CITY OF DOVER

DOVER PLANNING BOARD – AGENDA

REVISED

Meeting Type:	Regular Meeting
Meeting Location:	Council Chambers, City Hall, 288 Central Ave, Dover NH 03820
Meeting Date:	**Tuesday, September 28, 2021**
Meeting Time:	**7:00 pm**

1. CITIZENS' FORUM

2. APPROVAL OF THE PRIOR MINUTES

- August 24, 2021 Regular Meeting Minutes

3. OLD BUSINESS

A. Public hearing and possible vote of amendments to Chapter 153 entitled "Site Review Regulations" regarding landscape/tree calipers. *

B. Public hearing and possible vote of amendments to Chapter 157 entitled "Land Subdivision Regulations" regarding landscape/tree calipers.*

4. NEW BUSINESS

A. Consideration and acceptance of a Condition Use Permit for Michael and Michelle Trochalakis, Assessor's Map M, Lot 93-A-2, zoned R-40, located at 7 Cullen Bay Road. (Proposal is to construct a new pool and relocation of an existing walkway due to a garage addition resulting in 1,052 sq. ft. of impact to Conservation District and 144 sq. ft. of impact to Wetland Protection District. *(P21-61)

B. Consideration and acceptance of a Minor Subdivision for American Durafilm Co., Inc., (Owner: Dover Business and Industrial Development Authority), Assessor's Map D, Lot 11-1, zoned IT, located at Venture Drive. (2 new lots) *(P21-62)

C. Consideration and acceptance of a Conditional Use Permit for American Durafilm Co., Inc., (Owner: DBIDA), Assessor's Map D, Lot 11-1, zoned IT, located on Innovation Way and Venture Drive. (Proposal is for a new manufacturing building and associated parking and drainage facilities, creating 7,419 sq. ft. of wetlands buffer impacts). *(P21-50)

D. Consideration and acceptance of a Site Review for American Durafilm Co., Inc., (Owner: Dover Business & Industrial Development Authority), Assessor's Map D, Lot 11-1, zoned IT, located at Venture Drive. (Proposal is to construct a 15,000 s.f. light manufacturing building with associated parking as well as a future 5,000 s.f. addition). A related CUP application will also appear before the Planning Board. *(P21-49)

5. STAFF COMMENT

6. MEMBER COMMENTS

7. ADJOURNMENT

*Indicates that if the application is accepted for discussion, the public hearing will be held the same evening. Note that some hearings will be continued from one meeting to another and some may be postponed. Since this is only a partial description of the proposal and may change, persons with questions or wishing to see the plans are invited to visit the Planning Office, Monday through Thursday from 8:30 am to 5:30 pm and Friday 8:30 am to 4:00 pm or email Dover-Planning@dover.nh.gov. You may also view materials at www.dover.nh.gov. Follow us on Twitter @DoverNHPlanning and find us on Facebook at https://www.facebook.com/DoverNHPlanning. The public is encouraged to leave comments in advance by emailing Dover-Planning@dover.nh.gov, or mailing written comments to Planning Board, Dover City Hall, 288 Central Ave., Dover, NH 03820. Messages must be received no later than 4 p.m. the day of the meeting and should identify the name and Dover address of the person leaving the message or providing the comment.

DOVER PLANNING BOARD – MINUTES

CITY OF DOVER

Meeting Type:	Regular Meeting
Meeting Location:	City Council Chamber's 288 Central Avenue
Meeting Date:	**Tuesday, August 24, 2021**
Meeting Time:	**7:00 pm**

Members Present: Dennis Ciotti (Councilor), Mark Speidel (Alternate), Dave Landry, Jackson Kaspari, Dave White, Kyle Pimental, Tom Clark, Frank Torr, Steph George (Alternate), Gina Cruikshank (Chair)
Members Not Present (excused): Hayley Harmon (Vice Chair), Erin Allgood (Alternate)
Members Not Present (un-excused): None
Staff Present: Christopher Parker, Assistant City Manager

The Chair called the meeting to order at 7:00 p.m. and noted that M. Speidel will sit tonight for H. Harmon. S. George will sit in for J. Kaspari, who needs to recuse himself from the items under review. She also noted that items 4D and E will not be heard tonight, as the applicant has asked to be continued to work out some last items.

C. Parker explained that J. Kaspari is recusing himself from the items on tonight's agenda because the City just hired him to be on staff as the Resiliency Coordinator and a staff member cannot be on the board. J. Kaspari will resign from the board after tonight's meeting.

J. Kaspari spoke noting it has been an honor to serve the Dover community with the Planning Board and he looks forward to working with them as a staff member.

The Chair noted the following: The City of Dover has continued to be aware of the need to ensure the physical location of this meeting is frequently sanitized, and encourage those who wish to wear face masks do so. Although qualified members of the public can participate in the meeting by speaking at the physical location, the public is encouraged to leave comments in advance by calling 516-MEET (6338), emailing Dover-Planning@dover.nh.gov, or mailing written comments to Planning Board, Dover City Hall, 288 Central Ave., Dover, NH 03820. Messages must be received no later than 4 p.m. the day of the meeting and should identify the name and Dover address of the person leaving the message or providing the comment.

1. CITIZENS' FORUM

Citizens Forum Open.
None
Citizens Forum Closed.

Motion: M. Speidel moved to reopen Citizens Forum. Seconded by F. Torr. Vote U/A

The Chair noted an email came in and was requested to be read aloud into the public record. The email was from Diane Stowell, 5 Old Littleworth Rd.
M. Speidel read the email aloud. The topic of the email was new residential units in the City, and the strain that puts on natural resources, traffic and parking. She would like this addressed at tonight's meeting along with asking the Board to consider stop granting exceptions to well thought out regulations.

2. APPROVAL OF THE PRIOR MINUTES

July 27, 2021 Regular Meeting Minutes

Motion: F. Torr moved to approve the minutes as submitted. Seconded by D. White. Vote: U/A

3. OLD BUSINESS

A. Public hearing and possible vote on amendments to Chapter 170 entitled "Zoning Ordinance" of the code of the City of Dover. Amendments include changes to the wetland protection district, accessory structure definition, rezoning part of the R-40 to R-20 on Bellamy Road and Cold Springs Road, allowing all residential

structures in the R-12, R-20, and R-40 districts to be converted into a duplex, increasing lot area required in the RM-U table for 3-4 family dwellings, revising exceptions to lot size, frontage and setback requirements using TDR, swimming pools, customary home occupations, allowing residential to make up any 20% of a building in the CBD, allowing an extra Accessory Dwelling unit if it meets HUD Fair Market rent rates, revising the RCM Overlay District, nonconforming structure setbacks, TDR regulations, changing definitions of nonconforming lot and conservation lot.

C. Parker explained the process to develop these zoning amendments and reviewed the posted zoning amendments with a PowerPoint presentation.
He noted tonight is the third of three public hearings that will be held on this item to hear public comment. The Board can vote to adopt the amendments tonight.

Public Hearing Opened
Dave Dupont, 20 Lisa Beth Cir thanked Chris and the board for holding a meeting in July. The Lisa Beth residents are concerned about the rezoning of H-48, H-53 and H-55. Those parcels are unique and should not be included in the rezoning. There is a greenway between the residents and the industrial park, and these three parcels contain a stream that drains into the Bellamy River. The parcels have wetland and wildlife. These lots should be put into conservation and then change the zoning from R40 to R20 in the area to help development.

John Donais, 16 Durham Rd had questions about amendments 14 and 15.
He expressed concern with the definition of *conservation lot* in reference to adding sewage areas. Wetlands should not be included regarding development- they are protected and should remain so.

Mike Day 104 Gulf Rd has an issue with R40 being added to these amendments. Duplex homes and more homes added on smaller lots will have a big impact. It's going to change Dover's character. He is concerned about traffic, wear and tear on roads, property values, added septic systems and reduced space for wildlife.

George Heilshorn, 108 Gulf Rd is concerned about the R40 for all the reasons mentioned before. The farmland has an eco-system and wildlife is sensitive and should not be removed in favor of all of this added housing. The existing traffic is already disturbing, and he can't imagine what the increase would bring.

Jeff Andress, 2A Country Club Estates Dr has only been in Dover and NH for 1 year. In their research to find the right place to live, he found Dover's master plan and references to larger lots with low-density. That is why he moved to Dover and if these proposed changes had been in place, he would not have purchased his home.

Mary Ann Church, 20 Lisa Beth Cir is concerned about the City and its residents. She wanted to know why the two lots mentioned could not be built upon. Also, is there potential for mobile homes to go on those small, 5000 ft lots? Dover's water comes from aquifers. We are relying on snowfall to replenish those aquifers. She is concerned about the effect of additional usage to our water supply.

Laura Scammon, 356 Washington St works in the middle school and noted that Dover is already having difficulty funding the schools and staff. With the change to zoning, it will encourage more development in the area which will add to the school's issues. Traffic is already a problem with families getting to work and school.

No calls were received. An email was received from Mr. Donais relative to the term *unsuitable areas*.

Public Hearing Closed

C. Parker addressed public comment.

- He explained the undeveloped areas per deed restrictions
- Amendment 14 definitions of conservation lot: the update is to change the citation chapter
- Amendment 14 definition for unsuitable area: intent is building/ development area
- Amendment 15 only applies to the TDR ordinance with the intent to calculate wetlands and unsuitable for development areas which broadens the protected areas
- Amendment 4 to allow two-family dwellings: the changes are: 40,000 sq ft for SFH to 30,000; and 60,000 for two-family. This broadens our affordable housing in Dover.
- The 5,000 sq ft lots could not support manufactured homes. There are specific rules for those.

T. Clark asked if amendments can be made tonight to fix errors in the wording or does that halt the process. C. Parker noted wording can be amended tonight .
C. Parker explained how changes that have been brought up tonight as concerns can be made.

Motion: T. Clark moved to amend Amendments 14 and 15 to add the word *development* after the word *unsuitable* changing the term from *unsuitable area* to *unsuitable development area*. Seconded by F. Torr.

D. White does not think the language needs to be changed.
D. Landry asked if the word *development* includes buildings, roadways, playing fields etc? He wants to make sure the language is clear so if certain items are allowed, the residents are aware.
K. Pimental agreed with D. Landry but wondered if we are muddying the waters by adding that word when actually some types of development are allowed.
D. Ciotti noted words matter and we should take these comments under advisement and hold off making the change to another time.
S. George agrees that the word *development* clarifies the amendment.
Vote: 6-3 in favor with Pimental, Ciotti and White opposed.

Motion: T. Clark moved to amend Amendment 4 to strike the word *and* at the bottom of page 3, and to strike all of the proposed language to allow two-family units in the R40 district. Seconded by F. Torr.
The board discussed what affect the change will have. Vote: 7-2 in favor with Pimental and White opposed.

Motion: T. Clark moved to remove Amendment 3 entirely which would result in not rezoning Bellamy and Cold Springs- they will remain zoned as-is. Seconded by D. Ciotti. Vote: 8-1 in favor with White opposed.

D. Landry commented on Amendment 10 which allows for more than one ADU as long as they are HUD rental rates. He would like to pull the R40 portion out of it. He is in favor of tighter density in the city portions, but density should be thought about for this R40 area. He proposed changing 10A to end the sentence: *max of one ADU per property is permitted.*
Insert: "*In residential districts other than R40*" to allow the additional ADUs in other zones.

Motion: D. Landry moved to clarify the language of Amendment 10 to only allow 1 ADU in the R40 zone. Seconded by T. Clark.

K. Pimental disagrees. A home owner should be allowed to have a 2nd ADU which is sq ft restricted to 800. We should be promoting creative housing options with the state of housing we are in.
Vote: 5 in favor with Pimental, Torr, Speidel, George opposed.

Motion: T. Clark moved to approve the amendments as amended and forward to the City Council for ratification. Seconded by D. Landry. Vote: U/A

K. Pimental recused himself from the floodplain items as he was a consultant on the language.

B. Public hearing and possible vote on amendments to Chapter 170 entitled "Zoning Ordinance" of the code of the City of Dover. Amendments regarding Floodplain zoning*

C. Parker explained the process to develop these zoning amendments and reviewed the posted zoning amendments. He noted tonight is the third of three public hearings that will be held on this item to hear public comment. The Board can vote to adopt the amendments tonight.

Public Hearing Opened
No one spoke
No calls or emails were received.
Public Hearing Closed

Motion: T. Clark moved to amend the language to add the word *development* between *unsuitable* and *area* throughout the amendment. Seconded by F. Torr. Vote: U/A

Motion: T. Clark moved to approve the amendments as amended and forward to the City Council for ratification. Seconded by M. Speidel. Vote: U/A

4. NEW BUSINESS

A. Consideration and acceptance of a Conditional Use Permit for Edward Atkinson, Assessor's Map 10, Lot 31, zoned HR, located at 241 Washington Street. (Proposal is to allow construction of a deck 25' from the rear property line instead of 30'). *(P21-48)

C. Parker explained the applicant is requesting a Conditional Use Permit to allow a deck to be built 25' from the rear property line instead of 30' as required.

The Board may notice the typical HR side setbacks would not be met by the proposed deck but staff feels that since the new deck would be further from the side property lines than the existing house that relief wasn't necessary. If the property did not slope the way it does and the deck could be built on the ground, setbacks would not need to be met.

In other districts, relief is reviewed by the Zoning Board of Adjustment.

Edward Atkinson, owner reviewed the application and project.

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Motion: T. Clark moved to accept the applications and noted that this is not a development of regional impact. Seconded by M. Speidel. Vote: U/A

Public Hearing Opened
No calls or emails were received.
Public Hearing Closed

C. Parker noted that considering the justification provided in the applicant's narrative, the Conditional Use Permit request meets these requirements, and the Planning Department recommends the Planning Board vote to grant the Conditional Use Permit with the following condition:

Condition to Be Met Prior to the Issuance of the Conditional Use Permit:

1. The applicant shall be subject to a formal agreement between the Planning Board and the applicant. Said agreement shall be recorded at the Strafford County Registry of Deeds per Chapter 170-20-B(3).

Motion: T. Clark moved to approve the Conditional Use Permit, with Conditions, as it is consistent with the regulations. Seconded by M. Speidel. Vote: U/A

The Vice Chair noted items 4 B and C will be heard together.

B. Consideration and acceptance of a Conditional Use Permit for One First Street, LLC. Assessor's Map 6, Lot 20, zoned CBD-G, located at 1 First Street. (Proposal is to allow less than 80% of the façade to be windows for both the new building and existing building) *(P21-38)

C. Consideration and acceptance of a Site Review for One First Street, LLC., Assessor's Map 6, Lot 20, zoned CBD-General, located at 1 First Street. (Proposal is to renovate existing building for commercial space and 14 apartments as well as construct a new 4 story building with 44 apartments). *(P21-30)

C. Parker reminded the Board of the history of the property. This is the third proposed site plan for this property. The Board approved two previous site plans for this site, one in 2016 and another in 2019. If this is approved P19-16 will be no longer valid replaced with this request.

The current site plan request is to renovate existing building to house commercial space and 14 apartments and build a new building with 44 apartments. The site will be serviced by municipal water and sewer. Nineteen parking spaces are proposed under the new building and the rest would park at the Transportation Center. This application was reviewed by the Technical Review Committee on May 6 and June 16, 2021.

Staff and the applicant executed a Development Agreement on February 24, 2021, based upon City Council approval. Part of the agreement is that 20% of the apartments in the building be restricted to HUD rental rates of 80% of the median income for a period of 21 years. These apartments may float in the building and reporting would be provided the Planning Department annually. The applicant provided draft income verification documents in the submission.

Initially, staff considered two additional CUPs required for solar and non-residential percentage but worked with the applicant to meet those requirements. A narrative on those subjects and how the project meets the intent of the regulations is included with their submission.

There is a request for a Conditional Use Permit to allow for less than 80% of the building façade in the existing and proposed building to be windows/openings. The proposed percentages of the new building are 5% of windows and 18% openings, including windows and doors. The reason for the request is that the existing building has a historic look and feel to the building and complying with the regulation would alter that. Furthermore, the City Council required that the new building blend in and complement with the existing building.

There will be two votes, the CUP and the site plan.

Paul Goodwin, Chinburg Properties highlighted their investments in Dover explaining this is their latest project.

Neal Reposa, Civil Consultants reviewed the application and project.

M. Speidel asked about a handicapped ramp location, and if there is a restaurant in the commercial space, how it would be vented. He commented he is thrilled they are renovating the building and the flagpole. He wondered if the existing plaque would be preserved. He suggests keeping it on the exterior of the building so visitors can find it.

Mr. Reposa described the locations of items for M. Speidel and explained the venting would be done vertically

D. Landry commented this is a fantastic project.

K. Pimental noted the Arts Commission has been very involved with public art displays in the City and the City adopted a recreation and culture master plan chapter that discusses public art displays. These resources should be utilized while determining the public art pieces.

Motion: F. Torr moved to accept the applications and noted that this is not a development of regional impact. Seconded by T. Clark. Vote: U/A

Public Hearing Opened
No calls or emails were received.
Public Hearing Closed

STAFF RECOMMENDATION - CUP:
C. Parker noted the CBD-General table requires 80% of the façade to be windows or openings unless the Planning Board grants a CUP. Chapter 170-20-B(1)of the City Code states that conditional use approval for relief from the standards may be granted by the Planning Board provided that the proposed project complies with the standards:

Staff believes that the desire to maintain the historic building in as much of its current, external state as possible is worth doing and that the justification provided in the applicant's narrative meets the Conditional Use Permit standards. The Planning Department recommends the Planning Board accept the applications, open the public hearing, and vote to grant the Conditional Use Permit with the following conditions:

Conditions to Be Met Prior to the Issuance of the Conditional Use Permit:

1. Site Plan (P21-30) be approved.

2. The applicant shall be subject to a formal agreement between the Planning Board and the applicant. Said agreement shall be recorded at the Strafford County Registry of Deeds per Chapter 170-20-B(3)

D. Ciotti asked for details about the parking lot mentioned in the proposal. C. Parker addressed this.

Motion: M. Speidel moved to approve the Conditional Use Permit with conditions, as the request is consistent with the regulations. Seconded by T. Clark. Vote: U/A.

STAFF RECOMMENDATION- Site Plan:
C. Parker noted that the plan is consistent with Chapter 153-4 of the Site Review Regulations of the City Code provides for site review by the Planning Board of new construction of various types. The Planning Department recommends that the Planning Board vote to approve the adjustment with the following conditions:

Conditions to Be Met Prior to the Signing of Plans:

1. Provide:
    a. Letter from Licensed Pest Control Specialist regarding if a pest management plan is needed.
    b. Revised draft easement documents with easement plan or description noted.
2. Provide physical and digital copies (including CAD) of complete plan set which additionally shall include:
    a. Signature and stamp of PE, LLA, and LLS
    b. Owner's signature
    c. Provide 2"x2" space on lower right corner of sheet L2 for Dover's approval stamp
    d. Add permit number to note 24 on sheet L2
    e. Replace vinyl windows with windows that meet architectural standards
    f. The elevator shall provide an accessible means of egress and shall comply with emergency operation and signaling devices.
    g. Update plans to the satisfaction of the Building Official regarding ventilation and accessibility of the garage.
    h. Add note to plan that this approval supersedes any previous site approval.

Conditions to Be Met Prior to any Construction Activity:

3. A site construction sign with the contact information for the general contractor must be located and approved by the City Engineer or Assistant City Manager. Site Construction sign shall indicate level of visibility/noise/vibration disturbance anticipated each day.
4. An archaeologist be retained to be on site documenting excavation.
5. A neighborhood meeting shall be held.

Condition to Be Met Prior to Issuance of a Building Permit:

6. Water and sewer investment fees shall be paid at the time of request of service.
7. Report from Archaeologist provided to the satisfaction of the Assistant City Manager.
8. Public art presented to Dover Arts Commission and Planning Staff.

Conditions to Be Met Prior to Occupancy:

9. Issuance of a certificate of occupancy.
10. Impact fees shall be paid per the invoice included with the Notice of Decision.
11. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.

12. Community Trail and Transportation Center easements have been recorded.
13. Public art installed.
14. Conditions required by the Development Agreement with the City Council (re: Community Revitalization Tax Credit) shall be in place.

Motion: M. Speidel moved to approve the Site Plan, with Conditions, as it is consistent with the regulations. Seconded by T. Clark. Vote: U/A

The Vice Chair announced that items 4 D and E will not be heard tonight.

D. Consideration and acceptance of a Conditional Use Permit for Equine Properties, LLC, (Agent: Barry Surveying & Engineering), Assessor's Map H, Lot 37A, zoned Commercial, located at 239 Knox Marsh Road. (Proposal is for a 64 unit residential development with the construction of a 1,350 foot long road and 99 parking spaces. The project proposes 10,699 square feet of wetland buffer impacts due to road side slopes and drainage facilities and 28.6% of impervious cover in a Secondary Groundwater Protection Zone, where 20% is allowed. *(P21-05)

E. Consideration and acceptance of a Site Review for Equine Properties, LLC., Assessor's Map H, Lot 37A, zoned Commercial, located at 239 Knox Marsh Road. (Proposal is to construct a private roadway to provide access to two (2) mixed use buildings, each building consisting of commercial space on the first floor with 26 residential units on the second and third floor & construct twelve (12) single family dwellings). *(P21-04)

F. Consideration and possible posting of amendments to Chapter 153 entitled "Site Review Regulations" regarding landscape/tree calipers. *

C. Parker explained the amendment is to adjust the required caliper of trees for landscaping areas from no less than 3.5" caliper to 3". The Board has seen numerous waiver requests for this, and staff consulted with landscape architects and nurseries about the caliper.

Motion: T. Clark moved to post the amendment and hold a public hearing. Seconded by D. White. Vote: U/A

G. Consideration and possible posting of amendments to Chapter 157 entitled "Land Subdivision Regulations" regarding landscape/tree calipers.*

C. Parker explained the amendment is to adjust the required caliper of trees for landscaping areas from no less than 3.5" caliper to 3". The Board has seen numerous waiver requests for this, and staff consulted with landscape architects and nurseries about the caliper.

Motion: T. Clark moved to post the amendment and hold a public hearing. Seconded by D. White. Vote: U/A

5. STAFF COMMENTS

- C. Parker updated the Board on:
    - the latest TRC: subdivision on Sixth Street, a multi-family project on Cataract Avenue, a mixed use project on Broadway, a commercial project on Innovation Way.
- Reminder that the Board has two meetings in September and October.

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- CWDAC has the final site plans for the waterfront and will be considering approving the design at its September meeting. They will then be provided to the TRC for review.
- The Census numbers indicate Dover is the 3rd largest by-person growth (9.8%) in the state behind Manchester and Nashua.

6. MEMBER COMMENTS

- The Chair signed water treatment facility plans
- M. Speidel requested a presentation by community services to talk about how much water and sewer capacity Dover has and if it can support Dover's growth.
- D. Ciotti noted the Council just approved the new sewer treatment renovations at River St which will have a huge impact on how the operation runs.
- D. Ciotti wondered if the board should vote in a policy about emails sent in. Should they be read or summarized during public comment? The board should decide because emails are bound to be received more frequently. The board discussed this and determined the emails will be summarized unless they specifically state they request to have the email read aloud.

Motion: D. Ciotti made a motion to summarize emails sent to the board for agenda items unless the sender specifically requests the email to be read aloud at the meeting. (5 minute max) Seconded by T. Clark. Vote: U/A

7. ADJOURNMENT

Motion: T. Clark made a motion to adjourn at 9:28 p.m. Seconded by D. White. Vote: U/A

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CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P21-61

Application Type:	Conditional Use Permit
Applicant(s):	Michael and Michelle Trochalakis
Owner(s):	Michael and Michelle Trochalakis
Location:	7 Cullen Bay (Tax Map M, Lot 93-A-2)
Meeting Date:	September 28, 2021

INTENT: To obtain a Conditional Use Permit to allow 1,052 s.f. of impact to the Conservation District and 144 s.f. to the Wetland Protection District

LOTS/UNITS PROPOSED: N/A

AGENDA ITEM #: 4-A

ACREAGE: 3.97 acres

ZONING DISTRICT: R-40

EXISTING LAND USE: Residential

PROPOSED LAND USE: Same

SURROUNDING LAND USE:
Residential and vacant

ZBA ACTION: None

ATTACHMENTS: Application materials, CC minutes

DECLARE REGIONAL IMPACT: No

APPLICATION IS COMPLETE: Yes

NOTICES SENT: Abutter notices were sent by certified mail to all abutters for this meeting

PERMITS REQUIRED:
CUP

WAIVER(S) REQUESTED:
N/A for this case

Summary of Request and Background
The applicant is looking to install an in-ground pool and brick walk in the Conservation District adjacent to the tidal Cochecho River, creating 1,052 s.f. of permanent impact to the 100' tidal buffer zone and building a garage addition with an impact of 144 s.f. to a 50' wetlands buffer. The walkway will create wetlands buffer impacts.

The Conservation Commission endorsed the CUP at their meeting on September 13, 2021 (minutes attached), with no conditions.

Consistency with Land Use Regulations – Conditional Use Permit
The Wetlands Protection District ordinance provides for Conditional Use Permits to allow impacts to wetlands and wetland buffers if standards related to demonstration that no practicable alternative exists, impact avoidance was considered, impacts were minimized, and mitigation has been sought.

Staff feels that the applicant considered the criteria when designing the plan by placing the garage outside of the wetland buffer in an area that was previously filled when the house was built. Wetland impacts have been avoided and the minimal wetland buffer impact is primarily a steep slope. The impacts were minimized and avoided as much as possible by placing the walkway close to the garage. Staff believes this proposal is consistent with the standards.

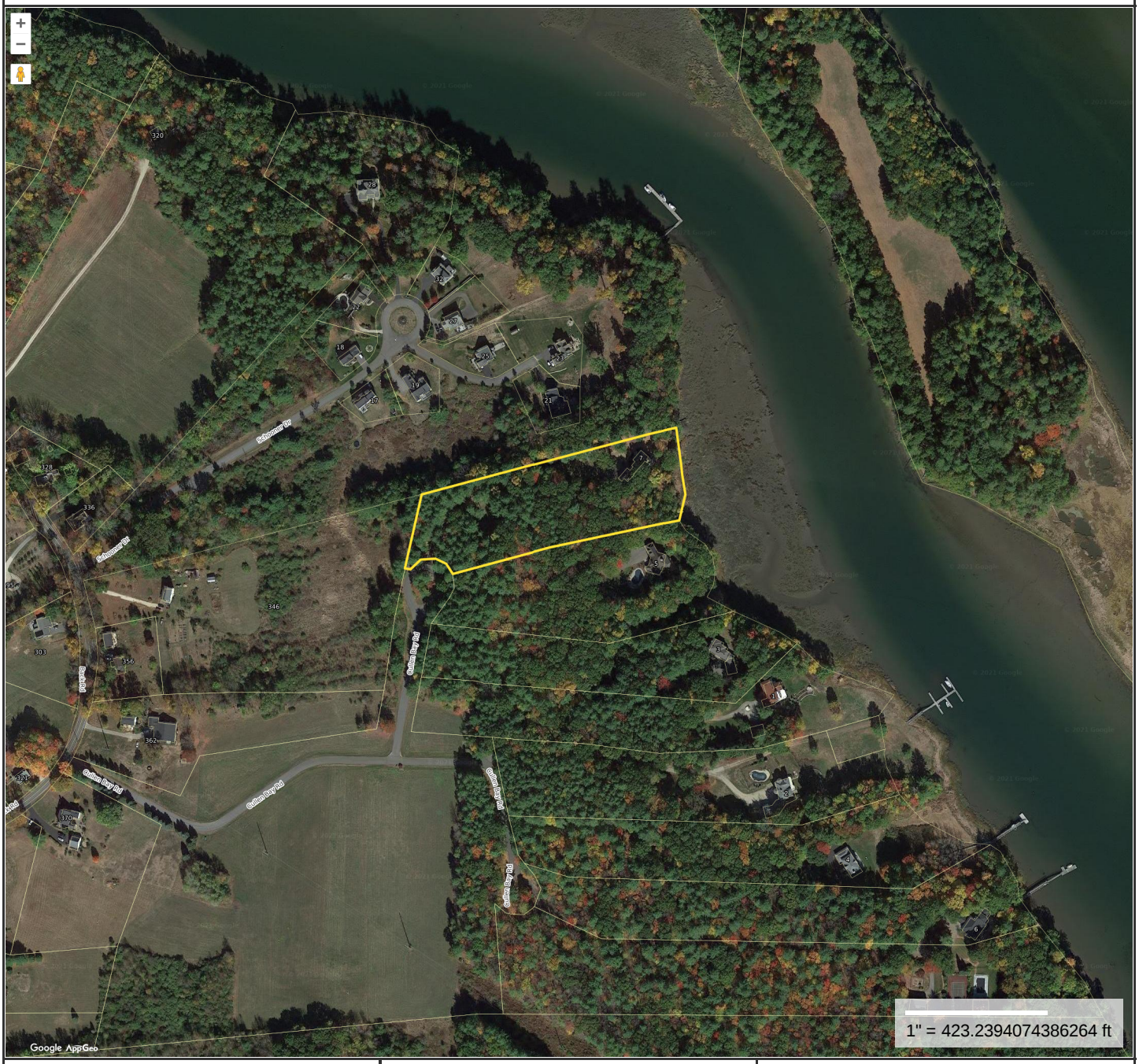
The Conservation District ordinances provide for Conditional Use Permits to allow impacts to the Conservation District if standards related to demonstration that the use is essential to the productive use of land, a soil erosion and sedimentation control plan is submitted, state and federal approvals have been applied for, and a written review by the Conservation Commission has been sought.

Staff feels that the applicant considered the criteria when placing the pool based on the site topography and in an area that is already a mowed lawn. The plan includes erosion and sedimentation control measures to prevent any impacts to the tidal buffer zone. The DES Wetlands Permit has been applied for and the Conservation Commission endorsed the application with no conditions.

STAFF RECOMMENDATION:
The Planning Department recommends the Planning Board to accept the application, open the public hearing, and vote to approve the Conditional Use Permit with the following condition, as the plans meet the standards outlined:

1. Provide a copy of the NHDES Wetlands Expedited permit.

P21-61 CUP for 7 Cullen Bay



Property Information

Property ID	M0093-A00002
Location	7 CULLEN BAY RD
Owner	TROCHALAKIS MICHEL G &
Land Use	101

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 5/3/2021
Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

CIVILWORKS NEW ENGLAND

181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

September 8, 2021

City of Dover Planning Board
288 Central Avenue
Dover, NH 03820

Subject: Conditional Use Permit
7 Cullen Bay Road
Dover, NH 03820
CNE Reference No. 21013

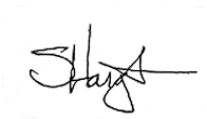
Dear City of Dover Planning Board:

On Behalf of Michel G. & Michelle L. Trochalakis, we are pleased to submit a conditional use permit for the Planning Board's consideration. The applicant is proposing the construction of a new pool and a relocation of an existing walkway due to a garage addition resulting in 1,052 s.f. of impact to the City of Dover's Conservation District and 144 s.f. of impact to the City of Dover's Wetland Protection District respectively.

If you have any questions, please do not hesitate to contact our office.

Sincerely,

CIVILWORKS NEW ENGLAND



Stephen J Haight, PE

PROJECT NARRATIVE

for

Michel G. & Michelle L. Trochalakis

Conditional Use Permit

7 Cullen Bay Road

Tax Map M, Lot 93A-2

SEPTEMBER 2021

PROJECT OVERVIEW & SITE CHARACTERISTICS

The project parcel is located at 7 Cullen Bay Road, Dover, NH and is shown on Tax Map M as Lot 93A-2, and is located within the R-40 Rural Residential District. The parcel consists of +/- 3.94 acres and is currently developed as a residential use. The project applicant is proposing the construction of a pool located, and the relocation of an existing walkway and associated site grading. The Cochecho River (Tidal) abuts the parcel to east.

OVERLAY DISTRICT SETBACKS IMPACT TYPE

Conservation District

The proposed location of the pool is within an existing lawn area on the side of the house. There is no other feasible location for the pool based on the topography of the parcel and the jurisdictional setbacks. The pool will be located uphill of the top of the bank within the 100' Conservation District and will impact approximately 1,052 s.f. of mowed lawn area. A comprehensive erosion control plan will be implemented during construction to contain any erosion or sedimentation created during construction. Any slopes over 4:1 will receive erosion control blanket, site wastes will be managed by the site contractor and hauled offsite as wastes are generated. As part of the construction process a weekly stormwater management review of the implemented BMP's will be performed and any deficiencies rectified immediately. Land clearing will be minimized as the pool is to be installed within an existing mowed lawn area. Permiter erosion control BMP's will be installed at the outset of construction and will be maintained during the entire course of construction and maintained until the site has been stabilized.

Wetland Protection District

The proposed relocation of an existing walkway is located within the 50' Wetland Protection District setback and will create an impact of approximately 144 s.f., 91 s.f. of impact to an existing mowed grass area and 53 s.f. of impact existing tree line. During Construction a Siltsoxx will be placed down slope of the construction area to prevent silt from discharging into the freshwater wetlands. During construction material and soil stockpile areas will be uphill and away from the bank. Stockpiles will be stabilized and ringed with silt soxx. Any slopes disturbed will

Demonstration of Need: The proposed construction is essential to the productive use of land or water outside the Wetlands Protection.

The existing walkway follows along the perimeter of the garage and with the expansion of the garage the walkway will be relocated along the garage to continue access to and from the backyard.

PROJECT NARRATIVE

for

Michel G. & Michelle L. Trochalakis

Conditional Use Permit

7 Cullen Bay Road

Tax Map M, Lot 93A-2

SEPTEMBER 2021

Avoidance: The potential impacts have been avoided to the maximum extent practicable.
The walkway has been relocated to be as close to the garage as is practicable to minimize grading and impacts within the wetland protection district.

Minimization: Any unavoidable impacts have been minimized. No reasonable alternative to the proposed construction exists which does not impact a wetland or which has less detrimental impact on a wetland. Design, construction and maintenance methods will be prepared by a registered engineer to minimize detrimental impacts to the wetlands and will include restoration of the site as nearly as possible to its original grade.
The relocation of the existing walkway does not impact any wetland area. The impact is to the wetland buffer only. The area of the walkway is within maintained lawn area. During Construction a Siltsoxx will be placed down slope of the construction area and at the top of the bank to prevent silt from discharging downhill.

Mitigation: If mitigation is required by state rules to prepare a compensatory mitigation plan, the applicant shall provide the Conservation Commission and Planning Board with one copy each of said plan for their review.
The relocation of the existing walkway does not impact any wetland area. The impact is to the wetland buffer only.

Approval for the wetlands impact has been received from the NHDES Wetlands Bureau.
The relocation of the existing walkway does not impact any wetland area. The impact is to the wetland buffer only. A NHDES Wetlands permit is not required.

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: Michel G. & Michelle L. Trochalakis Telephone # (603)512-8997

Address of Applicant: 7 Cullen Bay Road, Dover, NH

E-Mail Address: mike.trochalakis@gmail.com

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

Address of Property Owner: _____

PROPERTY INFORMATION

Assessor's Map # M Lot(s) # 93A-2

Address of Property: 7 Cullen Bay Road

Zoning District(s) R-40 Overlay District(s) Conservation District & Wetland Protection District

Existing Use of Property: Residential

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:

The proposed pool construction will be located on a maintained lawn area and will create a 1,052 s.f. impact to the Conservation District. The relocation of an existing walkway will create a 144 s.f. impact to the Wetland Protection District.

(Project Narrative Attached)

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: NHDES SHORELAND PERMIT - PENDING

NHDES WETLANDS PERMIT - PENDING

Name of Professional That Prepared Plans: CIVILWORKS NEW ENGLAND

Address 181 WATSON ROAD, P.O. BOX 1166 Telephone #: (603)749-0443

Professional License #: 7978 E-mail address: SHAIGHT@CIVILWORKSNE.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: Michelle Trockelak Date: 9/7/21

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: Michelle Trockelak Date: 9-7-2021

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
M	93A-2	Michel G. & Michelle L. Trochalakis	7 Cullen Bay Road, Dover, NH 03820

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Stephen J. Haight	Civilworks New England	P.O. Box 1166 Dover, NH 03821
Kevin M. McEneaney	McEneaney Survey Associates	24 Chestnut Street, Dover, NH 03820

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 # 2 per Application = $400
- ☐ 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) = $400

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 = $ _____

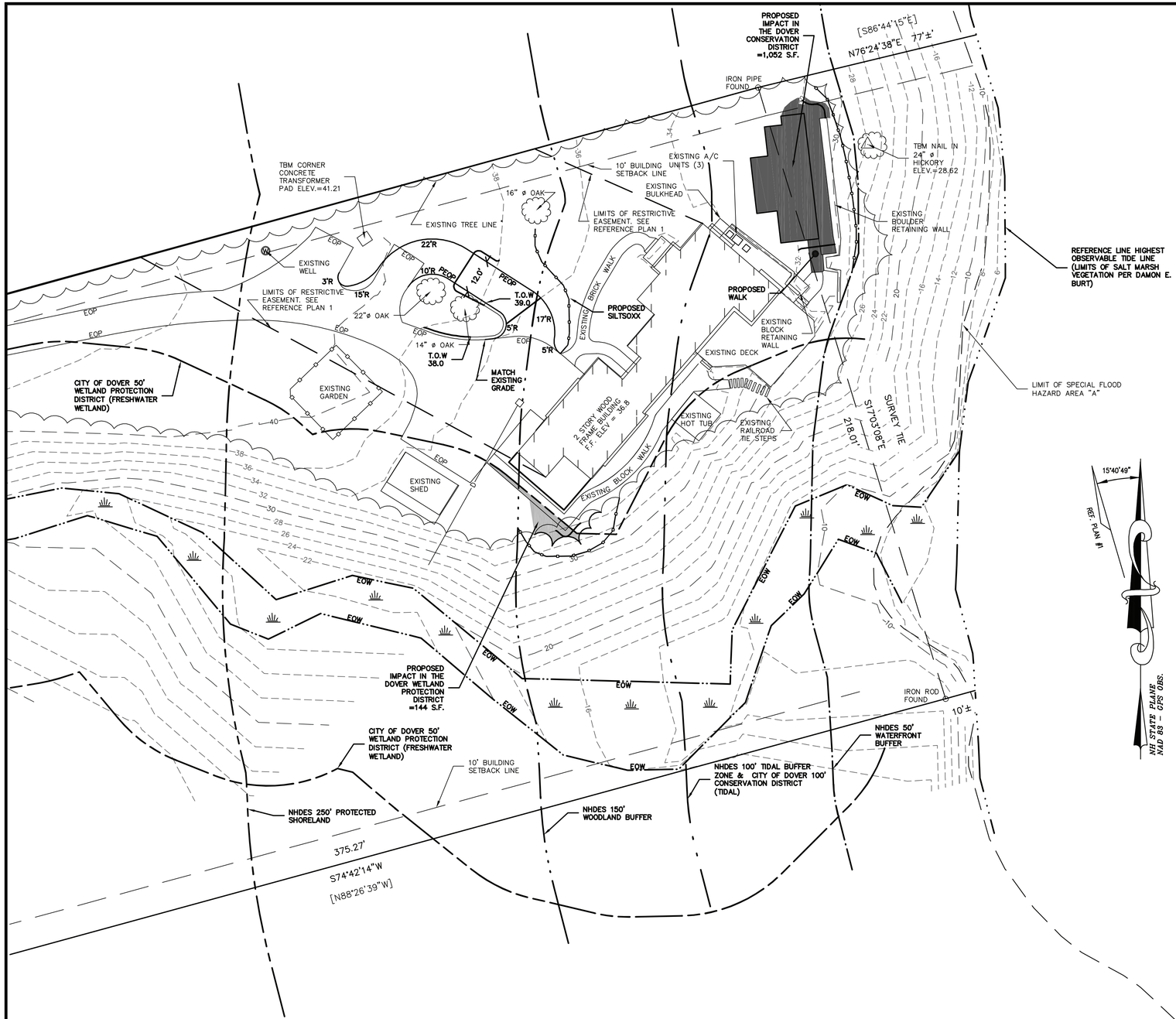
The balance due must be paid 28 hours prior to the Planning Board Meeting, to be heard.











PLAN INTENT:
THE INTENT OF THIS PLAN IS TO SHOW THE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF A GARAGE ADDITION, DRIVEWAY EXPANSION, AND A POOL.

REFERENCE PLAN:
1. EXISTING CONDITIONS PLAN PREPARED FOR MICHEL G. & MICHELLE L. TROCHALAKIS; MAP M, LOT NO. 93A-2, 7 CULLEN BAY DRIVE, DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE; DATED: JANUARY, 2020; PREPARED BY: MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND. (IN THIS PLAN SET)

SHORELAND CALCULATIONS

	PRE	POST
PRIMARY STRUCTURES	3,518 S.F.	3,743 S.F.
ACCESSORY STRUCTURE		
SHED	336 S.F.	336 S.F.
ASPHALT DRIVE	3,383 S.F.	4,100 S.F.
BRICK WALK	801 S.F.	827 S.F.
CONCRETE PADS	14 S.F.	14 S.F.
STONE RETAINING WALL	174 S.F.	198 S.F.
POOL	0 S.F.	687 S.F.
TOTAL	8,226 S.F.	9,905 S.F.

