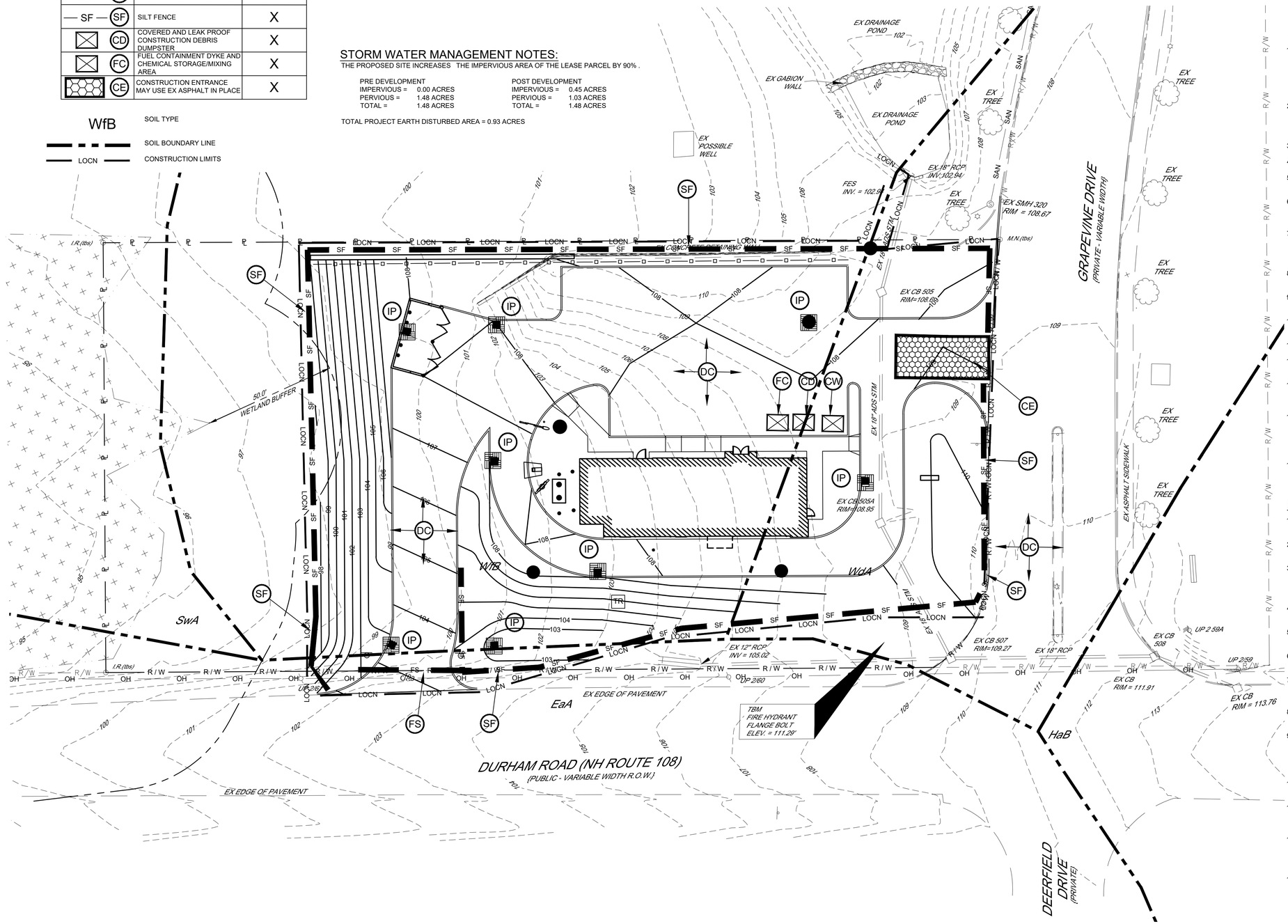
## STORM WATER MANAGEMENT NOTES:

THE PROPOSED SITE INCREASES THE IMPERVIOUS AREA OF THE LEASE PARCEL BY 90% .

| PRE DEVELOPMENT | | POST DEVELOPMENT | |
|---|---|---|---|
| IMPERVIOUS = | 0.00 ACRES | IMPERVIOUS = | 0.45 ACRES |
| PERVIOUS = | 1.48 ACRES | PERVIOUS = | 1.03 ACRES |
| TOTAL = | 1.48 ACRES | TOTAL = | 1.48 ACRES |

TOTAL PROJECT EARTH DISTURBED AREA = 0.93 ACRES

WfB SOIL TYPE
SOIL BOUNDARY LINE
LOCN CONSTRUCTION LIMITS




## HANDLING OF TOXIC OR HAZARDOUS MATERIALS

1. ALL HAZARDOUS AND CHEMICAL SPILLS SHALL BE CONTAINED ON-SITE AND REMOVED BY A CERTIFED HAZARDOUS WASTE REMOVAL CONTRACTOR AND DISPOSED OF PER STATE AND LOCAL SPECIFICATIONS.
2. CONTRACTOR SHALL ALSO REMOVE ALL SOILS THAT ARE IMPACTED BY SPILLS.
3. NO CHEMCIALS OR SPILS SHALL BE DIRECTED TO THE CITY'S STORM WATER OR SANITARY SEWER SYSTEMS.
4. THE CONTRACTOR SHALL DEVELOP AND HAVE A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC PLAN). PLAN SHALL INCLUDE CONTACTING NOTE: NEW HAMPSHIRE DEPAR7MENT OF ENVIRONEMENTAL SERVICES (1-603-271-3503), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) MUST BE CONTACTED WITHIN 30 MINUTES OF A SPILL OF 25 OR MORE GALLONS.

## CONSTRUCTION SEQUENCE

1. PRE-CONSTRUCTION MEETING PRIOR TO INITIAL DISTURBANCE OF SOILS ASSOCIATED WITH CLEARING, GRUBBING, GRADING PLACEMENT OF FILL, EXCAVATING AND/OR OTHER CONSTRUCTION ACTIVITIES. NOTIFICATION SHALL BE MADE TO THE DIVISION OF ENVIRONMENTAL SERVICES NO LATER THAN THREE DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. ESTABLISH CONSTRUCTION OFFICE ON SITE. ESTABLISH TEMPORARY POWER, WATER, SANITARY SEWER, TELEPHONE SERVICE, WITH OWNER, GC, SITE CONTRACTOR AND CITY ENGINEER REPRESENTATIVE. ALL TEMPORARY UTILITY SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. STAKEOUT LIMITS OF DISTURBANCE.
4. INSTALL INLET PROTECTION OF ANY EXISTING CATCH BASINS.
5. INSTALL ALL PERIMETER SILT FENCE (OR FILTER SOCK) WHERE SHOWN ON PLANS.
6. MAINTAIN TEMPORARY CONTROLS UNTIL REMOVAL IS WARRANTED DUE TO PROGRESSION OF WORK. CONSTRUCTION BMPsSHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
7. STRIP TOPSOIL AND BEGIN EARTHWORK OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE OWNER OF LOCATION AND EROSION SEDIMENTATION CONTROL MEASURES IMPLEMENTED AT BORROW OR SPOIL SITE OF IMPORT/EXPORT MATERIAL.
8. ALL SEWER AND UTILITY LINE CONSTRUCTION MAY BEGIN IMMEDIATELY FOLLOWING ESTABLISHMENT OF GRADE AND PERMISSION OF THE OWNER.
9. STABILIZE ALL UTILITY TRENCHES AT THE END OF EACH WORKDAY BY MEANS OF GRAVEL BACKFILL TO SURFACE, RE-PAVING, MULCHING.
10. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, PERMANENT SEED AND MULCHING IMMEDIATELY UPON REACHING FINAL GRADE.
11. INSTALL PAVEMENT BASE AND PAVEMENT.
12. COMPLETE SITE WORK, PAVEMENT MARKING, FINAL LANDSCAPING AND CLEANUP.
13. RESEED AND REDRESS ANY AREAS THAT MAY REQUIRE ATTENTION IMMEDIATELY. NOTE THAT LAWN AREAS WILL NOT BE DEEMED STABLE UNTIL A UNIFORM 80% COVERAGE IS ACHIEVED.
14. ALL EROSION MEASURES SHALL REMAIN IN PLACE UNTIL THE SITE IS STABILIZED. ALL AREAS OF VEGETATIVE SURFACE STABILIZATION, WHETHER TEMPORARY OR PERMANENT, SHALL BE CONSIDERED TO BE IN PLACE AND FUNCTIONAL WHEN THE REQUIRED UNIFORM RATE OF COVERAGE (80%) IS OBTAINED.
15. IF FOR ANY REASON THE PROJECT IS SUSPENDED, THE CONTRACTOR SHALL ENSURE THAT ALL INSTALLED EROSION MEASURES ARE FUNCTIONING AND PROPERLY MAINTAINED DURING THIS PERIOD, AND THAT ALL DISTURBED SOILS ARE SEEDED AND MULCHED WITH TEMPORARY SEED MIXTURE.

## EROSION AND SEDIMENT CONTROL NOTES:

1. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT.
2. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
3. TEMPORARY VEGETATION SHALL BE USED TO PROTECT HIGH EROSION POTENTIAL OR OTHER CRITICAL AREAS EXPOSED DURING DEVELOPMENT. WHEREVER FEASIBLE, NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED.
4. THE CONTRACTOR IS TO REFER TO THIS PLAN AND THE E&S PLAN, NOTES. AND DETAILS.
5. THE SITE DEMOLITION AREA IS APPROXIMATELY 1.26 AC. ACTUAL DISTURBED AREA IS APPROXIMATELY 1.14 AC.
6. TEMPORARY SEEDING IS SPECIFIED UNTIL CONSTRUCTION OF FINAL IMPROVEMENTS COMMENCES.
7. THE CONTRACTOR IS TO INSTALL AND MAINTAIN THE E&S CONTROLS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL THE SITE IS FULLY STABILIZED.
8. THE CONTRACTOR IS RESPONSIBLE TO REMOVE THE TEMPORARY E&S CONTROLS ONCE THE SITE IS FULLY STABILIZED.
9. CONTRACTOR IS TO MAINTAIN A LOG DOCUMENTING GRADING AND STABILIZATION ACTIVITIES AS WELL AS AMENDMENTS TO THE SWPPP. PER GENERAL PERMIT REQUIREMENTS. SWP3 INSPECTION REPORTS SHALL BE KEPT ON SITE WITH THE SWP3 AND READILY ACCESSIBLE DURING NORMAL WORKING HOURS.
10. CONTRACTOR IS TO UTILIZE EXISTING PAVEMENT FOR CONSTRUCTION ENTRANCE PER THEIR MEANS AND METHODS.
11. APPLICANT SHALL MAINTAIN COMPLIANCE WITH NEW HAMPSHIRE DEPARTMENT OF ENVIRONEMENTAL SERVICES GENERAL STORMWATER NPDES PERMIT PROGRAMS.
12. APPLICANT SHALL MAINTAIN COMPLIANCE WITH THE CITY OF DOVER AND STATE OF NEW HAMPSHIRE AIR QUALITY REGULATIONS APPLICABLE IN THE VCITY OF DOVER MUNICIPAL CODE AND THE ADMINISTRATIVE CODE INCLUDING, BUT NOT LIMITED TO THE ASBESTOS AND THE ANTI-NOISE LAWS.
13. ALL WASTE WILL COMPLY WITH APPLICABLE STATE OR LOCAL WASTE DISPOSAL REQUIREMENTS AND PROVISIONS FOR SANITARY WASTES AND CONSTRUCTION AND DEMOLITION DEBRIS. OPEN BURNING IS PROHIBITED.

FULL SIZE SHEET (22"x34")
SCALE: 1" = 20'-0"
0 10' 20' 40'


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STATE OF NEW HAMPSHIRE
CHRISTOPHER J. BEDNAR
NO. 17258
PROFESSIONAL ENGINEER
10.27.22

| | |
|---|---|
| 1 | 10.27.22 TECHNICAL REVIEW MEETING |

CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
STORE NUMBER: TBD

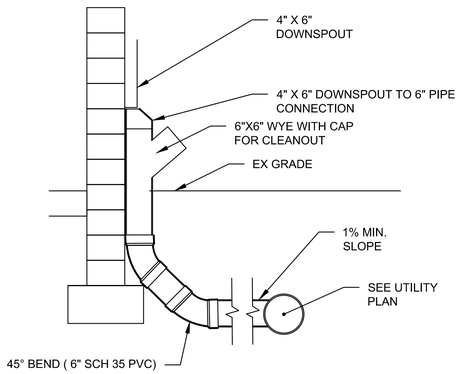
TACO BELL
Durham Road & Grapevine Drive
Dover, New Hampshire 03820

TACO BELL
ENDEAVOR 2.0
LARGE 50

# STORM WATER POLLUTION PREVENTION PLAN

# C5.0

PERMIT PLOT DATE:

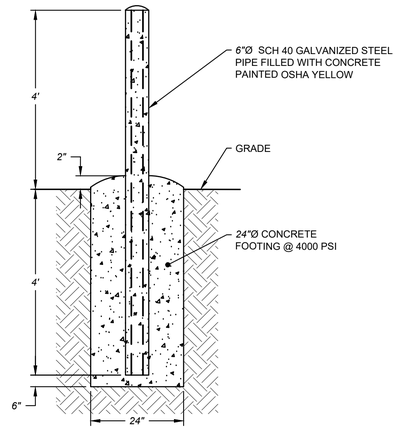



## DOWNSPOUT COLLECTOR

SCALE: NONE

NOTES:

1. FOR ALL DEPTHS OF COVER LESS THAN TWO (2) FEET, PIPE MUST BE SCHEDULE 40 PVC. FOR DEPTHS OF COVER GREATER THAN TWO (2) FEET, FLEXIBLE PIPE MAY BE USED. REFER TO SPECIFICATIONS FOR ALLOWABLE PIPE TYPES.
2. A WATERTIGHT CONNECTION SHALL BE MAINTAINED WITH ANY TRANSITION.
3. THE DOWNSPOUT COLLECTOR DRAIN SHALL BE INSTALLED BEFORE THE DOWNSPOUTS ARE INSTALLED ON THE BUILDING. THE SITEWORK CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK TO AND INCLUDING THE ADS CONNECTOR. THE BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONNECTION AT THE POINT OF THE ADS CONNECTOR.

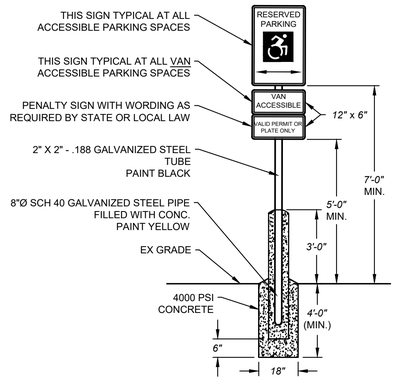



## BOLLARD DETAIL

SCALE: NONE

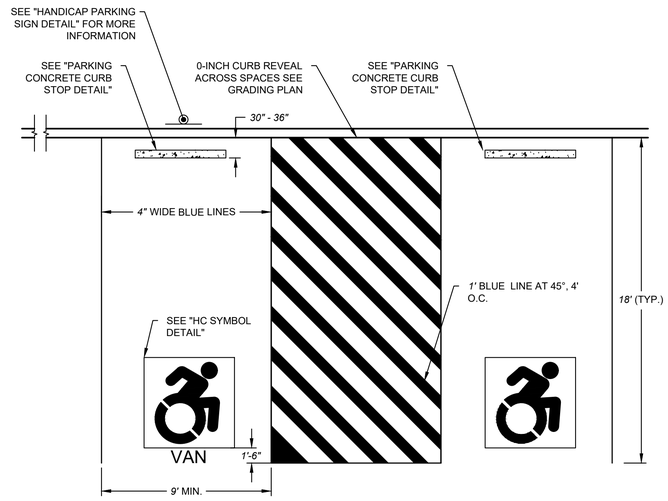
NOTES:

1. ALL CONCRETE SHALL BE 4000 PSI, AIR ENTRAINED, (NO FLY ASH) UNLESS OTHERWISE DIRECTED BY ENGINEER.
2. 1/2" PREFORMED EXPANSION JOIN WHEN ADJACENT TO STRUCTURE.
3. 1/2" FOAM EXP JOINT WITH 1/2" REVEAL FILL JOINT WITH ONE COMPONENT SEALER (SIKA, OR APPROVED EQUAL). SELECT COLOR TO MATCH SURROUNDING PAVEMENT.