TOTAL SHORELAND AREA 250'	= 57,303 S.F.
% PRE-CONSTRUCTION IMPERVIOUS 250'	= 8,226 S.F. (14.4%)
% POST-CONSTRUCTION IMPERVIOUS 250'	= 9,905 S.F. (17.3%)
TOTAL AREA 50' TO 150'	= 23,005 S.F.
AREA BETWEEN 50' TO 150' PRE UNALTERED	= 10,948 S.F.
AREA BETWEEN 50' TO 150' POST UNALTERED	= 10,850 S.F.
AREA BETWEEN 50' TO 150' PRE DISTURBED	= 12,055 S.F.
AREA BETWEEN 50' TO 150' POST DISTURBED	= 12,153 S.F.
TOTAL AREA 0' TO 50'	= 11,438 S.F.
AREA BETWEEN 0' TO 50' PRE & POST-UNALTERED	= 11,019 S.F.
AREA BETWEEN 0' TO 50' PRE & POST-DISTURBED	= 419 S.F.
TOTAL AREA 50' TO 100'	= 11,500 S.F.
AREA BETWEEN 50' TO 100' PRE & POST-UNALTERED	= 5,948 S.F.
AREA BETWEEN 50' TO 100' PRE & POST-DISTURBED	= 5,552 S.F.
TOTAL AREA 0 TO 100	= 22,938 S.F
AREA BETWEEN 0' TO 100' PRE-IMPERVOUS	= 1,849 S.F. (8.1%)
AREA BETWEEN 0' TO 100' POST-IMPERVIOUS	= 2,583 S.F. (11.3%)
TOTAL IMPACT AREA	= 3,308 S.F.
TOTAL IMPACT AREA - WETLANDS JURISDICTION	= 1,052 S.F.
TOTAL IMPACT AREA - SHORELAND JURISDICTION	= 2,256 S.F.
TOTAL IMPACT IN THE DOVER CONSERVATION DISTRICT	= 1,052 S.F.
TOTAL IMPACT IN THE DOVER WETLAND PROTECTION DISTRICT	= 144 S.F.

LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
HOTL	HIGHEST OBSERVABLE TIDE LINE
EOW	EDGE OF WET
x 74.00	EXISTING SPOT GRADE
---94---	EXISTING GRADE
	PROPOSED EDGE OF PAVEMENT
	PROPOSED SILTSOXX
	PROPOSED DRIP EDGE
	PROPOSED IMPACT AREA IN CONSERVATION DISTRICT
	PROPOSED IMPACT AREA IN WETLAND PROTECTION DISTRICT

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE

DATE: 9-8-21
SCALE: 1"=20'
DRAWN BY: JRG
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO:21013
FILE: SITE

STEPHEN J HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

CONDITIONAL USE PERMIT PLAN

MICHEL G. & MICHELLE L. TROCHALAKIS
7 CULLEN BAY ROAD
DOVER, NH 03820

CULLEN BAY ROAD
7 CULLEN BAY ROAD
DOVER, NH 03820

A

P21-61 **7 Cullen Bay Road**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
M0092-B00000	CULLEN BAY RD	CULLEN BAY HOMEOWNERS ASSC	C/O LORI LANDER-TREASURER	135 BAY SHORE DR	CAPE CORAL	FL	33904-5808
M0093-A00001	5 CULLEN BAY RD	HILDRETH NORMAN G JR &	HILDRETH BETH W	5 CULLEN BAY RD	DOVER	NH	03820
M0093-A00003	3 CULLEN BAY RD	WANG CHIEN &	REN HUA	3 CULLEN BAY RD	DOVER	NH	03820
M0094-A00000	346 BACK RD	HOLLINGER CHRISTINA B &	HOLLINGER JEFFREY D	346 BACK RD	DOVER	NH	03820
M0096-A00007	23 SCHOONER DR	MACBRIDE DAVID SCOTT TRUSTEE	MACBRIDE DAVID SCOTT REVOCBLE LIVING TRU	23 SCHOONER DR	DOVER	NH	03820
M0096-A00008	21 SCHOONER DR	KERSHA ALEXANDER VADIM &	RUSSANO ANDREA LYNN	21 SCHOONER DR	DOVER	NH	03820-5018
M0093-A00002	7 CULLEN BAY RD	TROCHALAKIS MICHEL G &	TROCHALAKIS MICHELLE L	7 CULLEN BAY RD	DOVER	NH	03820
		CIVILWORKS NEW ENGLAND	STEVE HAIGHT	P.O. BOX 1166	DOVER	NH	03821
		MCENEANEY SURVEY ASSOCIATES	KEVIN M MCENEANEY	24 CHESTNUT STREET	DOVER	NH	03820

DOVER CONSERVATION COMMISSION – MINUTES

CITY OF DOVER

Meeting Type:	Regular Meeting
Meeting Location:	Second Floor Conference Room – 288 Central Ave.., Dover, NH
Meeting Date:	Monday, September 13, 2021
Meeting Time:	5:30 pm

MEMBERS PRESENT: Bill Hunt (Chair), Robert Atwood (Secretary), Kristen Murphy (Alternate), Bruce Batchelder (Alternate)

Absent (Excused): Abigail Lyon, Steve Fellows (Vice Chair), Jason Aube, Amy Kramer-Perry, Richard Erickson

Absent (Un-excused):

STAFF PRESENT: Steve Bird

OTHERS PRESENT: Matthew Cardin, Chris Berry, Jase Gregoire, Mike Menary, Councilor Lindsey Williams

1. **CALL TO ORDER AND ROLL CALL**

   The meeting was convened at 5:30 PM.

   Hunt opened the meeting and did roll call.

2. **CITIZEN'S FORUM:** None
3. **APPROVAL OF THE PRIOR MEETING MINUTES** – August 9, 2021

Murphy moved to approve the August 9, 2021 minutes, Batchelder seconded. Vote: 3 yes, Atwood abstained

4. **OLD BUSINESS:** NONE
5. **NEW BUSINESS:**

A. NHDES Standard Wetlands Permit for William and Chaney Fisher, (Agent: Matthew Cardin), Assessor's Map 7, Lot 2, zoned R-20, located at 1 Boston Harbor Road.

Matthew Cardin was present to explain the proposal to construct a new dock with a 4' x 15' access ramp, a 4' x 60' permanent wood pier, a 3' x 40' aluminum gangway, and a 10' x 20' float, in the tidal Little Bay. The project creates 560 square feet of permanent impact to tidal wetland and 60 square feet of permanent impact to the tidal buffer zone. Pier is raised to account for sea level rise and floodplain. 14 total piers and float stops included. I am seeking a recommendation for approval.

Hunt: What is the status of your DES permit?

Cardin: The application is currently being reviewed by Dave Price at DES.

Murphy: Is there any vegetation along the shore?

Cardin: No, it is a mixture of rocks and sand.

Atwood: I can confirm that there is no vegetation as I was out there reviewing an application for an oyster bed for my job with Fish & Game.

Bird: The plans shows stairs but the application says ramp? How will the piles be installed?

Cardin: The plans shows stairs but the owner may want to use a ramp due to proposed use. Same impact for ramp and stairs. We will use barge to install the piles.

Murphy moved to endorse the NHDES Wetlands applications as presented, Atwood seconded. Vote: 4 yes

DRAFT

B. City of Dover Conditional Use Permit and NHDES Standard Wetlands Permit for Settlement on 6th, LLC (Agent: Chris Berry, Berry Surveying & Engineering), Assessor's Map B, Lot 5, zoned R-40, located on Sixth Street.

Chris Berry was present to explain the proposal for a 13 lot open space subdivision with a 900 foot long road and associated driveways and drainage facilities, creating 131 sq. ft. of temporary impact and 1,613 sq. ft. of permanent impact to a wetland and 12,394 sq. ft. of wetlands buffer impacts. Front of site flows south to wetland and rear of site flows east. Proposing to use TDR for 3 more lots, but we may end up with less lots. We require DES permits for Wetlands and AOT. Site uses gravel wetlands for storm water. Using stabilized slopes along road to reduce impacts. Proposing revegetation in impact areas. We have done a wildlife study. Municipal sewer is proposed.

Hunt: Any streams being impacted?

Berry: There are no streams, only wetlands.

Hunt: Why are you considering fewer houses?

Berry: TRC asked us to reduce impacts to buffers so we are looking at merging the first two lots on the right into a duplex and eliminating one of the lots on the north side of the road.

Murphy: Who will be responsible for maintaining the best management practice systems?

Berry: They will be maintained by a homeowners association that will be formed.

Murphy: I like the reduction of units to reduce impacts and the culvert design for wildlife.

Atwood moved to endorse the Conditional Use Permit and the NHDES Wetlands applications as presented, Batchelder seconded. Vote: 4 yes

C. City of Dover Conditional Use Permit for American Durafilm Co., Inc. (Owner: DBIDA) (Agent: Civilworks New England), Assessor's Map D, Lot 11-1, zoned IT, located on Innovation Way and Venture Drive.

Jase Gregoire was present to explain the proposal for a new manufacturing building and associated parking and drainage facilities, creating 7,419 sq. ft. of wetlands buffer impacts. We have been to DBIDA on June 4th and to TRC for two meetings. The impacts are for grading and drainage. No wetlands are impacted. The building has the potential for a 5,000 square foot addition and those impacts are included. They may only fill for the 15,000 square foot building. We will be using standard erosion control blankets and hydro seeding. Run-off from Innovation Way is treated.

Murphy: How will snow storage be handled?

Gregoire: On the front it will be pushed onto the grass to the north and on the back pavement it will be pushed to the north. The maintenance and inspection manual was prepared.

Murphy: Did you consider a retaining wall to reduce impacts to wetlands buffer?

Gregoire: It would come down to cost, as the wall would be about 156 feet tall.

The members reviewed the landscaping plan.

Batchelder moved to endorse the Conditional Use Permit as presented, Murphy seconded. Vote: 4 yes

DRAFT

D. City of Dover Conditional Use Permit and NHDES Expedited Minimum Impact Wetlands Permit for Michael and Michelle Trochalakis (Agent: Civilworks New England), Assessor's Map M, Lot 93-A-2, zoned R-40, located at 7 Cullen Bay Road.

Gregoire was present to explain the proposal for installation of an in-ground pool and brick walk in the Conservation District adjacent to the tidal Cochecho River, creating 1,052 sq. ft. of permanent impact in the 100' tidal buffer zone and building a garage addition with an impact of 144 sq. ft. to a 50' wetlands buffer. The walkway will be creating the wetlands buffer impacts not the garage itself.

Hunt: Will there be any erosion control issues due to the pool being so close to the river?

Gregoire: No we have shown the erosion control measures on the plan and the existing stone retaining wall will help. One of the Wetland Permit requirements is to find out if Dover has any wetland mitigation site that need mitigation assistance.

Bird: Right now there are not public wetland mitigation sites. The Open Lands Committee does work with private landowners to preserve land and there are a couple of projects pending but they are not in the public stage yet. You will likely end up making a payment to the ARM fund.

Murphy moved to endorse the Conditional Use Permit and the NHDES Wetlands Expedited application as presented, and to authorize the Chair to sign the applications, Atwood seconded. Vote: 4 yes

The Chair signed five copies of the application and returned them to the applicant.

E. Request for expenditures from the Conservation Fund for:

1. Open Lands Committee - Conservation Easement Appraisal – not to exceed $6,000

Bird explained that the Open Lands Committee is requesting the funds to hire an appraiser to complete a conservation easement appraisal on a parcel of land. The OLC is working with the landowner to preserve a portion of the parcel and need to determine a value. The Conservation Fund has a balance in excess of one million dollars.

Murphy moved to approve the expenditure from the Conservation Fund for an appraisal not to exceed $6,000, Batchelder seconded. Vote: 4 yes

6. REPORT FROM THE CHAIR

A. Review of Correspondence Received From NH Department of Environmental Services: None

7. OTHER BUSINESS:

A. Discussion on Proposal Abigail Lyon on Technical Review Committee Procedure

Lyon was absent so this discussion will be postponed until the next meeting.

B. Update on Committee to Work on Amendments to Wetland Protection District Ordinance

Bird: The committee held a meeting on August 24th. The committee discussed the functions and values of wetlands and different methods to use. Maps prepared by SRPC showing different layers of resources were reviewed.

8. ADJOURNMENT

Murphy moved to adjourn the meeting at 6:53 PM, Atwood seconded. Vote: 4 yes

DRAFT

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P21-62

Application Type:	Minor Subdivision
Applicant(s):	American Durafilm Co, Inc
Owner(s):	DBIDA/City of Dover
Location:	Innovation Way (Tax Map D, Lot 11-1)
Meeting Date:	September 28, 2021

INTENT: To subdivide one lot into 2 to be 3.30 acres and 32.89 acres.

LOTS/UNITS PROPOSED: 1 new lot

AGENDA ITEM #: 4-B

ACREAGE: 36.19 acres currently

ZONING DISTRICT: IT/R-40

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Light Manufacturing

SURROUNDING LAND USE: Residential and vacant and Industrial

ZBA ACTION: None

ATTACHMENTS: Application materials, subdivision plan

DECLARE REGIONAL IMPACT: No

APPLICATION IS COMPLETE: Yes

NOTICES SENT: Abutter notices were sent by certified mail to all abutters for this meeting

PERMITS REQUIRED:
CUP

WAIVER(S) REQUESTED:
N/A for this case

Summary of Request and Background
The applicant is requesting to subdivide 3.30 acres off of one industrial lot to create two lots.

As a Minor Subdivision, this application did not directly appear before the TRC. There is a conditional use permit request (P21-50) and site plan review(P21-49) related.

Consistency with Land Use Regulations
The plan is consistent with Chapter 157-15 of the City's Land Subdivision Regulations, which provides for subdivision of existing lots.

STAFF RECOMMENDATION:
The Planning Department recommends that the Planning Board accept the application for review, open the public hearing, and vote to approve the application with the following conditions:

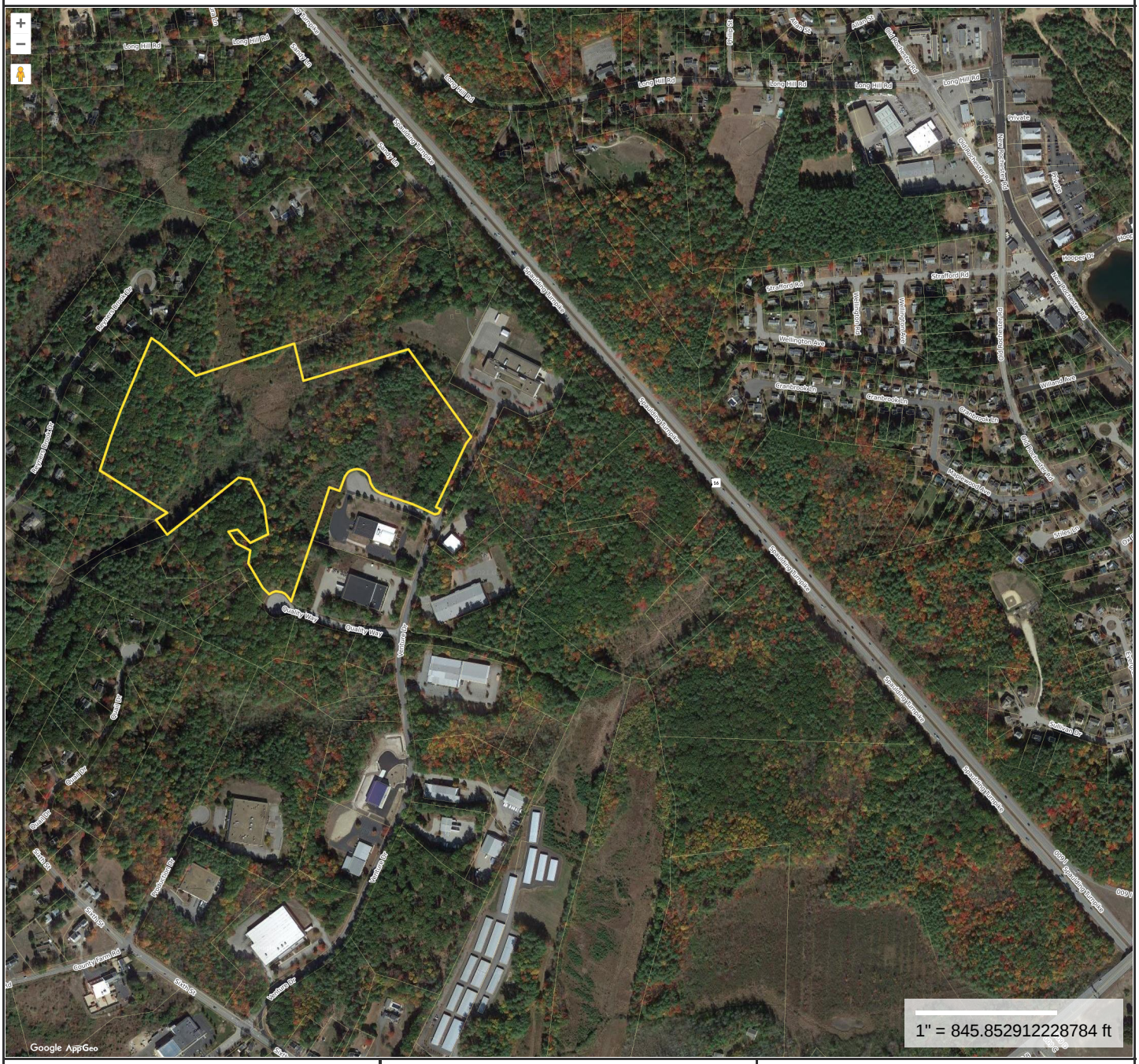
Conditions to Be Met Prior to Signing of Plans:

1. Provide physical and digital copies (including CAD) of complete plan set which additionally shall include:
    a. Signature and stamp of LLS
    b. Owner's signature for recording at Strafford County Registry of Deeds.
    c. Planning File # P21-62
    d. Common Subdivision notes 11, 14, 15 and 33
    e. A note that the TDR ordinance was used to create D-11-1
    f. Existing topography, setbacks, existing vegetation and soils
2. Confirm with the City Assessor that D-11-10 is the correct lot number

Conditions to Be Met Prior to Building Permit:

3. Easements for utilities shall be recorded at the Strafford County Registry of Deeds with the recording information provided to the Planning Department.

P21-62, P21-50 and P21-49



Property Information

Property ID	D0011-001000
Location	VENTURE DR
Owner	DOVER BUSINESS & IND DEV AUTHORITY
Land Use	903

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 5/3/2021
Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

City of Dover, New Hampshire
MINOR SUBDIVISION APPLICATION

[Revision Date: July 1, 2021]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: American Durafilm Co., Inc. Telephone # 508-429-8000

Address of Applicant: 55 Boynton Road PO Box 6770 Holliston, MA 01746

Name of Property Owner (*if different from applicant*): DBIDA Telephone # 603-516-6008

Address of Property Owner: 288 Central Avenue Dover, NH 03820

E-Mail Address: APPLICANT: mhendrick@americandurafilm.com

PROPERTY INFORMATION

Address of Property: Innovation Way (Venture Drive)

Assessor's Map # D Lot(s) # 11-1

Zoning District(s) IT Overlay District(s) N/A

Size of Parcel: 1,576,436 sf (36.19 ac) Property Deed: Book 4368 Page: 691

Existing Use of Property: Vacant

SUBDIVISION INFORMATION

Existing Number of Lots: 1 Proposed Number of Lots: 2

TDR Relief sought (Check All That Apply): □ Lot Size □ Frontage □ Setback □ 30' Buffer □ Purchase ____ units

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

N/A

Circle one for each category:

Water: City / Well (circle one) How far is city water from the property? at Venture Drive

Sewer: City / Septic (circle one) How far is city sewer from the property? at Venture Drive

Highway Access: City Street / State Highway (circle one) | Roadway Public or Private Road (circle one)

Refuse removal: Public / Private (circle one) | Estimated Length of Proposed Road: N/A feet

Estimated value of construction: N/A New impervious area (in s.f.): N/A

WAIVER REQUESTS

Subdivision Regulations section(s) to be waived: None Requested

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

_____

SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) Kevin M. McEneaney NH LLS McEneneaney Survey Associates

Address 24 Chestnut Street Dover, NH 03820 Telephone #: 603-742-0911

Professional License #: NH LLS #661 E-mail address: kevin@surveynh.com

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) Stephen J. Haight, P.E. Civilworks New England

Address PO Box 1166 Dover, NH 03821 Telephone #: 603-749-0443

Professional License #: NH P.E.#7978 E-mail address: shaight@civilworksne.com

LANDSCAPE ARCHITECT INFORMATION N/A

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

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

~~SOIL~~ WETLAND SCIENTIST INFORMATION

Name of ~~Soil~~ Wetland Scientist and Company (Licensed in N.H.) Damon E. Burt, CWS Fraggle Rock Environmental

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

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

CONSERVATION EASEMENT HOLDER N/A

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: _____ Date: _____

x Signature of Applicant (*if different from owner*): _____ Date: 9/3/21

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: _____ Date: _____

AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY

I, and my successors, hereby authorize the City of Dover and 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: _____ Date: _____

x Signature of Applicant (*if different from owner*): _____ Date: 9/3/21

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: _____ Date: _____

x Signature of Applicant (*if different from owner*): _____ Date: 9/3/21

CERTIFICATION OF PUBLIC ROADWAY ACCEPTANCE N/A

I, and my successors, hereby certify that I understand that the acceptance of a roadway as a public road is an action of the City Council in its sole and complete discretion. In order for the City Council to consider accepting a road as public, it must be free of encumbrances. No roadway with private utility easements shall be accepted as a public road by the City unless the easements are expunged prior to the transfer of land to the City. License agreements for any and all private utilities within the right of way may be granted by the City upon acceptance of the unencumbered roadway consistent with applicable state law.

Signature of Property Owner: _____ Date: _____

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

CITY OF DOVER SUBDIVISION
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
D	11-1	DBIDA	288 Central Avenue Dover, NH 03820

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS
Mack Hendrick	American Durafilm Co., Inc.	PO Box 6770 Holliston, MA 01746

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Kevin M. McEneaney	McEneaney Survey Associates	24 Chestnut Street Dover, NH 03820
Stephen J. Haight	Civilworks New England	PO Box 1166 Dover, NH 03821

Conservation Easement Holder: N/A

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

City of Dover, New Hampshire
MINOR SUBDIVISION SUBMISSION CHECKLIST

[Revision Date: May 18, 2019]

This review checklist is intended to assist the applicant in the planning process of preparing a Subdivision 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.

Plan Review Fees are due along with three (3) full size and twelve (12) half size (11x17), folded, copies of the plan set and materials, 3 weeks prior to the Planning Board meeting. Abutter/Notice Fees will be invoiced and are due 28 hours prior to Planning Board.

The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all subdivision requirements. Please refer to the Subdivision Regulations for full details.

APPLICANT: American Durafilm Co., Inc. File Number: P21-

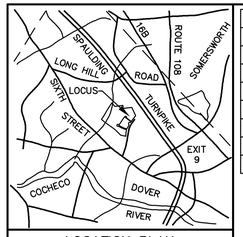
PROJECT TITLE: Subdivision of Land

PROPERTY LOCATION: Innovation Way (Venture Drive) Tax Map: D Lot: 11-1

	Where/How Provided	Reviewed
1. Completed and signed Application form	X	
2. Plan Review Fees are provided	X	
3. Electronic copy of the surveyed plat layout	X	
4. Electronic copy of supplementary materials and application	X	
5. Waiver requests to the Subdivision Regulations, with written justification	None Requested	
6. Conditional Use Permit applications	N/A	
7. Fifteen folded copies of subdivision plan w/scale of not less than 1"=50' or 1"=100' for larger subdivisions. Plans shall contain the following items as appropriate:	X	
Location map at appropriate scale	X	
Proposed subdivision name and title and Planning File #	X	
Date, north arrow and scale	X	
Names of all abutting property owners	X	
Name and address of owners and/or applicants	X	
Signature & stamp of NH licensed land surveyor and/or engineer	X	
Zoning District boundaries, including any special or overlay districts	N/A	
Location of Conservation District areas	N/A	
Location, names and widths of existing and proposed streets, including pavement widths, grades, curbs and crosswalks	X	
Location and widths of existing & proposed easements & right of ways	X	
Location and widths of existing and proposed sidewalks	N/A	
Existing and proposed property lines with dimensions and bearings tied into Dover's Geographic Information System coordinate system	X	
Existing and proposed lot areas in square feet	X	
Existing and proposed topographic information at two foot intervals	See attached Existing Conditions plan	
Existing and proposed buildings and structure locations	N/A	
Minimum building setbacks or build to lines on all lots	X	
Location and size of existing and proposed electric, telephone, gas cable and other underground utilities	X	

	Explain How Provided	Reviewed
Existing and proposed water lines and fire hydrants, including materials and capacity needed	N/A	
Location and materials of sanitary sewage facilities within project site and projected additional peak hour sewer load	N/A	
Existing and proposed septic system, including test pit locations and results and NHDES subdivision permit number	N/A	
Existing and proposed stormwater lines and facilities		
Location of Flood Hazard Zone	N/A	
Location of all bodies of water and watercourses	N/A	
Location of wetlands and buffers	X	
Existing natural features and/or significant vegetation on property	See attached Existing Conditions plan	
Soil types	See attached Existing Conditions plan	
Map and lot numbers for existing and proposed lots as assigned by Tax Assessor	X	
Location of all land offered for dedication for public use or land to be held in common by property owners of the subdivision	N/A	
Location, material and size of existing and proposed permanent monuments	X	
Existing railroad lines	N/A	
Note regarding solid waste disposal	N/A	
All applicable Dover Common Subdivision notes	X	
8. Construction Detail Sheets shall contain the following information (if appropriate): N/A		
Profiles showing existing & proposed elevations along the center lines of proposed streets & within 100' of intersections with existing streets		
Profiles showing the locations & a typical cross-section detail of streets		
Location of street trees, street lighting poles and street signs		
Location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants		
Location and size of all water, gas and other underground utilities		
9. Additional Information if appropriate N/A		
Stormwater Management Plan depicting the existing and proposed storm drainage system and engineered drainage analysis		
Stormwater Management System Operation and Maintenance Plan		
Letter to Serve from Public and Private Utilities		
Erosion and Sedimentation Control Plan		
Proposed restrictive covenants or homeowners association documents		
Dates and permit numbers of all required state and federal permits		
If wetland buffer, indicate placards locations, as applicable		
Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required		

REVIEWED BY: _____ DATE_____



LOCATION PLAN
(NO SCALE)

No.	Central Angle	Radius	Arc Length	Chord Length	Chord Bearing
C1	90°00'00"	25.00	39.27	35.36	S71°03'05"W
C2	07°57'48"	400.00	55.59	55.55	N67°55'49"W
C3	60°56'27"	100.00	106.36	101.42	N41°26'30"W
C4	64°03'45"	75.00	83.86	79.56	N43°00'09"W
C5	12°01'29"	100.00	20.99	20.95	N35°53'59"W
C6	99°18'14"	75.00	129.99	114.32	N79°32'21"W
C7	22°24'32"	193.79	75.80	75.31	N41°42'21"W
C8	86°52'42"	75.00	113.72	103.14	S61°31'38"W

No.	Bearing	Distance
L1	S35°34'25"W	7.80'
L2	S35°34'25"W	41.07'
L3	N83°07'09"W	94.90'
L4	S36°23'11"W	127.09'
L5	N68°18'50"W	87.90'
L6	N33°33'09"W	95.49'
L7	N36°33'25"E	82.31'

L8	N38°23'21"W	104.98'	L15	N09°40'20"E	72.30'
L9	S36°21'40"E	131.48'	L16	N63°58'30"W	88.04'
L10	N80°00'04"W	131.62'	L17	N35°56'47"W	78.76'
L11	S35°41'40"W	90.92'	L18	N77°08'15"E	52.06'
L12	S62°17'49"E	73.74'	L19	S45°40'06"E	101.64'
L13	S47°03'20"W	164.54'	L20	N64°31'37"E	111.26'
L14	N30°30'05"W	76.90'	L21	N08°59'42"W	162.31'

L22	N28°11'03"W	164.35'
L23	N81°38'07"W	66.39'
L24	S56°23'32"E	56.28'
L25	S57°52'29"W	164.83'
L26	S26°03'04"W	14.76'
L27	N63°56'55"W	72.54'
L28	S63°56'56"E	30.00'
L29	N30°30'05"W	59.35'
L30	S18°05'17"W	75.00'
L31	N71°54'43"W	60.49'

REFERENCE PLANS:

1.) LOT LINE ADJUSTMENT AND SUBDIVISION PLAN OF LAND PREPARED FOR GEORGE J. FOSTER & Co., INC. AND DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP D, LOT Nos. 9A & 11-1, VENTURE DRIVE AND QUALITY WAY, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: JUNE 12, 2006; BY: McENEANEY SURVEY ASSOCIATES, INC. RECORDED S.C.R.D. PLAN 86-73.

NOTES:

1.) OWNERS OF RECORD:

DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY (D.I.D.A.)
288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOL. 1559 / 394
TITLE REF. SEE SCRD 1738 / 130, 1027 / 790, 773 / 481

2.) D / 11-1 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) PLAN INTENT: TO SUBDIVIDE THE SUBJECT PARCEL INTO TWO (2) LOTS AS SHOWN. LOTS ARE SERVED BY MUNICIPAL SEWER AND WATER SERVICE.

4.) TOTAL PARCEL AREA: 1,576,425 S.F. / 36.19 Ac.

5.) ZONING DISTRICT IS INNOVATIVE TECHNOLOGY (IT)

DIMENSIONAL REQUIREMENTS:

MINIMUM LOT SIZE	= 2 ACRES
MINIMUM LOT COVERAGE	= 33 PERCENT
MINIMUM FRONTAGE	= 200 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT SETBACK	= 50 FEET
SIDE SETBACK	= 50 FEET
REAR SETBACK	= 50 FEET
MAXIMUM BUILDING HEIGHT	= 55 FEET MAXIMUM

6.) THE SUBJECT PARCEL IS LOCATED OUTSIDE OF THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0310; SUFFIX E; MAP NUMBER 33017C0310E; EFFECTIVE DATE SEPTEMBER 30, 2015.

7.) BASIS OF BEARING IS THE CITY OF DOVER / GEOD CORP. GRID PER REFERENCE PLAN No. 1.

8.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND DURING JANUARY 2021 WITH AN ERROR NOT GREATER THAN 1 IN 10,000

9.) THE PARCELS ARE SUBJECT TO A DOVER CONSERVATION OVERRIDING DISTRICT, 170-27B.(2), AREAS WITHIN FIFTY (50) FEET OF A FRESHWATER BROOK.

10.) WETLANDS SHOWN WERE TAKEN FROM REFERENCE PLAN No. 1 AND SUPPLEMENTED AT THE PROPOSED LOT LOCATION BY DAMON E. BURT, N.H.C.W.S. #163 OF FRAGGLE ROCK ENVIRONMENTAL SERVICES DURING MARCH 2021 IN ACCORDANCE WITH THE 1987 CORPS. OF ENGINEERS WETLANDS DELINEATION MANUAL AND LOCATED BY THIS OFFICE.

11.) BUILDING ADDRESSES (INCLUDING APT/UNIT NUMBERS IF APPLICABLE) SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.

OWNER SIGNATURE

A/47-28 — THOMAS LEFOLEY, CAROL LEFOLEY, 33 REYNER'S BROOK DRIVE, DOVER, NH 1393 / 718, SCRD PLAN 30A-121

A /47-26 — C & C HODGES REVOCABLE TRUST, 31 REYNERS BROOK DR, DOVER, NH 4605 / 925, SCRD PLAN 30A-121

A /47-24 — POOLE FAMILY REV TRUST, 29 REYNERS BROOK DR, DOVER, NH 4812 / 356, SCRD PLAN 30A-121

A /47-22 — YVONNE CLAPPER, WAYNE CLAPPER, 27 REYNERS BROOK DR, DOVER, NH 1536 / 784, SCRD PLAN 30A-121

A /47-20 — J & C COVERT REVOCABLE TRUST, 25 REYNERS BROOK DRIVE, DOVER, NH 4661 / 607, SCRD PLAN 30A-121

A /47-18 — ENOS FAMILY REVOCABLE TRUST, 23 REYNERS BROOK DRIVE, DOVER, NH 4616 / 581, SCRD PLAN 30A-121

A/47-16 — TEMITAYO & KATHRYN ATORO, 21 REYNERS BROOK DRIVE, DOVER, NH 3787 / 313, SCRD PLAN 30A-121

A/47-14 — JENNIFER L. YORK, TRUSTEE, JENNIFER L. YORK REVOCABLE LIVING TRUST, 19 REYNER'S BROOK DRIVE, DOVER, NH 4857 / 270, SCRD PLAN 30A-121

A / 62 — MARK E. JOHNSTONE, TRUSTEE, MARK E. JOHNSTONE 2014 TRUST, 51 SANDY LANE, DOVER, NH 03820 – 4252 / 470, SCRD PLANS 45-35, 39-38

CONSERVATION EASEMENT

D / 11A — 150 VENTURE DRIVE, LLC, 192 DOVER POINT ROAD, DOVER, NH 03820, 3851 / 304, SCRD PLAN 12134

D / 9A — INDEX PACKAGING, INC., 1055 WHITE MOUNTAIN HIGHWAY, MILTON, NH 03851, 4769 / 941, SCRD PLAN 12134

D / 11 — APW PROPERTIES, LLC, 127 VENTURE DRIVE, DOVER, NH 03820, 3984 / 847, SCRD PLANS 45-32, 39-91+92

D / 11-9 — HEINE USA, 10 INNOVATION WAY, DOVER, NH 03820, 3410 / 510, SCRD PLAN 86-73

D / 11-4 — QUALITY WAY, LLC, 1 QUALITY WAY, ENTERPRISE PARK, DOVER, NH 03820, 3973 / 254

D/11-9-SND — HEINE USA, 10 INNOVATION WAY, DOVER, NH 03820, 3410 / 510

D / 11-8 — DBIDA, 288 CENRAL AVENUE, DOVER, NH 03820, 1559 / 394

D/11-8-SND3 — DBIDA, 288 CENRAL AVENUE, DOVER, NH 03820, 1559 / 394

D/11-8-SND2 — DBIDA, 288 CENRAL AVENUE, DOVER, NH 03820, 1559 / 394

D/11-8-SND1 — DBIDA, 288 CENRAL AVENUE, DOVER, NH 03820, 1559 / 394

D/11-7-SND2 — DBIDA, 288 CENRAL AVENUE, DOVER, NH 03820, 1559 / 394

D / 11-7 — DBIDA, 288 CENRAL AVENUE, DOVER, NH 03820, 1559 / 394

D / 11-6 — DBIDA, 288 CENRAL AVENUE, DOVER, NH 03820, 1559 / 394

D / 11-10 — PROPOSED LOT 10, 143,577 S.F., 3.30 Ac.

5r — REMAINING AREA, 494,366 S.F., 11.35 Ac.

Dr — 39,283 S.F., 0.90 Ac.

Er — PARCEL AREA, 508,641 S.F., 11.68 Ac.

H — REMAINING AREA, 390,557 S.F., 8.97 Ac.

D / 11-1 — TOTAL PARCEL REMAINING AREA, 1,432,847 S.F., 32.89 Ac.

N – 265,863.20
E – 701,092.25
(SEE NOTE 7)

N – 265,268.56
E – 701,243.41
(SEE NOTE 7)

50' WETLAND BUFFER (TYP.)

50 FOOT CONSERVATION DISTRICT (TYP.)

30' x 100' DRAINAGE EASEMENT

PROPOSED 10' WIDE UTILITY EASEMENT

INNOVATION WAY
PUBLIC – 60' WIDE R.O.W.

VENTURE DRIVE
PUBLIC – 60' WIDE R.O.W.

QUALITY WAY
PUBLIC – 60' WIDE R.O.W.

REYNERS BROOK

CITY / GEOD CORP. GRID NORTH

THE SOIL TYPES ON THE SITE ARE:
BzB BUXTON SILT LOAM, 3 TO 8 PERCENT SLOPES
GlB GLOUCESTER FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES
GsC GLOUCESTER VERY STONY FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES
SfC SUFFIELD SILT LOAM, 8 TO 15 PERCENT SLOPES
SwA SWANTON FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES

THE SOURCE FOR THE SOIL TYPE DATA IS USDA NRCS WEB SOIL SURVEY
http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

LEGEND

S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
ø – DIAMETER
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
-o- UP – UTILITY POLE
– STONE WALL
– EDGE OF WET
f/k/a – FORMERLY KNOWN AS
◉ – IRON ROD W/ PLASTIC ID CAP (SET) AT PROPERTY CORNERS
⊡ – CONCRETE BOUND TO BE SET AT CURVE POINTS

NO.	DATE	DESCRIPTION	BY	CHK
		REVISIONS		

21-2334	SUBDIVISION	21-01	1-8
PROJECT NO	TYPE	FIELDBOOK & PAGES	

"I HEREBY CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL GROUND SURVEY PERFORMED WITH A TOTAL STATION, BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, SAID SURVEY MEETS OR EXCEEDS THE MINIMUM PRECISION REQUIREMENTS FOR SURVEY CLASSIFICATION "U" AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS."

SUBDIVISION OF LAND
PREPARED FOR
DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
TAX MAP D, LOT No. 11-1
VENTURE DRIVE, INNOVATION WAY AND QUALITY WAY
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No. P 21-___

DRAWN BY: RJM	FILE: 2334\DWGS\21-2334 S
SCALE: 1" = 100'	DATE: SEPTEMBER 2, 2021

100 50 0 50 100 200 300 400

STATE OF NEW HAMPSHIRE — No. 661 — KEVIN M. McENEANEY — LICENSED LAND SURVEYOR — SIGNATURE

McEneaney Survey Associates of NEW ENGLAND
P.O. Box 681 – 24 CHESTNUT STREET
DOVER, NH 03820 (603) 742-0911

SURVEYING – PLANNING – CONSULTING

P21-49 & P21-50 & P21-62 **Venture Drive**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
A0047-014000	19 REYNERS BROOK DR	YORK JENNIFER L TRUSTEE	YORK JENNIFER L REVOCABLE LIVING TRUST	19 REYNERS BROOK	DOVER	NH	03820
A0047-016000	21 REYNERS BROOK DR	ATORO TEMITAYO M &	ATORO KATHRYN E	21 REYNERS BROOK DR	DOVER	NH	03820
A0047-018000	23 REYNERS BROOK DR	ENOS DON A & LINDA M CO-TRUSTEES	ENOS FAMILY REVOCABLE TRUST	23 REYNERS BROOK	DOVER	NH	03820
A0047-020000	25 REYNERS BROOK DR	COVERT JOSEPH & CATHERINE TRUSTEES	COVERTJOSEPH AND CATHERINE REVOCABLE TRU	25 REYNERS BROOK	DOVER	NH	03820
A0047-022000	27 REYNERS BROOK DR	CLAPPER YVONNE &	CLAPPER WAYNE	27 REYNERS BROOK	DOVER	NH	03820
A0047-024000	29 REYNERS BROOK DR	POOLE PETER W & KATHLEEN E	POOLE FAMILY REV TRUST	29 REYNERS BROOK	DOVER	NH	03820
A0047-026000	31 REYNERS BROOK DR	HODGES CRAIG B & CAROLYN TRUSTEES	HODGES CRAIG AND CAROLYN REVOCABLE TRUST	31 REYNERS BROOK DR	DOVER	NH	03820
A0047-028000	33 REYNERS BROOK DR	LEFOLEY THOMAS & CAROL		33 REYNERS BROOK	DOVER	NH	03820
A0052-000001	51 SANDY LN	JOHNSTONE MARK E TRUSTEE	JOHNSTONE MARK E 2014 TRUST	51 SANDY LN	DOVER	NH	03820
D0009-A00000	150 VENTURE DR	INDEX PACKAGING INC		1055 WHITE MOUNTAIN HIGHWAY	MILTON	NH	03851
D0009-A00SND	VENTURE DR	INDEX PACKAGING INC		1055 WHITE MOUNTAIN HIGHWAY	MILTON	NH	03851
D0009-A01SND	VENTURE DR	INDEX PACKAGING INC		1055 WHITE MOUNTAIN HIGHWAY	MILTON	NH	03851
D0011-000000	127 VENTURE DR	APW PROPERTIES LLC		9 CAPITOL ST	CONCORD	NH	03301
D0011-003000	111 VENTURE DR	MERCHANDISE CENTRAL LLC		111 VENTURE DR	DOVER	NH	03820
D0011-004000	110 VENTURE DR	QUALITY WAY LLC		1 QUALITY WAY ENTERPRISE PARK	DOVER	NH	03820
D0011-006000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-007000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-007SN2	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN1	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN2	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN3	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-009000	10 INNOVATION WY	HEINE USA		10 INNOVATION WAY	DOVER	NH	03820
D0011-009SND	INNOVATION WY	HEINE USA		10 INNOVATION WAY	DOVER	NH	03820
D0011-A00000	SANDY LN	150 VENTURE DRIVE LLC		192 DOVER POINT RD	DOVER	NH	03820
D0011-001000	VENTURE DR	DOVER BUSINESS & IND DEV AUTHORITY		288 CENTRAL AVE	DOVER	NH	03820
		AMERICAN DURAFILM CO., INC.	MACK HENDRICK	55 BOYNTON ROAD	HOLLISTON	MA	01746
		CIVILWORKS NEW ENGLAND	STEPHAN J HAIGHT, P.E.	P.O. BOX 1166	DOVER	NH	03821
		MCENEANEY SURVEY ASSOCIATES	KEVIN MCENEANEY, LLS.	24 CHESTNUT STREET	DOVER	NH	03820

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P21-50

Application Type:	Conditional Use Permit
Applicant(s):	American Durafilm Co, Inc.
Owner(s):	DBIDA/City of Dover
Location:	Innovation Way (Tax Map D, Lot 11-1)
Meeting Date:	September 28, 2021

INTENT: To request a Conditional Use Permit to allow 7,419 s.f. of wetland buffer impacts

LOTS/UNITS PROPOSED: N/A

AGENDA ITEM #: 4-C

ACREAGE: 3.30 acres

ZONING DISTRICT: IT/R-40

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Light Manufacturing

SURROUNDING LAND USE: Residential and vacant and Industrial

ZBA ACTION: None

ATTACHMENTS: Application materials, CC minutes

DECLARE REGIONAL IMPACT: No

APPLICATION IS COMPLETE: Yes

NOTICES SENT: Abutter notices were sent by certified mail to all abutters for this meeting

PERMITS REQUIRED:
CUP

WAIVER(S) REQUESTED:
N/A for this case

Summary of Request and Background
The applicant is looking to build a new manufacturing building and associated parking and drainage facilities, creating 7,419 s.f. of wetlands buffer impacts. The 7,419 s.f. of impact is within the wetland buffer for grading associated with the bio retention basin and areas adjacent to the proposed 5,000 s.f. building addition. This impact also includes 72 s.f. of the proposed paved area according to the application.

The Conservation Commission endorsed the CUP at their meeting on September 13, 2021 (minutes attached), with no conditions.

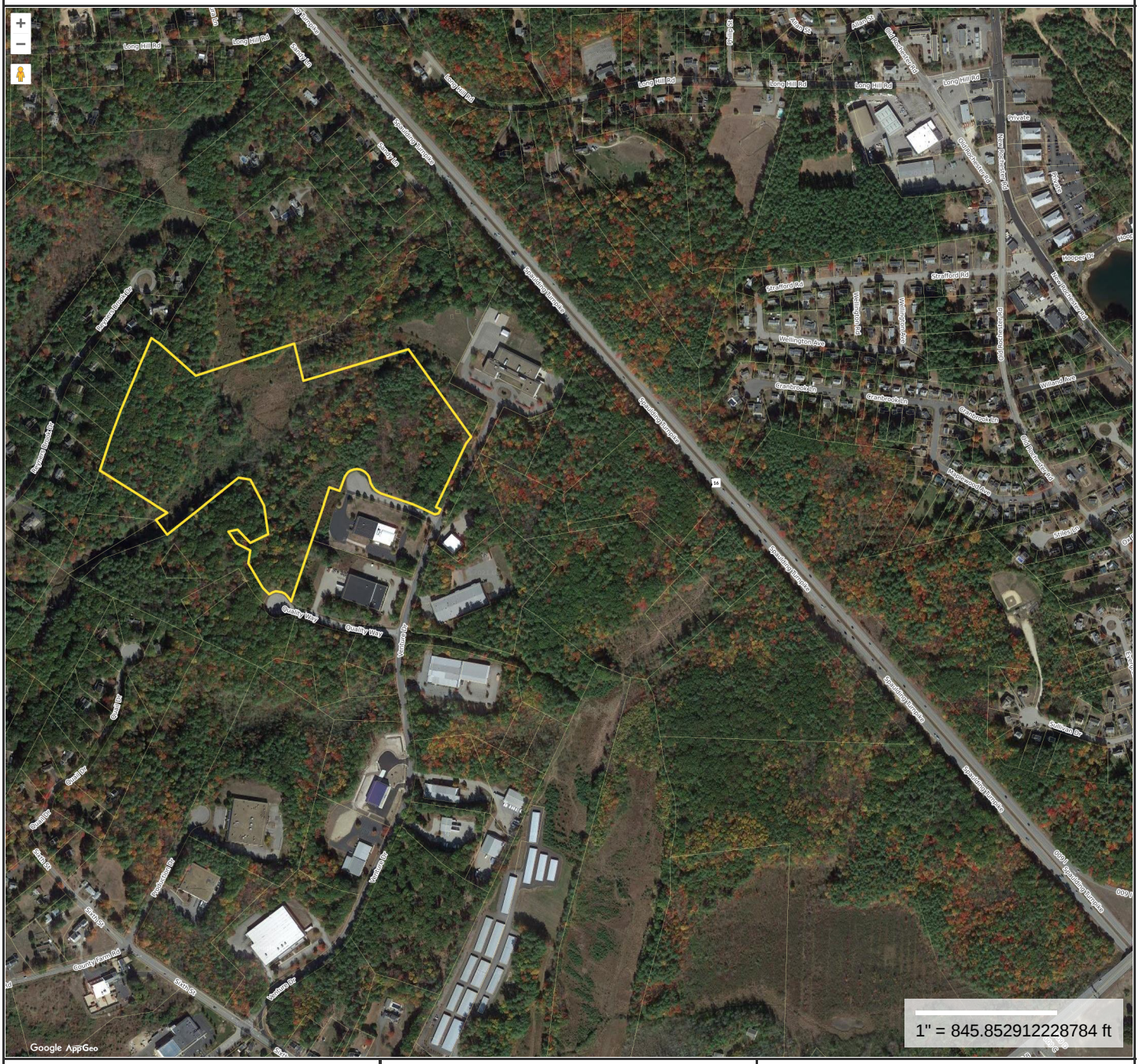
Consistency with Land Use Regulations – Conditional Use Permit
The Wetlands Protection District ordinance provides for Conditional Use Permits to allow impacts to wetlands and wetland buffers if standards related to demonstration that no practicable alternative exists, impact avoidance was considered, impacts were minimized, and mitigation has been sought.

Staff feels that the applicant considered the criteria when designing the plan by placing the building as close to Innovation Way as possible, that wetland impacts have been avoided and that the wetland buffer with the primary impacts is an isolated wetland that is not connected to the larger wetlands to the northwest. The building placement is the only practicable alternative and the impacts were minimized such that no building or parking is in the buffer. Staff believes this proposal is consistent with the standards.

STAFF RECOMMENDATION:
The Planning Department recommends the Planning Board to accept the application, open the public hearing, and vote to grant the Conditional Use Permit with the following conditions to be met prior to issuance of the CUP:

1. Site plan approval (P21-49) be approved.
2. Subdivision approval (P21-62) be approved.

P21-62, P21-50 and P21-49



Property Information

Property ID	D0011-001000
Location	VENTURE DR
Owner	DOVER BUSINESS & IND DEV AUTHORITY
Land Use	903

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 5/3/2021
Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

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: American Durafilm Co., Inc. Telephone # 508-429-8000

Address of Applicant: 55 Boynton Road Holliston, MA 01746

E-Mail Address: mhendrick@americandurafilm.com

Name of Property Owner (if different from applicant): DBIDA Telephone # 603-516-6008

Address of Property Owner: 288 Central Avenue Dover, NH 03820

PROPERTY INFORMATION

Assessor's Map # D Lot(s) # 11-1

Address of Property: Innovation Way (Venture Drive)

Zoning District(s) IT Overlay District(s) NONE

Existing Use of Property: Vacant

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:

The proposed site design will create a 7,419 s.f. impact within the wetland buffer for grading associated with the bio retention basin and areas adjacent to the proposed 5,000 s.f. building addition. This impact also includes 72 s.f. of the proposed paved area. There are no direct impact to the wetlands.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: NONE

Name of Professional That Prepared Plans: Stephen J. Haight, P.E. - Civilworks New England

Address PO Box 1166 Dover, NH 03821 Telephone #: 603-749-0443

Professional License #: NH Civil Engineer #7978 E-mail address: shaight@civilworksne.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: _____ Date: _____

x

Signature of Applicant (if different from owner): _____ Date: 8/6/21

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: _____ 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
D	11-1	DBIDA	288 Central Avenue Dover, NH 03820

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS
Mack Hendrick	American Durafilm Co., Inc.	55 Boynton Road Holliston, MA 01746

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Stephen J. Haight, P.E.	Civilworks New England	PO Box 1166 Dover, NH 03821
Kevin M. McEneaney, LLS	McEneaney Survey Associates	24 Chestnut Street Dover, NH 03820

Conservation Easement Holder: N/A

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

PLANNING BOARD FEE SCHEDULE/INVOICE

SEE SITE REVIEW APPLICATION

(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.

DOVER CONSERVATION COMMISSION – MINUTES

CITY OF DOVER

Meeting Type:	Regular Meeting
Meeting Location:	Second Floor Conference Room – 288 Central Ave.., Dover, NH
Meeting Date:	Monday, September 13, 2021
Meeting Time:	5:30 pm

MEMBERS PRESENT: Bill Hunt (Chair), Robert Atwood (Secretary), Kristen Murphy (Alternate), Bruce Batchelder (Alternate)

Absent (Excused): Abigail Lyon, Steve Fellows (Vice Chair), Jason Aube, Amy Kramer-Perry, Richard Erickson

Absent (Un-excused):

STAFF PRESENT: Steve Bird

OTHERS PRESENT: Matthew Cardin, Chris Berry, Jase Gregoire, Mike Menary, Councilor Lindsey Williams

1. **CALL TO ORDER AND ROLL CALL**

   The meeting was convened at 5:30 PM.

   Hunt opened the meeting and did roll call.

2. **CITIZEN'S FORUM:** None
3. **APPROVAL OF THE PRIOR MEETING MINUTES** – August 9, 2021

Murphy moved to approve the August 9, 2021 minutes, Batchelder seconded. Vote: 3 yes, Atwood abstained

4. **OLD BUSINESS:** NONE
5. **NEW BUSINESS:**

A. NHDES Standard Wetlands Permit for William and Chaney Fisher, (Agent: Matthew Cardin), Assessor's Map 7, Lot 2, zoned R-20, located at 1 Boston Harbor Road.

Matthew Cardin was present to explain the proposal to construct a new dock with a 4' x 15' access ramp, a 4' x 60' permanent wood pier, a 3' x 40' aluminum gangway, and a 10' x 20' float, in the tidal Little Bay. The project creates 560 square feet of permanent impact to tidal wetland and 60 square feet of permanent impact to the tidal buffer zone. Pier is raised to account for sea level rise and floodplain. 14 total piers and float stops included. I am seeking a recommendation for approval.

Hunt: What is the status of your DES permit?

Cardin: The application is currently being reviewed by Dave Price at DES.

Murphy: Is there any vegetation along the shore?

Cardin: No, it is a mixture of rocks and sand.

Atwood: I can confirm that there is no vegetation as I was out there reviewing an application for an oyster bed for my job with Fish & Game.

Bird: The plans shows stairs but the application says ramp? How will the piles be installed?

Cardin: The plans shows stairs but the owner may want to use a ramp due to proposed use. Same impact for ramp and stairs. We will use barge to install the piles.

Murphy moved to endorse the NHDES Wetlands applications as presented, Atwood seconded. Vote: 4 yes

DRAFT

B. City of Dover Conditional Use Permit and NHDES Standard Wetlands Permit for Settlement on 6th, LLC (Agent: Chris Berry, Berry Surveying & Engineering), Assessor's Map B, Lot 5, zoned R-40, located on Sixth Street.

Chris Berry was present to explain the proposal for a 13 lot open space subdivision with a 900 foot long road and associated driveways and drainage facilities, creating 131 sq. ft. of temporary impact and 1,613 sq. ft. of permanent impact to a wetland and 12,394 sq. ft. of wetlands buffer impacts. Front of site flows south to wetland and rear of site flows east. Proposing to use TDR for 3 more lots, but we may end up with less lots. We require DES permits for Wetlands and AOT. Site uses gravel wetlands for storm water. Using stabilized slopes along road to reduce impacts. Proposing revegetation in impact areas. We have done a wildlife study. Municipal sewer is proposed.

Hunt: Any streams being impacted?

Berry: There are no streams, only wetlands.

Hunt: Why are you considering fewer houses?

Berry: TRC asked us to reduce impacts to buffers so we are looking at merging the first two lots on the right into a duplex and eliminating one of the lots on the north side of the road.

Murphy: Who will be responsible for maintaining the best management practice systems?

Berry: They will be maintained by a homeowners association that will be formed.

Murphy: I like the reduction of units to reduce impacts and the culvert design for wildlife.

Atwood moved to endorse the Conditional Use Permit and the NHDES Wetlands applications as presented, Batchelder seconded. Vote: 4 yes

C. City of Dover Conditional Use Permit for American Durafilm Co., Inc. (Owner: DBIDA) (Agent: Civilworks New England), Assessor's Map D, Lot 11-1, zoned IT, located on Innovation Way and Venture Drive.

Jase Gregoire was present to explain the proposal for a new manufacturing building and associated parking and drainage facilities, creating 7,419 sq. ft. of wetlands buffer impacts. We have been to DBIDA on June 4th and to TRC for two meetings. The impacts are for grading and drainage. No wetlands are impacted. The building has the potential for a 5,000 square foot addition and those impacts are included. They may only fill for the 15,000 square foot building. We will be using standard erosion control blankets and hydro seeding. Run-off from Innovation Way is treated.

Murphy: How will snow storage be handled?

Gregoire: On the front it will be pushed onto the grass to the north and on the back pavement it will be pushed to the north. The maintenance and inspection manual was prepared.

Murphy: Did you consider a retaining wall to reduce impacts to wetlands buffer?

Gregoire: It would come down to cost, as the wall would be about 156 feet tall.

The members reviewed the landscaping plan.

Batchelder moved to endorse the Conditional Use Permit as presented, Murphy seconded. Vote: 4 yes

DRAFT

D. City of Dover Conditional Use Permit and NHDES Expedited Minimum Impact Wetlands Permit for Michael and Michelle Trochalakis (Agent: Civilworks New England), Assessor's Map M, Lot 93-A-2, zoned R-40, located at 7 Cullen Bay Road.

Gregoire was present to explain the proposal for installation of an in-ground pool and brick walk in the Conservation District adjacent to the tidal Cochecho River, creating 1,052 sq. ft. of permanent impact in the 100' tidal buffer zone and building a garage addition with an impact of 144 sq. ft. to a 50' wetlands buffer. The walkway will be creating the wetlands buffer impacts not the garage itself.

Hunt: Will there be any erosion control issues due to the pool being so close to the river?

Gregoire: No we have shown the erosion control measures on the plan and the existing stone retaining wall will help. One of the Wetland Permit requirements is to find out if Dover has any wetland mitigation site that need mitigation assistance.

Bird: Right now there are not public wetland mitigation sites. The Open Lands Committee does work with private landowners to preserve land and there are a couple of projects pending but they are not in the public stage yet. You will likely end up making a payment to the ARM fund.

Murphy moved to endorse the Conditional Use Permit and the NHDES Wetlands Expedited application as presented, and to authorize the Chair to sign the applications, Atwood seconded. Vote: 4 yes

The Chair signed five copies of the application and returned them to the applicant.

E. Request for expenditures from the Conservation Fund for:

1. Open Lands Committee - Conservation Easement Appraisal – not to exceed $6,000

Bird explained that the Open Lands Committee is requesting the funds to hire an appraiser to complete a conservation easement appraisal on a parcel of land. The OLC is working with the landowner to preserve a portion of the parcel and need to determine a value. The Conservation Fund has a balance in excess of one million dollars.

Murphy moved to approve the expenditure from the Conservation Fund for an appraisal not to exceed $6,000, Batchelder seconded. Vote: 4 yes

6. REPORT FROM THE CHAIR

A. Review of Correspondence Received From NH Department of Environmental Services: None

7. OTHER BUSINESS:

A. Discussion on Proposal Abigail Lyon on Technical Review Committee Procedure

Lyon was absent so this discussion will be postponed until the next meeting.

B. Update on Committee to Work on Amendments to Wetland Protection District Ordinance

Bird: The committee held a meeting on August 24th. The committee discussed the functions and values of wetlands and different methods to use. Maps prepared by SRPC showing different layers of resources were reviewed.

8. ADJOURNMENT

Murphy moved to adjourn the meeting at 6:53 PM, Atwood seconded. Vote: 4 yes

DRAFT

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P21-49

Application Type:	Site Plan Review
Applicant(s):	American Durafilm Co, Inc.
Owner(s):	DBIDA/City of Dover
Location:	Innovation Way (Tax Map D, Lot 11-1)
Meeting Date:	September 28, 2021

INTENT: To construct a 20,000 sf light manufacturing building with associated parking in two phases (15,000 sf and 5,000 sf)

LOTS/UNITS PROPOSED: New Industrial User

AGENDA ITEM #: 4-D

ACREAGE: 3.30 acres

ZONING DISTRICT: IT/R-40

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Vacant, Industrial, and Residential

SURROUNDING LAND USE: Industrial, Residential and vacant

ZBA ACTION: None

ATTACHMENTS: Application materials, CC minutes, TRC minutes

DECLARE REGIONAL IMPACT: No

APPLICATION IS COMPLETE: Yes

NOTICES SENT: Abutter notices were sent by certified mail to all abutters for this meeting

PERMITS REQUIRED:
CUP

WAIVER(S) REQUESTED:
-153-14.C(5)(b): entrance/exit width

Summary of Request and Background
The applicant is requesting site plan approval to construct a 15,000 s.f. light manufacturing building with associated parking as well as a future 5,000 s.f. addition. The site would be serviced by public water and sewer.

The Dover Business and Industrial Development A approved this project at its September meeting.

The Conservation Commission endorsed the CUP at its meeting on September 13, 2021 (minutes attached), with no conditions.

Summary of Waiver Requests:
The applicant is requesting the Board grant a waiver from the requirement for a driveway width to allow a 30' entrance/exit rather than 24' permitted. The applicant provided justification in their site plan application.

Consistency with Land Use Regulations – Waiver
Section 153-21 of the Site Review Regulations state the "Planning Board may waive specific provisions of these regulations. The Planning Board may only grant a waiver if the Planning Board finds, by majority vote, that:

(1) Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or
(2) Specific circumstances relative to the subdivision, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations."

Staff believe criterion 1 has been met noting that the width has been reduced since TRC initially reviewed to the minimum needed to make the turning radius work successfully. The need for deliveries and the slope at that part of the site require this configuration, and would impact the applicant.

STAFF RECOMMENDATION Waivers:
The Planning Department recommends the Planning Board to accept the application, open the public hearing, and vote to grant the waivers with the following condition:

1. Add a note to the plat that the Board granted a waiver to Chapter 153-14.C(5)(b) (entrance width) and that the Board found the criteria of Chapter 153-21.A have been met.

STAFF RECOMMENDATION TDR:
The Planning Department recommends the Planning Board vote to approve TDR request with the following conditions:

1. Add TDR note to site plan indicating rear setback relief was provided through TDR.

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #P21-49

Application Type:	Site Plan Review
Applicant(s):	American Durafilm Co, Inc.
Owner(s):	DBIDA/City of Dover
Location:	Innovation Way (Tax Map D, Lot 11-1)
Meeting Date:	September 28, 2021

Consistency with Land Use Regulations – Site Plan
Chapter 153-4 of the Site Review Regulations of the City Code provides for site review by the Planning Board of new construction of various types. This plan is consistent with those regulations.

STAFF RECOMMENDATION Site Plan:
The Planning Department recommends the Planning Board vote to approve the Site Plan with the following conditions, as the plans meet the regulations outlined:

Conditions to Be Met Prior to the Signing of Plans:

1. Provide physical and digital copies (including CAD) of complete plan set which additionally shall include:
    a. Signature and stamp of PE, LLA, CWS, architect, and LLS
    b. Owner's signature
    c. Revise plans to bring to water and sewer lines to the western property line unless waiver from DUC is granted.
    d. Revise note 19 on sheet 4 to indicate no Sunday or Federal Holiday hours.

Conditions to Be Met Prior to any Construction Activity:

2. A site construction sign with the contact information for the general contractor must be located and approved by the City Engineer or Assistant City Manager.

Condition to Be Met Prior to Issuance of a Building Permit:

3. Water and sewer investment fees shall be paid at the time of request of service.

Conditions to Be Met Prior to Occupancy:

4. Issuance of a certificate of occupancy.
5. Impact fees shall be paid per the invoice included with the Notice of Decision.
6. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.

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: American Durafilm Co., Inc. Telephone # 508-429-8000

Address of Applicant: 55 Boynton Road PO Box 6770 Holliston, MA 01746

E-Mail Address: mhendrick@americandurafilm.com

Name of Property Owner (*if different from applicant*): DBIDA Telephone # 603-516-6008

Address of Property Owner: 288 Central Avenue Dover, NH 03820

PROPERTY INFORMATION

Address of Property: Venture Drive

Assessor's Map # D Lot(s) # 11-1

Zoning District(s) IT Overlay District(s) N/A

Size of Parcel: 1,576,425 sq. ft. 36.19 ac. Property Deed: Book 4368 Page: 691

Existing Use of Property: Vacant

SITE PLAN INFORMATION

Describe Proposed Use: Light Manufacturing/Office Building

Area of Parcel to be Developed: ± 86,900 sq. ft.

If Multi-family Residential: Number of Units N/A & Buildings Proposed N/A

If lodging: Number of Units N/A & number of Buildings N/A

Number of Parking Spaces: Existing 0 Proposed 27

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

Number of Employees Total: 1-15 In Maximum Shift: 1

Disposition of Parcel:

Building Footprint 15,000 sq. ft.
Proposed Addition 5,000 sq. ft.
Total Building Area 20,000 sq. ft.

Paved Area 25,265 sq. ft.

Building Setbacks:

Front Yard 50 ft.

Rear Yard 50 ft.

Side Yard: Right 50 ft. Left 50 ft.

City Water? X Yes ___ No How far is city water from the property? at Venture Drive

City Sewer? X Yes ___ No How far is city sewer from the property? at Venture Drive

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:

To allow for a 25 foot rear setback where 50 feet is required (see Site Plan, sheet 6)

BUILDING INFORMATION

Type of Building to be Built: Steel & Concrete with Metal Siding

Height of Building: 28 ft. Finished Floor Elevation: 189.5 ft.

Number of Seats (where applicable) N/A

Estimated value of construction: $350,000 Refuse removal: Public/Private (circle one)

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: Article IV, Section 153-14. C (5)(b)

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

The proposed design includes two entrances/exits. One entrance/exit will be used for employee and guest vehicles and meets the 24 foot wide criteria. The second entrance/exit is 30 feet wide to accommodate larger delivery trucks and tractor trailers typical for the allowed use, as well as, emergency vehicles. The design of this wider entrance/exit will not negatively affect surrounding parcles or traffic flow given its location at the end of the existing ROW cul-de-sac.

SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) Kevin M. McEneaney, LLS McEneaney Survey Associates

Address 24 Chestnut Street Dover, NH 03820 Telephone #: 603-742-0911

Professional License #: NH LLS #661 E-mail address: kevin@surveynh.com

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) Stephen J. Haight, P.E. Civilworks New England

Address PO Box 1166 Dover, NH 03821 Telephone #: 603-749-0443

Professional License #: NH Civil Engineer #7978 E-mail address: shaight@civilworksne.com

ARCHITECT INFORMATION

Name of Architect and Company (Licensed in N.H.) John W. Tuttle, AIA - TW Designs

Address 254 Drake Hill Road Strafford, NH 03884 Telephone #: 603-664-2181

Professional License #: NH Licensed Architect # 4015 E-mail address: john@tw-designs.com

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) Jeffrey R. Hyland Ironwood Design Group, LLC

Address PO Box 873 Newmarket, NH 03857 Telephone #: 603-772-0590

Professional License #: NH Landscape Architect #0026 E-mail address: jhyland@fewood.com

WETLAND

~~SOIL~~ SCIENTIST INFORMATION

Name of ~~Soil~~ Wetland Scientist and Company (Licensed in N.H.) Damon E. Burt, CWS Fraggle Rock Environmental

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

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

CONSERVATION EASEMENT HOLDER N/A

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: _____ Date: _____

X Signature of Applicant (*if different from owner*): _____ Date: 8/6/21

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: _____ Date: _____

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: _____ Date: _____

X Signature of Applicant (*if different from owner*): _____ Date: 8/6/21

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: _____ Date: _____

X Signature of Applicant (*if different from owner*): _____ Date: 8/6/21

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES – P21-49

Application Type:	Site Plan Review
Applicant(s):	American Durafilm Co Inc
Owner(s):	DBIDA
Location:	Innovation Way (Assessor's Map D, Lot 11-1)
Date:	August 26, 2021

INTENT: To construct a 15,000 sf light manufacturing building with associated parking, and subdivide a portion of the lot to create a 3-acre lot. A CUP (P21-50) will be submitted for Planning Board.

UNITS PROPOSED: N/A

AGENDA ITEM #: 2

ACREAGE: 36.19

ZONING DISTRICT: IT/R-40

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Light Manufacturing

SURROUNDING LAND USE: Vacant, Industrial and Residential

ZBA ACTION: None

PERMITS REQUIRED:
-CUP for buffer

RELIEF/WAIVERS REQUESTED:
-153-14.C (5)(b): Waiver for entrance
-Needed for entire lot not to be surveyed

ATTENDANCE:
Members:
Donna Benton, Planning
Dave White, Engineering
Jim Maxfield, Inspection Services/Fire
Dan Barufaldi, Economic Development
Amanda Nolan, Zoning
Frank Torr, Planning Board

Others:
Jase Gregoire
Matt Henrick
David Choate
Robert Baldwin

PLAN REVIEW:
Planning:

- Owner signature on app or letter of authority to sign
- Owner Signatures on Plans
- W/S Investment Fees
- Impact Fees ($3,700)
- Innovation Way payment to Heine
- Consider Industrial TDR to reduce front setback and more building forward to avoid rear impacts
- Screen generator pad
- Provide:
  - Letters to Serve
  - Subdivision Plan
  - Traffic Impact Analysis
  - DBIDA Approval/Conditions
- Revise Plan Set to add:
  - Missing Common Site Plan Note # 33
  - Surveyor/Engineering Stamp and Signature
  - Proposed Project name and File # P21-49
  - Update waivers on sheet 4 (caliper no longer needed)
  - Add bollards or curb stops
  - Add stop sign to parking lot exit onto Innovation Way
  - Add total area of impact to plan set for CUP requests
  - Revise sheet 9 sheet name
  - Revise details on sheet 11 to "Accessible Parking"
  - Add security wall packs for security lighting on all 4 sides
  - Waiver needed to not show entire lot
  - Revise work hours

Engineering Comments:

- Change the utility layout to water, sewer, gas then uge
- Show the connection in the roadway of venture drive
- Show the road profile with utilities
- Have a level spreader at the swale outfall or plunge pool.
- Move the cbs into the roadway at the first driveway.
- Check for landscape conflicts with grading and utilities
- Is this the best back entrance layout? Can it be narrowed up? show truck movements.

Police Department Comments: N/A

Application Type:	Site Plan Review
Applicant(s):	American Durafilm Co Inc
Owner(s):	DBIDA
Location:	Innovation Way (Assessor's Map D, Lot 11-1)
Date:	August 26, 2021

Fire/Inspections Comments:

- Verify work hours indicated on Sheet 4, Note 19, parcel abuts residential neighborhoods – No Sunday, 9-4 on Saturday
- Sheet 6 and A3.1 – indicate landing elevations as there appears to be an elevation change
- Sheet 8 – provide adequate separation of utilities
- Sheet 8 – FDC shall be located in a readily accessible location free from obstructions
- Sheet 17 – indicate compliance with access roads requirements of Chapter 18 of NFPA 1, 2015 edition
- Sheet 17 – revise turning pattern for apparatus
- Plan set shall indicate design compliance in accordance with accessibility standards.
- Show hydrant placement
- Consider regulations about mezzanine

Economic Development:

- Add architectural amenities
- Correct colors? Seems dark

Planning Board Comments:

- Screening of dumpster with plantings

Next Steps:

Revise plans, submit for second TRC. Revise plans and submit for Conservation Commission and then Planning Board.

Adjournment:

Jim Maxfield moved to adjourn the meeting at 11:35AM. Seconded by Frank Torr. Vote: U/A.

CIVILWORKS NEW ENGLAND

181 WATSON ROAD P.O. BOX 1166 DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

September 2, 2021

City of Dover
288 Central Ave
Dover, NH 03820

Attn: Christopher G. Parker, Assistant City Manager/Director of Planning

Re: Site Plan Site Review & Conditional Use Permit Applications
Innovation Way (Tax Map D, Lot 11-1)
Dover Planning file: P21-49

Civilworks New England Reference No. 21041

Dear Mr. Parker:

On behalf of the applicant American Durafilm, we are pleased to resubmit the revised Site Plan based on the 8-26-21 TRC meeting.

We have addressed the Committee Notes (**Responses in Bold)** as follows:

Planning Review:

- *Owner signature on app or letter of authority to sign*
  Noted
- *Owner signatures on plans*
  Noted
- *W/S Investment Fees*
  Noted
- *Impact fees ($3,700)*
  Noted
- *Innovation Way payment to Heine*
  Noted
- *Consider Industrial TDR to reduce front setback and more building forward to avoid rear impacts*
  The applicant will be pursuing TDR relief for this rear setback impact. The proposed site layout is to accommodate the use and size of the building as well as allowing for maneuvering area for a tractor trailer to access the loading dock and to provide adequate maneuvering area for the City of Dover's fire truck.
- *Letters to serve*
  The utility availability to serve letters are provided. (attached).
- *Subdivision Plan*
  A subdivision plan is in the process of being created
- *Traffic impact analysis*

A traffic assessment memorandum is attached to this submittal.

- *DBIDA Approval/comments*
  An email acknowledging the approval from DBIDA is attached.
- Missing common site plan note #33
  Common Site plan note #33 is shown on Sheet 4, under paragraph "Site notes", Note 3.
- Surveyor/engineering stamp and signature
  Surveyor/engineering stamps and signatures will provided on the final approved plan set.
- *Proposed project name and file #P21-49*
  All sheets in the plan set have been revised to include the planning file number.
- *Provide parking calculation*
  The plan set has been revised and the parking calculation is shown on sheet 6.
- *Update waivers on sheet 4 (caliper not needed)*
  The tree caliper waiver request has been removed and sheet 4 has been updated.
- *Add bollards or curb stops*
  A bollard with sign has been provided at both Accessible parking spot locations.
- *Add stop sign to parking lot exit onto Innovation Way*
  The plan set has been revised to show stop sign and is noted on sheet 6 and the detail on sheet 12.
- *Add total area of impact to plan set for CUP requests*
  The plan set has been revised and the total area of wetland buffer impact is shown on sheet 7.
- *Revise sheet 9 sheet name*
  The plan set has been revised and sheet 9 is now labeled "Erosion Control Notes".
- *Revise details on sheet 11 to "Accessible Parking"*
  The accessible parking detail on sheet 11 has been updated. The accessible parking sign call outs on sheet 6 have been updated to say "Proposed R7-8 Accessible Parking sign with bollard.
- *Add security wall packs for security lighting on all 4 sides of the building*
  The plan set has been revised and wall packs are shown on all 4 sides of the building.
- *Waiver needed to show entire lot*
  A subdivision plan is in the process of being created. The subdivision plan will show the entire lot.

Engineering Comments:

- *Change the utility layout to water, sewer, gas, the uge*
  The plan set has been revised and the utility lay out has been updated per the request of the City of Dover.
- *Show the connection In the roadway of Venture Drive*
  The utility plan (Sheet 8) has been updated to show the connection of the utilities in Venture Drive. Please note, the contractor will coordinate with dig safe prior to construction activities to verify the locations.

- *Show the road profile with utilities*
  An existing road profile of Innovation Way has been provided with the proposed utilities, Sheet 10.
- *Have a level spreader at the swale outfall or plunge pool*
  A preformed scour hole has been designed at the end of treatment swale 1 and is shown on sheet 8 and sheet 12.
- *Move the cbs into the roadway at the first driveway*
  The proposed catch basins have been moved to the point of curvature on both entrance radii in Innovation Way.
- *Check for landscape conflicts with grading and utilities*
  Landscaping has been coordinated with the proposed utilities.
- *Is this the best back entrance layout? Can it be narrowed up? Show truck movements*
  The rear access has been reduced to 40'. See truck movement plan attached.

Police Department Comments: N/A

Fire/Inspections Comments:

- *Verify work hours indicated on sheet 4, note 19, parcel abuts residential neighborhoods*
  Note 19 on sheet 4 has been updated: Monday-Friday 7am-6pm & Saturday 9am-4pm
- *Sheet 6 and A3.1 – indicate landing elevations as there appears to be an elevation change*
  We have reviewed the plans and have confirmed that the sill and the concrete pad are at the same elevation. Spot grades have been shown at each landing pad. Please confirm that a step down off the landing pad to the proposed ground is acceptable.
- *Sheet 8 provide adequate separation of utilities.*
  - **The proposed utility mains in the right of way have been relocated to provide 10' of separation between the water and sewer, 7' of separation between the sewer and gas, and 3' of separation between the gas and electric.**
  - **The gas and electric services to the site have been relocated. See utility plan for proposed utility locations.**
- *Sheet 8 – FDC shall be located in a readily accessible location free from obstructions*
  The FDC is located on the southeast corner of the building closest to the front driveway access.
- *Sheet 17 – indicate compliance with access roads requirements of Chapter 18 of NFPA 1, 2015 edition*
  NFPA 1 2015 Editions – Chapter 18.2.3.4.4 Dead Ends – "Dead-end fire department access roads in excess of 150 ft (46m) in length shall be provided approved provisions for the fire apparatus to turn around"
  The parking lot has been revised to allow for the City of Dover's fire truck to be able to maneuver while the parking lot is full. The pavement has been extended 9' past the end of side walk and 3 parking's spots (2 on the left and 1 on the right) have been removed. There will be "No Parking Fire Lane" signs installed at the end of the parking lot. See attached Truck movement plan.

- *Sheet 17 – revise turning pattern for apparatus*
  The parking lot has been revised to allow for the City of Dover's fire truck to be able to maneuver while the parking lot is full. The pavement has been extended 9' past the end of side walk and 3 parking's spots (2 on the left and 1 on the right) have been removed. There will be "No Parking Fire Lane" signs installed at the end of the parking lot. See attached Truck movement plan.
- *Plan set shall indicate design compliance in accordance with accessibility standards*
  The note 13 under the site notes paragraph on sheet 4 states "The site layout is designed in compliance with applicable accessibility regulations and NH RSA 155-A:5. The proposed structure will also be designed in accordance with applicable accessibility regulations.

Economic Development:
Add architectural amenities

- **As reviewed at TRC the building and design are acceptable.**

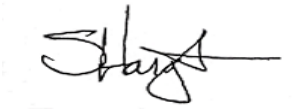
Correct colors? Seems dark

- **As reviewed at TRC the building and design are acceptable.**

Planning Board Comments:
Screening of dumpster with plantings
The dumpster will be enclosed with stockade fencing.

We look forward to discussing this application with the Technical Review Committee. Please feel free to call with any questions or comments.

Sincerely,
CIVILWORKS NEW ENGLAND



Stephen J Haight PE

PROJECT NARRATIVE

for

AMERICAN DURAFILM CO., INC.

Site Plan

Innovation Way (&Venture Drive)
Tax Map D, Lot 11-1

SEPTEMBER 2021

PROJECT OVERVIEW & SITE CHARACTERISTICS

The project parcel is shown on Tax Map D as Lot 11-1, is located within the IT District and consists of +/- 36 acres, currently undeveloped. The project applicant is proposing a +/- 15,000 s.f. (with a future 5,000 s.f. addition) light manufacturing building with associated parking. The 36+ acre lot is currently owned by the Dover Business & Industrial Development Authority (DBIDA). The Applicant has met with DBIDA and received an endorsement to proceed.

As part of this site plan proposal, the applicant will be proposing a subdivision to create a separate lot containing approximately 3 acres for their facility. The access to the lot will be located on Innovation Way. Innovation Way is a City road, however, the abutting parcel constructed this roadway and has a mechanism in place that other allows this parcel to use Innovation Way with compensation made to the abutter.

Utilities are currently located in Venture Drive. As part of this project the City of Dover will be extending utilities up Innovation Way to service this new parcel. An easement may be required to accommodate the necessary underground utilities along the ROW and will be created and shown on the proposed subdivision plan that creates the new parcel for this site.

The proposed site will include public water and sewer connections, underground electric service, natural gas service, and associated drainage improvements. A small portion of the grading and drainage work is proposed within the 50' wetland buffer with impacts of 7,419 sf. (See Conditional Use Permit application). There are no proposed impacts to any wetlands.

The project site consists of the following general improvements:

- Subdivide the parent parcel and create a lot of sufficient size to accommodate the current and future expansion building needs for the Applicant.
- Construction of +/- 15,000 SF professional/light manufacturing facility with associated parking and truck access.
- Construction of on-site stormwater detention and treatment system, grading, and other drainage requirements.
- On site utility construction.
- Construction of (2) new entrances on Innovation Way.
- Stabilize remaining areas with loam and seed.

PROJECT NARRATIVE

for

AMERICAN DURAFILM CO., INC.

Site Plan

Innovation Way (&Venture Drive)
Tax Map D, Lot 11-1

SEPTEMBER 2021

DRIVEWAY AND PARKING LOT

Employee and visitor parking will be segregated from the truck delivery entrance. The parking area will have a 24' wide driveway entrance and the truck access will be 30' wide to accommodate delivery trucks and emergency vehicles access. Lighting for the proposed parking lot and driveway will be per the Lighting Plan and will be LED fixtures that are dark sky compliant.

For the proposed development, the City of Dover parking maximums allow for the following:

Required/Proposed:

- Office: 1 space per 300 s.f. (2,500 s.f.) = 8 surface spaces
- Warehouse: 1 space per 800 s.f (17,500 s.f) = 19 surface spaces

    - Total proposed = 27 **Surface Spaces (includes 2 Accessible Spaces)**

WETLAND SETBACK IMPACT TYPE

The project work requires a conditional use permit from the City of Dover. Approximately +/- 7,419 sf of the wetland buffer will be impacted. The project does not impact bogs, marshes, sand dunes, tidal wetlands, cedar swamps, undisturbed tidal buffer zone, or involve any work within 50 feet of a salt marsh. The project is not located within 100 feet of prime wetlands.

DRAINAGE

The parcel is located at the corner of Venture Drive and Innovation Way. The proposed development will consist of approximately 3 acres surrounded by other commercial properties within a previously established industrial park. The watershed of the parcel includes the project site. On site soils are a mix of Windsor Loamy Fine Sand, Windsor Loamy Sand, Suffield Silt Loam, and Buxton Silt Loam. The Windsor series soils are HSG A with the Suffield and Buxton series soils classified as HSG C.

The proposed development of the site includes the construction of a 15,000 s.f. light manufacturing facility and offices and a 5,000 s.f. addition with associated parking having site access from Innovation Way (use allowed with compensation to the abutter). The project also includes the installation of utility and drainage, including on-site stormwater detention and treatment systems. The post development watershed is modeled utilizing the same points of analysis as the predevelopment watershed, allowing direct comparison of the peak runoff between the pre and post developed conditions (see drainage report).

PROJECT NARRATIVE

for

AMERICAN DURAFILM CO., INC.

Site Plan

Innovation Way (&Venture Drive)
Tax Map D, Lot 11-1

SEPTEMBER 2021

UTILITIES

The proposed project will connect to City of Dover water and sewer as well as Unitil for natural gas, and Eversource for electricity. Water, sewer, electric lines and natural gas lines are currently located within Venture Drive. In conjunction with the City of Dover these utilities will be extended up Innovation Way to service the proposed building. An easement may be required to accommodate the necessary underground utilities along the ROW and will be created and shown on the subsequent subdivision plan that creates the new parcel for this site. Building connections will be made per the City's Community Services Utility Division and Fire Department requirements and standards.

Jase Gregoire

From: Steve Haight
Sent: Thursday, September 2, 2021 2:31 PM
To: Jase Gregoire; Benton, Donna
Subject: FW: Durafilm Site plan application

From: Barufaldi, Daniel [mailto:d.barufaldi@dover.nh.gov]
Sent: Thursday, September 2, 2021 2:29 PM
To: Steve Haight
Subject: RE: Durafilm Site plan application

Steve,
This is confirmation that DBIDA has approved Durafilm for a 3+ acre lot on the corner of Venture Drive and Innovation Way in Enterprise Park. DBIDA grants Durafilm the ability to seek site plan and subdivision approval from the City of Dover, NH. The applicant will sign the applications to the City of Dover, NH. The City will require that.
Daniel J. Barufaldi

Daniel Barufaldi
Dover Business & Industrial Development Authority
City of Dover, NH
288 Central Avenue
Dover, NH 03820-4169
e: d.barufaldi@dover.nh.gov
p: 603.516.6043 f: 603.516.6049

Dover: First in New Hampshire, First with you!
http://www.dover.nh.gov

From: Steve Haight <shaight@civilworksne.com>
Sent: Thursday, September 2, 2021 1:15 PM
To: Barufaldi, Daniel <d.barufaldi@dover.nh.gov>
Cc: Benton, Donna <d.benton@dover.nh.gov>; Mack Hendrick <mhendrick@americandurafilm.com>
Subject: Durafilm Site plan application

Security Notice: External sender. Use caution with hyperlinks or attachments.