## HANDICAP PARKING SIGN DETAIL

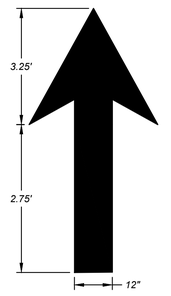
SCALE: NONE




## VAN ACCESSIBLE PARKING SPACE DETAIL

NOTES:

1. ISLAND STRIPING COLOR: BLUE.
2. HANDICAP SPACE STRIPING COLOR: BLUE.
3. ADA SYMBOL COLOR: PER DETAIL BELOW.

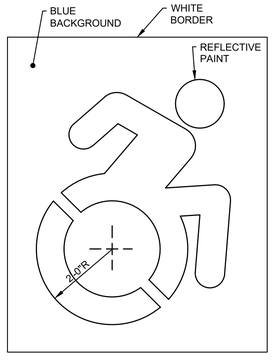



## DIRECTIONAL TRAFFIC ARROWS DETAIL

SCALE: NONE

NOTES:

1. COLOR OF ARROWS SHALL BE YELLOW.

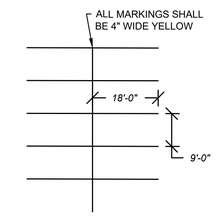



## HANDICAP SYMBOL DETAIL

SCALE: NONE

NOTES:

1. SIGNS ARE TO CONFORM TO MUNICIPALITY PARKING STANDARDS.
2. HANDICAP SYMBOL IS TO BE PAINTED WHITE ON BLUE BACKGROUND.

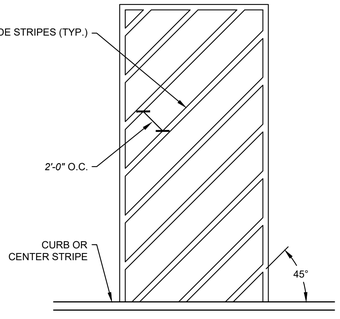



## PARKING STALL DETAIL

SCALE: NONE

NOTES:

1. TRAFFIC PAINT SHALL BE PER SPECIFICATIONS.
2. PARKING SPACES AND ISLANDS PER DRIVE AISLE MAY VARY. REFER TO SITE PLAN FOR ADDITIONAL INFORMATION.
3. REFER TO SITE PLAN FOR STRIPING LAYOUT, AND EXCEPTIONS TO THIS DETAIL.

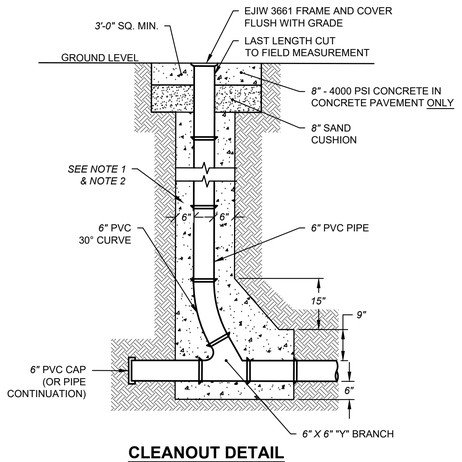



## ISLAND STRIPING DETAIL

SCALE: NONE

NOTES:

1. ISLAND STRIPING COLOR: YELLOW.
2. CROSSWALK COLOR: WHITE.
3. HANDICAP AREAS COLOR: BLUE.




## CLEANOUT DETAIL

SCALE: NONE

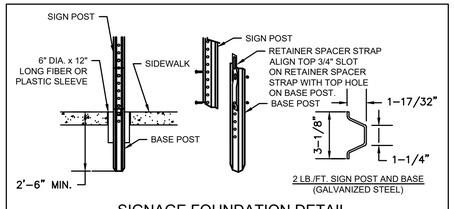
NOTES:

1. CONCRETE (4000 PSI) ENCASEMENT FOR CLEANOUT IS OPTIONAL WITHIN LANDSCAPE. CONSULT ENGINEER BEFORE PROCEEDING.
2. CONCRETE (4000 PSI) ENCASEMENT FOR CLEANOUT IS REQUIRED WHEN SUBJECT TO TRAFFIC.
3. 8" CLEANOUT SHALL BE USED FOR 8" SEWER AND LARGER.
4. SMALLER SIZE SEWERS AND LAMP HOLES SHALL HAVE SAME SIZE PIPE.
5. CLEANOUT TO HAVE A WATERTIGHT CAP ON RISER.
6. RISER IS TO BE TERMINATED JUST BELOW GRADE. USE C.I. LAMPHOLE FRAME AND COVER WHEN SUBJECT TO TRAFFIC.
7. INSTALL CLEANOUTS ON ALL STORM & SANITARY LINES LEAVING THE BUILDING. LOCATIONS TO BE FIELD DETERMINED.

## TRAFFIC CONTROL SCHEDULE

| SIGN NUMBER | SIGN | SIZE OF SIGN | | DESCRIPTION | MOUNT TYPE | MOUNT HEIGHT SEE NOTE | REMARKS |
|---|---|---|---|---|---|---|---|
| | | WIDTH | HEIGHT | | | | |
| R1-1 | STOP | 30" | 30" | STOP | CHANNEL | 7'-0" | REFLECTORIZED SIGN |
| R5-1 | DO NOT ENTER | 30" | 30" | DO NOT ENTER | CHANNEL | 7'-0" | REFLECTORIZED SIGN |
| - | RESERVED PARKING | 12" | 18" | ACCESSIBLE PARKING | TUBE | 7'-0" | REFLECTORIZED SIGN |
| R7-8A | VAN ACCESSIBLE | 12" | 6" | VAN PARKING | TUBE | 5'-0" | REFLECTORIZED SIGN |

NOTE: HEIGHT SHOWN IS FROM GROUND TO BOTTOM OF SIGN




## SIGNAGE FOUNDATION DETAIL

SCALE: NONE

NOTES:

1. BASE BOLTS SHALL BE 5/16" - 18 x 1 1/2" GRADE 8 OR ASTM A354.
2. BOLTS AND NUTS SHALL BE WASHER HEAD TYPE OR INSTALLED WITH FLAT WASHERS UNDER BOLT HEAD & NUT.


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STATE OF NEW HAMPSHIRE
CHRISTOPHER J. BEDNAR
NO. 17258
LICENSED PROFESSIONAL ENGINEER
©

10.27.22

1 10.27.22 TECHNICAL REVIEW MEETING

CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
STORE NUMBER: TBD

TACO BELL

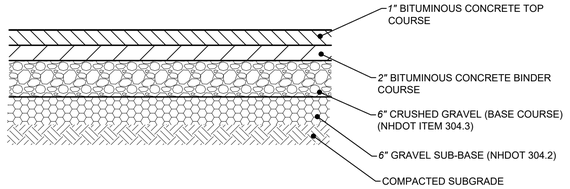
Durham Road & Grapevine Drive
Dover, New Hampshire 03820

TACO BELL
ENDEAVOR 2.0
LARGE 50

**DETAIL SHEET**

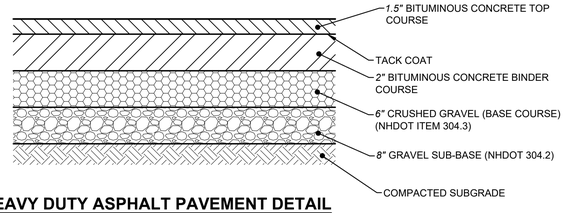
**D1.0**

PERMIT PLOT DATE:




## STANDARD DUTY ASPHALT PAVEMENT DETAIL

SCALE: NONE

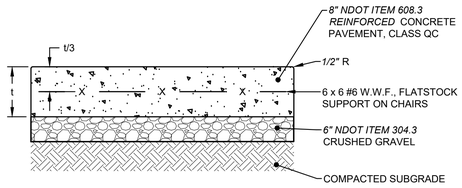



## HEAVY DUTY ASPHALT PAVEMENT DETAIL

(DRIVE AISLES) SCALE: NONE

NOTES:

1. ALL THICKNESSES SHOWN ARE COMPACTED IN PLACE.
2. PRIOR TO PAVING, SUBBASE IS TO BE PROOF ROLLED.
3. TACK COAT TO BE APPLIED IN ACCORDANCE WITH NHDOT SPECIFICATIONS
4. WHERE APPLICABLE, REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
5. GRAVEL SUB-BASE AND BASE COURSE SOILS SHOULD BE PLACED IN MAXIMUM LOOSE LIFTS OF 8 INCHES AND SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D1557).
6. THE LOOSE LIFT THICKNESS MAY BE INCREASED TO 12 INCHES IF A MINIMUM 10-TON VIBRATORY ROLLER IS USED FOR SOIL COMPACTION. THE ADEQUACY OF THE COMPACTION EFFORTS SHOULD BE VERIFIED BY FIELD DENSITY TESTING. COMPACTED STRUCTURAL FILL SHOULD BE PALCED IN 12-INCH LIFTS AND COMPACTED AT LEAST 92% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D1557).
7.

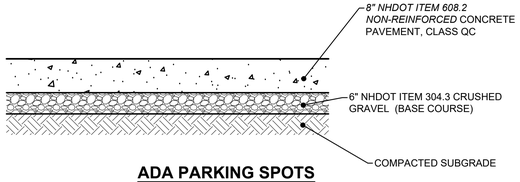



## REINFORCED CONCRETE SLAB DETAIL
## DUMPSTER PAD, DRIVE THRU LANE AND APRON

SCALE: NONE

NOTES:

1. ALL CONCRETE IS TO BE AIR-ENTRAINED 4000 PSI (NO FLY ASH), UNLESS OTHERWISE DIRECTED BY ENGINEER.
2. SLOPE SURFACE TO DRAIN
3. CONCRETE PAVEMENT TO HAVE MEDIUM BROOM FINISH PERPENDICULAR TO TRAFFIC FLOW, RUB OUT ALL TOOL MARKS.
4. PROVIDE EXPANSION JOINTS AT 50'-60' O.C. AND WHERE CONCRETE ABUTS BUILDING, CURBS, OR OTHER STRUCTURES.
5. CONTRACTION JOINTS SHOULD NOT EXCEED 15' O.C.
6. COORDINATE LOCATION OF ALL JOINTS WITH THE ENGINEER.
7. MATERIAL PLACING, FINISHING, AND JOINTING PER DETAILS AND SPECIFICATIONS.

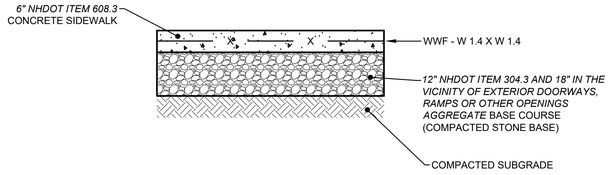



## ADA PARKING SPOTS
## CONCRETE PAVEMENT DETAIL

SCALE: NONE

NOTES:

1. ALL CONCRETE IS TO BE AIR ENTRAINED 4000 PSI (NO FLY ASH), UNLESS OTHERWISE DIRECTED BY ENGINEER.
2. A SINGLE COMPONENT POLYURETHANE, SELF LEVELING CONCRETE SEALANT (SIKA OR APPROVED EQUAL. SEE JOINT DETAILS) IS TO BE APPLIED TO CONCRETE JOINTS AT INTERFACE WITH BUILDING.
3. SLOPE SURFACE TO DRAIN (MIN. 1%).
4. PROOFROLL EXPOSED SUB-GRADE WITH A FULLY LOADED DUMP TRUCK.
5. COMPACT EXPOSED SUB-GRADE TO A MINIMUM OF 98% OF THE LABORATORY DRY DENSITY OF THE SOIL AS DETERMINED BY A STANDARD PROCTOR TEST (ASTM D 698).
6. STABILIZE OR UNDERCUT ANY UNSTABLE AREAS ON A T&M BASIS, APPROVED BY THE OWNER IN ADVANCE.
7. WATER WILL NOT BE ADDED AT JOBSITE. SLUMP MAY BE ADJUSTED WITH HRWR ADMIXTURE. SUBMIT MIX DESIGN TO ENGINEER AND TESTING AGENCY. CONTRACTOR IS TO PAY FOR PROCTOR TEST AND CONCRETE TESTING AGENCY (AIR CONTENT, SLUMP, 7 AND 28 DAY COMPRESSIVE STRENGTH).
8. APPLY SPRAY APPLIED CURING COMPOUND (ASTM C 309, TYPE 1, CLASS B, DISSIPATING).
9. INCLUDE FIBERMESH 650 SYNTHETIC FIBER (OR APPROVED EQUAL) TO CONCRETE AT A MINIMUM RATE OF 3.0 LBS PER C.Y.
10. SURFACE IS TO HAVE A MEDIUM BROOM FINISH PERPENDICULAR TO TRAFFIC FLOW, RUB OUT ALL TOOL MARKS.

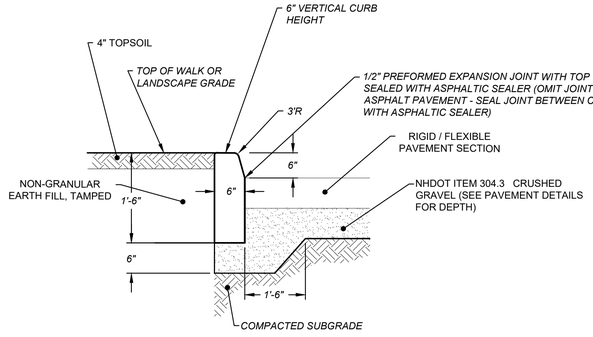



## CONCRETE SIDEWALK DETAIL

SCALE: NONE

NOTES:

1. ALL CONCRETE IS TO BE AIR-ENTRAINED 4000 PSI (NO FLY ASH) , UNLESS OTHERWISE DIRECTED BY ENGINEER.
2. SLOPE SURFACE TO DRAIN (MIN 1% MAX 2% CROSS-SLOPE).
3. 1/2" PREFORMED JOINT MATERIAL, CONTINUOUS STRIP SHALL BE INSTALLED EVERY 30' AND / OR BETWEEN SIDEWALK AND ANY FIXED STRUCTURE EXTENDING THE FULL DEPTH OF THE SIDEWALK.
4. SIDEWALK JOINTS SHALL BE DIVIDED INTO EQUALLY SPACED BLOCKS, BUT NOT GREATER THAN 10' O.C. (I.E. 5' INTERVALS FOR 5' WIDE SIDEWALKS). JOINTS SHALL BE HAND TOOLED OR SAW CUT TO A DEPTH OF 1/4" OF THE SLAB THICKNESS.
5. MATERIAL PLACING, FINISHING, AND JOINTING PER DETAILS AND SPECIFICATIONS
6. CONCRETE WALK IS TO HAVE MEDIUM BROOM FINISH PERPENDICULAR TO TRAFFIC FLOW, RUB OUT ALL TOOL MARKS.