Good afternoon Dan

Following up on the TRC meeting today.

- Can you provide confirmation that DIBDA has approved Durafilm for a lot off Innovation Way
- Provide acknowledgement that DIBDA grants Durafilm the ability to seek site plan and subdivision approval.
- Does DIBDA need to sign the applications or will a letter from DIBDA allowing the applicant to sign be acceptable

Stephen J. Haight, P.E.

President
Civilworks New England/Haight Engineering, PLLC
181 Watson Road
P.O. Box 1166
Dover, New Hampshire 03821
O: 603.749-0443
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shaight@civilworksne.com
www.civilworksne.com

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Jase Gregoire

From: White, Dave <D.White@dover.nh.gov>
Sent: Thursday, September 2, 2021 10:05 AM
To: Jase Gregoire
Subject: RE: CNE21041-American Durafilm-Innovation Way Dover, NH 03820 Tax Map D, Lot 11

Water and sewer is available to this site from venture drive.

Dave White, PE
City Engineer
Dover, NH

From: Jase Gregoire <jgregoire@civilworksne.com>
Sent: Wednesday, September 1, 2021 8:36 AM
To: White, Dave <D.White@dover.nh.gov>
Subject: CNE21041-American Durafilm-Innovation Way Dover, NH 03820 Tax Map D, Lot 11

Security Notice: External sender. Use caution with hyperlinks or attachments.

Good morning Dave,

We are addressing the TRC comments from the August 26 meeting and one of planning's comments was provide utility letters. We can't locate the availability of sewer and water to the site letter.

Since Innovation Way does not have utilities do we not receive a letter from the engineering office on the availability of sewer and water?

Please advise

Best regards

Jase R. Gregoire
Staff Engineer
Civilworks New England/Haight Engineering, PLLC
181 Watson Road
P.O. Box 1166
Dover, New Hampshire 03821
O: 603.749.0443
F: 603.749.7348
jgregoire@civilworksne.com
www.civilworksne.com

From: Jase Gregoire
Sent: Friday, August 6, 2021 1:35 PM
To: D.White@dover.nh.gov
Subject: CNE21041-American Durafilm-Innovation Way Dover, NH 03820 Tax Map D, Lot 11

Good Afternoon Dave,

American Durafilm CO, Inc is proposing to construct a commercial building on Innovation Way

Parcel: Map D, Lot 11

The project will generally consist of (1) 20,000 sf building, which is expected to generate sewer & water usage of approximately 200 gpd*.

* Volume is based on NHDES Env-Wq 1008.03 Table 1008-1 Design Flow figures: for Unspecified office space (2,000 sf) and warehouses (10 employees).

Please advise to the availability of sewer and water to the site.

Regards

Jase Gregoire

Jase R. Gregoire
Staff Engineer
Civilworks New England/Haight Engineering, PLLC
181 Watson Road
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jgregoire@civilworksne.com
www.civilworksne.com

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EVERSOURCE ENERGY

August 24, 2021

1700 Lafayette Road
Portsmouth, NH 03801

Michael J Busby
603-436-7708 x555-5678
michael.busby@eversource.com

Mack Hendrick
American Durafilm Co., Inc.
55 Boynton Rd
Holliston, MA 01746

Dear Mr. Hendrick:

I am responding to your request to confirm the availability of electric service for the proposed Innovation Way Dover, NH 03820, Tax Map D, Lot 11 project being constructed for/by American Durafilm Co., Inc..

The proposed project consists of a 1-story building with no residential units, approximately 15,000 s/f of retail/office space at the ground level/parking below grade. The proposed development will be constructed along Venture Drive / Innovation Way.

The developer will be responsible for the installation of all underground facilities and infrastructure required to service the new building. The service will be as shown on attached marked up Utility Plan "Draft Utility Plan", dated 8-6-21. The proposed building service will be fed from (to be determined by Eversource) as depicted on utility plan "Draft Utility Plan", dated 8-6-21. The developer will work with Eversource to obtain all necessary easements and licenses for the proposed overhead/underground facilities listed above.

This letter serves as confirmation that Eversource has sufficient capacity in the area to provide service to this proposed development. The cost of extending service to the aforementioned location and any associated infrastructure improvements necessary to provide service will be borne by the developer unless otherwise agreed upon.

The attached drawing titled "Draft Utility Plan" dated 08/06/2021, shows transformer locations to service your proposed project.

Eversource approves the locations shown; assuming the final installed locations meet all clearances, physical protection, and access requirements as outlined in Eversource's "Information & Requirements For Electric Supply" (https://www.eversource.com/content/docs/default-source/pdfs/requirements-for-electric-service-connections.pdf?sfvrsn=2).

If you require additional information or I can be of further assistance please do not hesitate to contact me at our Portsmouth Office, 603-436-7708 Ext. 555-5678

Respectfully.

Michael J. Busby, PE
NH Eastern Regional Engineering and Design Manager, Eversource

cc: (via e-mail)
Timothy Kenney, Eastern Region Operations Manager, Eversource
Mary Jo Hanson, Field Supervisor, Electric Design, Eversource

Unitil
Northern Utilities, Inc.

Augusts 9th 2021

Mack Hendrick
American Durafilm Co. Inc.
55 Boynton Rd
Holliston, MA 01746

Natural Gas to 'Innovation Way' Project in Dover, NH

Hi Mack,

Unitil/Northern Utilities Natural Gas Division has reviewed the requested site for natural gas service:

Unitil hereby confirms that natural gas is available to supply the proposed development located at Innovation Way in Dover, NH

If you have any questions, please contact me at 603-534-2379.

Sincerely,

Dave MacLean
Senior Business Development Rep
Unitil
T 603.294.5261 **M** 603.534.2379 **F** 603.294.5264
Email macleand@unitil.com

CIVILWORKS NEW ENGLAND

181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

TRAFFIC ASSESMENT MEMORANDUM

INTRODUCTION

Civilworks New England has prepared this traffic-assessment memorandum (TAM). This TAM regards American Durafilm located on Innovation Way in the City of Dover, New Hampshire.

This TAM includes:

- existing site description
- proposed project description
- road description
- public transit
- sight distances at the proposed driveways
- trip generation
- trip distribution/assignment
- potential traffic impacts

This TAM concludes that:

- relevant sight distances at the Innovation Way/proposed driveway intersections will be adequate
- The proposed project is not anticipated to add significant new traffic to the area

EXISTING SITE DESCRIPTION

The site:

- is along the northerly side of Innovation Way
- has an area of about 3.29 acres
- is presently wooded, vacant land

PROPOSED PROJECT DESCRIPTION

The project will provide:

- one building with a total floor area of about 20,000 square feet (sf)
- initial floor area of 15,000 sf, with a later addition of 5,000 sf
- two unsignalized driveways intersecting the north side of Innovation Way

CIVILWORKS NEW ENGLAND
181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

ROAD DESCRIPTION

Innovation Way:

- is under the jurisdiction of the City
- is a cul de sac local industrial street
- Innovation Way is oriented about east-west
- at the east end, intersects with Venture Drive, a local street serving Enterprise Park
- includes a relatively straight horizontal alignment
- has minor vertical grades
- has bituminous concrete pavement in overall good condition
- has one travel lane per direction, with 24ft. wide pavement
- has unmarked pavement
- has no posted speed limit
- has sloped granite curb on the entrance radii
- does not include utility services

PUBLIC TRANSIT

Collaborative Alliance for Seacoast Transportation (COAST) Route 33 provides on-call bus service stopping anywhere along Venture Drive. Service is on non-holiday weekdays. Route 33 connects with:

- central Dover, to the southeast
- the Dover Transportation Center, to the southeast
- the New Hampshire Department of Transportation Park and Ride facility near Indian Brook Drive and Spaulding Turnpike interchange 9, to the east
- the Strafford County Complex, to the west

SIGHT DISTANCES

The American Association of State Highway and Transportation Officials (AASHTO) has established authoritative policy for sight distances at intersections with no signal in terms of:

- stopping sight distance (SSD)

Innovation Way services traffic from the abutter across the street (Heine) including an employee/visitor parking area, and loading dock access off of the southerly side of the cul-de-sac.

This proposed development will access from the northerly side of Innovation Way. Due to very low traffic volume, and the short length (450ft.) of Innovation way, sight distance is not an applicable analysis.

CALCULATED TRIP GENERATION

The Institute of Transportation Engineers (ITE) compiles and publishes trip-generation information for a variety of land uses in *Trip Generation Manual*.[1] This authoritative guide for calculating site traffic includes information for light industrial, Land Use Code 110, based on floor area.[2] Table 2 shows calculated vehicle trip ends due to the proposed development as:

Table 2. Trip generation.

	Vehicle-Trips*		
Weekday Period	Total	In	Out
Daily	153	76	77
AM-Street-Peak Hour	15	14	1
PM-Street-Peak Hour	14	1	13

* ITE, *Trip Generation Manual*, Light Industrial, Land Use Code 110, 20,000-sf floor area.

- weekday daily, 153 (total of in and out)
- weekday AM-street-peak hour, 15 (14 in and 1 out)
- weekday PM-street-peak hour, 14 (1 in and 13 out)

TRIP DISTRIBUTION/ASSIGNMENT

Calculated trip generation is so low that area traffic operations are not sensitive to trip distribution/assignment. Vehicle-trips to and from the east may predominate largely due to connections with central Dover and the Spaulding Turnpike. All trips access the site from Sixth Street via Venture Drive.

[1] ITE, *Trip Generation Manual,* 10th edition (Washington DC, September 2017).

[2] ITE, *Trip Generation Manual,* Volume 2, Data, Industrial (Land Uses 100-199), pages 1 to 19.

CIVILWORKS NEW ENGLAND
181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

POTENTIAL TRAFFIC IMPACTS

The calculations show less than 100 peak-hour primary vehicle-trips, due to the proposed project. More specifically, tabulated peak-hour trip generation is:

- 14 to 15 vehicle-trips
- split entering versus exiting the site

Therefore, the proposed project is not anticipated to add significant new traffic to the Sixth Street or Venture Drive.

CONCLUSION

In conclusion:

- sight distances at the Innovation Way/proposed driveway intersections will be adequate
- the proposed project is not anticipated to add significant new traffic to the area

CIVILWORKS NEW ENGLAND

Sincerely,

Stephen J. Haight, PE

Dana C. Lynch, PE

cc. American Durafilm

Stormwater Management System Inspection & Maintenance Plan

Prepared for

AMERICAN DURAFILM
Map D, Lot 11-1

Innovation Way
Dover, New Hampshire
Strafford County

August, 2021
Revised: September 2021

Owner of Record:

AMERICAN DURAFILM CO. INC.
55 Boynton Rd.
Holliston, Massachusetts 01746

Prepared By:

CIVILWORKS NEW ENGLAND
P.O. Box 1166
181 Watson Road
Dover, New Hampshire 03821

Introduction

Civilworks NE, has prepared the following Stormwater Management System Inspection & Maintenance Plan for **American Durafilm Co. Inc.** The intent of this plan is to provide a list of procedures that document the inspection and maintenance requirements of the Stormwater Management System for this site.

The following inspection and maintenance program is necessary in order to keep the Stormwater Management System functioning properly. These measures will also help to minimize potential environmental impacts to the areas surrounding the developed site. By following the enclosed procedures, the property owners, and maintenance personnel will be able to maintain the functional design of the Stormwater Management System and maximize its ability to remove sediment and other contaminants from site generated stormwater runoff while at the same time ensuring the recharge of groundwater resources through continued infiltration.

This plan also requires the Owner/Operator to prepare and implement a salt minimization plan to reduce salt usage on-site and ultimately within the watershed. This plan will allow the owner/operator to monitor and modify how much salt is needed, when it should be applied, where it needs to be applied, with the ultimate goal of reducing salt-use without compromising safety. It is expected that salt-use reduction will lead to long-term cost-savings as a result of purchasing less salt and reduced impacts on vegetation (e.g., landscaping) and corrosion of infrastructure .

The salt minimization plan should include the retention of a contractor who has completed the Green SnowPro Training course and obtained NH DES Salt Application Certification.

It is anticipated that this be a living document that will be updated at regular intervals (recommend updating annually in advance of the winter season in order to facilitate adjustments).

Owner

American Durafilm Co. Inc.
55 Boynton Road
Holliston, MA 01746

In the event of a change in ownership, this Inspection and Maintenance Plan shall be transferred to the new party; transfer shall be documented to NH DES in writing.

Contact / Responsible Party

American Durafilm Co. Inc.
55 Boynton Road
Holliston, MA 01746

Mack Hendrick
PHONE: (508) 429-8000

The contact information for the Contact / Responsible Party shall be kept current; transfer shall be documented to NH DES in writing.

Management Company

American Durafilm Co. Inc.
55 Boynton Road
Holliston, MA 01746

The contact information for the Management Party shall be kept current.

Inspection Schedule / Record Retention

Inspection frequency should, at a minimum, be in accordance with New Hampshire Stormwater Manual, Volume 2, latest edition, as updated by NH DES. See the Inspection and Maintenance Plan for frequency requirements. A copy of the completed Stormwater Management System's Inspection & Maintenance Log and Deicing Salt Quantity Use Log shall be maintained, kept on-site, and be made available to local, state, or federal regulators as applicable by law. All Inspection and Maintenance records must be provided to NH DES upon request.

Stormwater Management System Components

The Stormwater Management System associated with the project is designed to mitigate both the quantity and quality of site-generated stormwater runoff and to recharge the underlying groundwater resources. As a result, its design includes the following elements:

- Pipes/Culverts
- Outlet Structures
- Energy Dissipation Structures
- Catch Basins
- Bioretention Basin
- Treatment Swale
- Preformed Scour Hole
- Pavement
- Litter / Trash Removal

Structure callouts correlate to the design plans, a copy of which shall be maintained with this Inspection and Maintenance Plan.

Control of Invasive Species

During maintenance activities, check for the presence of invasive plants and remove in a safe manner. Invasive plants shall be controlled to prevent them from reproducing, spreading, or re-growing. See the University of New Hampshire – Cooperative Extension's "Method for Disposing Non-Native Invasive Plants", included at the end of this manual, for guidance on the removal and disposal of invasive species.

Inspection and Maintenance Plan

By implementing the following procedures, the owners will be able to maintain the functional design of the Stormwater Management System and maximize the system's ability to remove sediment and other contaminants from site generated stormwater runoff and to effectively recharge the underlying groundwater resources.

PIPES/CULVERTS:

- Inspect once per year.
- Inspect for clogging and sediment accumulation.
- Remove all debris immediately and sediment accumulations ≥ 2 inches.

OUTLET STRUCTURE(S):

- Inspect once per year.
- Inspect for clogging and sediment accumulation.
- Remove all debris immediately and sediment accumulations ≥ 2 inches.

ENERGY DISSIPATION STRUCTURES (RIP RAP): As Applicable

- Inspect the outlet protection annually for damage and deterioration. Repair damages immediately.
- If stones become displaced from the riprap areas they should be replaced immediately and chinked in to assure stability. Add additional riprap as needed. Vegetation growing through the riprap should be eliminated at least yearly.

CATCH BASIN(S):

- Inspect once per year.
- Inspect for floatables, sediment accumulation, and hydrocarbons (oils and grease).
- Remove all floatables immediately and sediment accumulations ≥ 1 foot.
- Hydrocarbons shall be removed immediately by skimming, absorbent materials, or other methods and should be disposed of in accordance with applicable State and Federal regulations.

BIORETENTION BASIN:

- Inspection, by a **qualified professional**, of detention basin at least twice annually, and following any rainfall event exceeding 2.5 inches in a 24 hour period, with maintenance or rehabilitation conducted as warranted by such inspection.
- Embankments and spillways should be inspected by a **qualified professional** for settlement, erosion, seepage, animal burrows, woody vegetation, and other conditions that could degrade the embankment and reduce its stability for impounding water. Immediate corrective action should be implemented if any such conditions are found.
- Inlet and outlet pipes, inlet and outlet structures, energy dissipation structures or practices, and other structural appurtenances should be inspected by a **qualified professional**, and corrective action implemented (e.g., maintenance, repairs, or replacement) as indicated by such inspection.

- The bottoms, interior and exterior side slopes, and crest of earthen detention basins should be mowed, and the vegetation maintained in healthy condition, as appropriate to the function of the facility and type of vegetation.
- Vegetated embankments that serve as "berms" or "dams" that impound water should be mowed at least once annually to prevent the establishment of woody vegetation.
- Trash and debris should be removed from the pond and any inlet or outlet structures whenever observed.
- Accumulated sediment should be removed when it significantly affects pond capacity.

TREATMENT SWALE:

- Inspect once per year.
- Inspect for erosion, sediment accumulation, vegetation loss, and presence of invasive species.
- Remove debris and accumulated sediment, based on inspection.
- Repair eroded areas as needed; remove invasive species and dead vegetation.
- Perform periodic mowing of swales (at least twice annually), maintain a 4" stand of vegetative growth.

PREFORMED SCOUR HOLE

- Inspect once per year.
- Inspect the outlet protection for damage and deterioration.
- Repair damages immediately.

PAVEMENT:

- Minimize sanding.
- Minimize application of salt for ice control.
- Clean periodically (1-2 times per year) using a sweeper or vacuum sweeper. Vacuum sweeping is the preferred method.

LITTER / TRASH REMOVAL:

- Routinely patrol site for litter pick up.

DE-ICING AGENTS

- To address the concerns associated with the application of chlorides and other deicing materials, NHDES recommends that the Owner/Operator develop a Road Salt and Deicing Minimization Plan for the parking lots and roadways. The plan should develop the policies that the development will keep in place to minimize salt and other deicer use after the project has been completed. The plan should include tracking the use of salt and other deicers for each storm event and compiling salt use data annually. (See Anti-icing Data Form in the appendix).
- Use sand as primary agent for driveway and access way safety during ice and snow conditions
- Minimize the use of salt during the winter
- Use de-icing or anti-caking agents, added to enhance performance and application characteristics of sand mixtures, only as necessary and at minimum application rates.
- Recommend using a certified Winter Operator (Green SnowPro Trained) for applying de-icing agents.
- Monitor weather and apply de-icing agents based on weather conditions and temperatures.

ANTI-ICING AND SALT MINIMIZATION

- Owner to develop a Road Salt and Deicing Minimization Plan
- Provide a written policy that the "Development" will keep in place to minimize salt and other deicer use after the project has been completed.
- Use the attached form to track the use of salt and other deicers for each storm event and compiling salt use data annually.

Inspection & Maintenance Table

System Component / BMP	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance / Cleanout Threshold
Pipes/Culverts	Annually	• Check for sediment accumulation • Check for erosion • Ensure swale is stabilized • Maintain healthy stand of veg., 4" minimum • Inspect for invasive species	≥ 1 in. sediment Repair immediately Restore veg. in-kind Mow twice per year Remove/Dispose of accordingly
Outlet Structure(s)	No sanding Limit 2-4 x's Year Periodically Periodically	• No sanding • Minimize salt use for ice • Vacuum to prevent tracking issues and clogging • Monitor to ensure surface drains effectively • Check for trash/debris • See attached for winter maintenance	No sanding Minimize as Req. 2-4 x's a year Remove when noticed
Energy Dissipation (ED) Structures (RipRap)	Annually	• Check for displaced stones • Check for woody vegetation	Replace immediately Remove annually
Catch Basins	Annually	• Check for sediment accumulation • Check for floatable contaminants	≥ 1 ft. sediment depth Remove all floatables
Bio-Retention Basin • Embankments • Pond Sediment • Trash/Debris • Drawdown Time • Vegetation (Veg.)	Bi-Annually Periodically Periodically Periodically Annually Periodically	• Check for erosion, settlement, seepage, etc. • Check for sediment accumulation in pond • Check for trash (in pond and structures) • 72 hour drain time • Maintain 95% veg. (pond & slopes) • Maintain healthy stand of veg.	Repair immediately ≥ 2 in. sediment Remove all trash/debris Repair immediately Restore veg. in-kind Mow when ≥ 6 in
Treatment Swales	Annually	• Check for sediment accumulation • Check for erosion • Ensure swale is stabilized • Maintain healthy stand of veg., 4" minimum • Inspect for invasive species	≥ 1 in. sediment Repair immediately Restore veg. in-kind Mow twice per year Remove/Dispose of accordingly
Preformed Scour Hole	Annually	• Inspect the outlet protection for damage and deterioration	Repair immediately
Pavement • Sanding • Salt Applications • Sweep/Vacuum • Trash/Debris	Limit use As Req. 1 - 2 x's Year Periodically	• Minimize use to prevent tracking issues • RECORD APPLICATION RATES • Sweep or vacuum to prevent tracking issues • Check for trash/debris	Sweep to prevent issues Minimize as Req. Sweep/Vac as needed Remove when noticed
Litter / Trash Removal	Periodically	• Check for litter and trash	Remove when noticed

Inspection & Maintenance Checklist/Log

The following page contains a blank copy of the Stormwater Management System's Inspection & Maintenance Log and a Deicing Salt Quantity Use Log. These forms are provided to assist the owners with the inspection and maintenance of the aforementioned Stormwater Management System.

Stormwater Management System's Inspection & Maintenance Log

Date of Inspection/Maintenance: _____ Inspector: _____

System Component / BMP	Cleaning / Repair Needed (List Items / Comments)	Date of Cleaning/Repair	Performed By

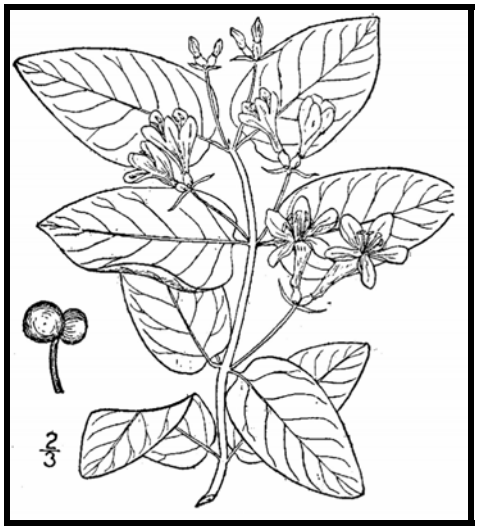
Deicing Salt Quantity Use Log

Date	Amount of Material Applied	Comments

University of New Hampshire Cooperative Extension

Methods for Disposing Non-Native Invasive Plants

Prepared by the Invasives Species Outreach Group, volunteers interested in helping people control invasive plants. Assistance provided by the Piscataquog Land Conservancy and the NH Invasives Species Committee. Edited by Karen Bennett, Extension Forestry Professor and Specialist.



Tatarian honeysuckle
Lonicera tatarica
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 282.

Non-native invasive plants crowd out natives in natural and managed landscapes. They cost taxpayers billions of dollars each year from lost agricultural and forest crops, decreased biodiversity, impacts to natural resources and the environment, and the cost to control and eradicate them.

Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands. In ideal conditions, they grow and spread even faster. There are many ways to remove these non-native invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed.

Knowing how a particular plant reproduces indicates its method of spread and helps determine the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

Because movement and disposal of viable plant parts is restricted (see NH Regulations), viable invasive parts can't be brought to most transfer stations in the state. Check with your transfer station to see if there is an approved, designated area for invasives disposal. This fact sheet gives recommendations for rendering plant parts non-viable.

Control of invasives is beyond the scope of this fact sheet. For information about control visit www.nhinvasives.org or contact your UNH Cooperative Extension office.

New Hampshire Regulations

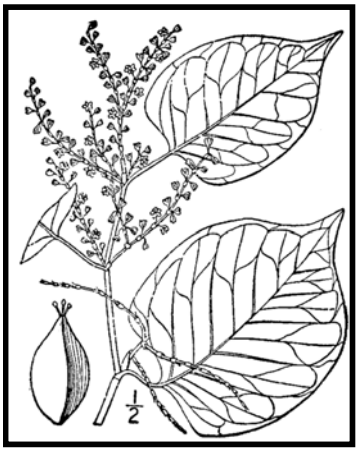
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

How and When to Dispose of Invasives?

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

Burning: Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.



Japanese knotweed
Polygonum cuspidatum
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 1: 676.

Bagging (solarization): Use this technique with softer-tissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

Chipping: Use this method for woody plants that don't reproduce vegetatively.

Burying: This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

Drowning: Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Well-rotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

Composting: Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

Be diligent looking for seedlings for *years* in areas where removal and disposal took place.

Suggested Disposal Methods for Non-Native Invasive Plants

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

<table>
<tr><th>Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">Norway maple
(Acer platanoides)
European barberry
(Berberis vulgaris)
Japanese barberry
(Berberis thunbergii)
autumn olive
(Elaeagnus umbellata)
burning bush
(Euonymus alatus)
Morrow's honeysuckle
(Lonicera morrowii)
Tatarian honeysuckle
(Lonicera tatarica)
showy bush honeysuckle
(Lonicera x bella)
common buckthorn
(Rhamnus cathartica)
glossy buckthorn
(Frangula alnus)</td><td rowspan="2">Fruit and Seeds
  </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Use as firewood.
▪ Make a brush pile.
▪ Chip.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip once all fruit has dropped from branches.
▪ Leave resulting chips on site and monitor.</td></tr>
<tr><td rowspan="2">oriental bittersweet
(Celastrus orbiculatus)
multiflora rose
(Rosa multiflora)</td><td rowspan="2">Fruits, Seeds, Plant Fragments
  </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Make a brush pile.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip – only after material has fully dried (1 year) and all fruit has dropped from branches. Leave resulting chips on site and monitor.</td></tr>
</table>

<table>
<tr><th>Non-Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">garlic mustard
(Alliaria petiolata)
spotted knapweed
(Centaurea maculosa)
▪ Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling.
black swallow-wort
(Cynanchum nigrum)
▪ May cause skin rash. Wear gloves and long sleeves when handling.
pale swallow-wort
(Cynanchum rossicum)
giant hogweed
(Heracleum mantegazzianum)
▪ Can cause major skin rash. Wear gloves and long sleeves when handling.
dame’s rocket
(Hesperis matronalis)
perennial pepperweed
(Lepidium latifolium)
purple loosestrife
(Lythrum salicaria)
Japanese stilt grass
(Microstegium vimineum)
mile-a-minute weed
(Polygonum perfoliatum)</td><td rowspan="2">Fruits and Seeds
  </td><td>Prior to flowering
Depends on scale of infestation
Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

Large infestation
▪ Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>During and following flowering
Do nothing until the following year or remove flowering heads and bag and let rot.

Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

Large infestation
▪ Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>common reed
(Phragmites australis)
Japanese knotweed
(Polygonum cuspidatum)
Bohemian knotweed
(Polygonum x bohemicum)</td><td>Fruits, Seeds, Plant Fragments
Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn’t materially influence disposal activities.</td><td>Small infestation
▪ Bag all plant material and let rot.
▪ Never pile and use resulting material as compost.
▪ Burn.

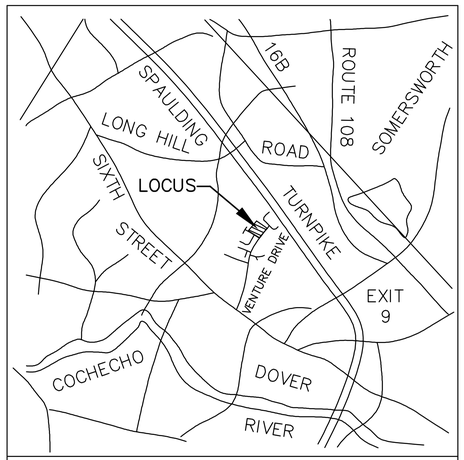
Large infestation
▪ Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile.
▪ Monitor and remove any sprouting material.
▪ Pile, let dry, and burn.</td></tr>
</table>

January 2010

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P21-49 & P21-50 & P21-62 **Venture Drive**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
A0047-014000	19 REYNERS BROOK DR	YORK JENNIFER L TRUSTEE	YORK JENNIFER L REVOCABLE LIVING TRUST	19 REYNERS BROOK	DOVER	NH	03820
A0047-016000	21 REYNERS BROOK DR	ATORO TEMITAYO M &	ATORO KATHRYN E	21 REYNERS BROOK DR	DOVER	NH	03820
A0047-018000	23 REYNERS BROOK DR	ENOS DON A & LINDA M CO-TRUSTEES	ENOS FAMILY REVOCABLE TRUST	23 REYNERS BROOK	DOVER	NH	03820
A0047-020000	25 REYNERS BROOK DR	COVERT JOSEPH & CATHERINE TRUSTEES	COVERTJOSEPH AND CATHERINE REVOCABLE TRU	25 REYNERS BROOK	DOVER	NH	03820
A0047-022000	27 REYNERS BROOK DR	CLAPPER YVONNE &	CLAPPER WAYNE	27 REYNERS BROOK	DOVER	NH	03820
A0047-024000	29 REYNERS BROOK DR	POOLE PETER W & KATHLEEN E	POOLE FAMILY REV TRUST	29 REYNERS BROOK	DOVER	NH	03820
A0047-026000	31 REYNERS BROOK DR	HODGES CRAIG B & CAROLYN TRUSTEES	HODGES CRAIG AND CAROLYN REVOCABLE TRUST	31 REYNERS BROOK DR	DOVER	NH	03820
A0047-028000	33 REYNERS BROOK DR	LEFOLEY THOMAS & CAROL		33 REYNERS BROOK	DOVER	NH	03820
A0052-000001	51 SANDY LN	JOHNSTONE MARK E TRUSTEE	JOHNSTONE MARK E 2014 TRUST	51 SANDY LN	DOVER	NH	03820
D0009-A00000	150 VENTURE DR	INDEX PACKAGING INC		1055 WHITE MOUNTAIN HIGHWAY	MILTON	NH	03851
D0009-A00SND	VENTURE DR	INDEX PACKAGING INC		1055 WHITE MOUNTAIN HIGHWAY	MILTON	NH	03851
D0009-A01SND	VENTURE DR	INDEX PACKAGING INC		1055 WHITE MOUNTAIN HIGHWAY	MILTON	NH	03851
D0011-000000	127 VENTURE DR	APW PROPERTIES LLC		9 CAPITOL ST	CONCORD	NH	03301
D0011-003000	111 VENTURE DR	MERCHANDISE CENTRAL LLC		111 VENTURE DR	DOVER	NH	03820
D0011-004000	110 VENTURE DR	QUALITY WAY LLC		1 QUALITY WAY ENTERPRISE PARK	DOVER	NH	03820
D0011-006000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-007000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-007SN2	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008000	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN1	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN2	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-008SN3	QUALITY WY	DOVER BUSINESS & IND DEV AUTHORITY	F/K/A DOVER IND DEV AUTHORITY	288 CENTRAL AV	DOVER	NH	03820
D0011-009000	10 INNOVATION WY	HEINE USA		10 INNOVATION WAY	DOVER	NH	03820
D0011-009SND	INNOVATION WY	HEINE USA		10 INNOVATION WAY	DOVER	NH	03820
D0011-A00000	SANDY LN	150 VENTURE DRIVE LLC		192 DOVER POINT RD	DOVER	NH	03820
D0011-001000	VENTURE DR	DOVER BUSINESS & IND DEV AUTHORITY		288 CENTRAL AVE	DOVER	NH	03820
		AMERICAN DURAFILM CO., INC.	MACK HENDRICK	55 BOYNTON ROAD	HOLLISTON	MA	01746
		CIVILWORKS NEW ENGLAND	STEPHAN J HAIGHT, P.E.	P.O. BOX 1166	DOVER	NH	03821
		MCENEANEY SURVEY ASSOCIATES	KEVIN MCENEANEY, LLS.	24 CHESTNUT STREET	DOVER	NH	03820



LOCATION PLAN
(NO SCALE)

SITE PLAN
FOR
AMERICAN DURAFILM

TAX MAP D, LOT 11-1

INNOVATION WAY

DOVER, NH

AUGUST 6, 2021

REVISED: SEPTEMBER 2, 2021

OWNER

DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY (D.I.D.A.)
288 CENTRAL AVENUE
DOVER, NH 03820

_____ DATE

APPLICANT

AMERICAN DURAFILM CO. INC
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

_____ DATE

SITE CIVIL ENGINEER

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

LAND SURVEYOR

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

ARCHITECT

TW DESIGNS
254 DRAKE HILL ROAD
STRAFFORD, NH 03884

LANDSCAPE ARCHITECT

IRONWOOD DESIGN GROUP LLC
55 MAIN STREET #129
NEWMARKET, NH 03857
(603) 772-0590

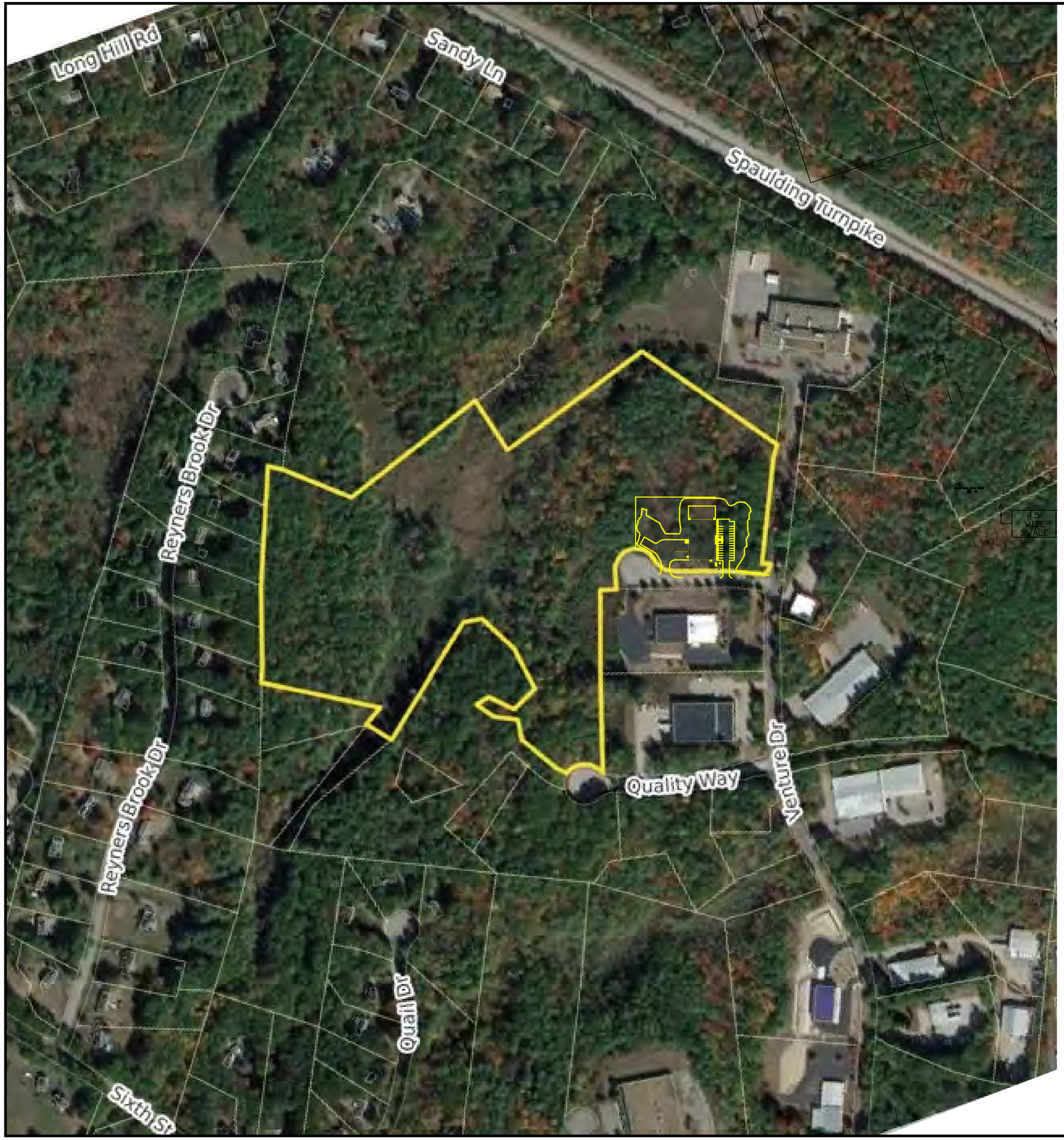
WETLAND SCIENTIST

DAMON E. BURT
FRAGGLE ROCK ENVIRONMENTAL
38 GARLAND ROAD
STRAFFORD, NH 03884
(603) 969-5574

SHEET INDEX

SHEET INDEX	SHEET
COVER SHEET	1
NEIGHBORHOOD PLAN	2
EXISTING CONDITIONS PLAN (BY MCENEANEY SURVEY)	3
NOTE SHEET	4
DEMOLITION PLAN	5
SITE PLAN	6
GRADING, DRAINAGE & EROSION CONTROL PLAN	7
UTILITY PLAN	8
UTILITY PLAN AND PROFILE	9
EROSION CONTROL NOTES	10
DETAILS	11 - 15
LIGHTING PLAN	16
LIGHTING DETAILS	17
DOVER LADDER TRUCK MOVEMENT PLAN	18
SEMI TRUCK MOVEMENT PLAN	T1
ARCHITECTURAL ELEVATIONS & FLOOR PLANS	-
STREET SCAPE PLAN	-
LANDSCAPE PLAN	-

PLANNING FILE NO.: P21-49



ABUTTERS LIST
(WITHIN 200 FT)

TAX MAP	LOT NO.	NAME & ADDRESS
D 9-A	9-A	INDEX PACKING INC. 105 WHITE MOUNTAIN HIGH WAY MILTON, NH 03851
D 11-A	11-A	150 VENTURE DRIVE LLC 192 DOVER POINT ROAD DOVER, NH 03820
A 52-01	52-01	JOHNSTONE MARK E TRUSTEE, JOHNSTONE MARK E 2014 TRUST 51 SANDY LANE DOVER, NH 03820
A 47-026	47-026	HODGES GRAIG B & CAROLYN TRUSTEES, HODGES GRAIG AND CAROLYN REVOCABLE TRUST 31 REYNERS BROOK DRIVE DOVER, NH 03820
A 47-024	47-024	POOLE PETER W & KATHLEEN POOLE FAMILY TRUST 29 REYNERS BROOK DRIVE DOVER, NH 03820
A 47-022	47-022	CLAPPER YVONNE & CLAPPER WAYNE 27 REYNERS BROOK DRIVE DOVER, NH 03820
A 47-020	47-020	COVERT JOSEPH * CATHERINE TRUSTEES, COVERT JOSEPH AND CATHERINE REVOCABLE TRUST 25 REYNERS BROOK DRIVE DOVER, NH 03820
A 47-018	47-018	ENOS A & LINDA M CO-TRUSTEES, ENOS FAMILY REVOCABLE TRUST 23 RAYNERS BROOK DRIVE DOVER, NH 03820
A 47-016	47-016	ATORO TEMITAYO M & ATORO KATHRYN E 21 REYNERS BROOKS DRIVE DOVER, NH 03820
D 11-009SND	11-009SND	HEINE USA 10 INNOVATION WAY DOVER, NH 03820
D 11-008SN3	11-008SN3	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D 11-008SN2	11-008SN2	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D 11-008	11-008	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D 11-007	11-007	DOVER BUSINESS & IND DEV AUTHORITY, F/K/A DOVER IND DEV AUTHORITY 288 CENTRAL AVE DOVER, NH 03820
D 11-004	11-004	QUALITY WAY LLC 1 QUALITY WAY ENTERPRISE PARK DOVER, NH 03820
D 11-009	11-009	HEINE USA 10 INNOVATION WAY DOVER, NH 03820
D 11	11	APW PROPERTIES LLC 9 CAPITOL STREET CONCORD, NH 03301
D 9-A01SND	9-A01SND	INDEX PACKAGING IND 1055 WHITE MOUNTAIN HIGHWAY MILTON, NH 03851
D 9-A00SND	9-A00SND	INDEX PACKAGING INC. 1055 WHITE MOUNTAIN HIGHWAY MILTON, NH 03851

K / 26 — TAX MAP / LOT NUMBER

MAGNETIC

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

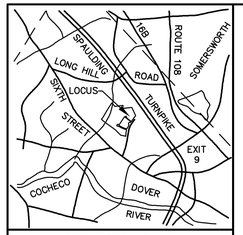
DATE: 8-6-21
SCALE: 1"=200'
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO:21041
FILE: SITE

NEIGHBORHOOD PLAN

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

2



LOCATION PLAN
(NO SCALE)

LEGEND

I.R. ◉ – IRON ROD
I.P. ◉ – IRON PIPE
D.H. ◉ – DRILL HOLE
S.S. ◉ – STEEL STAKE
– STONE WALL
– EDGE OF WET
f/k/a – FORMERLY KNOWN AS
– SOIL LINE
GIB – SOIL TYPE

REFERENCE PLANS:

1.) SUBDIVISION OF LAND PREPARED FOR DOVER INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP H, LOT No. 11–1, VENTURE DRIVE, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: FEBRUARY 28, 2005; BY THIS OFFICE. RECORDED S.C.R.D. PLAN 79–87.

2.) SUBDIVISION PLAN – DOVER INDUSTRIAL DEVELOPMENT AUTHORITY – SIXTH STREET / LONG HILL ROAD EXT., DOVER, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: JANUARY 17, 1992; BY: TERRASCAN. RECORDED S.C.R.D. PLAN 41–91 + 41–92.

3.) SUBDIVISION OF LAND PREPARED FOR DOVER INDUSTRIAL DEVELOPMENT AUTHORITY, VENTURE DRIVE, DOVER, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: AUGUST 4, 1994, REVISED THROUGH 10–20–94; BY THIS OFFICE. RECORDED S.C.R.D. PLAN 45–32.

4.) AMENDED SUBDIVISION AND LOT LINE ADJUSTMENT PLAN PREPARED FOR GEORGE J. FOSTER & Co., INC. AND DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP D, LOT Nos. 9A & 11–1, VENTURE DRIVE AND QUALITY WAY, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 100'; DATED: FEBRUARY 14, 2006, REVISED THROUGH 5/3/06; BY THIS OFFICE. RECORDED S.C.R.D. PLANS 85–99 & 85–100.

5.) LOT LINE ADJUSTMENT AND SUBDIVISION PLAN OF LAND PREPARED FOR GEORGE J. FOSTER & CO., INC. AND DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY, TAX MAP D, LOT Nos. 9A & 11–1, VENTURE DRIVE AND QUALITY WAY, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE; SCALE: 1" = 100'; DATED: JUNE 12, 2006; BY: McENEANEY SURVEY ASSOCIATES, INC., RECORDED S.C.R.D. PLAN 86–73.

GsC
D / 11–1
TOTAL PARCEL AREA
1,576,425 S.F.
36.19 Ac.
GIB
5r
REMAINING AREA
637,943 S.F.
14.65 Ac.

Dr
39,283 S.F.
0.90 Ac.

PROPOSED LOT
3.30 Ac.

D / 9A
INDEX PACKAGING, INC.
1055 WHITE MOUNTAIN HIGHWAY
MILTON, NH 03851
4769 / 941
SCRD PLAN 12134

NH STATE PLANE NAD 83 – GPS OBS.
PROPOSED LOT LINE
50' WETLAND BUFFER
30' WETLAND BUFFER
BUILDING SETBACK LINE
EDGE OF PAVEMENT
PROPOSED 10' WIDE UTILITY EASEMENT
INNOVATION WAY
{PUBLIC; 60' WIDE R.O.W.}
SGC
ASPHALT SIDEWALK
PRIVATE DRIVE
VENTURE DRIVE
{PUBLIC; 60' WIDE R.O.W.}
LIMIT OF PUBLIC R.O.W.

S83°07'09"E 94.90'
S34°14'22"W 212.17'
N36°23'11"E 127.09'
S68°18'50"E 87.90'
S25°03'37"W 392.81'
N71°54'43"W 183.50'
S63°56'55"E 72.54'
N18°05'17"E 75.00'
N71°54'43"W 60.49'

N – 265283.99
E – 1185678.55
N – 265185.29
E – 1186244.89

CB
RIM = 186.60
INV. IN = 183.90
INV. OUT = 183.70
SUMP = 180.60

CB
RIM = 186.52
INV. IN = 184.17
INV. OUT = 184.17
SUMP = 181.79

CB
RIM = 187.79
INV. OUT = 184.59
SUMP = 181.79

CB
RIM = 186.60
INV. OUT = 183.25
SUMP = 180.20

CB
RIM = 186.60
INV. IN = 180.45
INV. OUT = 180.35
SUMP = 177.60

CB
RIM = 176.81
INV. IN = 172.46
INV. OUT = 172.36
SUMP = 169.61

CB
RIM = 176.81
INV. IN = 174.25
INV. OUT = 172.75
SUMP = 169.75

FES INV.
15" RCP = 172.23

SMH
RIM = 175.89
INV.OUT = 161.51

SMH (EXISTING) HEINE
RIM = 179.58
INV. IN = 169.98
INV. IN = 157.85

12" RCP FES
INV. = 183.95

12" RCP FES
INV. = 183.86

12" RCP
15" RCP
EXISTING GAS LINE
EXISTING 12" DI WATER MAIN
EXISTING 8" PVC SEWER MAIN
ASPHALT SIDEWALK
SGC
G

D / 11–9

D / 11

HEINE USA
10 INNOVATION WAY
DOVER, NH 03820
3410 / 510
SCRD PLAN 86–73

APW PROPERTIES, LLC
127 VENTURE DRIVE
DOVER, NH 03820
3984 / 847
SCRD PLANS 45–32, 39–91+92

No.	Central Angle	Radius	Arc Length	Chord Length	Chord Bearing
C1	90°00'00"	25.00'	39.27'	35.36'	N71°03'05"E
C2	7°57'48"	400.00'	55.59'	55.55'	N67°55'49"W
C3	60°56'27"	100.00'	106.36'	101.42'	S41°26'30"E
C4	150°56'27"	75.00'	197.58'	145.20'	N86°26'30"W

No.	Bearing	Distance
L1	N63°56'56"W	30.00'
L2	S26°03'04"W	14.77'

NOTES:

1.) OWNERS OF RECORD:
DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY
(D.I.D.A.)
288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOL. 1559 / 394
TITLE REF. SEE SCRD 1738 / 130, 1027 / 790, 773 / 481

2.) D / 11–1 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) THE INTENT OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS OF A PORTION (PROPOSED LOT LINES SHOWN) OF TAX MAP D, LOT 11–1. SEE REFERENCE PLAN #5 FOR THE ENTIRE LOT.

4.) ZONING DISTRICT IS IT (INNOVATIVE TECHNOLOGY)
MINIMUM LOT SIZE = 2 ACRES
MINIMUM FRONTAGE = 200 FEET
BUILDING SETBACK REQUIREMENTS:
FRONT = 50 FEET
SIDE = 50 FEET
REAR = 50 FEET
MAXIMUM LOT COVERAGE = 33 PERCENT
MAXIMUM BUILDING HEIGHT = 55 FEET

REFERENCE IS MADE TO DOVER ZONING CHAPTER 170, WITH REGARDS TO ZONING OVERLAY DISTRICTS AND ORDINANCES.

5.) TRACTS LABELED AS H ARE "LOTS" AND "AREAS" AS SHOWN ON REFERENCE PLAN #2 & #5;
TRACTS LABELED AS 5r ARE "LOTS" AND "AREAS" AS SHOWN ON REFERENCE PLAN #2 & #5.

6.) REFERENCE IS MADE TO CONSERVATION EASEMENT DEED GRANTED TO THE CITY OF DOVER CONSERVATION COMMISSION S.C.R.D. VOL. 3323, PAGE 336; DATED APRIL 14, 2005 AND RECORDED JANUARY 24, 2006.

7.) VERTICAL DATUM IS USGS NAVD88. CONTOUR INTERVAL IS 2 FEET.

8.) WETLANDS WERE FLAGGED BY DAMON E. BURT, N.H.C.W.S. #163 OF FRAGGLE ROCK ENVIRONMENTAL SERVICES ON JANUARY 7, 2021 AND LOCATED BY THIS OFFICE.

9.) THE SOIL TYPES ON THE SITE ARE:
BzB BUXTON SILT LOAM, 3 TO 8 PERCENT SLOPES
GIB GLOUCESTER FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES
GsC GLOUCESTER VERY STONY FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES
SfC SUFFIELD SILT LOAM, 8 TO 15 PERCENT SLOPES
SwA SWANTON FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES
THE SOURCE FOR THE SOIL TYPE DATA IS USDA NRCS WEB SOIL SURVEY http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

1	9/2/21	ADD ROAD UTILITIES, PROP LOT LINES, SOILS	RJM	KMM
NO.	DATE	DESCRIPTION	BY	CHK
REVISIONS				
21–2334	EXIST.COND.	21–01	1–8	
PROJECT NO	TYPE	FIELDBOOK & PAGES		

EXISTING CONDITIONS PLAN
PREPARED FOR
AMERICAN DURAFILM CO., INC.
A PORTION OF TAX MAP D, LOT No. 11–1
INNOVATION WAY & VENTURE DRIVE
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DRAWN BY: KJF	FILE: MSA\2334\DWG\21–2334
SCALE: 1" = 30'	DATE: AUGUST 6, 2021

30 15 0 15 30 60 90 120

STATE OF NEW HAMPSHIRE – No. 661 KEVIN M. McENEANEY – LICENSED LAND SURVEYOR – SIGNATURE

McEneaney Survey Associates of NEW ENGLAND
P.O. Box 681 – 24 CHESTNUT STREET
DOVER, NH 03820 (603) 742–0911

SURVEYING – PLANNING – CONSULTING

GENERAL NOTES:

1. OWNERS OF RECORD:

   DOVER BUSINESS AND INDUSTRIAL DEVELOPMENT AUTHORITY
   f/k/a DOVER INDUSTRIAL DEVELOPMENT AUTHORITY (D.I.D.A)
   288 CENTRAL AVENUE
   DOVER, NEW HAMPSHIRE
   S.C.R.D. VOL. 1559, PAGE 394

2. D/11-1 – DENOTES TAX MAP AND PARCEL NUMBER.
3. ZONING DISTRICT IS IT (INNOVATIVE TECHNOLOGY)
4. DIMENSIONAL REGULATIONS:

	REQUIRED	PROPOSED
MINIMUM LOT SIZE	= 2 ACRES	3.30 ACRES
MAXIMUM LOT COVERAGE	= 33 %	13.9%
MINIMUM FRONTAGE	= 200 FEET	556 FEET
MAXIMUM BUILDING HEIGHT	= 55 FEET	<50 FEET
BUILDING SETBACK REQUIREMENTS:		
FRONT	= 50 FEET	50 FEET
ABUT A STREET	= 50 FEET	50 FEET
SIDE SETBACK	= 50 FEET	174 FEET
REAR SETBACK	= 50 FEET	25 FEET

5. VERTICAL DATUM IS USGS NAVD88. CONTOUR INTERVAL 2 FEET.
6. SUBJECT PARCEL IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD AREA, COMMUNITY PANEL 33017C0310E, EFFECTIVE DATE: SEPTEMBER 30, 2015.
7. TOPOGRAPHIC SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES ON JANUARY 25, 2021.
8. WETLANDS WERE FLAGGED BY DAMON E. BURT, N.H.C.W.S. #163 OF FRAGGLE ROCK ENVIRONMENTAL SERVICES ON JANUARY 7, 2021 AND LOCATED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND.

DEMOLITION NOTES:

1. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
2. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY DEMOLITION/ CONSTRUCTION ACTIVITIES. (811).
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, UTILITIES AND PAVEMENT ON THE SITE TO THE LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NOT ALREADY OBTAINED BY THE OWNER AND ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
8. THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
9. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES, AND CODES.
10. ALL EROSION CONTROL NOTES SHALL INCLUDE PROVISIONS FOR CONSTRUCTION SEQUENCING, TEMPORARY EROSION CONTROL MEASURES, AND PERMANENT STANDARDS SUCH AS LOAM SPREAD RATE FOR DISTURBED AREAS, RATES OF LIME, TYPE AND RATES FOR FERTILIZER, AND SEED AND MULCH MIXTURE WITH RATES OF APPLICATION.

PERMIT SUMMARY:

1. THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY:
   N/A
2. LIST ANY VARIANCES OR SPECIAL EXCEPTIONS GRANTED BY THE ZONING BOARD OF ADJUSTMENT OR CONDITIONAL USE PERMITS GRANTED BY THE PLANNING BOARD FOR THE PROPOSED USE OR STRUCTURE, INCLUDING THE CASE NUMBER AND DATE OF DECISION AND ANY CONDITIONS.
   CONDITIONAL USE PERMIT – PENDING

WAIVERS GRANTED:

1. A WAIVER REQUEST FROM SECTION 153-14.C.(5)(B) TO ALLOW A 30' WIDE ENTRANCE/EXIT WHERE 24 FEET IS REQUIRED.

SITE NOTES

1. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A PLAN REFERENCED AND PREPARED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND (SEE EXISTING CONDITIONS PLAN IN THIS PLAN SET).
2. THE PURPOSE OF THIS PLAN IS TO DEPICT IMPROVEMENTS ASSOCIATED WITH A 20,000 S.F. COMMERCIAL BUILDING AND ASSOCIATED SITE IMPROVEMENTS.
3. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 153-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.
4. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.
5. ON-SITE SNOW STORAGE SHALL OCCUR ALONG THE EDGES OF PROPOSED PAVEMENT.
6. ALL CONSTRUCTION LAYOUT SHALL BE DONE BY A LICENSED SURVEYOR UNDER CONTRACT WITH THE CONTRACTOR.
7. SEE DETAILS FOR SIGN LEGENDS.
8. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS, AND THE AMERICAN WITH DISABILITIES ACT, LATEST EDITIONS.
9. THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING DEMOLITION AND CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE OWNERS REPRESENTATIVE. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE-DOWNS. SUCH MATERIALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AT THE COMPLETION OF THE PROJECT.
10. METHODS OF DEMOLITION, CONSTRUCTION AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO DUST CONTROL AND SILT BARRIERS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO STRUCTURES OR UTILITIES OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION PHASE CAUSED BY HIMSELF, HIS EMPLOYEES, HIS SUBCONTRACTORS OR EMPLOYEES OF SAME. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TEMPORARY FACILITIES FOR THE PROTECTION OF THE WORK, WORKERS AND PUBLIC SAFETY.
12. BUILDING ADDRESSES TO BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
13. THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS AND NH RSA 155-A:5. THE PROPOSED STRUCTURE WILL ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS.
14. THE SITE SHALL BE MAINTAINED TO PROVIDE ACCESSIBILITY IN ALL WEATHER CONDITIONS.
15. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM WITH DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
16. THE SUBJECT PARCEL(S) IS (ARE) SERVED BY MUNICIPAL WATER AND SEWER.
17. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED IN OR WITHIN THE 50 FT. OF CONSERVATION AND WETLAND DISTRICTS SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY EARTH DISTURBANCE ACTIVITY OCCURRING.
18. AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED ON PAPER AND IN A DIGITAL FORMAT IN PDF AND AUTOCAD DWG, AUTOCAD DXF OR AN ESRI FORMAT TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF PROJECT. AS-BUILT PLANS SHALL BE PREPARED AND CERTIFIED CORRECT BY A L.L.S. OR P.E. DIGITAL FILES SHALL BE GEO-REFERENCED TO NEW HAMPSHIRE STATE PLANE COORDINATES NAD83 AND SHALL BE EXPRESSED IN FEET.
19. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM-6 PM, SATURDAY 9 AM-4 PM. HOURS OF CONSTRUCTION MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR THE GENERAL CONTRACTOR AND THE SIGN SHALL NOTE THE THE ROADWAY IS PRIVATE. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR ASSISTANT CITY MANAGER.
20. A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE CITY ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
21. ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND WITH THE CITY OF DOVER COMMUNITY SERVICES REGULATIONS AND STANDARD SPECIFICATION FOR CONSTRUCTION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
22. ANY RETAINING WALL TALLER THAN FOUR FEET (4') REQUIRES ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
23. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
24. APPLICANT SHALL COMPLETE LAND USE DEVELOPMENT TRACKING FORM, MOST RECENTLY REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PILOT PROJECT (PTAPP) PORTAL.
    HTTP://WWW.UNH.EDU/UNHSC/PTAPP.
25. A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS.
26. THE OWNER OF RECORD SHALL RECORD AT THE REGISTRY OF DEEDS DOCUMENTATION SUFFICIENT TO PROVIDE NOTICE TO ALL PERSONS/ENTITIES THAT MAY ACQUIRE ANY PROPERTY SUBJECT TO THE REQUIREMENTS AND RESPONSIBILITIES DESCRIBED IN THE APPROVED STORMWATER MANAGEMENT PLAN, THE NOTICE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS FOR RECORDING CONTAINED IN RSA 477 AND 478. THE NOTICE NEED NOT SET FORTH THE REQUIREMENTS AT LENGTH, SO LONG AS IT IS SUFFICIENT TO PROVIDE NOTICE TO PROSPECTIVE PURCHASERS TO THE REQUIREMENTS FOR MAINTENANCE AND REPORTING.
27. FIRE DEPARTMENT ACCESS SHALL BE INSTALLED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS IN ALL WEATHER CONDITIONS AT ALL TIMES.
28. REFUSE PICKUP WILL BE BY PRIVATE CONTRACTOR AND WILL BE VIA DUMPSTER ON-SITE.
29. SNOW STORAGE WILL BE ACCORDING TO THE OPERATION AND MAINTENANCE PLAN AND WITHIN AREAS AS INDICATED.
30. ALL EXTERIOR DOORS ARE MANUAL AND OPENED FROM THE INTERIOR BY PANIC HARDWARE. ALL EXTERIOR DOORS SHALL COMPLY WITH ADA AND ALL LOCAL BUILDING CODE REQUIREMENTS.

UTILITY NOTES

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
2. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
3. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED. SITE PLANS SHALL SHOW ANY EASEMENTS FOR THESE SERVICES.
4. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
5. THE SUBJECT PARCEL(S) IS (ARE) SERVED BY MUNICIPAL WATER AND SEWER.
6. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
7. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, DOUBLE CEMENT LINED DUCTILE IRON PIPE OR TYPE "K" COPPER, OR CITY APPROVED MATERIAL.
8. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF DOVER WATER DEPARTMENT.
9. ALL GRAVITY SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE NOTED AND CONFORM TO THE REQUIREMENTS OF THE CITY OF DOVER SEWER DEPARTMENT STANDARDS.
10. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE CITY OF DOVER COMMUNITY SERVICES DEPARTMENT STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
11. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
12. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE UTILITY COMPANIES.
13. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
14. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
15. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
16. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES. COORDINATE WITH GAS COMPANY.
17. A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS.
18. THE CONTRACTOR SHALL CONTACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL TIMES.
19. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN
20. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF DOVER.
21. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF DOVER.
22. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
23. CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
24. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PREPARED BY THE PROJECT ELECTRICAL ENGINEER.
25. APPROVED BACKFLOW PREVENTORS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
26. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE CITY AND STATE CODES.
27. A SECURITY ALARM SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 58, ARTICLE I, SECTION 58-2 OF THE CODE OF THE CITY OF DOVER.
28. THE PROPOSED STRUCTURE SHALL COMPLY WITH CHAPTER 81, ARTICLE IV, SECTION 81-27 AND THE STATE BUILDING CODES OF THE CODE OF THE CITY OF DOVER.
29. FINAL PLANS FOR TANK LOCATIONS, DISTRIBUTION SYSTEMS, AND CROSS SECTIONS ASSOCIATED WITH THE FUEL BAYS, SHALL BE PROVIDED TO THE CITY OF DOVER ENGINEER PRIOR TO CONSTRUCTION.
30. FIRE SUPPRESSION PLANS SHALL BE PROVIDED TO THE FIRE/INSPECTION DEPARTMENT PRIOR TO INSTALLATION.
31. THE STRUCTURE SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED UNDER CHAPTER 81-30 OF THE CODE OF THE CITY OF DOVER AND THE ADOPTED STATE OF NEW HAMPSHIRE BUILDING & FIRE CODE.
32. SPRINKLER CONNECTIONS MUST BE FLUSHED IN ACCORDANCE WITH NFPA 24 AND A CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM MUST BE COMPLETED.
33. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13.
34. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
35. SEWAGE LOADING (PER ENV. – Wq 1008.03 TABLE 1008-1)

OFFICE: 2500 S.F. X 5 GPD/100 S.F.	= 125 GPD
WAREHOUSES: 10 EMPLOYEES X 10 GPD/EMPLOYEE	= 100 GPD
TOTAL	= 225 GPD

GRADING NOTES:

1. ALL ROAD DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR CONSTRUCTION OF THE CITY OF DOVER, N.H. AND "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION", LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEERING CONSULTANT APPROVED BY THE OWNER, TO CONDUCT COMPACTION TESTING AND FILL GRADATION MONITORING PER THE ABOVE REFERENCED "STANDARD SPECIFICATIONS".
3. SEE EROSION CONTROL NOTES & DETAIL SHEET FOR TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
4. ALL DRAINAGE PIPES SHALL BE HDPE OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
5. ALL DISTURBED AREAS NOT OTHERWISE CALLED FOR SURFACE TREATMENT SHALL RECEIVE 6" OF HIGH QUALITY LOAM AND SHALL BE SEEDED WITH GRASS.
6. ALL SITEWORK CONSTRUCTION SHALL BE ADVANCED USING "BEST MANAGEMENT PRACTICES" SANCTIONED BY THE USDA SCS AND NHDES.
7. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED, UTILIZED AND MAINTAINED UNTIL BASE MATERIALS ARE CONSTRUCTED.
8. CONTRACTOR SHALL PROVIDE A FINISH GRADED SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND UNDER RAISED STRUCTURES.
9. DENSITY REQUIREMENTS:

LOCATION	MINIMUM DENSITY
BELOW PAVED OR CONCRETE AREAS	95%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREA	90%

   *ALL PERCENTAGES SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH AASHTO STANDARD 180, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH AASHTO STANDARD T-191, T-204, OR T-238 AND T-239.

10. SEE GENERAL EROSION CONTROL NOTES ON DETAIL SHEET.
11. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND AS SHOWN ON PLAN. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED AND UPSTREAM AREAS HAVE BEEN STABILIZED.
12. INSPECT SILT BARRIERS AFTER EACH RAIN STORM OF 1/4 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
13. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED FOR THIS PROJECT. THE SWPPP MUST INCLUDE THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE SITE. PARTIES RESPONSIBLE FOR DEVELOPING THE SWPPP SHOULD REFER TO THE EPA NPDES CONSTRUCTION GENERAL PERMITS NOTICE OF INTENT FOR A COMPLETE OUTLINE OR REQUIRED ELEMENTS. THESE PLANS AND THE STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN PREPARED FOR THIS PROJECT MAY BE UTILIZED IN FULFILLING THE REQUIREMENTS.
14. ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.
15. LIMIT TREE CLEARING TO ONLY THE EXTENT NECESSARY FOR CONSTRUCTION.
16. PLACARDS SHALL BE INSTALLED ALONG THE EDGE OF WETLAND PRIOR TO CONSTRUCTION.

LEGEND

I.R. (set) o	– IRON ROD W/ I.D. CAP (SET)
o I.P.	– IRON PIPE
□ G.B.	– GRANITE BOUND
o I.R.	– IRON ROD
o I.R.(fnd)	– IRON ROD (FOUND)
D.H.	– DRILL HOLE
S.F.	– SQUARE FEET
Ac.	– ACRE
(TYP.)	– TYPICAL
±	– MORE OR LESS
ø	– DIAMETER
S.C.R.D.	– STRAFFORD COUNTY REGISTRY OF DEEDS
UP	– UTILITY POLE
— · · · — · · · —	– EDGE OF WETLAND
O.A.	– OVERALL
TBR	– TO BE REMOVED
R.O.W.	– RIGHT OF WAY
DMH	– DRAIN MANHOLE
CB	– CATCH BASIN
SMH	– SEWER MANHOLE
HYD.	– FIRE HYDRANT
WV	– WATER GATE VALVE
	– TREE
GV	– GAS VALVE
5'R	– PROPOSED PAVEMENT RADIUS
PW	– PROPOSED WATER
PE	– PROPOSED ELECTRIC
PS	– PROPOSED SEWER
PD	– PROPOSED DRAINAGE
PG	– PROPOSED GAS
55	– PROPOSED FINISH GRADE
x 55	– PROPOSED SPOT GRADE

UTILITY CONTACTS

NATURAL GAS: – UNITIL CORPORATION
CONTACT: DAVID BEAULIEU
325 WEST ROAD
PORTSMOUTH, NH 03801
TEL: (603)-294-5144

WATER & SEWER: – CITY OF DOVER COMMUNITY SERVICES DEPARTMENT – PUBLIC WORKS & UTILITIES
CONTACT: BILL BOULANGER
271 MAST ROAD
DOVER, NH 03820
TEL: (603)-516-6450

ELECTRIC: – EVERSOURCE
CONTACT: PIERRE BOUGIE
4 OLD DOVER ROAD
ROCHESTER, NH 03867
TEL: (603)-332-4227

TELEPHONE: – FAIRPOINT COMMUNICATIONS, INC.
CONTACT: ED LANAGAN
HIGHWAY 33, BOX 307
1575 GREENLAND ROAD
GREENLAND, NH 03804
TEL (603)-528-7335

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

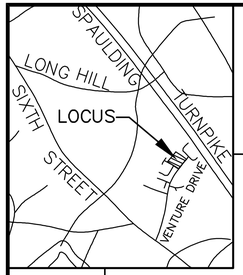
DATE: 8-6-21
SCALE: N/A
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY: SJH
PROJECT NO: 21041
FILE: SITE

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NOTE SHEET

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH



S71°54'43"E
295.33'

S.S.(fnd)

S.S.(fnd)

N18°05'17"E
192.58'

PROPOSED TREELINE

D / 11-1

TOTAL PARCEL AREA
1,576,425 S.F.
36.19 Ac.
PROPOSED LOT AREA
143,577 S.F.
3.30 Ac

PROPOSED TREELINE

EOP

LIMITS OF TREE REMOVAL

TREES TO BE REMOVED

10' WIDE UTILITY EASEMENT

EOP

EOP

PROPOSED TREELINE

I.R.(fnd)

LIMITS OF TREE REMOVAL

LIGHT POLE

SMH
RIM = 175.89
INV.OUT = 161.51

EOP

EXISTING 12" D.I. WATER MAIN

EXISTING 8" PVC SEWER MAIN

EOP

LIMITS OF SAWCUT

SGC

INNOVATION WAY

SGC

ASPHALT SIDEWALK

SGC

SGC

EXISTING GAS LINE

VENTURE DRIVE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
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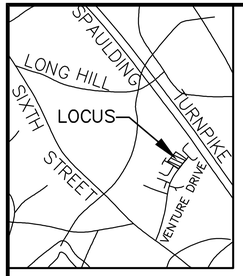
DATE: 8-6-21
SCALE: 1"=20'
DRAWN BY: SRD
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APPROVED BY:SJH
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DEMOLITION PLAN

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

5



D / 11-1

TOTAL PARCEL AREA
1,576,425 S.F.
36.19 Ac.
PROPOSED LOT AREA
143,577 S.F.
3.30 Ac

S71°54'43"E
295.33'
S.S.(fnd)
S.S.(fnd)
N18°05'17"E
192.58'
PROPOSED 25' BUILDING SETBACK
PROPOSED TREELINE
PROPOSED OUTLET PROTECTION
BIO-RETENTION AREA
PROPOSED TREELINE
PROPOSED OUTLET PROTECTION
HEAVY DUTY PAVEMENT SECTION
30'
10'R
35'R
BCC
END BCC
PROPOSED 12'x12' CONCRETE PAD WITH PRIVACY FENCE FOR DUMPSTER
150'
END SGC BEGIN BCC
40'R
PROPOSED RETAINING WALL
PROPOSED BOLLARD
PROPOSED OVERHEAD DOOR
PROPOSED BOLLARD
PROPOSED OVERHEAD DOOR
END SGC BEGIN BCC
PROPOSED 5'x5' CONCRETE PAD
EOP
30'R
30'
SGC
30'R
5'R
EOP
BEGIN SGC
EOP
100'
50'
PROPOSED FUTURE 5,000 S.F. BUILDING ADDITION
PROPOSED 5'x5' CONCRETE PAD
PROPOSED 5'x5' CONCRETE PAD
100'
PROPOSED 15,000 S.F. BUILDING
PROPOSED BIKE RACK
PROPOSED FIRE LANE NO PARKING SIGN
PROPOSED FIRE LANE NO PARKING SIGN
END VGC
3'R
8'
END BCC
PROPOSED FIRE LANE NO PARKING SIGN
PROPOSED 5'WIDE CONCRETE SIDEWALK
VGC
18'
24'
18'
5'
PROPOSED R7-8 "ACCESSIBLE PARKING" SIGN WITH BOLLARD
PROPOSED PAINTED HANDICAP PARKING SYMBOL (TYP)
PROPOSED RAMP WITH TIP-DOWN CURB
PROPOSED PAINTED ISLAND
PROPOSED CONCRETE PAD
PROPOSED RAMP WITH TIP-DOWN CURB
PROPOSED R7-8 "ACCESSIBLE PARKING" SIGN WITH BOLLARD
BCC
13
14
9' (TYP)
VGC
END SGC BEGIN VGC
3'R
3'R
END SGC BEGIN BCC
TS1
PROPOSED OUTLET PROTECTION
PROPOSED 5'x5' CONCRETE PAD
PROPOSED CONCRETE PAD FOR GENERATOR
PROPOSED CONCRETE PAD FOR TRANSFORMER
PROPOSED TREELINE
I.R.(fnd)
EOP
SGC
SGC
PROPOSED R1-1 "STOP" SIGN
10' WIDE UTILITY EASEMENT
PROPOSED FLAGPOLE
PROPOSED SIGN
24'
BEGIN SGC
10'R
10'R
BEGIN SGC
SGC

PARKING CALCULATIONS

	MAX ALLOWED	PROPOSED
OFFICE 2,500 S.F. 1 SP/300 S.F.	= 8	8
INDUSTRIAL/MANUFACTURING 17,500 S.F. 1 SP/800 S.F.	= 22	19
TOTAL PARKING	30	27

INNOVATION WAY
SGC
ASPHALT SIDEWALK
SGC
SGC
SGC
VENTURE DRIVE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

DATE: 8-6-21
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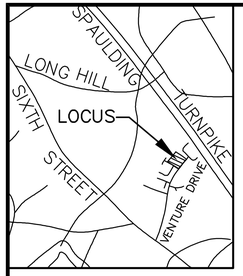
CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

SITE PLAN

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

6



PIPE CHART:

P1
15" HDPE
L=13.0'
S=0.0192

P2
12" HDPE
L=8.0'
S=0.0100

P3
12" HDPE
L=38.0'
S=0.0058

P4
12" HDPE
L=64.0'
S=0.0050

P5
12" HDPE
L=137.0'
S=0.0047

P6
15" HDPE
L=20.0'
S=0.0300

P7
12" HDPE
L=20.0'
S=0.0050

PUD
4" HDPE
L=60.0'
S=0.0000

RD1
12" HDPE
L=114.0'
S=0.0053

DRAINAGE CHART:

PCB1
RIM=183.70
INV.IN=179.70
INV.OUT=179.00

PCB2
RIM=186.65
INV.IN=182.10
INV.OUT=182.00

PCB3
RIM=184.85
INV.IN=181.85
INV.OUT=181.75

PCB4 (5' DIAMETER)
RIM=186.00
INV.IN=181.45
INV.OUT=181.35

PCB5
RIM=186.10
INV.OUT=182.10

D / 11-1

TOTAL PARCEL AREA
1,576,425 S.F.
36.19 Ac.
PROPOSED LOT AREA
143,577 S.F.
3.30 Ac

S71°54'43"E
295.33'

N18°05'17"E
192.58'

PROPOSED OUTLET PROTECTION (SEE DETAIL)
FES-1
INV.:172.4
P7
OS-1
PUD
BIO-RETENTION POND 1 (BIO1)
BUFFER IMPACT A
3,906 S.F.
BUFFER IMPACT B
701 S.F.
PROPOSED SILTSOXX 12" SINGLE ROW
STABILIZE SLOPE WITH SC150BN (TYP)
PROPOSED FUTURE
5,000 S.F.
BUILDING ADDITION
PROPOSED
15,000 S.F.
BUILDING
F.F.=189.5
RD
RD1
INV.:180.3
PCB1
FES-2
INV.:178.75
P1
BUFFER IMPACT C
2,812 S.F.
PROPOSED SILTSOXX 12" SINGLE ROW
PREFORMED SCOUR HOLE
TC 188.6
BC 188.1
PCB5
TS1
L=160.0'
S=0.005
D=2.0'
P5
FES-3
INV.:180.75
PCB4
P6
P4
PROPOSED CONSTRUCTION ENTRANCE
10' WIDE UTILITY EASEMENT
INV.IN:
182.20
P2
PCB2
P3
PCB3
INNOVATION WAY
VENTURE DRIVE
SGC
ASPHALT SIDEWALK
EOP

NOTES:

1. TOAL AREA OF WETLAND BUFFER IMPACT = 7,419 S.F.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE
NO.: P21-49

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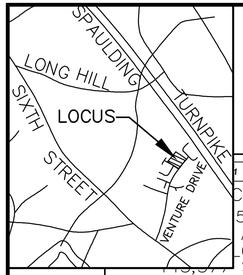
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PROJECT NO:21041
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CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

GRADING, DRAINAGE & EROSION CONTROL PLAN

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746



CEL AREA
5 S.F.
Ac.
OT AREA
S.F.
3.30 Ac

S71°54'43"E
295.33'

S.S.(fnd)

S.S.(fnd)

N18°05'17"E
192.58'

100'

50'

PROPOSED FUTURE
5,000 S.F.
BUILDING ADDITION

100'

BIO-RETENTION
AREA

PUD

RD

150'

PROPOSED
15,000 S.F.
BUILDING

RD1

RD

PD

TS1

EOP

PROPOSED FIRE
DEPARTMENT
CONNECTION (FDC)

INV. 182.1

PROPOSED 1"
DOMESTIC
SERVICE

PROPOSED 6"
WATER SERVICE

PE

PG

PS

PROPOSED
WATER
SHUTOFF

10' WIDE UTILITY EASEMENT

E

PROPOSED
FIRE HYDRANT

INV.181.04

PW

PSMH2

PROPOSED
WATER
SHUTOFF

PROPOSED 8"X6"
TEE WITH THRUST
BLOCK

PROPOSED 8"X6"
TEE WITH THRUST
BLOCK

PD

PSMH1
RIM:184.1
INV.IN(PSMH2):177.1
INV.OUT:177.0

SGC

INNOVATION WAY

SGC

ASPHALT SIDEWALK

SGC

SGC

SGC

LIGHT POLE

SMH
RIM = 175.89
INV.OUT = 161.51

I.R.(fnd)

EXISTING
UNDERGROUND ELECTRIC
APPROXIMATE (V.I.F.)

EXISTING GAS
APPROXIMATE (V.I.F.)

EOP

EXISTING 12" D.I. WATER MAIN

EXISTING 8" PVC SEWER MAIN

EOP

PROPOSED CHIMNEY
INV.:166.7
EXISTING 8" SEWER
INV.:161.15

PROPOSED 12"X8"
SADDLE WITH
THRUST BLOCK

EXISTING GAS LINE

VENTURE
DRIVE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE
NO.: P21-49

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

PROJECT NO: 21041
FILE: SITE
DESIGN BY: JRG
DRAWN BY: SRD
SCALE: 1"=20'
DATE: 8-6-21
APPROVED BY: SJH

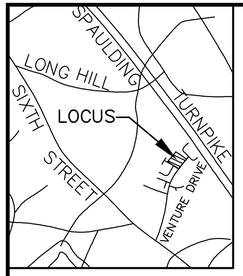
CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

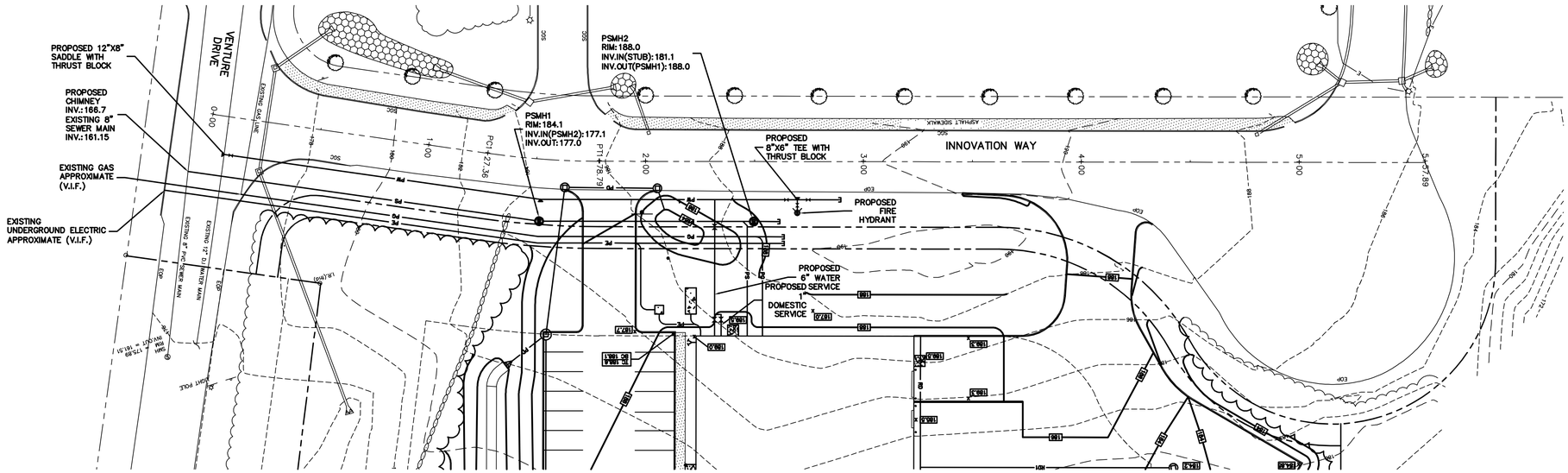
AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

MANUFACTURING/COMMERICAL
BUILDING
INNOVATION WAY
DOVER, NH

UTILITY PLAN

8

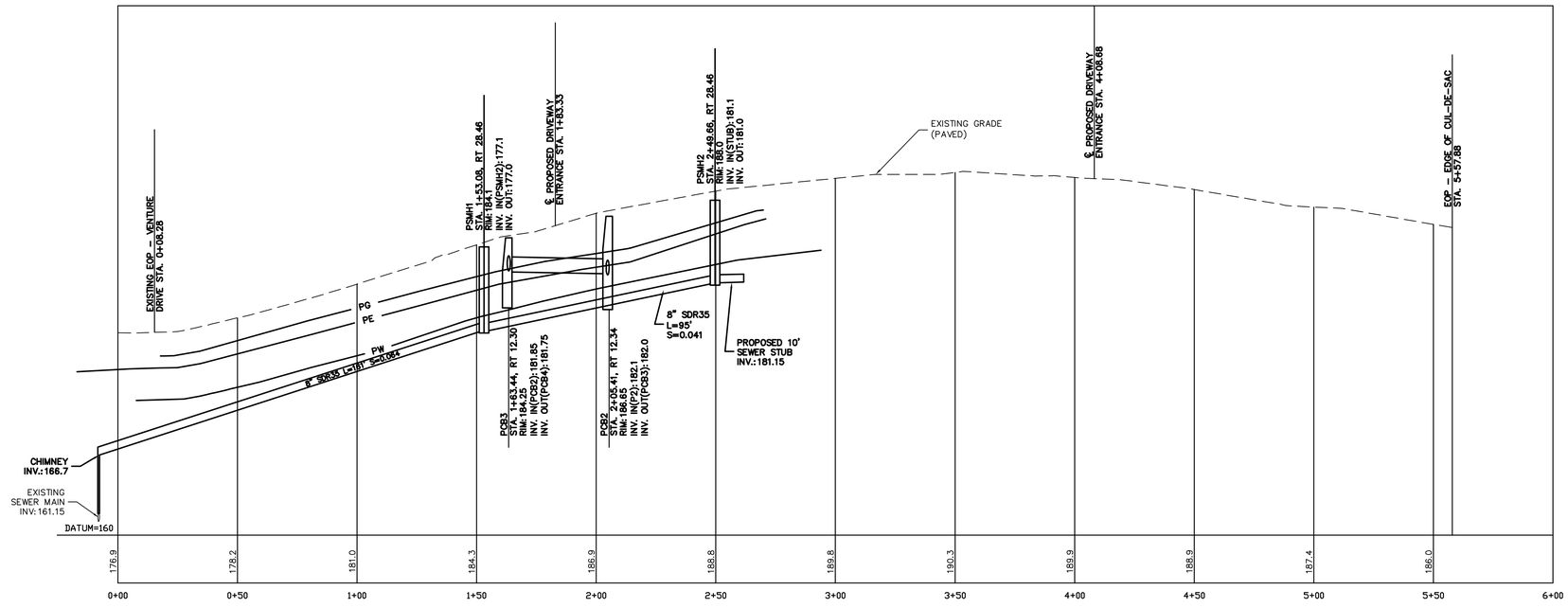




PLAN VIEW

INNOVATION WAY (PROPOSED UTILITIES)

HORIZONTAL SCALE: 1"=30'



PROFILE VIEW

INNOVATION WAY (PROPOSED UTILITIES)

HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=6'

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

DATE: 8-6-21
SCALE: 1"=30'
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 21041
FILE: SITE

UTILITY PLAN & PROFILE

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

DESCRIPTION

1. THE INTENT OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF A 20,000 S.F. BUILDING, DRAINAGE AND UTILITY IMPROVEMENTS, AND SITE ACCESS.

PROJECT NAME AND LOCATION

DURAFILM — LATITUDE N43° 13' 22"
INNOVATIONS WAY — LONGITUDE W70° 54' 28"
DOVER, NH

DISTURBED AREA

±86,900 S.F.