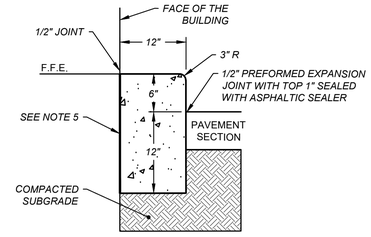



## 6" CONCRETE CURB DETAIL

SCALE: NONE

NOTES:

1. ALL CONCRETE SHALL BE AIR ENTRAINED 4,000 PSI UNLESS OTHERWISE DIRECTED BY ENGINEER (NO FLY ASH).
2. PROVIDE HOT APPLIED ASPHALTIC SEALER ACCORDING TO ASTM D 3405 AT ALL SURFACES WHERE ASPHALT PAVEMENT ABUTS CONCRETE CURB. APPLY SEALER IN A NEAT, WORKMANSHIP FASHION.
3. INSTALL CONTRACTION JOINT @ 10' O.C.
4. AGGREGATE BASE IS TO EXTEND 12" BEYOND BACK OF CURB.

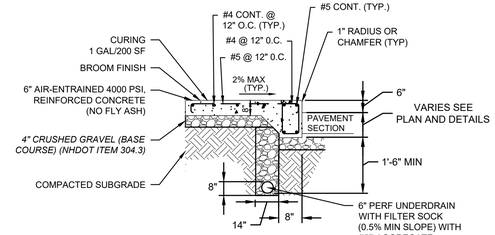



## CONCRETE CURB @ DRIVE-THRU/BUILDING DETAIL

SCALE: NONE

NOTES:

1. ALL CONCRETE SHALL BE AIR ENTRAINED 4,000 PSI UNLESS OTHERWISE DIRECTED BY ENGINEER (NO FLY ASH).
2. PROVIDE HOT APPLIED ASPHALTIC SEALER ACCORDING TO ASTM D 3405 AT ALL SURFACES WHERE ASPHALT PAVEMENT ABUTS CONCRETE CURB. APPLY SEALER IN A NEAT, WORKMANSHIP FASHION.
3. INSTALL CONTRACTION JOINT @ 10' O.C.
4. JOINT SHALL BE MADE FROM PRE MOLDED EXPANSION MATERIAL, THE CONTRACTOR IS TO CUT BACK AND PROVIDE SEALANT TYPICAL AT ALL JOINTS WITH FILLER.
5. 15 LB BOND BREAK MATERIAL BELOW EXPANSION JOINT MATERIAL.

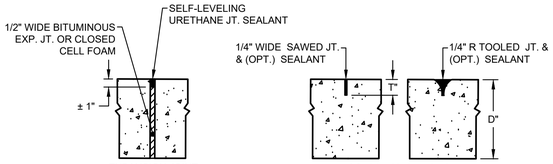



## MOD. INTEGRAL CURB & WALK

SCALE: NONE

NOTES:

1. ALL CONCRETE SHALL BE AIR ENTRAINED 4000 PSI (NO FLY ASH) UNLESS OTHERWISE DIRECTED BY ENGINEER.
2. USE CHAIRS TO SUPPORT REINFORCEMENT IN WALK.
3. USE EPOXY COATED REBAR. MAINTAIN 2" COVER OVER REINFORCEMENT.
4. PROVIDE STANDARD RUBBED FINISH ON EXPOSED VERTICAL FACE.
6. SLOPE SURFACE TO DRAIN (MIN 1% MAX 2% CROSS-SLOPE).
7. 1/2" PREFORMED JOINT MATERIAL, CONTINUOUS STRIP SHALL BE INSTALLED EVERY 30' AND / OR BETWEEN SIDEWALK AND ANY FIXED STRUCTURE EXTENDING THE FULL DEPTH OF THE SIDEWALK.
8. SIDEWALK JOINTS SHALL BE DIVIDED INTO EQUALLY SPACED BLOCKS, BUT NOT GREATER THAN 10' O.C. (I.E. 5' INTERVALS FOR 5' WIDE SIDEWALKS). JOINTS SHALL BE HAND TOOLED OR SAW CUT TO A DEPTH OF 1/4" OF THE SLAB THICKNESS.
9. MATERIAL PLACING, FINISHING, AND JOINTING PER DETAILS AND SPECIFICATIONS
10. CONCRETE WALK IS TO HAVE MEDIUM BROOM FINISH PERPENDICULAR TO TRAFFIC FLOW, RUB OUT ALL TOOL MARKS.



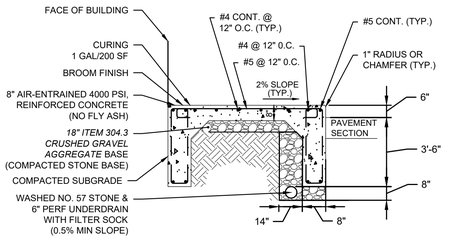

| D" | T" (MIN.) |
|---|---|
| 4" | 1-1/3" |
| 6" | 2" |
| 8" | 2-2/3" |

## PROFILE CONCRETE JOINT DETAIL

SCALE: NONE

NOTES:

1. MAXIMUM JOINT SPACING IS AS FOLLOWS:
   1.a. CONTRACTION JOINT @ 15' O.C.
   1.b. EXPANSION JOINT @ 60' O.C.
2. USE OF SEALANT IS OPTIONAL IN CONTRACTION JOINTS

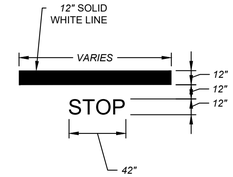



## MOD. WALK AT DOORS (FROST STOOP)

SCALE: NONE

NOTES:

1. ALL CONCRETE SHALL BE AIR ENTRAINED 4000 PSI (NO FLY ASH) UNLESS OTHERWISE DIRECTED BY ENGINEER.
2. USE CHAIRS TO SUPPORT REINFORCEMENT IN WALK.
3. USE EPOXY COATED REBAR. MAINTAIN 2" COVER OVER REINFORCEMENT.
4. PROVIDE STANDARD RUBBED FINISH ON EXPOSED VERTICAL FACE.
6. SLOPE SURFACE TO DRAIN (MIN 1% MAX 2% CROSS-SLOPE).
7. 1/2" PREFORMED JOINT MATERIAL, CONTINUOUS STRIP SHALL BE INSTALLED EVERY 30' AND / OR BETWEEN SIDEWALK AND ANY FIXED STRUCTURE EXTENDING THE FULL DEPTH OF THE SIDEWALK.
8. SIDEWALK JOINTS SHALL BE DIVIDED INTO EQUALLY SPACED BLOCKS, BUT NOT GREATER THAN 10' O.C. (I.E. 5' INTERVALS FOR 5' WIDE SIDEWALKS). JOINTS SHALL BE HAND TOOLED OR SAW CUT TO A DEPTH OF 1/4" OF THE SLAB THICKNESS.
9. MATERIAL PLACING, FINISHING, AND JOINTING PER DETAILS AND SPECIFICATIONS
10. CONCRETE WALK IS TO HAVE MEDIUM BROOM FINISH PERPENDICULAR TO TRAFFIC FLOW, RUB OUT ALL TOOL MARKS.
11. THIS WALK DETAIL IS TO BE USED AT ALL MAN DOORS TO THE BUILDING AND 4' (MIN.) BEYOND DOOR IN EACH DIRECTION.




## STOP BAR DETAIL

SCALE: NONE

NOTES:

1. THE BAR AND WORDING ARE TO BE WHITE.
2. LETTERING IS TO BE CENTERED ON THE STOP BAR.
3. SEE SITE PLAN FOR LOCATION AND ORIENTATION.


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8535 ferry road
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617.331.2545
kathleendayarchitect@gmail.com


STATE OF NEW HAMPSHIRE – CHRISTOPHER J. BEDNAR NO. 17258 – PROFESSIONAL ENGINEER ©

10.27.22

△ 10.27.22 TECHNICAL REVIEW MEETING

CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
STORE NUMBER: TBD

TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

TACO BELL

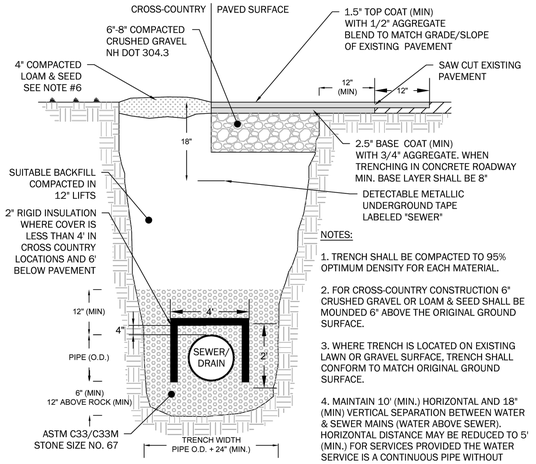
ENDEAVOR 2.0

LARGE 50

**DETAIL SHEET**

**D2.0**

PERMIT PLOT DATE:




NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.

2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.

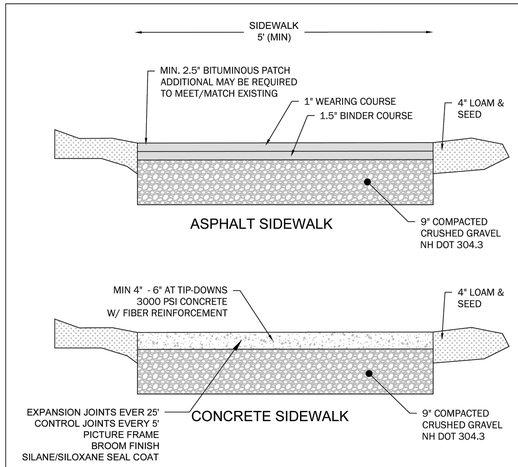
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.

4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE; DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT AND ROCKS OVER 6" IN LARGEST DIMENSION

6. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

| SHEET NO. | STANDARD DETAILS | CITY OF DOVER, NH |
|---|---|---|
| D-3 | SEWER/DRAIN TRENCH | COMMUNITY SERVICES ENGINEERING DIVISION |
| REVISED: MAY 2022 | NOT TO SCALE | 288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-1915 FAX: (603) 516-6483 |



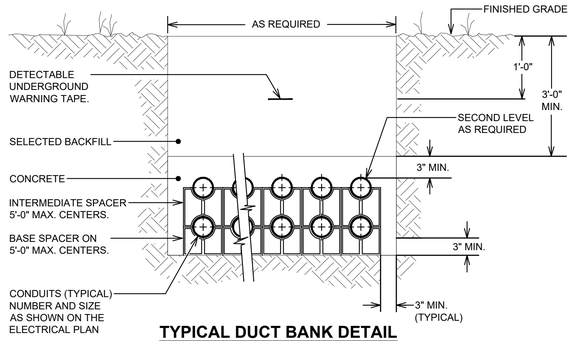

NOTES:

1. MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF DOVER STANDARDS SPECIFICATIONS.

2. SIDEWALK AND DRIVEWAY WIDTHS SHALL BE EQUAL TO EXISTING WIDTHS OR AS APPROVED AND SHALL SLOPE TO MATCH EXISTING ELEVATIONS.

3. BASE FOR THE SIDEWALKS AND DRIVEWAYS SHALL BE 9-INCHES OF CRUSHED GRAVEL.

| SHEET NO. | STANDARD DETAILS | CITY OF DOVER, NH |
|---|---|---|
| D-6 | ASPHALT & CONCRETE SIDEWALK | COMMUNITY SERVICES ENGINEERING DIVISION |
| REVISED: MAY 2022 | NOT TO SCALE | 288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-1915 FAX: (603) 516-6483 |




## TYPICAL DUCT BANK DETAIL

SCALE: NONE

NOTES:

1. CONTRACTOR SHALL LOCATE UNDERGROUND CONDUIT AT A MINIMUM OF 10'-0" FROM NEAREST TREE, OR IF NOT PRACTICAL, AS DIRECTED IN FIELD BY THE LANDSCAPE ARCHITECT.

2. ALL UNDERGROUND ELECTRICAL CONDUIT SHALL HAVE A DETECTABLE WARNING TAPE INSTALLED 12" BELOW GRADE - DIRECTLY ABOVE THE CONDUIT. WARNING TAPE SHALL BE "TERRA TAPE", 3" WIDE, LABELED WITH "CAUTION A, B, C, OR D BURIED BELOW".
   - A - "ELECTRIC LINE", #42-0064
   - B - "TELEPHONE LINE", #42-0041
   - C - "HIGH VOLTAGE LINE", #42-0111
   - D - "FIBER OPTIC CABLE", #42-0037
   - CONTACT: REEF INDUSTRIES, INC. 1-800-231-6074

3. CONCRETE ENCASE CONDUIT(S) UNDER ROADWAYS, DRIVEWAYS AND PARKING-LOTS. MINIMUM OF 3" CONCRETE ENCASEMENT.

4. WHENEVER POSSIBLE, DUCT ARRANGEMENTS SHALL BE RESTRICTED TO EITHER A TWO CONDUIT WIDTH OR A CONDUIT DEPTH TO ALLOW SIDE EXPOSURE OF ALL DUCTS. WHEN NOT POSSIBLE, ADDITIONAL INNER DUCTS WITH NO SIDE EXPOSURE SHALL BE PROVIDED AND SHALL NOT BE USED FOR POWER WIRING. (NOTE: A DUCT WITH NO SIDE EXPOSURE MAY BE USED FOR LOW VOLTAGE SYSTEM WIRING AND/OR FIBER OPTIC CABLING)

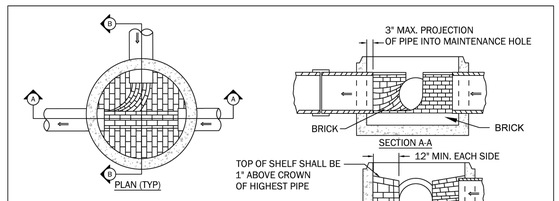
5. MINIMUM SEPARATION BETWEEN CONDUITS SHALL BE 3". MINIMUM SPACING BETWEEN POWER AND COMMUNICATION CONDUITS SHALL BE 12". REFER TO DRAWINGS FOR EXACT CONDUIT REQUIREMENTS. EXACT CONFIGURATION AND DEPTH SHALL BE ADJUSTED AFTER COORDINATION WITH OTHER TRADES ON SITE. REFER TO COORDINATION NOTES ON THE DRAWINGS.


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kathleendayarchitect@gmail.com



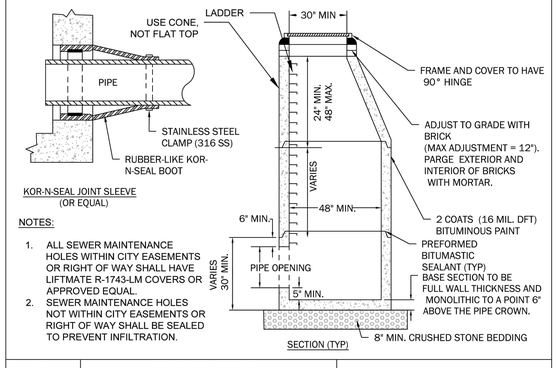


10.27.22




NOTES:

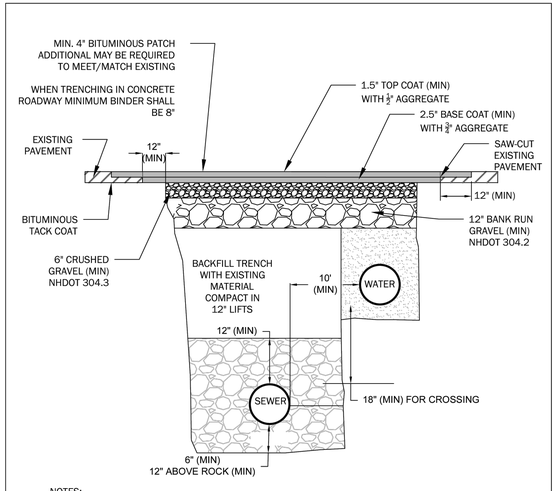
1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION




NOTES:

1. ALL SEWER MAINTENANCE HOLES WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL HAVE LIFTMATE R-1743-LM COVERS OR APPROVED EQUAL.
2. SEWER MAINTENANCE HOLES NOT WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL BE SEALED TO PREVENT INFILTRATION.

| SHEET NO. | STANDARD DETAILS | CITY OF DOVER, NH |
|---|---|---|
| D-16 | SEWER MAINTENANCE HOLE | COMMUNITY SERVICES ENGINEERING DIVISION |
| REVISED: MAY 2022 | NOT TO SCALE | 288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-1915 FAX: (603) 516-6483 |



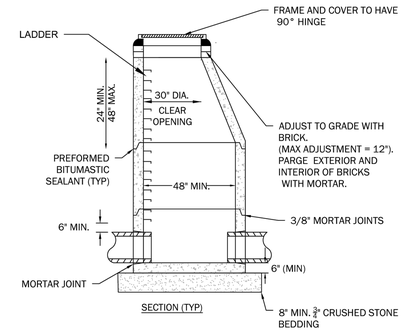

NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.