NOTES:

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY TIME BEFORE DISTURBED AREAS ARE STABILIZED.
2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

SEQUENCE OF MAJOR ACTIVITIES

1. CONTRACTOR SHALL PREPARE THE SWPPP, FILE FOR AND OBTAIN THE NOI A MINIMUM OF 2 WEEKS PRIOR TO COMMENCEMENT OF SITE WORK.
2. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S PRIOR TO EARTH MOVING ACTIVITIES.
3. ALL EROSION CONTROL AND PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING EARTH MOVING OPERATIONS.
4. SELECTIVE DEMOLITION.
5. REGRADE SITE TO SUBGRADE.
6. TEMPORARY WATER DIVERSION (SWALES, BASINS) MUST BE USED AS NECCESSARY UNTIL AREAS ARE STABILIZED.
7. SWALES AND PONDS (AS APPLICABLE) SHALL BE CONSTRUCTED EARLY ON IN THE CONSTRUCTION SEQUENCE AND BEFORE ROUGH GRADING OF THE SITE AND ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
8. INSTALL DRAINAGE STRUCTURES AND CONTROLS.
9. INSTALL FOUNDATION FOOTINGS AND WALLS.
10. INSTALL UTILITIES.
11. PLACE GRAVELS AND FINE GRADE.
12. STABILIZE ROADWAYS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
13. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
14. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
15. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
16. WHEN ALL SITE WORK IS COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND FILE THE EPA – N.O.T.

DEFINITIONS

AN AREA SHALL BE CONSIDERED STABLE OF ONE OF THE FOLLOWING HAS OCCURRED.

1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
3. A MINIMUM OF 3" OF NON–EROSIVE MATERIAL SUCH AS STONE OR RIP–RAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED

INSTALLATION, MAINTENANCE, AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS

A. SILT BARRIER

1. INSTALLATION
   a. USE SILT BARRIER AS PERIMETER CONTROLS, PARTICULARLY AT THE LOWER OR DOWN SLOPE EDGE OF A DISTURBED AREA.
   b. LEAVE SPACE FOR MAINTENANCE BETWEEN TOE AND SLOPE OF SILT BARRIER.
   c. TRENCH IN THE SILT BARRIER ON THE UPHILL SIDE (6 INCHES DEEP BY 6 INCHES WIDE).
   d. INSTALL STAKES ON THE DOWNHILL SIDE OF THE SILT BARRIER.
   e. CURVE THE END OF THE SILT BARRIER UP–GRADIENT TO HELP IT CONTAIN RUNOFF.
2. SEQUENCE OF INSTALLATION
   a. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
3. MAINTENANCE
   a. SILT BARRIERS SHOULD BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
   b. SILT BARRIERS HAVE A USEFUL LIFE OF ONE SEASON. ON LONGER CONSTRUCTION PROJECTS, SILT BARRIERS SHOULD BE REPLACED PERIODICALLY TO MAINTAIN EFFECTIVENESS.
   c. REMOVE SEDIMENT WHEN IT REACHES ONE–THIRD (1/3) THE HEIGHT OF THE SILT BARRIER.
   d. REPLACE THE SILT BARRIERS WHERE THEY ARE TORN, WORN, OR OTHERWISED DAMAGED AND MONITOR PERFORMANCE TO ENSURE EFFECTIVE PERFORMANCE.
   e. RETRENCH OR REPLACE ANY SILT BARRIER THAT IS NOT PROPERLY ANCHORED TO THE GROUND.
   f. IF THERE IS EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
   g. SILT BARRIERS SHOULD BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERMINING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SILT BARRIERS SHOULD BE REPLACED WITH A TEMPORARY CHECK DAM.

B. MULCHING

1. TIMING
   a. APPLY MULCH PRIOR TO ANY STORM EVENT. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.
   b. IN OTHER AREAS, THE TIME PERIOD CAN RANGE FROM 14 TO 30 DAYS OF INACTIVITY ON A AREA. THE LENGTH OF TIME VARYING WITH SITE CONDITIONS. PROFESSIONAL JUDGEMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS (SOIL ERODIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES, ETC.) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.
   c. WITHIN 100 FEET OF RIVERS, STREAMS, WETLANDS, AND IN LAKE AND POND WATERSHEDS, THE TIME PERIOD OF WHICH MULCHING SHOULD TAKE OCCUR SHOULD BE NO GREATER THAN SEVEN (7) DAYS. THIS SEVEN DAY LIMIT SHOULD BE REDUCED FURTHER DURING WET WEATHER PERIODS.
2. APPLICATION RATE
   a. MULCH SHALL BE APPLIED AT A RATE OF BETWEEN 1.5 TO 2 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1000 SQUARE FEET.
   b. GUIDELINES FOR WINTER MULCH APPLICATION. WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 150–200 POUNDS OF HAY OR STRAW PER ACRE WITH ABOUT 4 INCHES IN DEPTH. A TACKIFIER MAY BE ADDED TO THE MULCH.
3. MAINTENANCE
   a. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS. CHECK FOR SIGNS OF EROSION OR DISPLACEMENT OF THE MULCH. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.
   b. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE AND SHOULD BE REPAIRED AS NECCESSARY.
   c. INSPECTIONS SHOULD TAKE PLACE UNTIL THE SITE IS ESTABLISHED.
   d. EROSION CONTROL MULCH USED FOR TEMPORARY STABILIZATION SHOULD BE LEFT IN PLACE. VEGETATION ADDS STABILITY AND SHOULD BE PROMOTED.

C. TEMPORARY SEEDING

1. SEEDBED PREPARATION
   a. STONES AND TRASH SHOULD BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
   b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
   c. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS.
      i) APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER OR EQUIVALENT.
      ii) APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE OR 138 POUNDS PER 1,000 SQUARE FEET.
2. SEEDING
   a. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SUMMARY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   b. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
   c. TEMPORARY SEEDING BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE.
   d. VEGETATED GROWTH COVERING 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH.
3. MAINTENANCE
   a. TEMPORARY SEEDING SHALL BE INSPECTED PERIODICALLY. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER FABRICS, CHECK DAMS, ETC.).

D. PERMANENT SEEDING

1. BEDDING – STONES LARGER THAN 2 INCHES, TRASH, ROOTS, AND OTHER DEBRIS INTERFERRING WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF 4" TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL.
2. FERTILIZER
   a. LIME AND FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 4 INCHES USING A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT PRIOR TO OR AT THE SAME TIME OF SEEDING.
   b. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITORGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER.
   c. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
      AGRICULTURAL LIMESTONE @ 138 LBS. PER 1,000 S.F.
      LOW PHOSPHATE (N–P205–K20) FERTILIZER @ 13.8 LBS. PER 1,000 S.F.
3. SEED MIXTURE (RECOMMENDED)
   RATE:

TYPE	LBS. PER ACRE	LBS. PER 1,000 S.F.
TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.10

4. SEEDING
   a. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST.
   b. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   c. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION.
5. HYDROSEEDING
   a. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF STRAW MULCH ON CRITICAL AREAS IS PREFERRED SINCE IT GRANTS BETTER SLOPE PROTECTION BY USING ADHESIVE MATERIALS.
   b. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY).
   c. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
6. MAINTENANCE
   a. PERMANENT SEEDED AREAS SHOULD BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTIONS, MAINTENANCE, AND CORRECTIVE ACTIONS SHOULD CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
   b. SEEDED AREAS SHOULD BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION, WITH MOWING HEIGHT AND FREQUENCY DEPENDENT ON TYPE OF GRASS COVER.
   c. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABALIZATION OF EXPOSED SOILS.
   d. IF EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS RESEEDED. WITH OTHER TEMPORARY MEASURES USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.
   e. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.

E. STORM DRAIN INLET PROTECTION

1. SPECIFICATIONS
   a. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE BARRIER SHOULD BE LESS THAN ONE ACRE.
   b. ANY RESULTANT PONDING OF STORMWATER MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.
2. INSTALLATION
   a. INSTALL INLET PROTECTION AS SOON AS STORM DRAIN INLETS ARE INSTALLED AND BEFORE LAND–DISTURBANCE ACTIVITIES BEGIN IN AREAS WITH EXISTING STORM DRAIN SYSTEMS.
   b. PROTECT ALL INLETS THAT COULD RECEIVE STORMWATER FROM YOUR CONSTRUCTION PROJECT.
   c. USE IN CONJUNCTION WITH OTHER EROSION PREVENTION AND SEDIMENT CONTROL BMPS.
   d. DESIGN YOUR INLET PROTECTION TO HANDLE THE VOLUME OF WATER FROM THE AREA BEING DRAINED. ENSURE THAT THE DESIGN IS SIZED APPROPRIATELY.
3. MAINTENANCE
   a. INSPECT INLETS BARRIERS FREQUENTLY, BEFORE AND AFTER EACH RAINFALL EVENT AND REPAIR WHEN NECESSARY.
   b. SEDIMENT SHOULD BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BARRIER.
   c. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   d. SWEEP STREETS, SIDEWALKS, AND OTHER PAVED AREAS REGULARLY.
   e. ALL CATCH BASINS AND STORM DRAIN INLETS MUST BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES THE SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT FENCES AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.

WASTE DISPOSAL

a. WASTE MATERIALS
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
b. HAZARDOUS WASTE
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
c. SANITARY WASTE
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

MAINTENACE OF STORMWATER MANAGEMENT FACILITIES

THE PROJECT PROPONENT IS RESPONSIBLE FOR THE MAINTENANCE OF ALL STORMWATER FACILITIES DURING CONSTRUCTION AND THE PORPERTY OWNER IS RESPONSIBLE AFTER CONSTRUCTION IS COMPLETE.

CATCH BASINS & STORMWATER TREATMENT STRUCTURES

1. CATCH BASINS & STORMWATER TREATMENT STRUCTURES SHOULD BE INSPECTED ON A MONTHLY BASIS AND/OR AFTER A MAJOR RAINFALL EVENT TO ASSURE THAT DEBRIS OR SEDIMENTS DO NOT REDUCE THE EFFECTIVENESS OF THE SYSTEM.

SPILL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL SANITARY EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES THAT WILL BE FOLLOWED ON SITE DURING
1. THE CONSTRUCTION PROJECT:
   a. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.
   b. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
   c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
   d. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
   e. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
   f. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
2. HAZARDOUS PRODUCTS:
   a. THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
   b. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE
   c. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
   d. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

B. PRODUCT SPECIFICATION PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:
1. PETROLEUM PRODUCTS:
   a. ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENACE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
2. FERTILIZERS:
   a. FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
3. PAINTS:
   a. ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
4. CONCRETE TRUCKS:
   a. CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA ON SITE.

C. SPILL CONTROL PRACTICES
IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
   a. 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.
   b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
   c. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
   d. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
   e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OF LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
   f. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT OCCURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.
   g. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY–TO–DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

THE PROJECT PROPONENT IS REQUIRED TO MANAGE CONSTRUCTION TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO CONTROLLING INVASIVE SPECIES AND CONTROLLING FUGITIVE DUST IN ACCORDANCE WITH ENV–A 1002.

AGR 3800 PROHIBITED INVASIVE PLANT SPECIES RULES

THE RULE, AGR 3800, STATES: NO PERSON SHALL COLLECT, TRANSPORT, IMPORT, EXPORT, MOVE, BUY SELL, DISTRIBUTE, PROPAGATE OR TRANSPLANT ANY LIVING AND VIABLE PORTION OF ANY PLANT SPECIES, WHICH INCLUDED ALL OF THEIR CULTIVARS AND VARIETIES, LISTED IN TABLE 3800.1, NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST'. A COMPLETE COPY OF THE RULES CAN BE ACCESSED ON THE INTERNET AT HTTP://AGRICULTURE.NH.GOV/TOPICS/PLANTS_INSECTS.HTM.

ENV–A 1002 FUGITIVE DUST; PRECAUTIONS TO PREVENT, ABATE, AND CONTROL FUGITIVE DUST.

a. ANY PERSON ENGAGED IN ANY ACTIVITY WITHIN THE STATE EMITS FUGITIVE DUST, OTHER THAT THOSE LISTED IN ENV–A 1002.02 (b), SHALL TAKE PRECAUTIONS THROUGHOUT THE DURATION OF THE ACTIVITY IN ORDER TO PREVENT, ABATE, AND CONTROL THE EMISSION OF FUGITIVE DUST.
b. PRECAUTIONS REQUIRED BY (a) ABOVE, SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
   i) THE USE OF WATER OR HYDROPHILIC MATERIAL ON OPERATIONS OR SURFACES, OR BOTH;
   ii) THE APPLICATION OF ASPHALT, WATER, OR HYDROPHILIC MATERIAL, OR TARPS OR OTHER SUCH COVERS TO MATERIAL STOCKPILES;
   iii) THE USE OF HOODS, FANS, FABRIC FILTERS, OR OTHER DEVICES TO ENCLOSE AND VENT AREAS WHERE MATERIALS PRONE TO PRODUCING FUGITIVE DUST ARE HANDLED;
   iv) THE USE OF CONTAINMENT METHODS FOR SANDBLASTING OR SIMILAR OPERATIONS; AND
   v) THE USE OF VACUUMS OR OTHER SUCTION DEVICES TO COLLECT AIRBORNE PARTICULATE MATTER.

PER 153–10 F:

ALL SITE IMPROVEMENTS WHICH REQUIRE BLASTING OF LAND SHALL MEET THE FOLLOWING REQUIRMENTS PRIOR TO ANY BLASTING OCCURING.

1. THE APPLICANT SHALL PREPARE A PRE–BLAST SURVEY OF ALL STRUCTURES WITHIN FIVE HUNDRED (500) FEET OF THE EXTERNAL BOUNDARIES OF THE PROPOSED LOT TO BE DEVELOPED. THIS SURVEY, ALONG WITH A MONITORING PLAN, SHALL BE ON FILE WITH THE DOVER FIRE AND RESCUE. UPON RECOMMENDATIONS OF THE CHIEF, THE PLANNING BOARD MAY REQUIRE A PRE–BLAST SURVEY OF ALL STRUCTURES WITHIN ONE THOUSAND (1000) FEET.
2. THE APPLICANT SHALL HOLD A NEIGHBORHOOD MEETING TO REVIEW THE BLASTING PLAN AND PRE–BLAST SURVEY. REPRESENTATIVES OF THE FIRE AND RESCUE AND THE BLASTING COMPANY IN ATTENDANCE, PRIOR TO ANY ON–SITE BLASTING. ABUTTERS WITHIN ONE THOUSAND (1000) FEET OF THE EXTERNAL BOUNDARY OF THE PROJECT PARCEL SHALL BE NOTIFIED BY THE CERTIFIED MAIL (PAID FOR BY THE APPLICANT) OF THE MEETING NO LESS THAN TEN (10) DAYS PRIOR TO THE MEETING AND NO MORE THAN FIFTEEN (15) DAYS PRIOR TO THE MEETING. THE NOTICE SHALL STATE THE TIME AND DATE OF THE BLASTING AND CONTAIN A MAP SHOWING THE BLASTING AREA, THE 1,000–FOOT–RADIUS AREA, AND THE 500–FOOT–RADIUS AREA.
3. PERMIT HOLDERS SHALL BE IN COMPLIANCE WITH NFPA 495, EXPLOSIVE MATERIALS CODE. IN ADDITION TO ALL OTHER ORDINANCES AND CODES SET FORTH IN THE CITY OF DOVER CODE, § 153–14A, STORMWATER MANAGEMENT, EROSION CONTROL AND FLOOD HAZARDS, OF THIS CHAPTER AND THE CITY OF DOVER FIRE PREVENTION CODE, WHICH SPECIFICALLY PROHIBITS THE OVERNIGHT STORAGE OF EXPLOSIVES OR BLASTING AGENTS. FURTHER, ALL STORAGE MAGAZINES SHALL BE LOCKED IN THE OPEN POSITION AT THE END OF THE DAY'S OPERATION FOR EASY INSPECTION BY CITY OFFICIALS.
4. BLASTING PERMITS MAY BE OBTAINED BY CALLING THE DOVER FIRE AND RESCUE DURING NORMAL BUSINESS HOURS. THE PERMITS ARE ONLY ACTIVE FOR THE DATES AND TIME SPECIFIED ON THE PERMIT.
5. PERMIT HOLDERS SHALL HOLD INSURANCE AGAINST CLAIMS FOR DAMAGES FOR PERSONAL INJURY AND PROPERTY WHICH MAY ARISE FROM THE PERFORMANCE OF THE WORK.
6. HOURS OF OPERATION FOR THE BLASTING SHALL BE NO EARLIER THAN 8:00AM AND NO LATER THAN 6:00PM, MONDAY THROUGH FRIDAY, EXCLUDING FEDERAL HOLIDAYS.

WINTER CONSTRUCTION NOTES

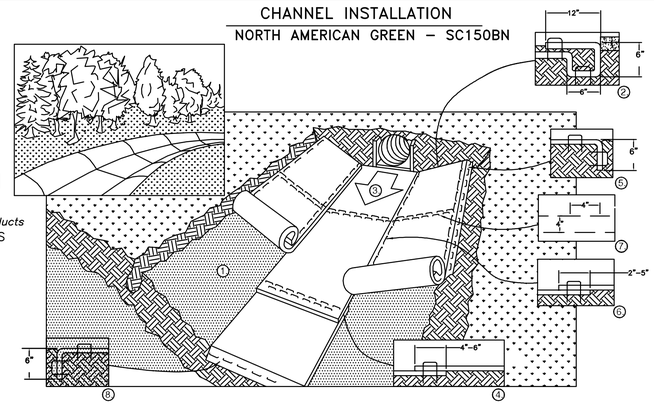
1. ALL PROPOSED POST–DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT.
2. ALL SLOPES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS.
3. AFTER OCTOBER 15TH, INCOMPLETE ROAD SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3–INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 403.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

ENV–WQ 1510: BEST MANAGEMENT PRACTICES FOR BLASTING

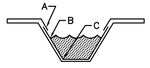
1) ALL ACTIVITIES ASSOCIATED WITH BLASTING NEED TO BE OPTIMIZED TO PREVENT THE RELEASE OF CHEMICALS ASSOCIATED WITH BLASTING ACTIVITIES TO THE ENVIRONMENT.
2) IF MORE THAN 5,000 CY OF ROCK REMOVAL IS REQUIRED DRINKING WATER WELLS MUST BE IDENTIFIED AND LOCATED WITHIN 2000 FEET OF THE PROPOSED BLASTING ACTIVITIES. DEVELOP A GROUNDWATER QUALITY SAMPLING PROGRAM TO MONITOR FOR NITRATE AND NITRITE EITHER IN THE DRINKING WATER SUPPLY WELLS OR IN OTHER WELLS THAT ARE REPRESENTATIVE OF THE DRINKING WATER SUPPLY WELLS IN THE AREA. THE PLAN MUST INCLUDE PRE AND POST BLAST WATER QUALITY MONITORING AND BE APPROVED BY NHDES PRIOR TO INITIATING BLASTING. THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY NHDES.
3) THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:
   (1) LOADING PRACTICES. THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
      (A) DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS

CHANNEL INSTALLATION
NORTH AMERICAN GREEN – SC150BN

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL–O–SEED DO NOT SEED PREPARED AREA. CELL–O–SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" – 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. NOTE: * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.



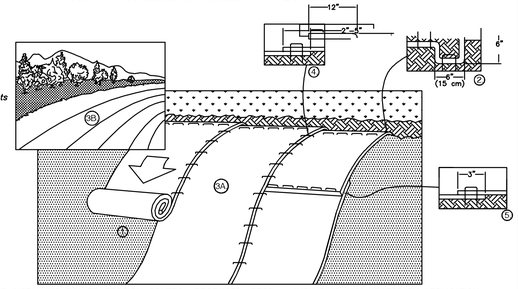
CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES
BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY

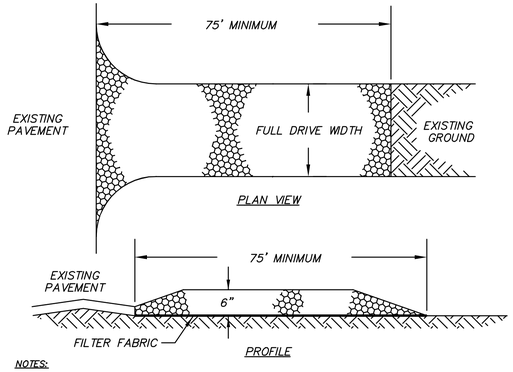
SLOPE INSTALLATION
NORTH AMERICAN GREEN – SC150BN

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
   NOTE: WHEN USING CELL–O–SEED DO NOT SEED PREPARED AREA. CELL–O–SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP's EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM® , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
   NOTE:
   *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

NOTE: THE USE OF WELDED PLASTIC OR BIODEGRADABLE PLASTIC NETTING OR THREAD IN EROSION CONTROL MATTING IS PROHIBITED. THE USE OF WILDLIFE FRIENDLY ORGANIC MATERIALS IS RECOMMENDED.



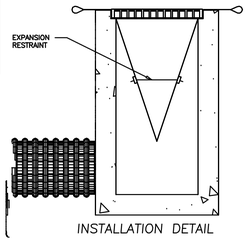
NOTES:
1. *SEE EROSION CONTROL NOTES BELOW FOR MATERIAL, INSTALLATION AND MAINTENANCE REQUIREMENTS.*
2. *TO BE INSTALLED AT EACH POINT OF EGRESS FROM THE WORK AREA.*

STABILIZED CONSTRUCTION ENTRANCE

1. SPECIFICATIONS
   A. AGGREGATE SIZE: USE THREE (3) INCHES STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
   B. AGGREGATE THICKNESS: NOT LESS THAN SIX (6) INCHES.
   C. WIDTH TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS.
   D. LENGTH: AS REQUIRED, BUT NOT LESS THAN SEVENTY–FIVE (75) FEET. PIPING OF SURFACE WATER UNDER ENTRANCE SHALL BE PROVIDED AS REQUIRED.
   E. GEOTEXTILE: TO BE PLACED OVER THE ENTIRE AREA TO BE COVERED WITH AGGREGATE.
   F. CRITERIA FOR GEOTEXTILE: THE FABRICS SHALL BE TREVIA SPUNBOND 1135, MIRAFI 600X OR EQUAL.

2. MAINTENANCE
   THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



OIL-ABSORBANT SILTSACK®

(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN–OFF OR SPILLS)
DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK® CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL–ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL–ABSORBANT SILTSACK®, WITH A WOVEN PILLOW INSERT.

SILTSACK®
SPECIFICATIONS

NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS. AS SUPPLIED BY AH HARRIS OF PORTSMOUTH OR APPROVED EQUAL

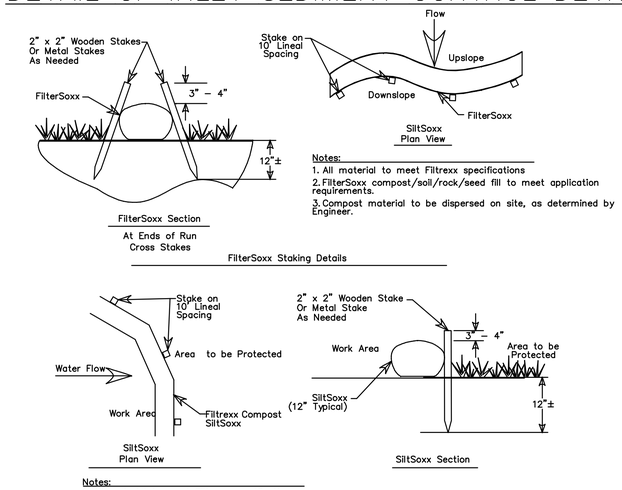
REGULAR FLOW SILTSACK®
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN–OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D–4632	20 %
PUNCTURE	ASTM D–4833	120 LBS
MULLEN BURST	ASTM D–3786	800 PSI
TRAPEZOID TEAR	ASTM D–4533	120 LBS
UV RESISTANCE	ASTM D–4355	80 %
APPARENT OPENING SIZE	ASTM D–4751	40 US SIEVE
FLOW RATE	ASTM D–4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D–4491	0.55 SEC –1

HI–FLOW SILTSACK®
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN–OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D–4632	20 %
PUNCTURE	ASTM D–4833	135 LBS
MULLEN BURST	ASTM D–3786	420 PSI
TRAPEZOID TEAR	ASTM D–4533	45 LBS
UV RESISTANCE	ASTM D–4355	90 %
APPARENT OPENING SIZE	ASTM D–4751	20 US SIEVE
FLOW RATE	ASTM D–4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D–4491	1.5 SEC –1

DETAIL OF INLET SEDIMENT CONTROL DEVICE



Notes:
1. All material to meet Filtrexx specifications
2. FilterSoxx compost/soil/rock/seed fill to meet application requirements.
3. Compost material to be dispersed on site, as determined by Engineer.

Notes:
1. All material to meet Filtrexx specifications
2. SiltSoxx compost/soil/rock/seed fill to meet application requirements.
3. SiltSoxx depicted is for minimum slopes. Greater slopes may require larger socks per the Engineer.
4. Compost material to be dispersed on site, as determined by Engineer.

SILTSOXX DETAILS
NOT TO SCALE

SEEKING REPORTS OF RARE TURTLES

The NH Fish & Game Department is collecting observations of four turtle species:



Blanding's turtle (state endangered)
- Large, dark/black domed shell with lighter speckles
- Distinct yellow throat/chin
- Aquatic but often moves on land



Wood turtle (special concern)
- Sculpted, pyramidal brownish shell
- Orange around neck and limbs
- River/stream turtle spending many months on land



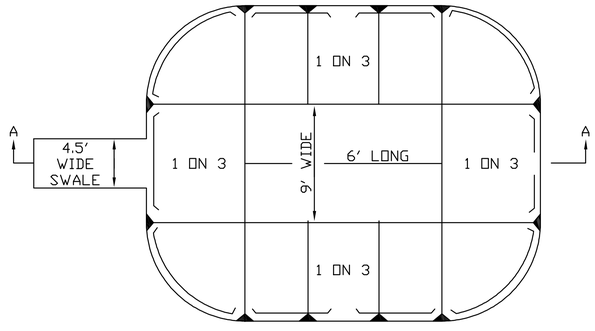
Eastern box turtle (state endangered)
- Small terrestrial turtle with highly domed shell
- Irregular yellow or orange markings over brown/black base



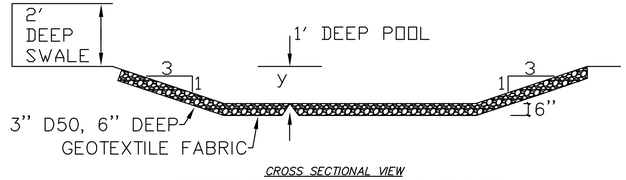
Spotted turtle (state threatened)
- Small, mostly aquatic with black or dark brown with yellow spots.
- Fairly flat shell compared to Blanding's turtle

Report sightings to RAARP@wildlife.nh.gov or 603-271-2461 *Please report promptly, noting specific location and date – Photographs strongly encouraged*

NOTES:
1. *ALL OUTSIDE CONSTRUCTION PERSONNEL SHALL RECEIVE TRAINING IN THE IDENTIFICATION OF RARE TURTLE SPECIES AND MADE AWARE OF THEIR PROTECTED STATUS.*
2. *THE USE OF WELDED PLASTIC OR 'BIODEGRADABLE PLASTIC' NETTING OR THREAD IN EROSION CONTROL MATTING IS PROHIBITED*
3. *THE USE OF EROSION CONTROL BERM, WHITE FILTREXX DEGRADABLE WOVEN SILT SOCK, OR 'WILDLIFE FRIENDLY' WOVEN ORGANIC MATERIAL (E.G. COCO OR JUTE MATTING SUCH AS NORTH AMERICAN GREEN SC150BN OR EQUIVALENT) ARE ACCEPTABLE FOR USE*
4. *IF WOOD, SPOTTED, OR BLANDING'S TURTLES ARE FOUND LAYING EGGS IN THE WORK AREA, PLEASE CONTACT MELISSA DOPERALSKI AT 271–1738 or JOSH MEGYESY AT 271–1125 FOR FURTHER INSTRUCTIONS.*



PLAN VIEW



CROSS SECTIONAL VIEW

PREFORMED SCOUR HOLE DETAIL AT OUTLER TO TS#1
NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21–49

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9–2–21

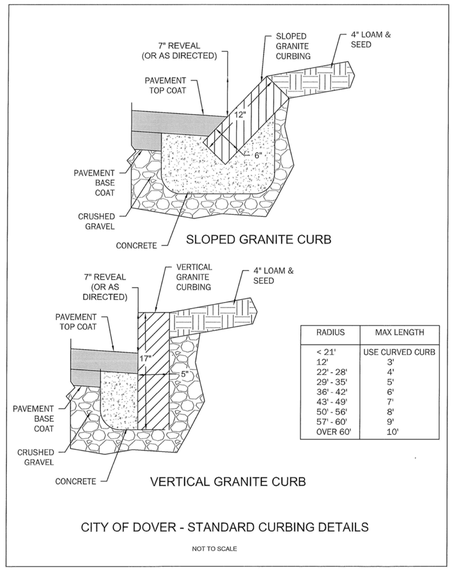
DATE: 8–6–21
SCALE: N/A
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY: SJH
PROJECT NO: 21041
FILE: SITE

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

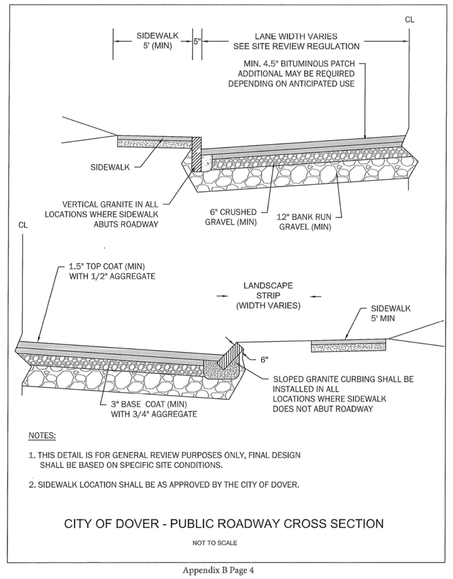
DETAILS

11



RADIUS	MAX LENGTH
< 21'	USE CURVED CURB
12'	3'
22' - 28'	4'
29' - 35'	5'
36' - 42'	6'
43' - 49'	7'
50' - 56'	8'
57' - 60'	9'
OVER 60'	10'

Appendix B Page 6



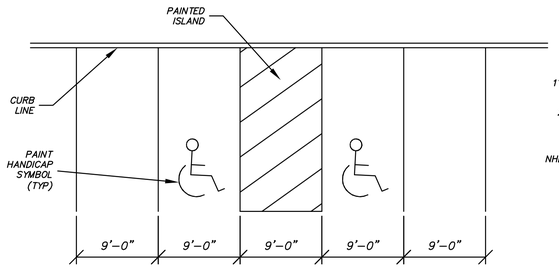
NOTES:

1. THIS DETAIL IS FOR GENERAL REVIEW PURPOSES ONLY, FINAL DESIGN SHALL BE BASED ON SPECIFIC SITE CONDITIONS.
2. SIDEWALK LOCATION SHALL BE AS APPROVED BY THE CITY OF DOVER.

CITY OF DOVER - PUBLIC ROADWAY CROSS SECTION

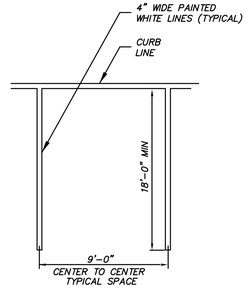
NOT TO SCALE

Appendix B Page 4

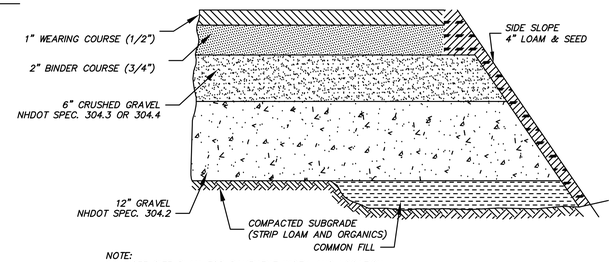


ACCESSIBLE PARKING LAYOUT

NOT TO SCALE



STANDARD PARKING STALL

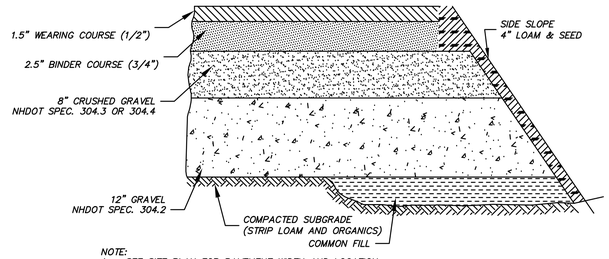


NOTE:

1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

TYPICAL PAVEMENT SECTION

NOT TO SCALE



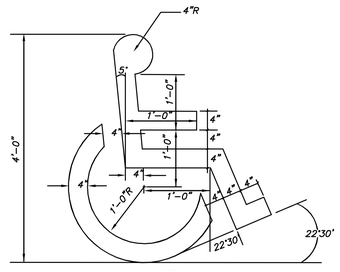
NOTE:

1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

HEAVY DUTY TYPICAL PAVEMENT SECTION

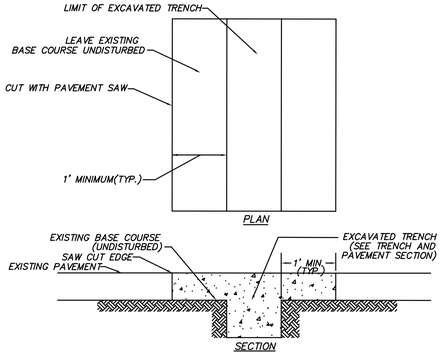
NOT TO SCALE

NOTE: SYMBOL TO BE PAINTED IN ALL HANDICAPPED SPACES



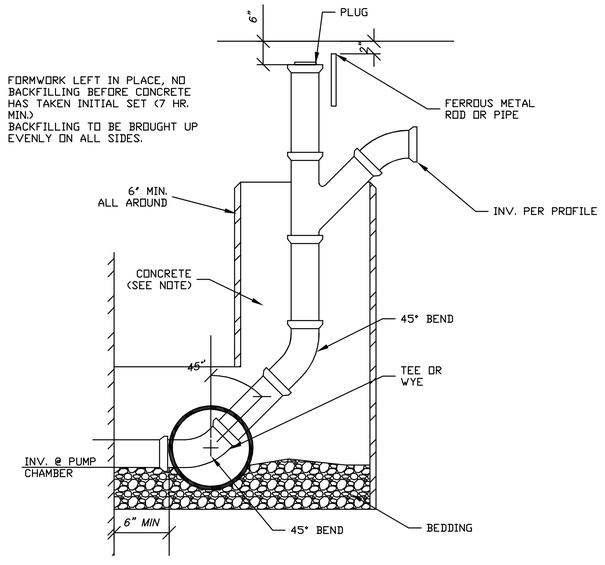
PAINTED HANDICAP SYMBOL

NOT TO SCALE



TRENCH PATCH

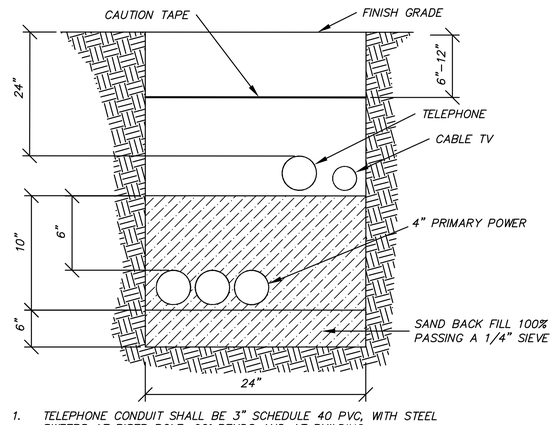
NOT TO SCALE



NOTE: CONCRETE. CONCRETE SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATIONS AS FOLLOWS:
CEMENT- 6.0 BAGS/C.Y. WATER- 5.75 GAL/BAG
AGGREGATE-1 ½" MAX.

CHIMNEY

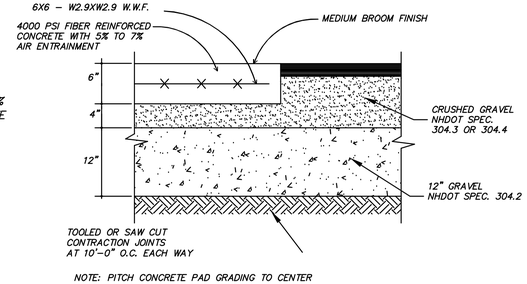
NOT TO SCALE



1. TELEPHONE CONDUIT SHALL BE 3" SCHEDULE 40 PVC, WITH STEEL SWEEPS AT RISER POLE, 90° BENDS AND AT BUILDING.
2. LEAVE PULL ROPE IN ALL CONDUITS FOR CABLE INSTALLATION.
3. FOR COMPLETE SPECIFICATIONS SEE "PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE CONSTRUCTION SPECIFICATIONS FOR UNDERGROUND CONDUIT SYSTEMS".
4. CONTRACTOR SHOULD VERIFY THE NUMBER & SIZE OF CONDUIT WITH THE APPROPRIATE UTILITIES.

UTILITY TRENCH

NOT TO SCALE



NOTE: PITCH CONCRETE PAD GRADING TO CENTER

DUMPSTER DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

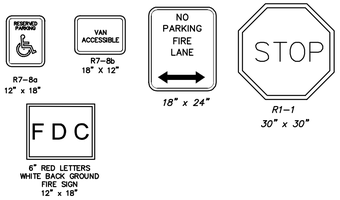
DATE: 8-6-21
SCALE: N/A
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 21041
FILE: SITE

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

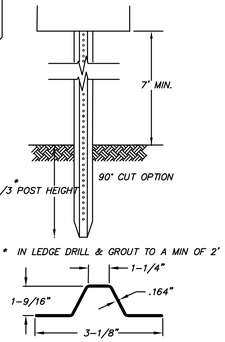
DETAILS

12

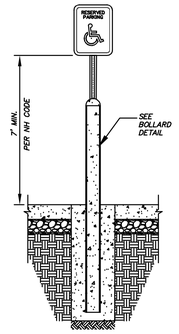


NOTE:
1. ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

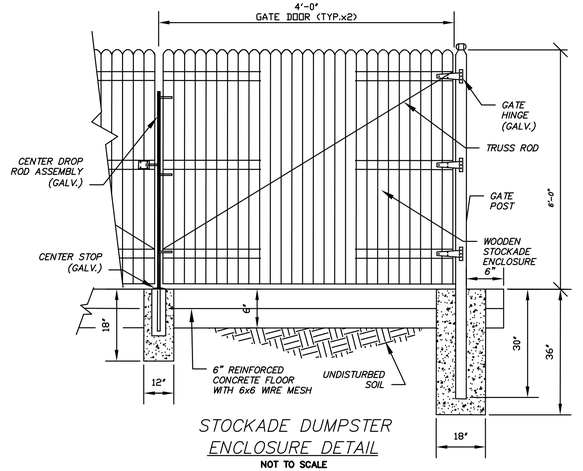
LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)
HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070 - 1080)
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN
BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY.
ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.