2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES

3. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

| SHEET NO. | STANDARD DETAILS | CITY OF DOVER, NH |
|---|---|---|
| D-10 | TYPICAL TRENCH | COMMUNITY SERVICES ENGINEERING DIVISION |
| REVISED: MAY 2022 | NOT TO SCALE | 288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-1915 FAX: (603) 516-6483 |




NOTES:

1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION

| SHEET NO. | STANDARD DETAILS | CITY OF DOVER, NH |
|---|---|---|
| D-20 | DRAIN MAINTENANCE HOLE | COMMUNITY SERVICES ENGINEERING DIVISION |
| REVISED: MAY 2022 | NOT TO SCALE | 288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-1915 FAX: (603) 516-6483 |

| | |
|---|---|
| 1 | 10.27.22 TECHNICAL REVIEW MEETING |

| | |
|---|---|
| CONTRACT DATE: | 07.05.22 |
| BUILDING TYPE: | ENDEAVOR 2.0 |
| PLAN VERSION: | |
| SITE NUMBER: | TBD |
| STORE NUMBER: | TBD |

TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

TACO BELL

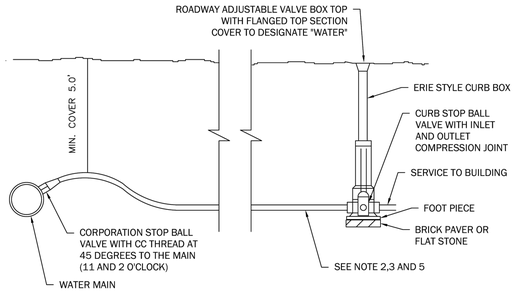
ENDEAVOR 2.0

LARGE 50

**DETAIL SHEET**

**D3.0**

PERMIT PLOT DATE:




NOTES:

1.ALL WATER LINES 4" OR GREATER SHALL BE DUCTILE IRON WITH AN 8 MIL POLYETHYLENE WRAP, INCLUDING TEE AND OTHER CONNECTIONS.

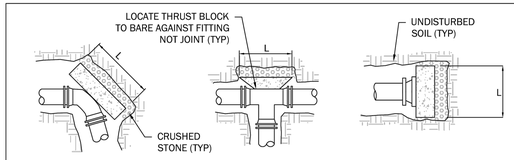
2. WATER SERVICE LINES SHALL BE COPPER TUBING (TYPE K) BETWEEN MAIN AND CURB STOP.

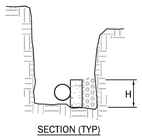
3. SERVICE BETWEEN CURB STOP AND BUILDING MAY BE (BLUE OR BLACK) CTS SDR 9 PLASTIC POLYETHYLENE RATED FOR 250 psi.

4. CAM-LOCK REQUIRED FOR CTS OR IPS, MJ ADAPTER REQUIRED FOR HDPE

5. ¾"- COPPER, CTS
1"- COPPER, CTS
2"- CTS, HDPE, IPS

| SHEET NO. | STANDARD DETAILS NOT TO SCALE | CITY OF DOVER, NH |
|---|---|---|
| D–13 | WATER SERVICE | COMMUNITY SERVICES ENGINEERING DIVISION<br>288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820<br>TELEPHONE: (603) 516–1915 FAX: (603) 516–6483 |
| REVISED: MAY 2022 | | |



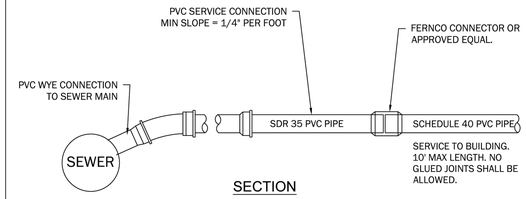

THRUST BLOCK SCHEDULE
MINIMUM BEARING AREA (SQUARE FEET)

| | PIPE SIZE | | | | | |
|---|---|---|---|---|---|---|
| Nominal Dia. (in) | 4 | 6 | 8 | 10 | 12 | 16 |
| Pipe Fittings | * | * | 5.18 | 7.96 | 11.43 | 20.29 |
| 90 Degree Bends | * | 4.11 | 7.33 | 11.26 | 16.17 | 28.69 |
| 45 Degree Bends | * | * | * | 6.10 | 8.75 | 15.53 |
| 22-1/2 Degree Bends | * | * | * | * | 4.46 | 7.92 |
| 11-1/4 Degree Bends | * | * | * | * | * | * |
| *SEE NOTE 2 | System Pressure: 125 psi<br>Safety Factor: 1.5<br>Soil Bearing Capacity: 2,000 psf | | | | | |

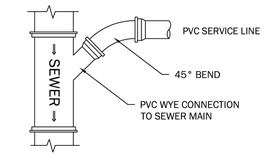
NOTES:

1. ALL THRUST BLOCKS SHALL BE PRE-CAST CONCRETE UNLESS APPROVED BY THE CITY ENGINEER.
2. 2'X2'X2' MINIMUM THRUST BLOCK REQUIRED, ANY BEARING AREA OVER 4SF REQUIRES THRUST BLOCKS, RESTRAINED JOINTS AND CALCULATIONS ASSOCIATED WITH THE JOINT.
3. THE MINIMUM BEARING AREAS SHOWN IN THE THRUST BLOCK SCHEDULE ARE BASED ON A SYSTEM PRESSURE OF 125 PSI. IF THE SYSTEM PRESSURE IS ABOVE 125 PSI, INCREASE THE NOTED AREAS PROPORTIONALLY TO THE ACTUAL SYSTEM PRESSURE.
4. FOR MINIMUM BEARING AREAS OVER 4 SF, THE LENGTH (L) OF THE BLOCK IS APPROXIMATELY TWICE AS LONG AS THE HEIGHT (H).
5. PLACE CRUSHED STONE BEHIND THRUST BLOCK AGAINST UNDISTURBED SOIL.
6. PLACE THRUST BLOCK ALONG MAXIMUM LENGTH OF THE FITTING TO MAXIMIZE BEARING AREA.
7. CONCRETE COMPRESSIVE STRENGTH: 2,000 PSI MINIMUM.
8. USE OF THRUST BLOCKS DOES NOT ELIMINATE THE REQUIREMENT OF OTHER RESTRAINTS OR VICE VERSA.

| SHEET NO. | STANDARD DETAILS NOT TO SCALE | CITY OF DOVER, NH |
|---|---|---|
| D–15 | CONCRETE THRUST BLOCK | COMMUNITY SERVICES ENGINEERING DIVISION<br>288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820<br>TELEPHONE: (603) 516–1915 FAX: (603) 516–6483 |
| REVISED: MAY 2022 | | |




SECTION

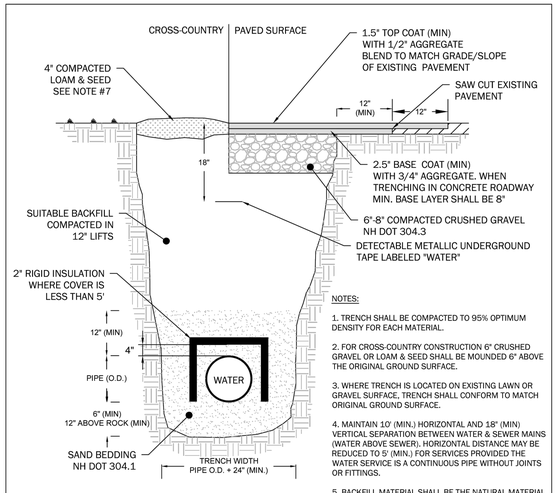



PLAN

NOTES:

1. TRENCHING AND BEDDING REQUIREMENTS PER CITY SEWER TRENCH DETAIL (D-3).
2. SERVICE LATERAL DIAMETER VARIES PER APPLICATION. REVIEW SIZE WITH CITY ENGINEER PRIOR TO INSTALLATION.
3. SDR 35 SHALL NOT EXTEND INTO THE BUILDING

| SHEET NO. | STANDARD DETAILS NOT TO SCALE | CITY OF DOVER, NH |
|---|---|---|
| D–17 | SEWER SERVICE | COMMUNITY SERVICES ENGINEERING DIVISION<br>288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820<br>TELEPHONE: (603) 516–1915 FAX: (603) 516–6483 |
| REVISED: MAY 2022 | | |




NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.

2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.

3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.

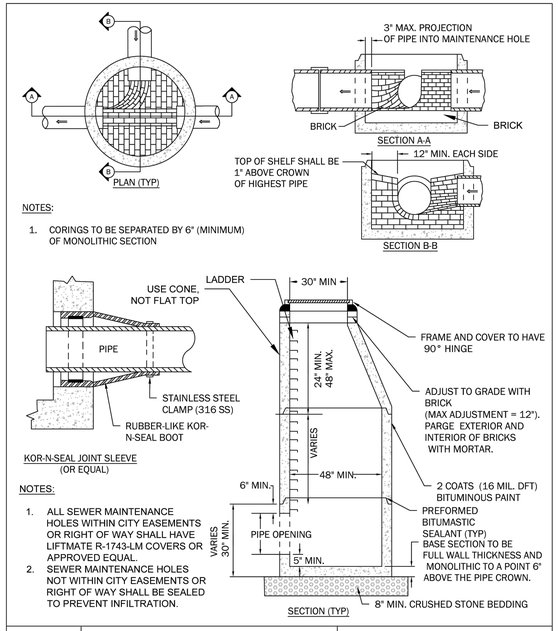
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER), HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE: DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT, AND ROCKS OVER 6" IN LARGEST DIMENSION

6. PROVIDE MINIMUM 5' OF COVER. ENGINEERING APPROVAL REQUIRED FOR LESS THAN 5' OF COVER.

7. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

| SHEET NO. | STANDARD DETAILS NOT TO SCALE | CITY OF DOVER, NH |
|---|---|---|
| D–4 | WATER TRENCH | COMMUNITY SERVICES ENGINEERING DIVISION<br>288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820<br>TELEPHONE: (603) 516–1915 FAX: (603) 516–6483 |
| REVISED: MAY 2022 | | |




KOR-N-SEAL JOINT SLEEVE
(OR EQUAL)

SECTION (TYP)

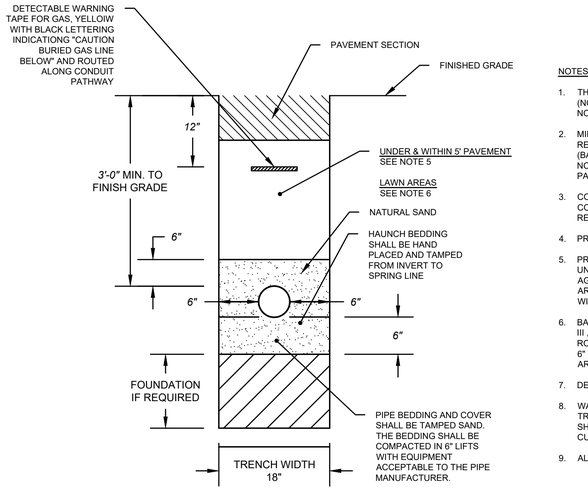
NOTES:

1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION

NOTES:

1. ALL SEWER MAINTENANCE HOLES WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL HAVE LIFTMATE R-1743-LM COVERS OR APPROVED EQUAL.
2. SEWER MAINTENANCE HOLES NOT WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL BE SEALED TO PREVENT INFILTRATION.

| SHEET NO. | STANDARD DETAILS NOT TO SCALE | CITY OF DOVER, NH |
|---|---|---|
| D–16 | SEWER MAINTENANCE HOLE | COMMUNITY SERVICES ENGINEERING DIVISION<br>288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820<br>TELEPHONE: (603) 516–1915 FAX: (603) 516–6483 |
| REVISED: MAY 2022 | | |




GAS MAIN TRENCH DETAIL

SCALE: NONE

NOTES:

1. THIS DETAIL IS FOR INSTALLATION OF WATER LINES IN STABLE SOIL (NOT SHALE). CONTACT ENGINEER IF MATERIAL ENCOUNTERED IS NOT STABLE OR IF ROCK IS ENCOUNTERED.
2. MIN OF 12" OF PROPERLY COMPACTED COVER OVER PIPE IS REQUIRED FOR LIGHT DUTY CONSTRUCTION VEHICLE TRAFFIC (BACKHOE, PICK-UP TRUCK, ETC.). HD CONSTRUCTION TRAFFIC IS NOT ALLOWED OVER PIPE UNTIL ALL REQUIRED BACKFILL AND PAVEMENT IS IN PLACE.
3. COMPACTION TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR. SUBMIT TESTING RESULTS TO THE ENGINEER FOR REVIEW.
4. PROVIDE MATERIAL SUBMITTALS TO ENGINEER FOR APPROVAL.
5. PREMIUM BACKFILL SHALL BE ODOT ITEM 304 GRANULAR MATERIAL UNDER OR WITHIN 5 FEET OF PAVEMENTS OR SIDEWALKS. AGGREGATE CONTAINING SLAG, ACBFS, RPCC AND FOUNDRY SAND ARE PROHIBITED. THE BACKFILL SHALL BE COMPACTED IN 6" LIFTS WITH EQUIPMENT ACCEPTABLE TO THE PIPE MANUFACTURER.
6. BACKFILL IN LAWN AREAS - SUITABLE MATERIAL MAY BE CLASS I, II, III , OR EXCAVATED MATERIAL - MAX. 8" LIFTS, 93% COMPACTION. NO ROCKS OVER 1-1/2" Ø ARE ACCEPTABLE IN UPPER 8" OF BACKFILL. A 6" (MIN.) LAYER OF SCREENED TOPSOIL IS REQUIRED IN LAWN AREAS.
7. DEPTH OF MAIN TO BE A MINIMUM OF 3'-0" FEET DEEP
8. WATER LINE IS TO BE INSPECTED PRIOR TO BACKFILLING THE TRENCH FOR DEPTH AND WATER TIGHTNESS. PROPER BLOCKING SHOULD BE PLACED UNDER ALL JOINTS, BENDS, TEES AND AT THE CURB STOP LOCATION.
9. ALL SERVICE CONNECTION FEES ARE PAID PRIOR TO TAP

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STATE OF NEW HAMPSHIRE
CHRISTOPHER J. BEDNAR
NO. 17258
PROFESSIONAL ENGINEER
10.27.22

| | |
|---|---|
| 1 | 10.27.22 TECHNICAL REVIEW MEETING |

| | |
|---|---|
| CONTRACT DATE: | 07.05.22 |
| BUILDING TYPE: | ENDEAVOR 2.0 |
| PLAN VERSION: | |
| SITE NUMBER: | TBD |
| STORE NUMBER: | TBD |

TACO BELL

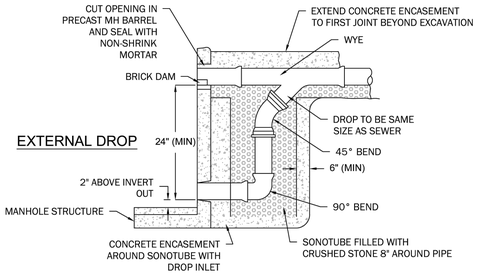
Durham Road & Grapevine Drive
Dover, New Hampshire 03820

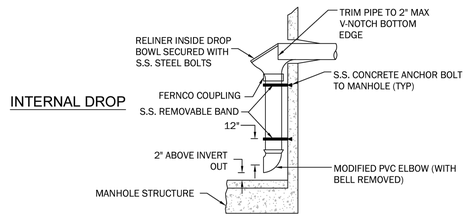
TACO BELL
ENDEAVOR 2.0
LARGE 50

**DETAIL SHEET**

**D4.0**

PERMIT PLOT DATE:

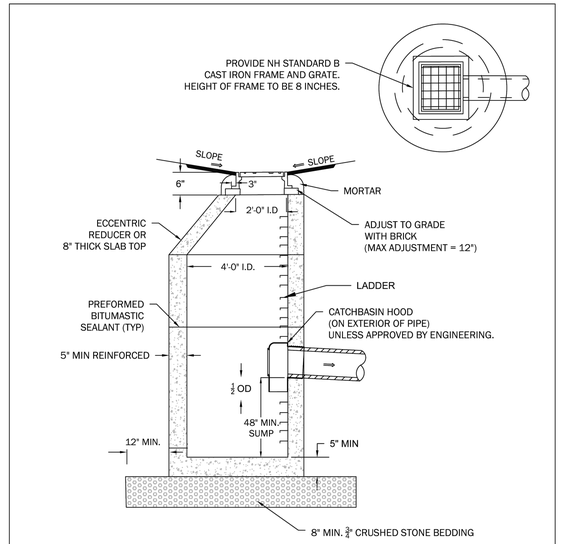



NOTES:

1. INTERNAL DROPS ARE PROHIBITED UNLESS APPROVED BY THE CITY ENGINEER.
2. IF DROP IS FOR AN EXISTING MANHOLE, REWORK SHELF TO FORM NEW CHANNEL FOR NEW DROP CONNECTIONS.
3. BRICK INVERT NOT SHOWN ON DETAIL.

| SHEET NO. | STANDARD DETAILS NOT TO SCALE | CITY OF DOVER, NH |
|---|---|---|
| D-18 | MAINTENANCE HOLE DROP INLET | COMMUNITY SERVICES ENGINEERING DIVISION<br>288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820<br>TELEPHONE: (603) 516-1915 FAX: (603) 516-6483 |
| REVISED: MAY 2022 | | |




NOTES:

1. ENTIRE STRUCTURE SHALL BE H-20 LOAD RATED. PROVIDE MANUFACTURER REINFORCEMENT DETAILS TO THE CITY ENGINEER UPON REQUEST.

| SHEET NO. | STANDARD DETAILS NOT TO SCALE | CITY OF DOVER, NH |
|---|---|---|
| D-19 | CATCHBASIN | COMMUNITY SERVICES ENGINEERING DIVISION<br>288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820<br>TELEPHONE: (603) 516-1915 FAX: (603) 516-6483 |
| REVISED: MAY 2022 | | |

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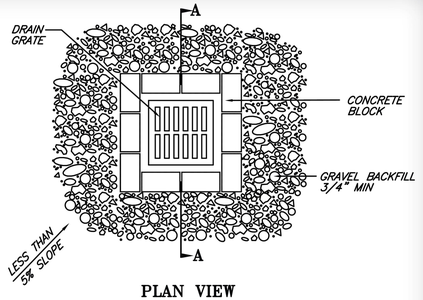
Durham Road & Grapevine Drive
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ENDEAVOR 2.0
LARGE 50

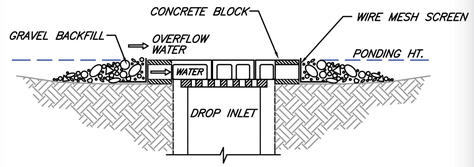
**DETAIL SHEET**

**D5.0**

PERMIT PLOT DATE:




PLAN VIEW

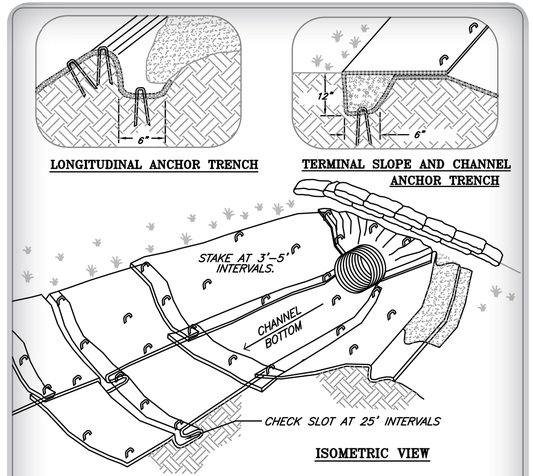



SECTION A – A

NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
2. EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

**CONCRETE BLOCK AND GRAVEL DROP INLET SEDIMENT BARRIER**

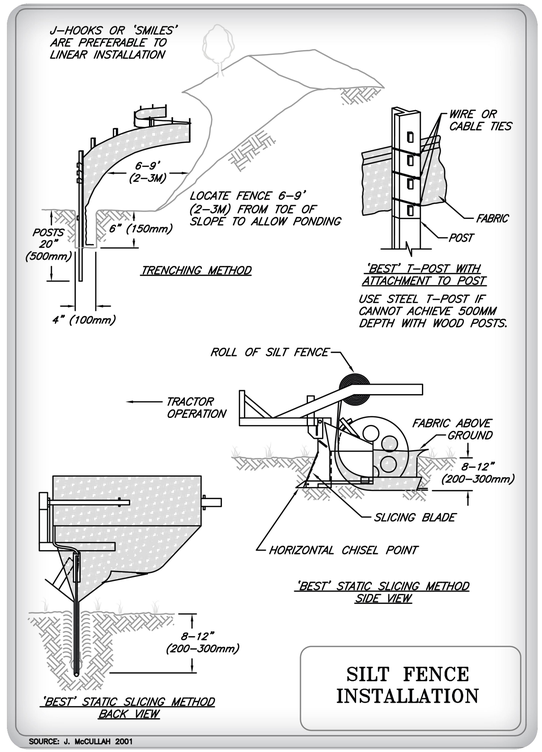
ADAPTED FROM J. McCULLAH 1994




NOTES:
1. DIMENSIONS GIVEN IN THE DRAWINGS ARE EXAMPLES; DEVICE SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
2. CHECK SLOTS TO BE CONSTRUCTED PER MANUFACTURER'S SPECIFICATIONS.
3. STAKING OR STAPLING LAYOUT PER MANUFACTURER'S SPECIFICATIONS.

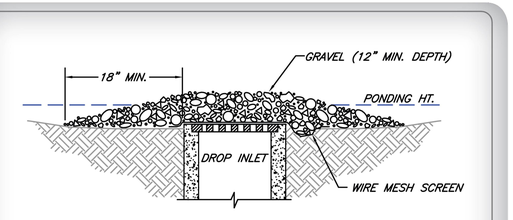
**EROSION BLANKETS CHANNEL INSTALLATION**

ADAPTED FROM J. McCULLAH 1994




**SILT FENCE INSTALLATION**

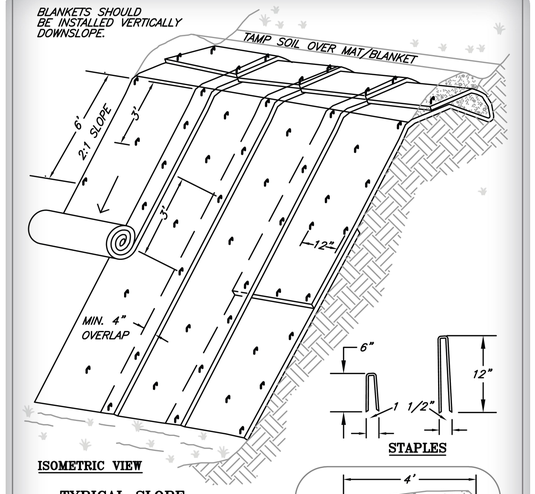
SOURCE: J. McCULLAH 2001




PROFILE

**GRAVEL & WIRE MESH DROP INLET SEDIMENT BARRIER**

ADAPTED FROM: MINNICK & MARSHALL, 1992



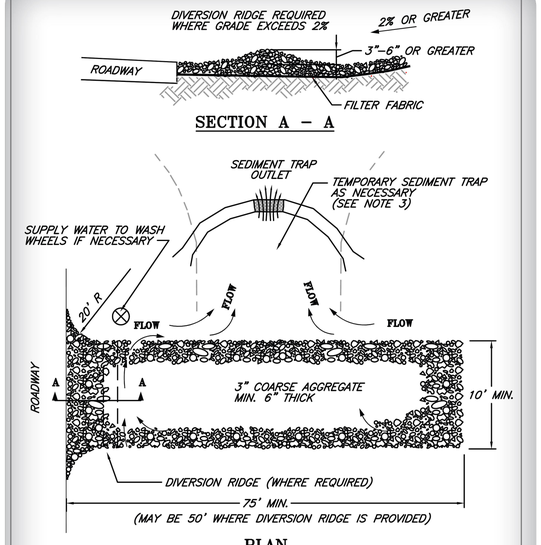

**TYPICAL SLOPE SOIL STABILIZATION**

NOT TO SCALE

NOTES:
1. DIMENSIONS GIVEN IN THE DRAWINGS ARE EXAMPLES; DEVICE SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
2. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
3. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

**EROSION BLANKETS SLOPE INSTALLATION**

ADAPTED FROM J. McCULLAH 1994




PLAN

NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

**TEMPORARY GRAVEL CONSTRUCTION EXIT**

ADAPTED FROM J. McCULLAH 1994


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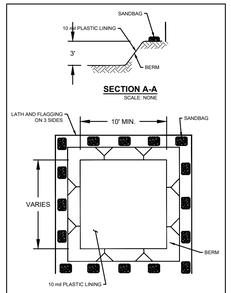
TACO BELL
Durham Road & Grapevine Drive
Dover, New Hampshire 03820

TACO BELL
ENDEAVOR 2.0
LARGE 50

**EROSION & SEDIMENT CONTROL DETAILS**

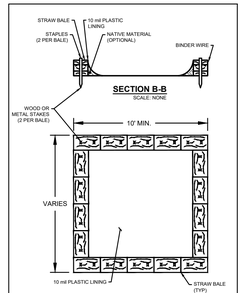
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PERMIT PLOT DATE:



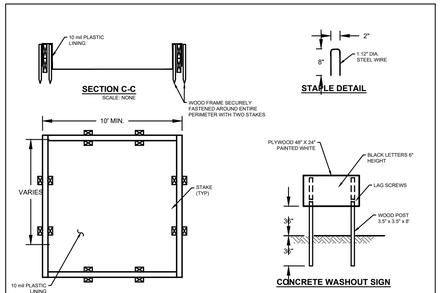

**SECTION A-A**
SCALE: NONE

**BELOW GRADE**
SCALE: NONE




**SECTION B-B**
SCALE: NONE

**ABOVE GRADEW WITH STRAW BALES**
SCALE: NONE




**SECTION C-C**
SCALE: NONE

**STAPLE DETAIL**

**CONCRETE WASHOUT SIGN**

**ABOVE GRADEW WITH WOOD PLANKS**
SCALE: NONE

# CONCRETE WASHOUT DETAILS

SCALE: NONE

NOTES:

1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30'-0" OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.

CWA INSTALLATION NOTES

1. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
2. BERM SURROUNDING SIDES AND BACK OF CWA SHALL HAVE A MINIMUM HEIGHT OF 1'-0".
3. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
4. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

1. INSPECT BMP'S EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMP'S SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMP'S AS SOON AS POSSIBLE (AND ALWAYS WITH 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMP'S IN EFFECTIVE OPERATING CONDITIONS. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMP'S HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'-0".
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

PHASING OF SITE DEVELOPMENT

- STAKE OUT LIMIT OF DISTURBANCE
- CONTRACTOR SHALL PREVENT CONSTRUCTION DEBRIS FROM BEING TRACKED ONTO PUBLIC ROADWAYS
- THE CONTRACTOR SHALL CLEAN THE ADJACENT PUBLIC ROADWAYS ON A DAILY BASIS
- INSTALL SEDIMENT CONTROL DEVICES AS NOTED ON E&S PLAN
- SITE DEMOLITION
- INSTALL UTILITES, FOUNDATIONS, CURBING, PAVEMENT, ETC.
- FINE GRADE SITE
- MAINTAIN TEMPORARY E&S CONTROLS UNTIL AFTER SUBSTANTIAL COMPLETION AND APPROVAL BY OWNER
- REMOVE TEMPORARY E&S CONTROLS ONCE SITE IS STABILIZED

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

ALL TEMPORARY AND PERMANENT CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED THROUGHOUT CONSTRUCTION TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL ALL UP SLOPE AREAS THEY CONTROL ARE PERMANENTLY STABILIZED.

INSPECTIONS (MINIMUM REQUIREMENTS)

1. ALL CONTROLS ARE TO BE INSPECTED ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN ONE-HALF INCH OF RAIN PER 24 HOUR PERIOD. THE INSPECTION PERIOD MAY BE REDUCED TO AT LEAST ONCE EVERY MONTH IF THE ENTIRE SITE IS TEMPORARILY STABILIZED OR RUNOFF IS UNLIKELY. ONCE A DEFINABLE AREA HAS BEEN FINALLY STABILIZED NO FURTHER INSPECTION REQUIREMENTS APPLY TO THAT PORTION OF THE SITE.

2. A CHECKLIST MUST BE COMPLETED AND SIGNED BY A QUALIFIED INSPECTION PERSONNEL AND INCLUDE THE FOLLOWING:

- INSPECTION DATE
- NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION
- WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION OR COMMENCEMENT OF CONSTRUCTION ACTIVITY (INCLUDE ANY STORM ACTIVITY - DURATION, INTENSITY, DISCHARGES)
- LOCATION OF ANY SEDIMENT OR OTHER POLLUTANT DISCHARGES FROM THE SITE
- LOCATION OF BMPS THAT NEED TO BE INSTALLED AND/OR MAINTAINED
- LOCATION OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE
- CHECK FOR ANY EVIDENCE OF POLLUTANTS FROM STORED MATERIALS ENTERING THE DRAINAGE SYSTEM
- CORRECTIVE ACTION (INSTALLATION, REPAIRS, MODIFICATIONS TO SWPPP PLAN AND IMPLEMENTATION DATES)
- A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR. THE SITE SUPERINTENDENT WILL SELECT INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
- COPIES OF THE REPORT ARE TO BE SENT TO THE OWNER, CITY ENGINEER & LOCAL SOIL & WATER CONSERVATION DISTRICT

REPAIR SCHEDULE OF SWPPP CONTROLS

A CONTROL PRACTICE, EXCEPT A SEDIMENT SETTLING POND, THAT IS IN NEED OF REPAIR OR MAINTENANCE MUST BE REPAIRED WITH 3 DAYS OF THE INSPECTION. IF APPLICABLE, SEDIMENT SETTLING PONDS MUST BE REPAIRED OR MAINTAINED WITHIN 10 DAYS OF THE INSPECTION. IF THE SPECIFIED CONTROL PRACTICE IS DEEMED INADEQUATE OR WAS NOT YET INSTALLED A NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION.