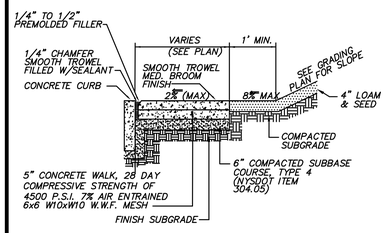
SIGN LEGEND & SIGN POST
NOT TO SCALE



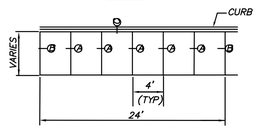
SIGN IN BOLLARD
NOT TO SCALE



STOCKADE DUMPSTER ENCLOSURE DETAIL
NOT TO SCALE

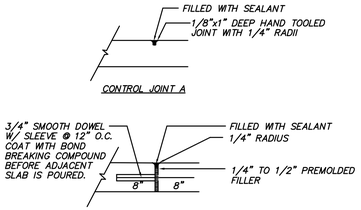


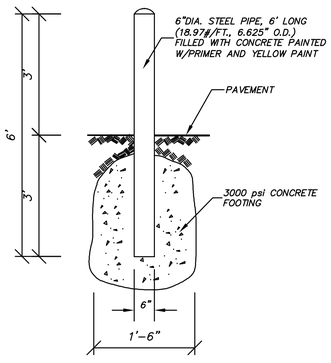
SECTION



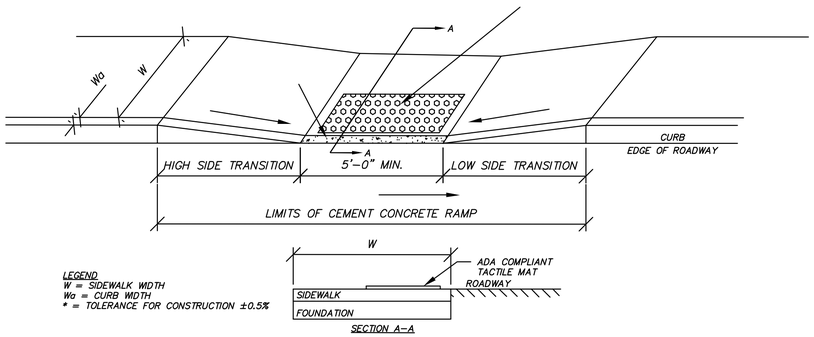
PLAN

CONCRETE SIDEWALK
NOT TO SCALE

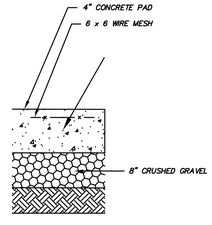




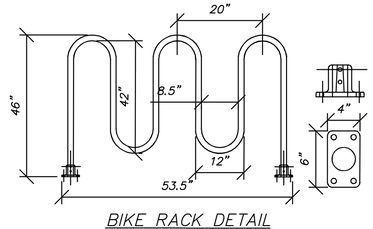
BOLLARD DETAIL
NOT TO SCALE



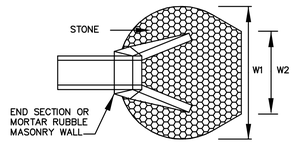
SIDEWALK APRON
NOT TO SCALE



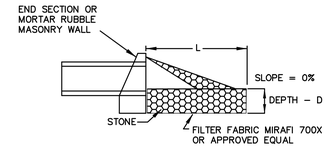
BIKE RACK PAD DETAIL
NOT TO SCALE



BIKE RACK DETAIL
NOT TO SCALE

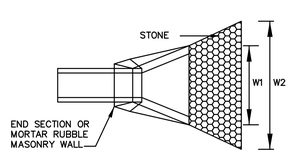


PLAN

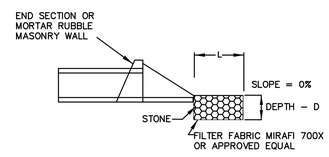


SECTION

STONE APRON OUTLET PROTECTION DETAIL OUTLET TO DEFINED CHANNEL



PLAN



SECTION

STONE APRON OUTLET PROTECTION DETAIL OUTLET TO FLAT AREA, NON DEFINED CHANNEL

MAINTENANCE
THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

STONE GRADATION

% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100	1.5 TO 2.0 D50
85	1.3 TO 1.8 D50
50	1.0 TO 1.5 D50
15	0.3 TO 0.5 D50

CONSTRUCTION SPECIFICATIONS

1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIPRAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK OR GRAVEL USED FOR FILTER OR RIPRAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIPRAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

OUTLET FROM	W1(ft)	W2(ft)	L(ft)	D (ft)	D50(IN)	CHANNEL TYPE
FES1	2	5	5	1	6	UNDEFINED
FES2	4	18	14	1	6	UNDEFINED
FES3	12	5	12	1	6	DEFINED

RIP RAP OUTLET PROTECTION
NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

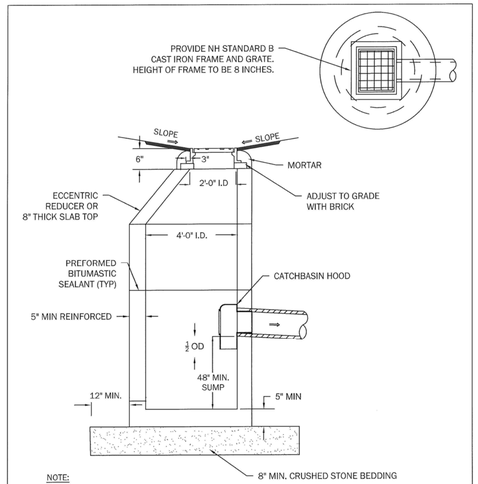
DATE: 8-6-21
SCALE: N/A
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO:21041
FILE: SITE

DETAILS

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

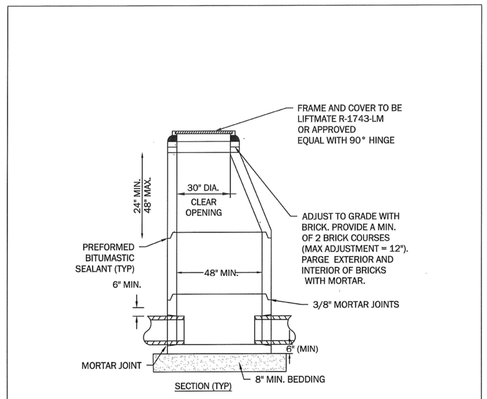
MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

13



CITY OF DOVER - CATCHBASIN

NOT TO SCALE

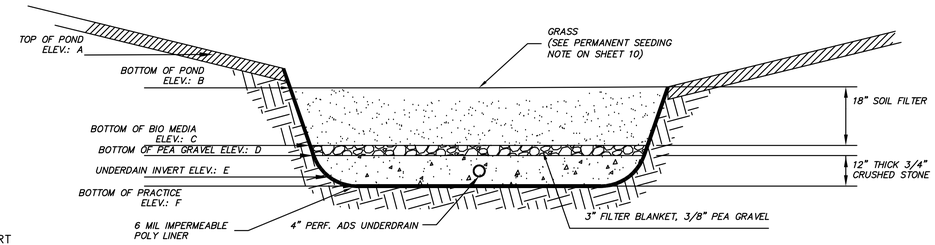


CITY OF DOVER - DRAIN MANHOLE

NOT TO SCALE

SPECIFICATIONS

1. All construction shall conform with the State of New Hampshire Department of Transportation (NHDOT), "Standard Specifications for Road and Bridge Construction"; hereinafter referred to as the "Standard Specifications".
2. Storm drains shall be ADS N12 or approved equal, and shall be jointed with neoprene "O" rings.
3. Catch basins and manholes shall be pre-cast reinforced concrete designed by an engineer registered in New Hampshire, and able to withstand loadings of 8 tons (H20 Loading).
4. Manholes shall have cast iron frames and covers with 30" inside diameter openings. A 3-inch (minimum) letter "D" for drain shall be plainly cast into the center of each cover.
5. Catch basins and manholes shall be adjusted to grade with courses of brick. Maximum adjustment to grade shall be 12 inches. Frames shall be set on a full bed of mortar, true to grade and concentric with the masonry. All voids between the top of the structure and the bottom flange of the frame shall be completely filled to make a watertight fit. A ring of mortar at least one inch thick and pitched to shed water away from the frame, shall be placed over and around the outside of the bottom flange. The mortar shall extend to the outer edge of the masonry all around its circumference and shall be finished smooth. No visible leakage will be permitted.
6. Invert channels of sewer manholes shall be formed smoothly to the largest pipe radius. Changes in grade shall be formed smoothly and evenly. The floor of the structure outside the channels shall be sloped towards the channels at approximately 1/2 inch per foot. The floor at the channel shall match the crown of the largest pipe.
7. Trench construction will conform with Section 603.3.1 of the Standard Specifications (1974).
8. Wood sheeting or a suitable trench box shall be used to support the trench as necessary. If wood sheeting is used, it shall be driven at a distance of 1 foot from the outside diameter of the pipe to a depth 6 inches below the invert of the pipe. Wood sheeting shall be cut off and left in place to an elevation not less than 1 foot above the top of the pipe, but not greater than 3 feet below the finished grade.
9. Bedding shall conform with Section 603.3.2 of the Standard Specifications (1974).
10. Backfill material will conform with Section 603.3.5 of the Standard Specifications (1974) and, in addition, shall exclude debris, pieces of pavement, organic matter, top soil, all wet or soft muck, peat or clay, all excavated ledge material, frozen material, all rocks over 6 inches in 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. Backfill shall not be placed on frozen or previously frozen material.
11. All backfill and bedding compaction shall meet the requirements of AASHO T 99 Method C. Density shall be 95 percent. Compaction shall be 6 inch lifts for bedding and backfill to a plane 1 foot above the pipe and in 12 inch lifts thereafter by an approved mechanical compactor.
12. Should frozen material be encountered, it shall not be placed in the backfill nor shall backfill be placed upon frozen material. Previously frozen material shall be removed as required before new backfill is placed.
13. The Contractor shall be responsible for any damage to frames and grates during and from the time of removal from the existing structure to and during the time of resetting, and shall replace in kind any damaged frames or grates at no additional compensation.
14. All trenches will be covered and debris, including any rejected materials, shall be removed daily. Strict safety precautions shall be maintained at all times.
15. Location of utilities shown on the plans are approximate.
    a) The Contractor shall, 48 hours prior to construction, notify the utility companies and have all utilities in the vicinity of the construction marked in the field.
    b) After the utilities have been located and prior to construction, the Contractor with the Engineer, shall layout the proposed drainage system in the field and rectify any utility conflicts which may be found.
    c) Any conflicts with utilities found during construction by the Contractor shall be immediately brought to the attention of the Engineer and the Utility Company and properly rectified.
    d) The Contractor is responsible for the cost of repair for any utilities damaged during construction. The Contractor shall contact the Utility Company to repair any damages, however, the Contractor may make appropriate repairs with the Utility Company's permission.
16. Complete shop drawings for pipe, manholes, catch basins, frames, grates and covers shall be submitted in triplicate for approval by the Engineer prior to the start of construction. Each shop drawing shall be checked and initialized by the Contractor to indicate approval before it is submitted to the Engineer.
17. Shop drawings for flat concrete covers shall be stamped prior to submission for approval by a New Hampshire Registered Professional Engineer.
18. Brick masonry for setting frames and brick and mortar plugs shall conform to the Standard Specification Section 604.2.4.



BIORETENTION POND SYSTEM CHART

POND	POND ELEVATION					
	A	B	C	D	E	F
BIO1	179.10	175.0	173.50	173.25	172.58	172.25

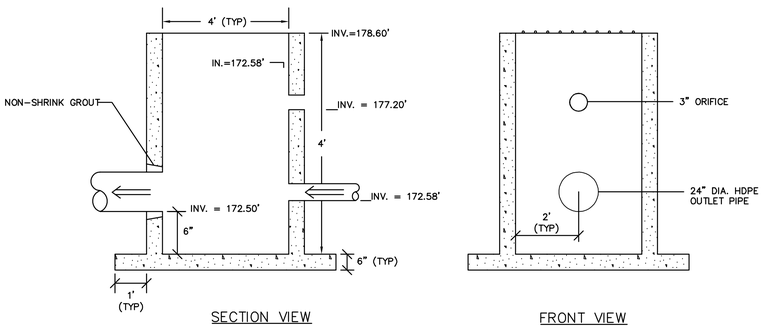
ACCEPTABLE PARTICLE SIZE DISTRIBUTION OF FINAL BIORETENTION SOIL MIX

MEDIA TYPE	SIEVE #	SIZE (in)	SIZE (mm)	% PASSING
COARSE SAND	4	0.187	4.76	100
MEDIUM SAND	10	0.079	2.00	95
FINE SAND	40	0.017	0.42	40–15
SILTS	200	0.003	0.075	10–20
CLAYS	<200	PAN	PAN	0–5

BIORETENTION SOIL MEDIA COMPONENTS:*

– AMOUNTS MIXED BY TOTAL VOLUME
- 60–85% – SAND (0.5 TO 2.0 mm) (SEE SPECS ABOVE)
- 15–25% – LOAM OR TOPSOIL
- 3–8% – ORGANIC MATTER
- 0–5% – WATER TREATMENT RESIDUALS OR IRON FILINGS**

*ALTERNATELY, USE MEDIA SPECIFIED IN THE ALTERATION OF TERRAIN RULES, Env-Wq 1508.07(k)
**THIS IS AN AMENDMENT USED FOR ENHANCED PHOSPHORUS ADSORPTION



SECTION VIEW

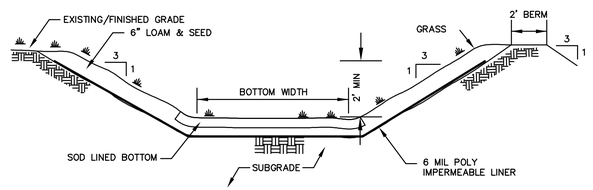
FRONT VIEW

NOTE:

1) ALL OUTLET STRUCTURES SHALL BE PRE CAST WITH A MINIMUM CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH STRUCTURE FOR REVIEW BY THE TOWN.
3) SUMPS SHALL NOT BE GREATER THAN 6 INCHES.

OUTLET STRUCTURE BIORETENTION BASIN 1 (OS-1) DETAIL

NOT TO SCALE



GRASSED TREATMENT SWALE

NOTES:

1. THE FOUNDATION AREA OF THE WATERWAY SHALL BE CLEARED AND GRUBBED OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL. MATERIALS REMOVED SHALL BE DISPOSED OF SO THEY WILL NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTIONING OF THE WATERWAY.
2. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE DESIGN CRITERIA. THE WATERWAY SHALL BE FREE OF IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. EARTH FILLS REQUIRED TO MEET SUBGRADE REQUIREMENTS BECAUSE OF OVER EXCAVATION OR TOPOGRAPHY SHALL BE COMPACTED TO THE SAME DENSITY AS THE SURROUNDING SOIL TO PREVENT UNEQUAL SETTLEMENT THAT COULD CAUSE DAMAGE TO THE COMPLETED WATERWAY. EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE EROSION AND AIR AND WATER POLLUTION. ALL APPROPRIATE STATE AND LOCAL LAWS AND REGULATIONS SHALL BE COMPLIED WITH FOR INSTALLATION.
5. VEGETATION SHALL BE ESTABLISHED IN THE SWALE PRIOR TO ALLOWING STORMWATER RUNOFF TO FLOW THROUGH THE SWALE.
6. MAINTENANCE OF THE VEGETATION IN THE GRASSED WATERWAY IS EXTREMELY IMPORTANT IN ORDER TO PREVENT RILLING, EROSION, AND FAILURE OF THE WATERWAY. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION AND TO KEEP THE GRASSES IN A VIGOROUS CONDITION. THE VEGETATION SHOULD NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE EROSION RESISTANCE IN THE WATERWAY.
7. THE WATERWAY SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE WATERWAY. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.
8. PERIODIC APPLICATIONS OF LIME AND FERTILIZER MAY BE NEEDED TO MAINTAIN VIGOROUS GROWTH.

GRASSED TREATMENT SWALE

NOT TO SCALE

STRUCTURE	WIDTH (ft)	LENGTH (ft)	SLOPE (ft/ft)
TS 1	4.5	160	0.005

NOTES:

1. DO NOT BEGIN CONSTRUCTION OF THE BIORETENTION AREA UNTIL LAWN AREA ON THE ENTIRE SITE AREA ESTABLISHED WITH AT LEAST 80 PERCENT TURF. FILTER ALL DRAIN INLETS IN THE SEDIMENT FOREBAYS TO PREVENT SILTATION INTO THE BIORETENTION AREA.
2. THE RAIN GARDEN SUBGRADE SHALL BE EXCAVATED TO THE DESIGN DEPTH PLUS TWO (2) INCHES. AT THAT DEPTH FOUR (4) INCHES OF COMPOST SHALL BE TILLED INTO THE EXISTING SOILS SUCH THAT THE SOILS ARE WELL MIXED.
3. DO NOT DRIVE CONSTRUCTION EQUIPMENT ON FILTER SUBGRADE NOR ON THE FILTER MATERIAL. INSTALL FILTER MATERIAL BY MEANS OF AN EXCAVATOR LOCATED ADJACENT TO THE FILTER AREA.
4. MATERIALS: CRUSHED STONE LAYER SHALL MEET NHDOT 304.4. STONE SHALL CONTAIN NO MORE THAN 5% FINES PASSING THE #200 SIEVE. TOPSOIL SHALL CONTAIN 15 TO 25% FINES PASSING THE #200 SIEVE. MULCH SHALL BE SHREDDED HARDWOOD, AGED IN A STOCKPILE OR STORED FOR AT LEAST 12 MONTH. NON-WOVEN GEOTEXTILE BE 4 TO 6 OZ. PER SQUARE YARD WITH A.O.S. OF #70 SIEVE OR LOWER, AND A MINIMUM FLOW RATE OF 125 GAL PER SQUARE FEET. UNDERDRAIN SHALL BE PERFORATED 6" PVC OR TRIPLE WALL PE PIPE.
5. REFER TO PERMANENT SEEDING NOTE ON SHEET 10 FOR GRASS SEED MIXES AND PLANTINGS. FERTILIZATION OF THE FILTER AREA SHALL BE AVOIDED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.
6. INITIAL ESTABLISHMENT: DURING THE FIRST 2-3 MONTHS OF ESTABLISHMENT WATER THE GRASS ON A WEEKLY BASIS (TO SUPPLEMENT RAINFALL FOR TOTAL OF 1 INCH PER WEEK).
7. ANNUAL MAINTENANCE: IN THE SPRING OF EACH YEAR, ANY DEAD VEGETATION SHALL BE REMOVED TO ALLOW FOR NEW GROWTH, AND ANY ACCUMULATED SEDIMENT (NORMALLY AT THE ENTRANCE TO THE GARDEN) SHALL ALSO BE REMOVED. DURING THE GROWING SEASON THE RAIN GARDEN SHALL BE WEEDED TWO (2) TIMES AND ADDITIONAL HARDWOOD MULCH SHALL BE ADDED AS NEEDED TO ASSIST IN WEED SUPPRESSION. TURF AT FILTER SHALL BE MOWED NO MORE THAN 3 TIMES PER GROWING SEASON. IF WATER PONDS ON THE SURFACE FOR MORE THAN 24 HOURS DURING THE FIRST YEAR OR 72 HOURS THEREAFTER, THE FILTER SURFACE SHALL BE AERATED WITH DEEP TINES OR THE SURFACE REPLACED.
8. GRASS SEED SHALL BE NATIVE NON-INVASIVE SPECIES, SEE LANDSCAPE ARCHITECT DRAWINGS.

BIORETENTION SYSTEM DETAIL

(SEE GRADING PLAN FOR LOCATION)

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

DATE: 8-6-21
SCALE: N/A
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 21041
FILE: SITE

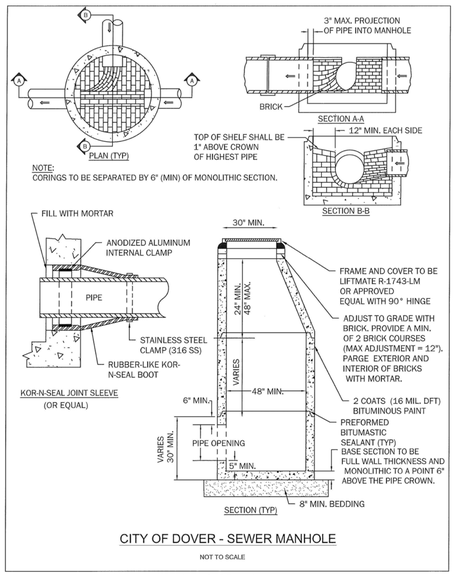
CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

DETAILS

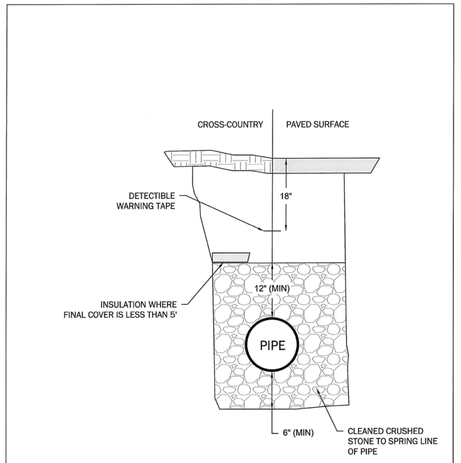
14



CITY OF DOVER - SEWER MANHOLE

NOT TO SCALE

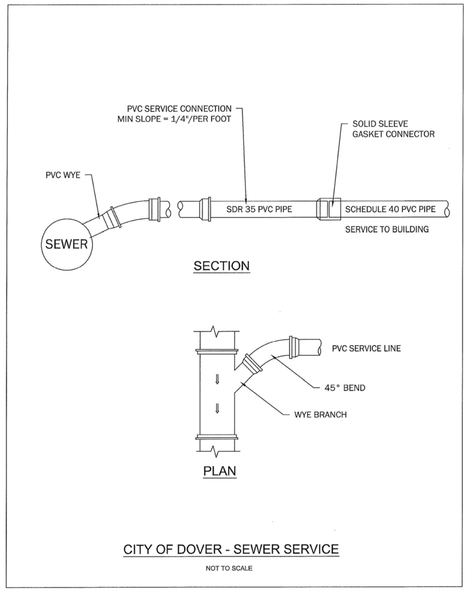
Appendix B Page 12



CITY OF DOVER- TYPICAL SEWER/DRAINLINE TRENCH

NOT TO SCALE

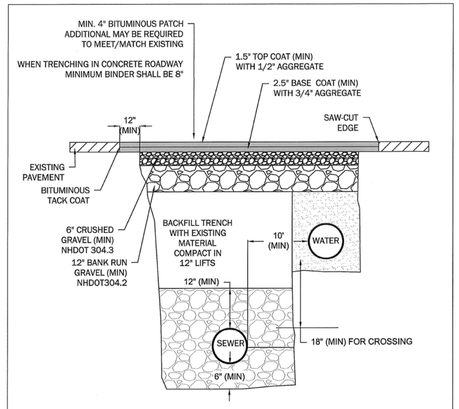
Appendix B Page 13



CITY OF DOVER - SEWER SERVICE

NOT TO SCALE

Appendix B Page 15



NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.
2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES

CITY OF DOVER - TYPICAL TRENCH DETAIL

NOT TO SCALE

Appendix B Page 3

NOTE:

1. ALL WATER LINES 4" OR GREATER SHALL BE DUCTILE IRON WITH AN 8 MIL POLYETHYLENE WRAP. CONTRACTOR MAY FORGO WRAPPING PIPE IF THE DUCTILE IRON PIPE IS ZINC-COATED, TEES AND OTHER CONNECTIONS WILL STILL NEED TO BE WRAPPED.

CITY OF DOVER - WATERLINE TRENCH

NOT TO SCALE

NOTE:

1. ALL WATER LINES 4" OR GREATER SHALL BE DUCTILE IRON WITH AN 8 MIL POLYETHYLENE WRAP. CONTRACTOR MAY FORGO WRAPPING PIPE IF THE DUCTILE IRON PIPE IS ZINC-COATED, TEES AND OTHER CONNECTIONS WILL STILL NEED TO BE WRAPPED.
2. WATER SERVICE LINES SHALL BE COPPER TUBING (TYPE K) BETWEEN MAIN AND CURB STOP.
3. SERVICE BETWEEN CURB STOP AND BUILDING MAY BE SDR 9 CTS (BLUE) PLASTIC POLYETHYLENE RATED FOR 250 psi.

CITY OF DOVER - WATER SERVICE CONNECTION

NOT TO SCALE

THRUST BLOCK SCHEDULE

MINIMUM BEARING AREA (SQUARE FEET)

	PIPE SIZE					
Nominal Dia. (in)	4	6	8	10	12	16
Tees, Caps, Plugs, & Tapping Sleeves	1.05	2.32	4.15	6.37	9.15	16.23
90 Degree Bends	1.48	3.29	5.86	9.01	12.93	22.96
45 Degree Bends	0.80	1.78	3.17	4.88	7.00	12.42
22-1/2 Degree Bends	0.41	0.91	1.62	2.49	3.57	6.33
11-1/4 Degree Bends	0.21	0.46	0.81	1.25	1.79	3.18
	System Pressure: 100 psi Safety Factor: 1.5 Soil Bearing Capacity: 2,000 psf					

THE MINIMUM BEARING AREAS SHOWN IN THE THRUST BLOCK SCHEDULE ARE BASED ON A SYSTEM PRESSURE OF 100 PSI. IF THE SYSTEM PRESSURE IS ABOVE 100 PSI, INCREASE THE NOTED AREAS PROPORTIONAL TO THE ACTUAL SYSTEM PRESSURE. FOR EXAMPLE, IF THE ACTUAL SYSTEM PRESSURE IS 160 PSI, MULTIPLY THE ABOVE VALUES BY 160%.

CITY OF DOVER - PRECAST CONCRETE THRUST BLOCK & ANCHOR

NOT TO SCALE

Appendix B Page 11

NOTES:

1. FIRE HYDRANT TO BE EDDY 2641.
2. HYDRANT TO BE PAINTED RED.
3. HYDRANT SHALL OPEN LEFT.

CITY OF DOVER - HYDRANT

NOT TO SCALE

Appendix B Page 10

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

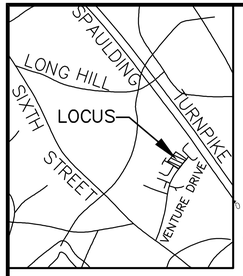
DATE: 8-6-21
SCALE: N/A
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 21041
FILE: SITE

DETAILS

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

15



D / 11-1

TOTAL PARCEL AREA
1,576,425 S.F.
36.19 Ac.
PROPOSED LOT AREA
143,577 S.F.
3.30 Ac.

S71°54'43"E 295.33'

N18°05'17"E 192.58'

100'

50'

PROPOSED FUTURE
5,000 S.F.
BUILDING ADDITION

100'

150'

PROPOSED
15,000 S.F.
BUILDING

EOP

PE

PG

EOP

EOP

INNOVATION WAY

EXISTING GAS LINE

VENTURE DRIVE

EOP

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Description	Luminaire Lumens	Luminaire Watts	Total Watts
	1	S4	Single	GLEON-SA2C-740-U-T4FT/ SSS4A20SFN1 (20' AFG)	14559	113	113
	1	W3	Single	GWC-SA1A-740-U-SL4/ WALL MTD 10' AFG	4729	34	34
	1	W2	Single	ISS-SA1E-740-U-SL4 / WALL MTD 15' AFG	6916	58.2	58.2
	5	W1	Single	MERU-LED-ACEM-DB-PIR / WALL MTD 10' AFG	1581	16.4	82
	3	W	Single	ISS-SA1E-740-U-SL4 / WALL MTD 20' AFG	6916	58.2	174.6

StatArea_1
PARKING LOT AREA
Illuminance (Fc)
Average = 1.00
Maximum = 3.2
Minimum = 0.3
Avg/Min Ratio = 3.33
Max/Min Ratio = 10.67

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE
NO.: P21-49

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

DATE: 8-6-21
SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO:21041
FILE: SITE

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MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

LIGHTING PLAN

16

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GLEON Galleon

Area / Site Luminaire

Typical Applications

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 4
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 9

Product Certifications

Product Features

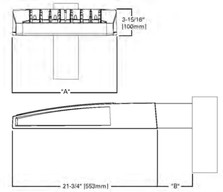
Quick Facts

- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt

Connected Systems

- WaveLinx
- Enlighted

Dimensional Details



Number of Light Squares	"A" Width	"D" Standard Arm Length	"E" Extended Arm Length	"H" Quick Mount Arm Length	"H" Quick Mount Extended Arm Length
1-4	15-1/2"	7"	10"	10-5/8"	16-9/16"
5-6	21-5/8"	7"	10"	10-5/8"	16-9/16"
7-8	27-5/8"	7"	13"	10-5/8"	--
9-10	33-3/4"	7"	16"	--	--

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GWC Galleon Wall

Wall Mount Luminaire

Typical Applications

Exterior Wall • Walkway

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 3
- Energy and Performance Data page 4
- Control Options page 6

Product Certifications

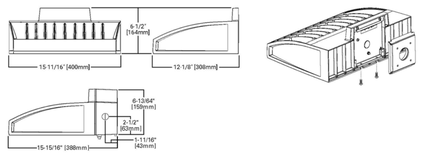
Quick Facts

- Choice of thirteen high-efficiency, patented AccuLED Optics™
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

Connected Systems

- WaveLinx
- Enlighted

Dimensional Details



MERU Series

LED GENERAL & EMERGENCY LIGHTING

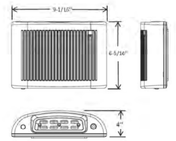
EZ SPEC

PROJECT:
FIXTURE TYPE:
LOCATION:
CONTACT/PHONE:

PRODUCT DESCRIPTION

The MERU Series is an architectural, low-profile outdoor light, offering "normally On" AC and emergency lighting with powerful LED illumination. The housing is fully sealed and gasketed, and has an IP65 rating. Designed for wall mounting with universal K/O pattern in back-plate for easy installation to most standard size junction boxes. Includes a single ½" NPT conduit entry in the top, center of the housing. Illumination provided by 8 high power LEDs which achieve 1,600 lumens in AC and 600 lumens in emergency. LED color at 4000K.





PRODUCT SPECIFICATIONS

CONSTRUCTION

Die cast aluminum housing with superior heat sink • Scratch resistant Polyester powder coat finish • UV resistant polycarbonate lens • Snap-fit housing and mounting plate are held together by four stainless steel clips • Universal mounting pattern molded into the back plate • 1/2" threaded top access for surface conduit installation • Silicone rubber seal with hollow center, shape adaptive design protects the electrical components • Junction box neoprene seal is attached to the back plate for a weather proof installation • Dark Bronze or White textured finish.

ELECTRICAL

Dual voltage 120/277VAC 60Hz input • Solid state charging and switching • Battery low voltage disconnect • AC power indicator and test switch at the bottom of the unit • Standard with Self Diagnostics to monitor proper operation.

LAMPS

Supplied with eight (8) LG SMD 4000K LED'S • L70 > 72,000hours • 17 Watts total (32 Watts with IH option) • 1600 Lumens in AC mode, 600 Lumens in Emergency mode • Full cut-off optics for Dark Sky compliance

BATTERY

Maintenance-free, long-life rechargeable NiCad battery will operate fixture for a minimum of 90 minutes in the event of a power outage • 24 hour recharge after 90 minute discharge.

CODE COMPLIANCE

UL924 • Listed for wet location applications (0˚C-50˚C) • Optional "IH" cold weather package for (-40˚C-50˚C) • IP65 Rated • NFPA 101 Life Safety Code compliant • NEC and OSHA compliant • DLC Listed • RoHS Compliant

WARRANTY

5-year warranty. Product specifications subject to change without notice.

ACEM Model (NiCad Battery Backup)

Integral photocell: Unit operates as a dusk to dawn luminaire and in the event of a power failure as an emergency light.
Remote Switched: The integral photocell can be defeated to allow remote switching for normal operation. In the event of a power failure unit operates as an emergency light.

INSTALLATION

MOUNTING

Suitable for indoor or outdoor wall mounting on junction box, or with surface conduit using the supplied 1/2" threaded top access • Mounting plate has molded universal mounting pattern for simple mounting over junction box.

ORDERING INFORMATION

model	operation mode	housing color	options
MERU-LED	ACEM = General & Emergency Lighting	DB = Dark Bronze	*Self-Diagnostics & Photocell (Included/Standards*
	AC = General Lighting	WH = White	IH = Internal Heater
		BK = Black	PIR = Passive Infra-Red Motion Sensor
		NK = Nickel	

Ordering Example: MERU-ACEM-DB

Mule Lighting , Inc. 46 Baker Street Providence, RI 02905 800 556-7690 P 401 941-2929 F www.mulelighting.com

Steel Poles



SSS SQUARE
STRAIGHT STEEL

Catalog #		Type
Project		
Comments		Date
Prepared by		

FEATURES
- ASTM Grade steel base plate with ASTM A366 base cover
- Hand hole assembly 3" x 5" on 5" and 6" pole; and 2" x 4" on 4" pole
- 10'-39' mounting heights
- Drilled or tenon (specify)

DESIGN CONSIDERATIONS

Wind induced vibrations resulting from steady, unidirectional winds and other aerodynamic forces, as well as vibration and coefficient of height factors for non-grounded mounted installations (e.g., installations on bridges or buildings) are not included in this document. The information contained herein is for general guidance only and is not a replacement for professional judgement. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Also, please review Eaton's Light Pole White Paper for risk factors and design considerations. Learn more.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Eaton or visit www.eaton.com/lighting for available options, accessories and ordering information.

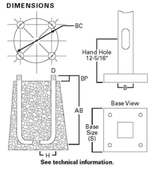
ORDERING INFORMATION

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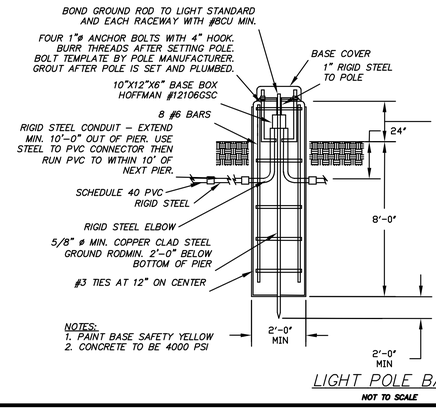
Product Family	Shaft Size (inches)[1]	Wall Thickness (inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Arm Lengths (Feet)	Options (Add as Suffix)
SSS=Square Straight Steel	**4**=4" **5**=5" **6**=6"	**A**=0.120" **M**=0.188" **X**=0.250"	**10**=10' **15**=15' **20**=20' **25**=25' **30**=30' **35**=35' **39**=39'	**S**=Square Steel Base	**F**=Dark Bronze **G**=Galvanized Steel **J**=Summit White **K**=Carbon Bronze **L**=Dark Platinum **R**=Hartford Green **S**=Silver **T**=Graphite Metallic **V**=Grey **W**=White **X**=Custom Color **Y**=Black	**2**=2-3/8" O.D. Tenon (4" Long) **3**=3-1/2" O.D. Tenon (5" Long) **4**=4" O.D. Tenon (6" Long) **9**=2" O.D. Tenon (4" Long) **6**=2-3/8" O.D. Tenon (6" Long) **7**=4" O.D. Tenon (10" Long) **A**=Type A Drilling **C**=Type C Drilling **E**=Type E Drilling **F**=Type F Drilling **G**=Type G Drilling **J**=Type J Drilling **K**=Type K Drilling **M**=Type M Drilling **N**=Type N Drilling **R**=Type R Drilling **S**=Standard Upsweep Arm **Z**=Type Z Drilling	**1**=Single **2**=2 at 180° **3**=Triple[3] **4**=4 at 90° **5**=2 at 90° **X**=None	**X**=None **2**=2' **3**=2.5' **4**=4' **6**=6' **8**=8'	**A**=1/2" Tapped Hub[4] **B**=3/4" Tapped Hub[4] **C**=Convenience Outlet[4] **E**=GFCI Convenience Outlet[4] **G**=Ground Lug **H**=Additional Hand Hole[4] **V**=Vibration Dampener

NOTES: 1. All shaft sizes nominal. **2.** Square poles are 3 at 90°, round poles are 3 at 120°. **3.** Tapped Hub is located 5' below the pole top and on the same side of pole as hand hole, unless specified otherwise. **4.** Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. **5.** Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified.

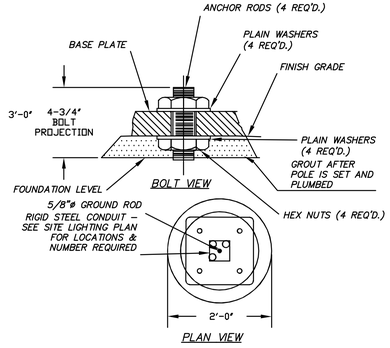
DIMENSIONS



See technical information.



LIGHT POLE BASE
NOT TO SCALE



PLAN VIEW

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

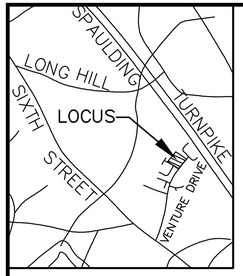
DATE: 8-6-21
SCALE: N/A
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY: SJH
PROJECT NO: 21041
FILE: SITE

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

LIGHTING DETAILS



D / 11-1

TOTAL PARCEL AREA
1,576,425 S.F.
36.19 Ac.
PROPOSED LOT AREA
143,577 S.F.
3.30 Ac

S71°54'43"E
295.33'

N18°05'17"E
192.59'

100'
50'
PROPOSED FUTURE
5,000 S.F.
BUILDING ADDITION

100'
150'
PROPOSED
15,000 S.F.
BUILDING

EOP

45.50
8.50
20.00

Dover Idder	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 44.0

INNOVATION WAY

VENTURE DRIVE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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NO.	REVISION	APP'D	DATE
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DATE: 8-6-21
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PROJECT NO:21041
FILE: SITE

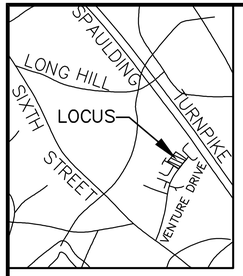
CIVILWORKS NEW ENGLAND
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181 Watson Road, PO Box 1166
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DOVER LADDER TRUCK MOVEMENT PLAN

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

18



D / 11-1

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100'
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5,000 S.F.
BUILDING ADDITION

100'
150'
PROPOSED
15,000 S.F.
BUILDING

EOP

INNOVATION WAY

VENTURE DRIVE

EXISTING GAS LINE

15.00 53.00
3.00 43.50
0.00
4.00 19.50

CNE WB-65 feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 42.0
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: P21-49

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-2-21

DATE: 8-6-21
SCALE: 1"=20'
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO:21041
FILE: SITE

SEMI TRUCK MOVEMENT PLAN

AMERICAN DURAFILM CO. INC.
55 BOYNTON ROAD
P.O. BOX 6770
HOLLISTON, MA 01746

MANUFACTURING/COMMERICAL BUILDING
INNOVATION WAY
DOVER, NH

T1

American Durafilm

Dover, NH

Planning Board Set

N.F.C.



T | W DESIGNS

254 Drake Hill Rd. Strafford, NH
TW-Designs.com | 603.664.2181

Revision Schedule

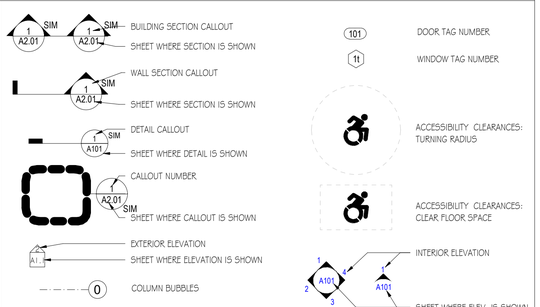
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MASTER ABBREVIATION KEY:

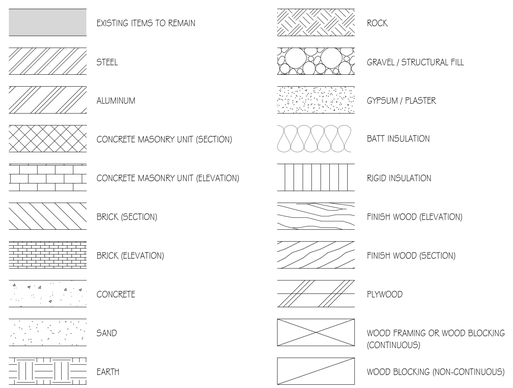
AB	ANCHOR BOLT
AC	AIR CONDITIONER
ACI	AMERICAN CONCRETE INSTITUTE
ACOUST	ACOUSTIC
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANCH	ANCHOR
ANOD	ANODIZED
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
BD	BOARD
BIT	BITUMINOUS
BL	BUILDING LINE
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOC	BOTTOM OF CURB
BOF	BOTTOM OF FOOTING ELEVATION
BOT	BOTTOM
BRG	BEARING
BRK	BRICK
BSMT	BASEMENT
BTW	BETWEEN
BUR	BUILT-UP ROOF
CAB	CABINET
CB	CATCH BASIN
CER	CERAMIC
CF	CUBIC FOOT
CI	CAST IRON
CJ	CONTROL JOINT
CL	CLOSET
CLCB	CURBLESS CATCH BASIN
CLG	CEILING
CM	CONTRACT MANAGER
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPACTED (COMPOSITION)
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CORR	CORRUGATED
CP	CONTROL PANEL
CSG	CASING
CSMT	CASEMENT
CT	CERAMIC TILE
CTR	CENTER
CY	CUBIC YARD
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DSIC	DRIVE SIDE OF CURB
DTL	DETAIL
DWG	DRAWING
E	EAST
EJ	EXPANSION JOINT
EJC	EXPANSION JOINT COVER
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EQ	EQUAL
EQUIP	EQUIPMENT
ER	EMERGENCY ROOM
EST	ESTIMATE
EWC	ELECTRICAL WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXPD	EXPANDED
EXT	EXTERIOR
F/F	FACE OF FOUNDATION WALL
FA	FRESH AIR
FAP	FIRE ALARM PANEL
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FIN	FINISH
FL	FLOW LINE
FLR	FLOOR
FND	FOUNDATION
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FR	FIRE RATED
FS	FULL SIZE
FT	FOOT
FTG	FOOTING
FUR	FURRED (FURRING)
FVC	FIRE VALVE CABINET
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERAL
GL	GLASS
GLZ	GLAZING
GRD	GRADE
GYP	GYPSUM
H4V	HEATING & VENTILATING
HC	HANDICAP
HDWD	HARDWOOD
HGT	HEIGHT
HM	HOLLOW METAL
HP	HIGH POINT
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HWH	HOT WATER HEATER
ID	INSIDE DIAMETER
IN	INCH
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
JC	JANITORS CLOSET
JST	JOIST
JT	JOINT
LAM	LAMINATE
LAV	LAVATORY
MAS	MASONRY
MAT	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEM	MEMBRANE
MEP	MECHANICAL, ELECTRICAL, PLUMBING
METTP	METAL TOILET PARTITION
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTL	METAL
MULL	MULLION
N	NORTH
NAT	NATURAL
NEC	NECESSARY
NIC	NOT IN CONTRACT
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF/C	OUTSIDE FACE OF CONCRETE
OH	OVERHEAD
OPG	OPENING
OPP	OPPOSITE
OR	OPERATING ROOM
PBD	PARTICLE BOARD
PCF	POUNDS PER CUBIC FOOT
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PNL	PANEL
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PAINT
PTD	PAINTED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
R	RADIUS
R/A	RETURN AIR
RC	REINFORCED CONCRETE
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCE
REQD	REQUIRED
RGH	ROUGH
RL	RAIN LEADER
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RQMT	REQUIREMENT
S	SOUTH
S-TRAP	SEDIMENT TRAP
SC	SOLID CORE
SCED	SCHEDULE
SD	STORM DRAIN
SF	SQUARE FOOT
SH	SHOWER
SHT	SHEET
SIM	SIMILAR
SL	SLIDING
SMR	SINGLE PLY MEMBRANE ROOF
SP/PT/FIN	SPECIAL PAINT FINISH
SPEC	SPECIFICATION
SPKR	SPEAKER
SQ	SQUARE
SS	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRG	STRINGER
STRUCT	STRUCTURAL
SU	SITE UTILITY
SUSP	SUSPEND (SUSPENDED)
SYMM	SYMMETRICAL
SYS	SYSTEM
T	TREAD
TAG	TONGUE & GROOVED
T/FRM	TOP OF FRAME
T/SLB	TOP OF SLAB
TB	TACKBOARD
TEL	TELEPHONE
TEMP	TEMPORARY
TERR	TERRAZZO
THK	THICK
THLD	THRESHOLD
TOC	TOP OF CURB
TOF	TOP OF FOUNDATION
TOS	TOP OF SLAB
TOW	TOP OF WALL ELEVATION
TR	TO REMAIN
TYP	TYPICAL
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES, INC.
UOD	UNDERSIDE OF DECK
UON	UNLESS OTHERWISE NOTED
UR	URINAL
UV	UNIT VENTILATOR
VAR	VARIES OR VARIABLE
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VNR	VENEER
VOL	VOLUME
W	WEST
W/	WITH
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WGL	WIRE GLASS
WP	WEATHERPROOF (WATERPROOFING)
WWF	WELDED WIRE FABRIC

LOCUS MAP: (N.T.S.)