MAINTENANCE REQUIREMENTS DURING CONSTRUCTION (WHERE APPLICABLE)

A. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE
B. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND. REPAIRS ARE TO BE MADE PROMPTLY.
C. IF APPLICABLE, THE SEDIMENT BASIN WILL BE INSPECTED FOR DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 40 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB.
D. IF APPLICABLE, DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
E. TEMPORARY AND PERMANENT SEEDING AND PLANTINGS WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

DEWATERING REQUIREMENTS DURING CONSTRUCTION

THERE SHALL BE NO SEDIMENT-LADEN DISCHARGES TO SURFACE WATERS RESULTING FROM DEWATERING ACTIVITIES. SHOULD DEWATERING BE REQUIRED, E.G., FROM TRENCHES, ETC,. DURING CONSTRUCTION, ALL WATER SHALL BE PUMPED TO THE TEMPORARY SEDIMENT BASINS, IF POSSIBLE, BEFORE BEING RELEASED TO DOWNSTREAM CHANNELS, STORM SEWERS, ETC. IF A TEMPORARY SEDIMENT BASIN IS NOT SHOWN ON THE PLAN, OR NOT ACHIEVABLE FOR DEWATERING, THE WATER SHALL BE PUMPED INTO A SEDIMENT TRAP OR THROUGH SEDIMENT BAGS ONTO A RELATIVELY FLAT SURFACE AWAY FROM INLET BASINS, STREAMS, ETC.

POST-CONSTRUCTION INSPECTION PROCEDURE

1. (NA) THE SITE SHALL BE MAINTAINED PER THE POST-CONSTRUCTION MAINTENANCE PLAN FOLLOWING THE SUBMITTAL OF THE N.O.T.
2. THE PROPERTY OWNER OR THE OWNER'S AUTHORIZED REPRESENTATIVE(S) IS RESPONSIBLE FOR THE INSPECTION OF THE PERMANENT SWPPP CONTROLS, DISCHARGES FROM THE SITE AND ANY SEDIMENT ACCUMULATIONS.
3. MAINTENANCE COSTS, IF INSPECTED BY THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE(S) WILL BE PAID BY THE OWNER.
4. REGULAR INSPECTIONS, ESPECIALLY FOLLOWING MAJOR STORM EVENTS, WILL REQUIRE AN INSPECTION REPORT THAT SHALL BE KEPT BY THE OWNER FOR A PERIOD OF THREE YEARS. A COPY OF THE REPORT IS TO BE SUBMITTED TO THE CITY'S ENGINEERING DEPARTMENT (IF REQUIRED)

POST CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

POST-CONSTRUCTION STORM WATER MANAGEMENT PRACTICES TREAT RUNOFF FROM A DEVELOPMENT SITE AFTER CONSTRUCTION IS COMPLETE.

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TACO BELL

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Dover, New Hampshire 03820

ENDEAVOR 2.0
LARGE 50

**EROSION & SEDIMENT CONTROL DETAILS**

**ES2.0**

PERMIT PLOT DATE:

**SWPPP GRADING AND STABILIZATION ACTIVITIES LOG**

**PROJECT NAME**

| DATE GRADING ACTIVITY INITIATED | DESCRIPTION OF GRADING ACTIVITY | DATE GRADING ACTIVITY CEASED (INDICATE TEMPORARY OR PERMANENT) | DATE WHEN STABILIZATION MEASURES ARE INITIATED | DESCRIPTION OF STABILIZATION MEASURE AND LOCATION |
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**SWPPP INSPECTION REPORT LOG**

**PROJECT NAME**

| INSPECTION # | INSPECTOR NAME | DATE OF INSPECTION | RAIN EVENT | TYPE OF CORRECTIVE ACTION REQUIRED |
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**SWPPP AMENDMENT LOG**

**PROJECT NAME**

| AMENDMENT NUMBER | DESCRIPTION OF AMENDMENT | DATE OF AMENDMENT | AMENDMENT PREPARED BY |
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**SWPPP CORRECTIVE ACTION LOG**

**PROJECT NAME**

| INSPECTION DATE | INSPECTOR NAME | DESCRIPTION OF CORRECTIVE ACTION NEEDED (FORM INSPECTION REPORT) | CORRECTIVE ACTION TAKEN | DATE ACTION TAKEN |
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TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

ENDEAVOR 2.0
LARGE 50

# EROSION & SEDIMENT CONTROL DETAILS

# ES3.0

PERMIT PLOT DATE:

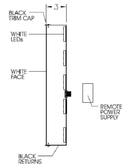
V-1006

V-09.12W V-09.16W

TACO BELL

**GENERAL SPECIFICATIONS:**

- 3" Deep fabricated aluminum cabinet, black
- .118 #7328 White acrylic faces w/ 3/4" black trim cap
- Internally illuminated with white LEDs
- Sign Area (Squared): 13.9



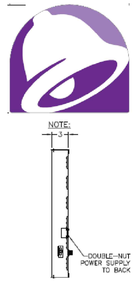

**ELECTRICAL SPECIFICATIONS:**

- White LEDs
- Power Supply: One (1) 60 watt
- .90amps @ 100-277 V
- One (1) 20 amp circuit, 60HZ UL 48 & NEC compliant

**COLOR SPECIFICATIONS:**

Black
White

V-04.36 V-04.42




**GENERAL SPECIFICATIONS:**

3" aluminum returns & trim cap w/ black finish
.150 White poly face w/ vinyl applied to first surface

**ELECTRICAL SPECIFICATIONS:**

- LED: LS-PRO160-50K-2B1

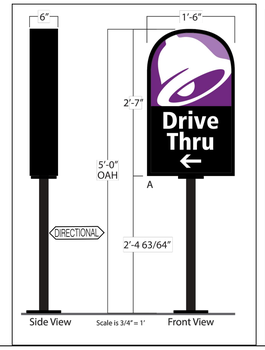
Power Supply: One (1) 60 watt

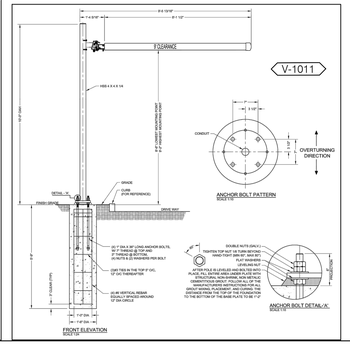
.9 amps @ 100-277 VAC

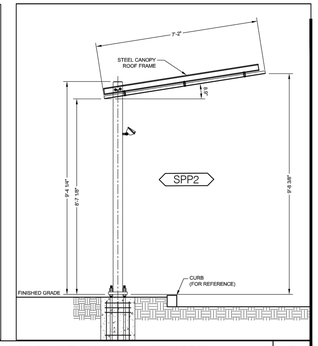
- One (1) 20 amp circuit

**COLORS:**

Dark Purple: 3630-9327; PMS 2603
Light Purple: 3630-9141; PMS 2577
Black
White



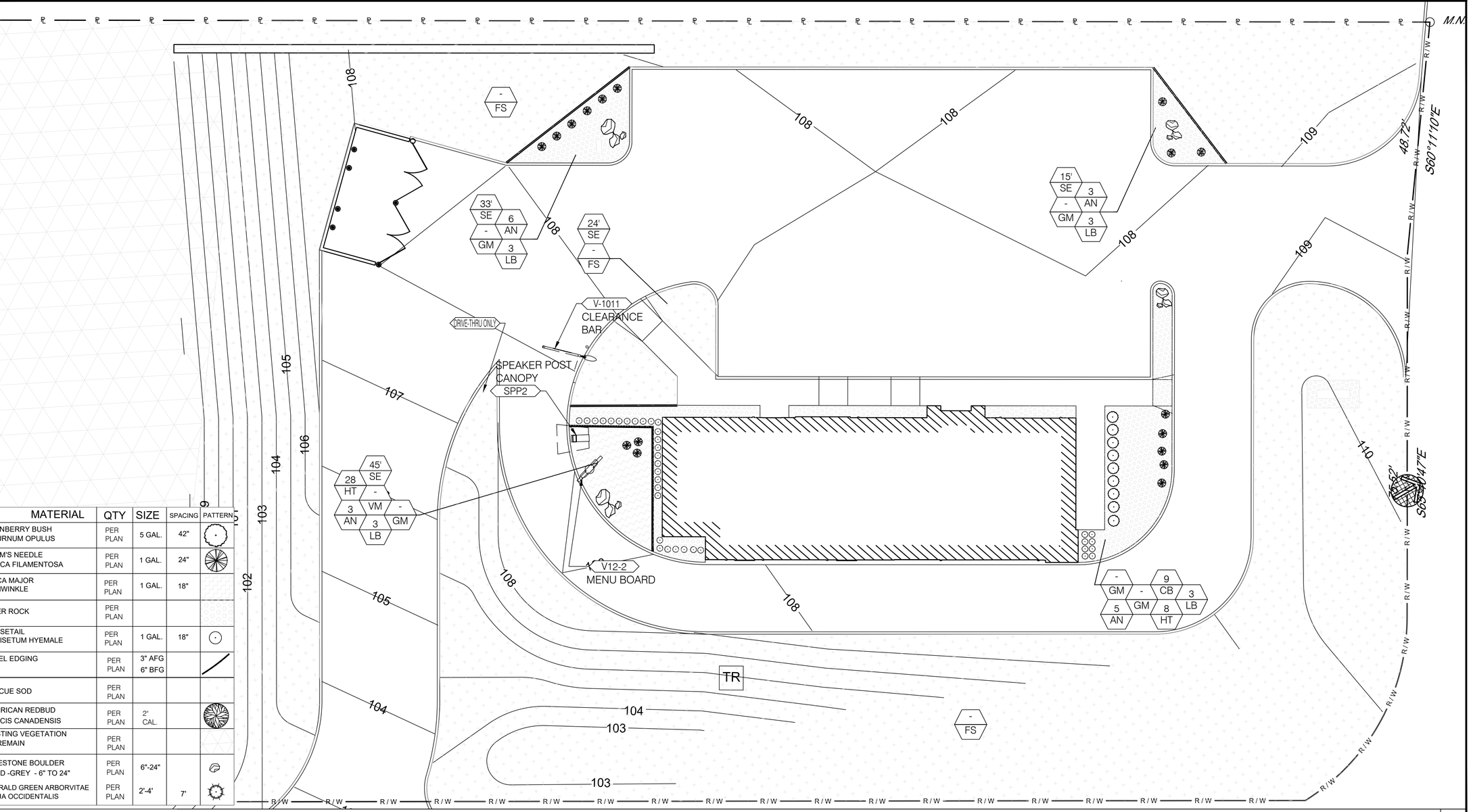




**SIGN SPECIFICATIONS** 2


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8535 ferry road
waynesville, oh 45068
617.331.2545
kathleendayarchitect@gmail.com








| MATERIAL | QTY | SIZE | SPACING | PATTERN |
|---|---|---|---|---|
| NBERRY BUSH<br>URNUM OPULUS | PER PLAN | 5 GAL. | 42" | |
| M'S NEEDLE<br>CA FILAMENTOSA | PER PLAN | 1 GAL. | 24" | |
| CA MAJOR<br>IWINKLE | PER PLAN | 1 GAL. | 18" | |
| ER ROCK | PER PLAN | | | |
| SETAIL<br>ISETUM HYEMALE | PER PLAN | 1 GAL. | 18" | |
| EL EDGING | PER PLAN | 3" AFG<br>6" BFG | | |
| CUE SOD | PER PLAN | | | |
| RICAN REDBUD<br>CIS CANADENSIS | PER PLAN | 2" CAL. | | |
| TING VEGETATION<br>REMAIN | PER PLAN | | | |
| ESTONE BOULDER<br>D -GREY - 6" TO 24" | PER PLAN | 6"-24" | | |
| RALD GREEN ARBORVITAE<br>A OCCIDENTALIS | PER PLAN | 2'-4' | 7' | |

**SITE PLAN** 3/32" = 1'-0" 1

CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
STORE NUMBER: TBD

TACO BELL

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Dover, New Hampshire 03820

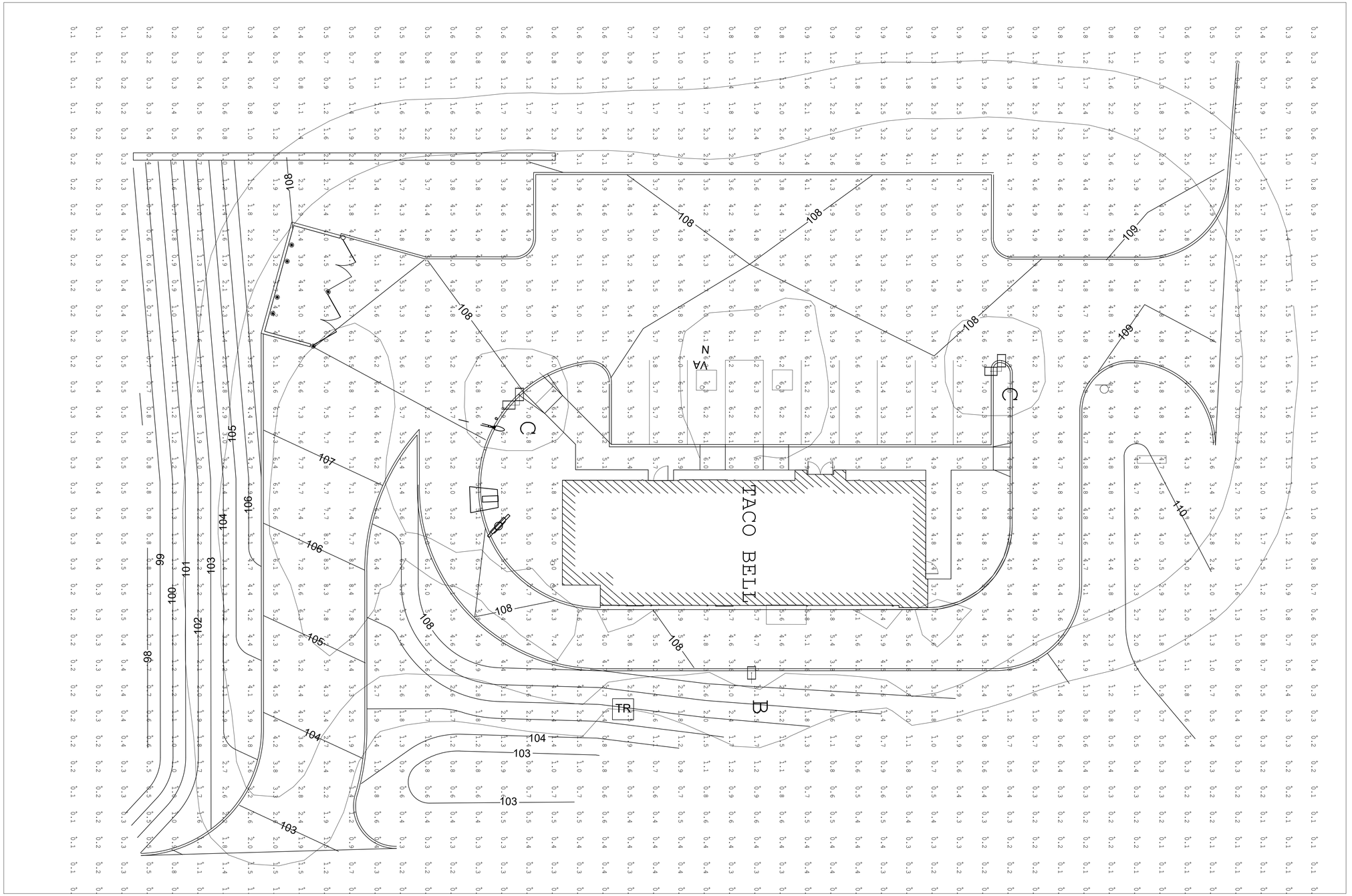
ENDEAVOR 2.0
LARGE 50

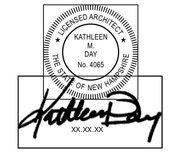
**SIGN & LANDSCAPE PLAN**

# SD0.0

PERMIT PLOT DATE:

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waynesville, oh 45068
617.331.2545
kathleendayarchitect@gmail.com




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ENDEAVOR 2.0

LARGE 50

PERMIT PLOT DATE:

1. SIGNAGE SHALL BE INSTALLED ON LATCH SIDE OF DOOR OR, IF NO SPACE, ON THE NEAREST WALL, PREFERABLE TO THE RIGHT.

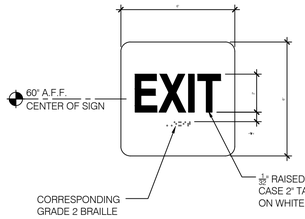
2. SIGNAGE MUST BE LOCATED SO THAT A PERSON CAN APPROACH WITHIN 3" W/O OBSTRUCTION.

3. SIGNAGE SHALL HAVE A NON-GLARE FINISH W/ A CONTRASTING BACKGROUND

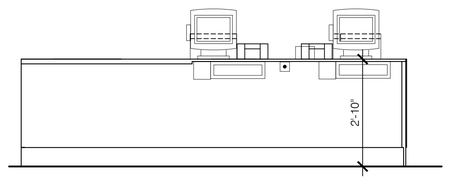
4. SIGNAGE SHALL HAVE A WIDTH-TO-HEIGHT RATIO BETWEEN 3:5 AND 1:1.

5. CHARACTER STROKE WIDTH-TO-HEIGHT RATIO BETWEEN 1:5 AND 1:10.

6. SIGNAGE SHALL CONTAIN GRADE 2 BRAILLE W/ DOTS 1/10" O.C. AND 1/10" SPACE BETWEEN CELLS RAISED 1/32".

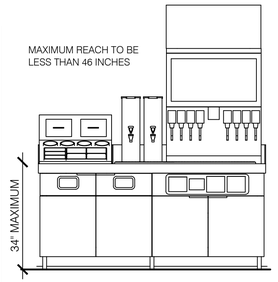



**TACTILE EXIT SIGNAGE** | **F**




* FOR HEIGHT AND REACH REF. ONLY

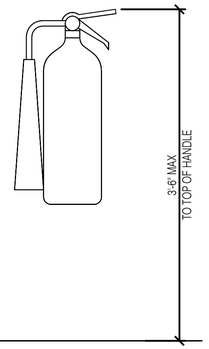
**SERVICE (POS) COUNTER** | **H**



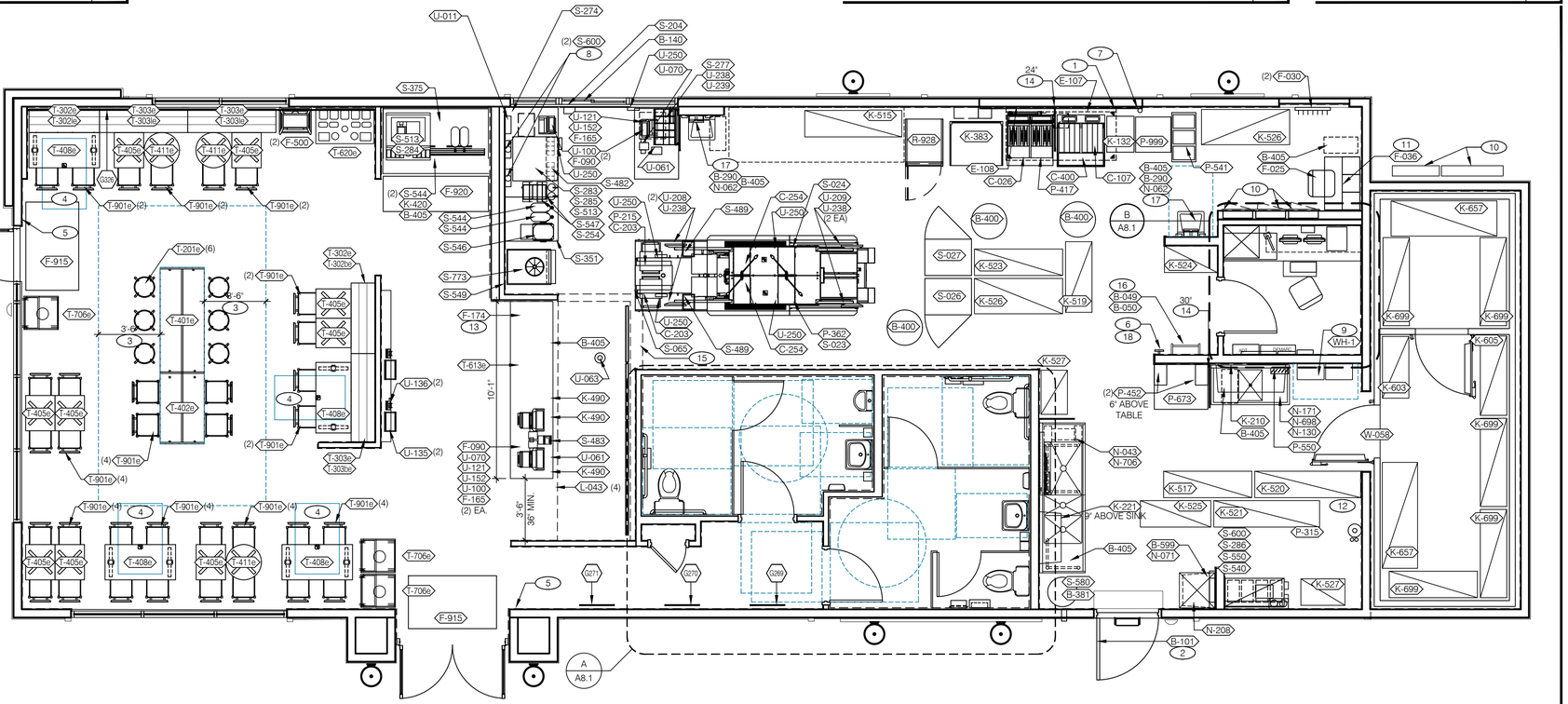

* FOR HEIGHT AND REACH REF. ONLY

**BEVERAGE COUNTER** | **I**

NOTE:
1. FIRE EXTINGUISHERS MUST HAVE A MINIMUM OF "2A10BC" RATING AND CLASS K SHALL BE WITHIN A 30'-0" TRAVEL DISTANCE OF ALL COOKING SURFACES PER NFPA 10, SEC. 5.7 2002 ED.
2. FINAL LOCATION & QUANTITY OF FIRE EXTINGUISHERS SHALL BE AS DIRECTED BY FIRE MARSHAL.
3. INSTALL NEW TYPE "K" WALL MOUNTED FIRE EXTINGUISHER. PROTRUSION INTO PATH OF CIRCULATION 4"MAX.
4. INSTALL NEW WALL MOUNTED FIRE EXTINGUISHER (MIN. - TYPE 2A 40BC.) PROTRUSION INTO PATH OF CIRCULATION 4"MAX.




**FIRE EXTINGUISHER MTG.** | **G**




**EQUIPMENT/SEATING PLAN** 1/4"=1'-0" | **A**

| TAG | QTY | ITEM DESCRIPTION |
|---|---|---|
| | | |
| T-201e | 10 | BARREL BARSTOOL - 29 PURPLE WOOD SEAT |
| T-302e | 2 | BENCH SEAT - 48" |
| T-302be | 1 | WALL MOUNTED BACK REST FOR T-302e- 48" |
| T-302le | 1 | BENCH BACK REST FOR T-302e- 48" |
| T-303e | 3 | BENCH SEAT - 60" |
| T-303be | 1 | WALL MOUNTED BACK REST FOR T-303e - 60" |
| T-303le | 2 | BENCH BACK REST FOR T-303e- 60" |
| T-401e | 1 | HUB TABLE - - HIGH TOP |
| T-402e | 1 | HUB TABLE - 48" - ADA |
| T-405e | 9 | LAMINATE TABLE - 24 X 20 X 30 - 2 TOP |
| T-408e | 4 | LAMINATE TABLE ADA - 24 X 48 X 30 - 4 TOP |
| T-411e | 3 | SS TABLE - 24 DIA X 30 - 2 TOP |
| | | |
| T-613e | 1 | POS COUNTER 121 - 3 POS |

| TAG | QTY | ITEM DESCRIPTION |
|---|---|---|
| T-620e | 1 | CONDIMENT COUNTER - RECTANGLE |
| T-706e | 3 | WASTE ENCLOSURE - SINGLE |
| | | |
| T-801e | 1 | KIOSK HALF TOWER |
| T-901e | 34 | CHAIR - LAMINATE SEAT |

**SEATING PACKAGE - BY SEATING VENDOR U.O.N. (TOTAL SEATS = 54)** | **E**

| X | QTY. | NAME | FAMILY | FRAME OR MURAL | SIZE | LOCATION |
|---|---|---|---|---|---|---|
| 0328 | 1 | HYPNOTIZE ME BELL | D | M01 | CUSTOM | SEE A8.0 |
| 0269 | 1 | CAMO PATTERN | D | F01 | 28x40 | SEE A8.0 |
| 0270 | 1 | CAMO PATTERN | D | F02 | 28x40 | SEE A8.0 |
| 0271 | 1 | CAMO PATTERN | D | F01 | 28x40 | SEE A8.0 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

**ARTWORK SCHEDULE** | **D**

DECOR
1. REFER TO SC SHEETS FOR SCOPE OF WORK RESPONSIBILITIES.
2. (H) - SYMBOL DENOTES A HIGH TABLE OR DINING COUNTER WITH STOOLS.
3. (HC)- SYMBOL DENOTES A HANDICAP ACCESSIBLE TABLE.

**GENERAL NOTES** | **C1**

| STORAGE TYPE | LINEAR FT. |
|---|---|
| | |
| DRY STORAGE | 67 |
| COLD STORAGE | 29 |
| FROZEN STORAGE | 16 |
| | |
| | |

**SHELVING QUANTITIES REQUIRED** | **C2**

1. HOOD FIRE SUPPRESSION SYSTEM (ANSUL R-102 OR EQUAL).
2. SEE SHEET A1.1 FOR SECURITY DOOR PACKAGE.
3. MAINTAIN 42" MIN CLEAR AISLE EGRESS PATHS TO EXIT DOORS.
4. 30" x 48" CLEAR FLOOR SPACE FOR HANDICAP ACCESS.
5. TACTILE EXIT SIGN MOUNTED 60" A.F.F. TO CENTER LINE - SEE DETAIL F/A2.0
6. PULL STATION @ 3'-8" A.F.F.
7. GAS LINE DOWN TO EQUIPMENT.
8. COORDINATE LOCATION OF HORIZ PVC SYRUP CHASE THROUGH WALL TO COUNTER.
9. TANKLESS WATER HEATER - SEE PLUMBING.
10. SWITCHGEAR / ELECTRIC PANELS.
11. EMPLOYEE WORK STATION. SEE DETAIL B/A8.3.
12. 8' LADDER.
13. BRINKS SAFE - SEE 10/A6.3.
14. SPLASH GUARD. SEE DETAIL 9/A6.3.
15. ALERT LIGHT BOX FOR 3-COMP POWER SOAK.
16. ROOF LADDER. SEE ELEVATION D/A8.3.
17. SOAP / HAND SANITIZER DISPENSERS - BY ECOLAB.
18. PROVIDE NEW FIRE EXTINGUISHERS ON WALL MOUNTED BRACKETS -- COORDINATE FINAL LOCATION WITH LOCAL AUTHORITY. A MINIMUM OF ONE TYPE K EXTINGUISHER SHALL BE PROVIDED, SEE DETAIL G.

**KEYNOTES** | **B**


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LICENSED ARCHITECT
KATHLEEN M DAY
No. 4065
THE STATE OF NEW HAMPSHIRE
XX.XX.XX

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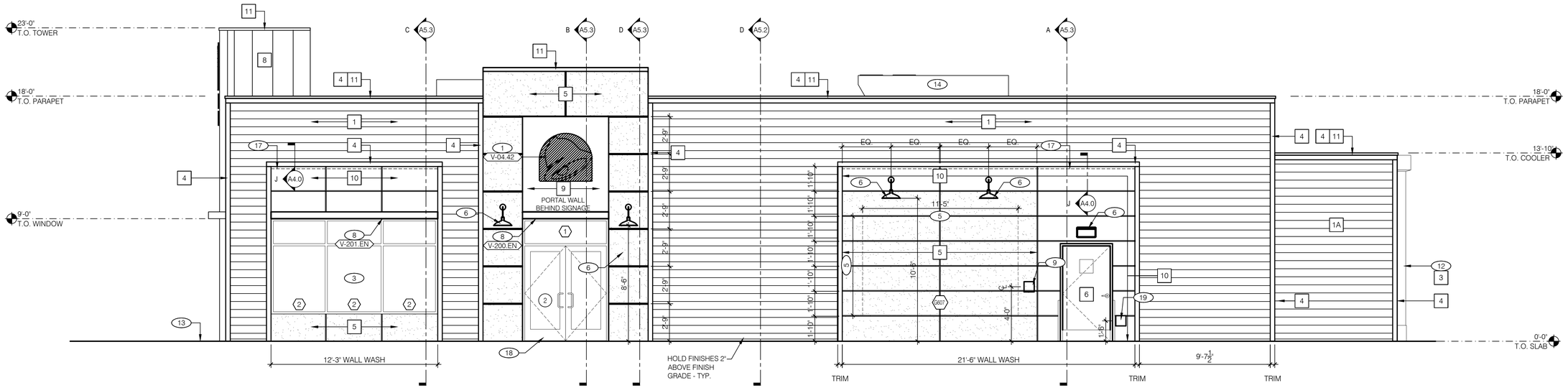
ENDEAVOR 2.0
LARGE 50

# EQUIPMENT AND SEATING PLAN

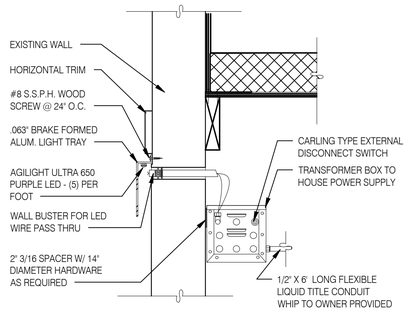
# A2.0

PERMIT PLOT DATE:

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## ENTRY ELEVATION 1/4"=1'-0" | A




## LED WALL WASHER DETAIL | J

### EXTERIOR SIGNAGE SCHEDULE

| TYPE MARK | QTY | ITEM DESCRIPTION | LOC |
|---|---|---|---|
| TOWER | | | |
| V-04.36 | 2 | 36" SWINGING BELL PURPLE LOGO | A4.1 |
| V-09.16W | 2 | LARGE TB 16" CHANNEL LETTERS WHITE (2) STACKED (1) LINEAR | A4.1 |
| | | | |
| SIDE ENTRY | | | |
| V-04.42 | 1 | 42" SWINGING BELL WHITE/BLACK LOGO - FACE LIT | A4.0 |
| V-200.EN | 1 | SIDE ENTRY AWNING 6' 4" X 6' 3" BLACK | A4.0 |
| | | | |
| DRIVE THRU | | | |
| V-101.DT | 1 | DT AWNING (OVER DT) 9' 0" X 4' 0" BLACK | A4.1 |
| | | | |
| REAR | | | |
| V-04.24 | 1 | 24" SWINGING BELL PURPLE LOGO | A4.1 |
| V-09.12W | 1 | 12" CHANNEL LETTERS WHITE | A4.1 |
| | | | |
| EYEBROW AWNINGS | | | |
| V-202.EN | 1 | FRONT EYEBROW (WINDOW) 16' 9" X 6" H X 1' 4" D BLACK | A4.1 |
| V-203.EN | 1 | DT EYEBROW (WINDOW) 7' 9" L X 6" H X 1' 4" D BLACK | A4.1 |
| V-201.EN | 1 | SIDE ENTRY EYEBROW (WINDOW) 12' 3" L 6" H X 1' 4" D BLACK | A4.0 |

## SIGNAGE / EXTERIOR ARTWORK | G

MISCELLANEOUS
A. SEE SHT A1.1 "WINDOW TYPES" FOR WINDOW ELEVATIONS.