GRAPHIC SYMBOLS LEGEND



MATERIAL LEGEND



DRAWING SHEET INDEX:

Sheet	Sheet Name	Issued	Revision	Revision Date
PCS	*Project Cover Sheet*	*N.F.C.*		
A1.1	*Floor Plan*	*N.F.C.*		
A3.1	*Exterior Elevations*	*N.F.C.*		
R1.1	*Exterior Rendering*	*N.F.C.*		

GENERAL NOTES:

1. DO NOT SCALE DRAWING OR DIMENSIONS. FOR MISSING DIMENSIONS OR DIMENSIONS IN CONFLICT, CONTACT THE CONTRACTOR IMMEDIATELY BEFORE CONTINUING WITH WORK.
2. ANY DISCREPANCIES IN THESE PLANS WILL BE BROUGHT TO THE CONTRACTOR'S ATTENTION IN WRITING IMMEDIATELY
3. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DESIGN-BUILD PLANS AND SPECIFICATION FOR LOCATIONS OF ALL BLOCK OUTS, INSERTS, OPENINGS, CURBS, BASES, & PADS THAT ARE NOT DIMENSIONED OR SHOWN ON CONTRACTOR'S DWG'S. OR STRUCTURAL DWG'S.
4. STRUCTURAL STEEL, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION PLANS AND SPECIFICATION SHALL BE PROVIDED AND ARE THE RESPONSIBILITY OF THERE RESPECTIVE SUBCONTRACTORS IF NOT CARRIED IN ARCHITECTURAL SERVICES
5. ALL CONSTRUCTION SHALL CONFORM TO AND BE IN ACCORDANCE WITH THE REGULATOR REQUIREMENTS MANDATED BY ALL FEDERAL, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION IN ACCORDANCE TO THE STATE IN WHICH THE WORK IS PERFORMED (STATE BUILDING CODE, STATE LIFE SAFETY & FIRE CODE ETC.)
6. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS AND VERIFY ALL DIMENSIONS AND FIELD CONDITIONS, AND SHALL CONFIRM WORK IS BUILDABLE AS SHOWN. ANY CONFLICTS OR OMISSIONS, ETC. SHALL BE IMMEDIATELY REPORTED IN WRITING TO THE ARCHITECT FOR CLARIFICATION
7. DIMENSIONS ARE FROM EXTERIOR FACE OF FOUNDATION, VENEER, OR WALL STUD AND TO CENTER OF ALL INTERIOR STUD WALLS OR FACE OF INTERIOR MASONRY. UNLESS NOTED OTHERWISE.
8. CLEAR DIMENSIONS ARE FROM FACE TO FACE OF WALL FINISH. UNLESS NOTED OTHERWISE
9. REFER TO MECHANICAL DRAWINGS / SPEC. FOR ALL SIZES AND LOCATIONS OF MECHANICAL DUCT WORK.
10. UNLESS OBVIOUSLY SHOWN OTHERWISE, DOOR LOCATIONS NOT DESIGNATED BY WRITTEN DIMENSION SHALL BE CENTERED IN THE WALL OR SHALL BE LOCATED FOUR (4) INCHES FROM FINISH WALL TO EDGE OF DOOR JAMB. PER PLAN.
11. PROVIDE METAL CORNER BEAD AT ALL OUTSIDE CORNERS OF PLASTERED OR DRYWALL SURFACES, UNLESS NOTED OTHERWISE.
12. PENETRATIONS OF ALL FIRE RATED ASSEMBLIES SHALL BE PROTECTED BY LIKE RATED CONSTRUCTION DAMPERS, SEALANTS, COLLARS, ETC., TYPICAL.
13. CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL ALL ACCESS PANELS AS REQUIRED AFTER INSTALLATION OF MECHANICAL DUCTS, PLUMBING AND ELECTRICAL WORK, FIRE RATED AS REQUIRED.
14. FURNISH AND INSTALL SOLID BLOCKING BEHIND ALL WALL HUNG MILLWORK ITEMS, RAILS, FIXTURES,GRAB BARS, ETC. , WHERE INDICATED OR REQUIRED.
15. CONTRACTOR SHALL LAYOUT OR MARK, ALL EQUIPMENT, SYSTEMS AND MILLWORK ON THE FLOOR FOR ARCHITECT OR OWNER'S APPROVAL PRIOR TO BEGINNING CEILING / OVER HEAD WORK.
16. ALL SPRINKLER HEAD LOCATIONS, MAINS, BRANCHES AND RISER PIPE LOCATIONS MUST BE COORDINATED WITH THE DESIGN / BUILD CONTRACTOR PRIOR TO WORK.
17. FURNISH AND INSTALL FIRE EXTINGUISHERS IN TYPE, QUANTITY, AND LOCATION PER LOCAL FIRE DEPARTMENT. TYPICAL
18. CONTRACTOR SHALL VERIFY, COORDINATE LOCATION WITH THE ARCHITECT ANY SMOKE, CARBON MONOXIDE DETECTOR OR FIRE ALARM DEVICE AS REQUIRED BY THE LOCAL FIRE DEPARTMENT.
19. FURNISH & INSTALL FIRE DAMPERS WITH FUSIBLE LOUVER WHEREVER DUCT WORK PENETRATES ONE OR TWO HOUR CEILINGS OR WALLS. TYPICAL UNLESS NOTED OTHERWISE.
20. PROVIDE PLASTER AND GYPSUM WALL BOARD CONTROL JOINTS AT 30'-0" ON CENTER FROM FLOOR TO CEILING, OR AS NOTED ON THE CONSTRUCTION DOCUMENTS. VERIFY IN FEILD WITH ARCHITECT PRIOR TO WORK.

Architect of Record:

T | W Designs, LLC
254 Drake Hill Rd.
Strafford, NH 03884
603-664-2181

Civil Engineer:

Civil Works Inc.
181 Watson Rd. Dover, NH
603.749.0443

Structural Engineer:

To Be Determined

Electrical Engineer:

To Be Determined

Mechanical Engineer:

To Be Determined

Fire Protection Eng.:

To Be Determined

General Contractor:

Whitcher Builders, Inc.
254 Drake Hill Rd.
Strafford, NH 03884
603-664-5577

Project Info:

American Durafilm
55 Boynton Rd.
Holliston, MA
508.429.8000

Project Cover Sheet

SHEET NUMBER

PCS



15,000 s.f.

1 FIRST FLOOR
1/8" = 1'-0"

2 A3.1

TW DESIGNS LLC
254 DRAKE HILL RD. STRAFFORD, NH
P: 603.664.2181 | F: 603.664.9508

DESIGN | BUILD Architectural Document Set -
Prepared For Exclusive Use By :

WHITCHER BUILDERS

Space Legend

- Fabrication
- Toilet Room
- Flushing
- Mechanical
- Pulling
- Shipping & Receiving
- Business Core
- Vertical Towers

Space Schedule	
Name	Area
Vertical Towers	4358 SF
Fabrication	4507 SF
Mechanical	270 SF
Business Core	598 SF
Flushing	360 SF
Pulling	540 SF
Shipping & Receiving	1691 SF
Toilet Room	125 SF
Toilet Room	139 SF

No.	Description	Date

Revision Schedule

Project Info:

American Durafilm

Dover, NH

Sheet Status:

Latest Release:
Issued For: Planning Board Set
Org. Issue Date: N.F.C.

JOB NO:
DRAFTED: JMT
CHECKED: Checker
SCALE: 1/8" = 1'-0"

Sheet Title:

Floor Plan

PROJECT NORTH

True

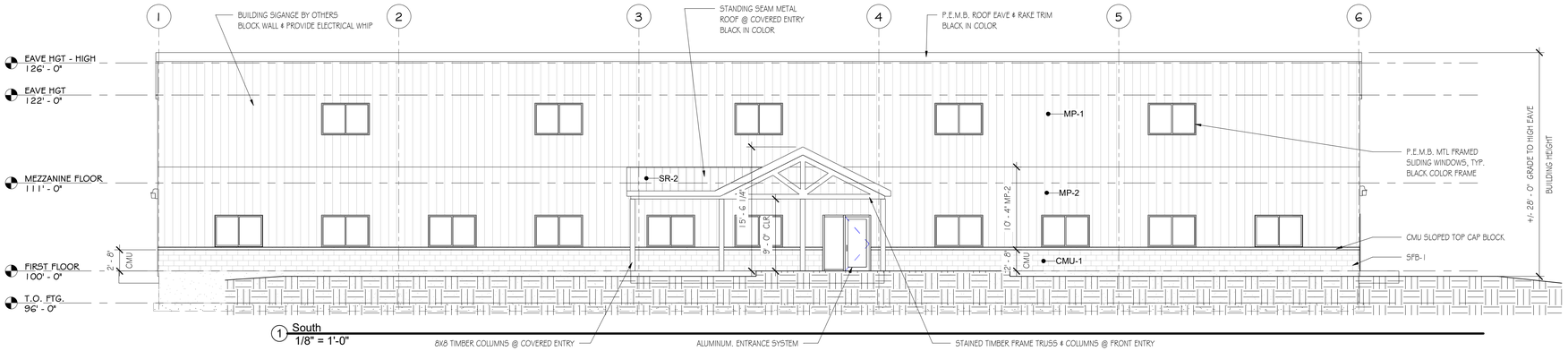
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A1.1

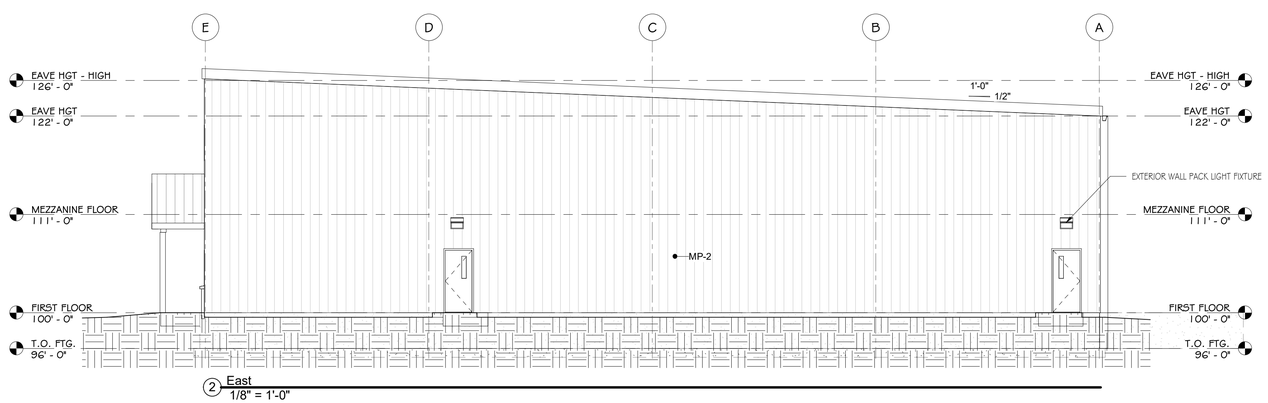
PLANNING BOARD SET
7/15/2021

Printed on: 7/15/2021

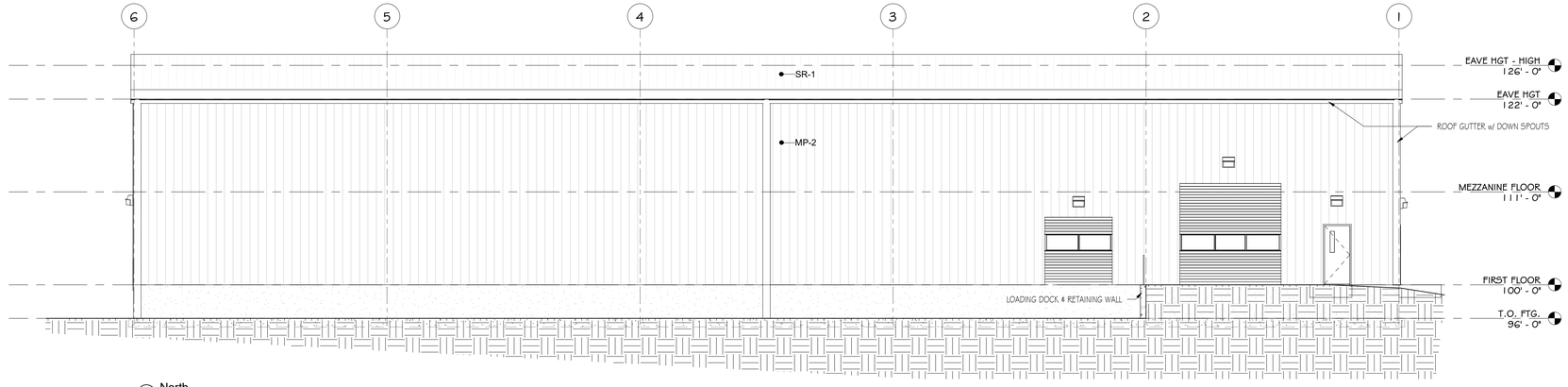
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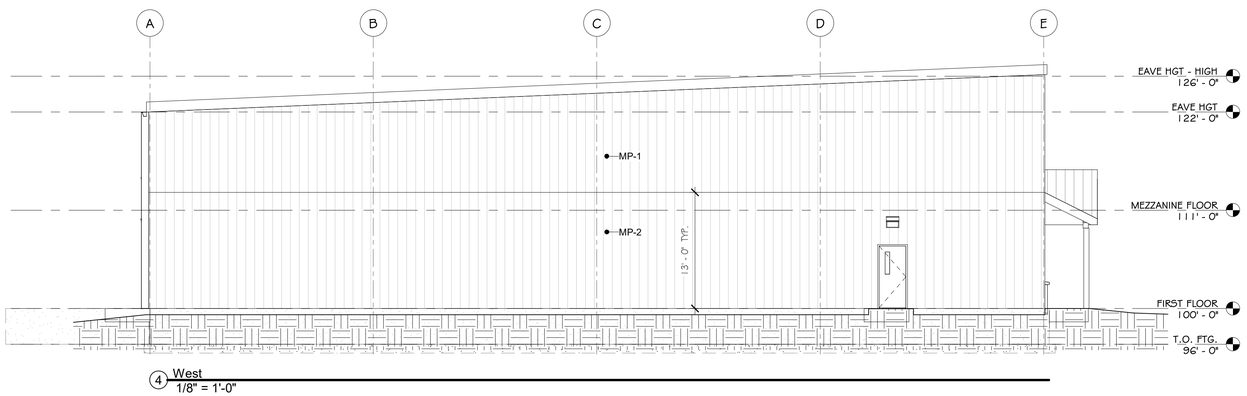
1 South
1/8" = 1'-0"



2 East
1/8" = 1'-0"



3 North
1/8" = 1'-0"



4 West
1/8" = 1'-0"

Exterior Finish Material Schedule				
Mark	Manufacturer	Model	Color	Comments
CMU-1	GENEST	ARCH. SPLIT FACE BLOCK	Charcoal (111)	Block Venner
MP-1	ATAS	BELVEDERE - GRAND R	Charcoal Grey (62)	Vertical Metal Panel
MP-2	ATAS	BELVEDERE - GRAND R	Dove Grey (13)	Vertical Metal Panel

Roof Panel Schedule				
Mark	Manufacturer	Model	Color	Comments
SR-1	ATAS	2 3/8" Feild-Lok Panel	Dove Grey (13)	Standing Seam Roof
SR-2	ATAS	2 3/8" Feild-Lok Panel	Black (02)	Standing Seam Roof

PLANNING BOARD SET
7/15/2021

T W DESIGNS LLC
254 DRAKE HILL RD. STRAFFORD, NH
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DESIGN | BUILD Architectural Document Set -
Prepared For Exclusive Use By :
WHITCHER BUILDERS

No. Description Date
Revision Schedule

Project Info:
American Durafilm

Dover, NH

Sheet Status:
Latest Release:
Issued For: Planning Board Set
Org. Issue Date: N.F.C.

JOB NO:
DRAFTED: Author
CHECKED: Checker

SCALE: 1/8" = 1'-0"

Sheet Title:
Exterior Elevations

Sheet Number:
A3.1

Printed on: 7/15/2021

T:\3 Projects\21023 American Durafilm\21023-A.rvt



TW DESIGNS

American Durafilm
Exterior Rendering

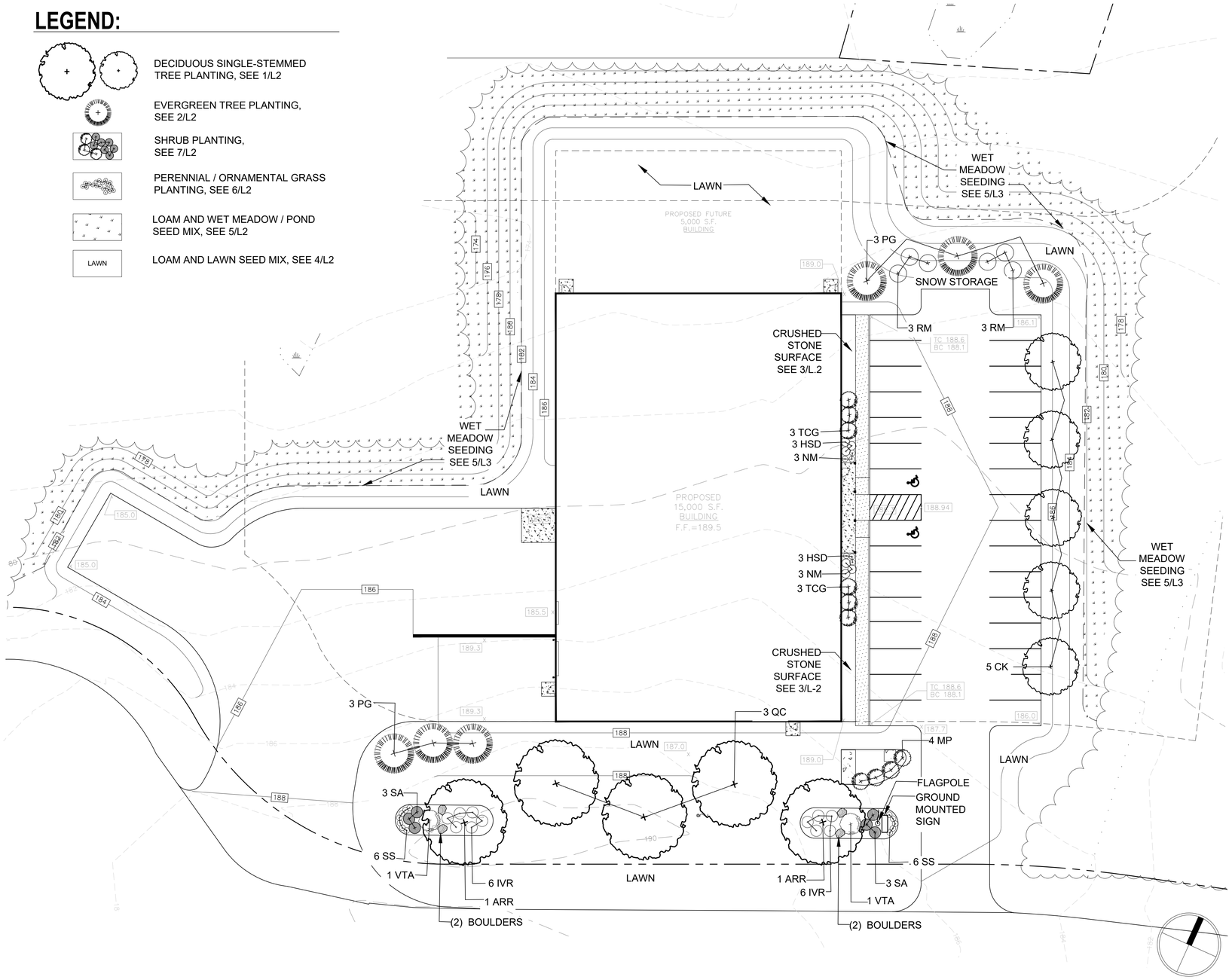
American DURAFILM

PLANTING NOTES:

1. PLEASE REVIEW AND BECOME FULLY ACQUAINTED WITH THESE NOTES, CONSTRUCTION DETAILS, AND THE PLANTING PLAN.
2. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING AND NEW UTILITY LINE LOCATIONS PRIOR TO PLANTING, AND SHALL REPORT ANY CONFLICT TO THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
3. ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE "AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN SOCIETY OF NURSERY MEN, INC. LATEST EDITION.
4. THE CONTRACTOR SHALL STAKE THE LOCATION OF ALL THE PROPOSED PLANT MATERIAL FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. NO PLANTS SHALL BE PLANTED BEFORE THE ACCEPTANCE OF ROUGH GRADING. THE BASE OF THE FLARE OF THE TREE TRUNK SHALL BE EXPOSED, IF NECESSARY, AND PLACED 2" ABOVE FINISH GRADE.
5. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES WILL BE PLANTS WITH EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER COLOR, LEAF COLOR, FRUIT COLOR, AND TIME OF BLOOM, AS APPROVED BY THE LANDSCAPE ARCHITECT.
6. EXISTING LOAM: STOCKPILING OF EXISTING LOAM IS SPECIFIED ELSEWHERE. REMOVE CLAY LUMPS, BRUSH, LITTER, ROOTS, STONES 1" AND LARGER, AND OTHER FOREIGN MATERIALS.
7. ADDITIONAL LOAM: IF STOCKPILED LOAM QUANTITY IS INSUFFICIENT, PROVIDE LOAM, WHICH IS A "FINE SANDY LOAM", OR A "SANDY LOAM" DETERMINED BY MECHANICAL ANALYSIS AND BASED ON THE "U.S.D.A. CLASSIFICATION SYSTEM." IT SHALL BE OF UNIFORM COMPOSITION, WITHOUT ADMIXTURE OF SUBSOIL. LOAM SHALL HAVE AN ACIDITY RANGE OF PH 5.8 TO PH 7.0 AND SHALL CONTAIN NOT LESS THAN 4% NOR MORE THAN 10% ORGANIC MATTER AS DETERMINED BY THE LOSS OF IGNITION OF OVEN-DRIED SAMPLES. PROVIDE LOAM WHICH IS FERTILE, FRIABLE, NATURAL LOAM FREE FROM SUBSOIL, CLAY LUMPS, BRUSH, LITTER, ROOTS, STONES 1" AND LARGER, AND ANY FOREIGN MATERIALS.
8. PINE MULCH: PROVIDE PARTIALLY DECOMPOSED MINIMUM SIX MONTH AGED FINELY SHREDDED PINE BARK MULCH WITH DARK BROWN COLOR AND FREE OF WEEDS, EXCESSIVE FINE PARTICLES, STRINGY MATERIAL, AND CHUNKS OF WOOD THICKER THAN ¼". PROVIDE BARK MULCH APPROVED BY THE LANDSCAPE ARCHITECT. APPLY TACKIFIED MULCH TO ALL SEEDED AREAS.
9. ALL PLANTS SHALL BE PLUM VERTICALLY AFTER SETTLING.
10. ALL PLANT MATERIAL SHALL BE MULCHED AFTER PLANTING.
11. LESS OTHERWISE INDICATED, DICTATED BY CONDITIONS AT THE SITE, AND DIRECTED BY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE, BACKFILL SHALL CONSIST OF UNAMENDED SOIL EXCAVATED FROM THE PLANTING PIT. BACKFILL IN 3-4" LAYERS AND CONSOLIDATE EACH LAYER WITH WATER TO ELIMINATE VOIDS AND ARE POCKETS BEFORE PLACING SUBSEQUENT LAYERS. CONTINUE UNTIL BACKFILL HAS REACHED FINISHED GRADE. WATER THOROUGHLY WHEN EXCAVATION IS BACK FILLED AND CONTINUE WATERING UNTIL SATURATED. IF EXISTING UNAMENDED SOIL IS NOT ACCEPTED, PROVIDE PLANTING SOIL MIXTURE CONSISTING OF 7 PARTS LOAM AND 1 PART HUMUS. MIX QUANTITY OF FERTILIZER AND SOIL AMENDMENTS AS RECOMMENDED BY SOIL ANALYSIS AND APPROVED BY THE LANDSCAPE ARCHITECT.
12. WATERING: FLOOD ALL PLANTS WITH WATER TWICE WITHIN THE FIRST 24 HOURS AFTER PLANTING.
13. LOAMING: LOOSEN SUBGRADE AND EXISTING LOAM AREAS BY DISCING OR ROTOTILLING TO MINIMUM DEPTH OF 6". REMOVE STONES GREATER THAN 2" AND ALL RUBBISH AND DEBRIS. PLACE LOAM IN TWO EQUAL LIFTS MIXING FIRST APPLICATION INTO LOOSENED SUBGRADE THEN PLACE SECOND LIFT TO BRING LOAM AFTER SETTLING AND COMPACTING TO THE LINES AND GRADES SHOWN IN THE CONTRACT DOCUMENTS, 6" DEEP MINIMUM. DO NOT HANDLE LOAM OR SUBSOIL IF IT IS WET OR FROZEN.
14. AFTER LOAM HAS BEEN SPREAD, IT SHALL BE CAREFULLY PREPARED BY SCARIFYING AND HAND RAKING. ALL LARGE STIFF CLODS, LUMPS, BRUSH, ROOTS, STUMPS, LITTER AND FOREIGN MATTER, AND STONES OVER ONE INCH IN DIAMETER SHALL BE REMOVED FROM THE LOAM. LOAM SHALL ALSO BE FREE OF SMALLER STONES IN EXCESSIVE QUANTITIES AS DETERMINED BY THE LANDSCAPE ARCHITECT.
15. FINE GRADING: SET SUFFICIENT GRADE STAKES FOR CHECKING THE FINISHED GRADES. STAKES MUST BE SET AT THE BOTTOM AND TOP OF SLOPES. GRADES SHALL BE ESTABLISHED THAT ARE ACCURATE TO 1/10TH OF A FOOT EITHER WAY. CONNECT CONTOURS AND SPOT ELEVATIONS WITH AN EVEN SLOPE. ALL GRADING WILL INSURE DRAINAGE AWAY FROM STRUCTURES.
16. FINE GRADE LAWN AREAS TO SMOOTH, FREE DRAINING, EVEN SURFACES WITH FINE TEXTURE. ROLL, RAKE AND DRAW LAWN AREAS TO FLATTEN RIDGES AND FILL DEPRESSIONS, EXCEPT AT SELECT AREAS SHOW ON THE DRAWINGS. CONTROL MOISTURE CONTENT TO MAINTAIN OPTIMUM CONDITIONS, BUT DO NOT CREATE A MUDDY CONDITION.
17. ROLLING - TYPICAL: ROLL THE ENTIRE AREA WITH A HAND ROLLER WEIGHTING NOT MORE THAN 100 POUNDS. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT OF ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM AND THE SURFACE SHALL BE REGARDED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE OR TO THE SHAPES AND CONFIGURATIONS AS SHOWN ON THE DETAILS.
18. THE SILT FENCE SHALL BE LIMIT OF SEEDING UNLESS OTHERWISE INDICATED ON THE DRAWINGS. ALL AREAS DISTURBED OUTSIDE THE LIMIT OF WORK SHALL BE SEEDED AS INDICATED ON THE DRAWINGS.
19. IN CASE OF DISCREPANCIES BETWEEN THE QUANTITIES SHOWN ON THE PLANT SCHEDULE AND THE QUANTITIES SHOWN ON THE PLANTING PLAN, THE QUANTITIES ON THE PLANTING PLAN SHALL BE PROVIDED BY THE CONTRACTOR.

LEGEND:

- DECIDUOUS SINGLE-STEMMED TREE PLANTING, SEE 1/L2
- EVERGREEN TREE PLANTING, SEE 2/L2
- SHRUB PLANTING, SEE 7/L2
- PERENNIAL / ORNAMENTAL GRASS PLANTING, SEE 6/L2
- LOAM AND WET MEADOW / POND SEED MIX, SEE 5/L2
- LAWN — LOAM AND LAWN SEED MIX, SEE 4/L2



PLANT SCHEDULE:

TREES				
ABR	BOTANICAL NAME	COMMON NAME	QTY	SIZE
M	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE	2	3" - 3.5" CAL
CK	CORNUS KOUSA	KOUSA DOGWOOD	2	3" - 3.5" CAL
PG	PICEA GLAUCA	BLUE SPRUCE	6	8' - 10'
QC	QUERCUS COCCINEA	SCARLET OAK	3	3" - 3.5" CAL

SHRUBS				
ABR	BOTANICAL NAME	COMMON NAME	QTY	SIZE
IVR	ILEX VETICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	12	2'-2 1/2'
MP	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	4	3'-4'

SHRUBS cont.				
RM	RHODODENDRON MAXIMUM	ROSEBAY RHODODENDRON	6	2'-2 1/2'
SA	SPIREA ALBIFLORA	JAPANESE WHITE SPIREA	6	2'-2 1/2'
TCG	TAXUS CUPIDATA 'GREENWAVE'	GREEN WAVE YEW	6	2'-2 1/2'
VTA	VIBURNUM TRILOBUM 'ALFREDO'	ALFREDO AMERICAN CRANBERRY	2	2'-2 1/2'

PERENNIALS				
ABR	BOTANICAL NAME	COMMON NAME	QTY	SIZE
HSD	HEMEROCALLIS 'STELLA D'ORO'	YELLOW DWARF DAYLILLY	6	#2
NM	NEPETA MUSSINI	CATMINT	6	#2
SS	SALVIA SUPERBA 'BLUE HILL'	MEADOW SAGE	12	#2

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MANUFACTURING / COMMERCIAL BUILDING
INNOVATION WAY DOVER, NEW HAMPSHIRE

AMERICAN DURAFILM CO. INC.
HOLLISTON, MA 01746

SHEET TITLE

LANDSCAPE PLAN

REVISION LOG

REV#	DATE	DESCRIPTION

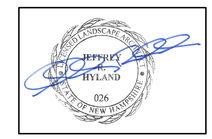
PROJECT NO.	21046.0
DESIGN BY	J. HYLAND / K.OSGOOD
DRAWN BY	J. HYLAND / K.OSGOOD
CHECKED BY	J. HYLAND
DATE	AUGUST 2021

SCALE

10' 0' 20' 40'

SCALE: 1"=20'-0"

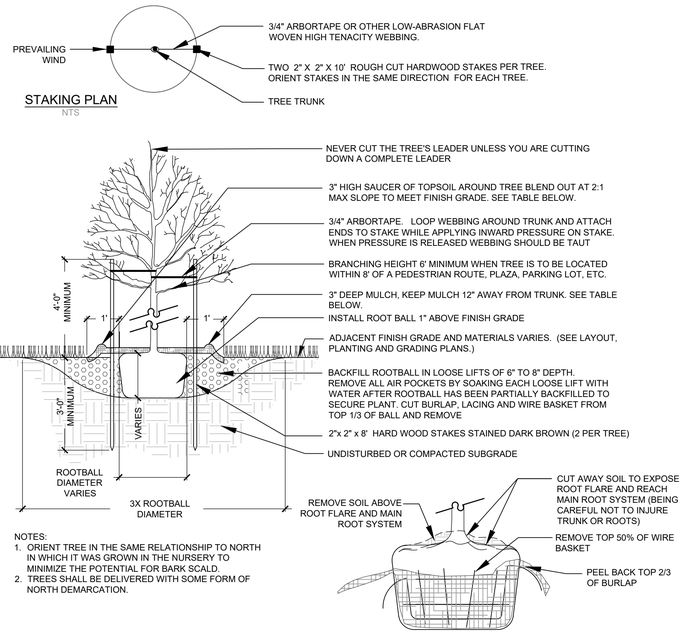
SEAL



L1

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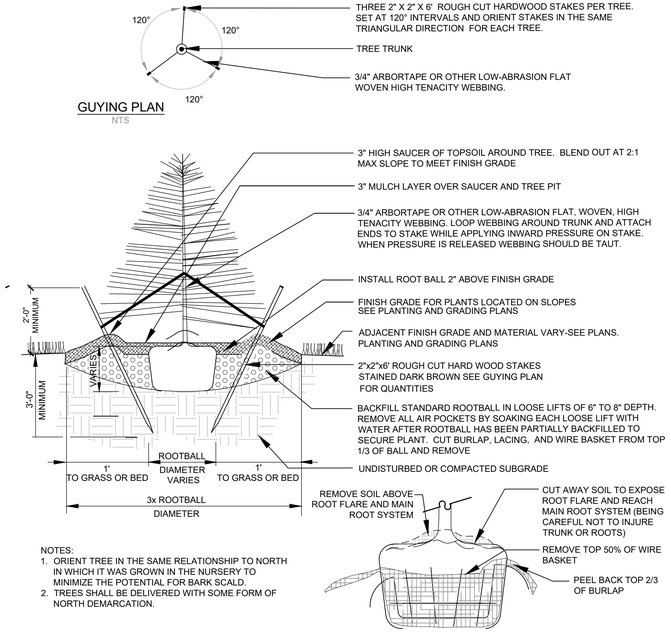
NOTES:
1. ORIENT TREE IN THE SAME RELATIONSHIP TO NORTH IN WHICH IT WAS GROWN IN THE NURSERY TO MINIMIZE THE POTENTIAL FOR BARK SCALD.
2. TREES SHALL BE DELIVERED WITH SOME FORM OF NORTH DEMARCATION.

Deciduous Single-Stemmed Tree Planting

Not to Scale

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1 L2



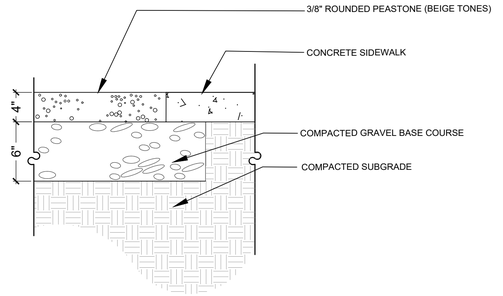
NOTES:
1. ORIENT TREE IN THE SAME RELATIONSHIP TO NORTH IN WHICH IT WAS GROWN IN THE NURSERY TO MINIMIZE THE POTENTIAL FOR BARK SCALD.
2. TREES SHALL BE DELIVERED WITH SOME FORM OF NORTH DEMARCATION.

Evergreen Tree Planting

Not to Scale

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2 L2

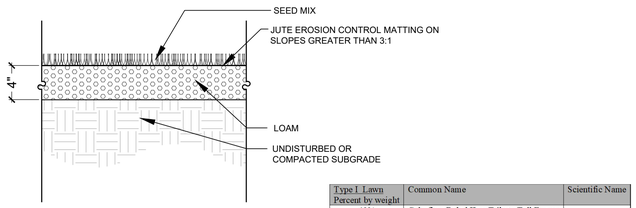


Peastone Surface

Not to Scale

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3 L2



NOTE:
1. LOAM ALL DISTURBED AREAS.
2. PRIOR TO SEEDING THE LAWN SEED MIX PROPERLY PREPARE THE SEED BED.

Type I Lawn Percent by weight	Common Name	Scientific Name
40%	Celmfine, Rebel II or Tribute Tall Fescue	
15%	Palmer II Perennial Ryegrass	
10%	Jamestown Chewings Fescue	
10%	Reliant Hard Fescue	
10%	Bridsfoot Trefoil	*Arvenis* variety
5%	Switchgrass	
5%	White Clover	
5%	Redtop	*Streaker* variety

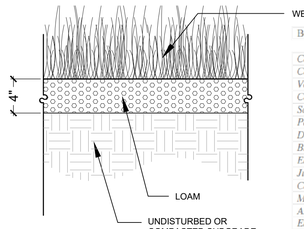
Apply at a rate of 265/lbs/acre

Loam and Lawn Seed Mix

Not to Scale

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4 L2



NOTE:
1. LOAM ALL DISTURBED AREAS.
2. PRIOR TO SEEDING THE WET MEADOW SEED MIX PROPERLY PREPARE THE SEED BED.
3. INSTALL JUTE MATTING ON POND SIDE SLOPES GREATER THAN 3:1.

Botanical Name	Common Name
Carex lurida	Lurid Sedge
Carex scoparia	Blunt Broom Sedge
Verbena hastata	Blue Vervain
Carex lupulina	Hop Sedge
Scirpus atrovirens	Green Bulrush
Panicum rigidulum	Redtop Panic Grass
Deschampsia cespitosa	Tufted Hairgrass
Bidens aristosa	Tickseed Sunflower/Bur Marigold
Eleocharis palustris	Creeping Spike Rush
Juncus effusus	Soft Rush
Carex crinita	Fringed Sedge
Mimulus ringens	Square Stemmed Monkey Flower
Aster puniceus	Swamp Aster
Eupatorium perfoliatum	Boneset
Glyceria canadensis	Rattlesnake Grass
Asclepias incarnata	Swamp Milkweed
Helenium autumnale	Common Sneezeweed
Penthorum sedoides	Ditch Stonecrop

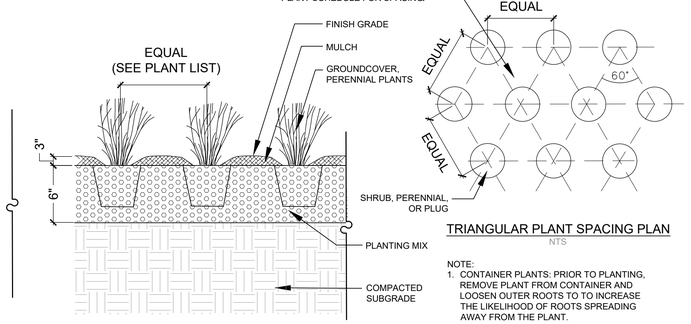
Apply at rate of 231bs/acre. New England Wildflower Mix available at New England Wetland Plants, Ma: www.newp.com . Approved equal may be substituted.

Loam and Wet Meadow / Pond Seed Mix

Not to Scale

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5 L2



TRIANGULAR PLANT SPACING PLAN
NTS

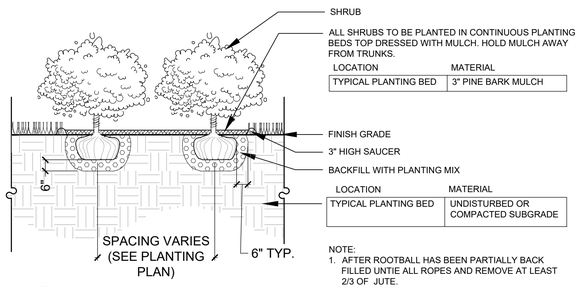
NOTE:
1. CONTAINER PLANTS: PRIOR TO PLANTING, REMOVE PLANT FROM CONTAINER AND LOOSEN OUTER ROOTS TO TO INCREASE THE LIKELIHOOD OF ROOTS SPREADING AWAY FROM THE PLANT.

Perennial / Ornamental Grass Planting

Not to Scale

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6 L2



NOTE:
1. AFTER ROOTBALL HAS BEEN PARTIALLY BACK FILLED UNTIE ALL ROPES AND REMOVE AT LEAST 2/3 OF JUTE.

Shrub Planting

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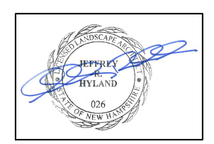
SHEET TITLE
LANDSCAPE DETAILS

REVISION LOG

REV#	DATE	DESCRIPTION
-	-	-

PROJECT NO.	21046.0
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DRAWN BY	J. HYLAND / K.OSGOOD
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DATE	AUGUST 2021
SCALE	AS NOTED

SEAL



L2

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