SEALERS (REFER TO SPECS):
A. SEALANT AT ALL WALL AND ROOF PENETRATIONS.
B. SEALANT AT ALL WINDOW AND DOOR FRAMES AT HEAD AND JAMB. DO NOT SEAL SILL @ WINDOWS.
C. APPLY NEOPRENE GASKET (CONT.) BETWEEN BUILDING & CANOPY.

"CRITICAL" DIMENSIONS:
A. REQUIRED CLEAR OPENING WIDTH TO ENSURE COORDINATION WITH STANDARD SIGNAGE/ BUILDING ELEMENTS DIMENSIONS.

NOTE: NO EXTERIOR SIGNS ARE WITHIN THE SCOPE OF WORK COVERED BY THE BUILDING PERMIT APPLICATION. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL EXTERIOR SIGNS AND INSTALLATION OF REQUIRED BLOCKING AND ELECTRICAL CONNECTIONS FOR FINAL APPROVED SIGNS.

## GENERAL NOTES | F

PAINTING
APPLICATOR MUST DO THEIR DUE DILIGENCE WITH PREPARATION.
PRIMER: 1 COAT SW A24W8300
FINISH: 2 COATS SW A82-100 SERIES, MATCH COLORS FROM MATERIAL SCHEDULE.
A-100 EXTERIOR LATEX SATIN.

## PAINT NOTES | B

| SYMBOL | ITEM/MATERIAL | MANUFACTURER | MATERIAL SPEC | COLOR | CONTACT INFORMATION |
|---|---|---|---|---|---|
| 1 | SIDING | JAMES HARDIE | ARTISAN V-GROOVE 144"L X 8.25"W; 7" EXPOSURE COMES PRIMED FOR PAINT | WORLDLY GRAY (SW7043), SEMI-GLOSS | SEE C / A 7.2 |
| 1a | SIDING | JAMES HARDIE | ARTISAN V-GROOVE 144"L X 8.25"W; 7" EXPOSURE COMES PRIMED FOR PAINT | CYBERSPACE (SW7076), SEMI-GLOSS | SEE C / A 7.2 |
| 2 | SCUPPERS | - | - | WORLDLY GRAY (SW7043), SEMI-GLOSS | |
| 3 | DOWN SPOUTS | - | - | WORLDLY GRAY (SW7043), SEMI-GLOSS | |
| 4 | HARDIE TRIM | JAMES HARDIE | HARDIE TRIM 5/4 SMOOTH 1"x4.5" | CYBERSPACE (SW7076), SEMI-GLOSS | SEE C / A 7.2 |
| 5 | HARDIE REVEAL PANEL | JAMES HARDIE | REVEAL PANEL SYSTEM | CYBERSPACE (SW7076), SEMI-GLOSS | SEE C / A 7.2 |
| 6 | HOLLOW METAL DOOR | - | - | SW PURPLE TB2603C, SEMI-GLOSS | |
| 7 | AWNINGS | SIGNAGE VENDOR | - | BLACK BY THE SIGNAGE VENDOR | |
| 8 | CORNER TOWER | WESTERN STATE | T-GROOVE 24GA PAINTED 18" PANEL | WEATHERED RUSTIC | SEE C / A 7.2 |
| 9 | RECESS OF SIDE ENTRY PORTAL | WESTERN STATE | T-GROOVE 24GA PAINTED 18" PANEL | WEATHERED RUSTIC | SEE C / A 7.2 |
| 10 | HARDIE REVEAL PANEL | JAMES HARDIE | REVEAL PANEL SYSTEM | SW PURPLE TB2603C, SEMI-GLOSS | SEE C / A 7.2 |
| 11 | METAL PARAPET CAP | - | 24GA GALVANIZED | CYBERSPACE (SW7076) KYNAR 500 COATING | |
| 15 | PIPE BOLLARDS | STREET SMART | - | YELLOW - 1/4" THICK PLASTIC COVER (US.POSTMAN.COM) OR EQUAL | SEE C / A 7.2 |

### EXTERIOR ARTWORK SCHEDULE

| EQ # | QTY. | ORDERING NUMBER | ITEM DESCRIPTION | REMARKS |
|---|---|---|---|---|
| G-607 | 1 | G-607-B-M03-84x144 | CAMO PATTERN PURPLE | CUSTOM SIZE |
| G-510 | 1 | G-510-B-M02-48x96 | CAMO PATTERN PURPLE | CUSTOM SIZE |
| G-511 | 1 | G-511-B-M02-48x96 | CAMO PATTERN PURPLE | CUSTOM SIZE |

## EXTERIOR FINISH / ARTWORK SCHEDULE | H

1. BUILDING SIGN, BY VENDOR. SEE STRUCTURAL BLOCKING ELEVATIONS, SHEET S5.0 FOR MORE INFORMATION. SEE ELECTRICAL PLANS FOR POWER REQUIREMENTS.
2. DRIVE THRU WINDOW. SEE SHEET A1.0 AND A1.1.
3. STOREFRONT, TYPICAL.
4. SWITCH GEAR. PAINT TO MATCH WALL.
5. ART MURAL / ART PANELS - SEE SCHEDULE.
6. EXTERIOR LIGHT FIXTURE - SEE ELECTRICAL.
7. ASSUME D/T LANE SURFACE IS 6" BELOW THE FINISH FLOOR. REFER TO GRADING & SITE PLAN.
8. METAL CANOPY BY SIGN VENDOR.
9. CO2 FILLER VALVE & COVER. SEE DETAIL 5/A6.2 SIM.
10. DRIVE-THRU CANOPY BY OTHERS.
11. GAS SERVICE - WALL SHALL BE FINISHED PRIOR TO INSTALLATION.
12. SCUPPER, COLLECTOR, AND VERTICAL DOWNSPOUT 6" MIN. PAINT PER SCHEDULE.
13. CONCRETE CURB.
14. RTU BEYOND.
15. OVERFLOW SCUPPER, SEE ROOF PLAN.
16. BOLLARD.
17. PURPLE LLIGHT WALL WASHER - PROVIDED BY SIGNAGE VENDOR. SEE J/A4.0
18. STOREFRONT DOOR. REFER TO DOOR SCHEDULE.
19. HOSE BIBB LOCATION. REFER TO PLUMBING AND DETAIL 8/A6.2

## KEY NOTES | D

LICENSED ARCHITECT
KATHLEEN M DAY
No. 4065
THE STATE OF NEW HAMPSHIRE
XX.XX.XX

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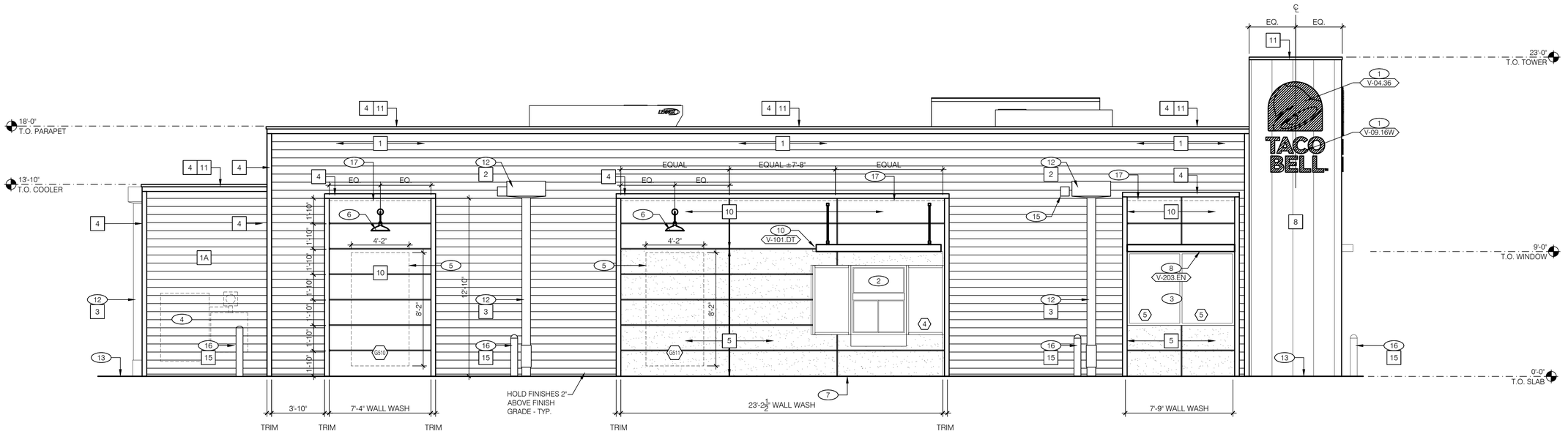
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# EXTERIOR ELEVATIONS

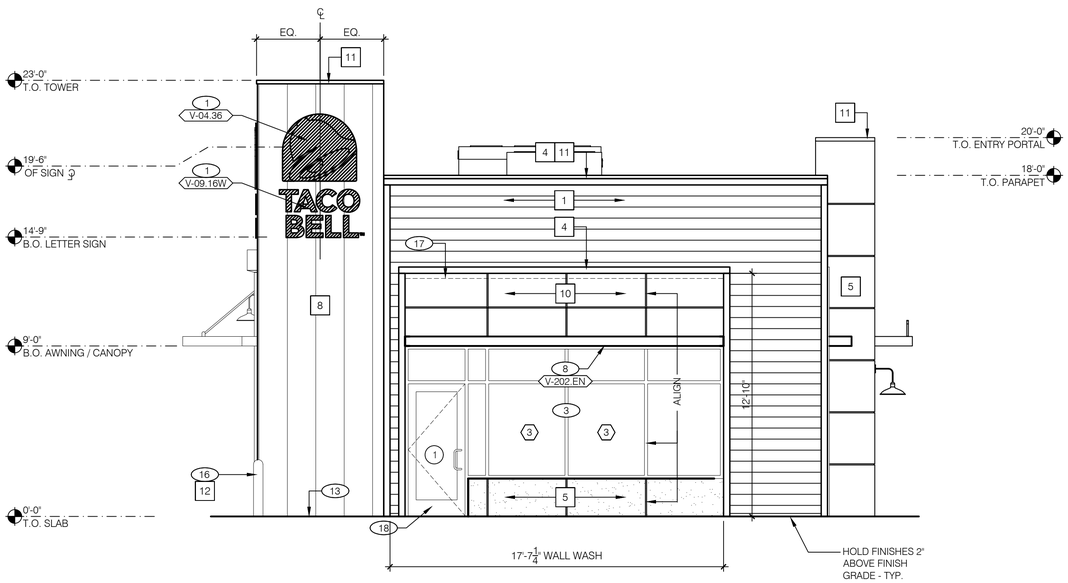
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PERMIT PLOT DATE:

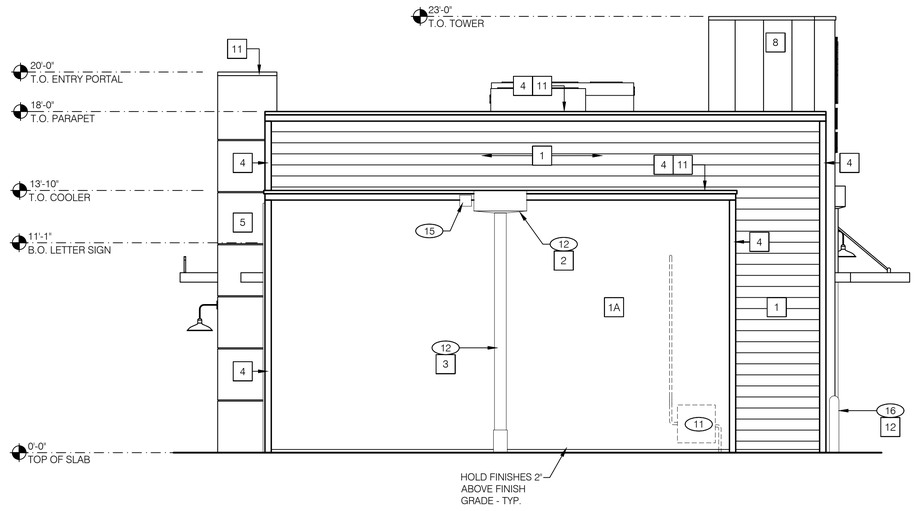
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kathleendayarchitect@gmail.com




**DRIVE THRU ELEVATION** 1/4"=1'-0" | **A**




**FRONT ELEVATION** 1/4" = 1'-0" | **C**




**REAR ELEVATION** 1/4" = 1'-0" | **B**

| | |
|---|---|
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Dover, New Hampshire 03820

ENDEAVOR 2.0

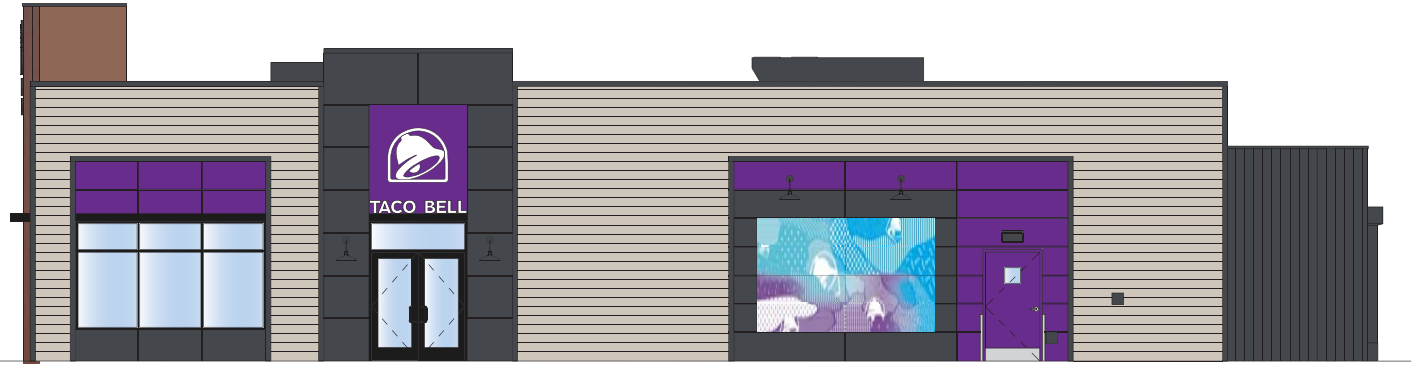
LARGE 50

LICENSED ARCHITECT
KATHLEEN M DAY
No. 4065
THE STATE OF NEW HAMPSHIRE
XX.XX.XX

# EXTERIOR ELEVATIONS

# A4.1

PERMIT PLOT DATE:







SHERWIN WILLIAMS
WORLDLY GRAY (SW7043)

SHERWIN WILLIAMS
CYBERSPACE (SW7076)

SHERWIN WILLIAMS
PURPLE (SW/TB2603C)

SHERWIN WILLIAMS
BLACK EMERALD (SW/2936)




kathleen day, architect
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waynesville, oh 45068
617.331.2545
kathleendayarchitect@gmail.com

CONTRACT DATE: 07.05.22
BUILDING TYPE: ENDEAVOR 2.0
PLAN VERSION:
SITE NUMBER: TBD
STORE NUMBER: TBD

TACO BELL

Durham Road & Grapevine Drive
Dover, New Hampshire 03820

ENDEAVOR 2.0
LARGE 50

PERMIT PLOT DATE: